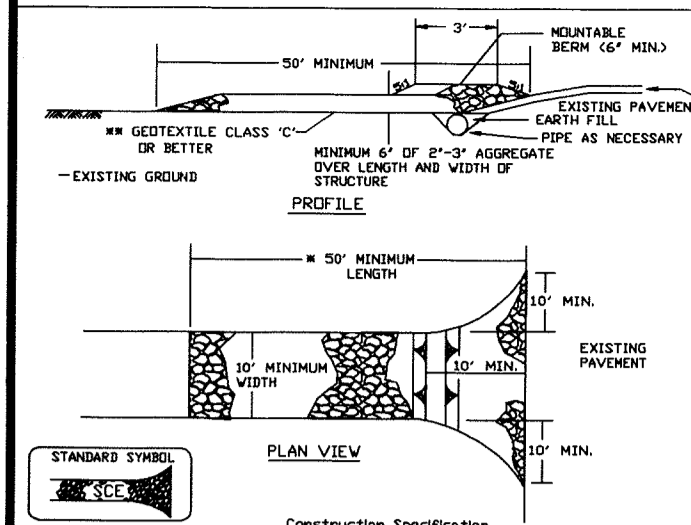
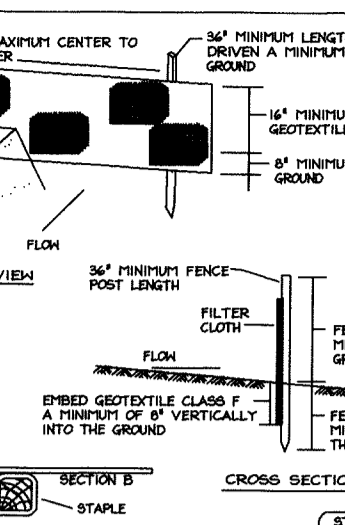


DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



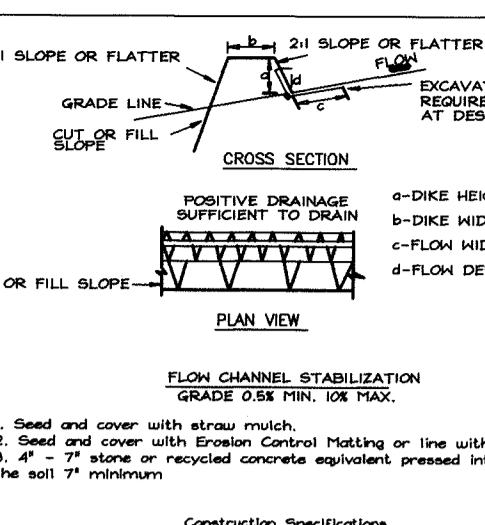
Construction Specification
1. Length - minimum of 30' (30' for single residence lots.
2. Width - 12" minimum, should be filtered at the existing road to provide a turning radius.
3. Geotextile fabric (refer to 310) shall be placed over the existing ground prior to placing stone.
4. Stone - crushed aggregate (2" to 3") or recycled or recycled concrete equipment shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be directed through a 12" diameter pipe.
6. Location - a stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site.
7. Maintenance - the entrance shall be inspected after each rainfall event and maintained when necessary to ensure proper function.

DETAIL 22 - SILT FENCE



Construction Specifications
1. Fence posts shall be a minimum of 36" long driven 18" minimum into the ground.
2. Geotextile fabric (refer to 310) shall be placed over the existing ground prior to placing stone.
3. Stone - crushed aggregate (2" to 3") or recycled or recycled concrete equipment shall be placed at least 6" deep over the length and width of the entrance.
4. Surface Water - all surface water flowing to or diverted toward construction entrances shall be directed through a 12" diameter pipe.

DETAIL 1 - EARTH DIKE



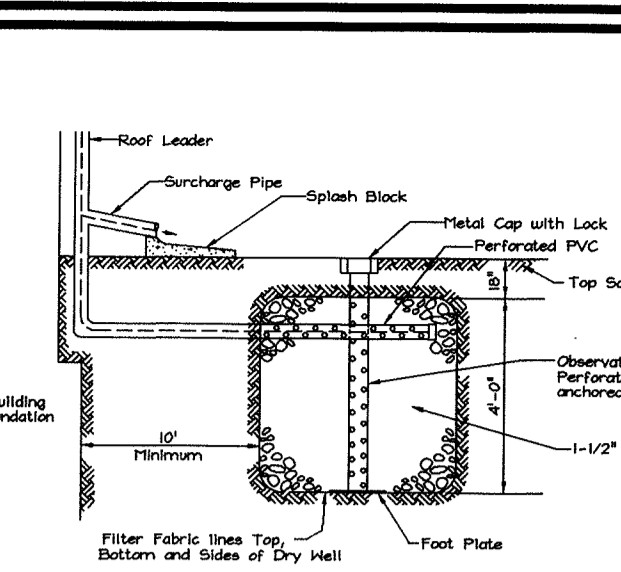
Construction Specifications
1. All temporary earth dikes shall have undisturbed positive grade to an outlet.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. All temporary earth dikes shall have undisturbed positive grade to an outlet.
4. All areas, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be inspected after each rainfall event and maintained when necessary to ensure proper function.

SEQUENCE OF CONSTRUCTION

- 1. Clear grading area.
2. Notify Howard County Branch of Inspections and Permits (331-000) at least 24 hours before starting any work.
3. Construct Stabilized Construction Entrances.
4. Install silt fence.
5. Rough grade site.
6. Construct the first floor elevation cannot be more than 1" higher or 0.2' lower than the elevation shown on the plan.
7. During grading and after each rainfall, the contractor shall provide the necessary maintenance on the sediment and erosion control measures shown.
8. Following initial soil disturbance or redistribution (permanent or temporary stabilization shall be completed with).
9. A 70000 days for all perimeter sediment control devices.
10. Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- I. Topsoil Specifications - Soil to be used on topsoil must meet the following:
1. Topsoil shall be a minimum of 2" deep.
2. Topsoil shall be free of clumps or clods of soil greater than 1.5" in diameter.
3. Topsoil shall be free of rocks or stones greater than 1.5" in diameter.
4. Topsoil shall be free of other debris greater than 1.5" in diameter.
5. Topsoil shall be free of other debris greater than 1.5" in diameter.
6. Topsoil shall be free of other debris greater than 1.5" in diameter.
7. Topsoil shall be free of other debris greater than 1.5" in diameter.
8. Topsoil shall be free of other debris greater than 1.5" in diameter.
9. Topsoil shall be free of other debris greater than 1.5" in diameter.
10. Topsoil shall be free of other debris greater than 1.5" in diameter.



LOCATION OF DRY WELLS ARE APPROXIMATE AND ARE TO BE DETERMINED IN FIELD.
NOTE: ALL DRY WELLS TO BE 4' X 4' X 4'. (2 PER LOT)
SYMBOL: [Symbol]

TEMPORARY SEEDING

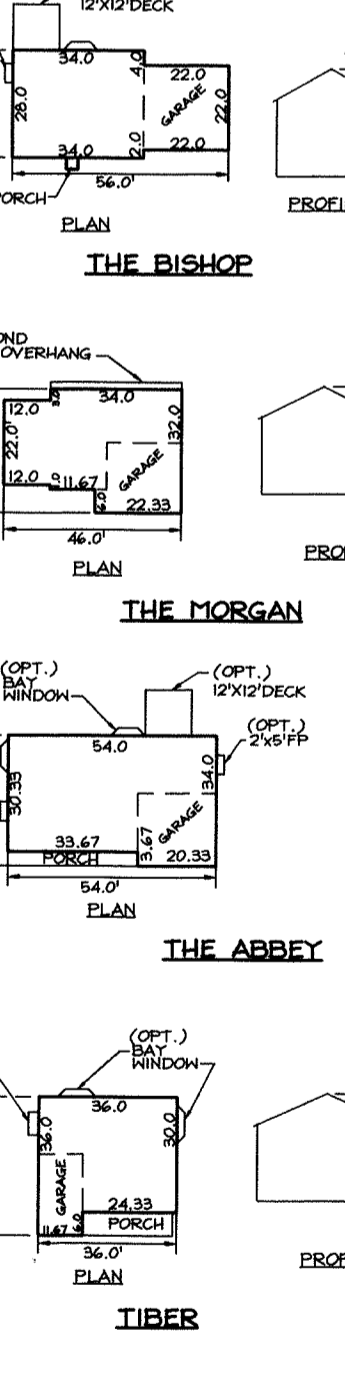
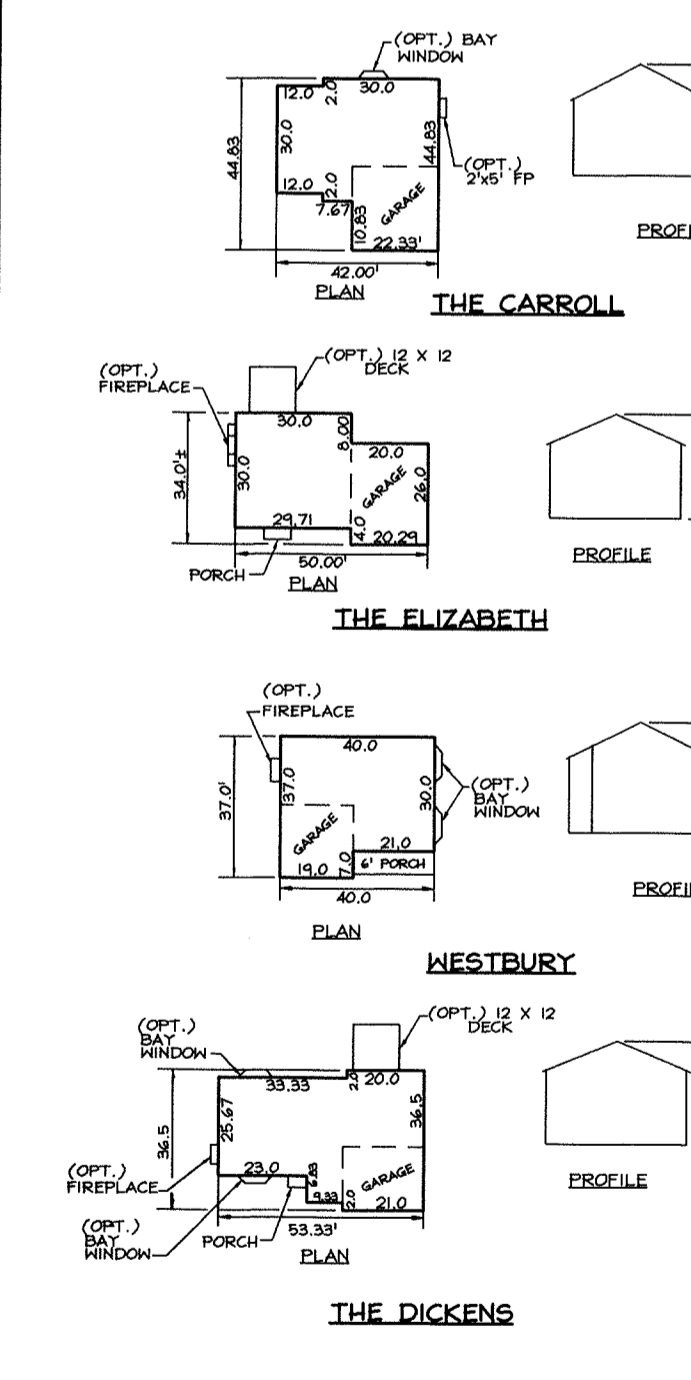
Apply to graded or cleared areas likely to be reseeded within a short-term vegetative cover is needed.
Seeded preparation: Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding.
Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.).
Seeding: For periods March 1 thru April 30 and from August 1 thru November 15, seed with 2 1/2 bushels per acre of annual ryegrass (20 lbs./1000 sq. ft.).
Flushing: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of granulated small grain straw immediately after seeding.

SEEDING CONTROL NOTES

- 1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (331-885).
2. All vegetation and structural practices are to be installed according to the standards and specifications for soil erosion and sediment control.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within (7) 7 calendar days.
4. All sediment traps/basins shall be fenced and warning signs posted.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 HANDBOOK STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until their removal has been obtained from the Howard County Sediment Control Inspector.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent, long-term vegetative cover is needed.
Seeded preparation: Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding.
Soil Amendments: Use one of the following schedules:
1) Preferred - Apply 2 tons per acre dolomitic limestone (40 lbs./1000 sq. ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding.
2) Acceptable - Apply 2 tons per acre dolomitic limestone (40 lbs./1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (28 lbs./1000 sq. ft.) before seeding.



21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION: Topsoil is the uppermost layer of soil, which is the most fertile and productive layer of soil. It is the layer of soil that is most susceptible to erosion and sedimentation.
CONDITION WHERE PRACTICE APPLIES:
1. The topsoil is limited to areas having 21 or fewer acres.
2. The topsoil is limited to areas having 21 or fewer acres.
3. The topsoil is limited to areas having 21 or fewer acres.
4. The topsoil is limited to areas having 21 or fewer acres.
5. The topsoil is limited to areas having 21 or fewer acres.
6. The topsoil is limited to areas having 21 or fewer acres.
7. The topsoil is limited to areas having 21 or fewer acres.
8. The topsoil is limited to areas having 21 or fewer acres.
9. The topsoil is limited to areas having 21 or fewer acres.
10. The topsoil is limited to areas having 21 or fewer acres.

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
3. BEFORE STARTING WORK ON THESE DRAWINGS, THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS.
4. SITE ANALYSIS: AREA OF SITE: 1.10 AC, AREA OF SUBMISSION: 1.10 AC, PRESENT ZONING: R-20, LIMIT OF DISTURBANCE: 1.0 AC, PROPOSED USE OF SITE: SINGLE FAMILY DWELLINGS, TOTAL NUMBER OF UNITS: 3.
5. PROJECT BACKGROUND: LOCATION: TAX MAP: 17 PARCEL: 412, ZONING: R-20, SUBDIVISION: FRANK PROPERTY, DPZ REFERENCES: F-98-176.
6. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
7. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED BY THE CONTRACTOR'S EXPENSE.
8. EXISTING UTILITIES LOCATED FROM A FIELD SURVEY (BY OTHERS) AND AVAILABLE RECORD DRAWINGS, APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
9. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT. ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
10. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. CONTRACTOR SHALL CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION BASED ON SOILS TEST.
11. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. CONTRACTOR SHALL CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION BASED ON SOILS TEST.
12. FEE-IN-LIEU OF STORMWATER MANAGEMENT QUANTITY FOR THESE LOTS PROVIDED UNDER F-98-176. STORMWATER MANAGEMENT QUANTITY WILL BE PROVIDED BY DRY WELLS (SEE DETAIL THIS SHEET). COORDINATES BASED ON NAD 83 HORIZONTAL AND NAVD29 VERTICAL DATUMS AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 17DA & 17DB. STA. NO. 17DA N 59540.845 E 135272.586 EL. 492.099, STA. NO. 17DB N 195641.146 E 135629.555 EL. 476.022.
13. EXISTING TOPOGRAPHY IS BASED ON PLANS PREPARED BY MILDENBERG, BOENDER & ASSOCIATES DATED FEB., 1998. BOUNDARY INFORMATION IS BASED ON A PLAT PREPARED BY MILDENBERG, BOENDER & ASSOCIATES.
14. A LANDSCAPE SURETY FOR THE REQUIRED 16 TREES (\$4800.00) WILL BE POSTED WITH THE GRADING PERMIT. PRIVATE ACCESS EASEMENT IS A 40' WIDE STRIP FOR THE PURPOSE OF ACCOMMODATING A SHARED DRIVEWAY FOR LOTS 1, 2, 3, 4 AND/OR A FUTURE PRIVATE ACCESS PLIE FOR POSSIBLE FUTURE SUBDIVISION OF PARCEL 414 (SMOOT PROPERTY), RECORDED IN LIBER 4609, FOLIO 72.
15. BOUNDARY INFORMATION IS BASED ON A PLAT PREPARED BY MILDENBERG, BOENDER & ASSOCIATES.

SCHEDULE A : PERIMETER LANDSCAPED EDGE

Table with 2 columns: CATEGORY and ADJACENT TO PERIMETER PROPERTIES. Rows include Landscape Type, Credit for Existing Vegetation, Credit for Wall, Fence, or Berm, Number of Plants Required, and Number of Plants Provided.

PERIMETER

Table with 2 columns: PERIMETER and EDGE TYPE. Rows include Perimeter 1, Perimeter 2, Perimeter 3, and Perimeter 4, detailing linear feet and shade tree requirements.

OWNER / DEVELOPER

JARED SPAHN
OLD TOWN CONSTRUCTION, LLC
10805 HICKORY RIDGE ROAD
SUITE 215
COLUMBIA, MD 21044
410-740-2100

REFERENCES

F-98-176
TAX MAP #17
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN AND GRADING AND SEDIMENT CONTROL

FRANK PROPERTY LOTS 2 - 4

REFERENCES: F-98-176
TAX MAP #17
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

VOGEL & ASSOCIATES

ENGINEERS/SURVEYORS/PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3965

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Cheryl Simmons 5/4/99
USDA NATURAL RESOURCES CONSERVATION SERVICE
DATE
John R. Robertson 5/4/99
HOWARD SOIL CONSERVATION DISTRICT
DATE

ENGINEERS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR 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.
Signature: Robert H. Vogel
Date: 4/22/99

DEVELOPER'S CERTIFICATE

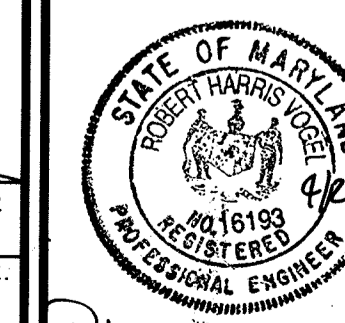
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
Signature: [Signature]
Date: 4/27/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

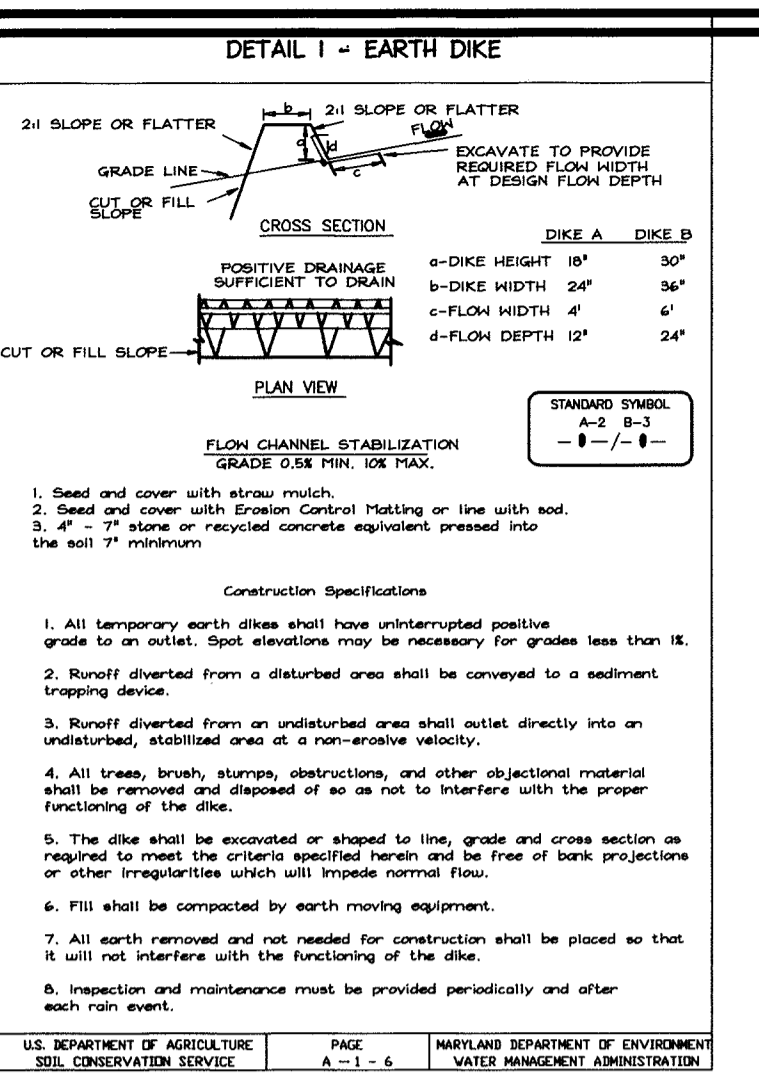
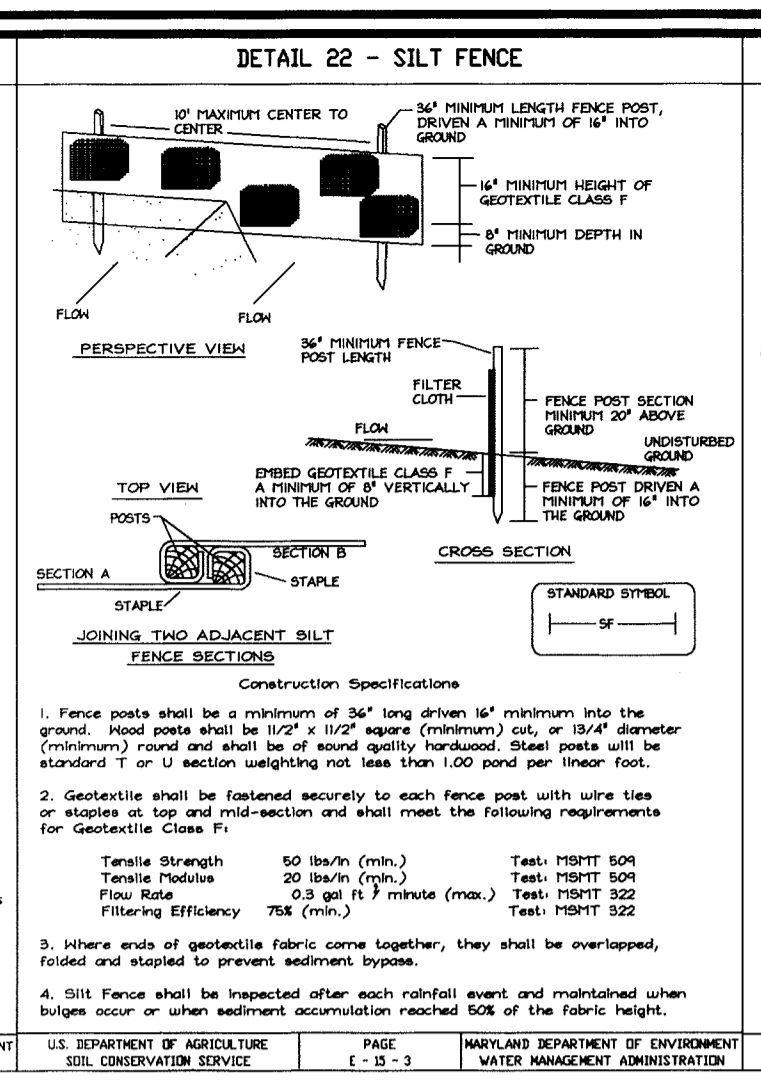
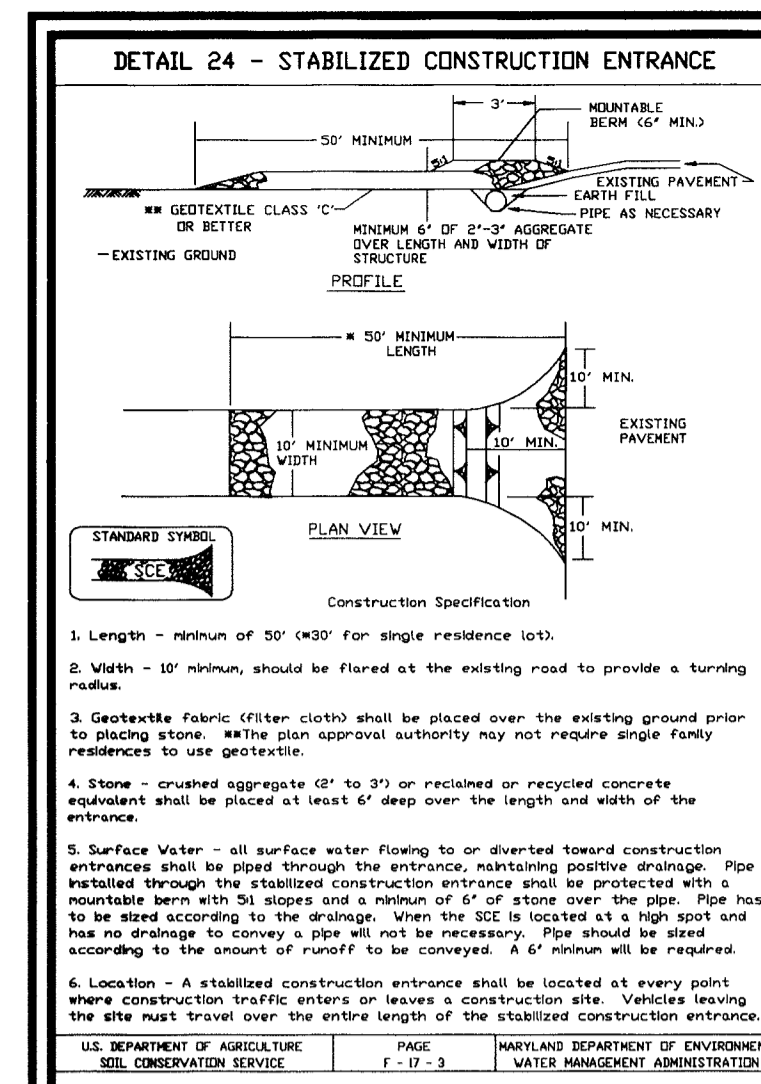
Director: [Signature] 5/13/99
Chief, Division of Land Development: [Signature] 5/10/99
Chief, Development Engineering Division: [Signature] 5/1/99

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Howard County Health Officer: [Signature]
Subdivision Name: FRANK PROPERTY
Section/Area: N/A
Parcel Number: 412
Plat No: 13566, Block No: 7, Zone: R-20, Tax/Elect. Dist.: 17, Census Tr.: 6022
Water Code: [Blank], Sewer Code: [Blank]



DESIGN BY: JCO
DRAWN BY: JCO/RJS
CHECKED BY: RHV
DATE: APRIL 23, 1999
SCALE: 1"=50'
W.O. NO.: 99-05



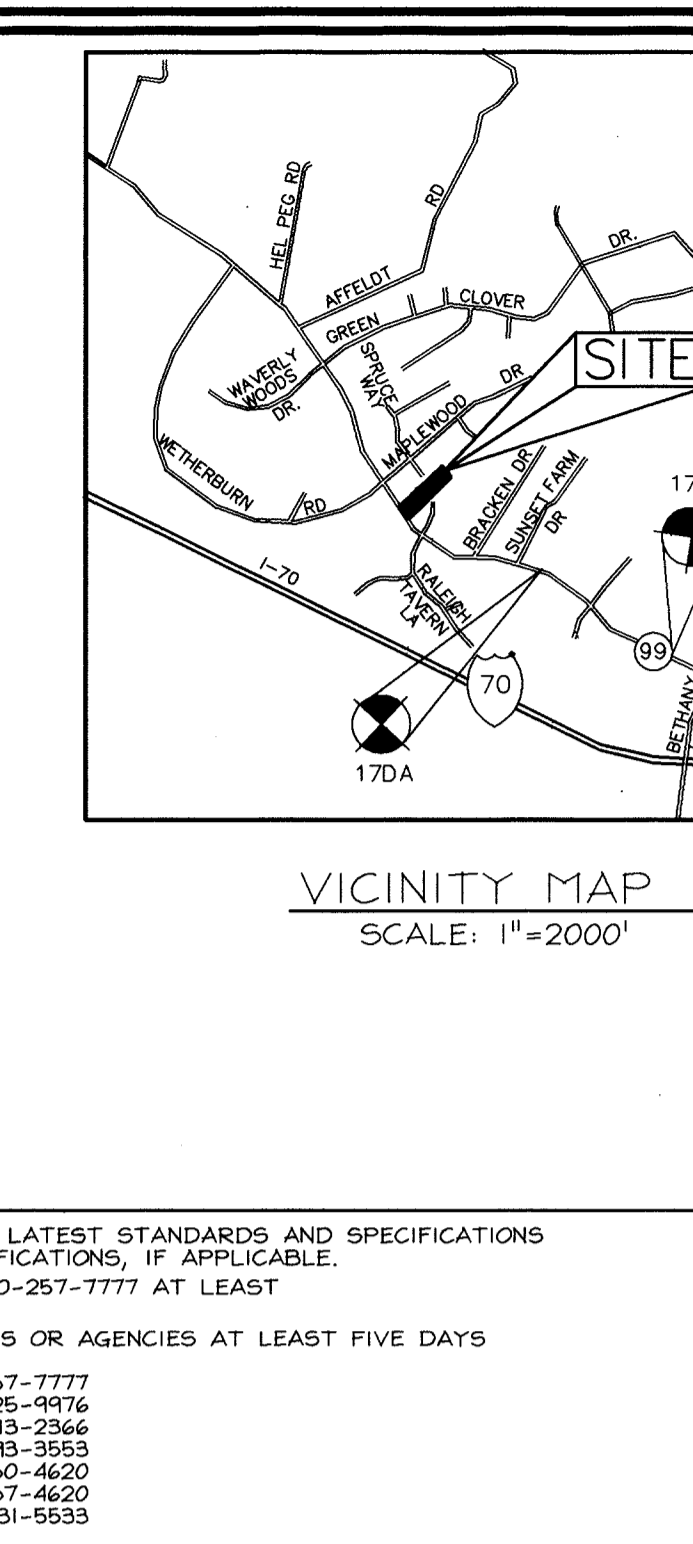
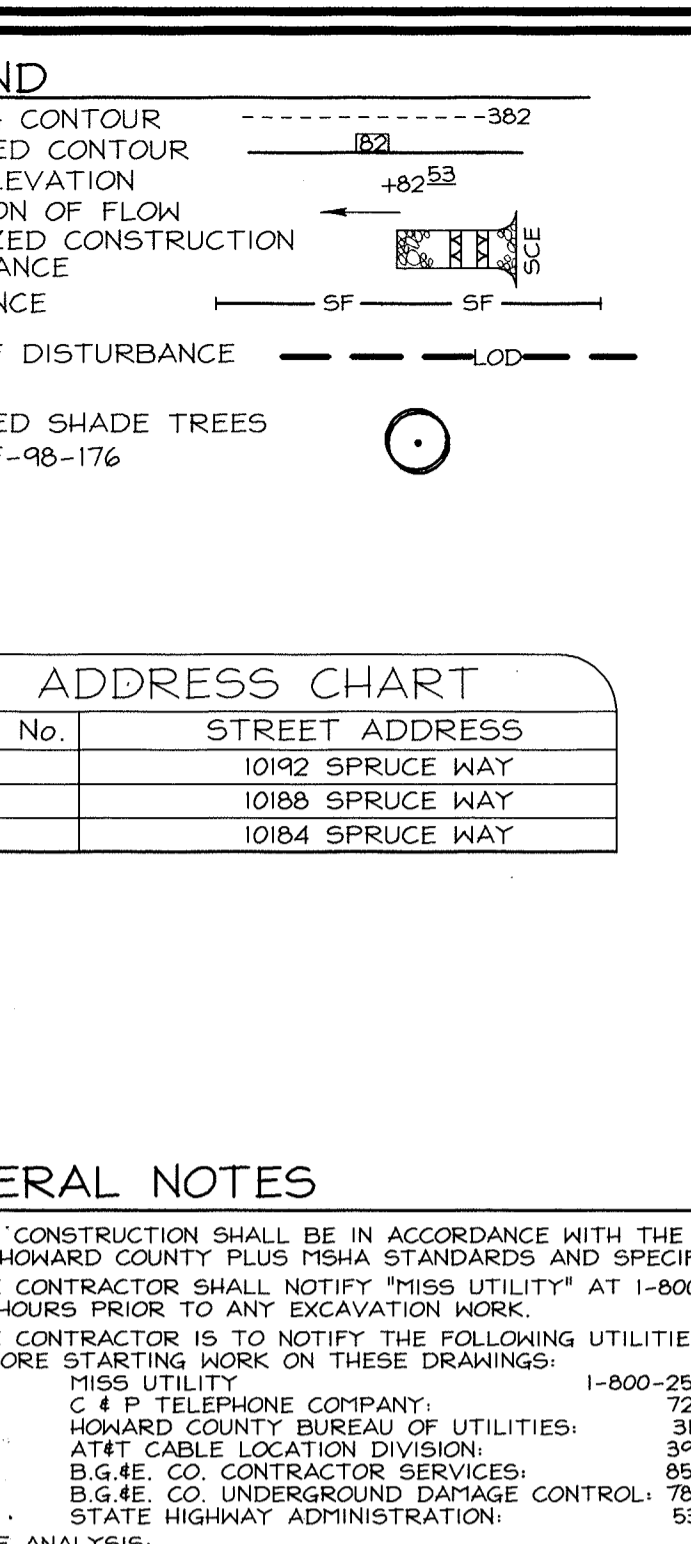
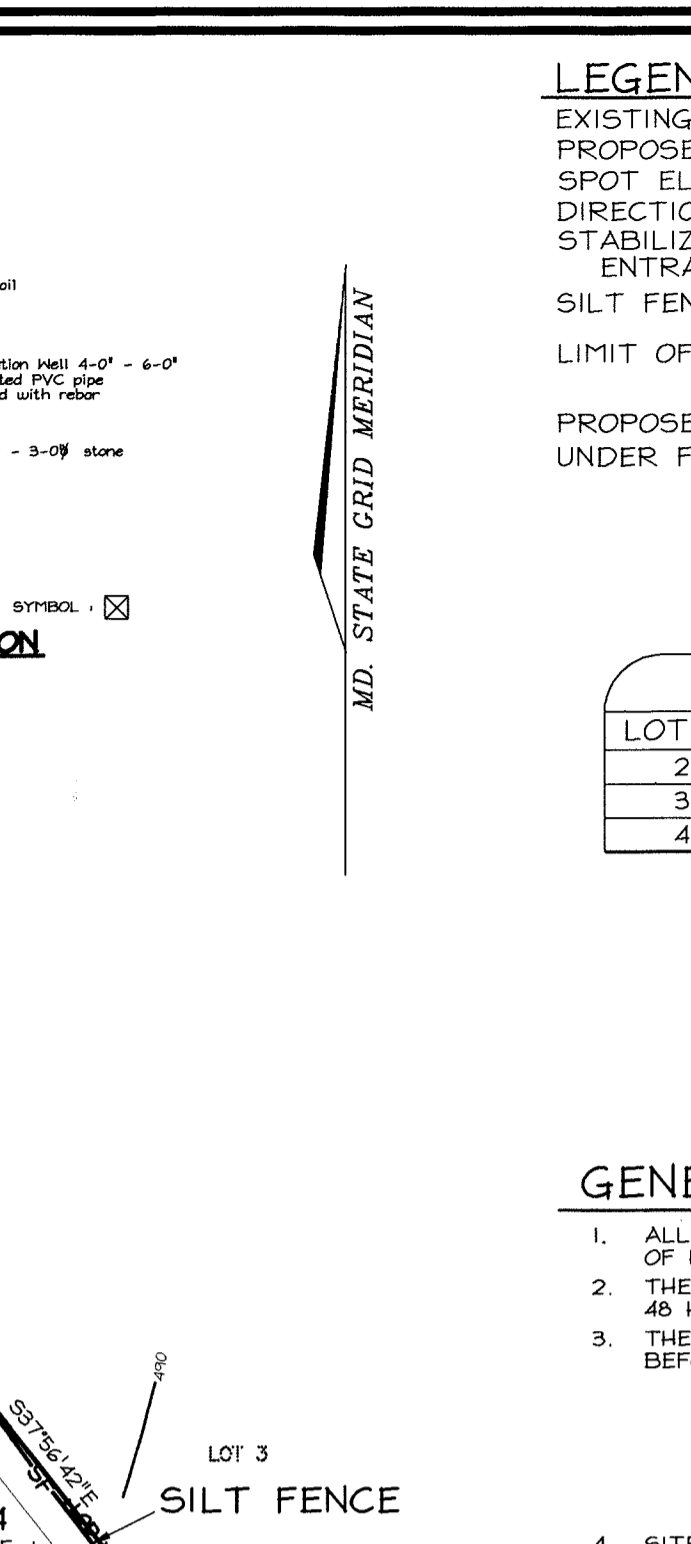
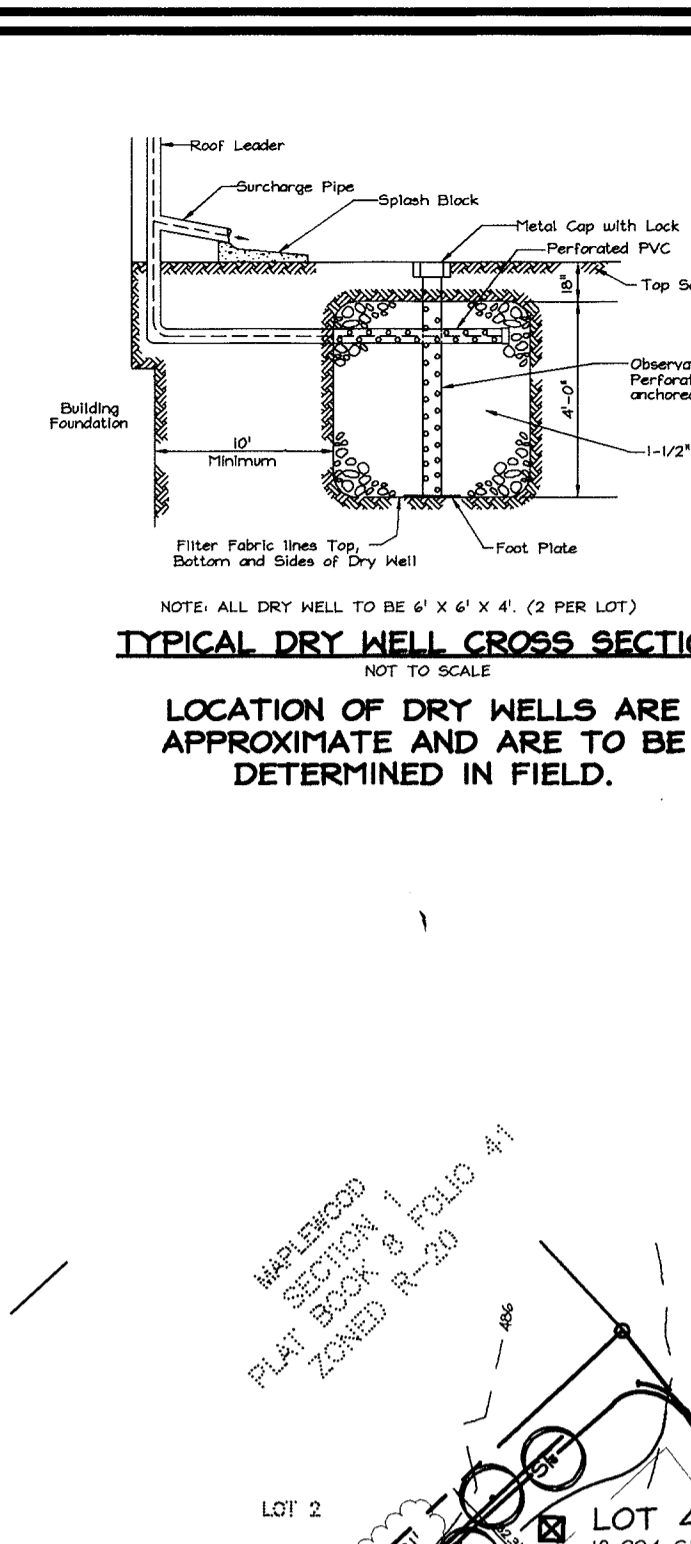
**CONSTRUCTION SPECIFICATION**  
 1. Length - minimum of 50' for single residence lots.  
 2. Material - silt fence shall be placed over the existing ground prior to placing stone. The silt fence shall not require any family residence to use aggregate.  
 3. Stone - crushed aggregate (2" to 3") or recycled concrete equivalent shall be placed at least 6' deep over the length and width of the entrance.  
 4. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped to a stormwater management system. The pipe shall be installed through the stabilized construction entrance shall be protected with a portable berm with 2' slope over the entrance. The pipe has to be sized according to the drainage. When the pipe is located at a high spot and has no drainage to convey a pipe will not be necessary. The pipe shall be sized according to the amount of runoff to be conveyed. A 6' minimum will be required.
 5. Location - A stabilized construction entrance shall be located at every spot where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

**CONSTRUCTION SPECIFICATIONS**  
 1. Fence posts shall be a minimum of 3/4" long driven 18" minimum into the ground. Posts shall be spaced at a maximum of 10' on center. Posts shall be spaced 7' on center and shall be at least 1/2" diameter. Posts shall be spaced 7' on center and shall be at least 1/2" diameter.  
 2. Geotextile fabric (Filter cloth) shall be placed over the existing ground prior to placing stone. The silt fence shall not require any family residence to use aggregate.  
 3. Stone - crushed aggregate (2" to 3") or recycled concrete equivalent shall be placed at least 6' deep over the length and width of the entrance.  
 4. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped to a stormwater management system. The pipe shall be installed through the stabilized construction entrance shall be protected with a portable berm with 2' slope over the entrance. The pipe has to be sized according to the drainage. When the pipe is located at a high spot and has no drainage to convey a pipe will not be necessary. The pipe shall be sized according to the amount of runoff to be conveyed. A 6' minimum will be required.
 5. Location - A stabilized construction entrance shall be located at every spot where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

**CONSTRUCTION SPECIFICATIONS**  
 1. Seed and cover with straw mulch.  
 2. Erosion control matting or straw matting shall be installed on the slope with the seed.  
 3. A 2" - 7" slope or recycled concrete equivalent pressed into the soil 1" minimum.  
 4. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Best practices may be necessary for grades less than 1:1.  
 5. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping structure.  
 6. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.  
 7. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of as an out to interfere with the proper functioning of the dike.  
 8. The dike shall be excavated or shaped to the grade and cross section as required to meet the criteria specified herein and be free of bank projection or other irregularities which will impede normal flow.  
 9. All work completed by each morning excavation shall be placed so that it will not interfere with the functioning of the dike.  
 10. Inspection and maintenance must be provided periodically and after each rain event.  
 11. For the purpose of these standards and specifications, the contractor shall have the appropriate signage posted at the site.

**SEQUENCE OF CONSTRUCTION**  
 1. Obtain grading permit.  
 2. Obtain Howard County Bureau of Inspections and Permits (313-1880) at least 24 hours before starting any work.  
 3. Construct Stabilized Construction Entrances.  
 4. Install silt fence.  
 5. Rough grade site.  
 6. Final grade. The first form elevation cannot be more than 1" higher or 0.2' lower than the elevation shown on this plan. The foundation formwork must be within the generic 1/2" tolerance.  
 7. Final lot grade to be in substantial conformance with site development plan.  
 8. During grading and after each rainfall, the contractor shall inspect and provide the necessary maintenance on the sediment and erosion control measures shown.  
 9. Following final soil disturbance or disturbance, the sediment and erosion control measures shall be inspected with the approval of the sediment control inspector.  
 10. Upon completion of final soil disturbance or disturbance, the sediment control measures shall be inspected with the approval of the sediment control inspector.

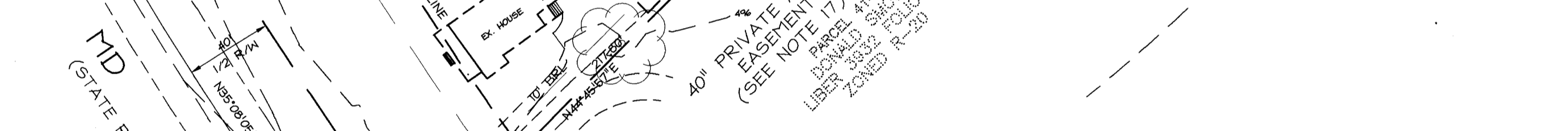
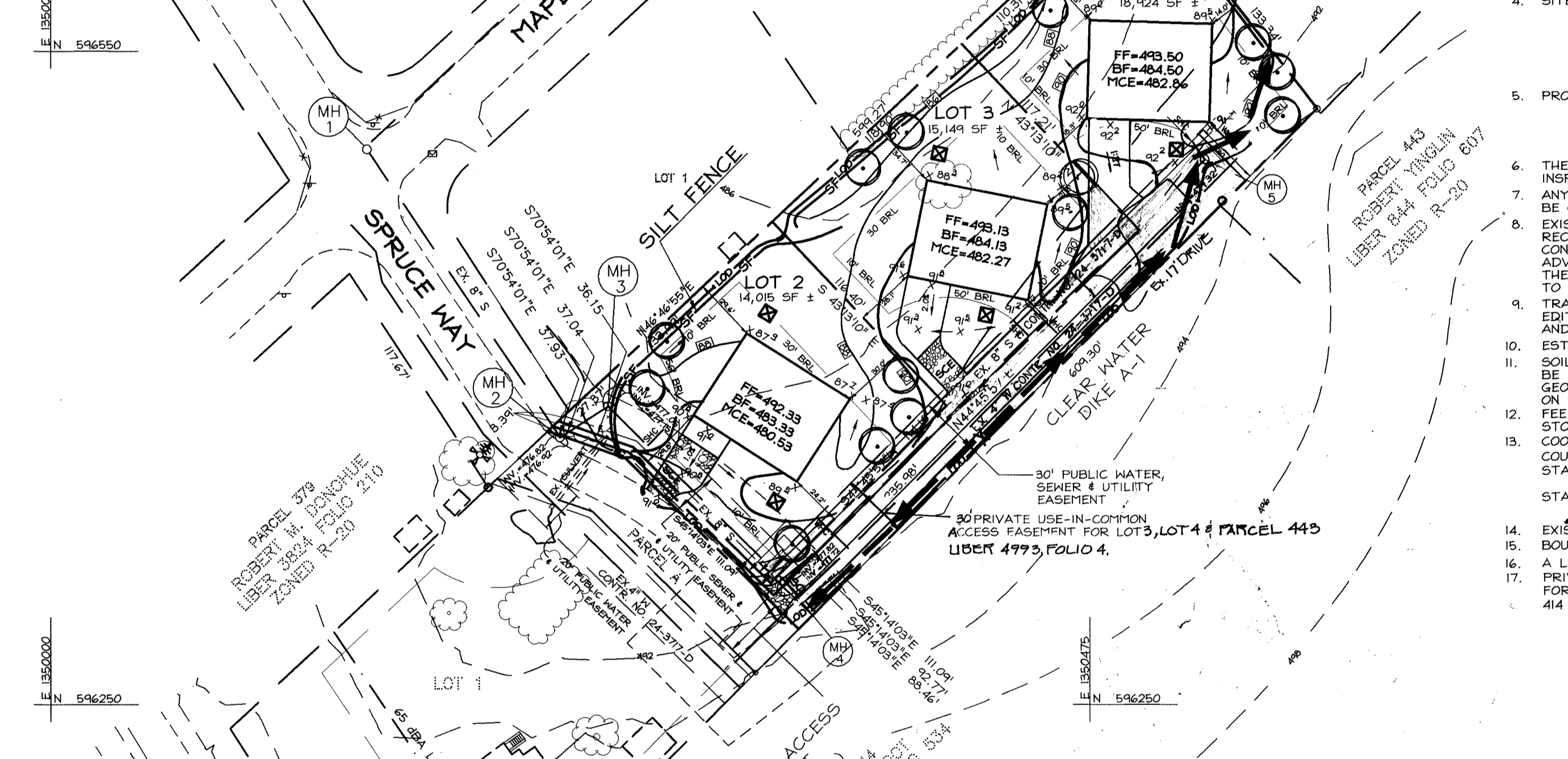
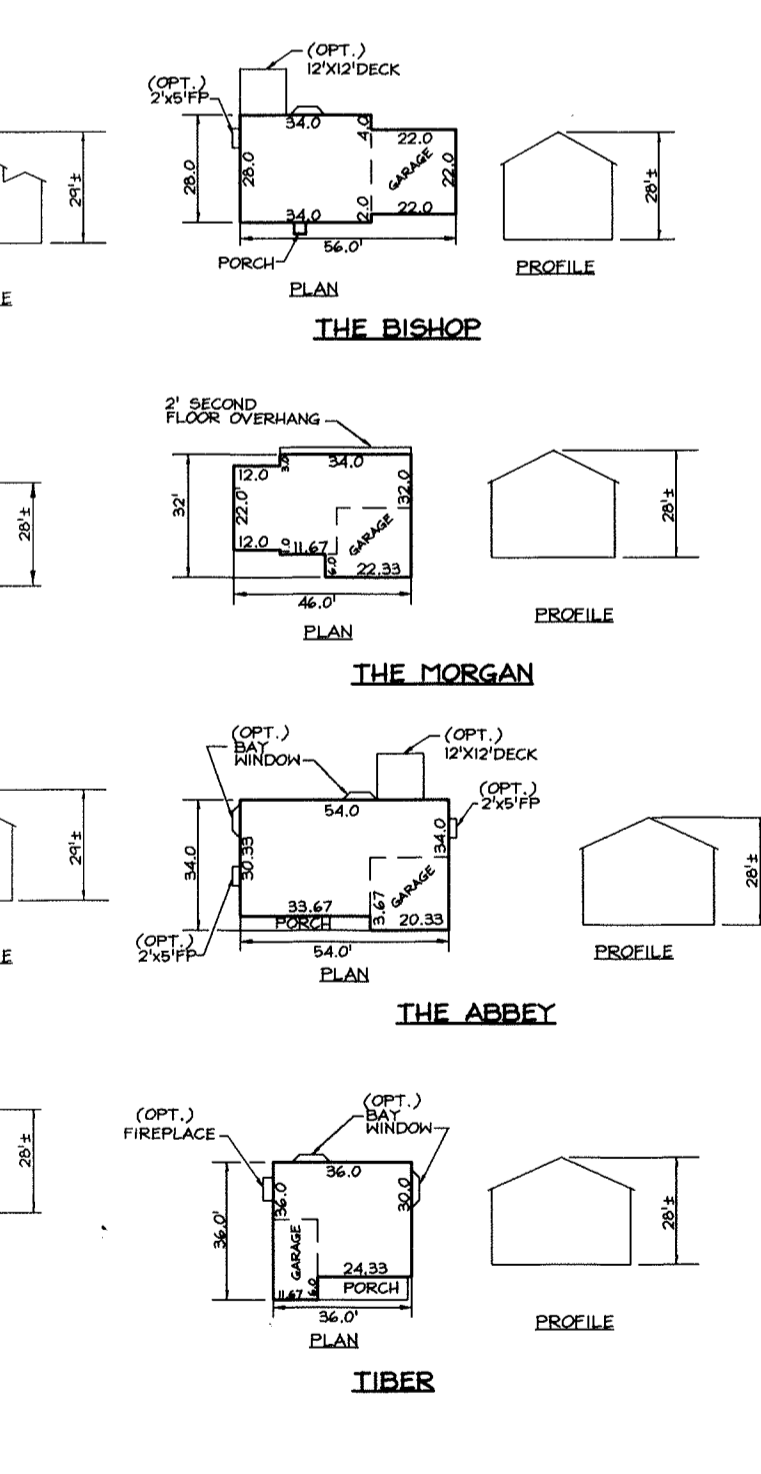
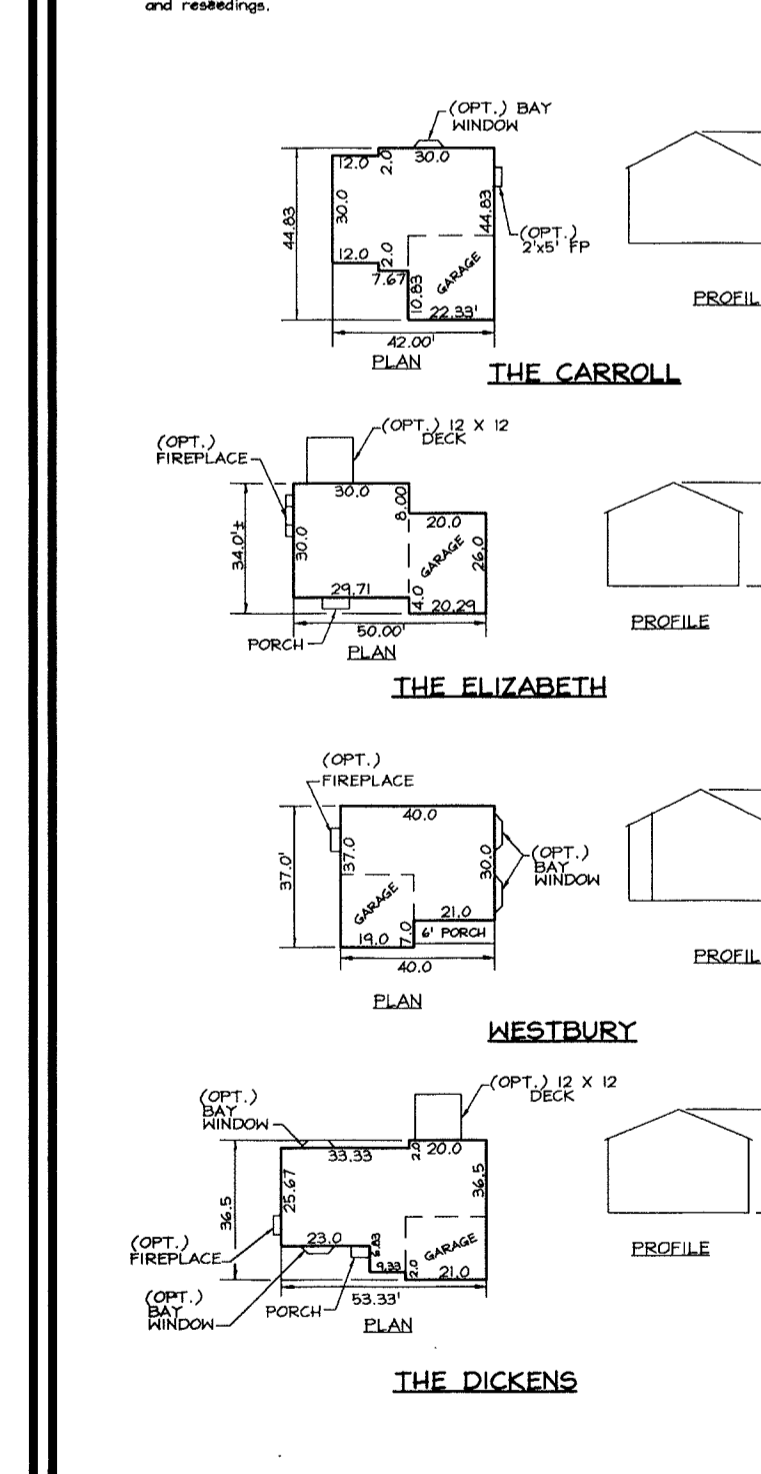
**2.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL**  
**DEFINITION**  
 Topsoil is the soil on the surface of the earth which is the most fertile and productive soil layer.  
**CONDITIONS WHERE PRACTICE APPLIES**  
 1. This practice is limited to areas having 2:1 or flatter slopes.  
 a. The location of the ground surface material is required to meet the criteria specified herein and be free of bank projection or other irregularities which will impede normal flow.  
 b. The soil material is so shallow that the roots of trees or shrubs are not exposed.  
 c. The original soil is vegetated contains material which is not to be removed.  
 d. The soil is so shallow that treatment with limestone is not required.  
 2. For the purpose of these standards and specifications, the contractor shall have the appropriate signage posted at the site.



**TEMPORARY SEEDING**  
 Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.  
**Seeded Preparation:** Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding. If not previously loosened.  
**Soil Amendments:** Apply 400 lbs. per acre 10-20-10 fertilizer (14 lbs./1000 sq. ft.).  
**Seeding:** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushels per acre of seed (12 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of seed (12 lbs./1000 sq. ft.). For the period November 16 thru February 29, protect site by applying 2 tons per acre of well-anchored straw mulch, and seed on soon as possible in the spring, or use seed.  
**Mulching:** Apply 1/2 to 2 tons per acre (10 to 40 lbs./1000 sq. ft.) of well-anchored straw mulch immediately after seeding. Apply mulch immediately after application using mulch anchoring tool or 200 gal. per acre (8 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 400 gal. per acre (8 gal./1000 sq. ft.) for anchoring.  
 Refer to the 1983 HARTLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

**PERMANENT SEEDING NOTES**  
 Apply to graded or cleared areas not subject to immediate further disturbance where a permanent, long-lived vegetative cover is needed.  
**Seeded Preparation:** Loosen upper 3 inches of soil by raking, discing, or other acceptable means before seeding. If not previously loosened.  
**Soil Amendments:** Use one of the following schedules:  
 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 400 lbs. per acre 10-20-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Loosen or disc top 3 inches of soil. At time of seeding apply 400 lbs. per acre 10-20-10 fertilizer (14 lbs./1000 sq. ft.).  
 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 400 lbs. per acre 10-20-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Loosen or disc top 3 inches of soil.  
**Seeding:** For the period March 1 thru April 30 and August 1 thru October 15, seed with 400 lbs. per acre (14 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 600 lbs. per acre of seed (20 lbs./1000 sq. ft.) of seed. For the period of October 16 thru February 29, protect site by applying 2 tons per acre of well-anchored straw mulch, and seed on soon as possible in the spring. On slopes 8 feet or higher, use 400 gal. per acre (8 gal./1000 sq. ft.) for anchoring.  
 Refer to the 1983 HARTLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

**SEEDING CONTROL NOTES**  
 1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1885).  
 2. All vegetation and structural practices are to be installed according to the standards and specifications for soil erosion and sediment control. The standards and specifications for soil erosion and sediment control.  
 3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within (a) 7 calendar days for all perimeter areas, (b) 14 calendar days for all interior areas, (c) 14 days for all other disturbed areas on the project.  
 4. All sediment traps/basins shall be fenced and carrying capacity posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.  
 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 HARTLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. The permanent seeding, soil, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.  
 6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.  
 7. Site Analysis  
 Total Area of Site 110.00 acres  
 Area Disturbed 1.00 acre  
 Area to be seeded or paved 0.00 acres  
 Area to be vegetatively stabilized 1.00 acres  
 Total Soil 110.00 acres  
 Offsite waste/borrow area location 0.00 acres  
 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 3 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment control. The permanent seeding, soil, temporary seeding, and mulching (Sec. G). Other building or grading inspection approvals may not be authorized without the consent of the inspection agency.  
 11. Tranches for the construction of utilities is limited to three side lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.



**LEGEND**  
 EXISTING CONTOUR  
 PROPOSED CONTOUR  
 SPOT ELEVATION  
 DIRECTION OF FLOW  
 STABILIZED CONSTRUCTION ENTRANCE  
 SILT FENCE  
 LIMIT OF DISTURBANCE  
 PROPOSED SHADE TREES UNDER F-98-176

**GENERAL NOTES**  
 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY. PLUS HIGHWAY STANDARDS AND SPECIFICATIONS, IF APPLICABLE.  
 2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.  
 3. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:  
 MISS UTILITY 1-800-257-7777  
 C & P TELEPHONE COMPANY 725-9976  
 HOWARD COUNTY BUREAU OF UTILITIES 313-2346  
 AT&T CABLE LOCATION DIVISION 343-3553  
 B.G. & CO. CONSTRUCTION SERVICES 350-4620  
 B.G. & CO. UNDERGROUND DAMAGE CONTROL 787-4620  
 STATE HIGHWAY ADMINISTRATION 531-5533  
 4. SITE ANALYSIS:  
 AREA OF SITE: 110 AC  
 AREA OF SUBMISSION: 110 AC  
 PRESENT ZONING: R-20  
 PROPOSED USE OF SITE: SINGLE FAMILY DWELLINGS  
 TOTAL NUMBER OF UNITS: 3  
 5. PROJECT BACKGROUND:  
 LOCATION TAX MAP: 17 PARCEL: 412  
 ZONING: R-20  
 SUBDIVISION: FRANK PROPERTY  
 DPZ REFERENCES: F-98-176  
 6. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.  
 7. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.  
 8. EXISTING UTILITIES LOCATED FROM A FIELD SURVEY (BY OTHERS) AND AVAILABLE RECORD DRAWINGS, APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES HELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.  
 9. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.  
 10. ESTIMATES OF MATERIAL QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.  
 11. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER.  
 12. FEE-IN-LIEU OF STORMWATER MANAGEMENT QUANTITY FOR THESE LOTS PROVIDED UNDER F-98-176. STORMWATER MANAGEMENT QUANTITY WILL BE PROVIDED BY DRY WELLS (SEE DETAIL THIS SHEET).  
 13. COORDINATES BASED ON NAD '83 HORIZONTAL AND NAVD29 VERTICAL DATUMS AS PROJECTED BY HOWARD COUNTY GEODETIC STATIONS NO. 17DA & 17DB.  
 STA. NO. 17DA N 482.039  
 E 136164.146  
 N 54629.556  
 E 136272.566  
 STA. NO. 17DB E 476.022  
 14. EXISTING TOPOGRAPHY IS BASED ON PLANS PREPARED BY MILDENBERG, BOENDER & ASSOCIATES DATED FEB., 1988. BOUNDARY INFORMATION IS BASED ON A PLAT PREPARED BY MILDENBERG, BOENDER & ASSOCIATES.  
 15. A LANDSCAPE SURETY FOR THE REQUIRED 16 TREES (\$4800.00) WILL BE POSTED WITH THE GRADING PERMIT.  
 16. PRIVATE ACCESS EASEMENT IS A 40' WIDE STRIP FOR THE PURPOSE OF ACCOMPANYING A SHARED DRIVEWAY FOR LOTS 1, 2, 3, 4 AND/OR A FUTURE PRIVATE ACCESS PLACE FOR POSSIBLE FUTURE SUBDIVISION OF PARCEL 414 (SHOOT PROPERTY), RECORDED IN LIBER 4609, FOLIO 72.

**OWNER / DEVELOPER**  
 JARED SPAHN  
 OLD TOWN CONSTRUCTION, LLC  
 10805 HICKORY RIDGE ROAD  
 SUITE 215  
 COLUMBIA, MD. 21044  
 410-740-2100

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.  
 Cheryl Simmons 5/4/99  
 USDA NATURAL RESOURCES CONSERVATION SERVICE  
 THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 John Robertson 5/4/99  
 HOWARD SOIL CONSERVATION DISTRICT

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR 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.  
 Signature of Engineer  
 Robert H. Vogel  
 DATE 4/27/99

**DEVELOPER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE 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.  
 Signature of Developer  
 DATE 4/27/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Director  
 5/13/99 DATE  
 Chief, DIVISION OF LAND DEVELOPMENT  
 5/10/99 DATE  
 Chief, DEVELOPMENT ENGINEERING DIVISION  
 5/7/99 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 COUNTY HEALTH OFFICER  
 DATE  
 SUBDIVISION NAME SECTION/AREA PARCEL NUMBER  
 FRANK PROPERTY N/A 412  
 PLAT NO. BLOCK NO. ZONE TAX/ZONE ELECT. DIST. CENSUS TR.  
 13566 7 R-20 17 2ND 6022  
 WATER CODE SEWER CODE

**SITE DEVELOPMENT PLAN AND GRADING AND SEDIMENT CONTROL**  
**FRANK PROPERTY**  
 LOTS 2 - 4  
 REFERENCES: F-98-176  
 TAX MAP #17 PARCEL 412  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**VOGEL & ASSOCIATES**  
 ENGINEERS-SURVEYORS-PLANNERS  
 3681 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
 Tel: 410.461.5828 Fax: 410.465.3966

DESIGN BY: JCO  
 DRAWN BY: JCO/RJS  
 CHECKED BY: RHV  
 DATE: APRIL 23, 1999  
 SCALE: 1"=50'  
 W.D. NO.: 99-05  
 SHEET OF 1

STATE OF MARYLAND  
 ROBERT H. VOGEL, P.E. #12193  
 PROFESSIONAL ENGINEER