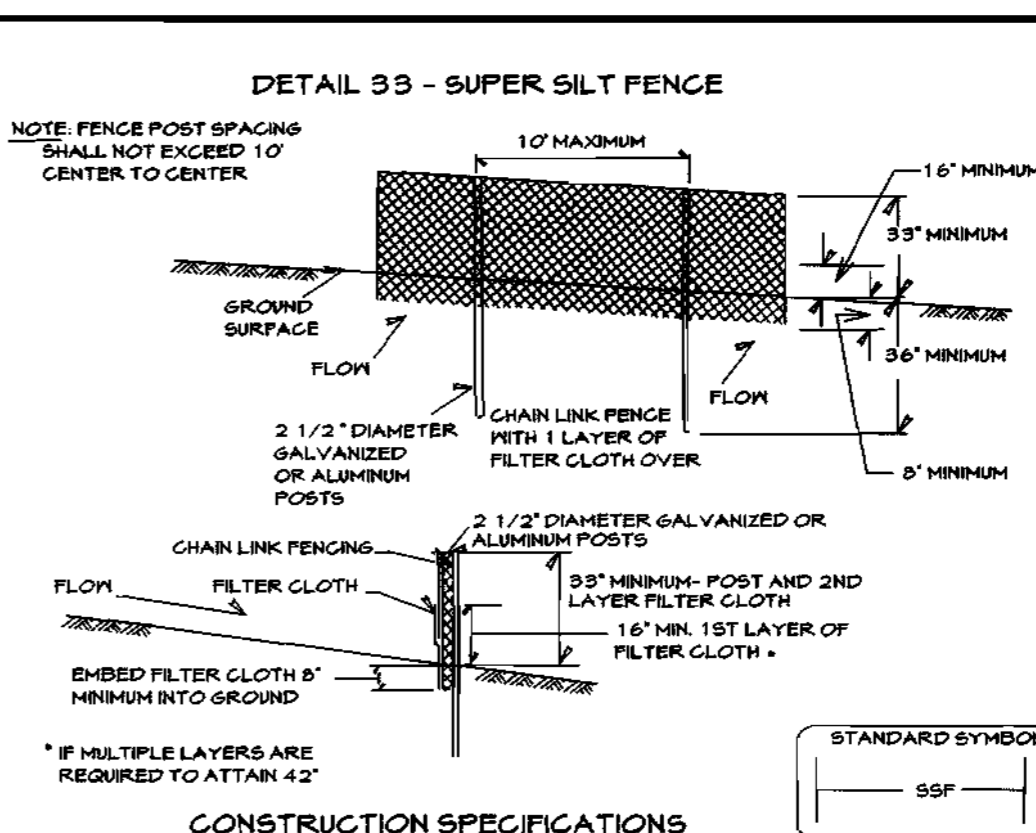
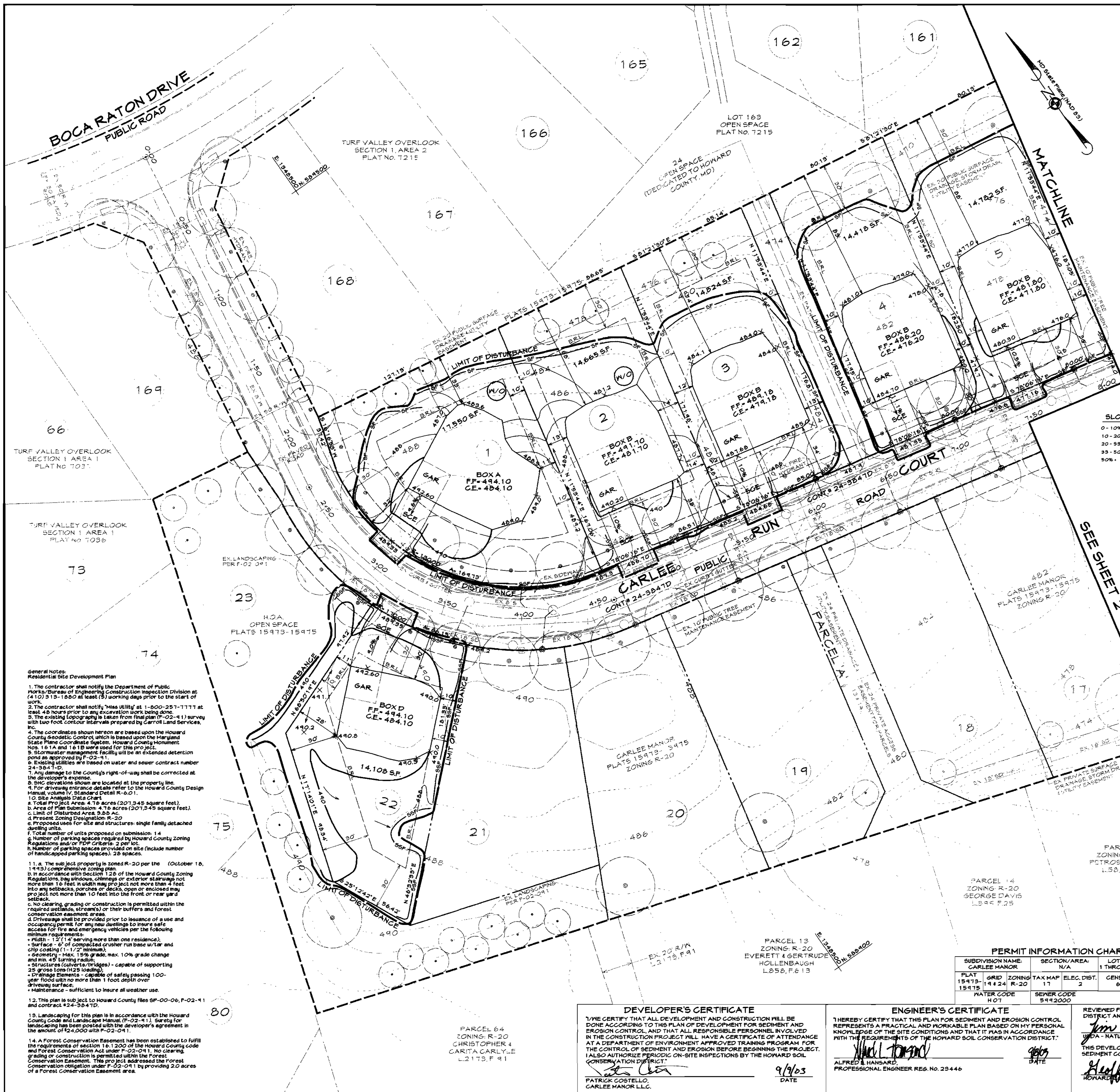


CAD Drawing File Name: g:\1790\dwn\const_sitedev\011sitedev1.dgn



NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER.

CONSTRUCTION SPECIFICATIONS

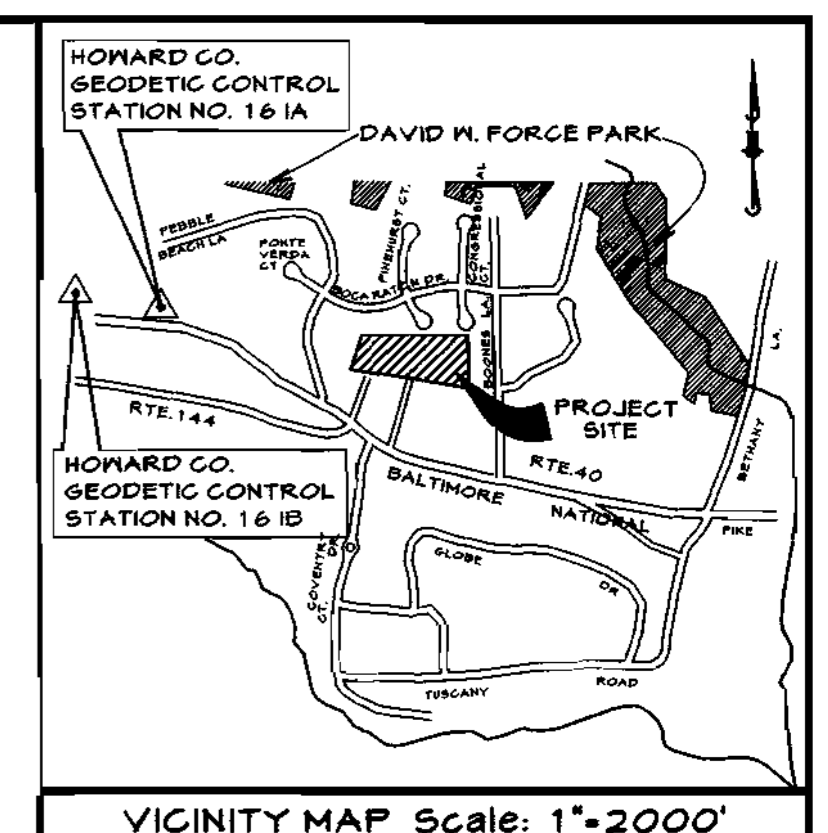
FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6' FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6' LENGTH POSTS.

- THE POLES DO NOT NEED TO SET IN CONCRETE.
- 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 GAPS 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 ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND POLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDUPS 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 5:

TENSILE STRENGTH	50 LBS./IN. (MIN)	TEST: MHMT 504
TENSILE MODULUS	20 LBS./IN. (MIN)	TEST: MHMT 504
FLOW RATE	0.3 GAL./FT. (MIN) (MAX)	TEST: MHMT 322
FILTERING EFFICIENCY	75% (MIN)	TEST: MHMT 322

DESIGN CRITERIA

SLOPE	SLOPE STEEPNESS	SLOPE LENGTH SILT FENCE LENGTH (MAXIMUM)	SLOPE LENGTH SILT FENCE LENGTH (MAXIMUM)
0 - 10%	0 - 1:1	UNLIMITED	UNLIMITED
10 - 20%	1:1 - 1.5:1	200 FEET	1,500 FEET
20 - 33%	1.5:1 - 2:1	100 FEET	1,000 FEET
33 - 50%	2:1 - 3:1	50 FEET	500 FEET
50% +	3:1 - 4:1	25 FEET	250 FEET



SHEET INDEX

SHEET #	DESCRIPTION
1	PLAN VIEW
2	PLAN VIEW
3	NOTES & DETAILS

LOT INFORMATION

LOT NUMBER	LOT SIZE (SQUARE FEET)	MIN. CELLAR ELEVATION	INV. SEWER # R/W	REMARKS
1	17,550 S.F.	484.10	478.90	
2	14,665 S.F.	481.20	477.30	
3	14,824 S.F.	479.00	474.90	
4	14,416 S.F.	476.20	472.20	
5	14,782 S.F.	471.60	467.80	
6	14,763 S.F.	463.00	463.00	
7	14,117 S.F.	463.00	458.70	
8	14,645 S.F.	458.20	454.20	
9	14,456 S.F.	454.50	450.20	
10	15,267 S.F.	449.00	444.70	
11	14,034 S.F.	447.00	444.20	
12	14,482 S.F.	445.50	441.20	
13	14,037 S.F.	444.00	440.10	
22	14,108 S.F.	484.10	479.70	

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
1	3005 CARLEE RUN COURT
2	3004 CARLEE RUN COURT
3	3013 CARLEE RUN COURT
4	3011 CARLEE RUN COURT
5	3021 CARLEE RUN COURT
6	3025 CARLEE RUN COURT
7	3024 CARLEE RUN COURT
8	3033 CARLEE RUN COURT
9	3031 CARLEE RUN COURT
10	3041 CARLEE RUN COURT
11	3045 CARLEE RUN COURT
12	3048 CARLEE RUN COURT
13	3050 CARLEE RUN COURT
22	3006 CARLEE RUN COURT

NOTE: SEDIMENT AND EROSION CONTROL: NO MORE THAN THREE CONTIGUOUS LOTS CAN BE UNDER CONSTRUCTION AT ONE TIME.

LEGEND

- SF — SILT FENCE
- LIMIT OF DISTURBANCE
- (W/O) WALK OUT

General Notes:
Residential Site Development Plan

- The contractor shall notify the Department of Public Works, Bureau of Engineering Construction Inspection Division at (410) 313-1800 at least 48 hours prior to the start of work.
- The contractor shall notify the utility at 1-800-387-7117 at least 48 hours prior to any excavation work being done.
- The existing topography is taken from final plan (F-02-01) survey with two foot contour intervals prepared by Carroll Land Services, Inc.
- 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. 161A and 161B were used for this project.
- Stormwater management facility will be an extended detention pond as approved by F-02-01.
- Existing utilities are based on water and sewer contract number 24-39-07-0.
- Any damage to the County's right-of-way shall be corrected at the developer's expense.
- Site elevations shown are located at the property line.
- For driveway entrance details refer to the Howard County Design Manual, volume IV, Standard Detail R-6-01.
- Site Analysis Data Chart:
 - Total Project Area: 4.78 acres (207,345 square feet).
 - Area of Plan Submission: 4.78 acres (207,345 square feet).
 - Limit of Disturbed Area: 3.93 Ac.
 - Present Zoning Designation: R-20
 - Proposed uses for site and structures: single family detached dwelling units.
 - Total number of units proposed on submission: 14
 - Number of parking spaces required by Howard County Zoning Regulations and/or FOP Criteria: 2 per lot.
 - Number of parking spaces provided on site (include number of handicapped parking spaces): 28 spaces.
- a. The subject property is zoned R-20 per the (October 16, 1949) comprehensive zoning plan.
 - In accordance with Section 1.28 of the Howard County Zoning Regulations, any windows, chimneys or exterior stairways not more than 10 feet in width may project not more than 4 feet into any setbacks, porches or decks, open or enclosed may project not more than 10 feet into the front or rear yard setback.
 - No clearing, grading or construction is permitted within the required setbacks, streets or their buffers and forest conservation easement area.
 - Driveway 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:
 - Width - 12' (14' serving more than one residence).
 - Surface - 6" of compacted or other run base with and chip coating (1-1/2" minimum).
 - Geometry - Max. 15% grade; max. 10% grade change and min. 45' turning radius.
 - Structures (Culverts/bridges) - capable of supporting 25 gross tons (25 loading).
 - Drainage Elements - capable of safely passing 100-year flood not more than 1 foot depth over driveway surface.
 - Maintenance - sufficient to insure all weather use.
- This plan is subject to Howard County files SF-00-06, F-02-01 and contract 32-40-041D.
- Landscaping for this plan is in accordance with the Howard County Code and Landscape Manual (F-02-01). Security for landscaping has been posted with the developer's agreement in the amount of \$24,000 with F-02-01.
- A Forest Conservation Easement has been established to fulfill the requirements of section 16-1.200 of the Howard County code and Forest Conservation Act under F-02-01. No clearing, grading or construction is permitted within the Forest Conservation Easement. The project addressed the Forest Conservation obligation under F-02-01 by providing 2.0 acres of a Forest Conservation Easement area.

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELlicOTT CITY, MD. 21045
410-750-1200

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT NUMBER			
CARLEE MANOR	N/A	1 THROUGH 13 & 22			
PLAT	GRID	ZONING	TAX MAP	ELEC. DIST.	CENSUS TRACT
15475	14424	R-20	17	2	602100
WATER CODE	SEWER CODE				
H01	5442000				

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick Costello
PATRICK COSTELLO,
CARLEE MANOR L.L.C.
DATE: 9/15/03

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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred Hansard
ALFRED HANSARD,
PROFESSIONAL ENGINEER REG. NO. 23446
DATE: 9/15/03

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jim Myers
JIM MYERS,
NATURAL RESOURCE CONSERVATION SERVICE
DATE: 9/15/03

Sheffey W. Schering
SHEFFEY W. SCHERING,
HOWARD COUNTY
DATE: 9/15/03

APPROVED:
FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Mark L. Unger
DIRECTOR
DATE: 9/15/03

Cindy Kramer
CHIEF DIVISION OF LAND DEVELOPMENT
DATE: 9/15/03

Michael...
CHIEF DEVELOPMENT ENGINEERING DIVISION
DATE: 9/15/03

SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

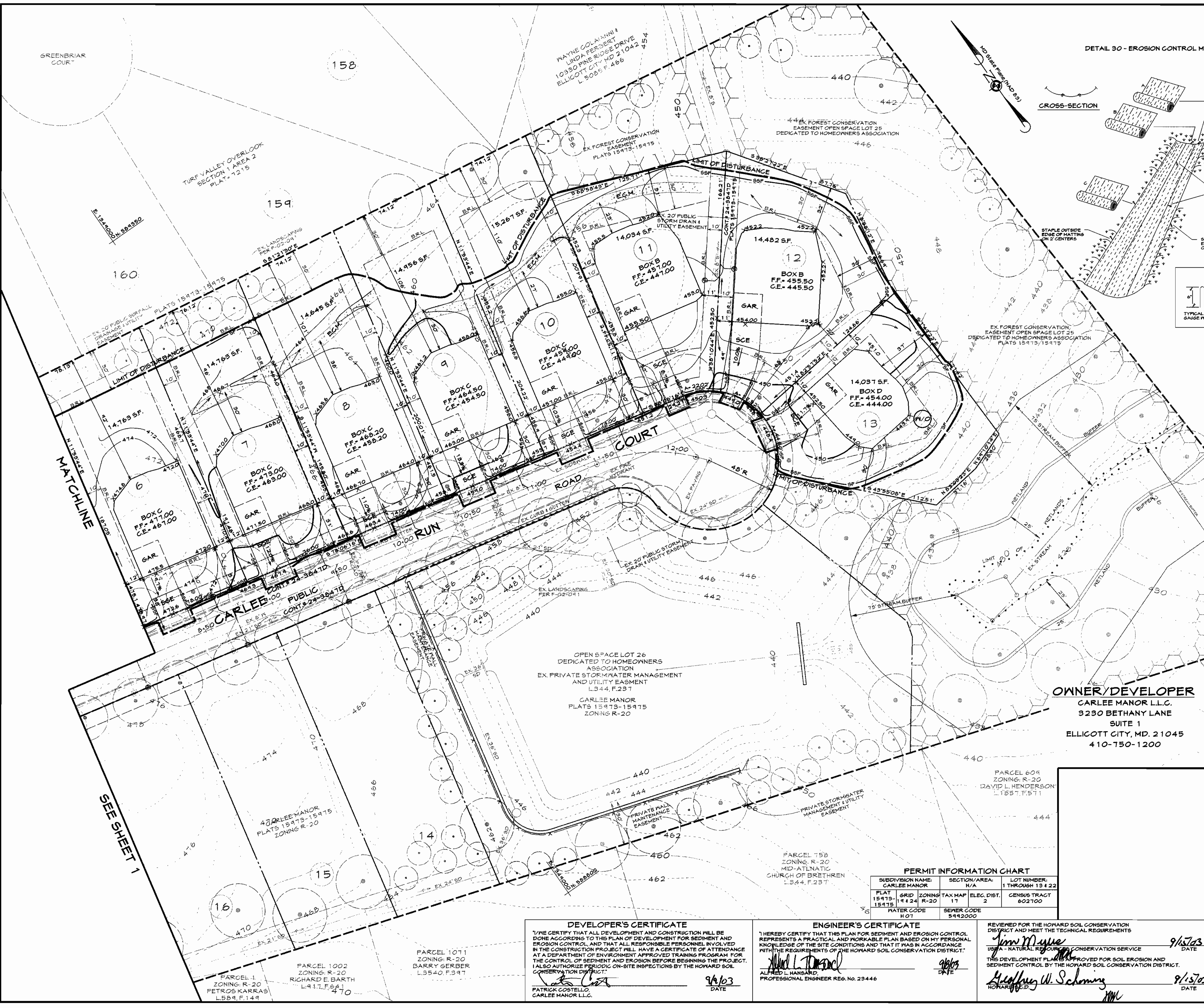
TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CLSI
Carroll Land Services
1700 Old Baltimore Road
Engineers • Surveyors • Land Development Consultants
Landscape Architects • Environmental Specialists
439 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

Professional Engineer Registration No. 23446

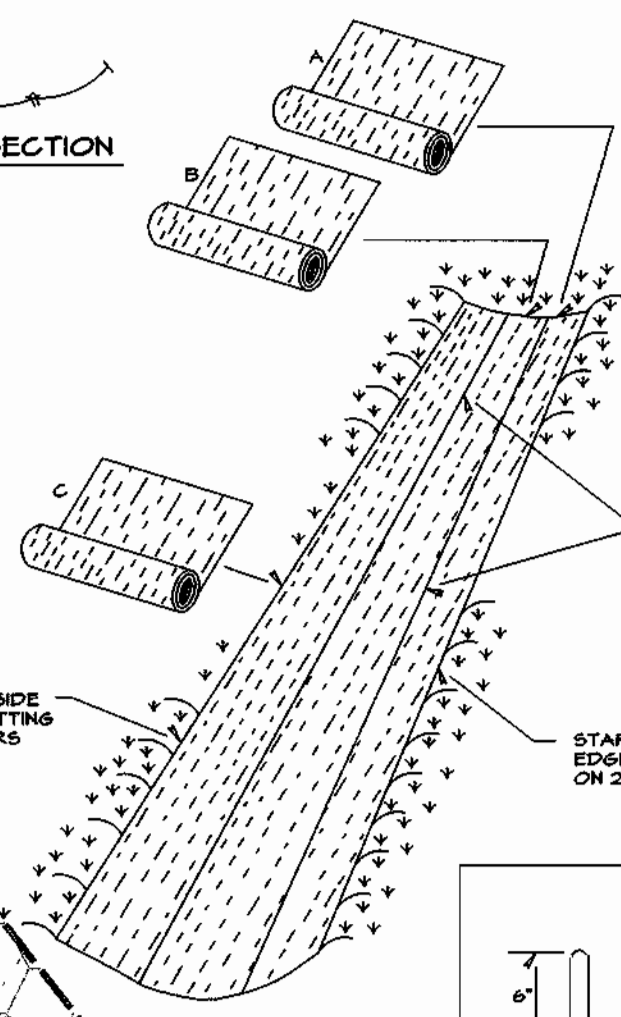
Date: 9/15/03
Revisions: _____
Designed By: BM
Reviewed By: KF
Date: _____
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Job No.: 41230A
Sheet: 1 of 3

CAD Drawing File Name: g:\1720.dgn.const.sitedev\02\sitedev2.dgn



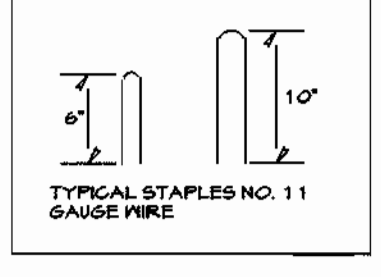
DETAIL 30 - EROSION CONTROL MATTING

CROSS-SECTION



CONSTRUCTION SPECIFICATIONS

1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
 2. STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
 3. BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
 4. STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
 5. WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIP-LAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
 6. THE DISCHARGE END OF THE MATTING LINER SHOULD BE SMOOTHLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.
- NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEYED-IN.



LEGEND

- SF SILT FENCE
- LIMIT OF DISTURBANCE
- (V/O) WALK OUT
- SSF SUPER SILT FENCE
- EROSION CONTROL MATTING

NOTE: SEDIMENT AND EROSION CONTROL: NO MORE THAN THREE CONTIGUOUS LOTS CAN BE UNDER CONSTRUCTION AT ONE TIME.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

David L. Henderson 9/25/02 DATE
DIRECTOR

Cindy Hornetta 9/25/02 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

Chris Dammann 9/25/02 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELlicOTT CITY, MD. 21045
410-750-1200

SITE DEVELOPMENT & GRADING PLAN
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND



CLSI

Carroll Land Services
Incorporated
Engineers * Surveyors * Land Development Consultants
Landscape Architects * Environmental Specialists
439 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

Date	Revisions	Drawn By: BM
		Designed By: KF
		Reviewed By:
		Date:
		Scale: 1" = 50'
		Job No: 17290A
		Sheet: 2 of 3

PERMIT INFORMATION CHART

SUBDIVISION NAME CARLEE MANOR	SECTION/AREA N/A	LOT NUMBER 1 THROUGH 13 & 22
PLAT 15473 15475	GRID ZONING 11 24 R-20	ELEC. DIST. 2
CENSUS TRACT 602100	MATERIAL CODE R-07	SEWER CODE 5492000

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick Costello 9/13/02 DATE
PATRICK COSTELLO
CARLEE MANOR L.L.C.

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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred L. Hansard 9/13/02 DATE
ALFRED L. HANSARD
PROFESSIONAL ENGINEER REG. NO. 23446

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jane Mayne 9/15/02 DATE
JANE MAYNE
USE A NATURAL RESOURCE CONSERVATION SERVICE

Heidi W. Schmitz 9/15/02 DATE
HEIDI W. SCHMITZ
REVIEWED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

**HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT 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 (13-1-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within a 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1. 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seeding (Sec. 5.1), sod (Sec. 5.4), temporary seeding (Sec. 5.0) and mulching (Sec. 5.2). Temporary stabilization 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:
Total Area of Site: 19.31 Acres
Area Disturbed: 9.28 Acres
Area to be roofed or paved: 1.43 Acres
Area to be vegetatively stabilized: 2.46 Acres
Total Cut: 100 CU Yds.
Total Fill: 100 CU Yds.
Offsite waste/borrow area location will be to a site with an approved sediment control plan and an approved and open grading permit.
- 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 control 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 erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building 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 by the end of each workday, whichever is shorter.

Rev. 4/14

Topsoil Notes
Construction and Material Specifications
I. 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:
i. 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" in diameter.
- Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutgrass, poison ivy, thistle, or others as specified.
- Where the subsol 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.
- For sites having disturbed areas under 5 acres:
i. Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
Page 2

Permanent Seeding Summary

No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Ryegrass	40	3/1 to 10/30	1"-2"

- Topsoil Notes:
a) 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.
b) Organic content of topsoil shall be not less than 1.5 percent by weight.
c) Topsoil having soluble salt content greater than 500 parts per million shall not be used.
d) No sod 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 min.) 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 2.0.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

V. Topsoil Application
i. 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.
ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4"-8" higher in elevation.
iii. Topsoil shall be uniformly distributed in a 4"-8" layer and tightly 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.
iv. 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.

Stockpiling/Topsoil Notes
i. Stockpiling will not be allowed on any impervious area.
ii. All stockpiles left at the end of the day will need to be temporarily stabilized until they are again disturbed, unless they are within existing perimeter sediment controls.
iii. All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the inspector in the field.

SEQUENCE OF CONSTRUCTION
1. OBTAIN GRADING PERMIT. (1 DAY)
2. INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
3. CONSTRUCT DWELLING. (90 DAYS)
4. FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
5. INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
6. INSTALL LANDSCAPING. (1 DAY)
7. ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

NOTE:
ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.

STABILIZATION SPECIFICATIONS

- TEMPORARY SEEDING NOTES**
Scope: Planting short term (no more than 1 year) vegetation to temporarily stabilize any areas where soil disturbance has occurred until the area can be permanently stabilized with vegetative or non-vegetative practices.
Standards: The following notes shall conform to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - Fertilizer shall consist of a mixture of 10-10-10 and be applied at a rate of 600 lb per acre (15 lb per 1000 sq. ft.) and will meet the requirements in 6-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in 6-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F, G and H.
 - Seeding mixtures shall be selected from or will be equal to those on Table 26.
 - The following is one option, approved equals may be used.

Temporary Seeding Summary

No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Kentucky-31	80	3/1 to 11/15	1"
Annual Ryegrass	20	3/1 to 11/15	1/4" - 1/2"

- PERMANENT SEEDING NOTES**
Scope: Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 1 year.
Standards: The following notes shall conform to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - For sites over 5 ac. soil tests will be performed to determine the exact mixture and application rates for both lime and fertilizer. Soils tests will be prepared by the University of Maryland or a recognized commercial laboratory. If the existing soil does not meet the minimum conditions as stated in 6-20 Sec. 1-C-ii, then topsoil will need to be obtained that meets these conditions and applied so as to meet the requirements in 6-21.
 - For sites of 5 ac. or less of disturbance, the following fertilizer and lime rates shall apply:
i. Fertilizer shall consist of a mixture of 10-20-20 and be applied at the following rates:
N-40 lb per acre (2 lb per 1000 sq. ft.) P205-175 lb per acre (4 lb per 1000 sq. ft.) K2O-175 lb per acre (4 lb per 1000 sq. ft.). Fertilizer shall meet the requirements in 6-20 Sec. 1-B.
ii. Lime shall be applied at a rate of 2 tons per acre (100 lb per 1000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in 6-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F, G and H.
 - Refer to 6-20 Sec. 1-E for methods of Seeding specifications.
 - Refer to 6-20 Sec. 4 for Sod specifications.
 - Refer to 6-20 Sec. 5 for Turfgrass Establishment specifications.
 - Seeding mixtures shall be selected from or will be equal to those on Table 25.
 - The following is one option, approved equals may be used.

Permanent Seeding Summary

No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Ryegrass	40	3/1 to 10/30	1"-2"

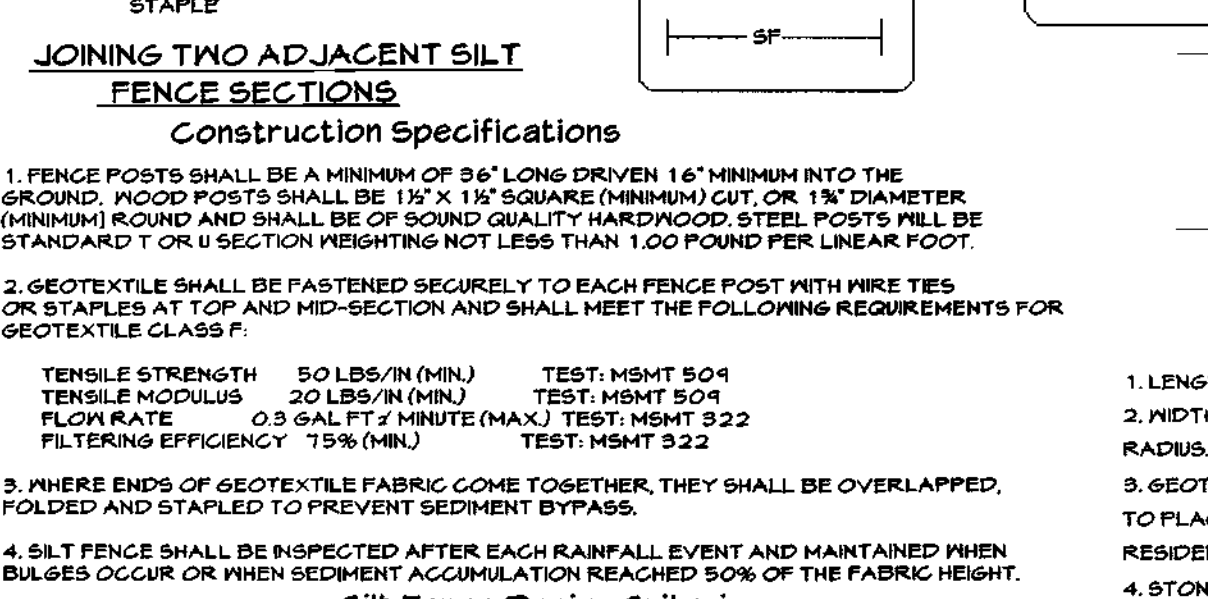
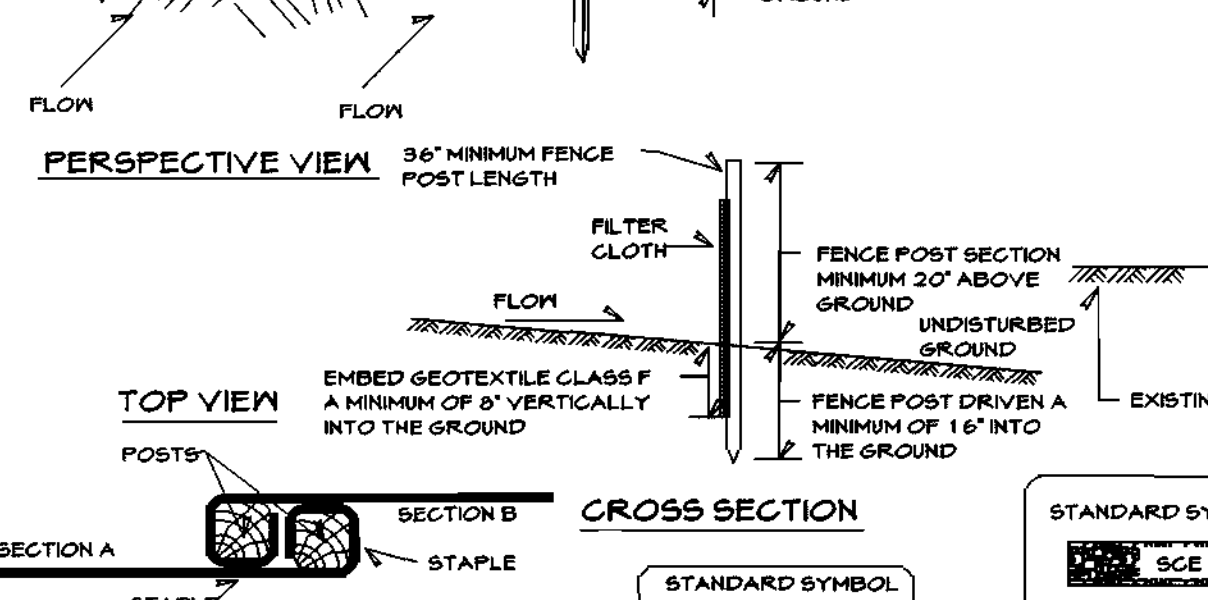
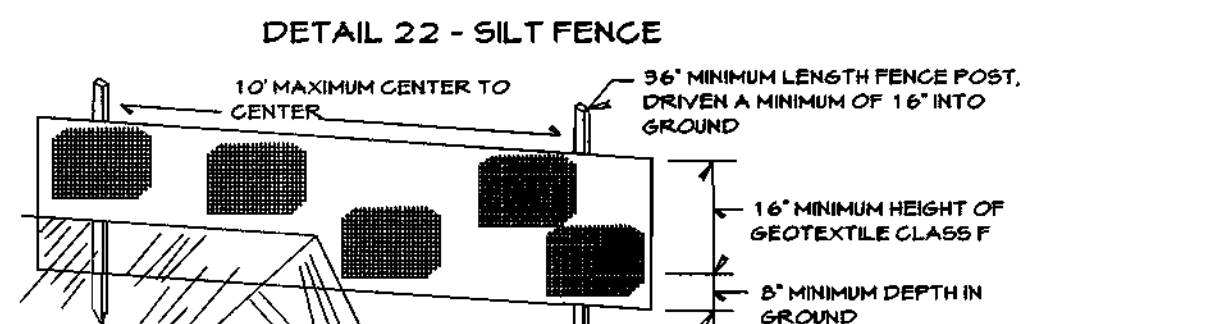
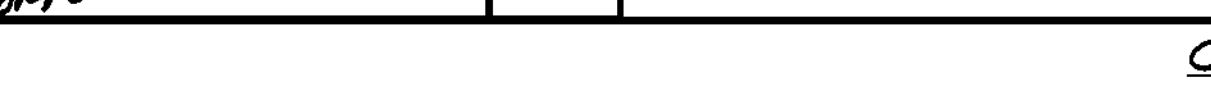
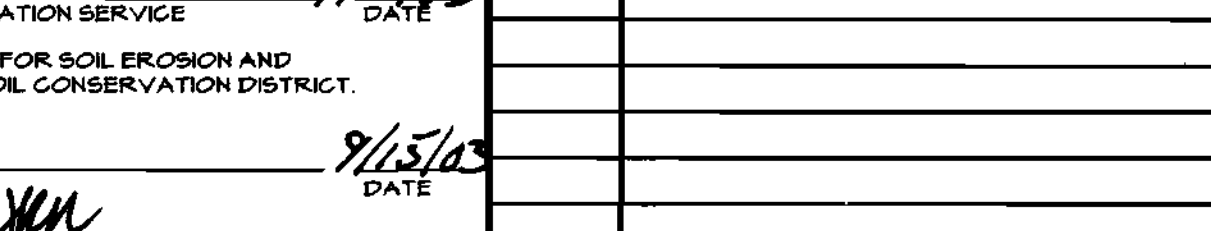
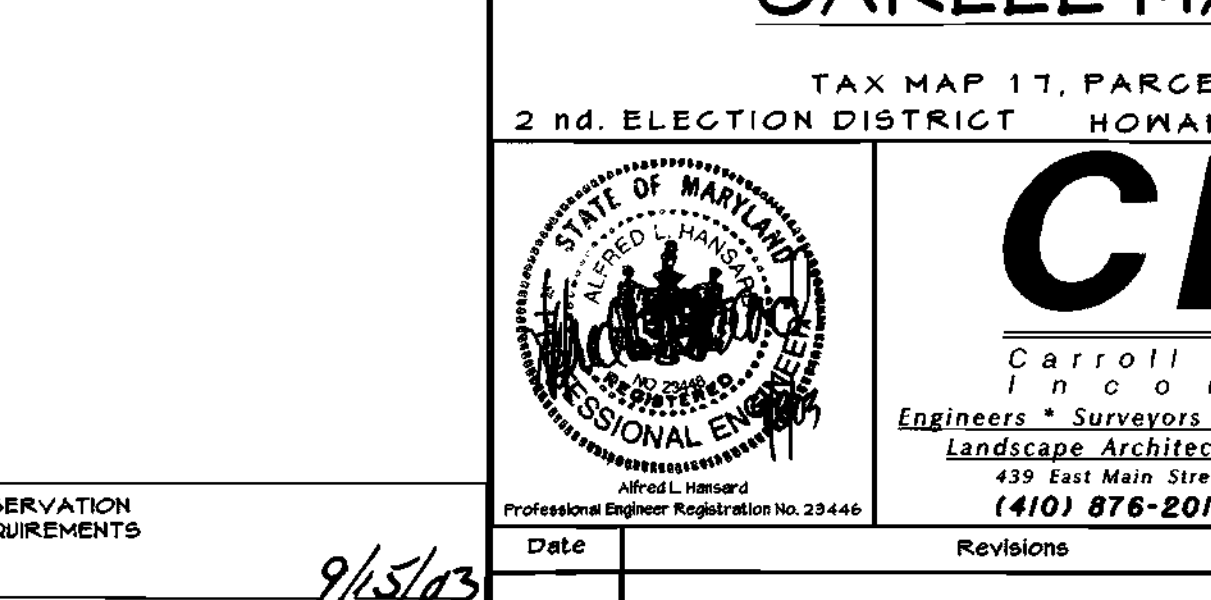
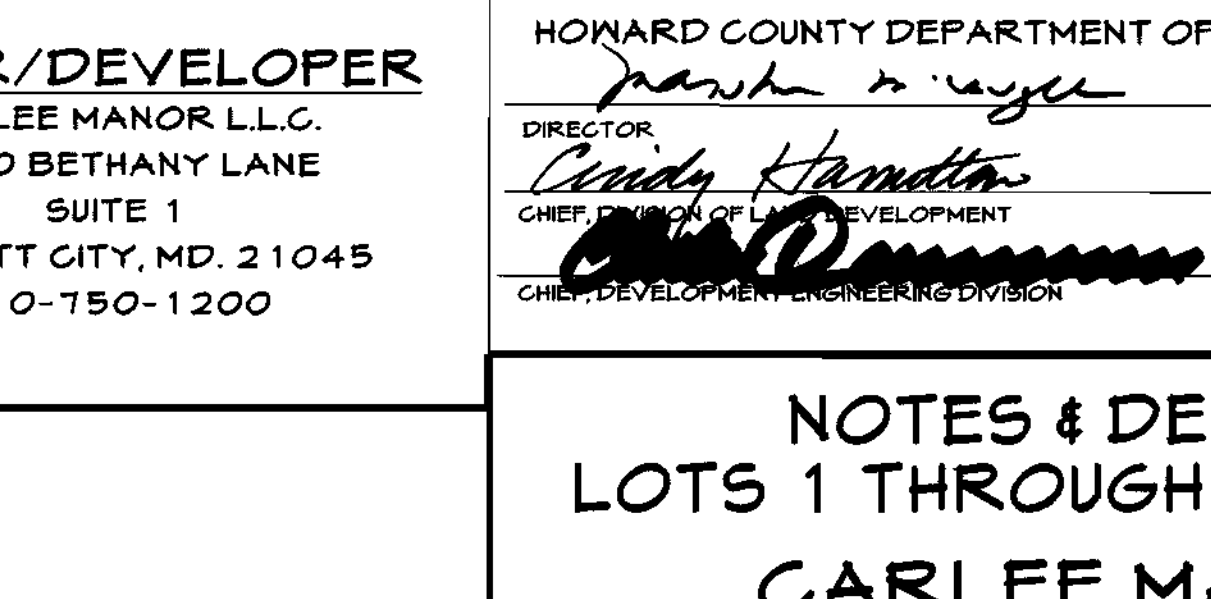
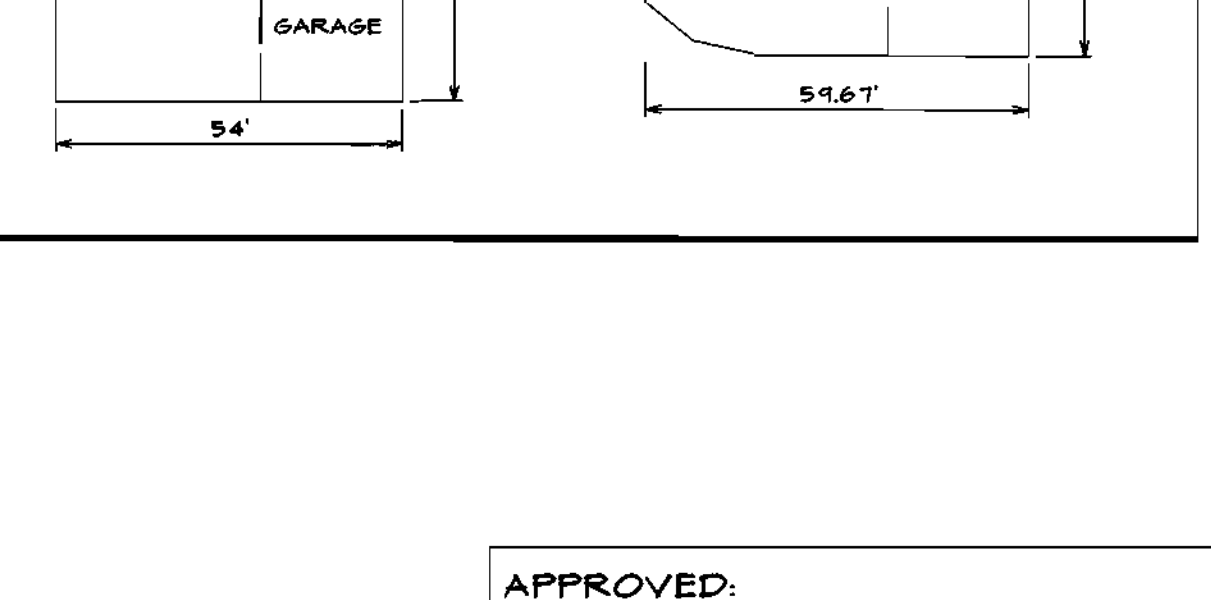
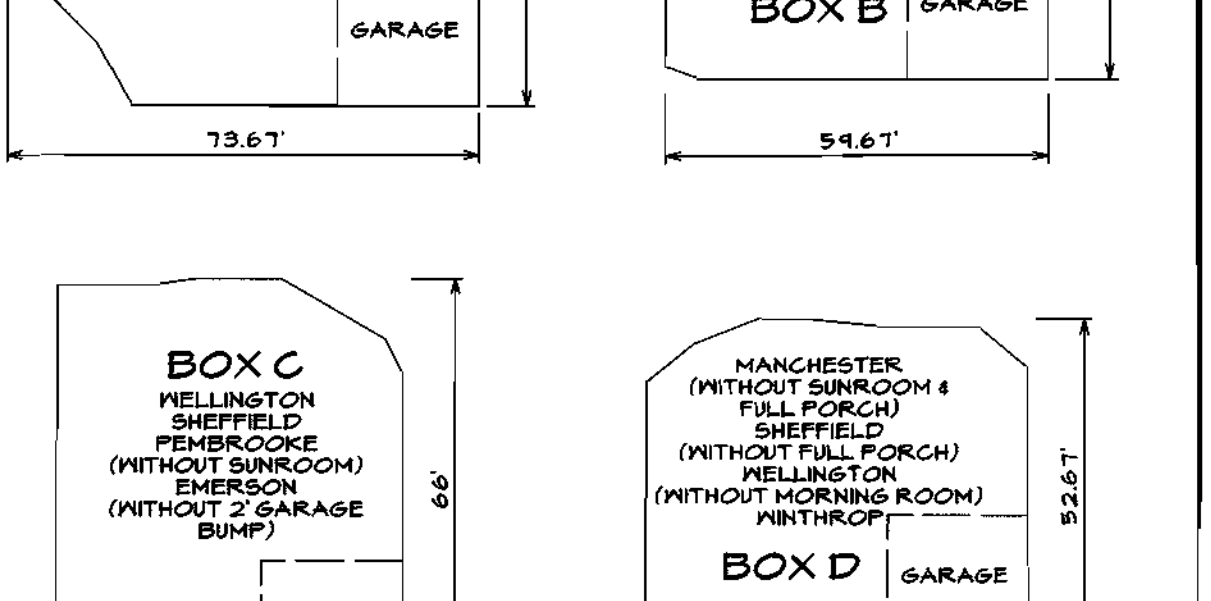
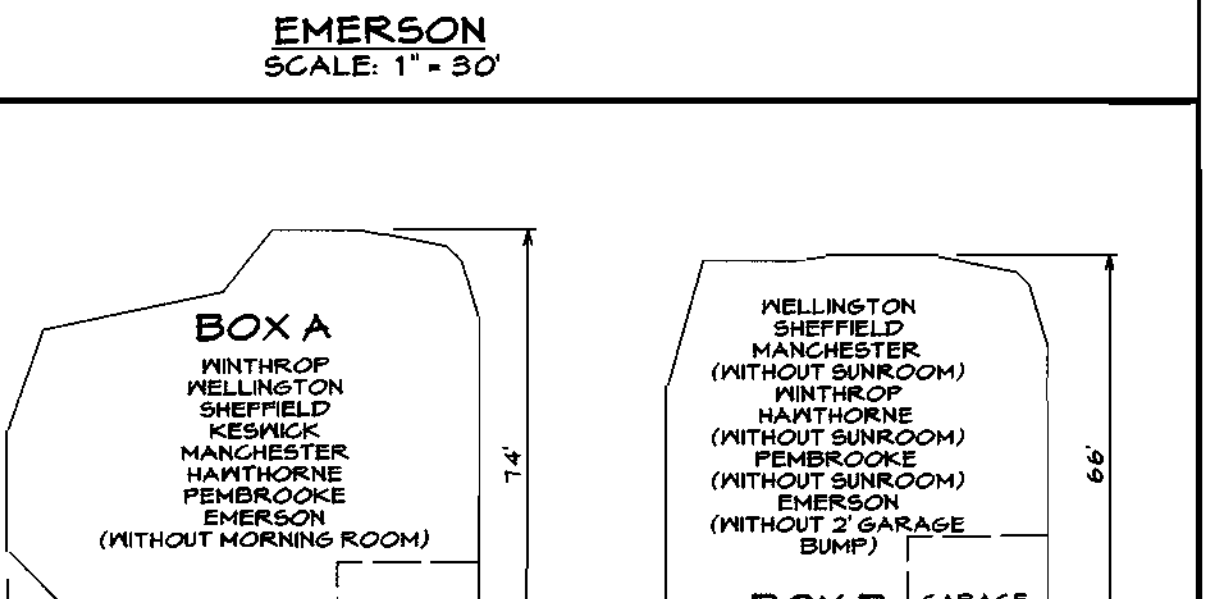
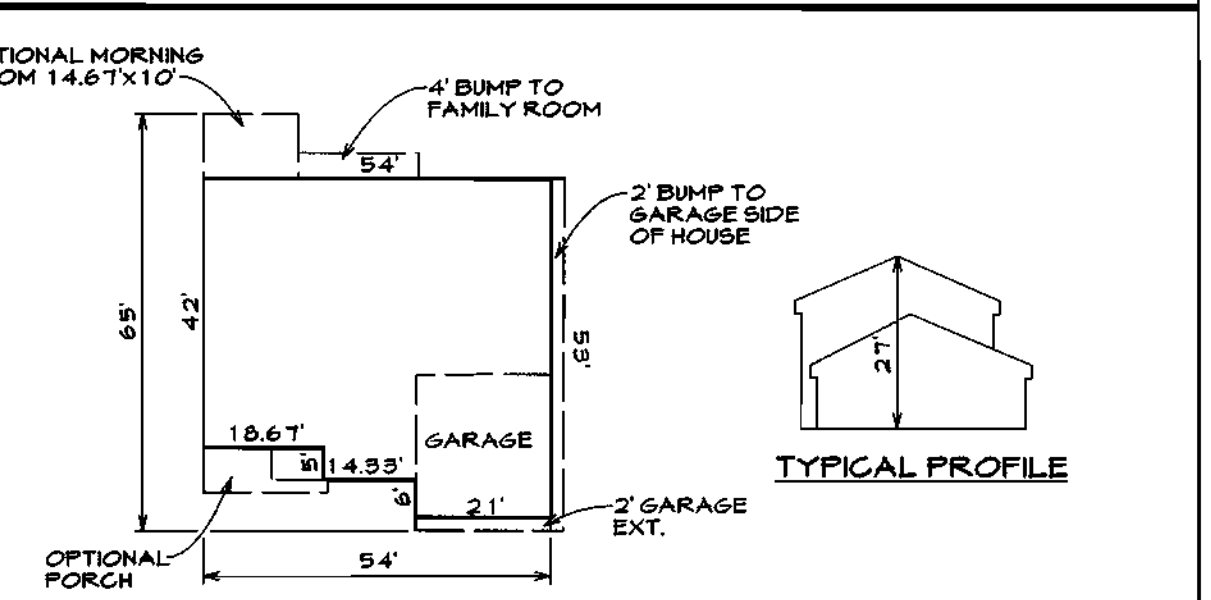
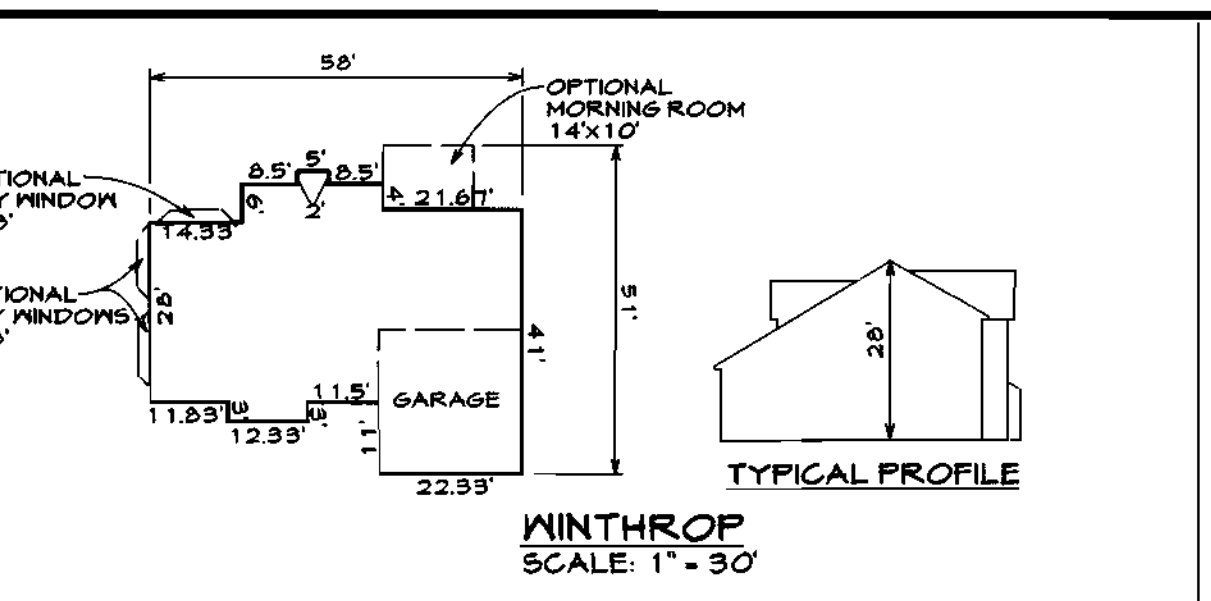
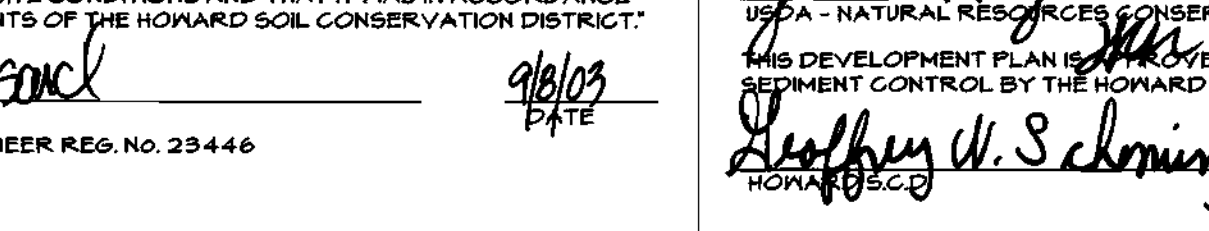
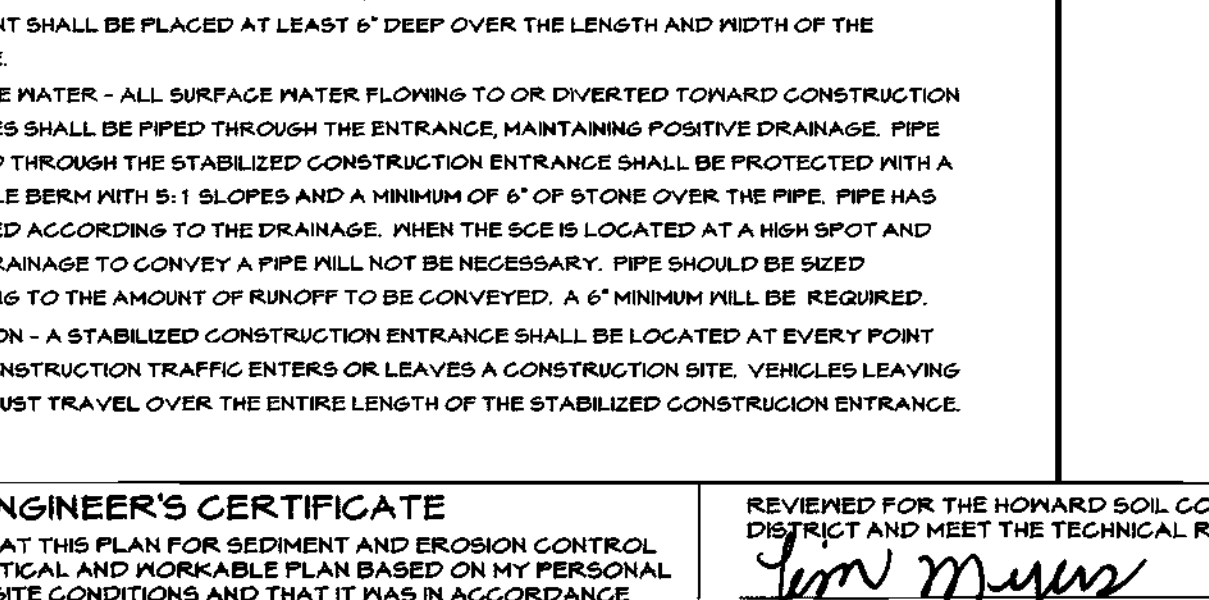
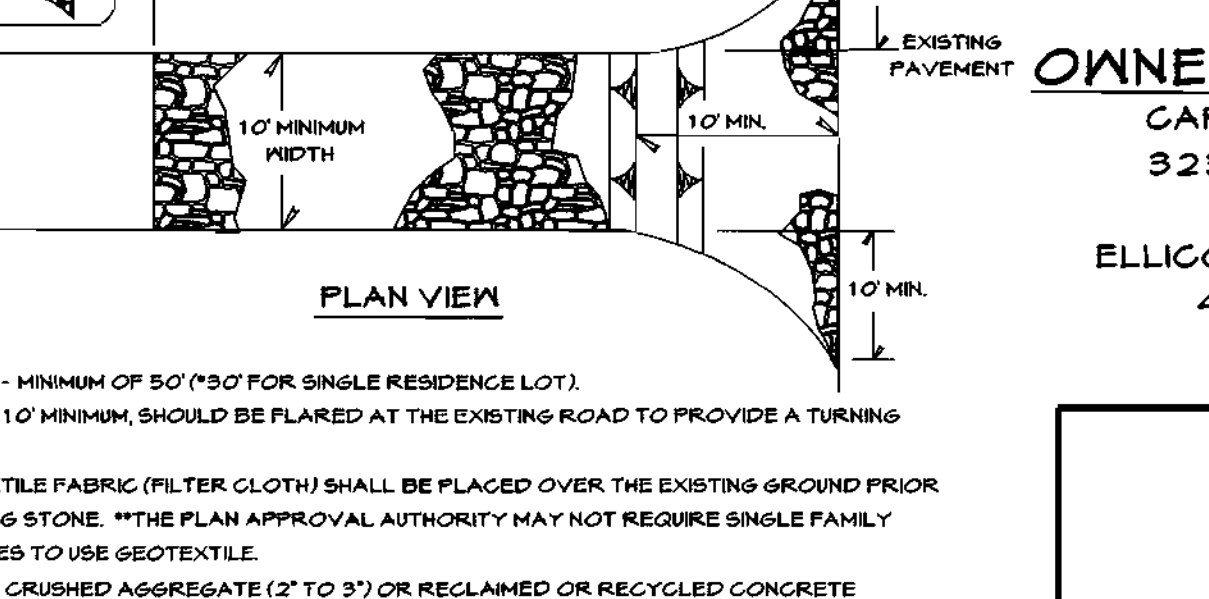
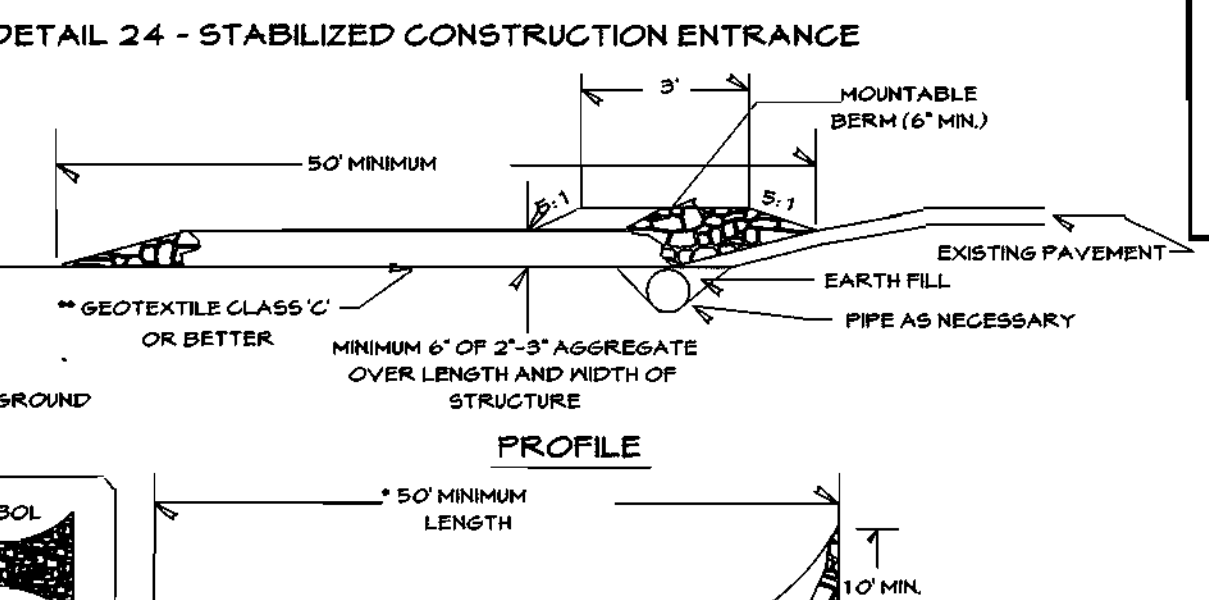
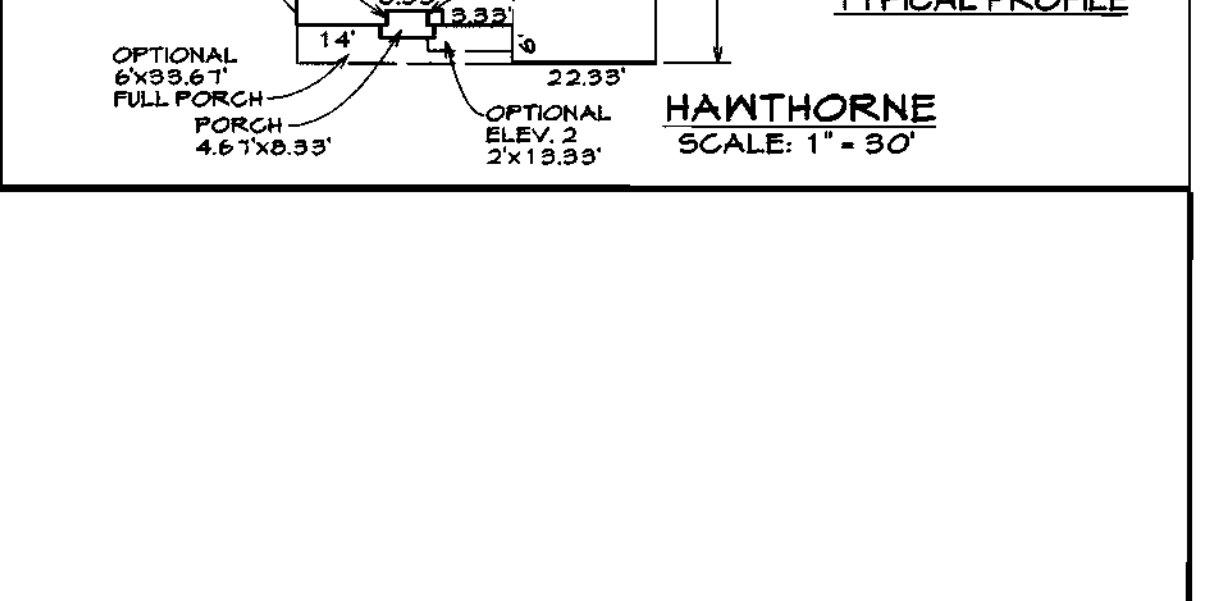
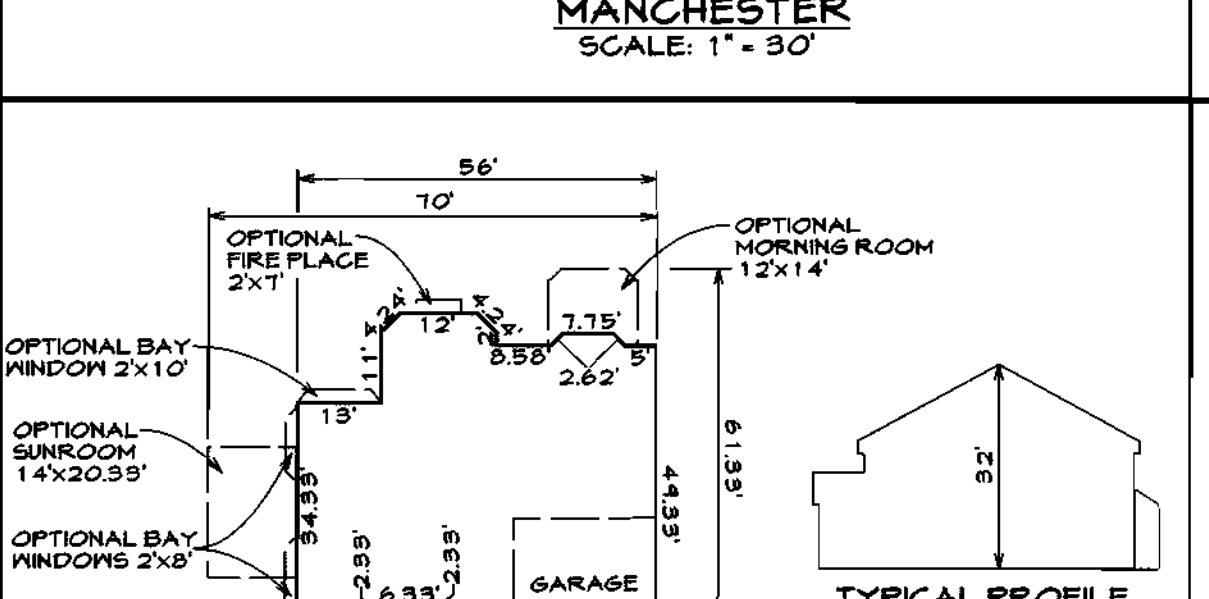
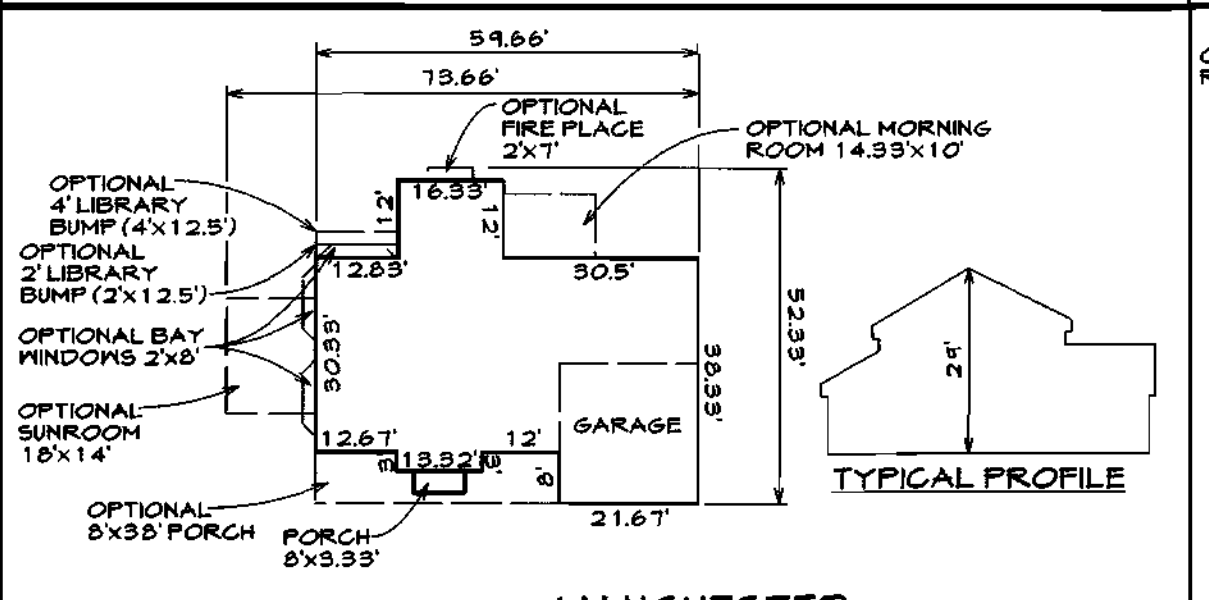
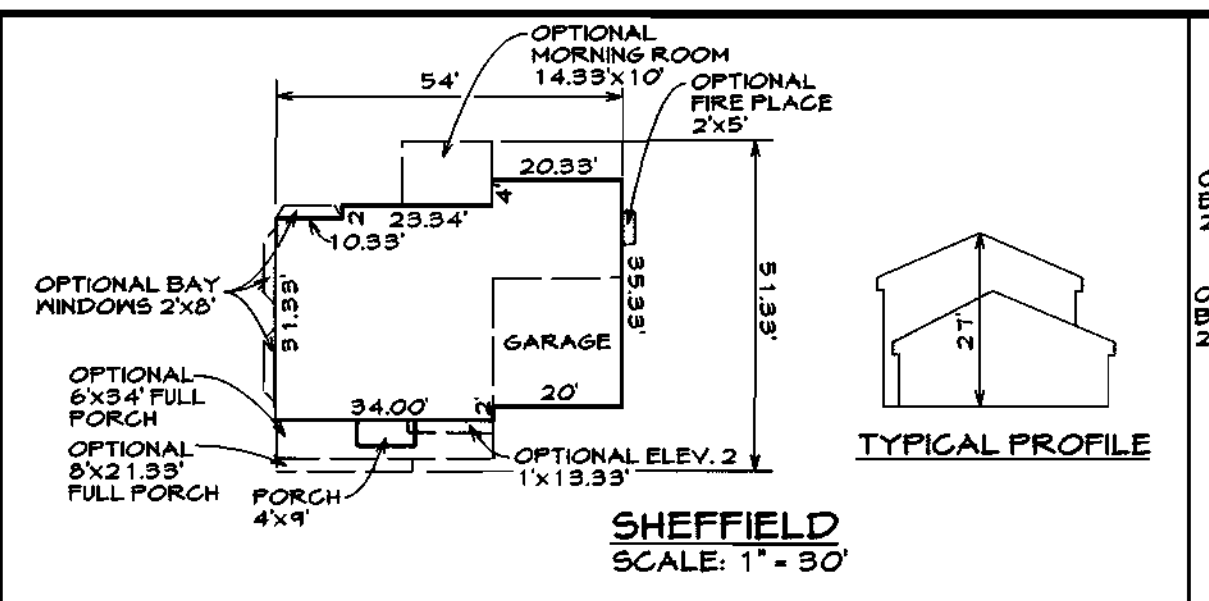
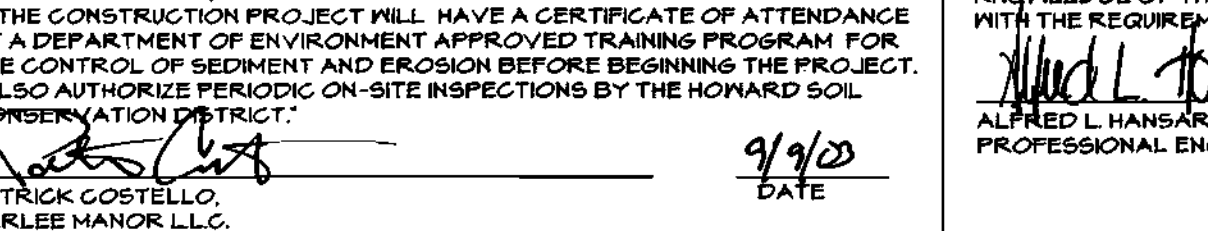
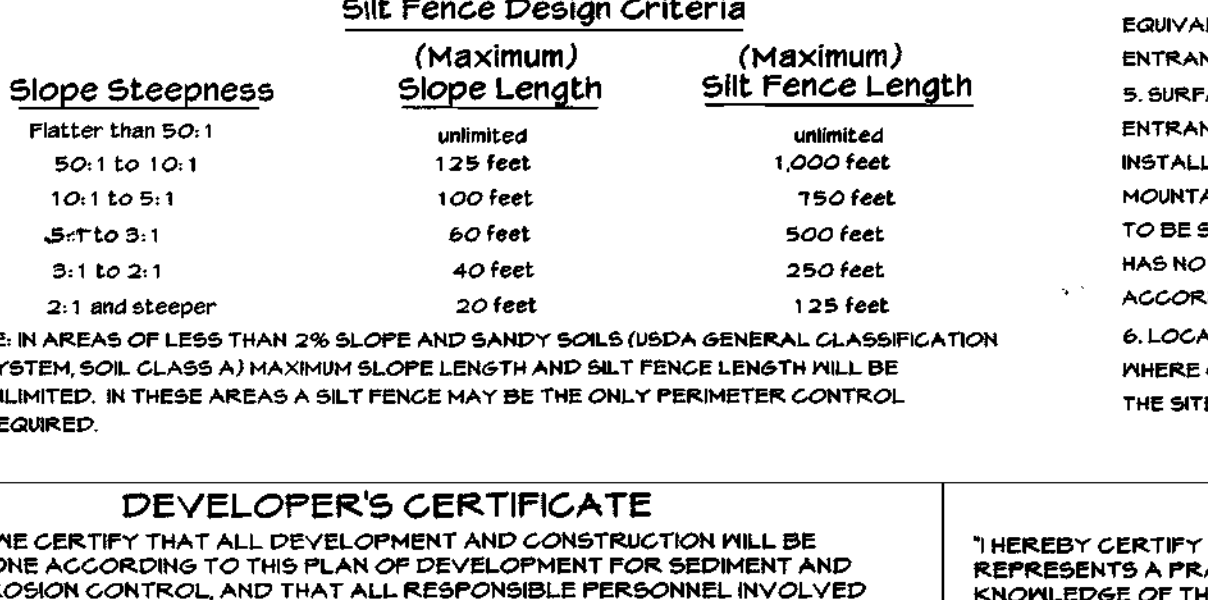
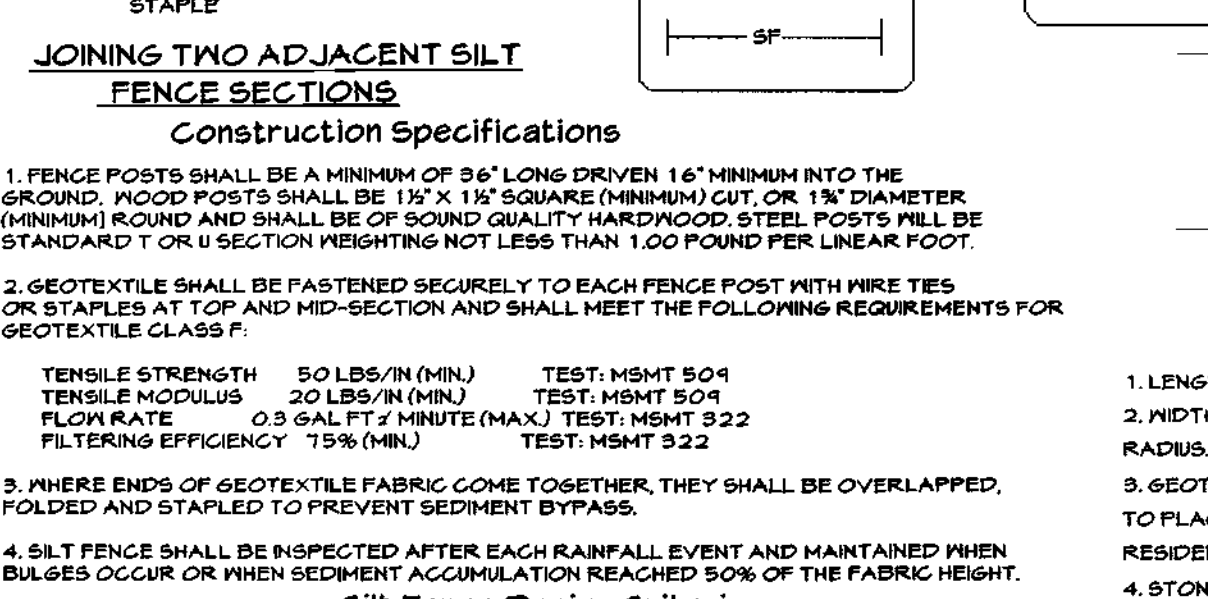
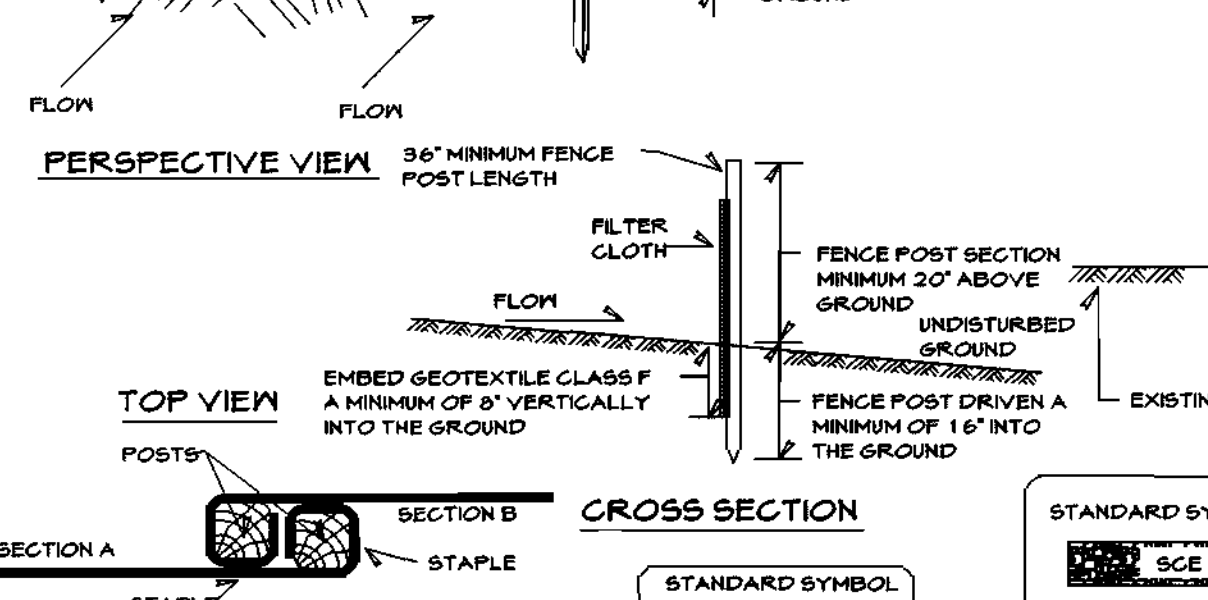
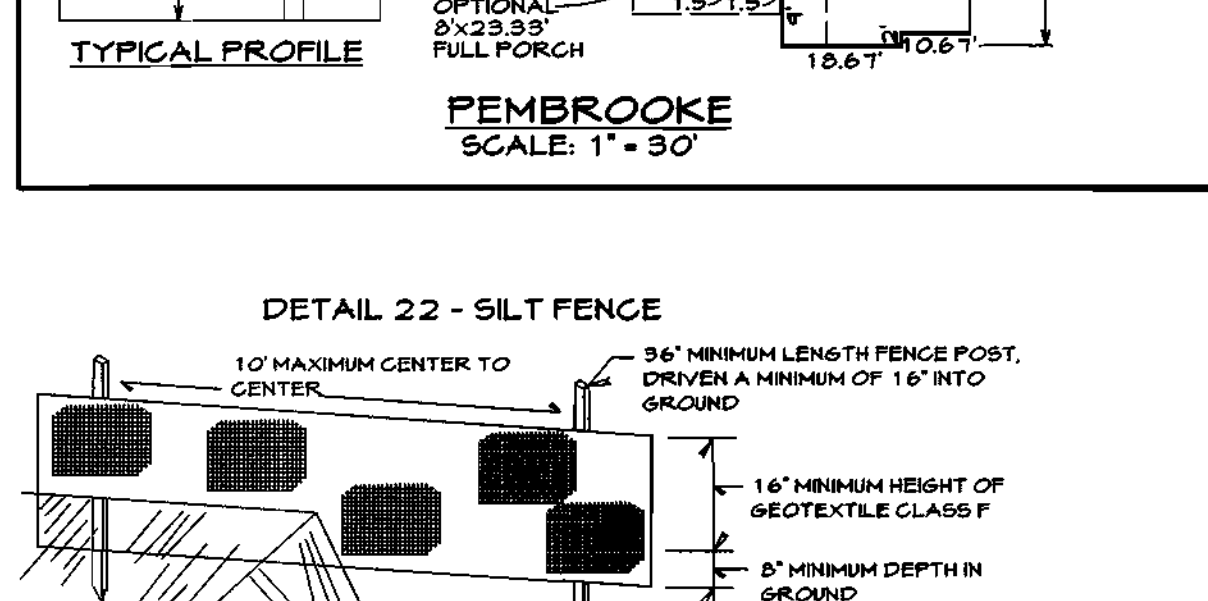
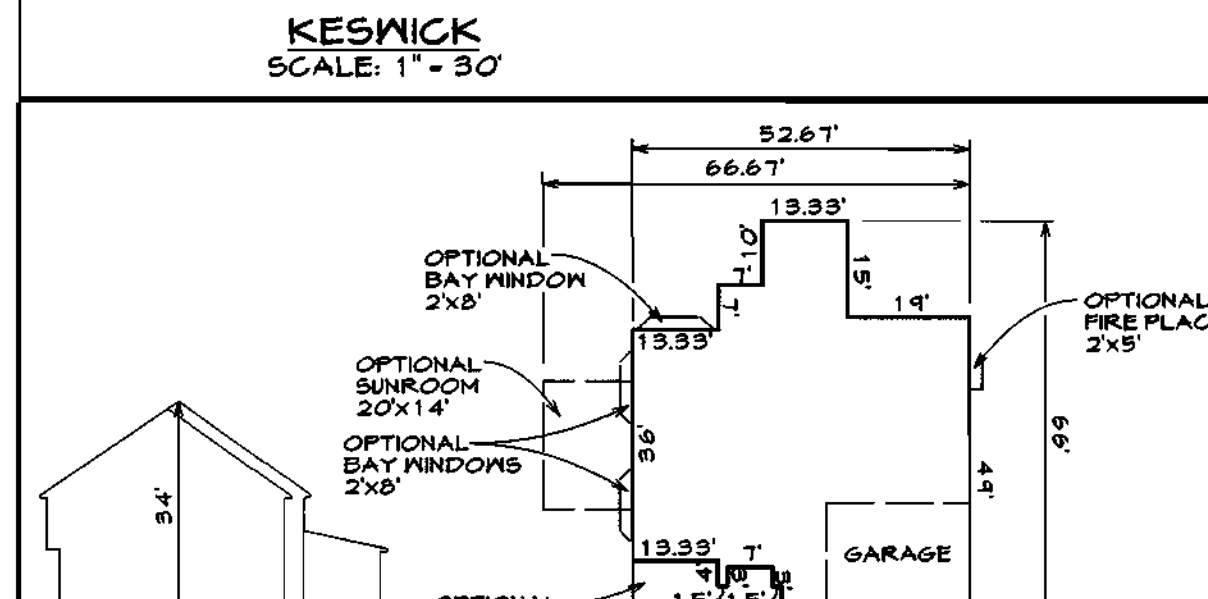
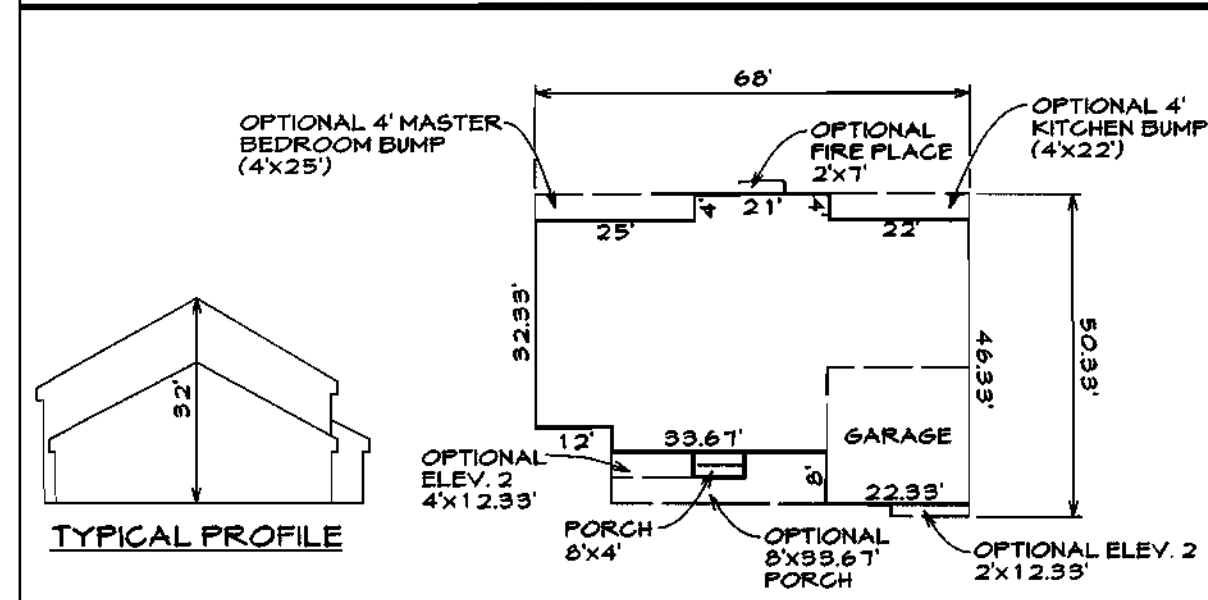
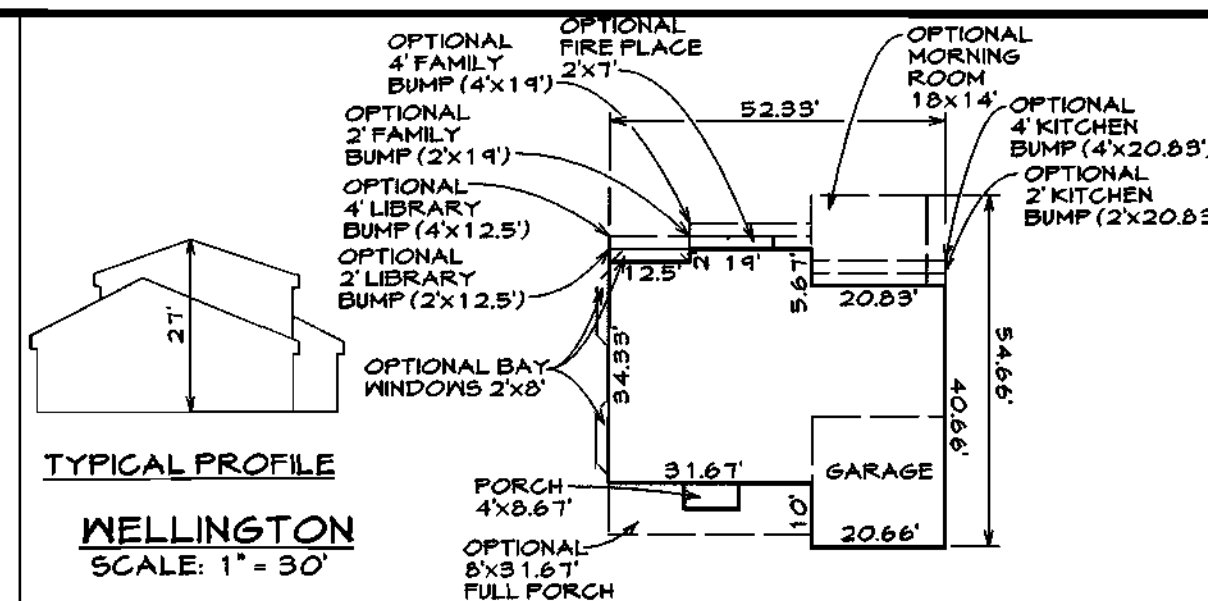
Tracking Note:
On areas where the slope is 3:1 or steeper and the height is 6' or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that cleat marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 6' height criteria.

- UTILITY CONSTRUCTION NOTES**
1. Place all excavated material on the high side of the trench.
2. Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
3. Any sediment control measures disturbed by the utility construction will be repaired the same day.

STOCKPILE/TOPSOIL NOTES
1. Stockpiling will not be allowed on any impervious area.
2. All stockpiles left at the end of the day will need to be temporarily stabilized until they are again disturbed, unless they are within existing perimeter sediment controls.
3. All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the inspector in the field.

- SEQUENCE OF CONSTRUCTION**
1. OBTAIN GRADING PERMIT. (1 DAY)
2. INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
3. CONSTRUCT DWELLING. (90 DAYS)
4. FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
5. INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
6. INSTALL LANDSCAPING. (1 DAY)
7. ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

DEVELOPER'S CERTIFICATE
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
PATRICK COSTELLO, CARLEE MANOR, LLC. DATE: 9/10/03



Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.

- LENGTH - MINIMUM OF 50' (90' FOR 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 MOUNTABLE 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 SILENCE 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.

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELLCOTT CITY, MD. 21045
410-750-1200

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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
ALFRED L. HANSAARD, PROFESSIONAL ENGINEER REG. NO. 23444 DATE: 9/10/03

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS
USDA - NATURAL RESOURCES CONSERVATION SERVICE
THIS DEVELOPMENT PLAN IS REVIEWED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
STEPHEN W. SCHMIDT, PROFESSIONAL ENGINEER REG. NO. 23444 DATE: 9/15/03

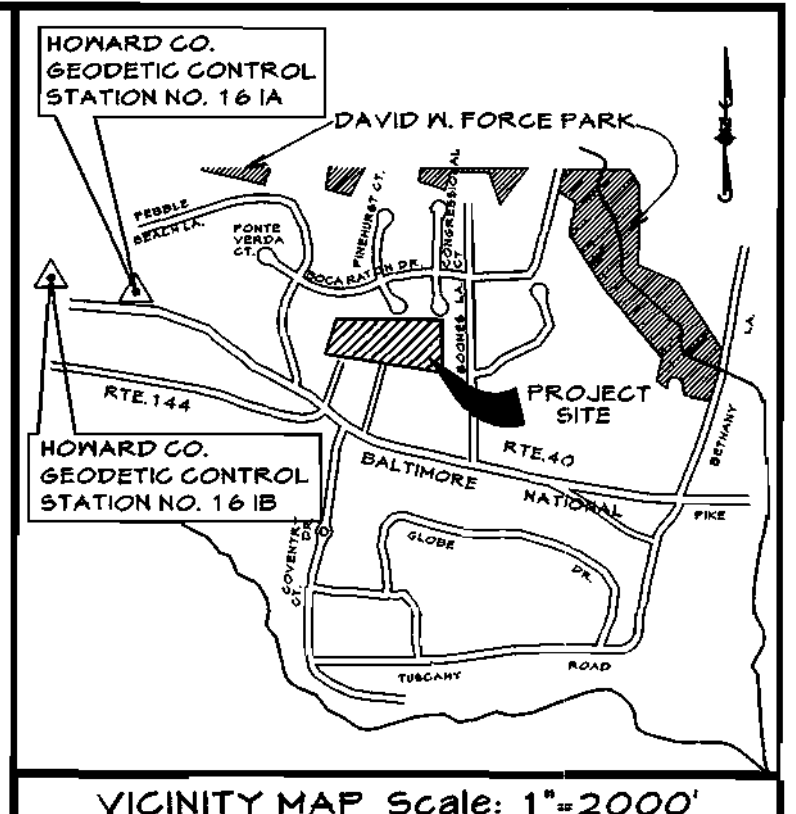
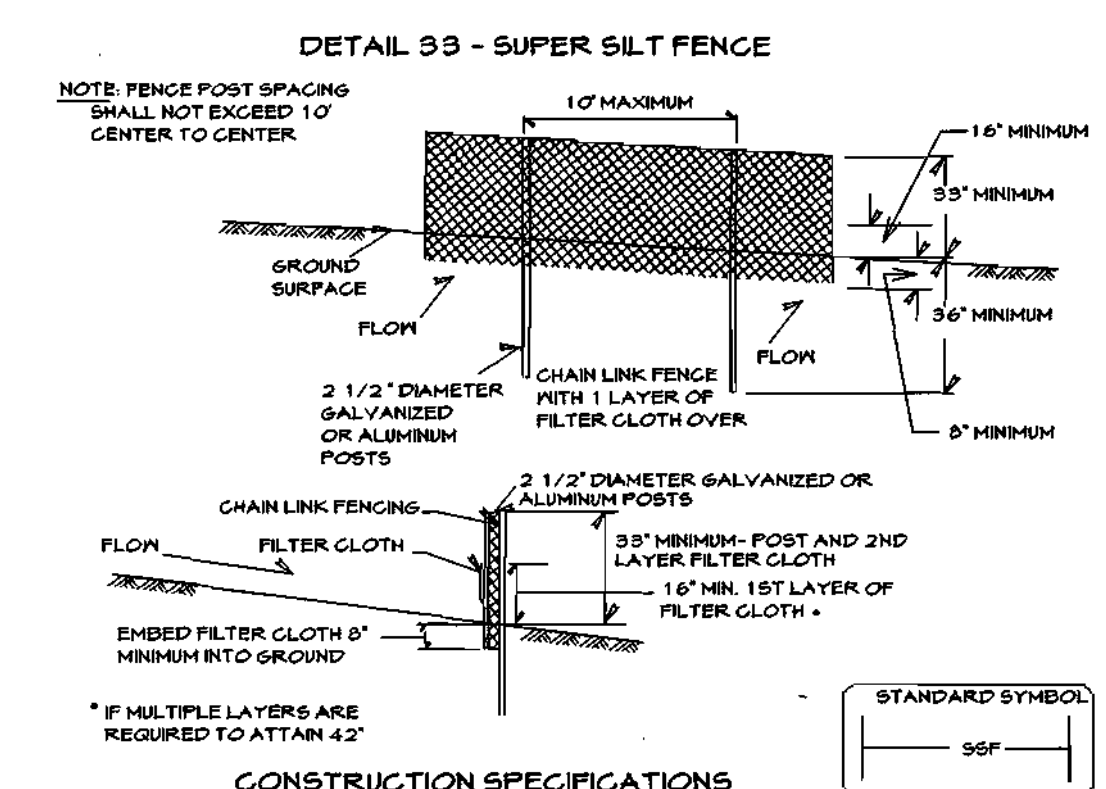
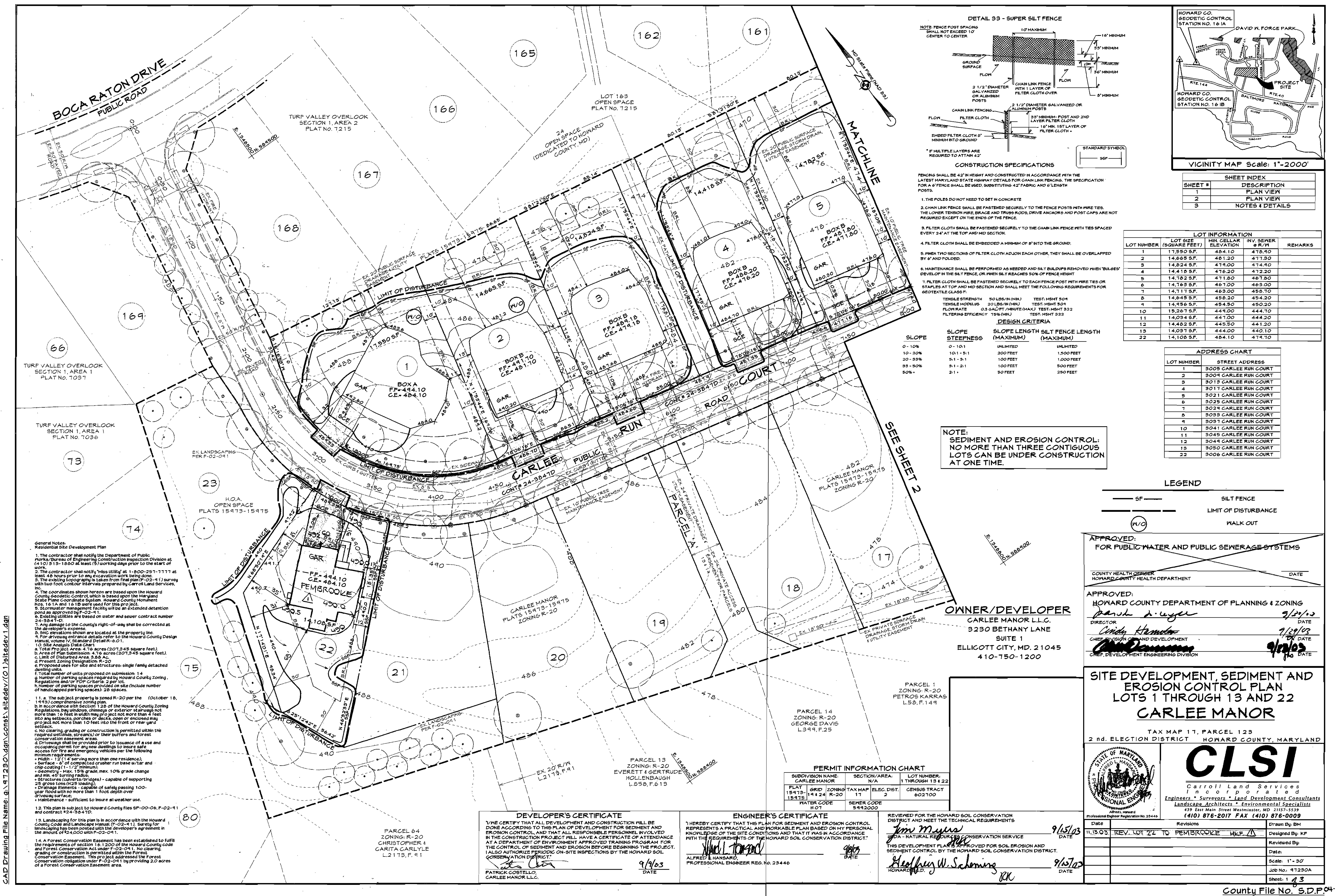
APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director: *Carlee Manor* DATE: 9/10/03
Chief Development Engineer: *Carlee Manor* DATE: 9/10/03

NOTES & DETAILS
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR
TAX MAP 17, PARCEL 123
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CLSI
Carroll Land Services Incorporated
Engineers • Surveyors • Land Development Consultants
Landscape Architects • Environmental Specialists
435 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

Date	Revisions	Drawn By: BH
		Designed By:
		Reviewed By:
		Date:
		Scale: AS SHOWN
		Job No: 41230A
		Sheet: 5 of 3

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SHEET INDEX

SHEET #	DESCRIPTION
1	PLAN VIEW
2	PLAN VIEW
3	NOTES & DETAILS

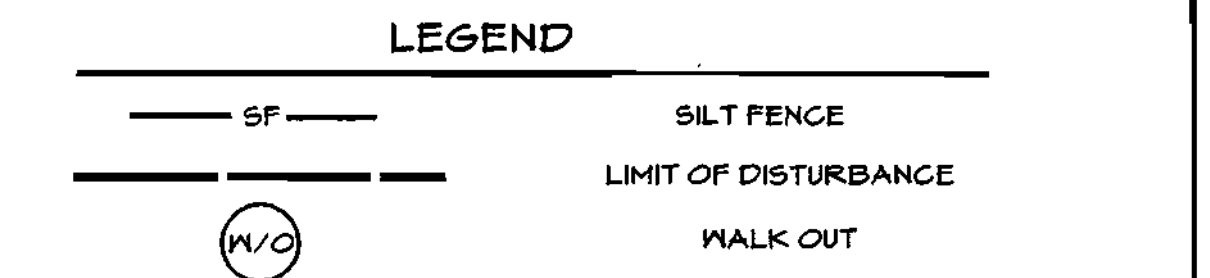
LOT INFORMATION

LOT NUMBER	LOT SIZE (SQUARE FEET)	MIN. CELLAR ELEVATION	INV. SEWER @ R/W	REMARKS
1	17,550 SF.	484.10	478.40	
2	14,665 SF.	481.20	477.80	
3	14,824 SF.	474.00	474.40	
4	14,418 SF.	476.20	472.20	
5	14,782 SF.	471.80	467.80	
6	14,763 SF.	467.00	463.00	
7	14,717 SF.	463.00	458.70	
8	14,645 SF.	458.20	454.20	
9	14,456 SF.	454.30	450.20	
10	15,267 SF.	444.00	444.70	
11	14,054 SF.	441.00	444.20	
12	14,482 SF.	445.50	441.20	
13	14,037 SF.	444.00	440.10	
22	14,108 SF.	484.10	474.70	

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
1	3005 CARLEE RUN COURT
2	3007 CARLEE RUN COURT
3	3013 CARLEE RUN COURT
4	3011 CARLEE RUN COURT
5	3021 CARLEE RUN COURT
6	3025 CARLEE RUN COURT
7	3024 CARLEE RUN COURT
8	3033 CARLEE RUN COURT
9	3037 CARLEE RUN COURT
10	3041 CARLEE RUN COURT
11	3045 CARLEE RUN COURT
12	3047 CARLEE RUN COURT
13	3050 CARLEE RUN COURT
22	3006 CARLEE RUN COURT

NOTE:
SEDIMENT AND EROSION CONTROL:
NO MORE THAN THREE CONTIGUOUS
LOTS CAN BE UNDER CONSTRUCTION
AT ONE TIME.



APPROVED:
FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER: _____ DATE: _____
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

David A. Ugel 9/27/03 DATE
DIRECTOR

Uday Handra 9/29/03 DATE
CHIEF DIVISION OF LAND DEVELOPMENT

John P. ... 9/29/03 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
9230 BETHANY LANE
SUITE 1
ELLIGOTT CITY, MD. 21045
410-750-1200

PERMIT INFORMATION CHART

SUBDIVISION NAME:	SECTION/AREA:	LOT NUMBER:
CARLEE MANOR	N/A	1 THROUGH 13 & 22
FLAT:	GRID:	TAX MAP:
15475	14+24	R-20
15475	17	2
MATER CODE: H07		SEWER CODE: 542000

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patricia Costello 9/29/03 DATE
PATRICIA COSTELLO, CARLEE MANOR L.L.C.

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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred J. Hansard 9/29/03 DATE
ALFRED J. HANSARD, PROFESSIONAL ENGINEER REG. NO. 23446

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jim Myra 9/15/03 DATE
JIM MYRA, NATURAL RESOURCES CONSERVATION SERVICE

Heather W. Schomberg 9/15/03 DATE
HEATHER W. SCHOMBERG, PROFESSIONAL ENGINEER REG. NO. 23446

General Notes

1. The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 315-1800 at least 15 working days prior to the start of work.

2. The contractor shall notify Miss Uggel at 1-800-251-7177 at least 48 hours prior to any excavation work being done.

3. The existing topography is taken from final plan (F-02-41) survey with two foot contour intervals prepared by Carroll Land Services, Inc.

4. The coordinates shown herein are based upon the Howard County geodetic control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 161A and 161B were used for this project.

5. Stormwater management facility will be an extended detention pond as approved by F-02-41.

6. Existing utilities are based on water and sewer contract number 24-9847-0.

7. Any damage to the County's right-of-way shall be corrected at the developer's expense.

8. SMC elevations shown are located at the property line.

9. For driveway entrance details refer to the Howard County Design Manual, volume IV, Standard Detail R-6-01.

10. Site Analysis Data Chart:
a. Total Project Area: 4.18 acres (207,345 square feet).
b. Area of Plan Submission: 4.16 acres (207,345 square feet).
c. Limit of Disturbed Area: 3.88 Ac.
d. Present Zoning Designation: R-20
e. Proposed uses for site and structures: single family detached dwelling units.

11. Total number of units proposed on submission: 14

12. Number of parking spaces required by Howard County Zoning Regulations and/or FDP Criteria: 2 per lot.

13. Number of parking spaces provided on site (include number of handicapped parking spaces): 28 spaces.

14. The subject property is zoned R-20 per the (October 18, 1945) Comprehensive Zoning Plan.

15. In accordance with Section 1.2 of the Howard County Zoning Regulations, any 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.

16. No clearing, grading or construction is permitted within the required setbacks, streams, or their buffers and forest conservation easement areas.

17. 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:
+ Highways - 12' 1/4" serving more than one residence.
+ Surface - 6" of compacted crusher run base w/1/4" and chip coating (1-1/2" minimum).
+ Geometry - Max. 15% grade, max. 10% grade change and min. 45' turning radius.
+ Structures (curbs/bridges) - capable of supporting 25 gross tons (125' loading).
+ Drainage Elements - capable of safely passing 100-year flood with no more than 1 foot depth over driveway surface.
+ Maintenance - sufficient to insure all weather use.

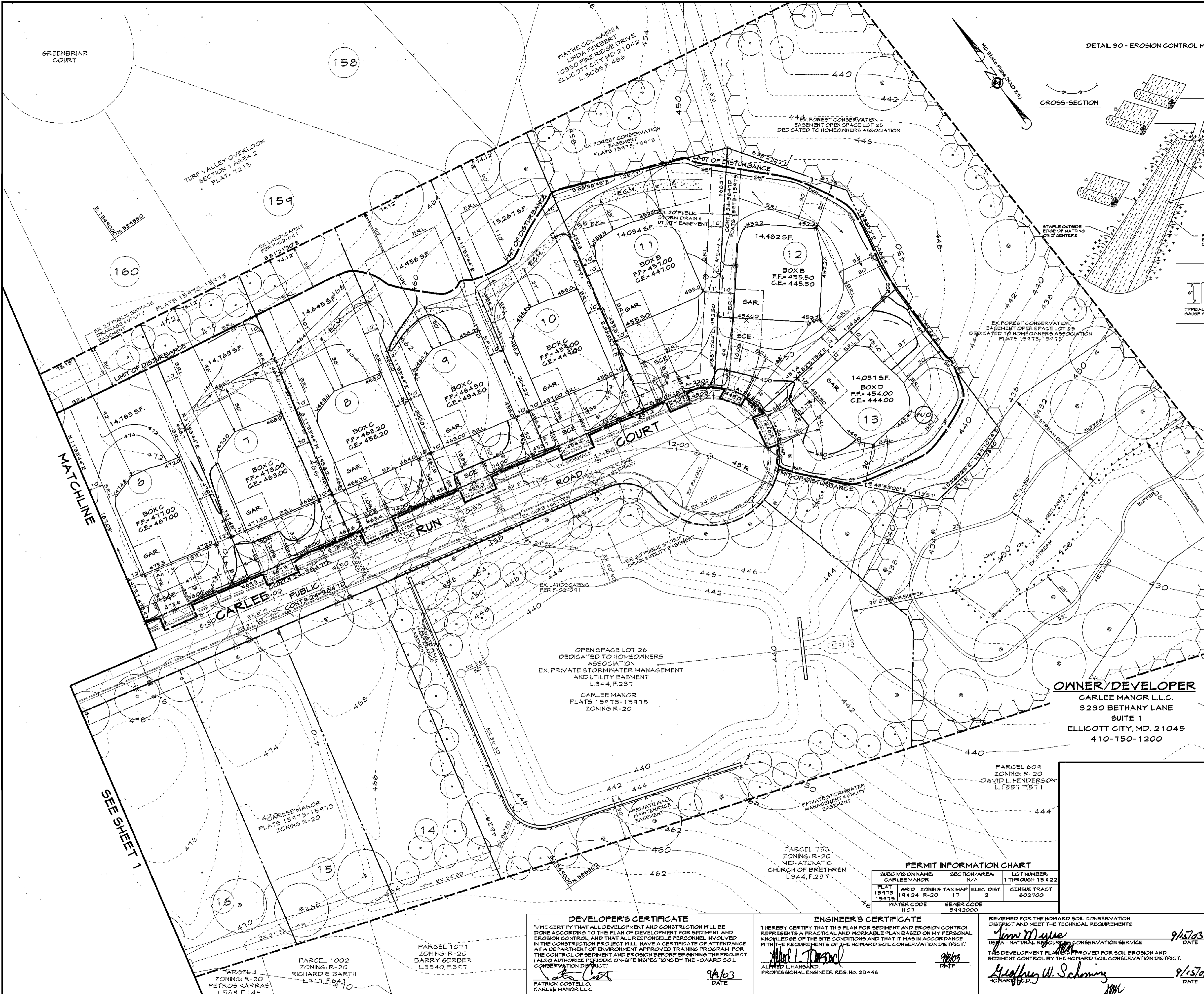
18. This plan is subject to Howard County Files SP-00-06, F-02-41 and contract #24-9847D.

19. Landscaping for this plan is in accordance with the Howard County Code and Landscape Manual (F-02-41). Surety for landscaping has been posted with the developer's agreement in the amount of \$24,000 with F-02-041.

20. A Forest Conservation Easement has been established to fulfill the requirements of section 16.1200 of the Howard County Code and Forest Conservation Act under F-02-041. No clearing, grading or construction is permitted within the Forest Conservation Easement. This project addressed the Forest Conservation obligation under F-02-041 by providing 2.0 acres of a Forest Conservation Easement area.

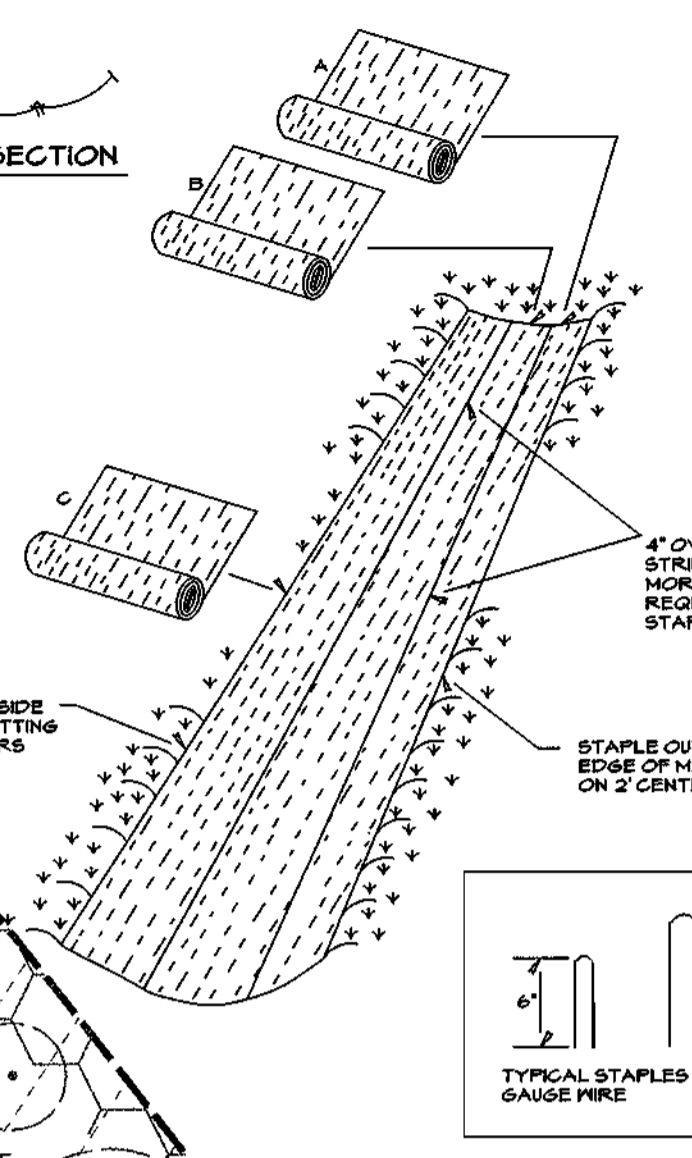
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DETAIL 30 - EROSION CONTROL MATTING

CROSS-SECTION



- CONSTRUCTION SPECIFICATIONS**
- KEY-IN THE MATTINGS BY PLACING THE TOP ENDS OF THE MATTINGS IN A NARROW TRENCH 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES 6".
 - STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
 - BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
 - STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
 - WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIFLAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
 - THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.
- NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEYED-IN.

LEGEND

- SF SILT FENCE
- LIMIT OF DISTURBANCE
- W/O WALK OUT
- SSF SUPER SILT FENCE
- EROSION CONTROL MATTING

NOTE:
SEDIMENT AND EROSION CONTROL:
NO MORE THAN THREE CONTIGUOUS
LOTS CAN BE UNDER CONSTRUCTION
AT ONE TIME.

APPROVED:
FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

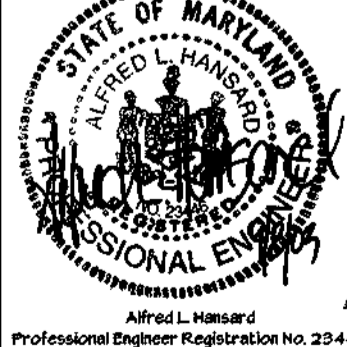
APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELLCOTT CITY, MD. 21045
410-750-1200

DIRECTOR
CHIEF OF LAND DEVELOPMENT
CHIEF, DEVELOPMENT ENGINEERING DIVISION

SITE DEVELOPMENT & GRADING PLAN
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND



CLSI
Carroll Land Services
Incorporated

Engineers & Surveyors • Land Development Consultants
Landscape Architects • Environmental Specialists
439 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

Date	Revisions	Drawn By: BM
9/15/03		Designed By: KF
		Reviewed By:
		Date:
		Scale: 1" = 30'
		Job No.: 47230A
		Sheet: 2 of 3

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT NUMBER			
CARLEE MANOR	N/A	1 THROUGH 13 & 22			
PLAT	GRID	ZONING	TAX MAP	ELEC. DIST.	CENSUS TRACT
15413	14124	R-20	17	2	602100
WATER CODE	SEWER CODE				
H 07	S 912000				

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
PATRICK COSTELLO
CARLEE MANOR L.L.C.
9/1/03
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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
ALFRED L. HANSARD
PROFESSIONAL ENGINEER REG. NO. 23446
9/15/03
DATE

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS
JIM M...
USDA - NATURAL RESOURCE CONSERVATION SERVICE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
ALFRED W. SCHMIDT
9/15/03
DATE

**HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT 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 (313-1255).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1 to 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 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 5.1) and Sec. 5.4 temporary seeding (Sec. 5.0) and mulching (Sec. 5.2). Temporary stabilization 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.

1. Site Analysis

Total Area of Site	13.31 Acres
Area Disturbed	3.04 Acres
Area to be roofed or paved	1.43 Acres
Area to be vegetatively stabilized	2.46 Acres
Total Cut	100 Cu Yds.
Total Fill	100 Cu Yds.

Offsite waste/borrow area location will be to a site with an approved sediment control plan and an approved and open grading permit.

- 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 other earth disturbance or grading. Other building 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 by the end of each workday, whichever is shorter.
- Rev. 4/14
- Topsoil Notes**
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 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" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutcracker, 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. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 2.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - 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:

N 10	P 205	K 20	10
------	-------	------	----

 Lime application rate - 2 tons/acre (100 lbs./1,000 sq. ft.)
Seed Mixture Hardiness Zone 6B/7A (6-20 Figure 5)

No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Ryegrass	40	3/1 to 10/30	1"-2"
 - 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 min) 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 2.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

- Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - 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"-2" 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.
- Page 3
- Topsoil Notes**
- Topsoil shall not be placed until 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.
 - 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 over 5 acres shall be tested to prescribe amendments and 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 (at 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 the 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.

NOTE:
ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.

STABILIZATION SPECIFICATIONS

TEMPORARY SEEDING NOTES

- Scope:** Planting short term (no more than 1 year) vegetation to temporarily stabilize any areas where soil disturbance has occurred, until the area can be permanently stabilized with vegetative or non-vegetative practices.
- Standard:** The following notes shall conform to the "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL," published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - Fertilizer shall consist of a mixture of 10-10-10 and be applied at a rate of 600 lb per acre (15 lb per 1,000 sq. ft.) and will meet the requirements in 6-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1,000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in 6-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F, G and H.
 - Seeding mixtures shall be selected from or will be equal to those on Table 26.
 - The following is one option, approved equals may be used.

Temporary Seeding Summary

Seed Mixture	Hardiness Zone	6B/7A (6-20 Figure 5)	
No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Kentucky-31	80	3/1 to 11/15	1"-2"
Annual Ryegrass	20	3/1 to 11/15	1/4"-1/2"

PERMANENT SEEDING NOTES

- Scope:** Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 1 year.
- Standard:** The following notes shall conform to the "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL," published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - For sites over 5 ac. soil tests will be performed to determine the exact mixture and application rates for both lime and fertilizer. Soil tests will be prepared by the University of Maryland or a recognized commercial laboratory. If the existing soil does not meet the minimum conditions as stated in 6-20 Sec. 1-C-II, then topsoil will need to be obtained that meets these conditions and applied so as to meet the requirements in 6-21.
 - For sites of 5 ac. or less of disturbance, the following fertilizer and lime rates shall apply:
 - Fertilizer shall consist of a mixture of 10-20-20 and be applied at the following rates:
 - N-40 lb per acre (2 lb per 1,000 sq. ft.)
 - P-205-175 lb per acre (4 lb per 1,000 sq. ft.)
 - K-20-175 lb per acre (4 lb per 1,000 sq. ft.)
 Fertilizer shall meet the requirements in 6-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1,000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F & H.
 - Refer to 6-20 Sec. 4 for Sod specifications.
 - Refer to 6-20 Sec. 5 for Turfgrass Establishment specifications.
 - Seeding mixtures shall be selected from or will be equal to those on Table 25.
 - The following is one option, approved equals may be used.

Permanent Seeding Summary

N 10	P 205	K 20	10
------	-------	------	----

Lime application rate - 2 tons/acre (100 lbs./1,000 sq. ft.)
Seed Mixture Hardiness Zone 6B/7A (6-20 Figure 5)

No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Ryegrass	40	3/1 to 10/30	1"-2"

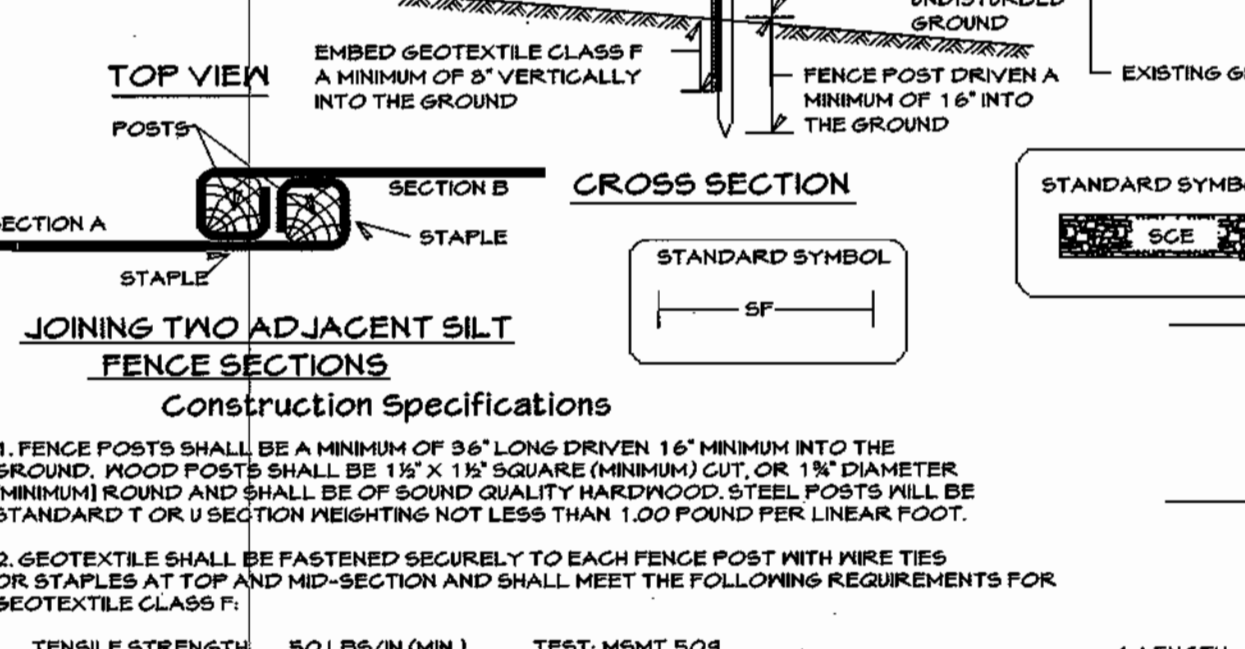
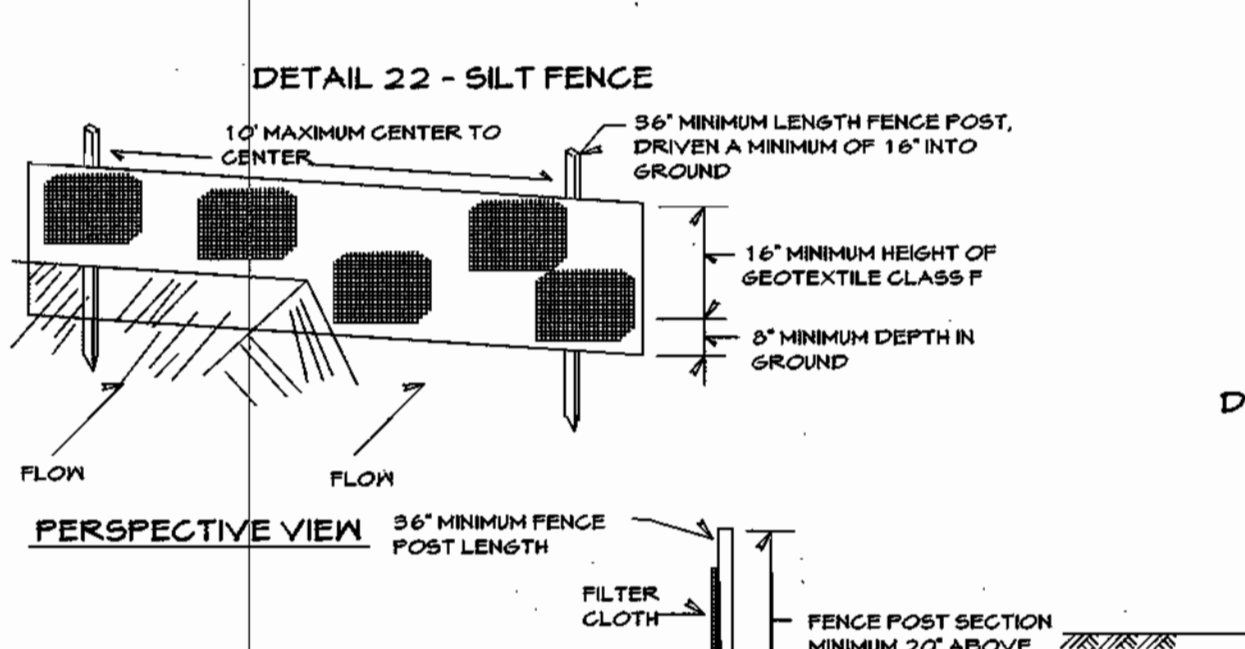
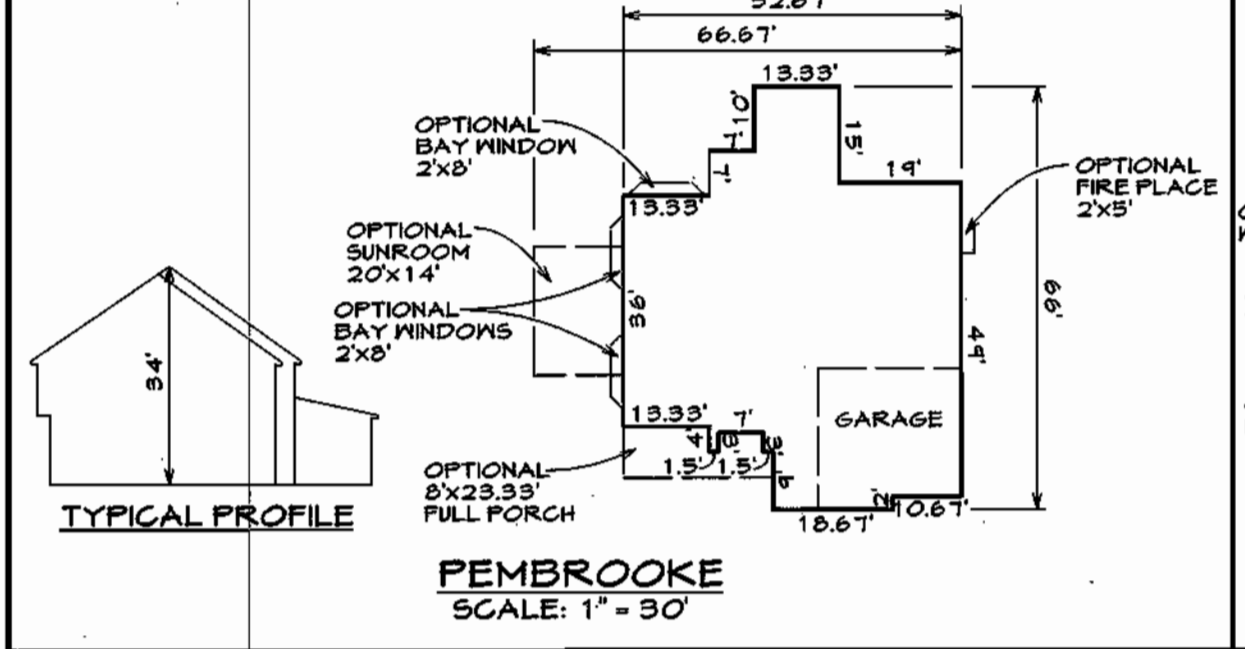
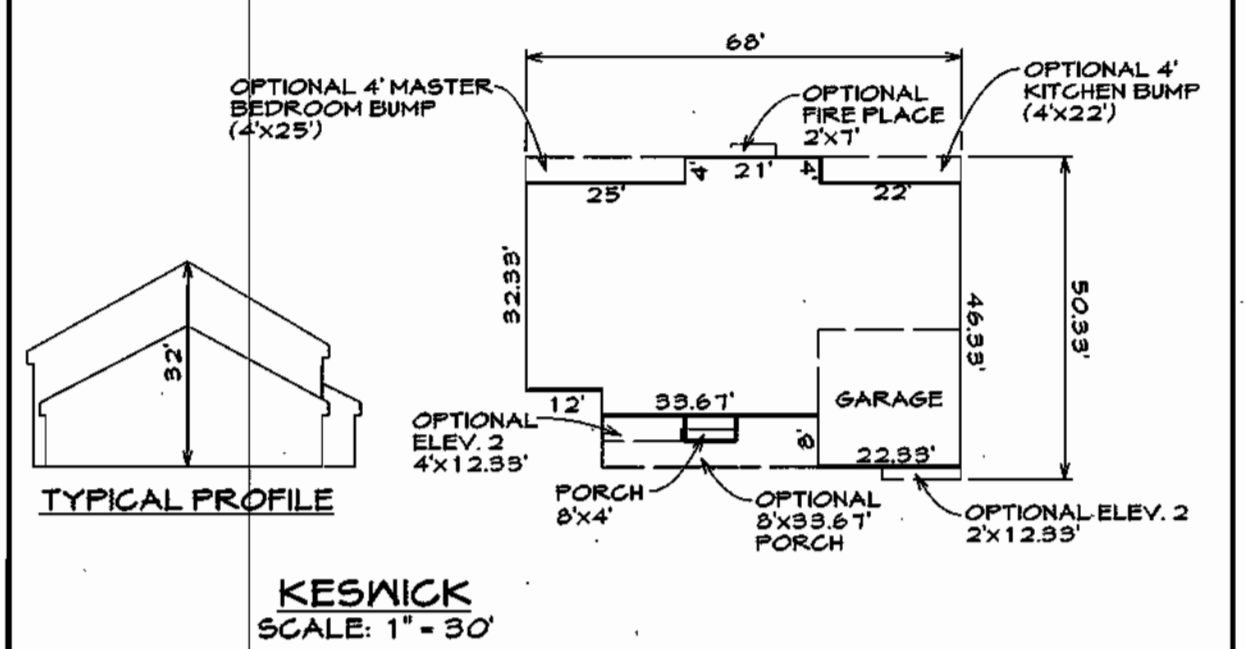
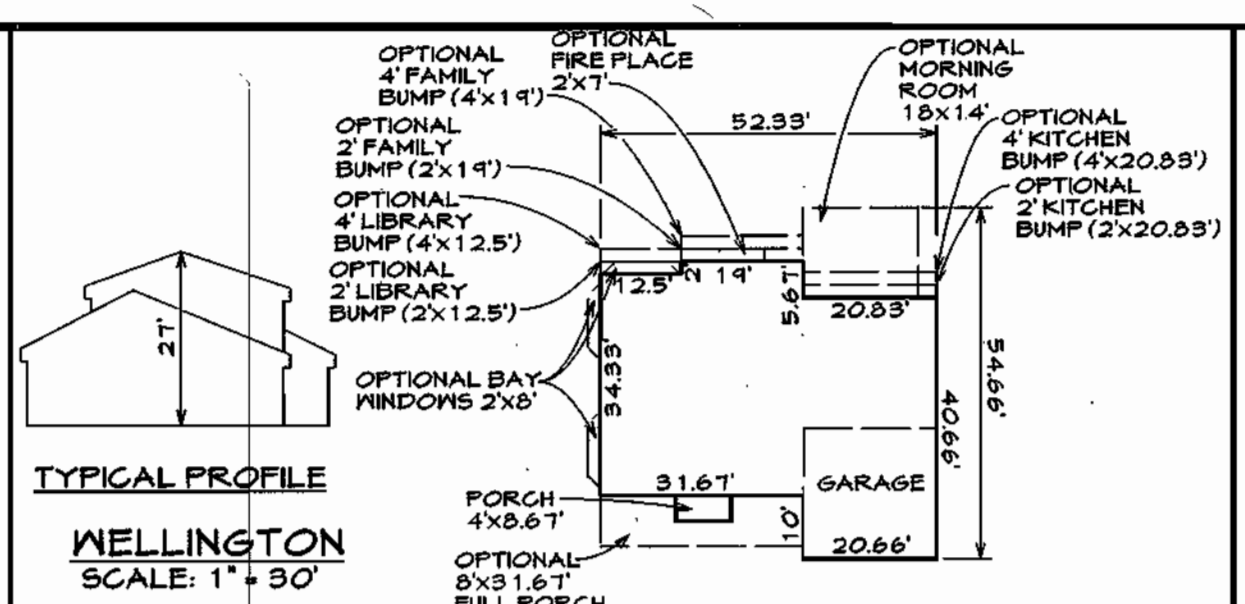
Tracking Note:
On areas where the slope is 3:1 or steeper and the height is 8' or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that clear marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8' height criteria.

- UTILITY CONSTRUCTION NOTES**
- Place all excavated material on the high side of the trench.
 - Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
 - Any sediment control measures disturbed by the utility construction will be repaired the same day.

- STOCKPILE/TOPSOIL NOTES**
- Stockpiling will not be allowed on any impervious area.
 - All stockpiles left at the end of the day will need to be temporarily stabilized until they are again disturbed, unless they are within existing perimeter sediment controls.
 - All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the inspector in the field.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. (1 DAY)
- INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
- CONSTRUCT DWELLING. (90 DAYS)
- FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
- INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
- INSTALL LANDSCAPING. (1 DAY)
- ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)



Construction Specifications

- FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. MOOD POSTS SHALL BE 1 1/2" X 1 1/2" SQUARE (MINIMUM) CUT, OR 1 1/2" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION HEIGHTS NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
- GEOTEXTILE 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 504
TENSILE MODULUS	20 LBS./IN (MIN)	TEST: MSMT 504
FLOW RATE	0.5 GAL/FT ² / MINUTE (MAX)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN)	TEST: MSMT 322

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.

4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

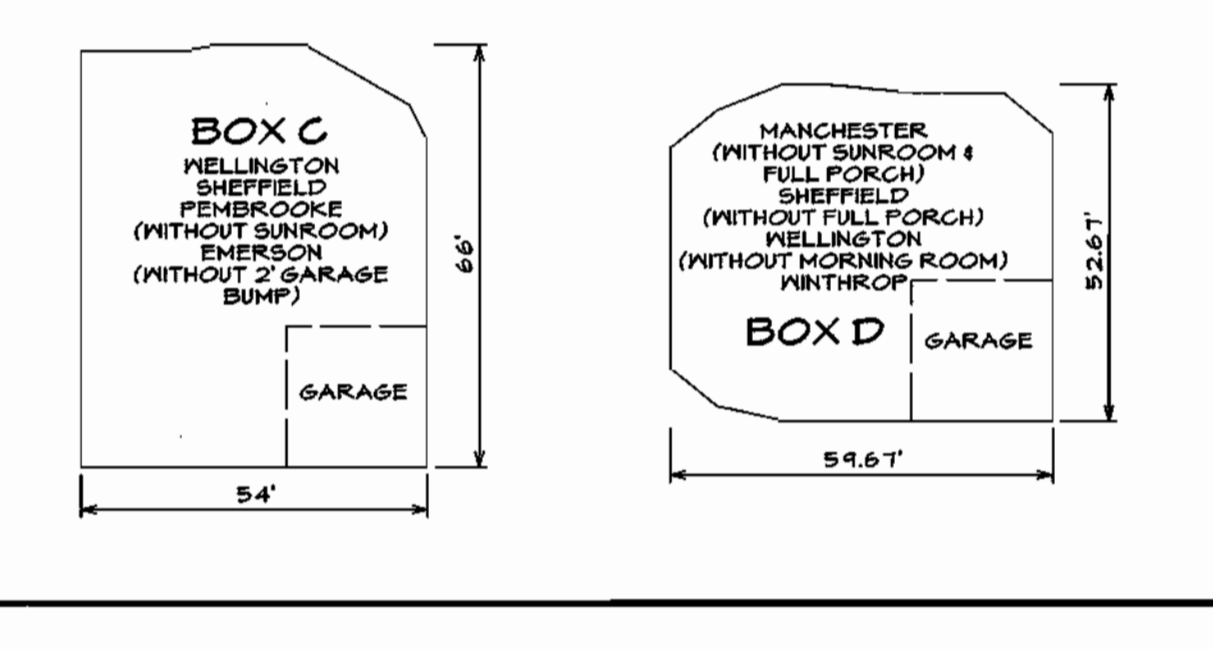
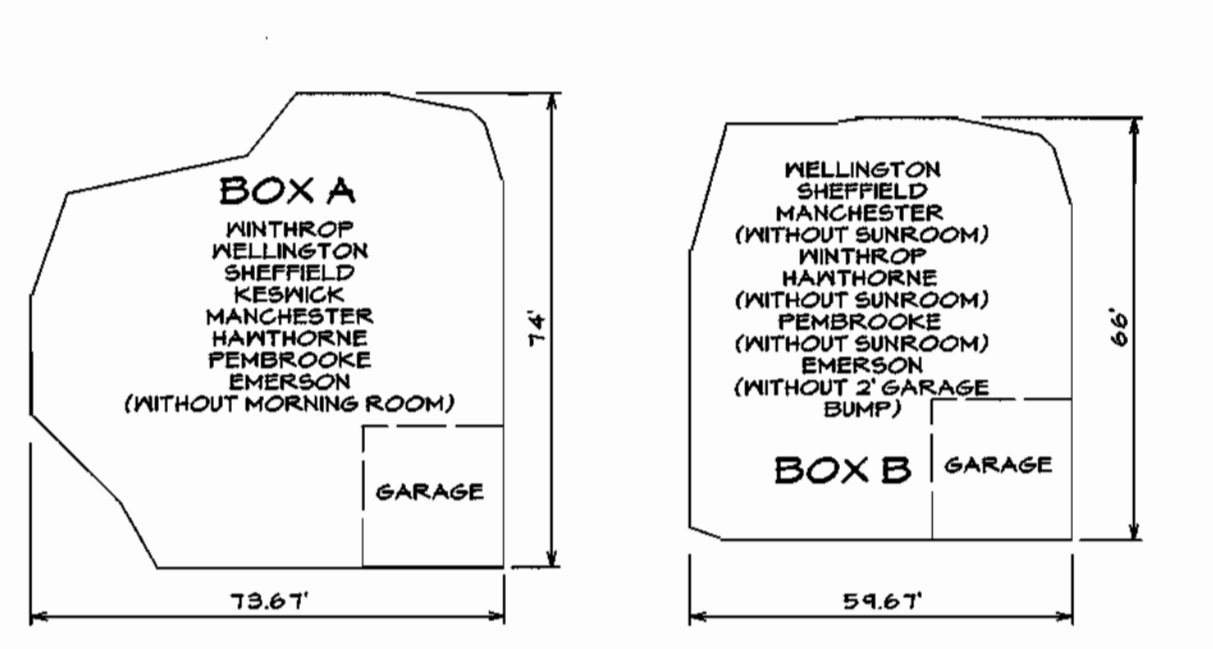
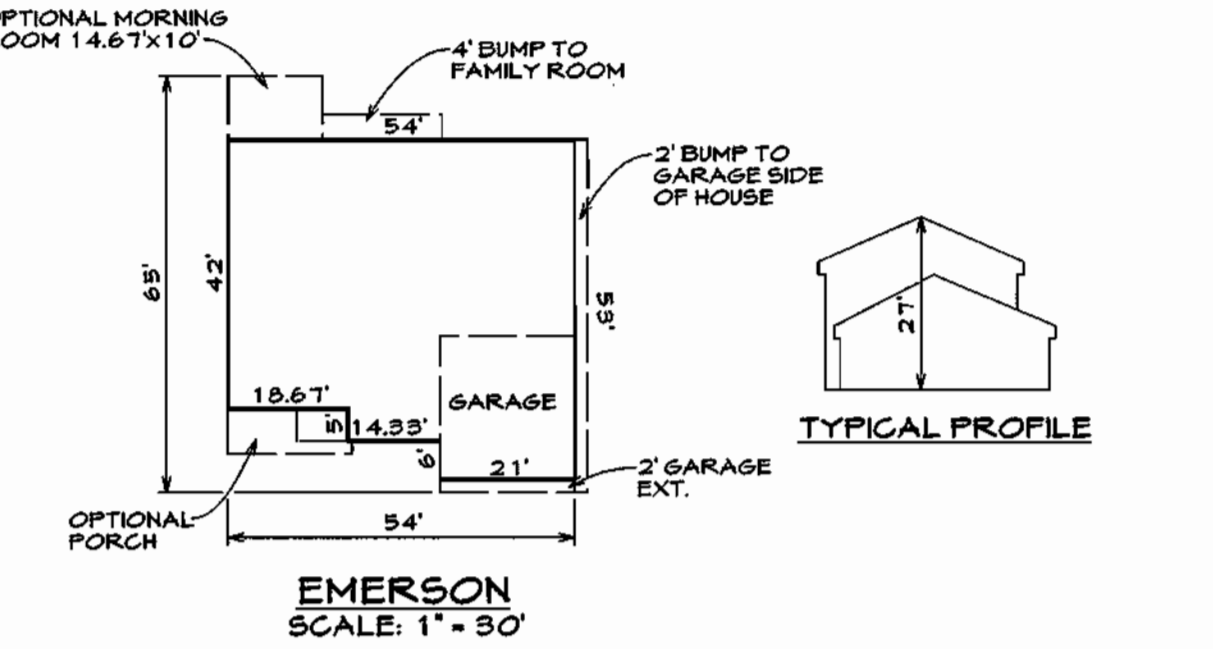
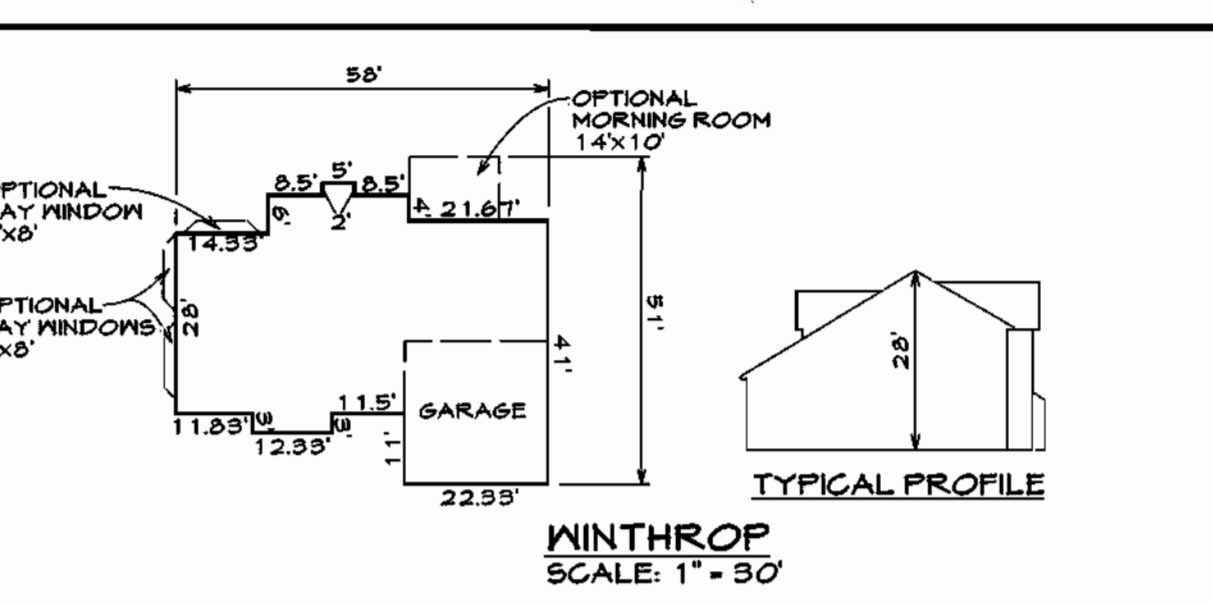
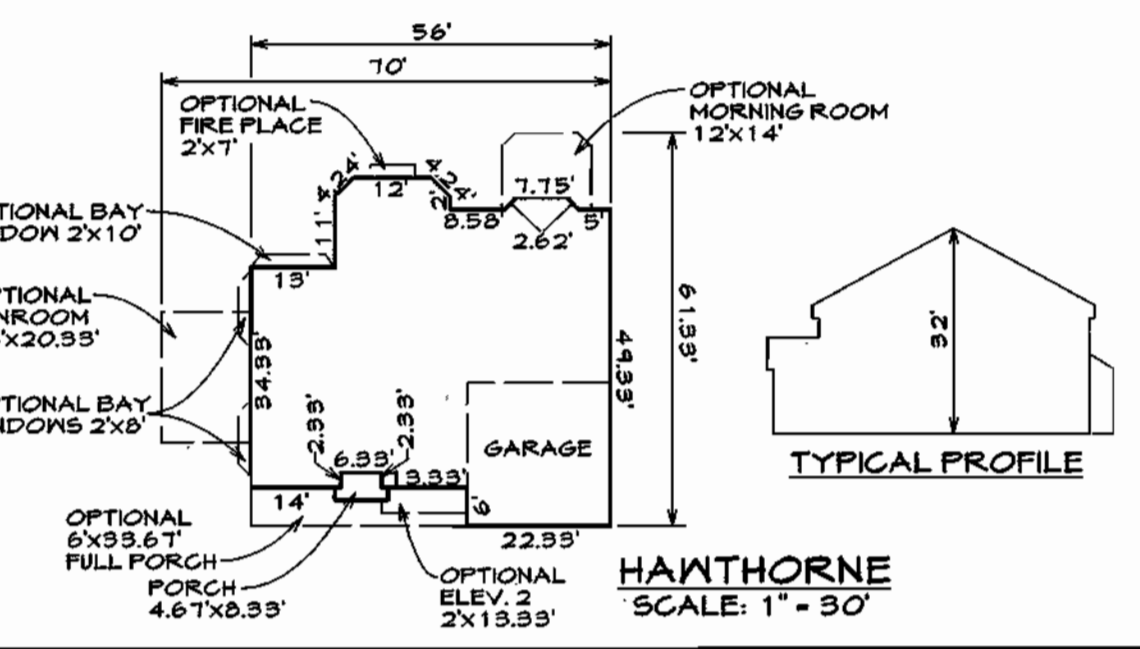
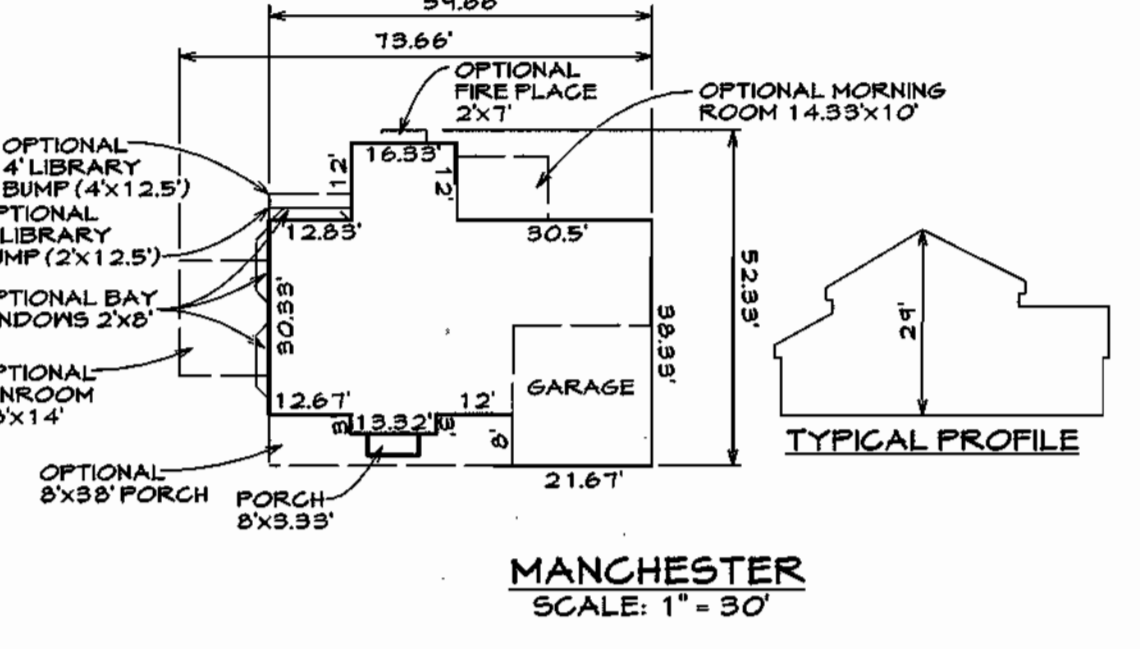
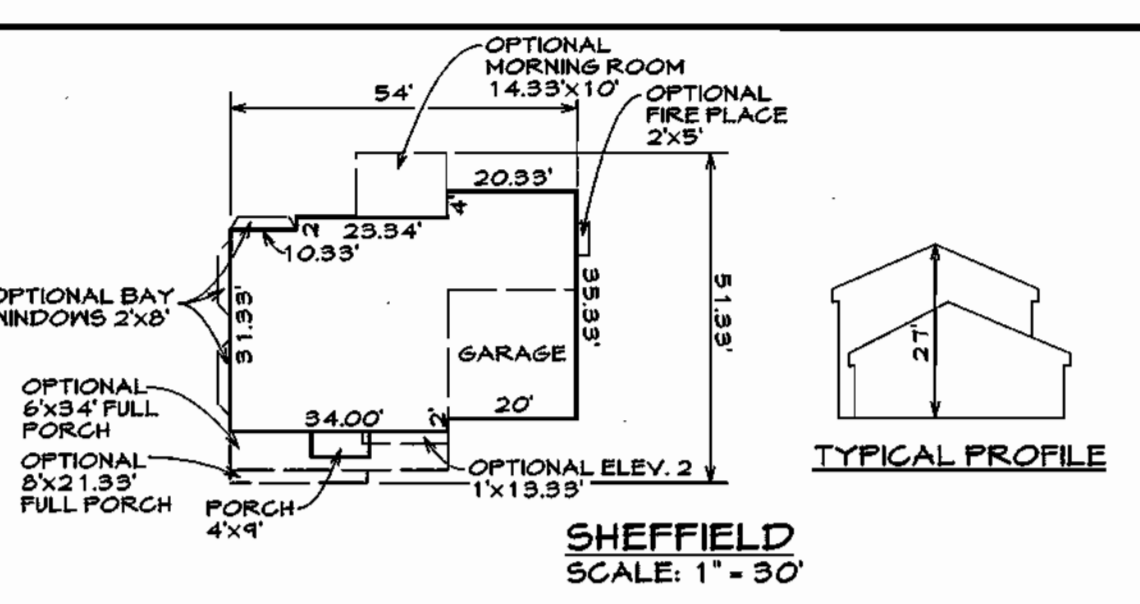
Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
	1:1 to 1.5:1	125 feet
1.5:1 to 2:1	100 feet	150 feet
	5:1 to 8:1	60 feet
3:1 to 2:1	40 feet	250 feet
	2:1 and steeper	20 feet

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick Costello
PATRICK COSTELLO
CARLEE MANOR L.L.C.
9/9/03 DATE



OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELLCOTT CITY, MD. 21045
410-750-1200

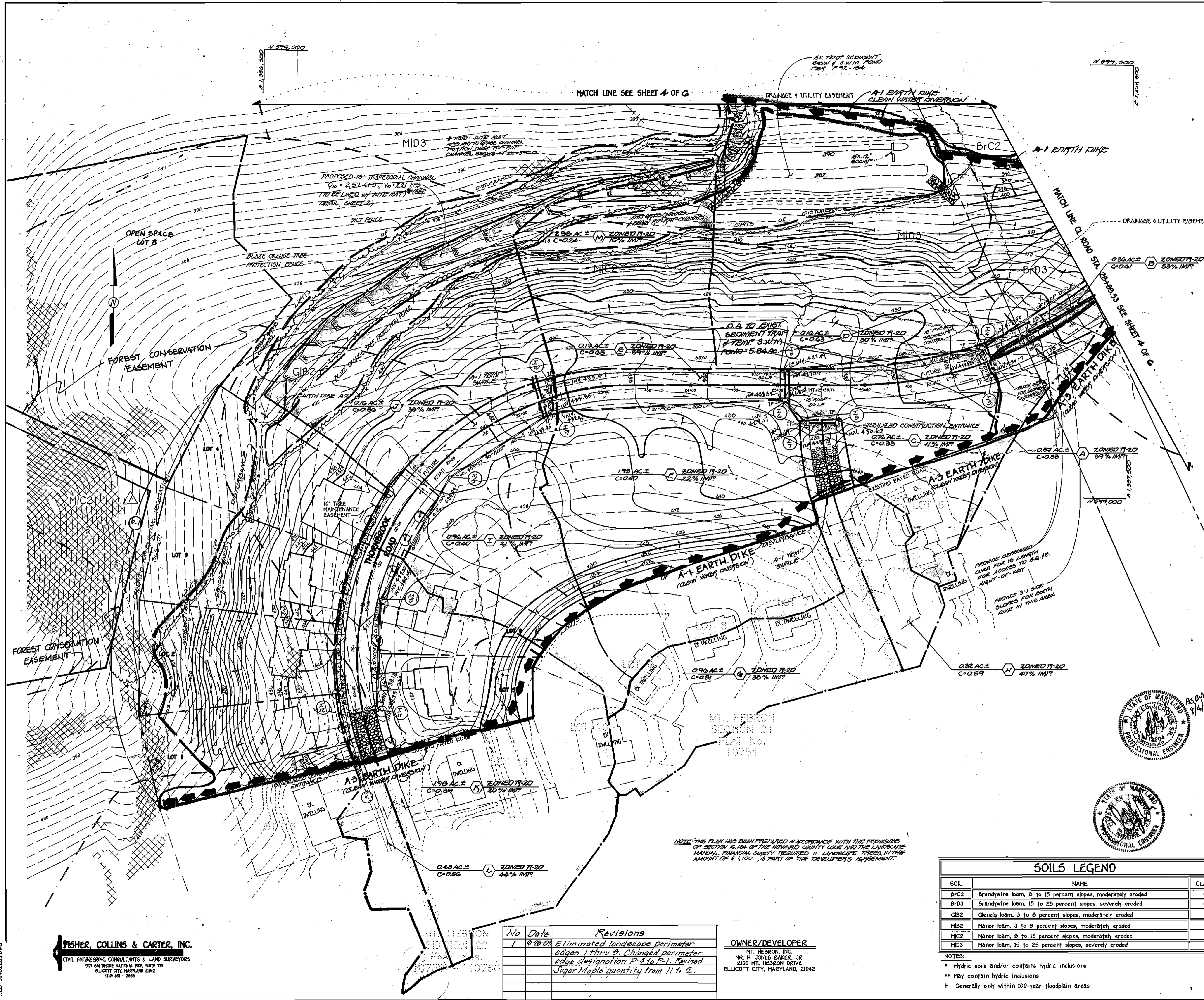
NOTES & DETAILS
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CLSI
Carroll Land Services
1100 Potomac
Engineers - Surveyors - Land Development Consultants
Landscape Architects - Environmental Specialists
439 East Main Street Westminister, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director: *Paula H. Weyer* 7/5/03 DATE
Chief Engineer: *Cathy Hamilton* 7/2/03 DATE
Chief Development Engineering Division: *John R. ...* 9/15/03 DATE

Date	Revisions	Drawn By: BM
		Designed By:
		Reviewed By:
		Date:
		Scale: AS SHOWN
		Job No.: 11290A
		Sheet: 3 of 3



ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

Signature of Engineer (Print name beside signature) *Charles J. Carls SE* Date *5/14/95*

DEVELOPER'S CERTIFICATE

I/we certify that all development and/or construction will be done according to these plans, 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize the engineer to act as my representative before the Howard Soil Conservation District.

Signature of Developer (Print name beside signature) *Robert W. Suban* Date *5/14/95*

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District. *2/27/96*

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for the pond within 30 days of completion. *2/27/96*

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Jim Anthony Chief, Division of Land Development and Research *4/11/96*

APPROVED: DEPARTMENT OF PLANNING AND ZONING

William D. ... Chief, Division of Engineering Division *2/28/96*

APPROVED: DEPARTMENT OF PUBLIC WORKS

Charles M. ... Chief, Bureau of Highways *3-18-96*

OPERATION, MAINTENANCE AND INSPECTION

Inspection of the ponds shown hereon shall be performed at least annually, in accordance with the conditions and specifications contained within USFS, 505 "Standards and Specifications for Ponds" (MD-378). The pond owner(s) and any heirs, successors, or assigns shall be responsible for the safety of the pond and the continued operation, surveillance, inspection and maintenance thereof. The pond owner(s) shall promptly notify the Soil Conservation District of any unusual observations that may be indications of distress such as excessive seepage, turbid seepage, sliding or slumping.

AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications.

Signature *...* Date *9/14/95* PE No. *13204*

Certify means to state or declare a professional opinion based on-site inspections and material tests which are conducted during construction. The on-site inspections and material tests are those inspections and tests deemed sufficient and appropriate by commonly accepted engineering standards. Certify does not mean or imply a guarantee by the engineer nor does an engineer's certification relieve any other party from meeting requirements imposed by contract, employment, or other means, including meeting commonly accepted

SCHEDULE A - PERIMETER LANDSCAPE EDGE

PERIMETER CATEGORY	ADJACENT TO PERIMETER PROPERTIES?
LANDSCAPE TYPE: 15' BUFFER STREET FRONTAGE / PERIMETER	A
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES 512'
CREDIT FOR WALL, FENCE OR BARRIERS (YES, NO, LINEAR FEET)	YES 365'
NUMBER OF PLANTS REQUIRED: SHADE TREES, EVERGREEN TREES, BUSHES	2
NUMBER OF PLANTS PROVIDED: SHADE TREES, EVERGREEN TREES, OTHER TREES (2:1 SUBSTITUTION), BUSHES (2:1 SUBSTITUTION)	2
DESCRIBE PLANT SUBSTITUTIONS (CREDITED BELOW IF NEEDED)	

LANDSCAPE TYPE IS A LIGHT BUFFER OF ONE SHADE TREE PER SIXTY LINEAR FEET.

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	QUANTITY
(Symbol)	AUTUMN FLAME RED MAPLE	ACER RUBRUM	2 1/2" - 3" CAL.	16
(Symbol)	GREEN MOUNTAIN SUGAR MAPLE	ACER SACCHARINUM	2 1/2" - 3" CAL.	2

NOTE: PROVIDE 20' MINIMUM SPACING BETWEEN STREET LIGHT AND TREES.

SOILS LEGEND

SOIL	NAME	CLASS
BrC2	Brandywine loam, 8 to 15 percent slopes, moderately eroded	C
BrD3	Brandywine loam, 15 to 25 percent slopes, severely eroded	C
GIB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
MIB2	Manor loam, 3 to 8 percent slopes, moderately eroded	B
MIC2	Manor loam, 8 to 15 percent slopes, moderately eroded	B
MID3	Manor loam, 15 to 25 percent slopes, severely eroded	B

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas

GRADING, LANDSCAPE, SEDIMENT CONTROL PLAN & DRAINAGE AREA MAP

MT. HEBRON

SECTION 23
 LOTS 1-8

TAX MAP No: 17 PARCEL:
 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 DATE: MAY 19, 1975
 SCALE: 1"=50'
 SHEET 3 OF 6

Revisions

No	Date	Revisions
1	8-28-95	Eliminated landscape perimeter edges, thru 3. Changed perimeter edge designation P-4 to P-1. Revised Sugar Maple quantity from 11 to 2.

OWNER/DEVELOPER

MT. HEBRON, INC.
 MR. H. JONES BAKER, JR.
 2106 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND, 21042

FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 971 BALTIMORE NATIONAL PKW. SUITE 100
 ELLICOTT CITY, MARYLAND 21042
 4100 461 - 2025

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HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
STANDARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT 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 (13-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. And revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1; b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1914 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. For permanent seeding (Sec. 5-1), sod (Sec. 5-4), temporary seeding (Sec. 5-0) and mulching (Sec. 5-2). Temporary stabilization 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.

7. Site Analysis:

Total Area of Site	19.51 Acres
Area Disturbed	3.94 Acres
Area to be roofed or paved	1.43 Acres
Area to be vegetatively stabilized	2.46 Acres
Total Cut	20.0 Cu Yds.
Total Fill	100 Cu Yds.

- Offsite waste/borrow area location will be to a site with an approved sediment control plan and an approved and open grading permit.
- 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 control 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 erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building 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 by the end of each workday, whichever is shorter.

Rev. 9/14

Topsoil Notes
Construction and Material Specifications
 I. 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.
 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 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" in diameter.
 II. Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutsedge, poison ivy, thistle, or others as specified.
 III. If the topsoil 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.
 III. For sites having disturbed areas under 5 acres:
 1. Place topsoil (if required) and apply soil amendments as specified in 2.00 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 IV. For sites having disturbed areas over 5 acres:
 1. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 Page 2
 Topsoil Notes
 a) 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.
 b) Organic content of topsoil shall be not less than 1.5 percent by weight.
 c) Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 d) No sod 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 min.) 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.
 II. Place topsoil (if required) and apply soil amendments as specified in 2.00 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 V. Topsoil Application
 1. 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.
 II. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4"-8" higher in elevation.
 III. 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 sodding or seeding can proceed with a minimum of additional soil.
 IV. 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.
 Page 3
 Topsoil Notes
 V. 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.
 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:
 I. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 a) Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 b) 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.
 c) Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 II. 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.

Temporary Seeding Summary

No. Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depths
N/A Kentucky-31	80	3/1 to 11/15	1"
Annual Rye	20	3/1 to 11/15	1/4" - 1/2"

Permanent Seeding Summary

No. Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Rye	40	3/1 to 10/30	1"-2"

Tracking note:
 On areas where the slope is 3:1 or steeper and the height is 8' or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that cleat marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8' height criteria.

UTILITY CONSTRUCTION NOTES

- Place all excavated material on the high side of the trench.
- Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
- Any sediment control measures disturbed by the utility construction will be repaired the same day.

STOCKPILE/TOPSOIL NOTES

- Stockpiling will not be allowed on any impervious area.
- All stockpiles left at the end of the day will need to be temporarily stabilized until they are again disturbed, unless they are within existing perimeter sediment controls.
- All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the inspector in the field.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. (1 DAY)
- INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
- CONSTRUCT DWELLING. (90 DAYS)
- FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
- INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
- INSTALL LANDSCAPING. (1 DAY)
- ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E 4 S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

NOTE:
 ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.

STABILIZATION SPECIFICATIONS

- TEMPORARY SEEDING NOTES**
Scope: Planting short term (no more than 1 year) vegetation to temporarily stabilize any areas where soil disturbance has occurred, until the area can be permanently stabilized with vegetative or non-vegetative practices.
Standards: The following notes shall conform to the 1914 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. Published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See G-20 Sec. 1-C.
 - Fertilizer shall consist of a mixture of 10-10-10 and be applied at a rate of 600 lb per acre (15 lb per 1000 sq. ft.) and will meet the requirements in G-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1000 sq. ft.) and shall meet the requirements in G-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in G-20 Sec. 1-C.
 - The seed must be applied immediately after seeding and will need to meet the requirements in G-20 Sec. 1-F, G, and H.
 - Seeding mixtures shall be selected from or will be equal to those on Table 26.
 - The following is one option, approved equals may be used.

Permanent Seeding Notes
Scope: Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 1 year.
Standards: The following notes shall conform to the 1914 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. Published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.

- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See G-20 Sec. 1-C.
- For sites over 5 ac, soil tests will be performed to determine the exact mixture and application rates for both lime and fertilizer. Soil tests will be prepared by the University of Maryland or a recognized commercial laboratory. If the existing soil does not meet the minimum conditions as stated in G-20 Sec. 1-C-I, then topsoil will need to be obtained that meets these conditions and applied so as to meet the requirements in G-21.
- For sites of 5 ac. or less of disturbance, the following fertilizer and lime rates shall apply.
- Fertilizer shall consist of a mixture of 10-20-20 and be applied at the following rates:
 N=40 lb per acre (2 lb per 1000 sq. ft.) P205=175 lb per acre (4 lb per 1000 sq. ft.) K2O=175 lb per acre (4 lb per 1000 sq. ft.). Fertilizer shall meet the requirements in G-20 Sec. 1-B.
- Lime shall be applied at a rate of 2 tons per acre (100 lb per 1000 sq. ft.) and shall meet the requirements in G-20 Sec. 1-B.
- Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in G-20 Sec. 1-C.
- Mulching will be applied immediately after seeding and will need to meet the requirements in G-20 Sec. 1-F, G, H.
- Refer to G-20 Sec. 1-E for Methods of Seeding specifications.
- Refer to G-20 Sec. 4 for Sod specifications.
- Refer to G-20 Sec. 5 for Turfgrass Establishment specifications.
- Seeding mixtures shall be selected from or will be equal to those on Table 25.
- The following is one option, approved equals may be used.

- Tracking note:**
 On areas where the slope is 3:1 or steeper and the height is 8' or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that cleat marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8' height criteria.
- UTILITY CONSTRUCTION NOTES**
- Place all excavated material on the high side of the trench.
 - Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
 - Any sediment control measures disturbed by the utility construction will be repaired the same day.

Permanent Seeding Summary

No. Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Rye	40	3/1 to 10/30	1"-2"

Tracking note:
 On areas where the slope is 3:1 or steeper and the height is 8' or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that cleat marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8' height criteria.

UTILITY CONSTRUCTION NOTES

- Place all excavated material on the high side of the trench.
- Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
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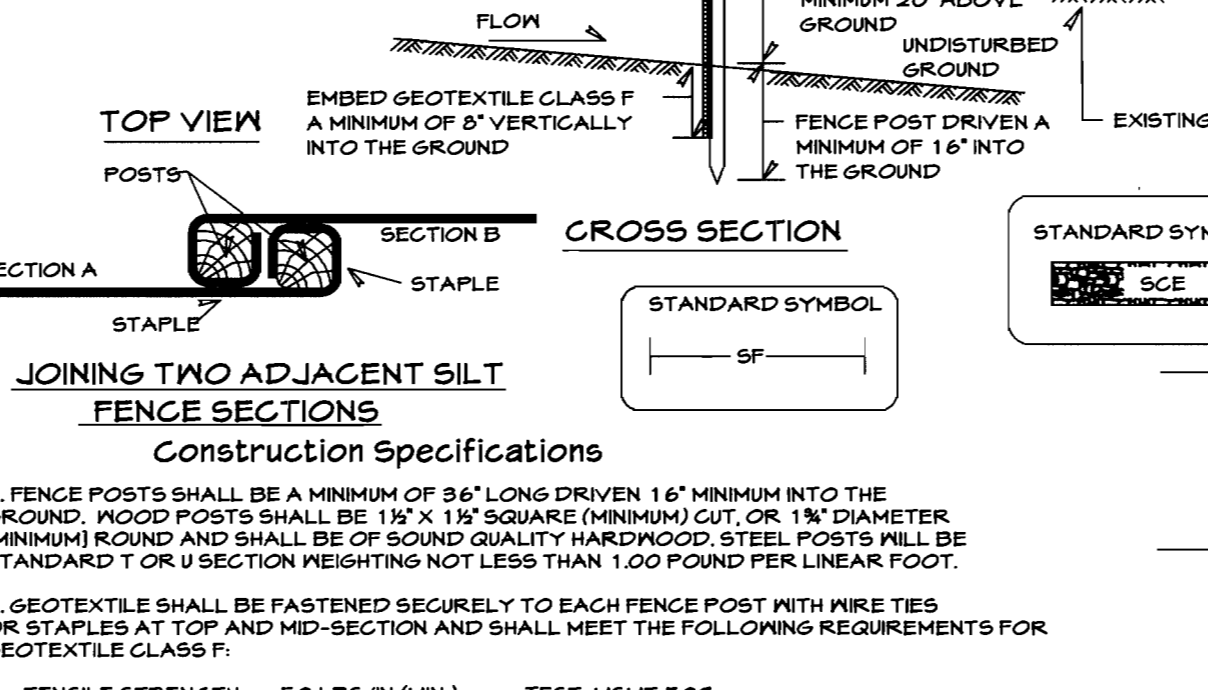
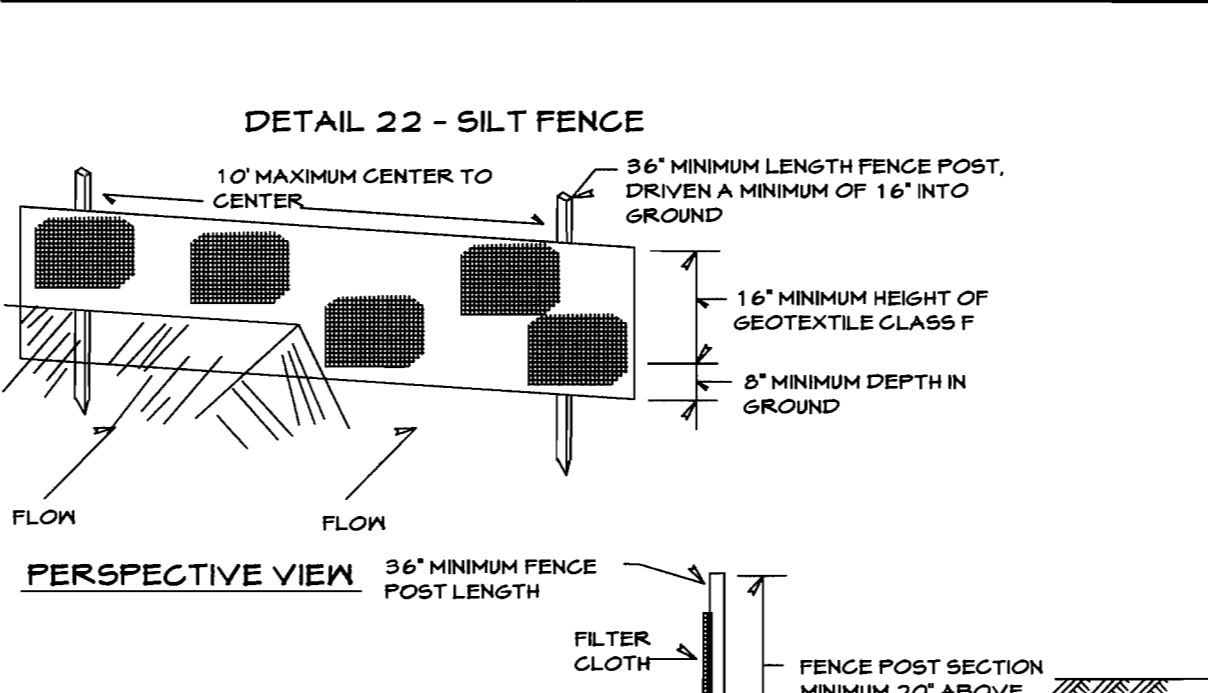
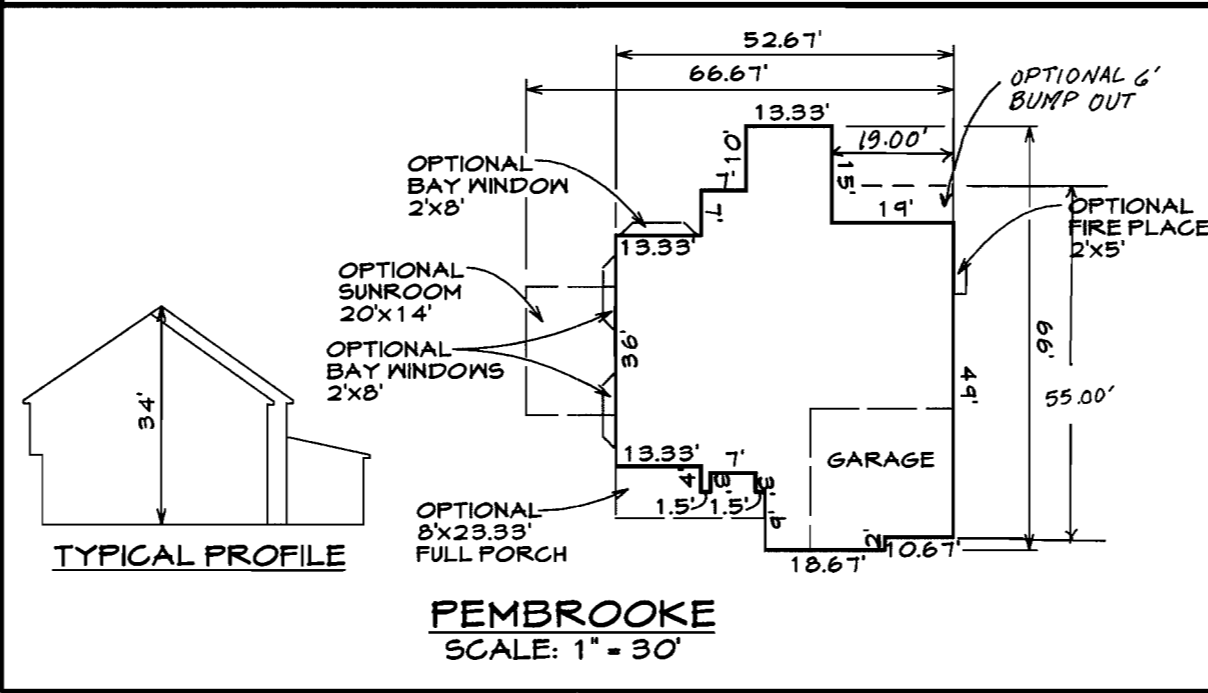
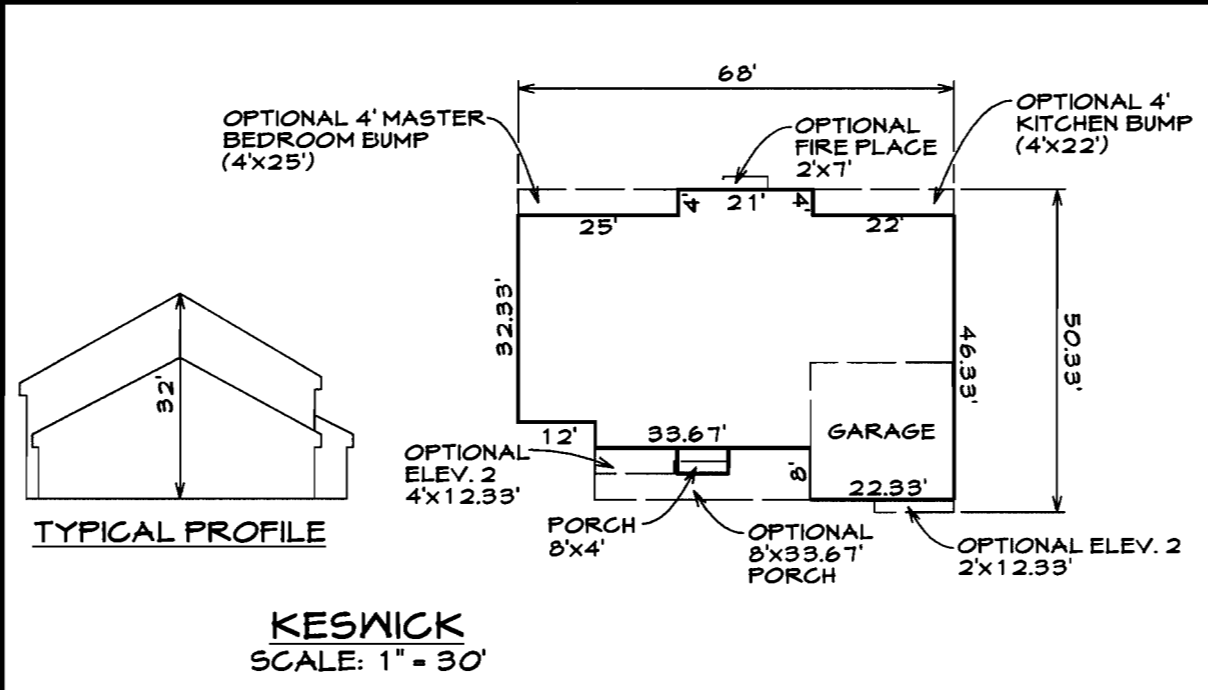
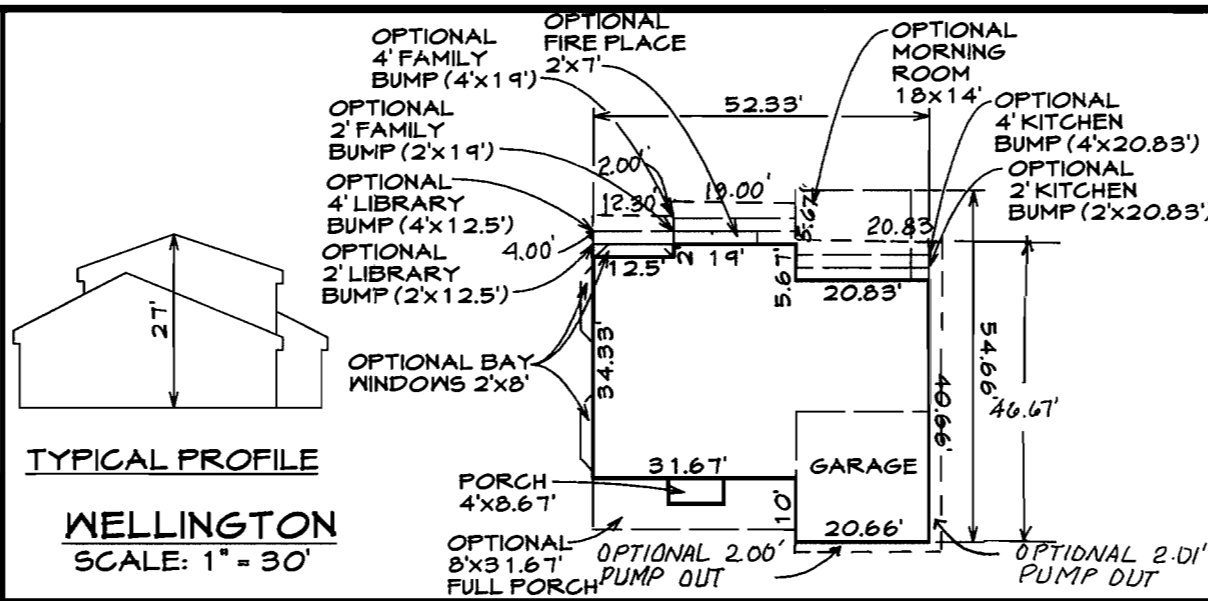
STOCKPILE/TOPSOIL NOTES

- Stockpiling will not be allowed on any impervious area.
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- All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the inspector in the field.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. (1 DAY)
- INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
- CONSTRUCT DWELLING. (90 DAYS)
- FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
- INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
- INSTALL LANDSCAPING. (1 DAY)
- ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E 4 S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

NOTE:
 ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.



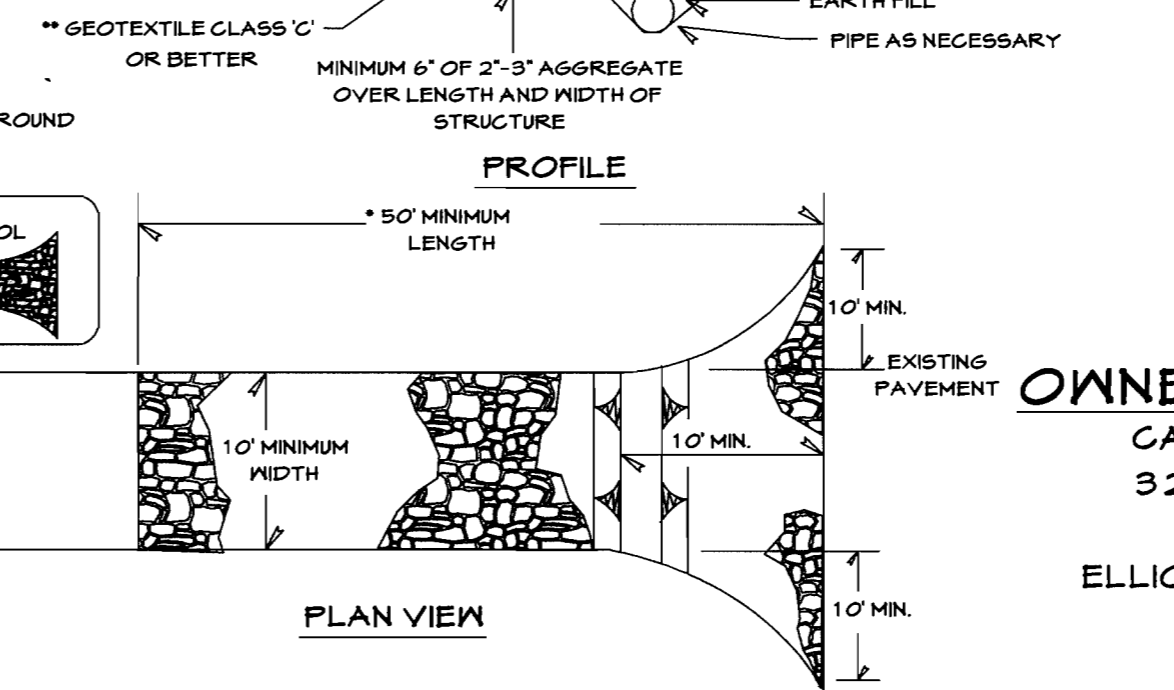
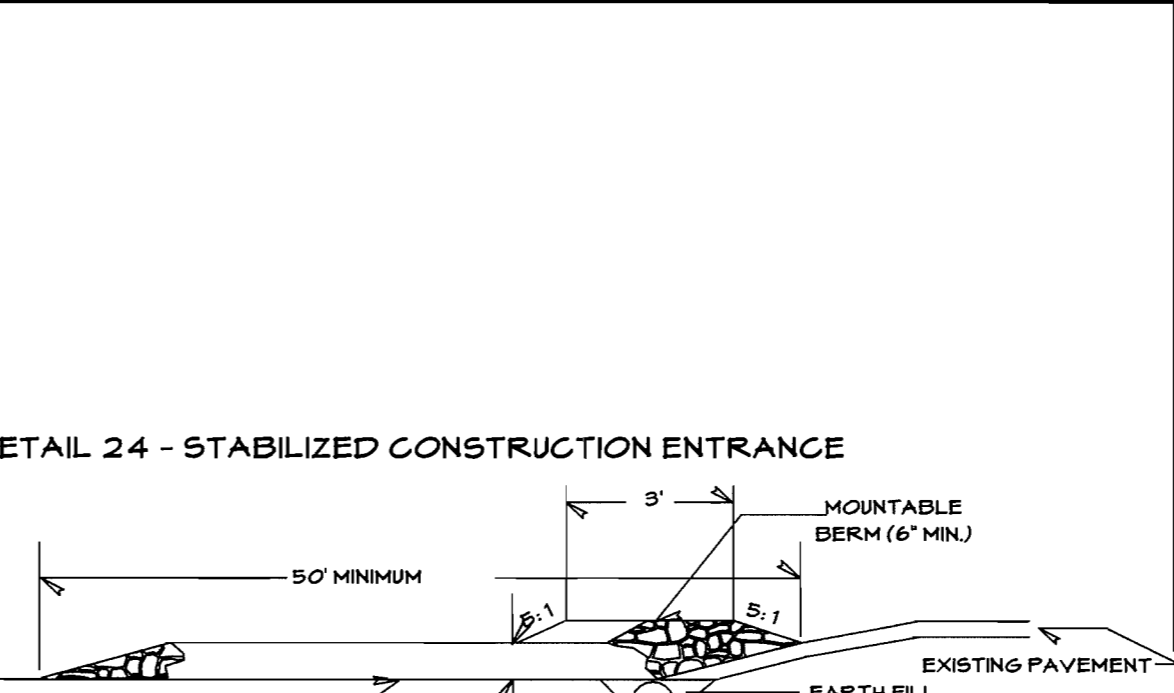
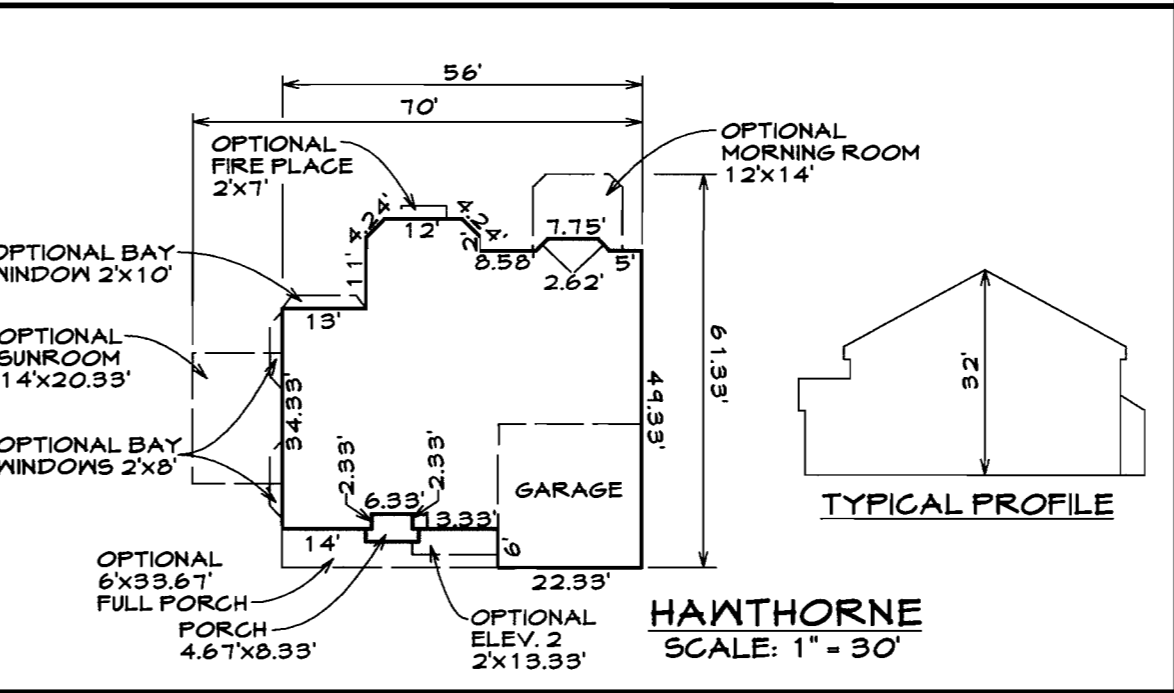
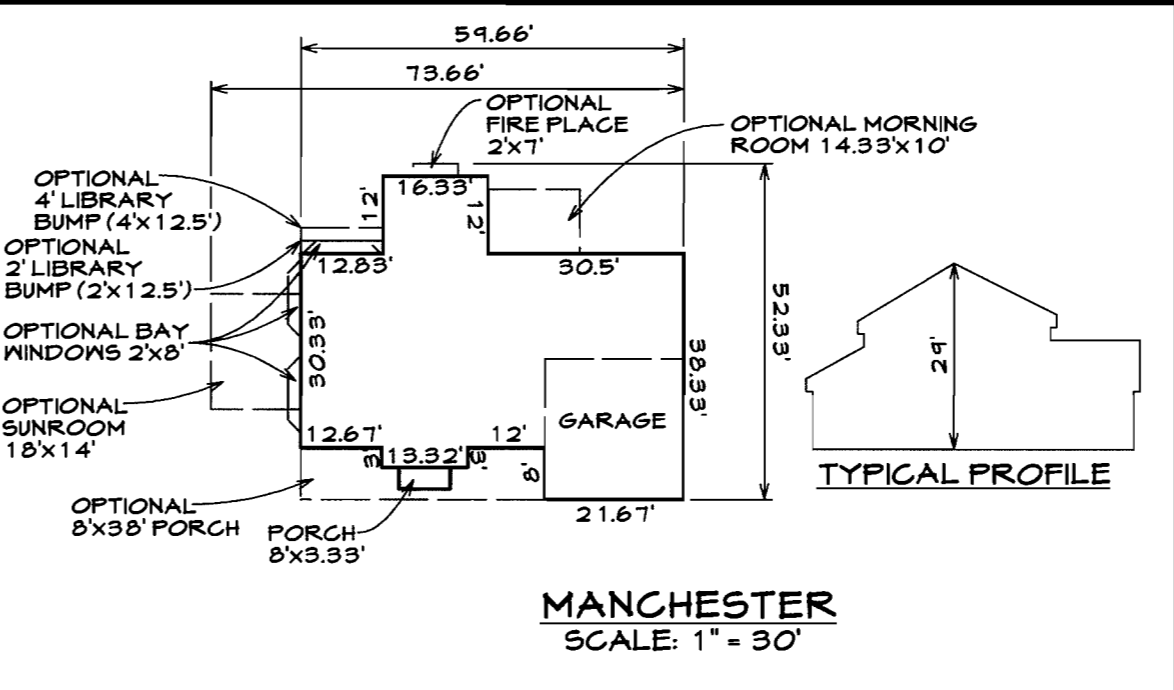
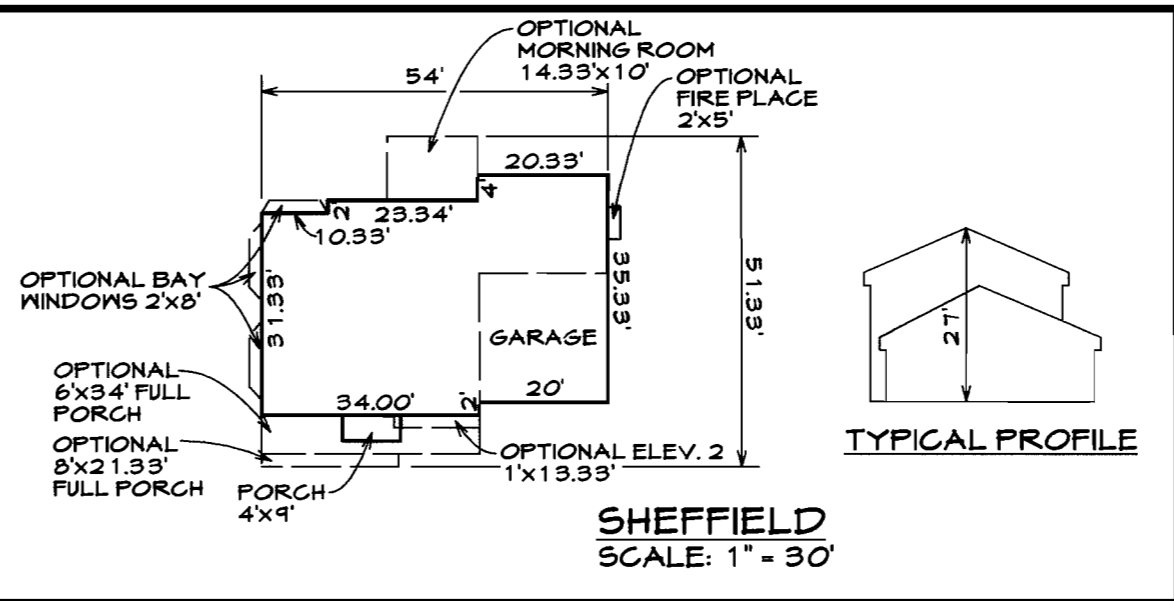
Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 5:1	unlimited	unlimited
5:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	30 feet	125 feet

NOTE: IN AREAS OF LESS THAN 3% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.

DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 Patrick Costello, Carlee Manor L.L.C. 9/15/03

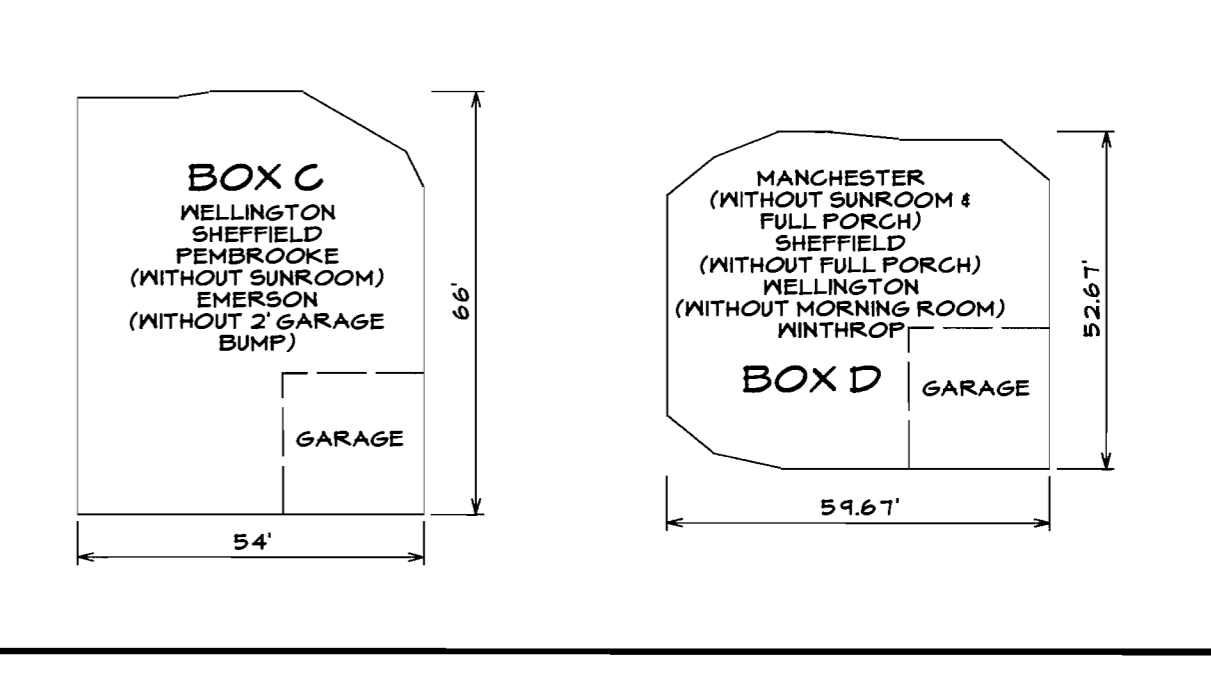
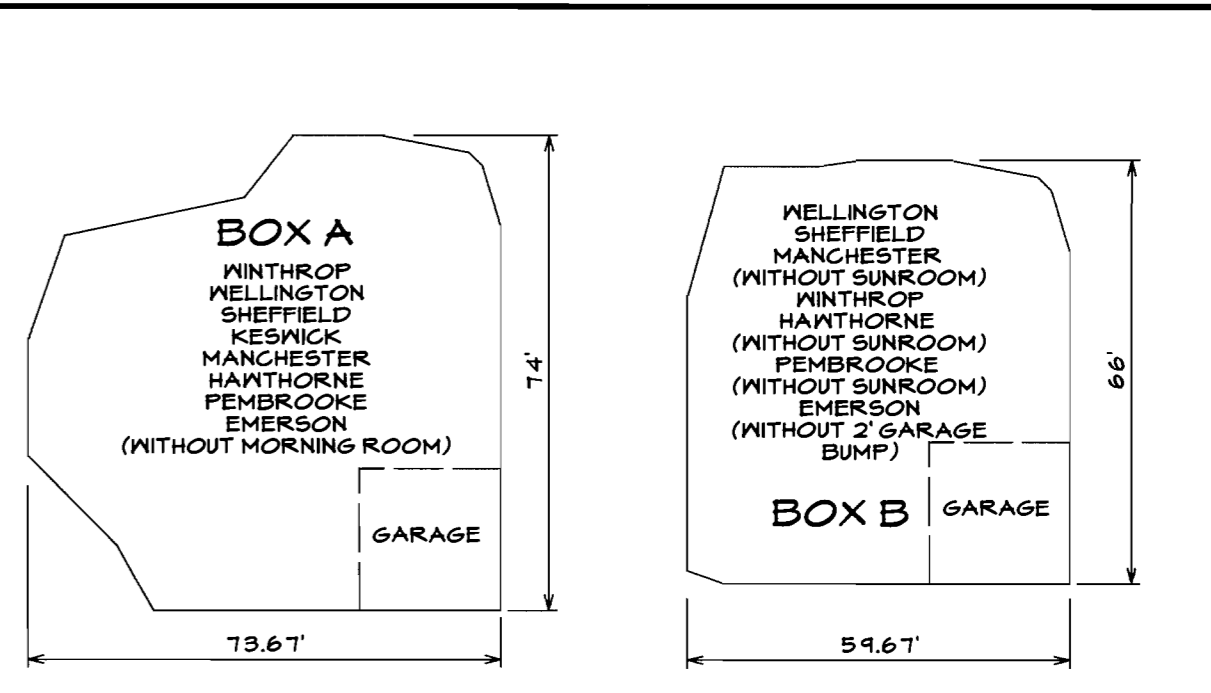
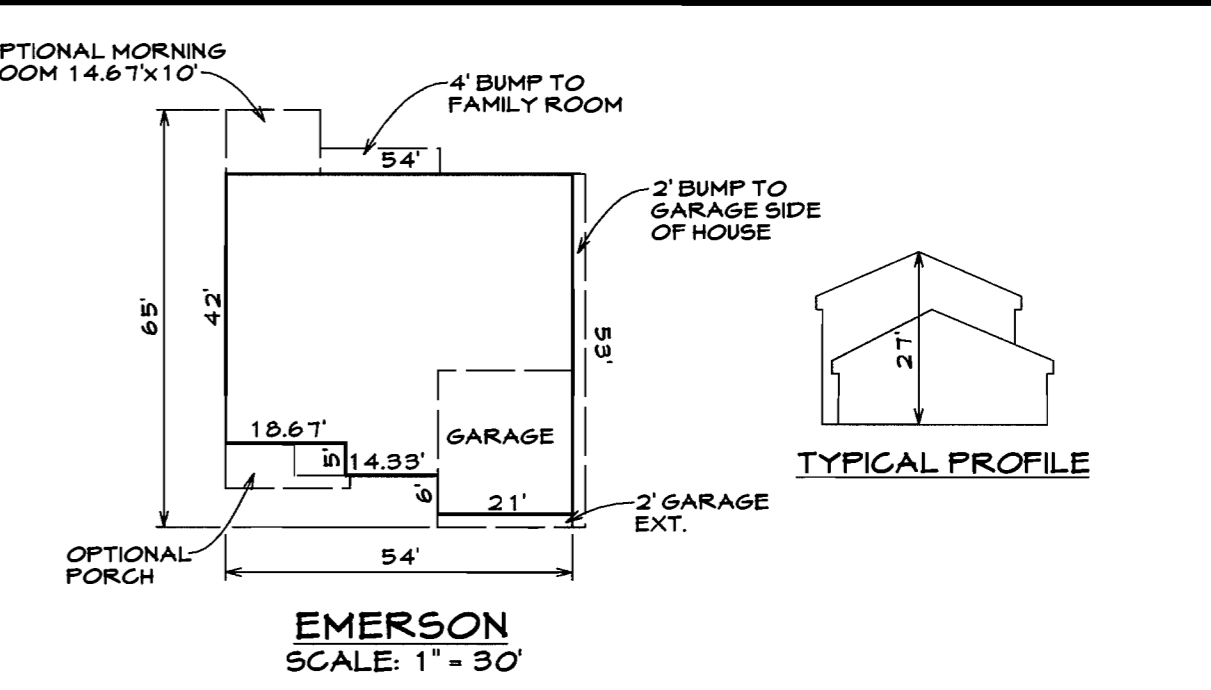
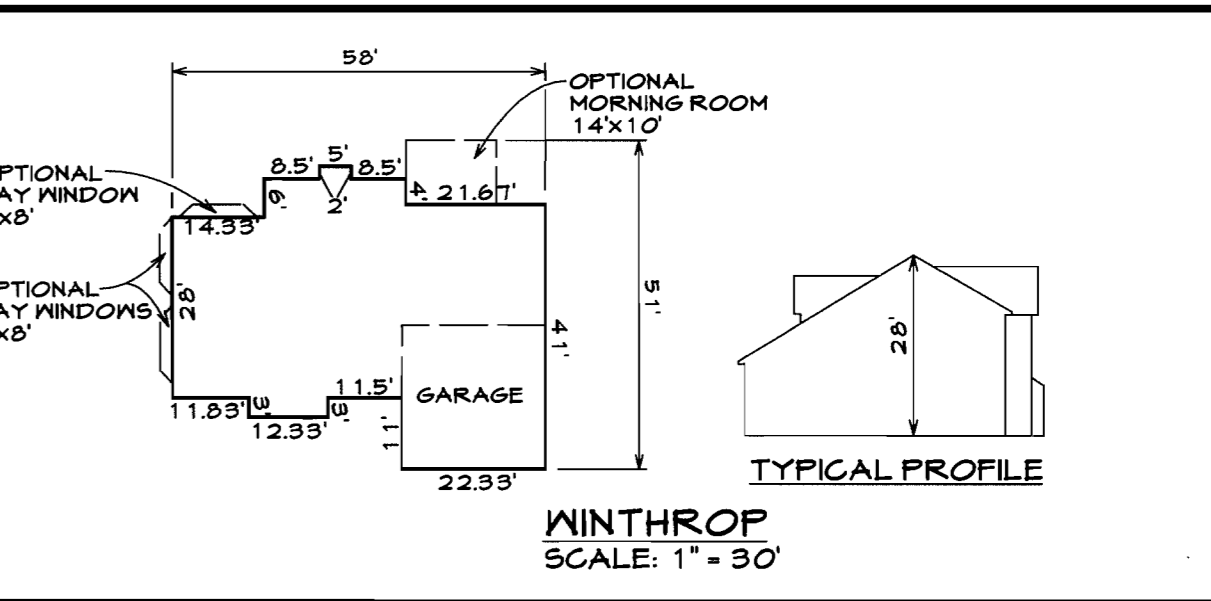
ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT.
 Alfred L. Hansard, Professional Engineer Reg. No. 23446 9/15/03



OWNER/DEVELOPER
 CARLEE MANOR L.L.C.
 3230 BETHANY LANE
 SUITE 1
 ELLICOTT CITY, MD. 21045
 410-750-1200

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: Candy Hamilton 9/25/03
 Chief of Department: [Signature] 9/25/03
 Chief, Development Engineering Division: [Signature] 9/25/03

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS
 [Signature] 9/15/03
 [Signature] 9/15/03



NOTES & DETAILS
 LOTS 1 THROUGH 13 AND 22
 CARLEE MANOR

TAX MAP 17, PARCEL 123
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

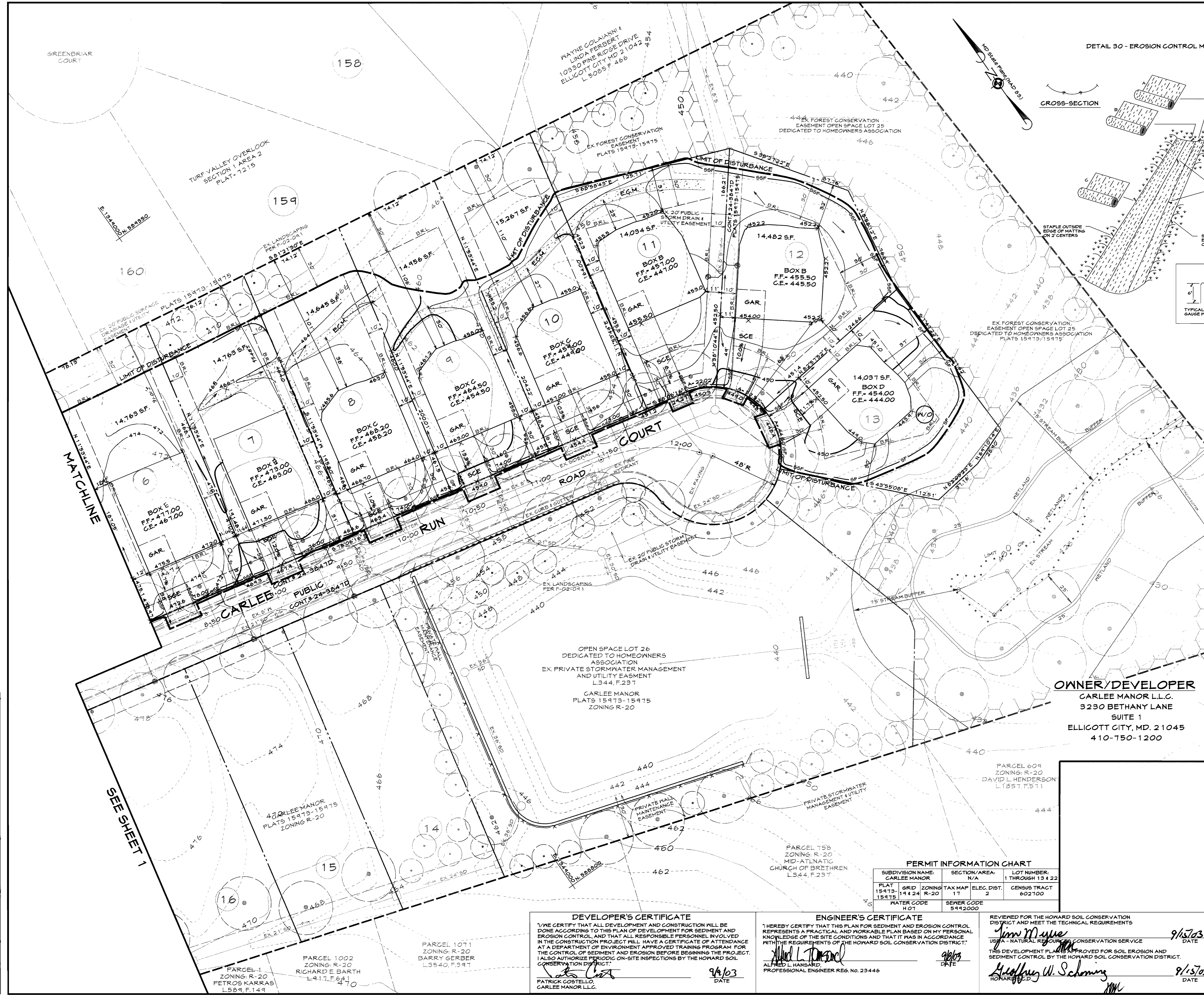
CLSI
 Carroll Land Services Incorporated
 Engineers * Surveyors * Land Development Consultants
 Landscape Architects * Environmental Specialists
 419 East Main Street Westminster, MD 21157-5539
 (410) 876-2017 FAX (410) 876-0009

Professional Engineer Registration No. 23446
 Alfred L. Hansard

Date	Revisions	Drawn By: DM
4/12/04	REVISED HOUSE BOXES AND ADDED GENERIC BOX "E"	Designed By:
		Reviewed By:
		Date:
		Scale: AS SHOWN
		Job No.: 91230A
		Sheet: 5 of 3

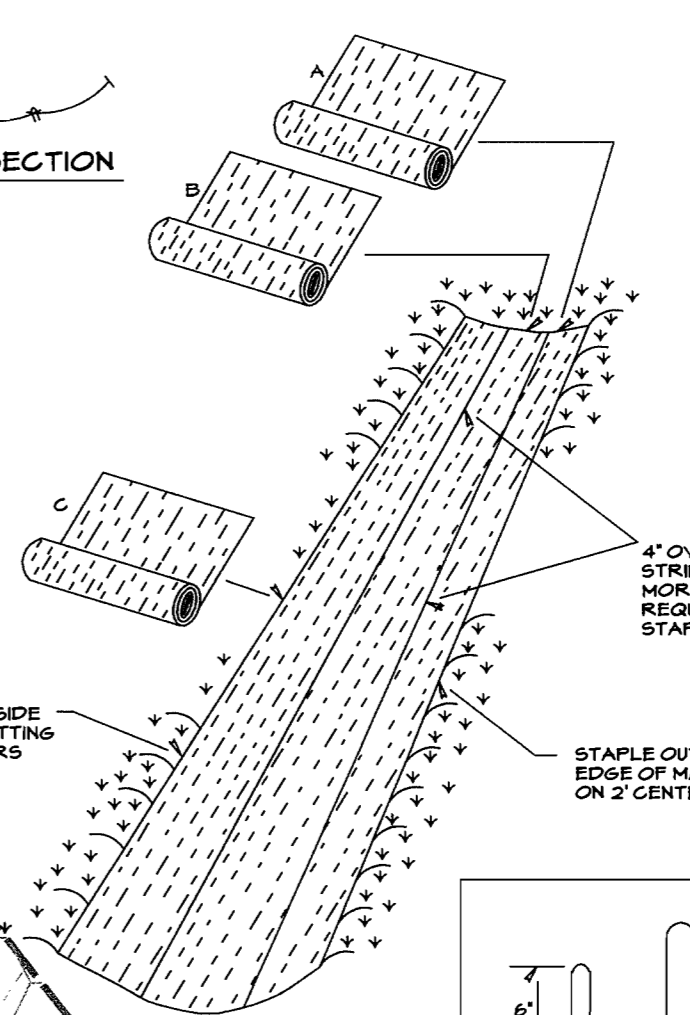
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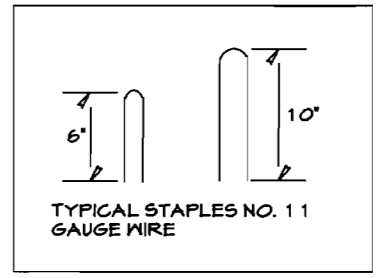


DETAIL 90 - EROSION CONTROL MATTING

CROSS-SECTION



- CONSTRUCTION SPECIFICATIONS**
- KEY-IN THE MATTINGS BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
 - STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
 - BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
 - STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
 - WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIP-LAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
 - THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.
- NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEVED-IN.



LEGEND

- SF SILT FENCE
- LIMIT OF DISTURBANCE
- (W/O) WALK OUT
- SSF SUPER SILT FENCE
- EROSION CONTROL MATTING

NOTE:
SEDIMENT AND EROSION CONTROL:
NO MORE THAN THREE CONTIGUOUS
LOTS CAN BE UNDER CONSTRUCTION
AT ONE TIME.

APPROVED:
FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

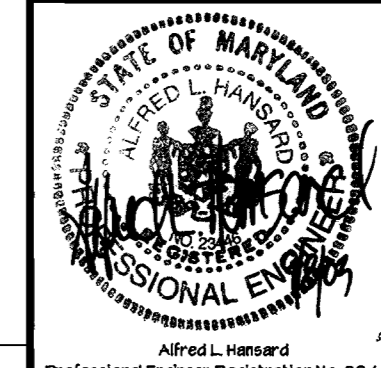
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELLICOTT CITY, MD. 21045
410-750-1200

SITE DEVELOPMENT & GRADING PLAN
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND



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439 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

PERMIT INFORMATION CHART

SUBDIVISION NAME:	CARLEE MANOR	SECTION/AREA:	N/A	LOT NUMBER:	1 THROUGH 13 & 22
PLAT:	15473, 15474	GRID ZONING:	R-20	TAX MAP:	17
WATER CODE:	HOT	SEWER CODE:	5142000	ELEC. DIST.:	2
				CENBUS TRACT:	602100

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR DEVELOPMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick Costello
PATRICK COSTELLO
CARLEE MANOR L.L.C.
9/1/03
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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred L. Hansard
ALFRED L. HANSARD
PROFESSIONAL ENGINEER REG. NO. 23446
9/1/03
DATE

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jim Myer
JIM MYER
USDA - NATURAL RESOURCE CONSERVATION SERVICE
9/15/03
DATE

Heidi W. Schmitz
HEIDI W. SCHMITZ
9/15/03
DATE

Date:	Revisions:	Drawn By:	BM
4/21/04	REVISED HOUSE BOXES FOR LOTS 6 & 7	Designed By:	KF
		Reviewed By:	
		Date:	
		Scale:	1" = 30'
		Job No.:	41230A
		Sheet:	2 of 3

**HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT 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 (9-13-1055).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in-conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 1 calendar day for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1 b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 1.2 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 5.1.1.1) and temporary seeding (Sec. 5.0) and mulching (Sec. 5.2). Temporary stabilization 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.

7. Site Analysis
Total Area of Site 13.31 Acres
Area Disturbed 3.04 Acres
Area to be roofed or paved 1.43 Acres
Area to be vegetatively stabilized 2.46 Acres
Total Cut 100 Cu Yds.
Total Fill 100 Cu Yds.

Offsite waste/borrow area location will be to a site with an approved sediment control plan and an approved and open grading permit.

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 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 other earth disturbance or 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 by the end of each workday, whichever is shorter.

Rev. 4/14

Topsoil Notes
Construction and Material Specifications
I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Topsoil may not be salvaged from 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 Experimental 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" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutsedge, poison ivy, thistle, or others as specified.
 - Where the subsol 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.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- 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:

N 10	P 205	K 20	10
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 Lime application rate - 2 tons/acre (100 lbs./1,000 sq. ft.)
Seed Mixture Hardness Zone 6B/7A (6-20 Figure 5)

Permanent Seeding Summary

No. Species	Application Rate (lb./ac)	Seeding Dates	Seeding Depths
N/A Kentucky-31	80	3/1 to 11/15	1"
Annual Ryegrass	20	3/1 to 11/15	1/4" - 1/2"

Tracking Note:
On areas where the slope is 3:1 or steeper and the height is 8" or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that clear marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8" height criteria.

- UTILITY CONSTRUCTION NOTES**
- Place all excavated material on the high side of the trench.
 - Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
 - Any sediment control measures disturbed by the utility construction will be repaired the same day.

STOCKPILE/TOPSOIL NOTES

- Stockpiling will not be allowed on any impervious area.
- All stockpiles left at the end of the day will need to be temporarily stabilized until they are again disturbed, unless they are within existing perimeter sediment controls.
- All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the Inspector in the field.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT. (1 DAY)
 - INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
 - CONSTRUCT DWELLING. (90 DAYS)
 - FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
 - INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
 - INSTALL LANDSCAPING. (1 DAY)
 - ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

NOTE:
ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.

STABILIZATION SPECIFICATIONS

- TEMPORARY SEEDING NOTES**
Scope: Planting short term (no more than 1 year) vegetation to temporarily stabilize any areas where soil disturbance has occurred, until the area can be permanently stabilized with vegetative or non-vegetative practices.
Standards: The following notes shall conform to the "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" Published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - Fertilizer shall consist of a mixture of 10-10-10 and be applied at a rate of 600 lb per acre (15 lb per 1,000 sq. ft.) and will meet the requirements in 6-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1,000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in 6-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F, G and H.
 - Seeding mixtures shall be selected from or will be equal to those on Table 2b.
 - The following is one option, approved equals may be used.

Temporary Seeding Summary

No. Species	Application Rate (lb./ac)	Seeding Dates	Seeding Depths
N/A Kentucky-31	80	3/1 to 11/15	1"
Annual Ryegrass	20	3/1 to 11/15	1/4" - 1/2"

PERMANENT SEEDING NOTES

- Scope:** Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 1 year.
Standards: The following notes shall conform to the "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" Published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - For sites over 5 ac, soil tests will be performed to determine the exact mixture and application rates for both lime and fertilizer. Soil tests will be prepared by the University of Maryland or a recognized commercial laboratory. If the existing soil does not meet the minimum conditions as stated in 6-20 Sec. 1-G-II, then topsoil will need to be obtained that meets these conditions and applied so as to meet the requirements in 6-21.
 - For sites of 5 ac or less of disturbance, the following fertilizer and lime rates shall apply:
 - Fertilizer shall consist of a mixture of 10-20-20 and be applied at the following rates: N-40 lb per acre (2 lb per 1,000 sq. ft.) P205-175 lb per acre (4 lb per 1,000 sq. ft.) K2O-175 lb per acre (4 lb per 1,000 sq. ft.). Fertilizer shall meet the requirements in 6-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1,000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in 6-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F, G and H.
 - Refer to 6-20 Sec. 1-E for Methods of Seeding specifications.
 - Refer to 6-20 Sec. 4 for Sod specifications.
1. Seeding mixtures shall be selected from or will be equal to those on Table 2b.
2. The following is one option, approved equals may be used.

Permanent Seeding Summary

No. Species	Application Rate (lb./ac)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Ryegrass	40	3/1 to 10/30	1"-2"

Tracking Note:
On areas where the slope is 3:1 or steeper and the height is 8" or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that clear marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8" height criteria.

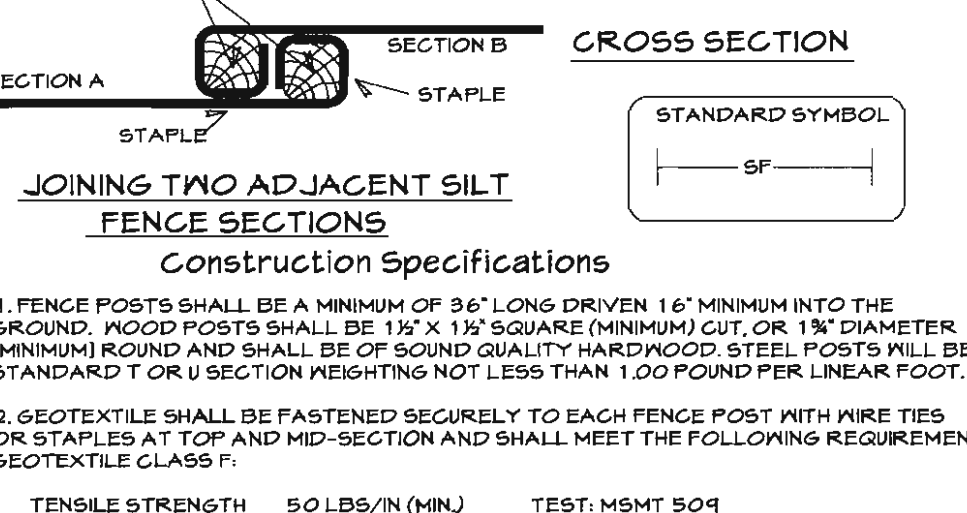
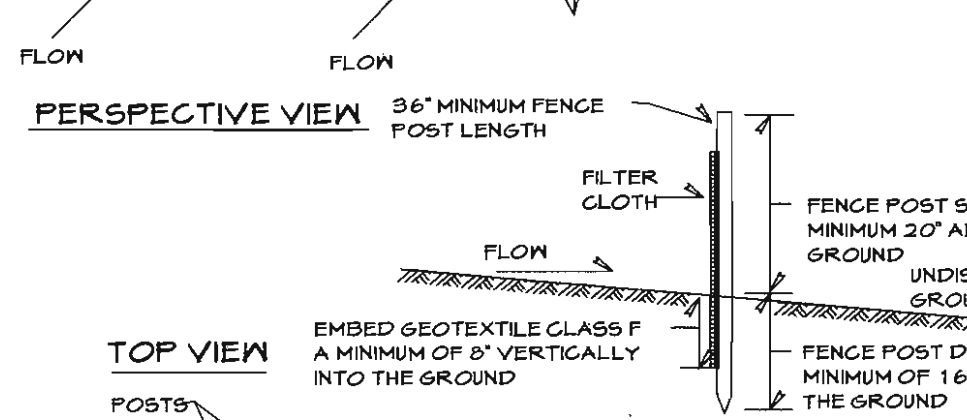
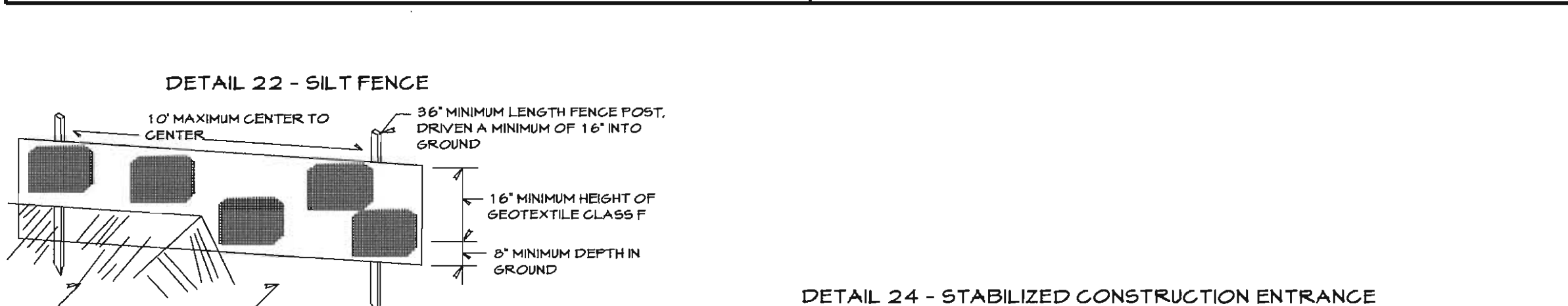
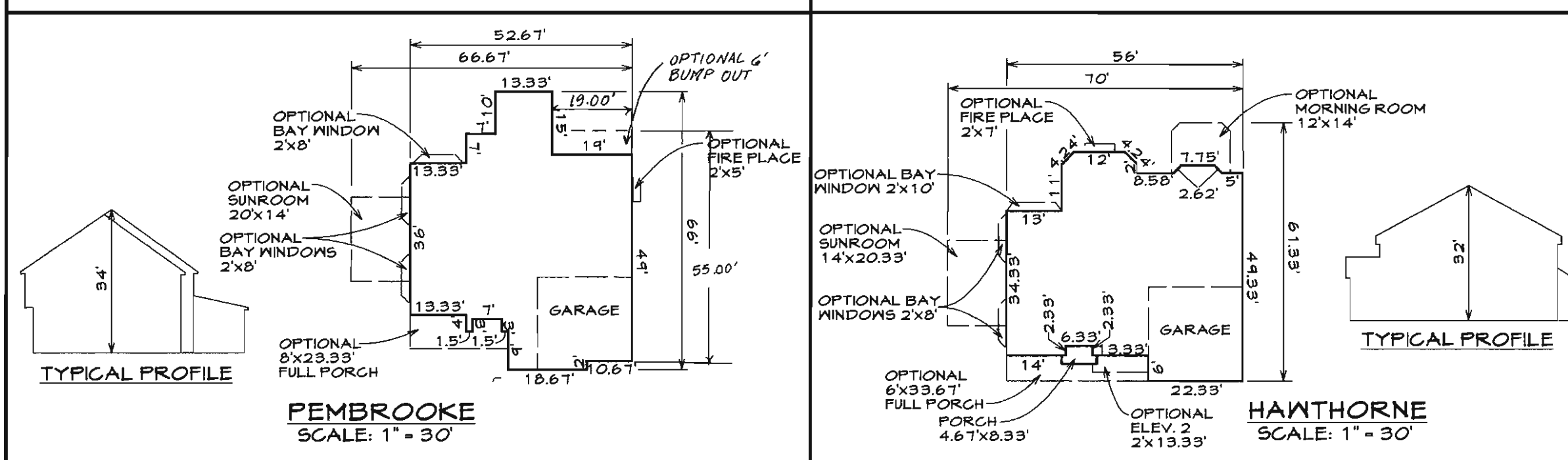
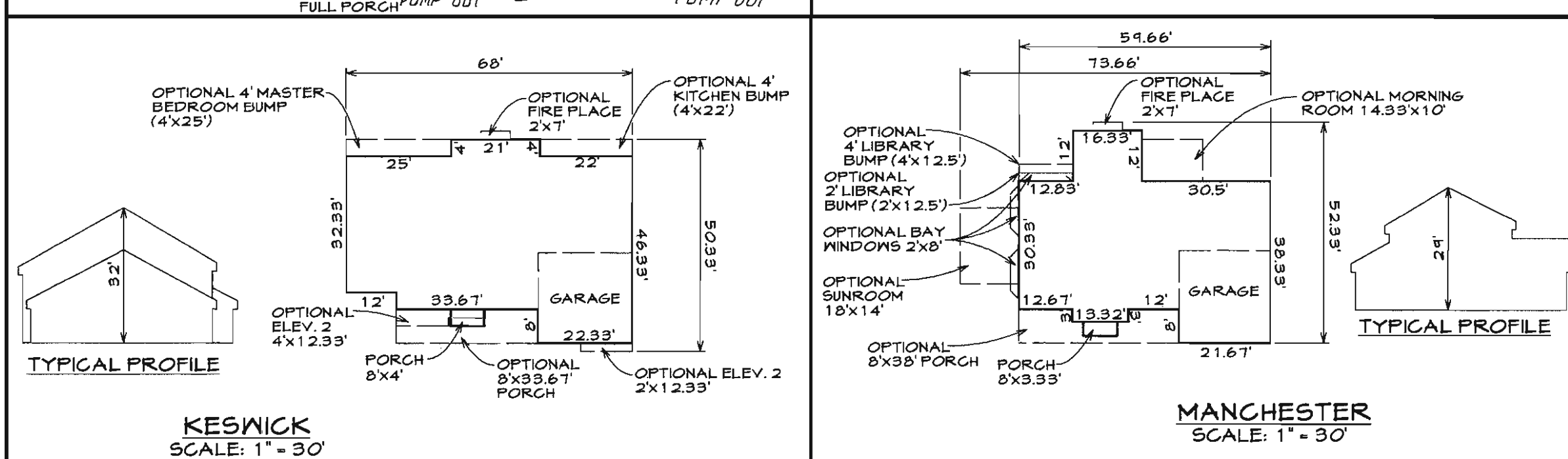
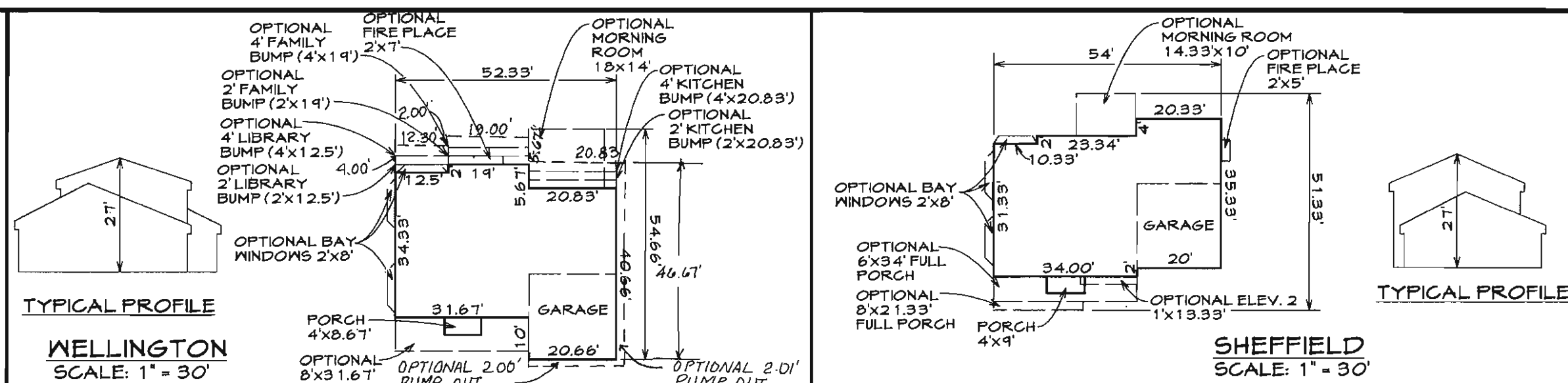
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 - INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
 - CONSTRUCT DWELLING. (90 DAYS)
 - FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
 - INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
 - INSTALL LANDSCAPING. (1 DAY)
 - ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

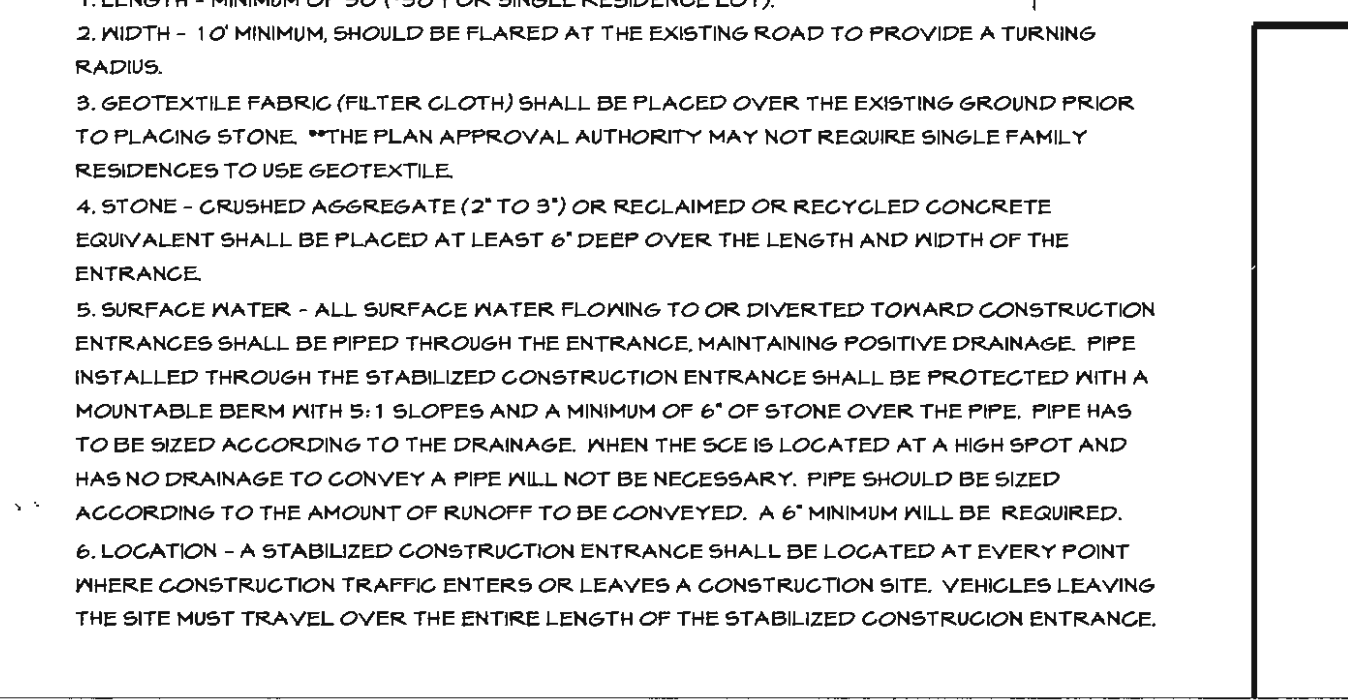
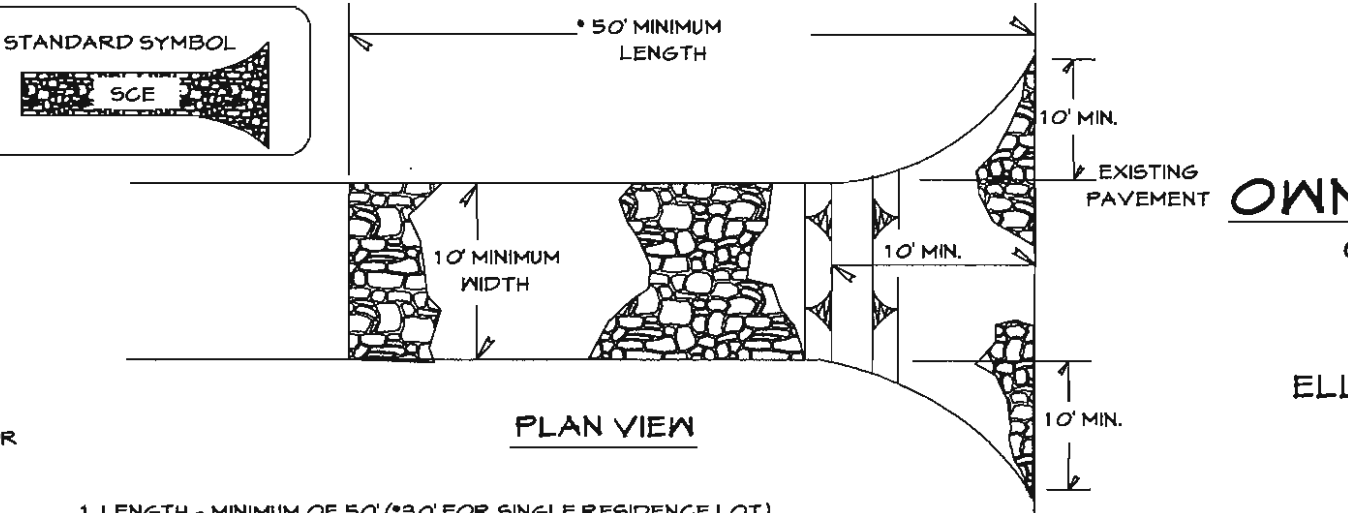
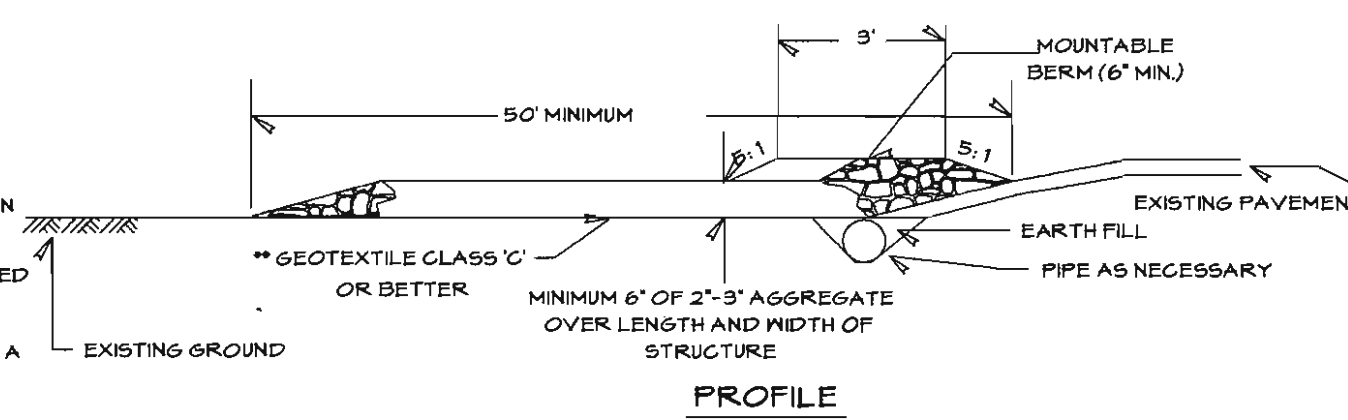
NOTE:
ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.



Silt Fence Design Criteria

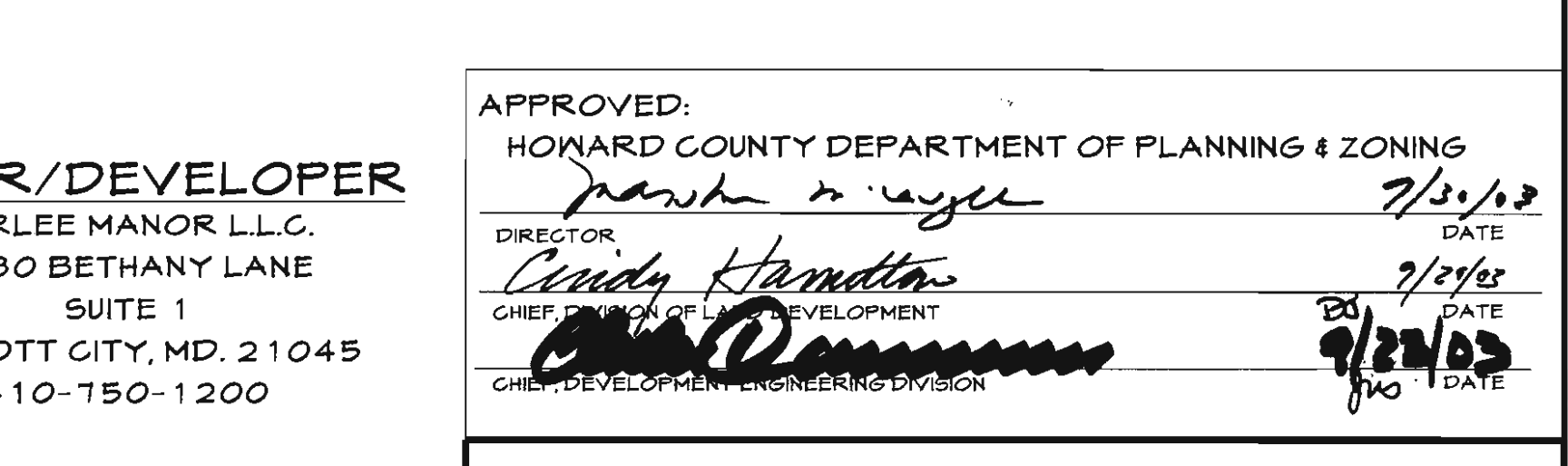
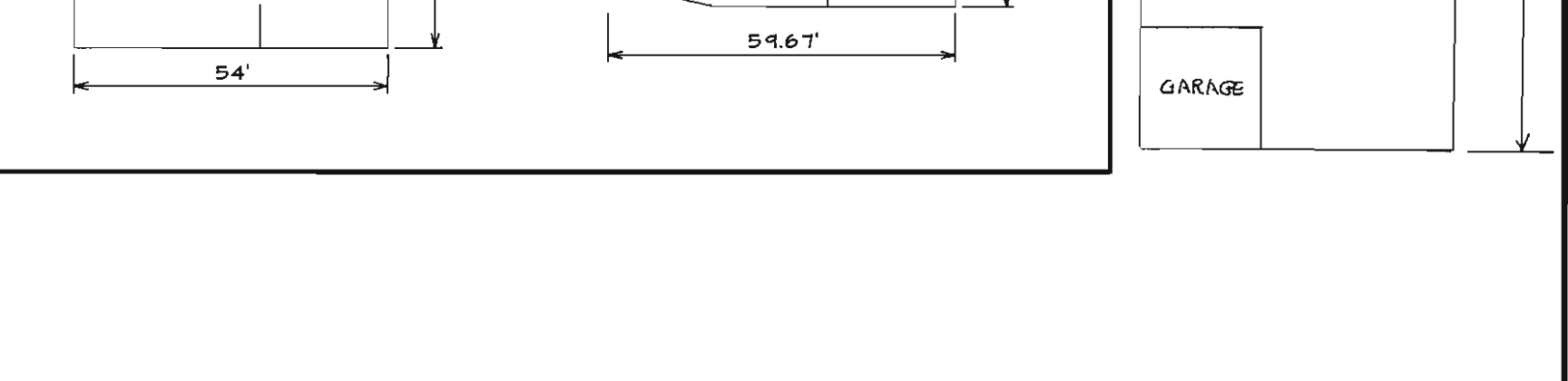
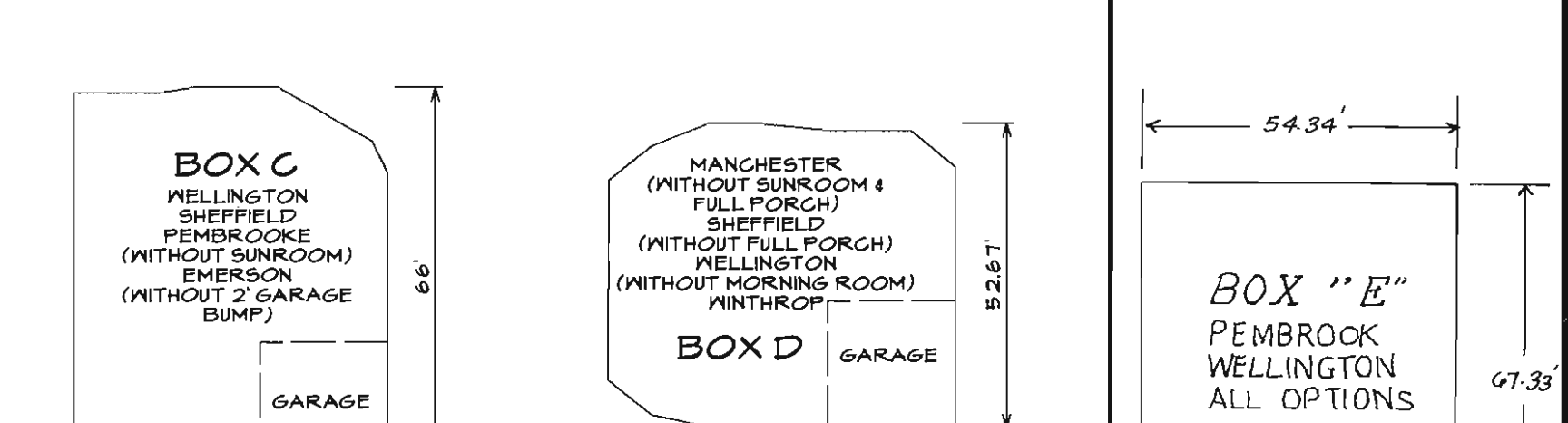
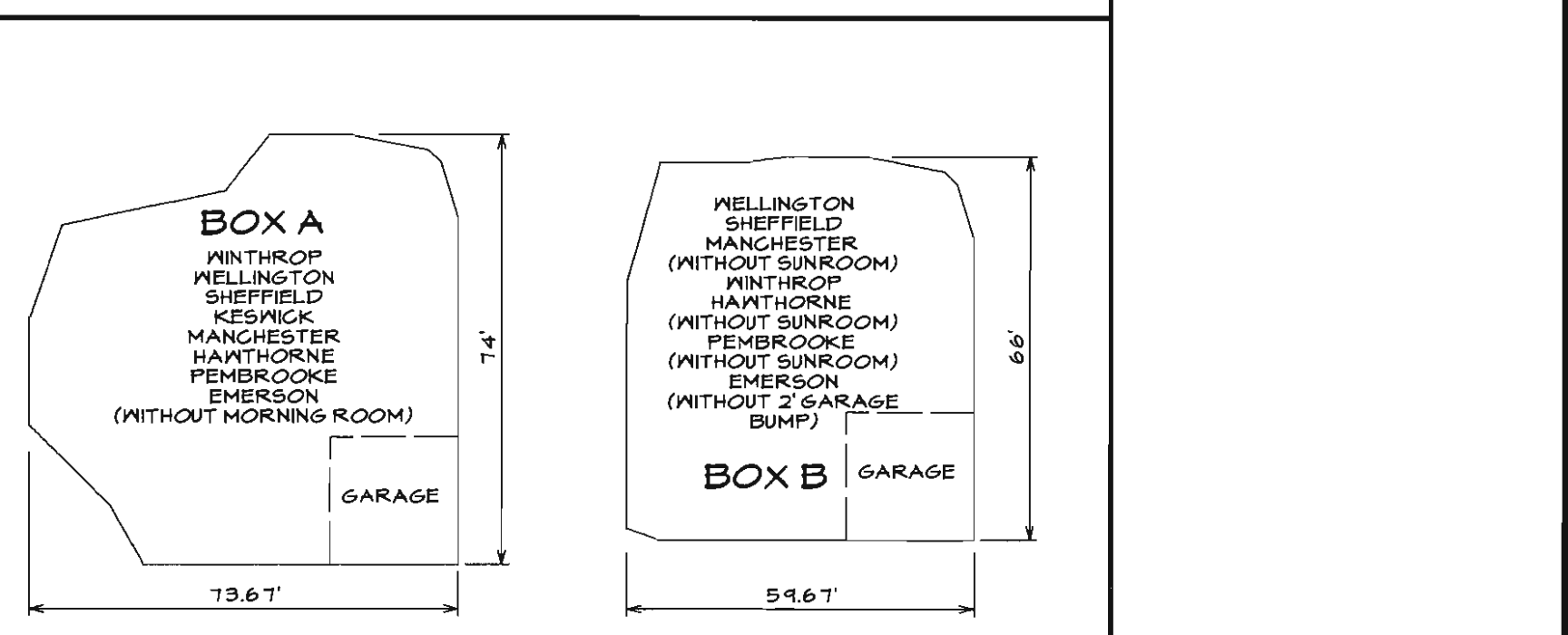
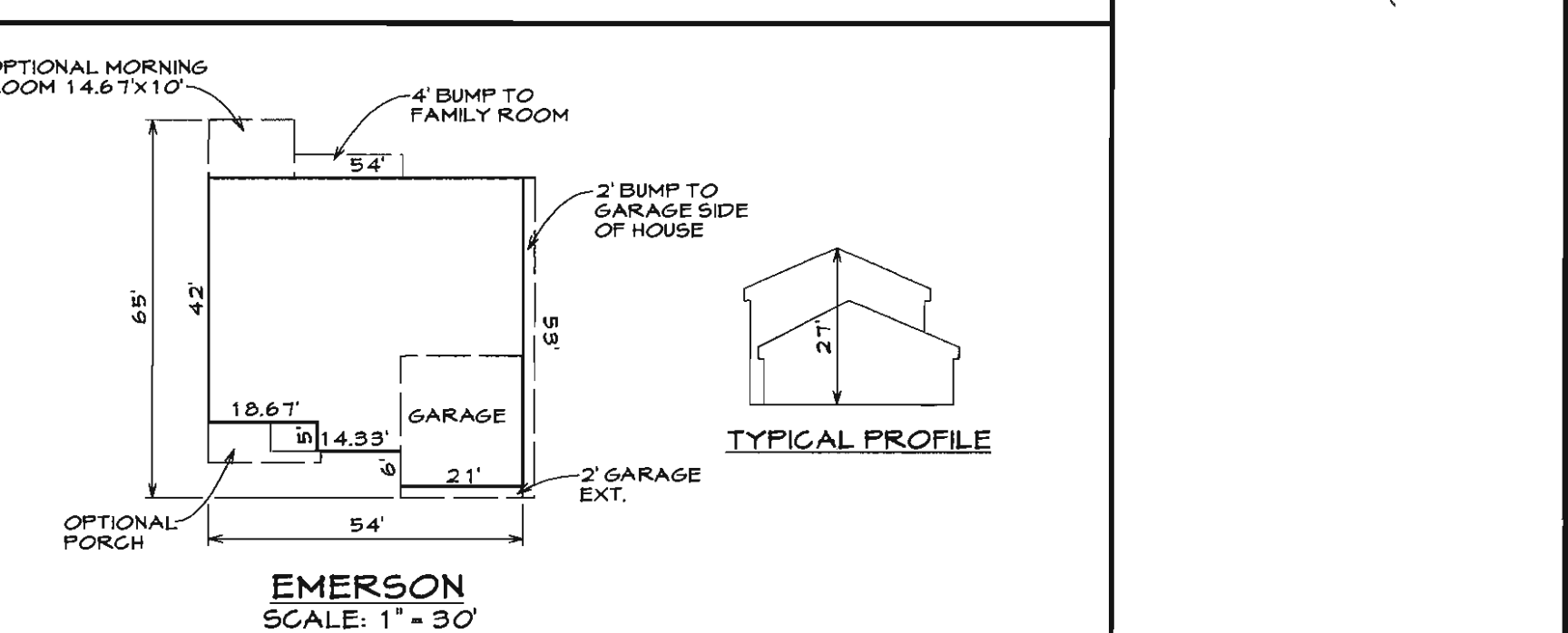
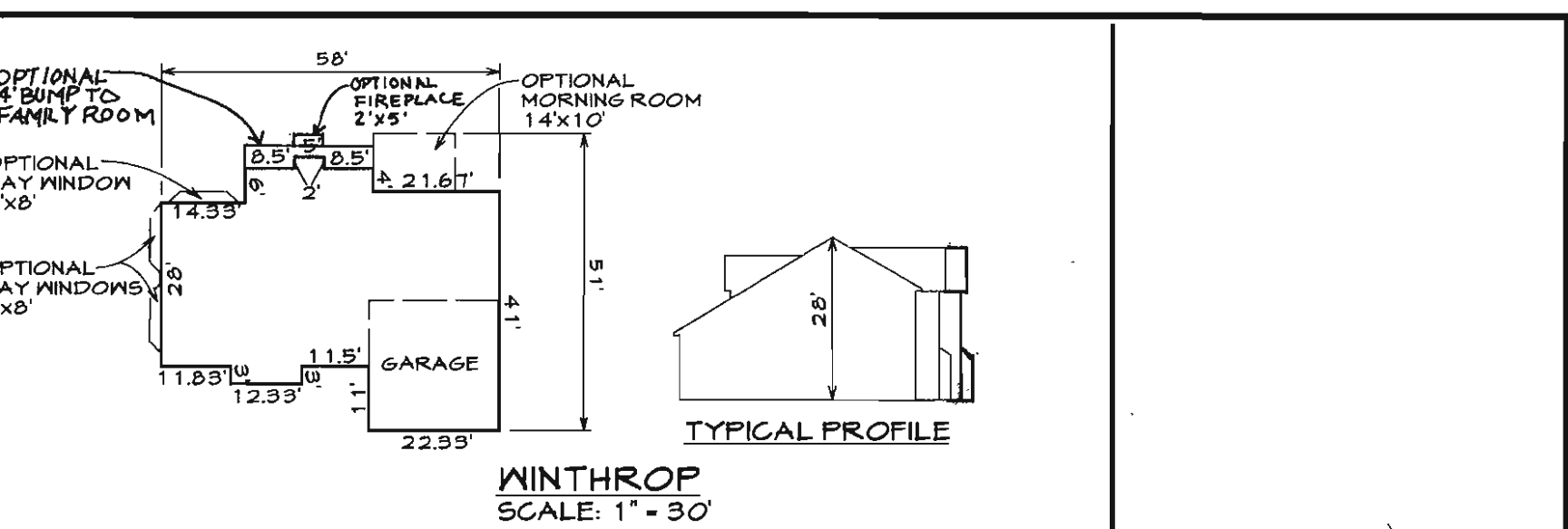
Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.



DEVELOPER'S CERTIFICATE
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICABLE AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.



**NOTES & DETAILS
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR**

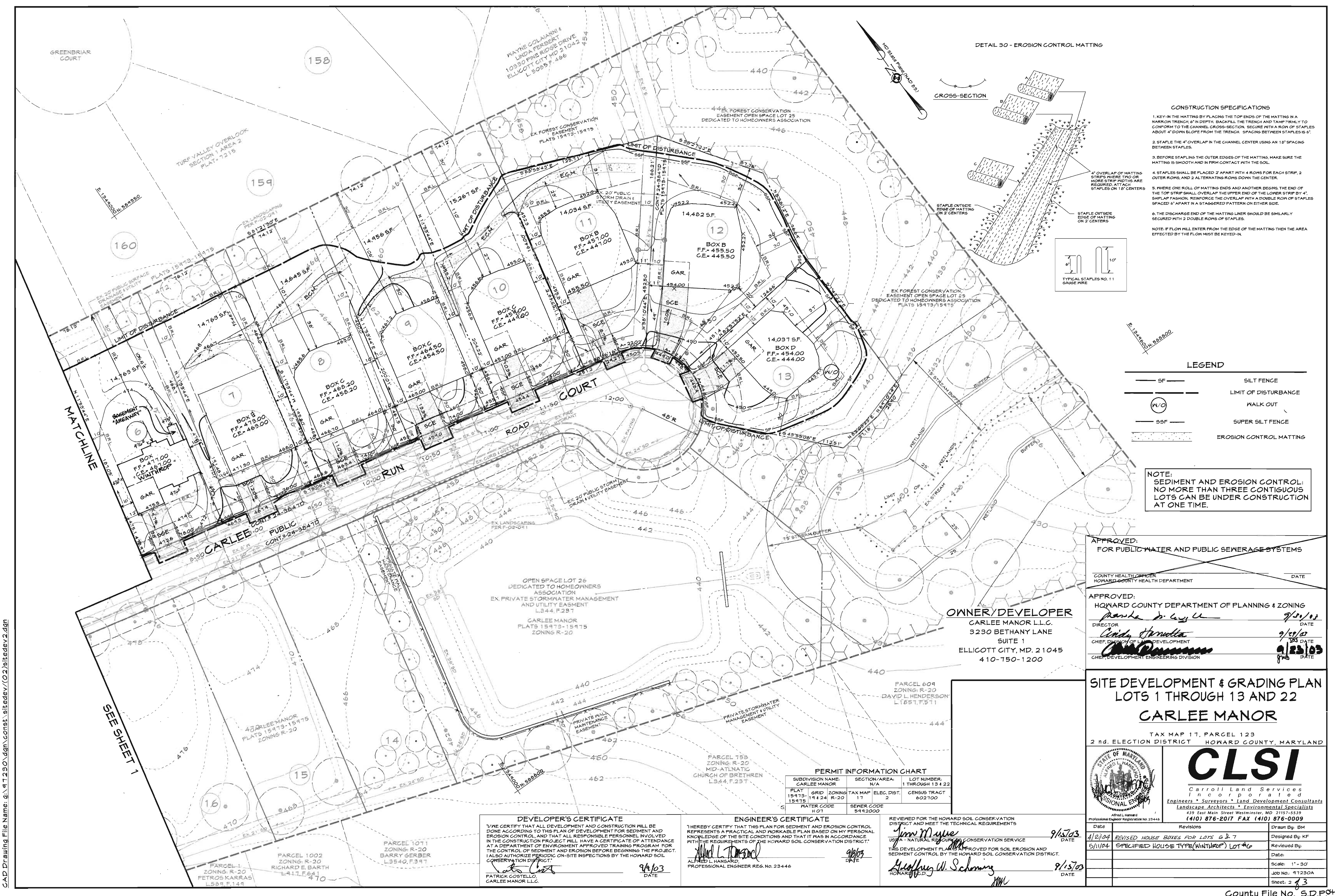
TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CLSI
Carroll Land Services
Incorporated
Engineers * Surveyors * Land Development Consultants
Landscape Architects * Environmental Specialists
439 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

Professional Engineer Registration No. 23446

Date	Revisions	Drawn By
4/2/04	REVISED HOUSE BOXES AND ADDED GENERIC BOX "E"	Designed By
5/6/04	ADD OPTIONAL BUMP OUT TO FAMILY ROOM AND OPTIONAL FIREPLACE TO WINTHROP MODEL	Reviewed By
		Date:
		Scale: AS SHOWN
		Job No.: 97230A
		Sheet: 3 of 3

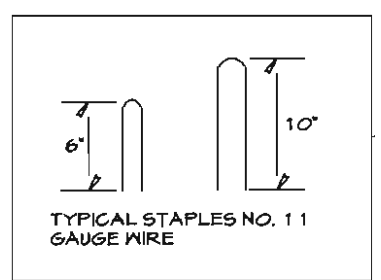
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DETAIL 30 - EROSION CONTROL MATTING

CROSS-SECTION

- CONSTRUCTION SPECIFICATIONS**
- KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
 - STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
 - BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
 - STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
 - WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIFLAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
 - THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.
- NOTE: IF FLOW WILL ENTER FROM THE EDGES OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEVED-IN.



LEGEND

- SF SILT FENCE
- LIMIT OF DISTURBANCE
- W/O WALK OUT
- SSF SUPER SILT FENCE
- EROSION CONTROL MATTING

NOTE:
SEDIMENT AND EROSION CONTROL:
NO MORE THAN THREE CONTIGUOUS
LOTS CAN BE UNDER CONSTRUCTION
AT ONE TIME.

APPROVED:
FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Resha D. Gandy 9/20/03
DIRECTOR DATE
David Starnes 9/29/03
CHIEF, DIVISION OF DEVELOPMENT DATE
John D. ... 9/23/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELlicOTT CITY, MD. 21045
410-750-1200

SITE DEVELOPMENT & GRADING PLAN
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT NUMBER
CARLEE MANOR	N/A	1 THROUGH 13 & 22
PLAT 15475-15475	GRID ZONING TAX MAP ELEC. DIST.	CENSUS TRACT
	19 & 24 R-20 17 2	602100
WATER CODE	SEWER CODE	
H 07	5992000	

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick Costello 9/16/03
PATRICK COSTELLO, CARLEE MANOR L.L.C. 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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred L. Hansard 9/16/03
ALFRED L. HANSARD, PROFESSIONAL ENGINEER REG. NO. 23446 DATE

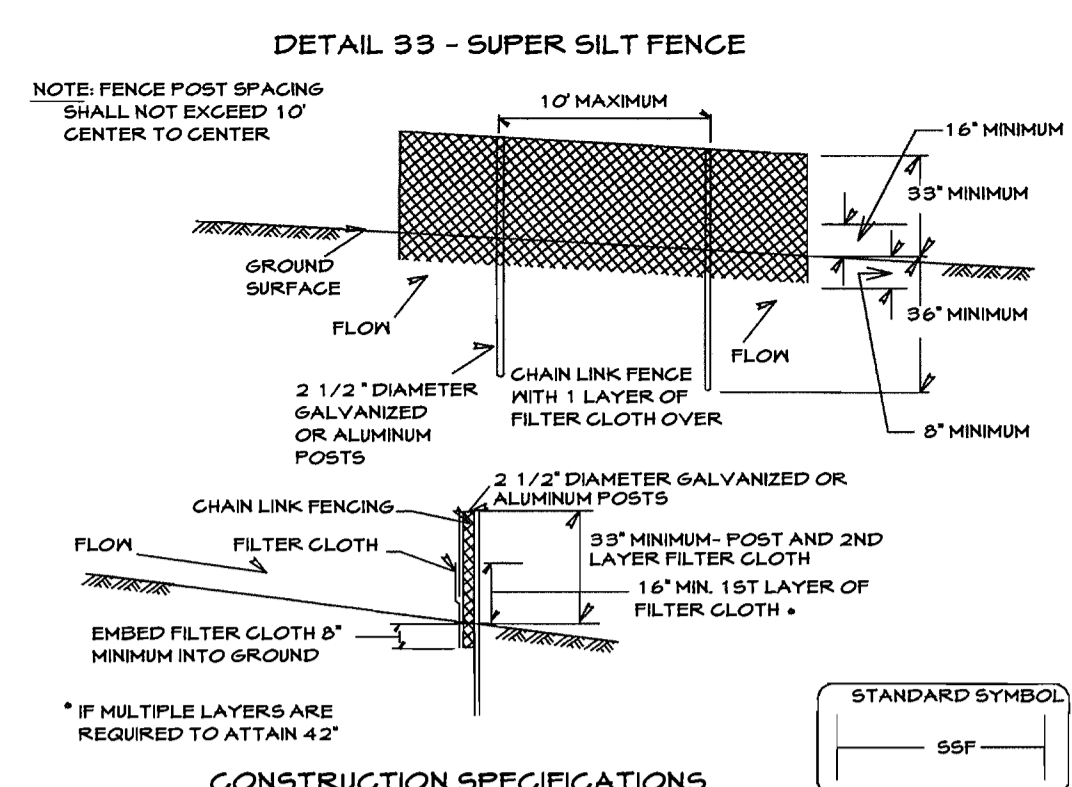
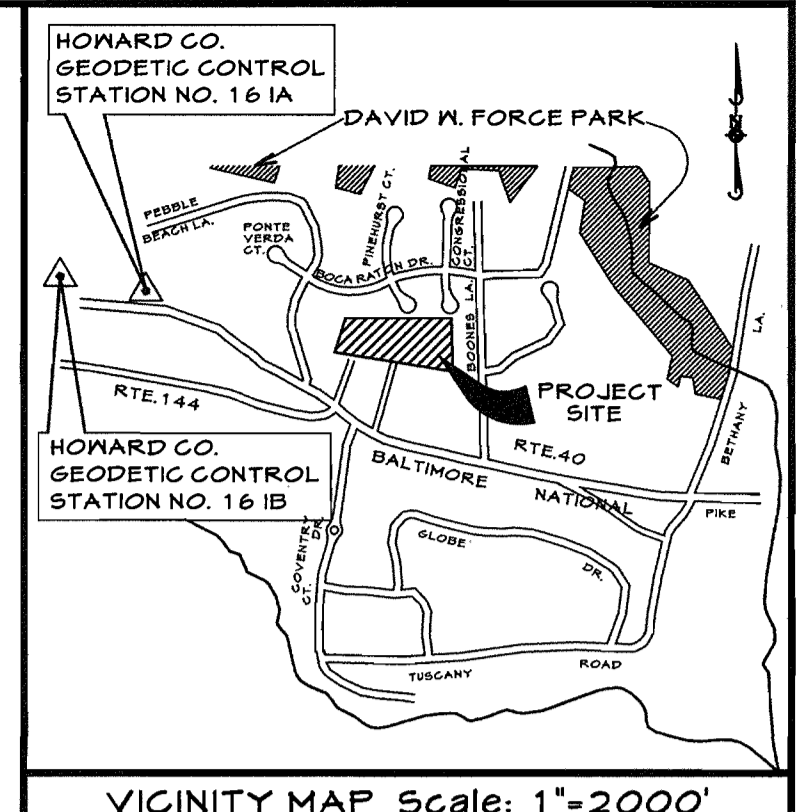
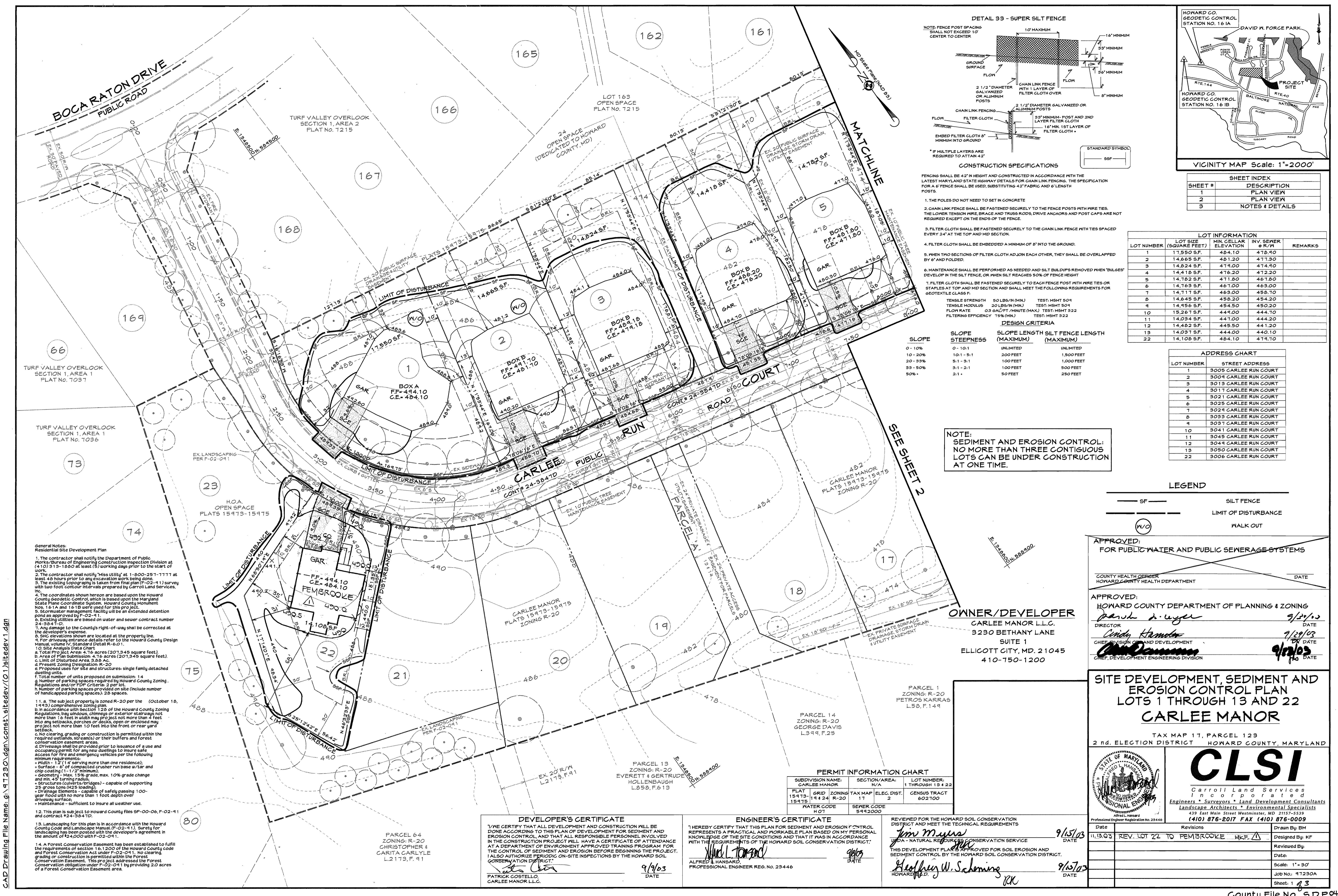
REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jan Myrue 9/15/03
JAN MYRUE, NATURAL RESOURCE CONSERVATION SERVICE DATE

Groffrey W. Schenney 9/15/03
GROFFREY W. SCHENNEY, HOWARD COUNTY DATE

Date	Revisions	Drawn By: BM
4/2/04	REVISED HOUSE BOXES FOR LOTS 6 & 7	Designed By: KF
5/11/04	SPECIFIED HOUSE TYPE (WINTHROP) LOT #6	Reviewed By:
		Date:
		Scale: 1" = 30'
		Job No.: 91230A
		Sheet: 2 of 3

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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.

1. THE POLES DO NOT NEED TO SET IN CONCRETE
2. 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.
3. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
4. FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 2' AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDUPS REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE OR WHEN SILT REACHES 50% OF FENCE HEIGHT.

1. 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 504
 TENSILE MODULUS 20 LBS/(IN MIN) TEST: MSMT 504
 FLOW RATE 0.3 GAL/FT MINUTE (MAX) TEST: MSMT 322
 FILTERING EFFICIENCY 15% (MIN) TEST: MSMT 322

DESIGN CRITERIA

SLOPE STEEPNESS	SLOPE LENGTH SILT FENCE LENGTH (MAXIMUM)	SILT FENCE LENGTH (MAXIMUM)
0 - 10%	UNLIMITED	UNLIMITED
10 - 20%	101 - 511	1,500 FEET
20 - 33%	51 - 311	1,000 FEET
33 - 50%	31 - 211	500 FEET
50% +	2 - 11	50 FEET

SHEET INDEX

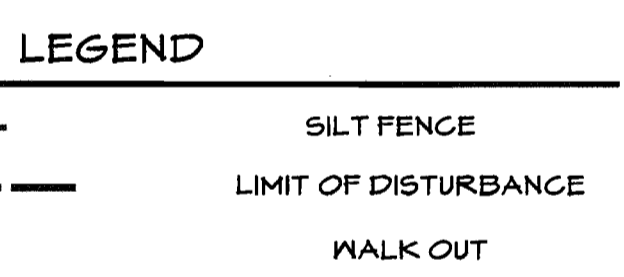
SHEET #	DESCRIPTION
1	PLAN VIEW
2	PLAN VIEW
3	NOTES & DETAILS

LOT INFORMATION

LOT NUMBER	LOT SIZE (SQUARE FEET)	MIN. CELLAR ELEVATION	INV. SEWER @ 8"/M	REMARKS
1	17,550 S.F.	484.10	476.50	
2	14,665 S.F.	481.20	477.50	
3	14,824 S.F.	479.00	474.40	
4	14,418 S.F.	476.20	472.20	
5	14,782 S.F.	471.80	467.80	
6	14,763 S.F.	467.00	463.00	
7	14,717 S.F.	463.00	458.70	
8	14,645 S.F.	458.20	454.20	
9	14,956 S.F.	454.50	450.20	
10	15,267 S.F.	444.00	444.70	
11	14,034 S.F.	447.00	444.20	
12	14,482 S.F.	445.50	441.20	
13	14,037 S.F.	444.00	440.10	
22	14,108 S.F.	484.10	479.70	

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
1	3005 CARLEE RUN COURT
2	3004 CARLEE RUN COURT
3	3013 CARLEE RUN COURT
4	3017 CARLEE RUN COURT
5	3021 CARLEE RUN COURT
6	3025 CARLEE RUN COURT
7	3029 CARLEE RUN COURT
8	3033 CARLEE RUN COURT
9	3037 CARLEE RUN COURT
10	3041 CARLEE RUN COURT
11	3045 CARLEE RUN COURT
12	3049 CARLEE RUN COURT
13	3053 CARLEE RUN COURT
22	3006 CARLEE RUN COURT



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER: HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

OWNER/DEVELOPER: CARLEE MANOR L.L.C., 3230 BETHANY LANE, SUITE 1, ELLICOTT CITY, MD. 21045, 410-750-1200

SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN
 LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
 2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CLSI
 Carroll Land Services
 Engineers • Surveyors • Land Development Consultants
 Landscape Architects • Environmental Specialists
 439 East Main Street Westminster, MD 21157-5539
 (410) 876-2017 FAX (410) 876-0009

REVISIONS

Date	Revisions	Drawn By: BM
11.13.03	REV. LOT 22 TO PEMBROOKE	Designed By: KF
		Reviewed By:
		Date:
		Scale: 1" = 30'
		Job No: 97290A
		Sheet: 1 of 3

General Notes:
 Residential Site Development Plan

1. The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least (5) working days prior to the start of work.
2. The contractor shall notify 'Miss Utility' at 1-800-257-7171 at least 48 hours prior to any excavation work being done.
3. The existing topography is taken from final plan (F-02-41) survey with two foot contour intervals prepared by Carroll Land Services, Inc.
4. 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. 161A and 161B used for this project.
5. Stormwater management facility will be an extended detention pond as approved by F-02-41.
6. Existing utilities are based on water and sewer contract number 24-3947-D.
7. Any damage to the County's right-of-way shall be corrected at the developer's expense.
8. SHC elevations shown are located at the property line.
9. For driveway entrance details refer to the Howard County Design Manual, volume IV, Standard Detail R-601.
10. Site Analysis Data chart:
 - a. Total Project Area: 4.76 acres (207,349 square feet).
 - b. Area of Plan Submission: 4.76 acres (207,349 square feet).
 - c. Limit of Disturbed Area: 3.88 Ac.
 - d. Present zoning designation: R-20
 - e. Proposed uses for site and structures: single family detached dwelling units.
 - f. Total number of units proposed on submission: 14
 - g. Number of parking spaces required by Howard County Zoning Regulations and/or other criteria: 2 per lot.
 - h. Number of parking spaces provided on site (include number of handicapped parking spaces): 28 spaces.
11. a. The subject property is zoned R-20 per the (October 18, 1443) comprehensive zoning plan.
 b. In accordance with Section 128 of the Howard County Zoning Regulations, any outdoor, citizens or outdoor structures 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 setbacks.
 c. No clearing, grading or construction is permitted within the required wetlands, streams or their buffers and forest conservation easement areas.
 d. 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:
 - Width - 12' (14' serving more than one residence);
 - Surface - 6" of compacted crusher run base w/tar and chip coating (1-1/2" minimum).
 - Geometry - Max. 15% grade, max. 10% grade change and min. 45' turning radius.
 - Structures (culverts/bridges) - capable of supporting 25 gross tons (M25 loading).
 - Drainage Elements - capable of safely passing 100-year flood with no more than 1 foot depth over driveway surface.
 - Maintenance - sufficient to insure all weather use.
12. This plan is subject to Howard County Files SP-00-06, F-02-41 and contract #24-3947-D.
13. Landscaping for this plan is in accordance with the Howard County Code and Landscape Manual (F-02-41). Surety for landscaping is being posted with the developer's agreement in the amount of \$4,000 with F-02-011.
14. A Forest Conservation Easement has been established to fulfill the requirements of section 16.1200 of the Howard County code and Forest Conservation Act under F-02-041. No clearing, grading or construction is permitted within the Forest Conservation Easement. This project addressed the Forest conservation obligation under F-02-041 by providing 2.0 acres of a Forest Conservation Easement area.

DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

PARCEL 64
 ZONING: R-20
 CHRISTOPHER & CARITA CARLYLE
 L.21173, F. 91

9/9/03
 DATE

PATRICK COSTELLO
 CARLEE MANOR L.L.C.

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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ALFRED J. HANSARD
 PROFESSIONAL ENGINEER REG. NO. 23446

9/15/03
 DATE

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jim Myers
 USDA - NATURAL RESOURCE CONSERVATION SERVICE

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

Heather W. Schering
 HOWARD S.D.

9/15/03
 DATE

PERMIT INFORMATION CHART

SUBDIVISION NAME:	SECTION/AREA:	LOT NUMBER:
CARLEE MANOR	N/A	1 THROUGH 13 & 22
PLAT 15473, 15475	GRID ZONING TAX MAP ELEC. DIST.	GENSUS TRACT
19424 R-20	17	2
15475		602700
WATER CODE H07	SEWER CODE 5942000	

CAD Drawing File Name: g:\1730.dgn const\sitedev\01\sitedev1.dgn

**HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT 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 (3-13-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within a 7 calendar days for all perimeter control structures, dikes, perimeter slopes and all slopes greater than 3:1 to 1:4 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 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seeding (Sec. 5.1), soil (Sec. 5.4) temporary seeding (Sec. 5.2) and mulching (Sec. 5.2). Temporary stabilization 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:

Total Area of Site	13.31 Acres
Area Disturbed	3.84 Acres
Area to be roofed or paved	1.43 Acres
Area to be vegetatively stabilized	2.46 Acres
Total Cut	100 Cu Yds.
Total Fill	100 Cu Yds.

 Offsite waste/borrow area location will be to a site with an approved sediment control plan and an approved open grading permit.
- 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 control 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 erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building 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 by the end of each workday, whichever is shorter.

Rev. 9/4/94
 Topsoil Notes
 Construction and Material Specifications
 I. Topsoil salvaged from the existing lot 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 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" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutgrass, 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. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 2.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- 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:

Permanent Seeding Summary				
No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	
N/A Kentucky-31	80	3/1 to 11/15	1"	
Annual Ryegrass	20	3/1 to 11/15	1/4" - 1/2"	

Page 2
 Topsoil Notes
 a) 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.
 b) Organic content of topsoil shall be not less than 1.5 percent by weight.
 c) Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 d) No sod 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 min) 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.
 II. Place topsoil (if required) and apply soil amendments as specified in 2.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 V. Topsoil Application
 I. 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.
 II. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4"-8" higher in elevation.
 III. 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 sodding or seeding can proceed with a minimum of additional soil.
 IV. 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.

Page 3
 Topsoil Notes
 v. 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 - Road of applying full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 I. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 a) Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 b) 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.
 c) Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 II. 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.

NOTE:
 ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.

STABILIZATION SPECIFICATIONS

TEMPORARY SEEDING NOTES

- Scope: Planting short term (no more than 1 year) vegetation to temporarily stabilize any areas where soil disturbance has occurred, until the area can be permanently stabilized with vegetative or non-vegetative practices.
- Standards: The following notes shall conform to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, Published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See G-20 Sec. 1-C.
 - Fertilizer shall consist of a mixture of 10-10-10 and be applied at a rate of 600 lb per acre (15 lb per 1,000 sq. ft.) and will meet the requirements in G-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1,000 sq. ft.) and shall meet the requirements in G-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in G-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in G-20 Sec. 1-F, G and H.
 - Seeding mixtures shall be selected from or will be equal to those on Table 26.
 - The following is one option, approved equals may be used.

Temporary Seeding Summary				
No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	
N/A Kentucky-31	80	3/1 to 11/15	1"	
Annual Ryegrass	20	3/1 to 11/15	1/4" - 1/2"	

PERMANENT SEEDING NOTES

- Scope: Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 1 year.
- Standards: The following notes shall conform to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, Published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See G-20 Sec. 1-C.
 - For sites over 5 ac. soil tests will be performed to determine the exact mixture and application rates for both lime and fertilizer. Soil tests will be prepared by the University of Maryland or a recognized commercial laboratory. If the existing soil does not meet the minimum conditions as stated in G-20 Sec. 1-C, then topsoil will need to be obtained that meets these conditions and applied so as to meet the requirements in G-20 Sec. 1-C.
 - For sites of 5 ac. or less of disturbance, the following fertilizer and lime rates shall apply:
 N-40 lb per acre (2 lb per 1,000 sq. ft.) P-205-175 lb per acre (4 lb per 1,000 sq. ft.) K-20-175 lb per acre (4 lb per 1,000 sq. ft.). Fertilizer shall meet the requirements in G-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1,000 sq. ft.) and shall meet the requirements in G-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in G-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in G-20 Sec. 1-F, G and H.
 - Refer to G-20 Sec. 1-E for Methods of Seeding specifications.
 - Refer to G-20 Sec. 4 for sod specifications.
 - Refer to G-20 Sec. 5 for Turfgrass Establishment specifications.

Permanent Seeding Summary				
N 10	P 205	10	K 20	10
Lime application rate - 2 tons/acre (100 lbs./1,000 sq. ft.)				
Seed Mixture Hardiness Zone 6B/7A (G-20 Figure 5)				
No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	
N/A Tripe Fescue	160	3/1 to 10/30	1"-2"	
Perennial Ryegrass	40	3/1 to 10/30	1"-2"	

Tracking note:
 On areas where the slope is 3:1 or steeper and the height is 8' or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that cleat marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8' height criteria.

UTILITY CONSTRUCTION NOTES

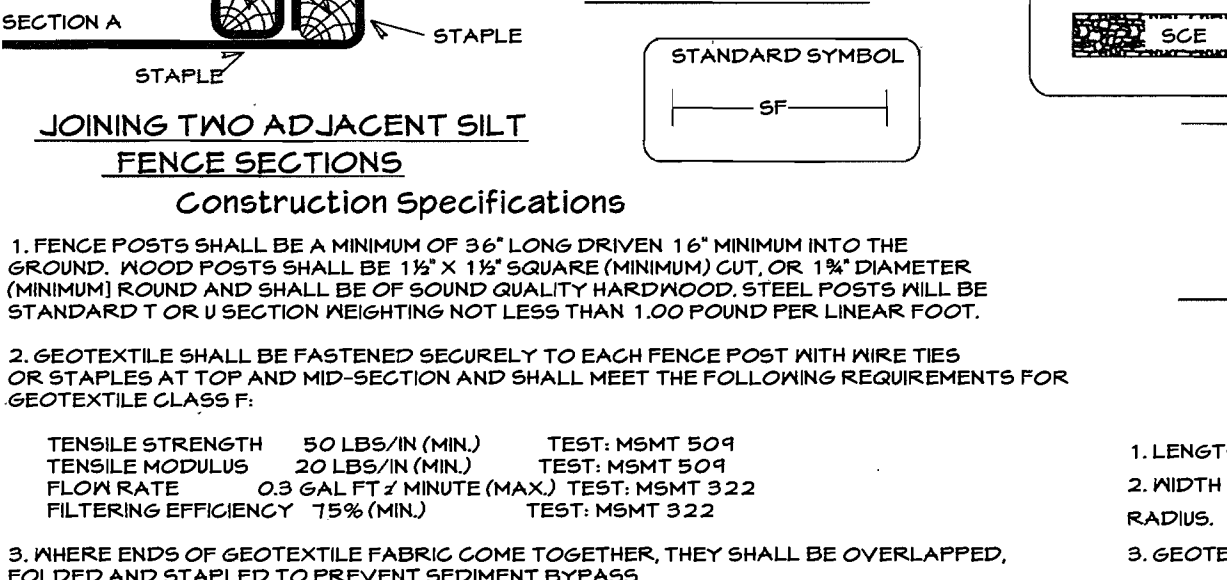
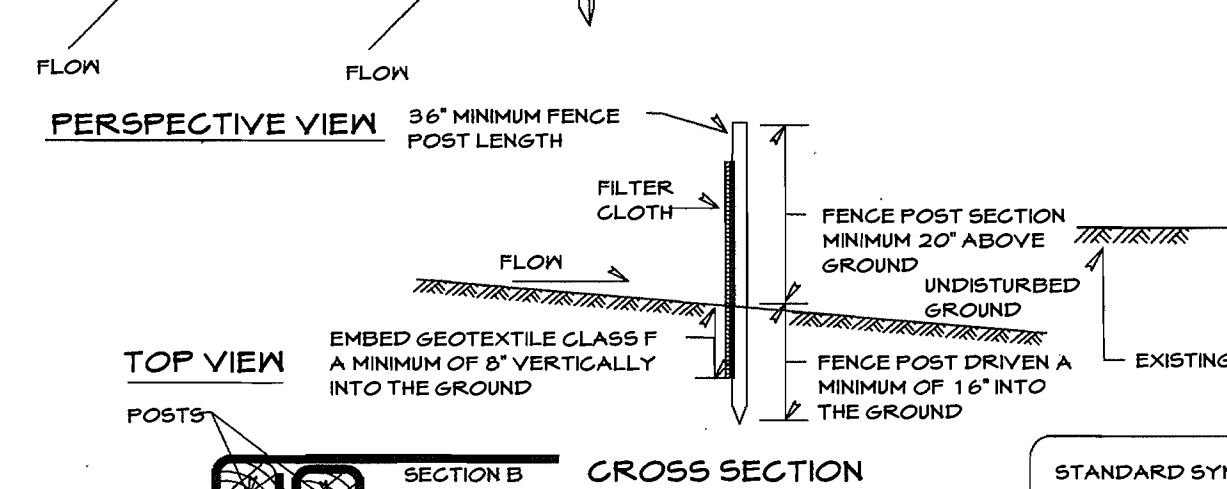
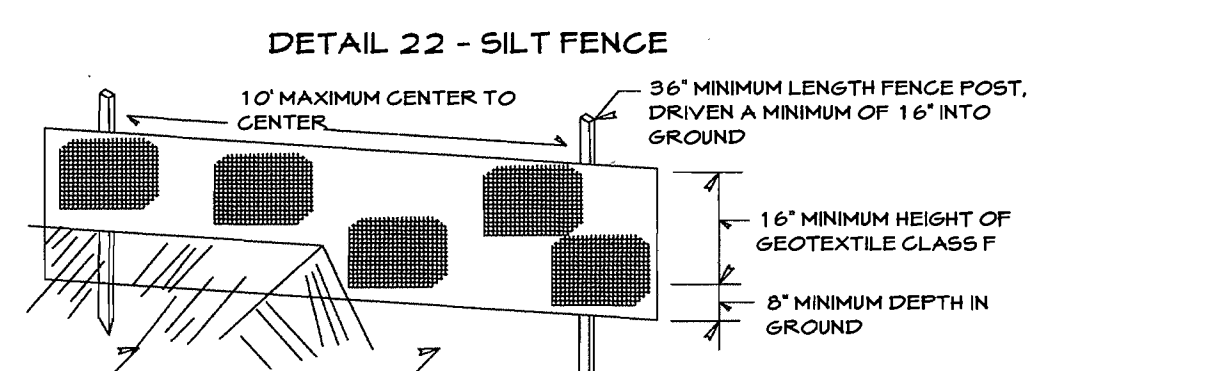
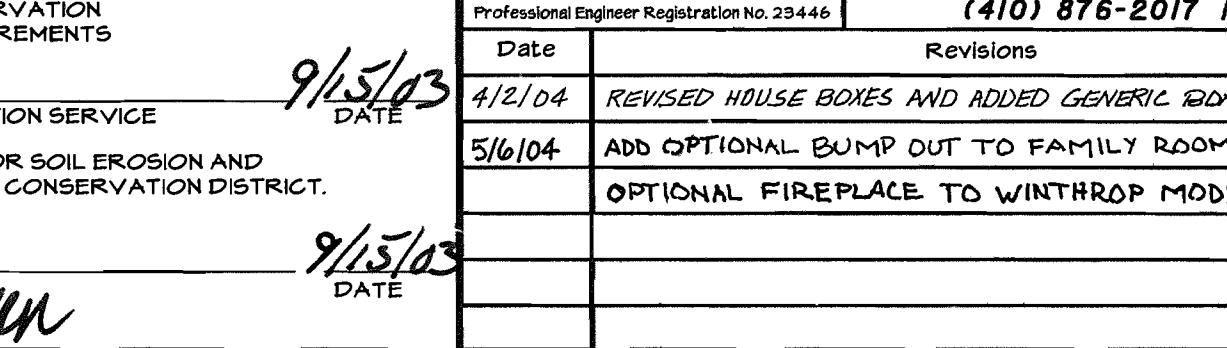
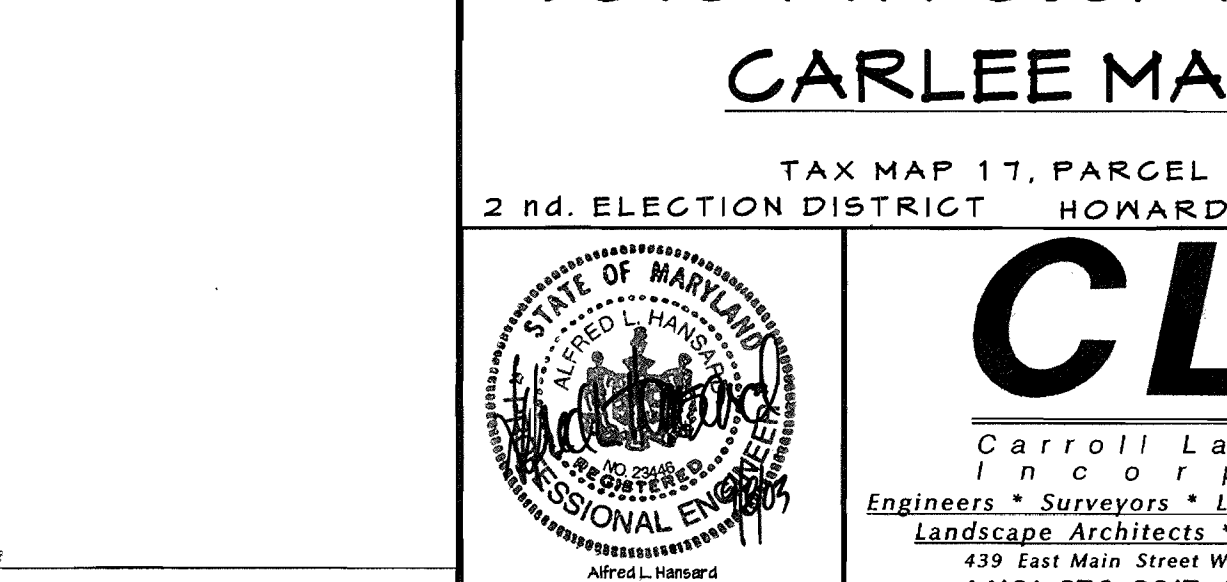
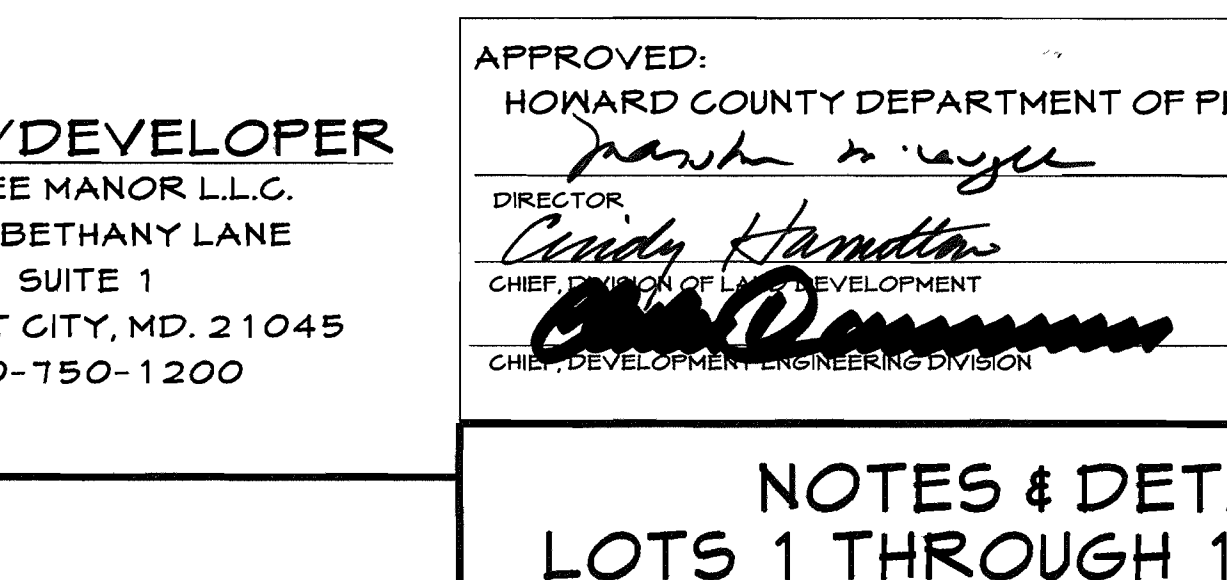
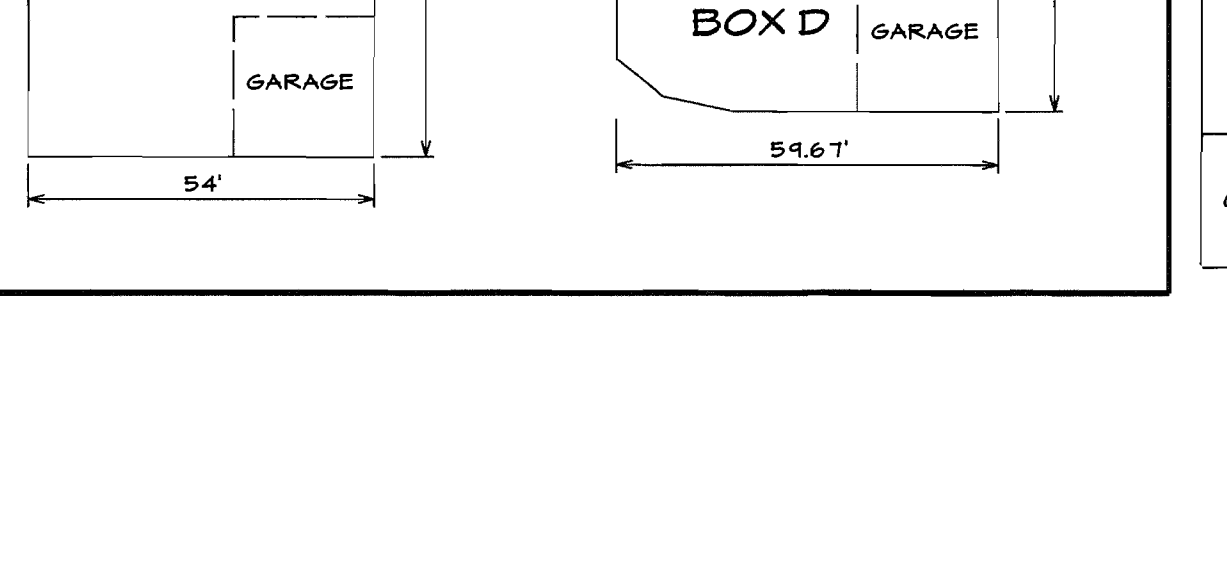
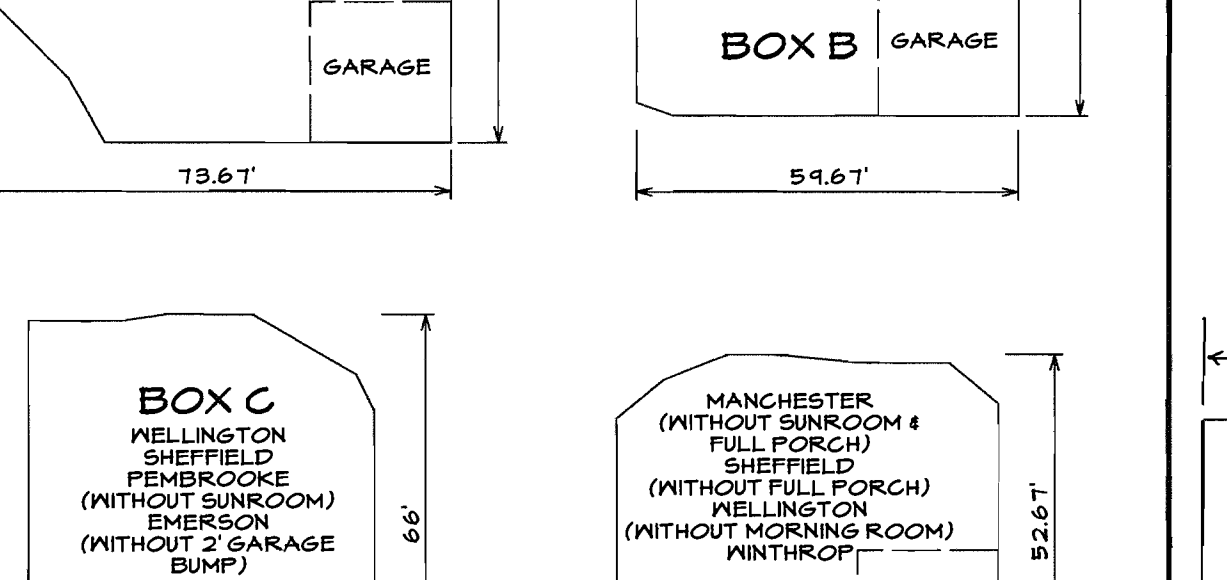
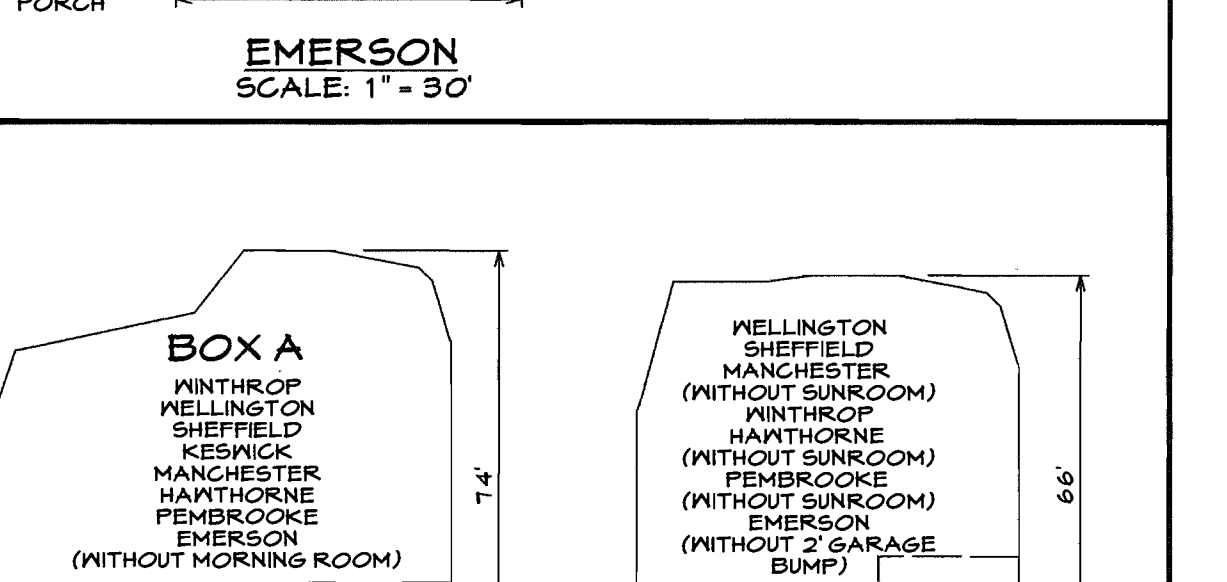
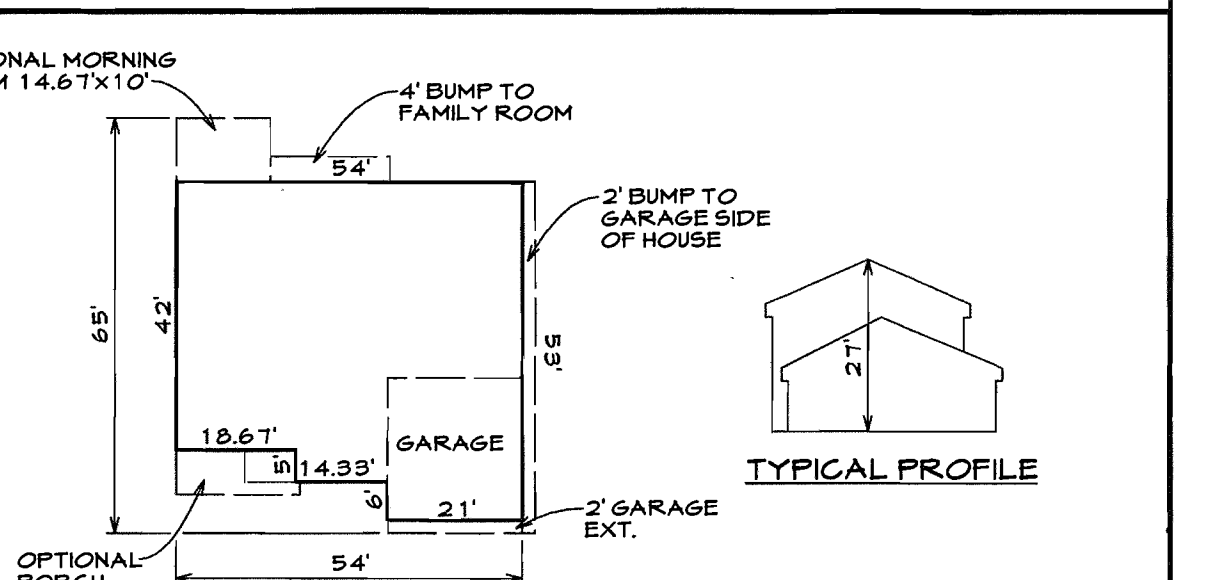
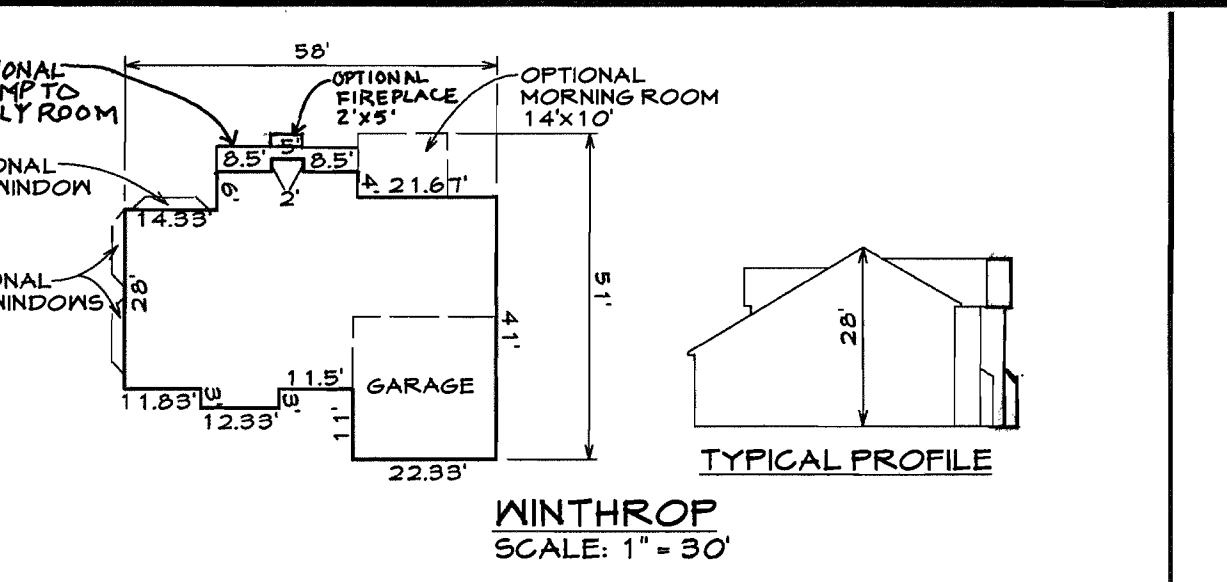
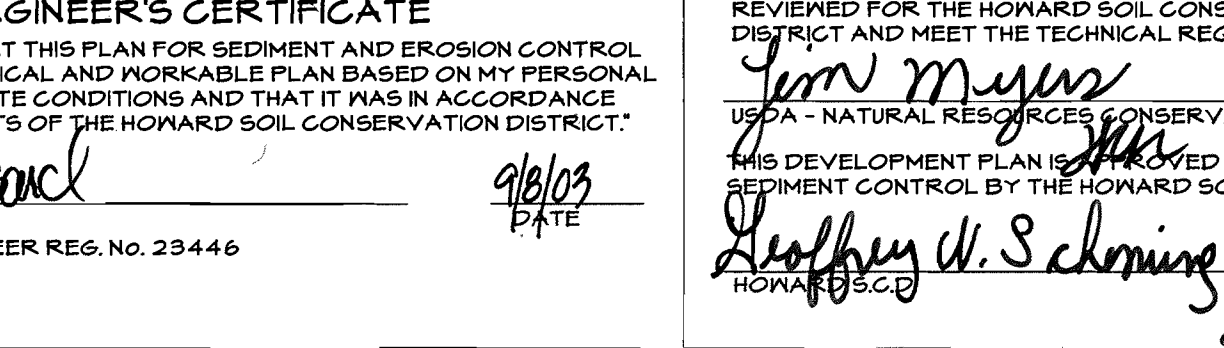
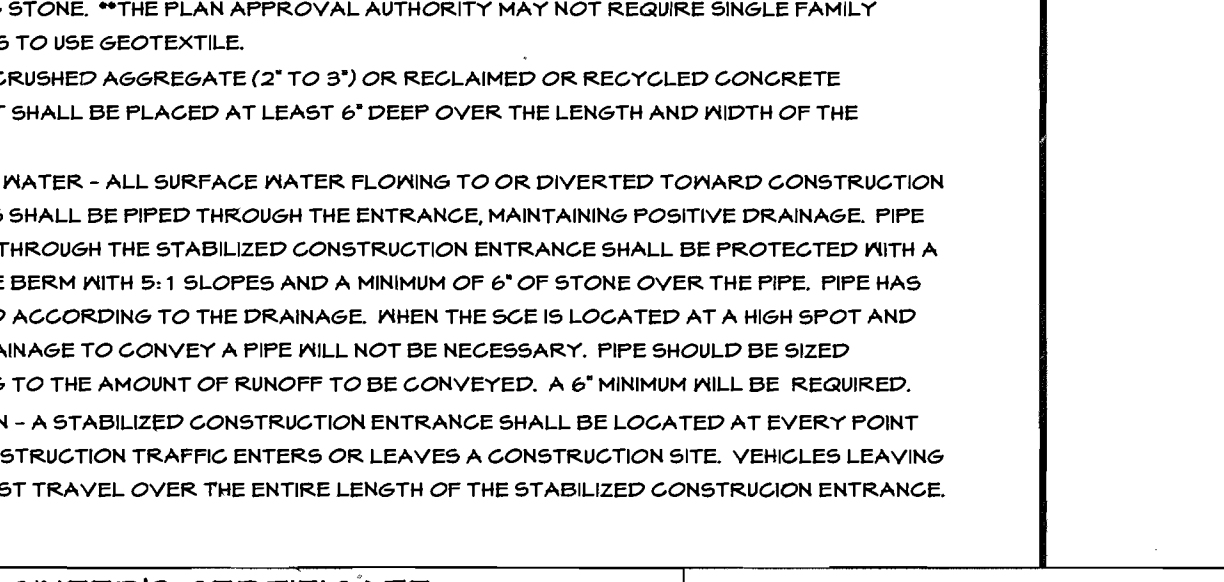
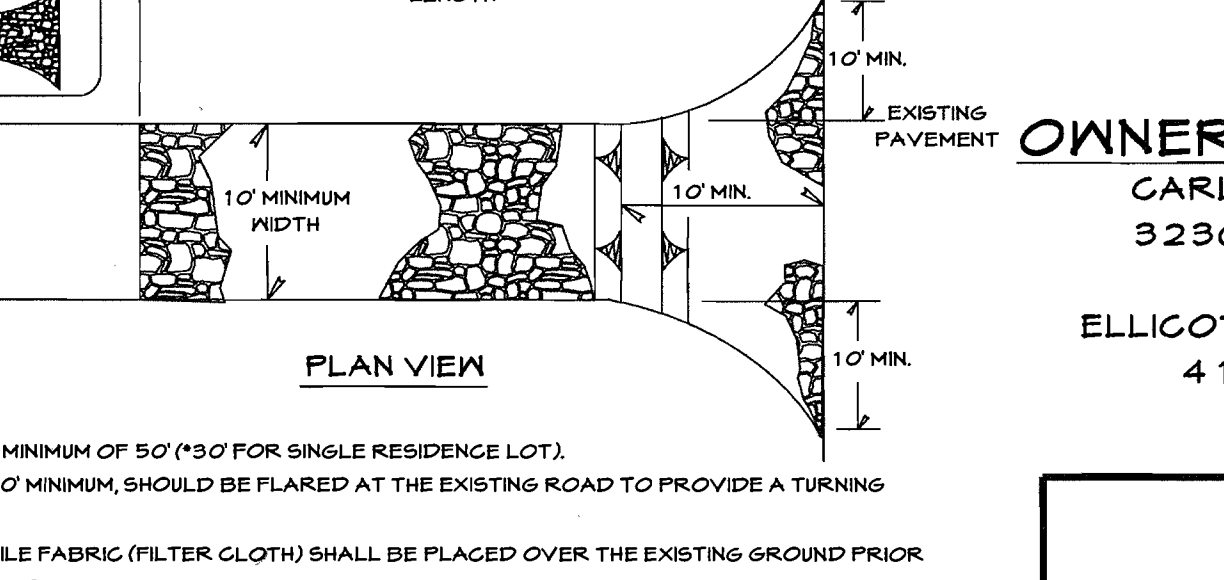
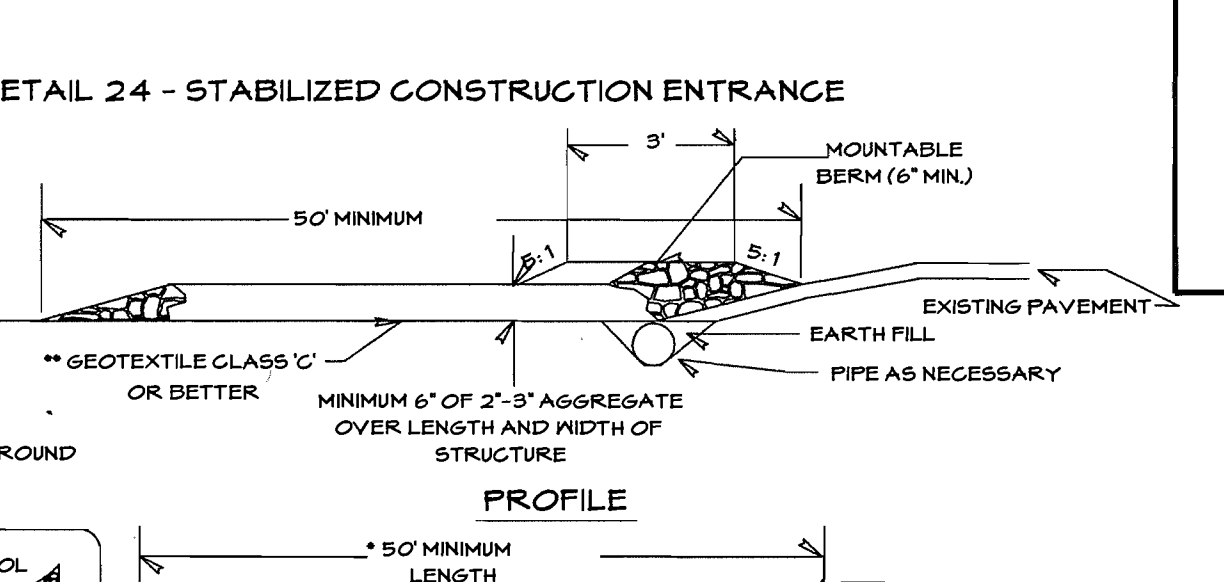
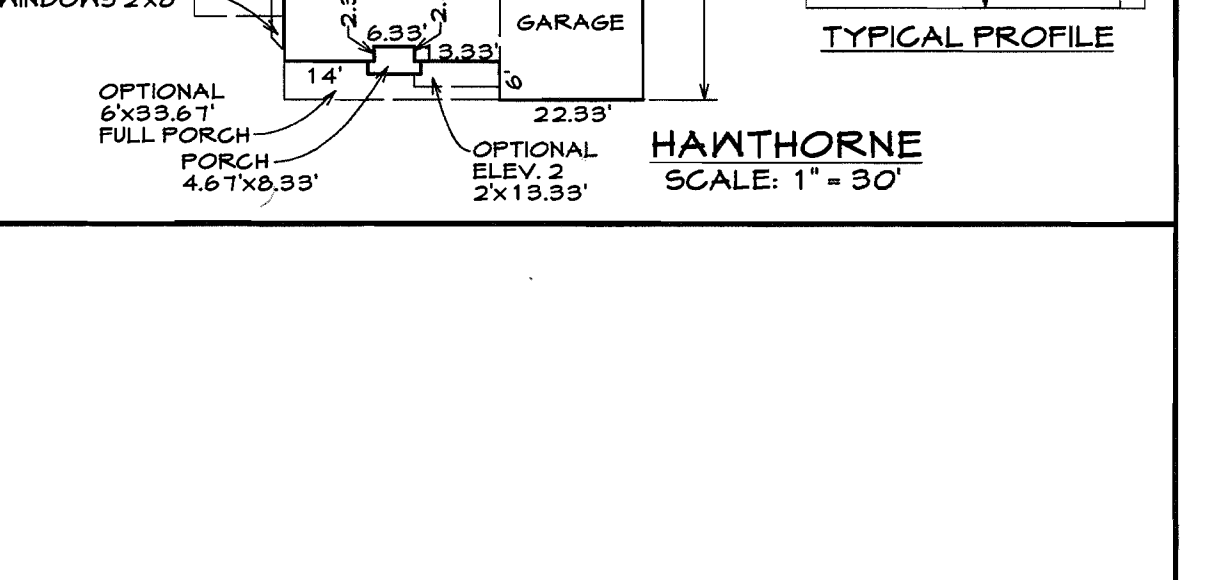
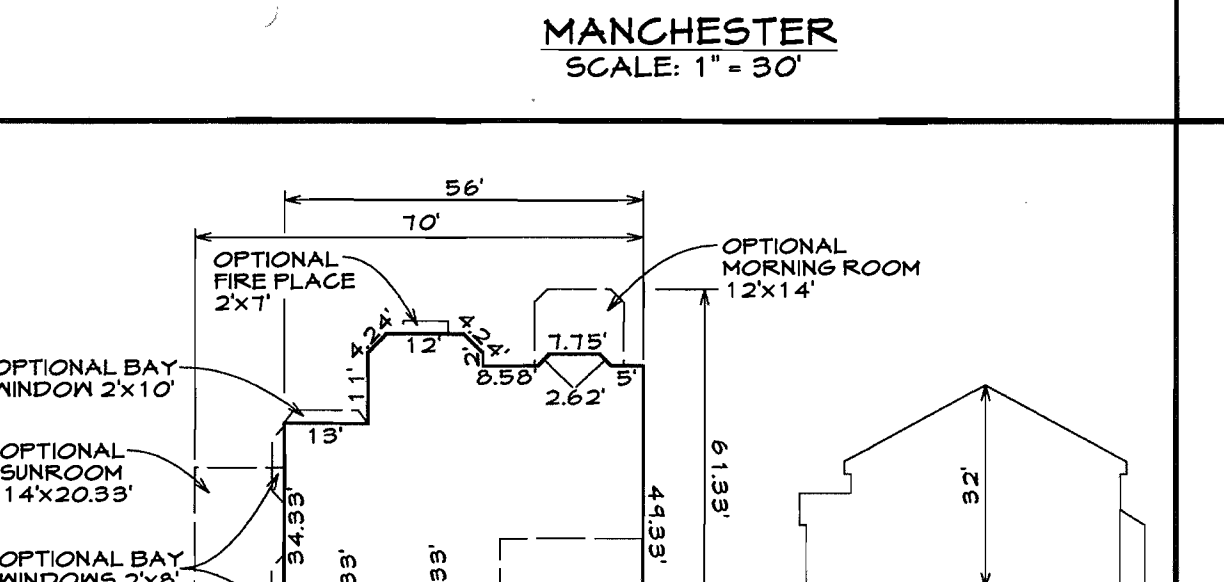
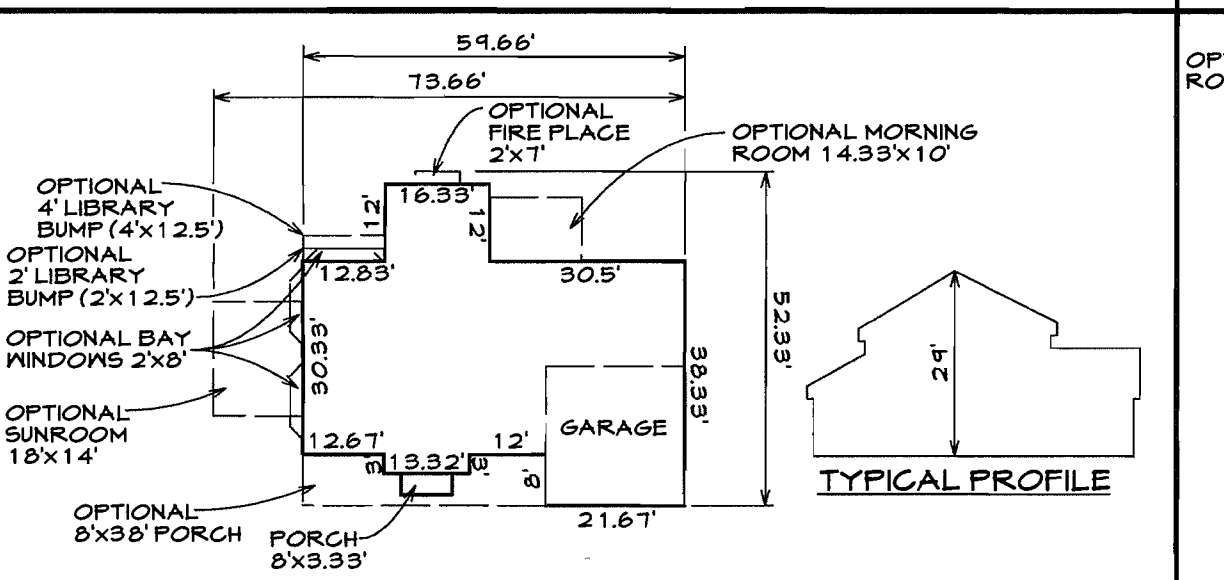
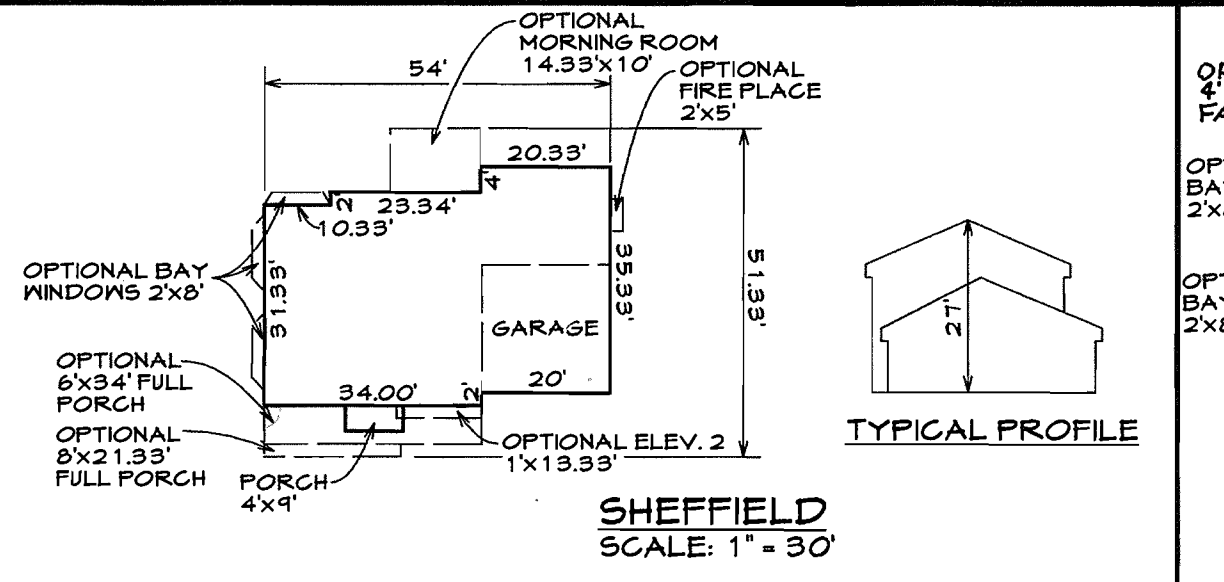
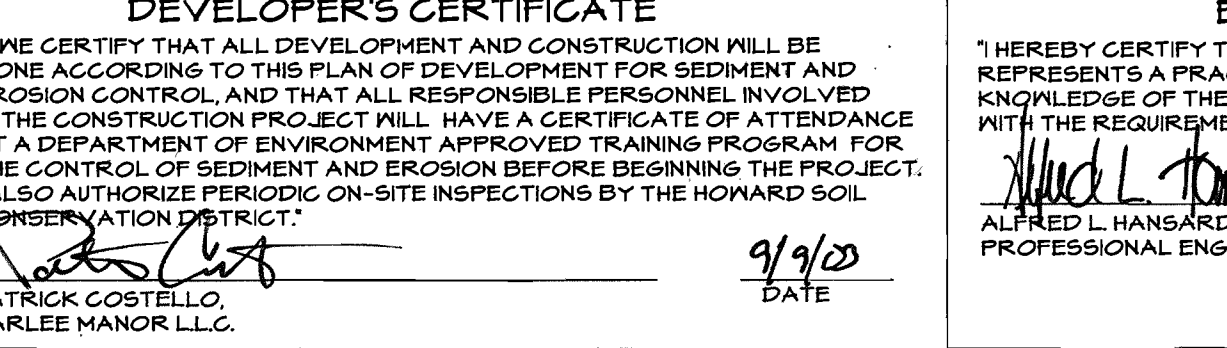
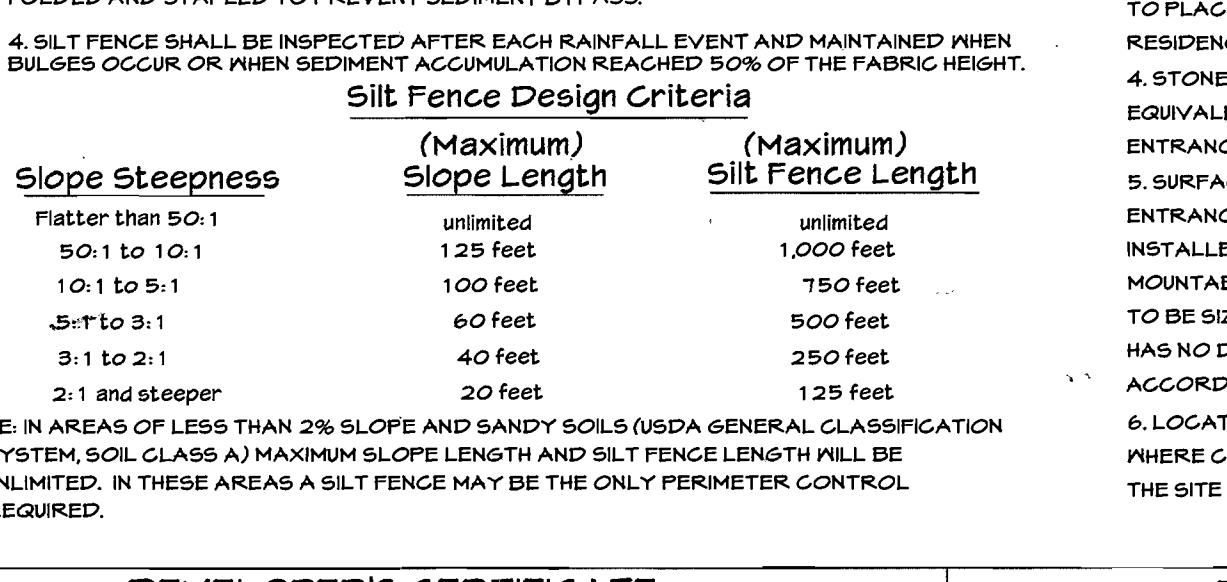
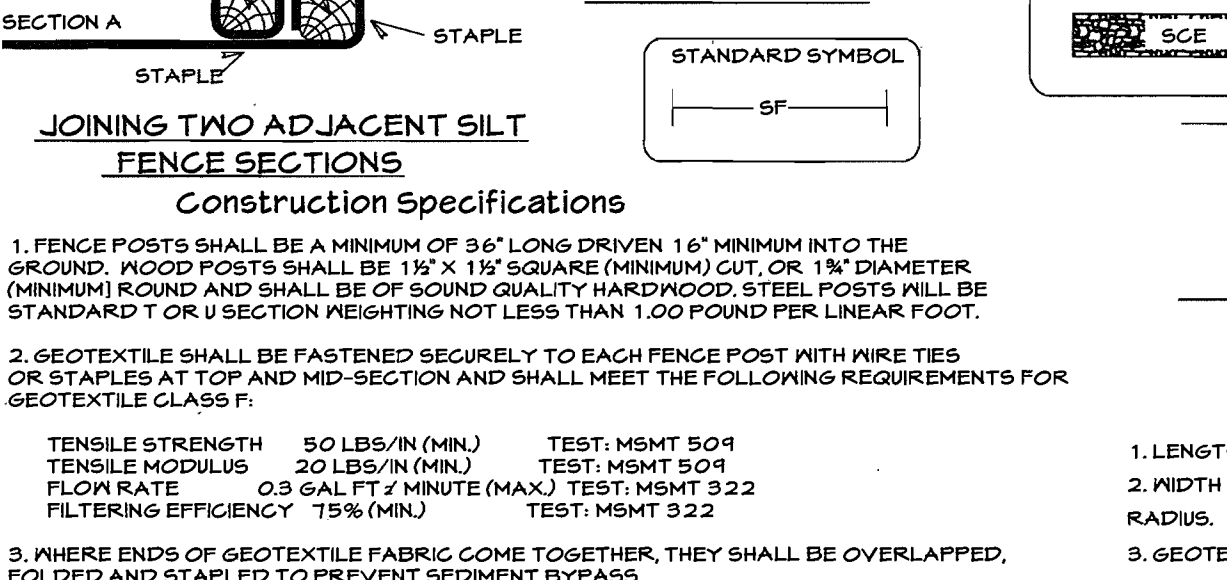
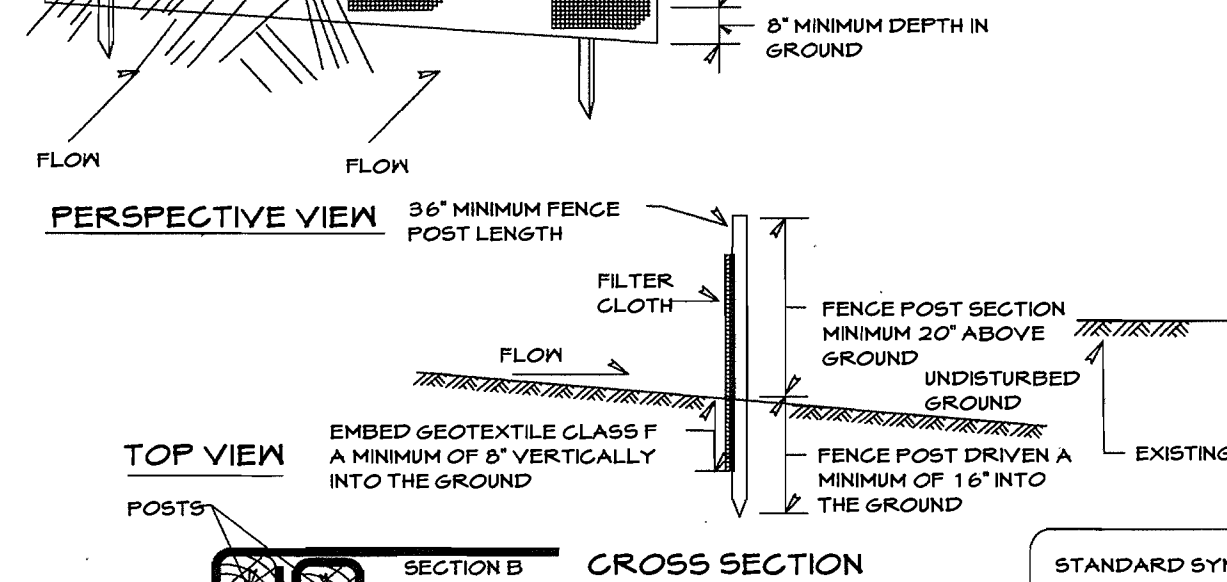
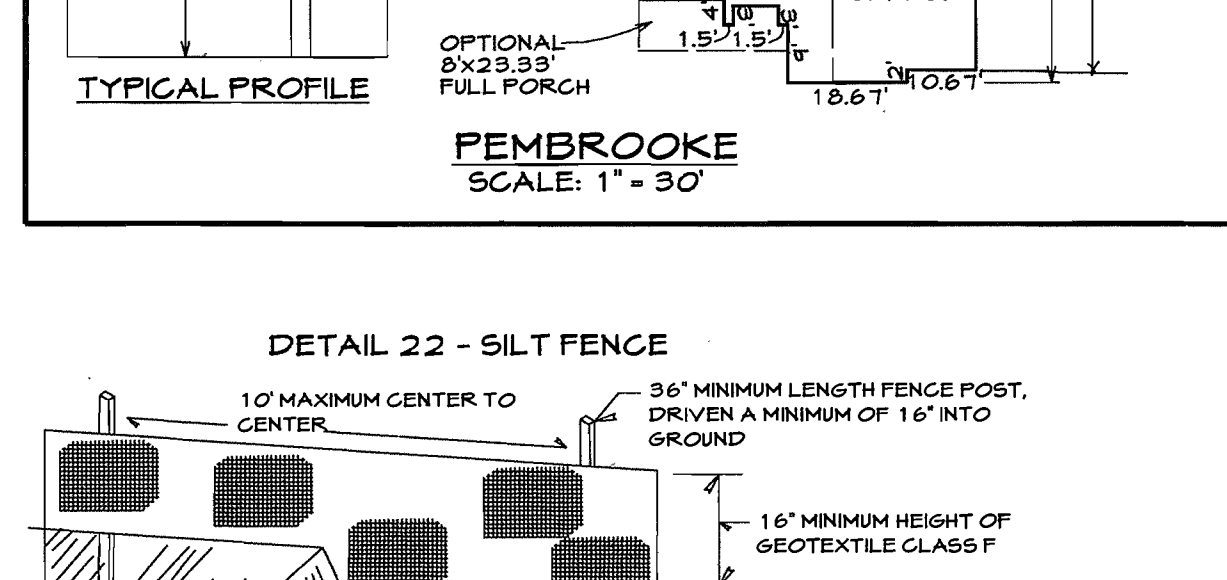
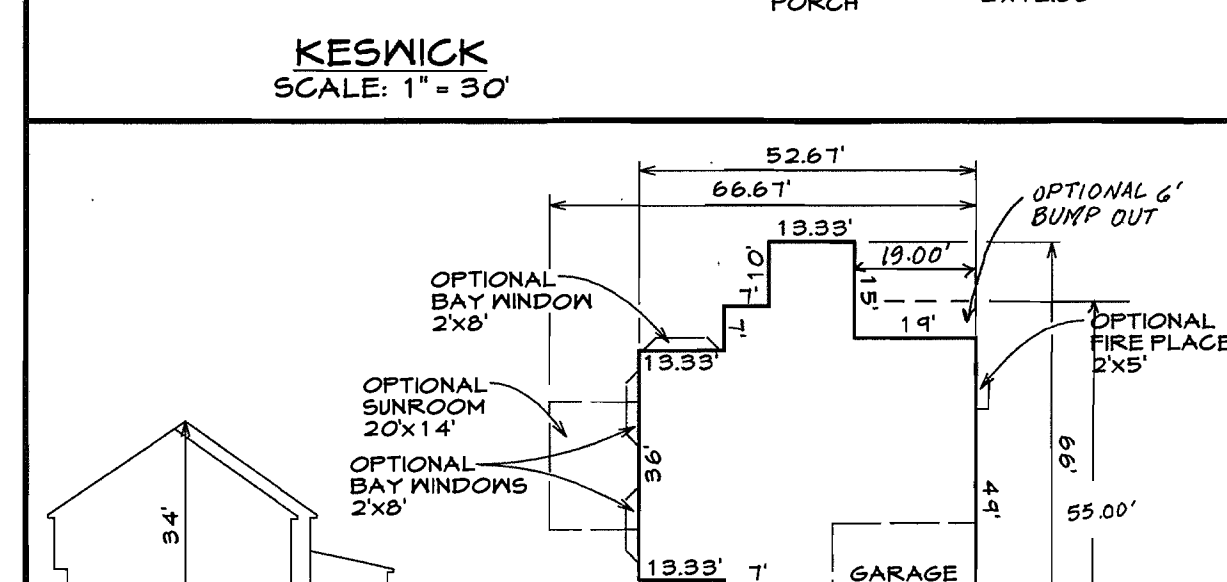
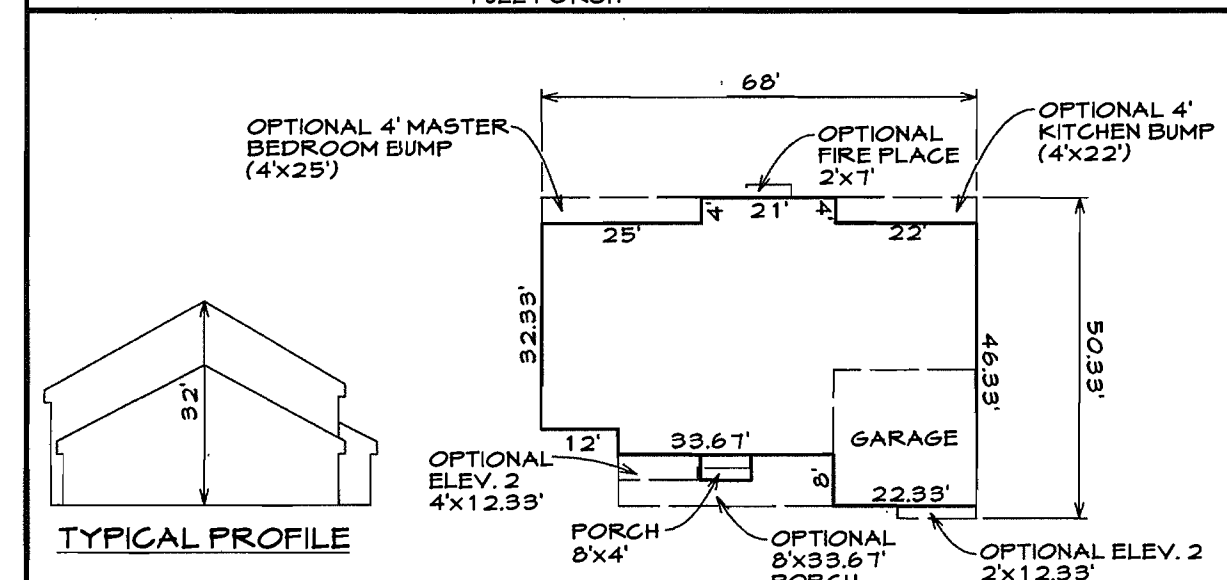
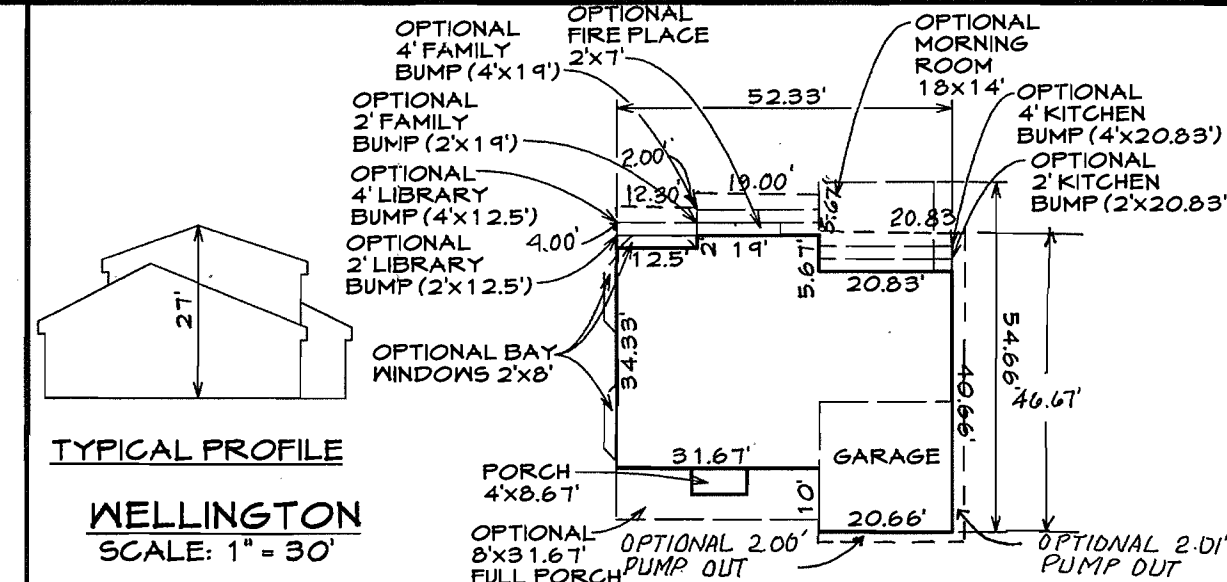
- Place all excavated material on the high side of the trench.
- Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
- Any sediment control measures disturbed by the utility construction will be repaired the same day.

STOCKPILE/TOPSOIL NOTES

- Stockpiling will not be allowed on any impervious area.
- All stockpiles left at the end of the day will need to be temporarily stabilized until they are again disturbed, unless they are within existing perimeter sediment controls.
- All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the inspector in the field.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. (1 DAY)
- INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
- CONSTRUCT DWELLING. (90 DAYS)
- FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
- INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
- INSTALL LANDSCAPING. (1 DAY)
- ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)



DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
 CARLOS COSTELLO
 PATRICK MANOR LLC.
 DATE: 9/13/03

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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 ALFRED L. HANSARD
 PROFESSIONAL ENGINEER REG. NO. 23446
 DATE: 9/13/03

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS
 JENNIFER MAYER
 HOWARD SOIL CONSERVATION SERVICE
 DATE: 9/15/03

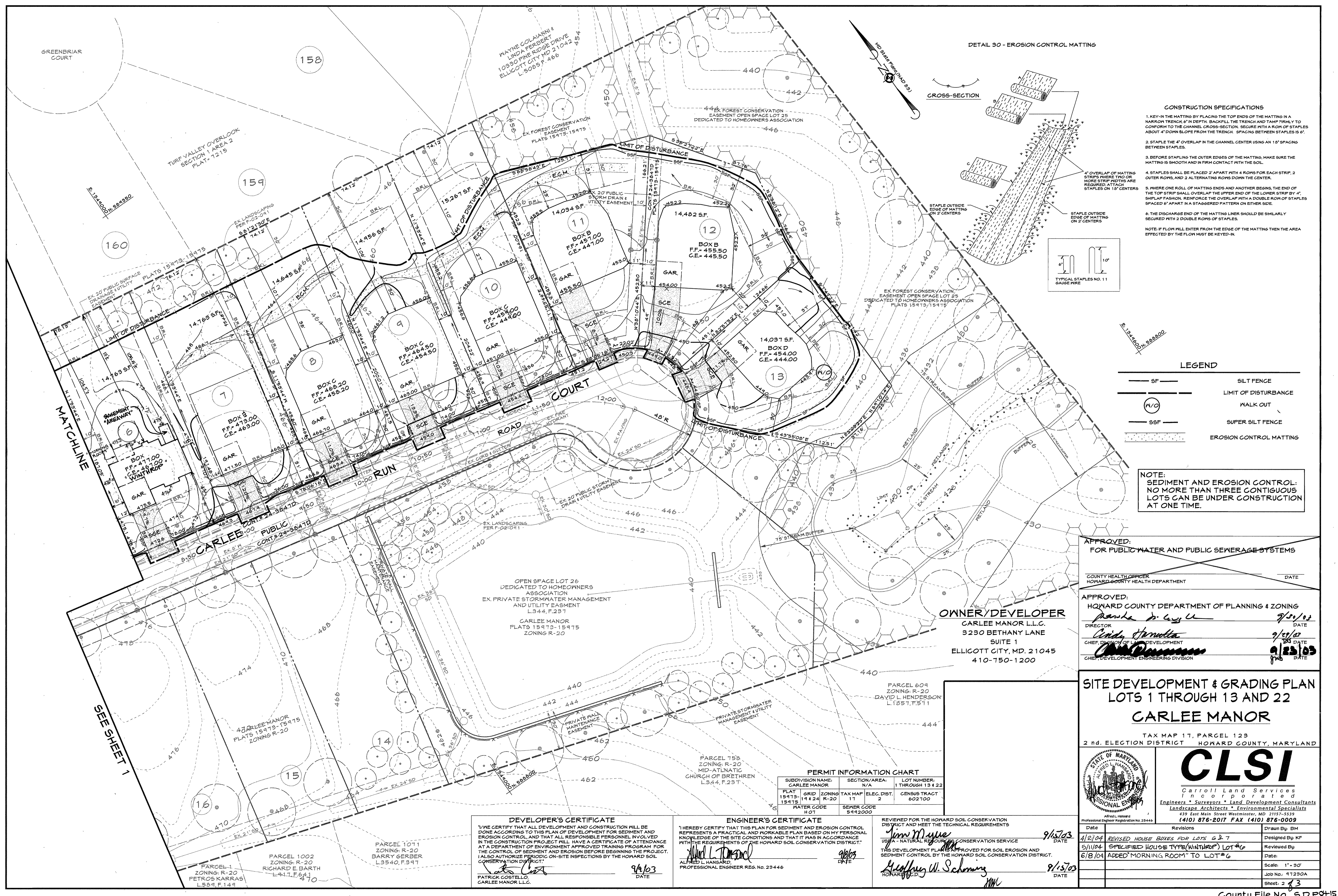
APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 CARLEE MANOR LLC.
 3230 BETHANY LANE
 SUITE 1
 ELLICOTT CITY, MD 21045
 410-750-1200
 DATE: 9/15/03

**NOTES & DETAILS
 LOTS 1 THROUGH 13 AND 22
 CARLEE MANOR**

TAX MAP 17, PARCEL 123
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

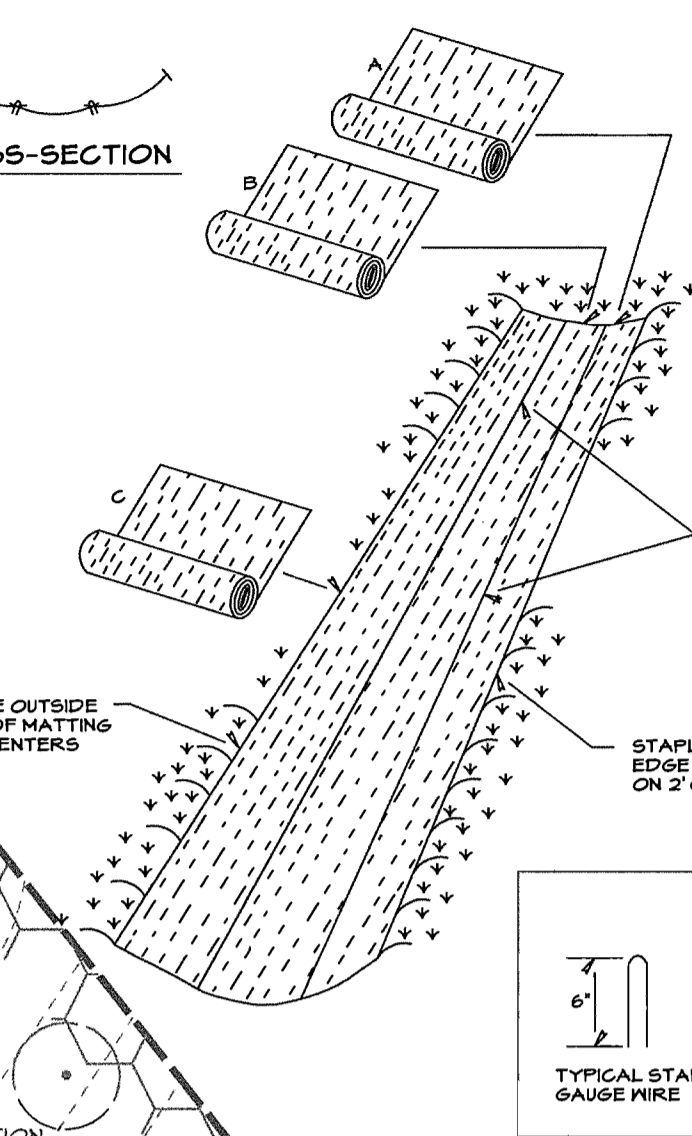
CLSI
 Carroll Land Services
 Incorporated
 Engineers * Surveyors * Land Development Consultants
 Landscape Architects * Environmental Specialists
 439 East Main Street Westminster, MD 21157-5539
 (410) 876-2017 FAX (410) 876-0009

Date	Revisions	Drawn By: BM
4/21/04	REVISED HOUSE BOXES AND ADDED GENERAL BOX "E"	Designed By:
5/6/04	ADD OPTIONAL BUMP OUT TO FAMILY ROOM AND OPTIONAL FIREPLACE TO WINTHROP MODEL	Reviewed By:
		Date:
		Scale: AS SHOWN
		Job No: 91230A
		Sheet: 9 of 3



DETAIL 30 - EROSION CONTROL MATTING

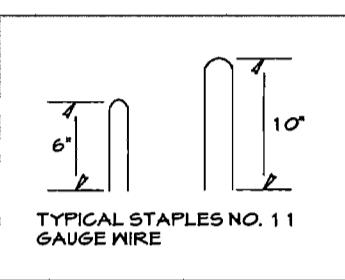
CROSS-SECTION



CONSTRUCTION SPECIFICATIONS

1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH, 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
2. STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
3. BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
4. STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
5. WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIFLAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
6. THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.

NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEYED-IN.



LEGEND

- SF — SILT FENCE
- LIMIT OF DISTURBANCE
- (W/O) — WALK OUT
- SSF — SUPER SILT FENCE
- EROSION CONTROL MATTING

NOTE: SEDIMENT AND EROSION CONTROL: NO MORE THAN THREE CONTIGUOUS LOTS CAN BE UNDER CONSTRUCTION AT ONE TIME.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELLICOTT CITY, MD. 21045
410-750-1200

SITE DEVELOPMENT & GRADING PLAN
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PERMIT INFORMATION CHART

SUBDIVISION NAME:	SECTION/AREA:	LOT NUMBER:
CARLEE MANOR	N/A	1 THROUGH 13 & 22
FLAT	GRID	ZONING
15473	1424	R-20
15475	1424	R-20
WATER CODE	SEWER CODE	
HOT	5942000	

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

PATRICK COSTELLO
CARLEE MANOR L.L.C.
9/6/03
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 HAS IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred L. Hansard
PROFESSIONAL ENGINEER REG. NO. 23446
9/6/03
DATE

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jim Wayne
9/15/03
DATE

USDA - NATURAL RESOURCE CONSERVATION SERVICE

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

Geoffrey W. Schomig
9/15/03
DATE

Date	Revisions	Drawn By: BM
4/2/04	REVISED HOUSE BOXES FOR LOTS 6 & 7	Designed By: KF
5/11/04	SPECIFIED HOUSE TYPE (WINTHROP) LOT #6	Reviewed By:
6/8/04	ADDED MORNING ROOM TO LOT #6	Date:
		Scale: 1" = 30'
		Job No.: 47230A
		Sheet: 2 of 3

**HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT 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 (9/13-10/55).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1 to 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 5.1) and (Sec. 5.4), temporary seeding (Sec. 5.0) and mulching (Sec. 5.2). Temporary stabilization 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.

7. Site Analysis
Total Area of Site 13.31 Acres
Area Disturbed 3.04 Acres
Area to be roofed or paved 1.43 Acres
Area to be vegetatively stabilized 2.46 Acres
Total Cut 100 Cu Yds.
Total Fill 100 Cu Yds.

8. Any sediment control practice, which is disturbed by grading activity for placement of utilities, must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or 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 by the end of each workday, whichever is shorter.

Topsoil Notes
Construction and Material Specifications
I. 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 Experimental Station.
II. Topsoil Specifications - Soil to be used as topsoil must meet the following:
1. 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 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" in diameter.
II. Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutgrass, poison ivy, thistle, or others as specified.
III. 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.
III. For sites having disturbed areas under 5 acres:
1. Place topsoil (if required) and apply soil amendments as specified in 2.00 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
IV. For sites having disturbed areas over 5 acres:
1. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
Page 2
Topsoil Notes
a) 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.
b) Organic content of topsoil shall be not less than 1.5 percent by weight.
c) Topsoil having soluble salt content greater than 500 parts per million shall not be used.
d) No sod 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 min.) 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.
II. Place topsoil (if required) and apply soil amendments as specified in 2.00 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
V. Topsoil Application
1. 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.
II. Grades on the areas to be topsoiled, which have been previously established, shall be maintained about 4"-8" higher in elevation.
III. 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 sodding or seeding can proceed with a minimum of additional soil.
IV. 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.
Page 3
Topsoil Notes
V. 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 sodding 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:
1. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
a) Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
b) 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.
c) Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
II. 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.

Tracking notes:
On areas where the slope is 3:1 or steeper and the height is 8' or greater, contractor shall track the slope using cleared dozer prior to placing asphalt binder. Dozer shall run up-and-down so that cleat marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 2' height criteria.

UTILITY CONSTRUCTION NOTES
1. Place all excavated material on the high side of the trench.
2. Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
3. Any sediment control measures disturbed by the utility construction will be repaired the same day.

STOCKPILE/TOPSOIL NOTES
1. Stockpiling will not be allowed on any impervious area.
2. All stockpiles left at the end of the day will need to be temporarily stabilized until they are again disturbed, unless they are within existing perimeter sediment controls.
3. All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the Inspector in the field.

SEQUENCE OF CONSTRUCTION
1. OBTAIN GRADING PERMIT. (1 DAY)
2. INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN PER LOT. (2 DAYS)
3. CONSTRUCT DWELLING. (90 DAYS)
4. FINE GRADE LOT AND INSTALL DRIVEWAY AND SIDE WALKS. (1 DAY)
5. INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
6. INSTALL LANDSCAPING. (1 DAY)
7. ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

NOTE:
ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.

STABILIZATION SPECIFICATIONS

- TEMPORARY SEEDING NOTES**
Scope: Planting short term (no more than 1 year) vegetation to temporarily stabilize any areas where soil disturbance has occurred, until the area can be permanently stabilized with vegetative or non-vegetative practices.
Standard: The following notes shall conform to the "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" Published Jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - Fertilizer shall consist of a mixture of 10-10-10 and be applied at a rate of 600 lb per acre (15 lb per 1000 sq. ft.) and will meet the requirements in 6-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in 6-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F, G and H.
 - Seeding mixtures shall be selected from or will be equal to those on Table 26.
 - The following is one option, approved equals may be used.

Temporary Seeding Summary

Seed Mixture	Hardness Zone	6B/7A (6-20 Figure 5)	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Kentucky-91	80	3/1 to 11/15	1"		
Annual Rye	20	3/1 to 11/15	1/4" - 1/2"		

PERMANENT SEEDING NOTES

- Scope:** Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 1 year.
Standard: The following notes shall conform to the "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" Published Jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service, and the State Soil Conservation Committee.
- The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See 6-20 Sec. 1-C.
 - For sites over 5 ac. soil tests will be performed to determine the exact mixture and application rates for both lime and fertilizer. Soils tests will be prepared by the University of Maryland or a recognized commercial laboratory. If the existing soil does not meet the minimum conditions as stated in 6-20 Sec. 1-C-II, then topsoil will need to be obtained that meets these conditions and applied so as to meet the requirements in 6-20 Sec. 1-B.
 - For sites of 5 ac. or less of disturbance, the following fertilizer and lime rates shall apply:
Fertilizer shall consist of a mixture of 10-20-20 and be applied at the following rates:
N-40 lb per acre (2 lb per 1000 sq. ft.) P-205-175 lb per acre (4 lb per 1000 sq. ft.) K-20-175 lb per acre (4 lb per 1000 sq. ft.). Fertilizer shall meet the requirements in 6-20 Sec. 1-B.
 - Lime shall be applied at a rate of 2 tons per acre (100 lb per 1000 sq. ft.) and shall meet the requirements in 6-20 Sec. 1-B.
 - Seed tags shall be made available to the inspector to verify the type and rate of seed used. The seed must meet the requirements in 6-20 Sec. 1-C.
 - Mulching will be applied immediately after seeding and will need to meet the requirements in 6-20 Sec. 1-F, G and H.
 - Refer to 6-20 Sec. 1-E for Methods of Seeding specifications.
 - Refer to 6-20 Sec. 4 for Soil Specifications.
 - Refer to 6-20 Sec. 5 for Turfgrass Establishment specifications.
 - Seeding mixtures shall be selected from or will be equal to those on Table 25.
 - The following is one option, approved equals may be used.

Permanent Seeding Summary

N10	P205	K20	Lime
10	205	20	2 tons/acre (100 lbs./1000 sq. ft.)

Seed Mixture Hardness Zone 6B/7A (6-20 Figure 5)

No. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
N/A Triple Fine Fescue	160	3/1 to 10/30	1"-2"
Perennial Rye	40	3/1 to 10/30	1"-2"

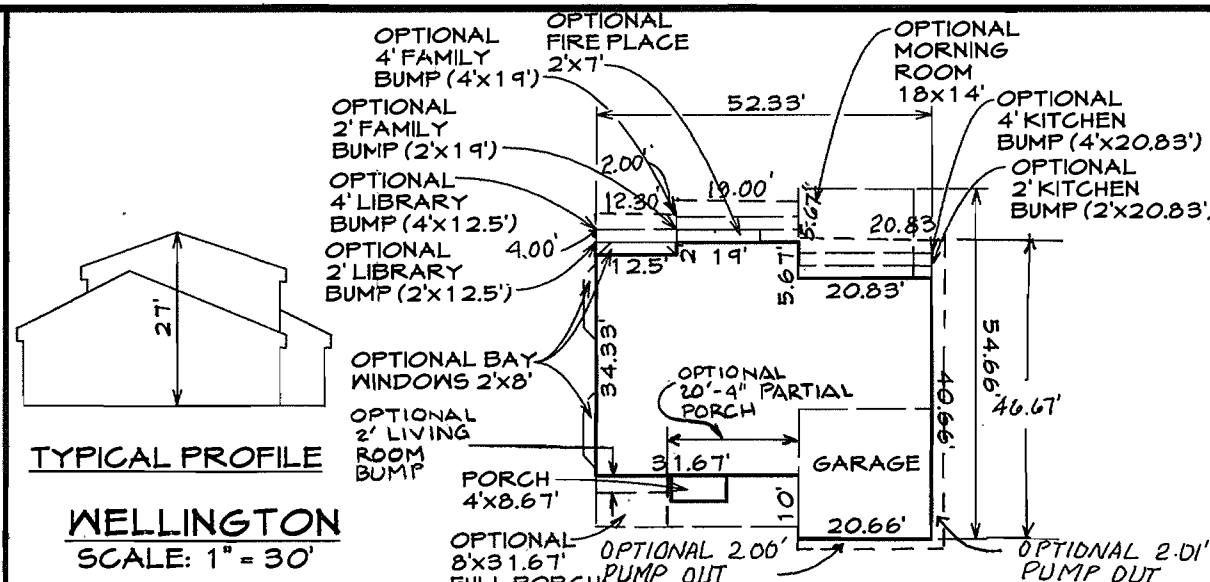
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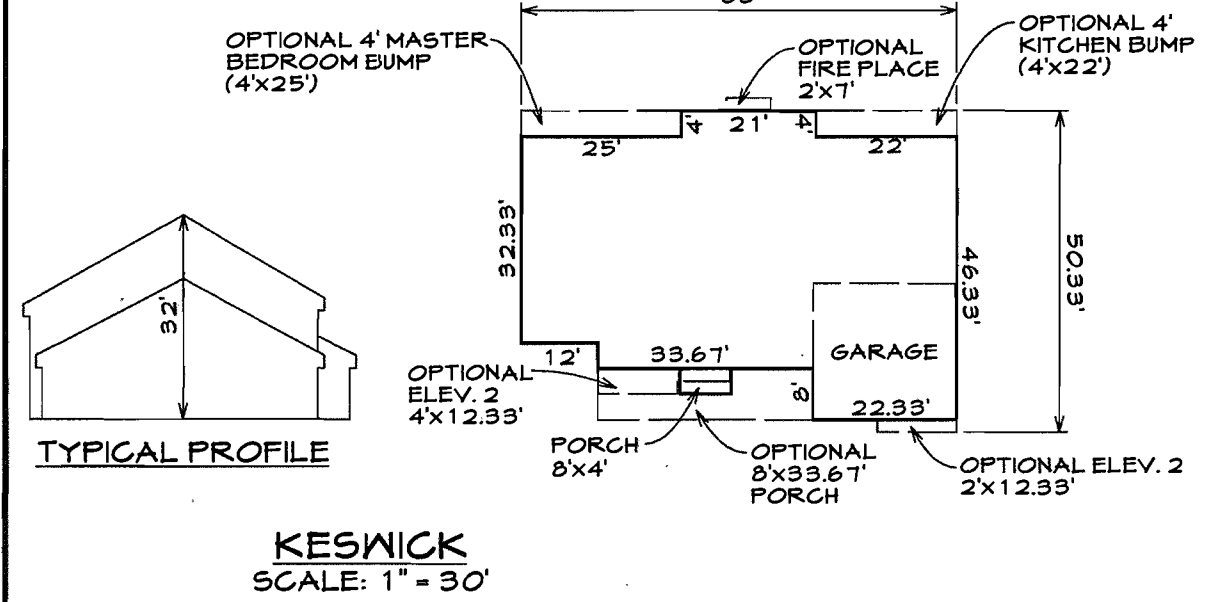
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3. CONSTRUCT DWELLING. (90 DAYS)
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7. ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

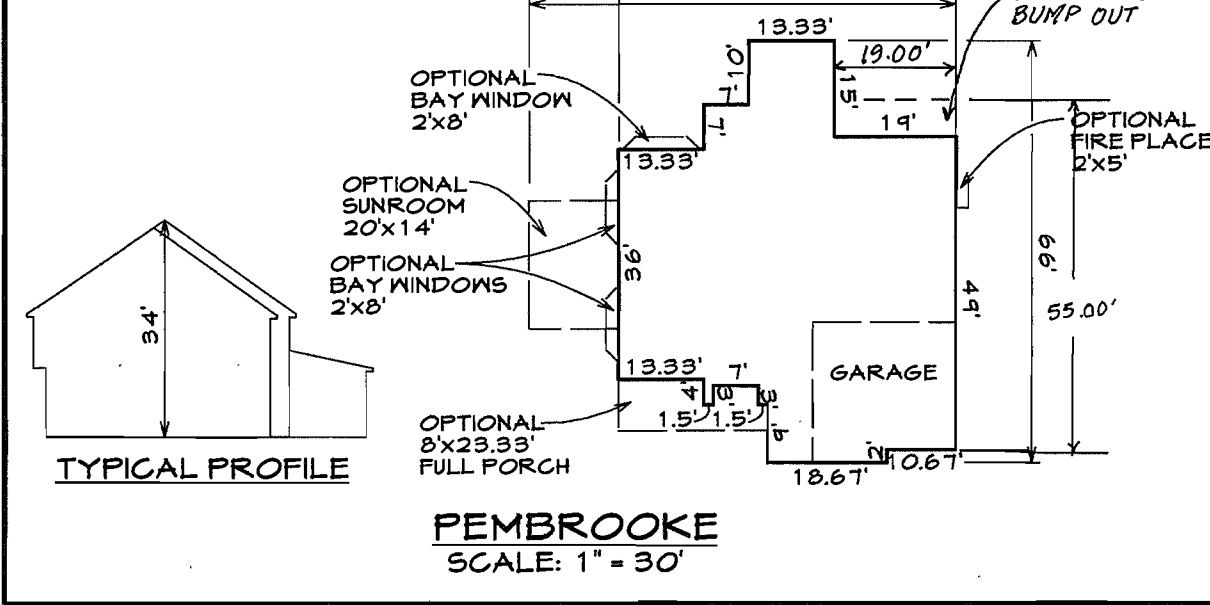
NOTE:
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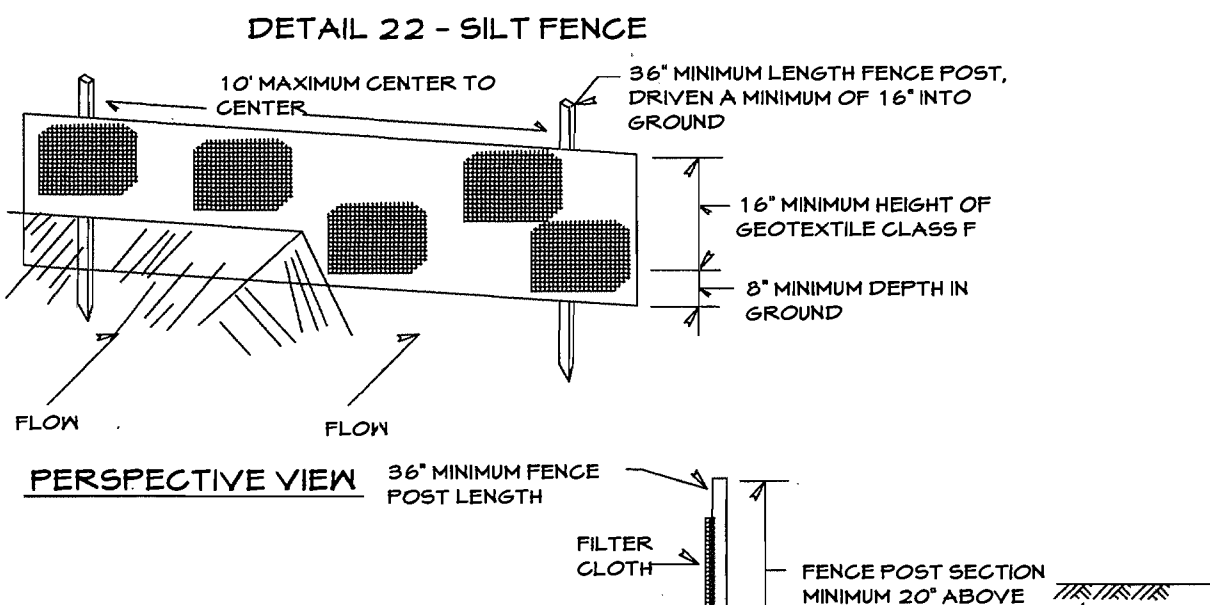
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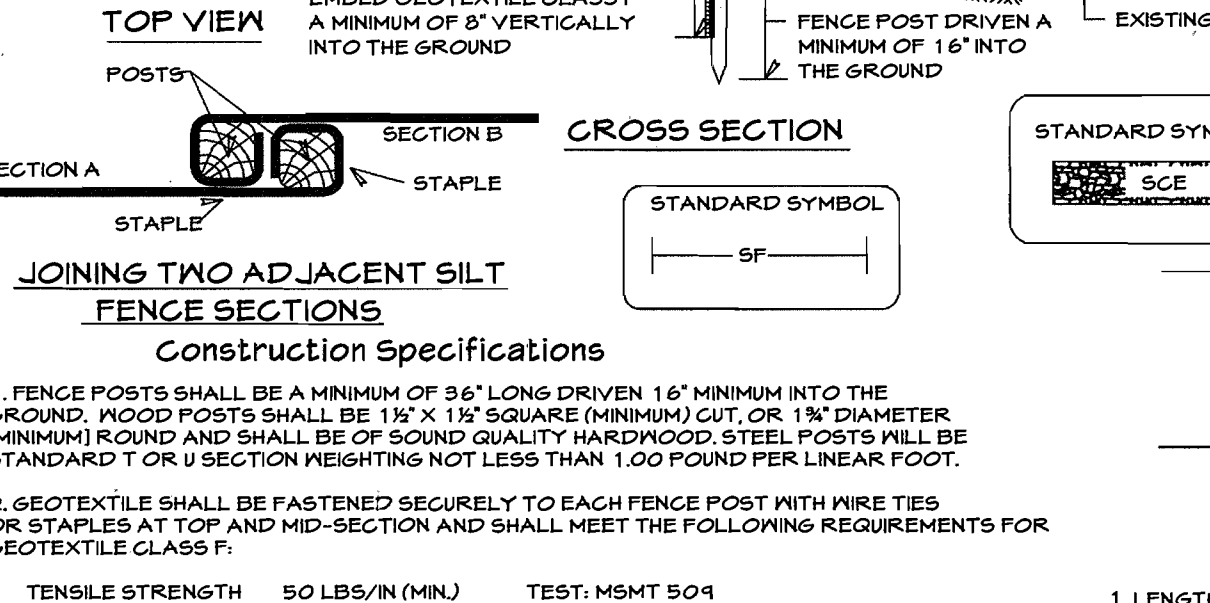
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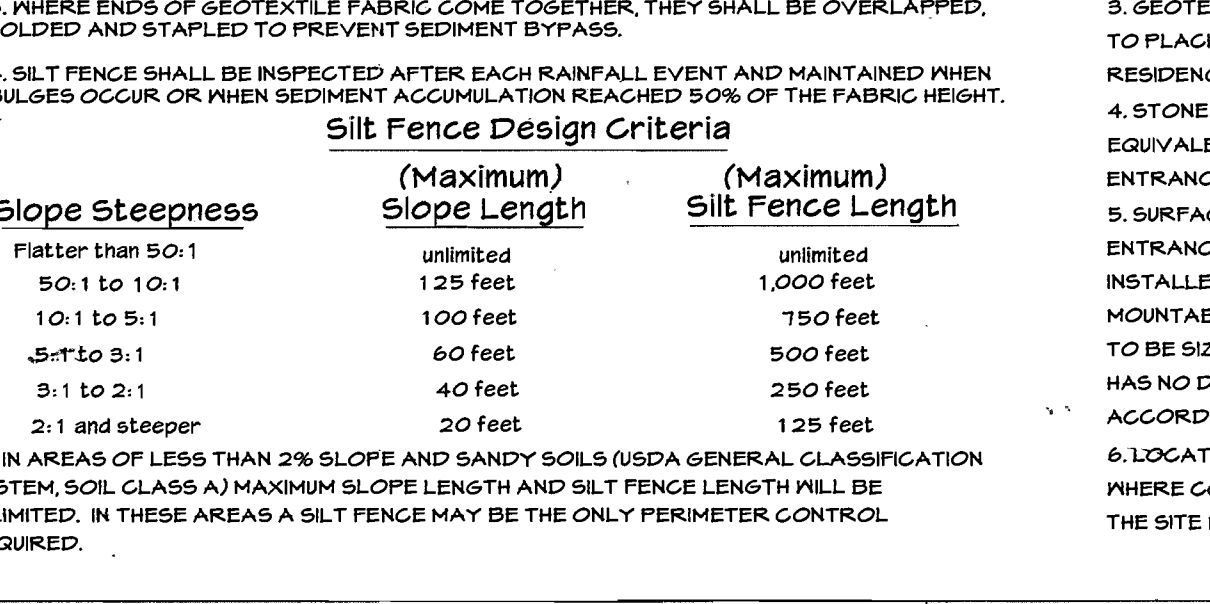
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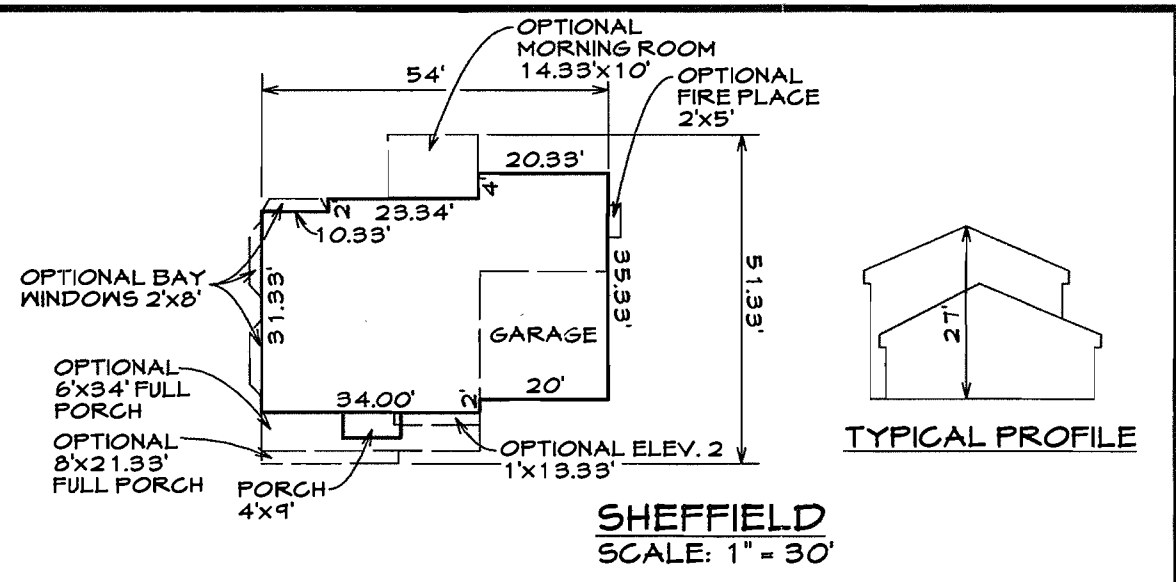
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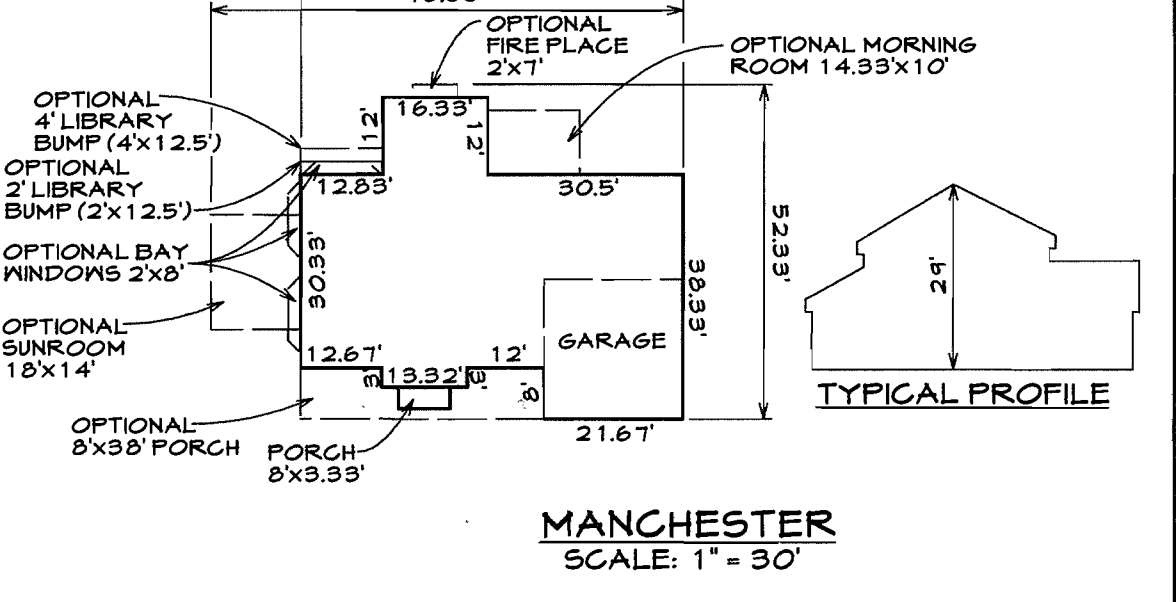
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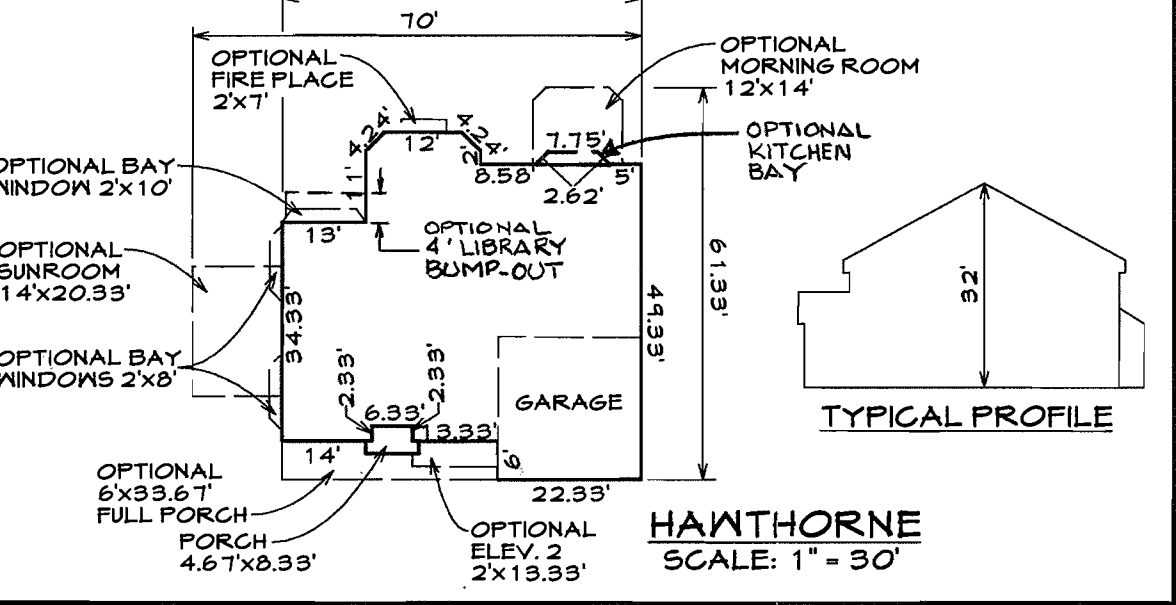
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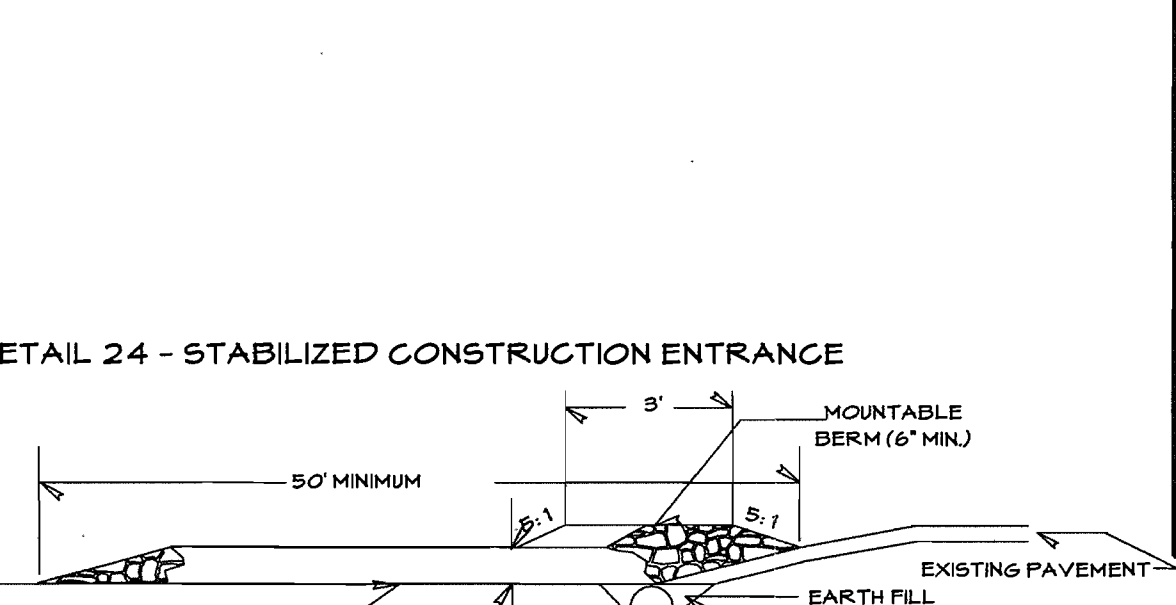
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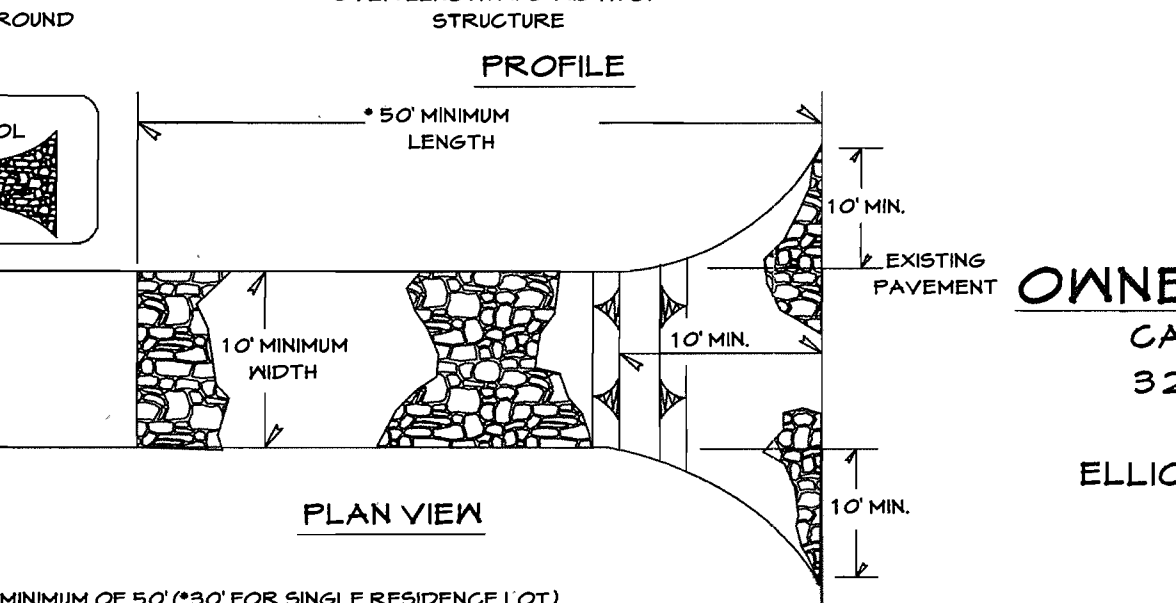
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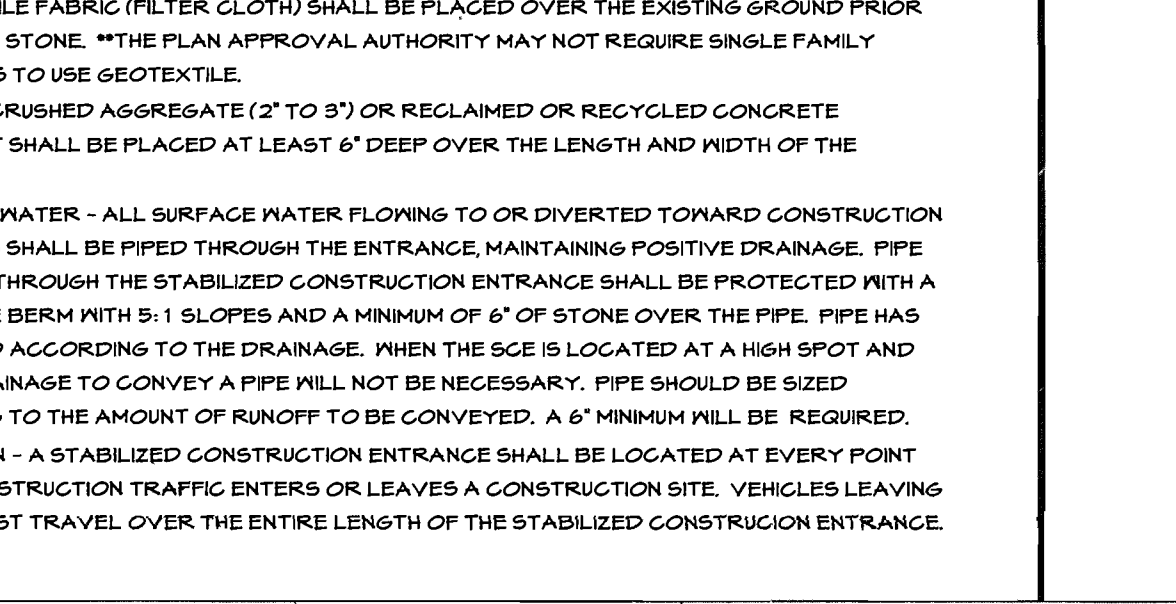
BOX A



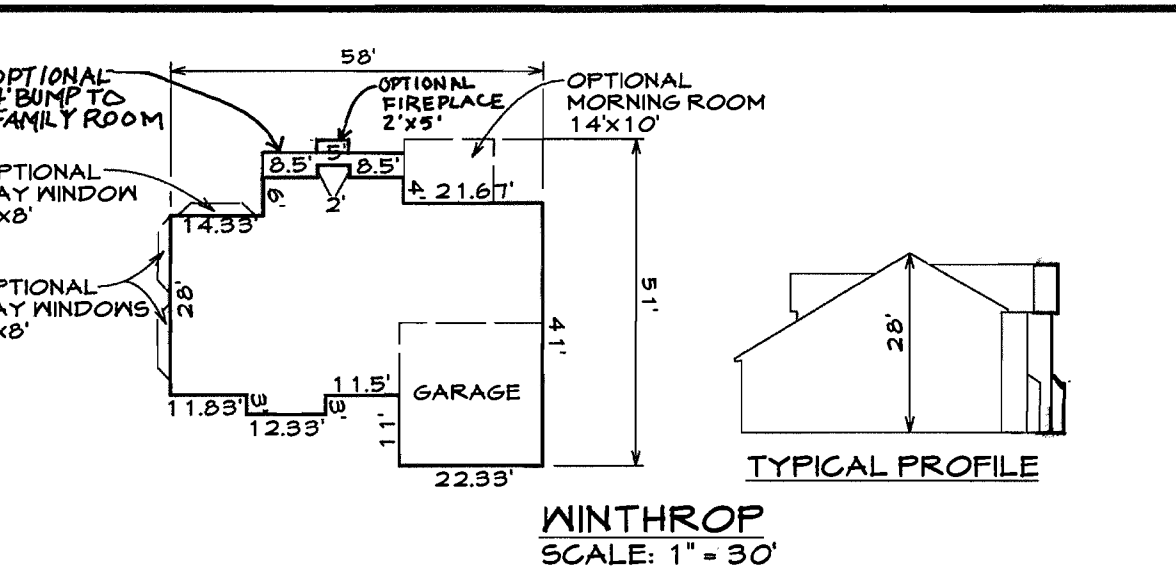
BOX B



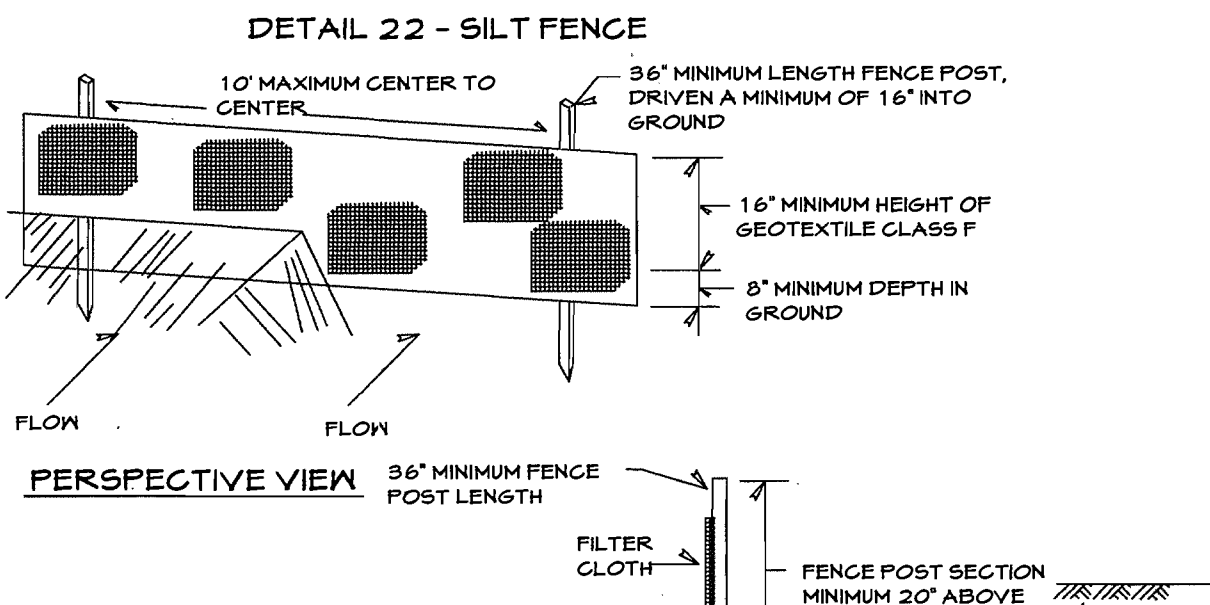
BOX C



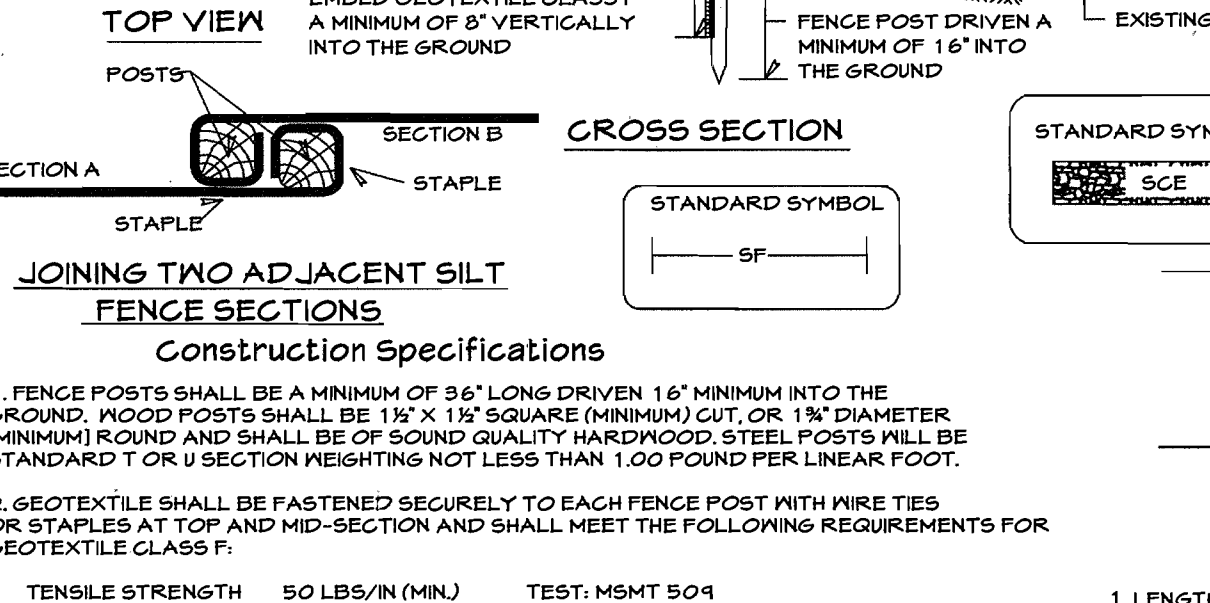
BOX D



BOX E



DETAIL 22 - SILT FENCE



DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.

DEVELOPER'S CERTIFICATE
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR PERMIT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature]
PATRICK COSTELLO
CARLEE MANOR LLC
9/9/03
DATE

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR PERMIT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature]
ALFRED HANSEND
PROFESSIONAL ENGINEER REG. NO. 23446
9/8/03
DATE

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature]
DIRECTOR
[Signature]
CHIEF OF DEPARTMENT OF ENVIRONMENT
[Signature]
CHIEF DEVELOPMENT ENGINEERING DIVISION

DATE: 7/21/03
DATE: 7/29/03
DATE: 9/22/03

OWNER/DEVELOPER
CARLEE MANOR LLC
3230 BETHANY LANE
SUITE 1
ELLCOTT CITY, MD 21045
410-750-1200

NOTES & DETAILS
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

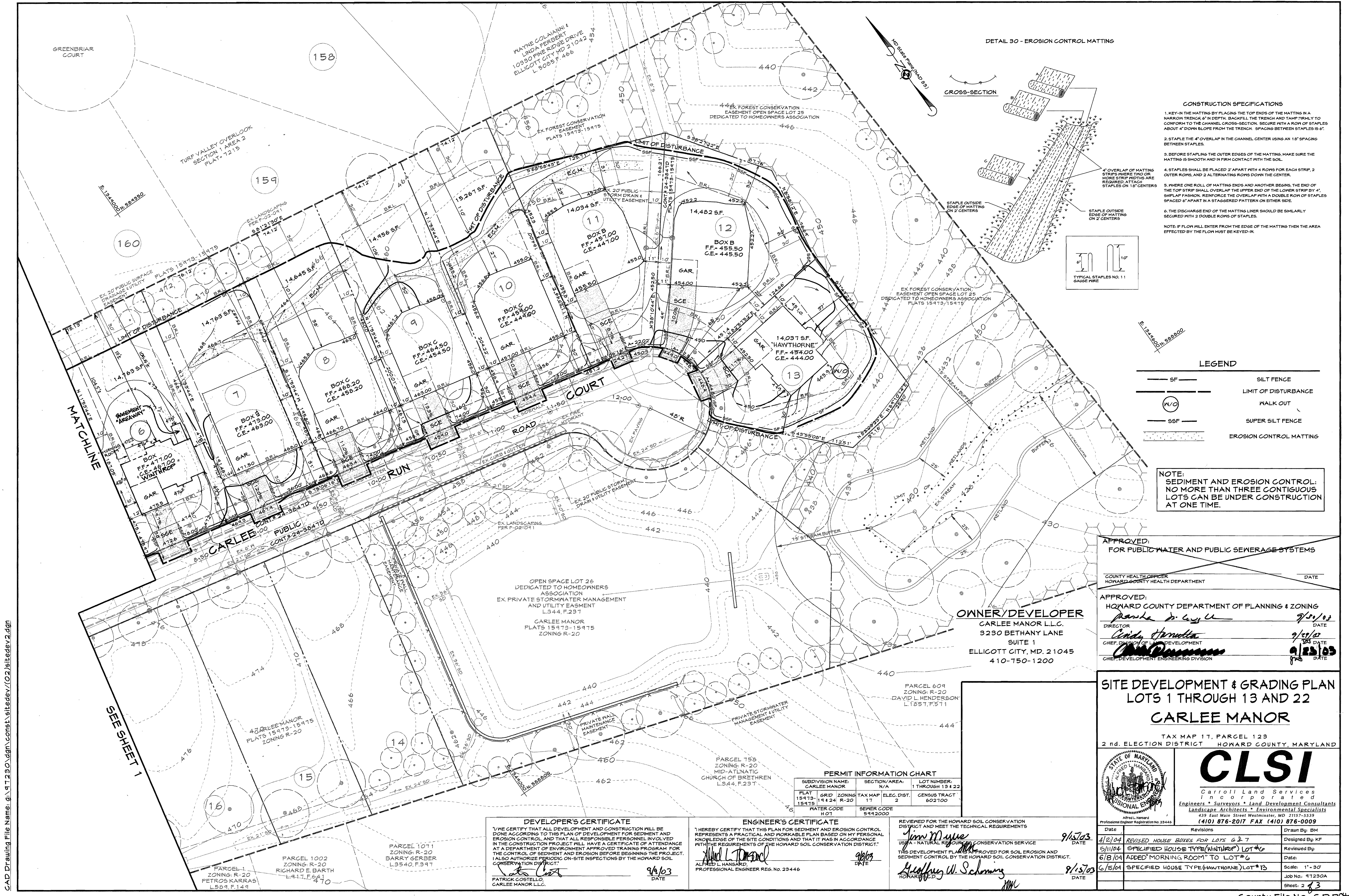
TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CLSI
Carroll Land Services
INCORPORATED
Engineers • Surveyors • Land Development Consultants
Landscape Architects • Environmental Specialists
439 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

Professional Engineer Registration No. 23446
Alfred Hansend

REVISIONS

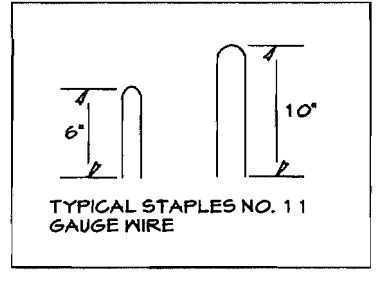
Date	Revisions	Drawn By	Checked By
4/2/04	REVISED HOUSE BOXES AND ADDED GENERIC BOX "E"	BM	BM
5/6/04	ADD OPTIONAL BUMP OUT TO FAMILY ROOM AND	BM	BM
9/15/04	OPTIONAL FIRE PLACE TO WINTHROP MODEL	BM	BM
9/15/04	ADD OPTIONAL PARTIAL PORCH & LIVING ROOM BUMP OUT	BM	BM
9/15/04	WELLINGTON. MAKE KITCHEN BAY OPTIONAL & ADD	BM	BM
9/15/04	OPTIONAL LIBRARY BUMP OUT	BM	BM



DETAIL 30 - EROSION CONTROL MATTING

CROSS-SECTION

- CONSTRUCTION SPECIFICATIONS**
- KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
 - STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
 - BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
 - STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
 - WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIFLAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
 - THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.
- NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEYED-IN.



LEGEND

- SF — SILT FENCE
- — — LIMIT OF DISTURBANCE
- (W/O) WALK OUT
- SSF — SUPER SILT FENCE
- EROSION CONTROL MATTING

NOTE:
SEDIMENT AND EROSION CONTROL:
NO MORE THAN THREE CONTIGUOUS
LOTS CAN BE UNDER CONSTRUCTION
AT ONE TIME.

APPROVED:
FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Paula D. G... 9/20/03
DIRECTOR DATE
Carole J. ... 9/29/03
CHIEF DIVISION OF DEVELOPMENT DATE
... 9/23/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

OWNER/DEVELOPER
CARLEE MANOR L.L.C.
3230 BETHANY LANE
SUITE 1
ELLCOTT CITY, MD. 21045
410-750-1200

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT NUMBER
CARLEE MANOR	N/A	1 THROUGH 13 & 22
PLAT	GRID ZONING TAX MAP ELEC. DIST.	CENSUS TRACT
15913, 15915	14 24 R-20 17 2	602100
WATER CODE	SEWER CODE	
H 01	5992000	

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick Costello
PATRICK COSTELLO
CARLEE MANOR L.L.C.
9/4/03
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 IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

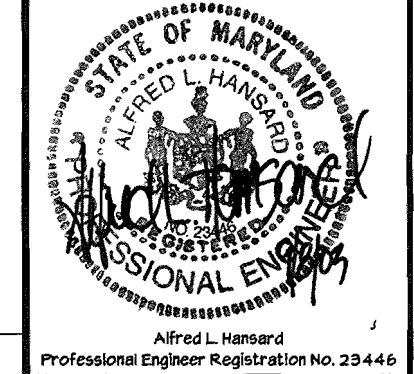
Alfred L. Hansard
ALFRED L. HANSARD
PROFESSIONAL ENGINEER REG. NO. 23446
9/6/03
DATE

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

Jeffrey W. Schomig
JEFFREY W. SCHOMIG
HOWARD COUNTY
9/15/03
DATE

SITE DEVELOPMENT & GRADING PLAN
LOTS 1 THROUGH 13 AND 22
CARLEE MANOR

TAX MAP 17, PARCEL 123
2 nd. ELECTION DISTRICT HOWARD COUNTY, MARYLAND



CLSI
Carroll Land Services
Incorporated
Engineers & Surveyors • Land Development Consultants
Landscape Architects • Environmental Specialists
439 East Main Street Westminster, MD 21157-5539
(410) 876-2017 FAX (410) 876-0009

Date	Revisions	Drawn By: BM
4/12/04	REVISED HOUSE BOXES FOR LOTS 6 & 7	Designed By: KF
5/11/04	SPECIFIED HOUSE TYPE (WINTHROP) LOT #6	Reviewed By:
6/8/04	ADDED MORNING ROOM TO LOT #6	Date:
6/15/04	SPECIFIED HOUSE TYPE (HAWTHORNE) LOT #13	Scale: 1" = 30'
		Job No: 97230A
		Sheet: 2 of 3

CAD Drawing File Name: g:\17230\dgn\const\sitedev\02\sitedev2.dgn