

1. 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.

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.

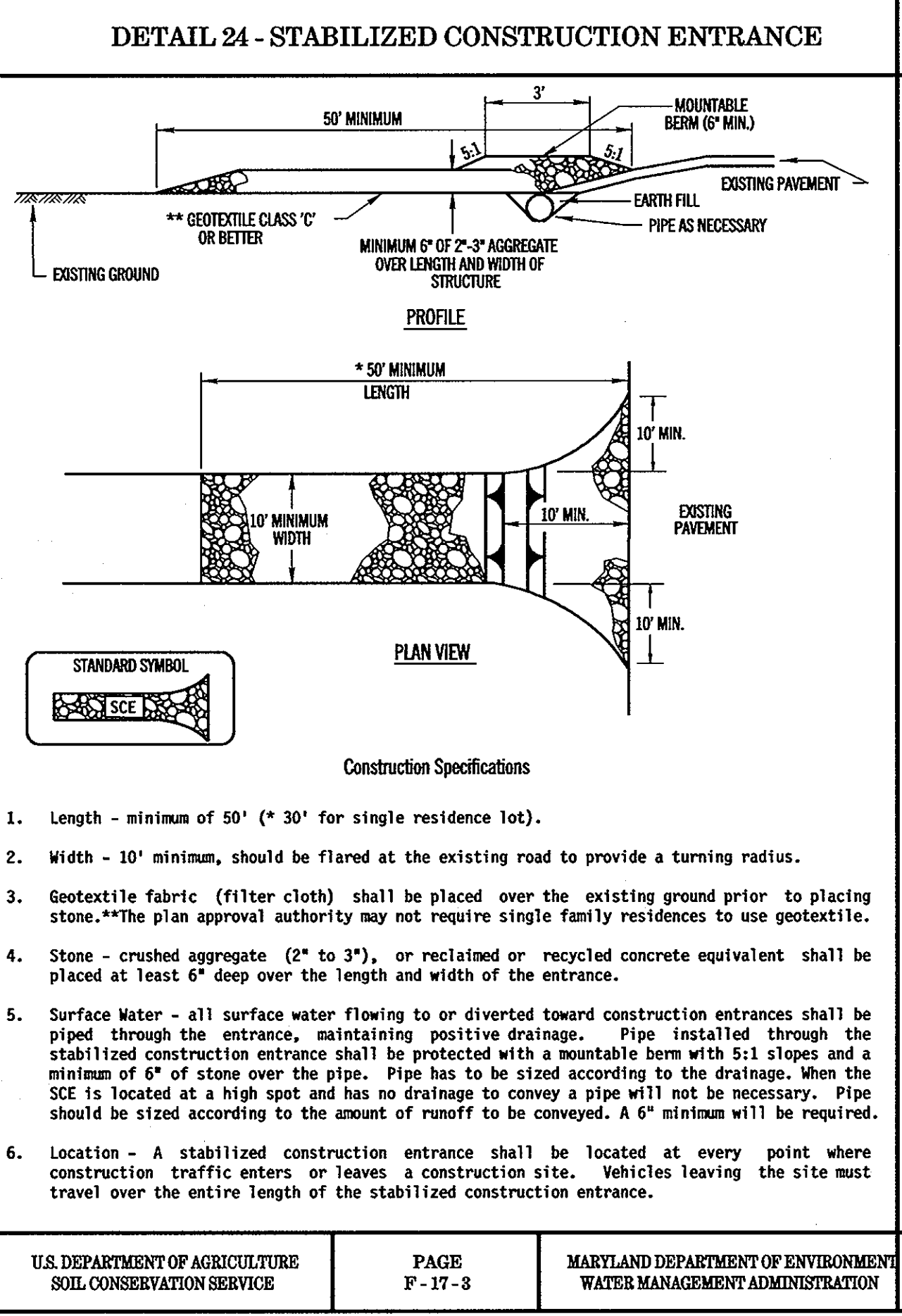
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

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.

7. 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: HSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: HSMT 509
Flow Rate	0.3 gal/ft/minute (max.)	Test: HSMT 322
Filtering Efficiency	75% (min.)	Test: HSMT 322

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1. Length - minimum of 50' (* 30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

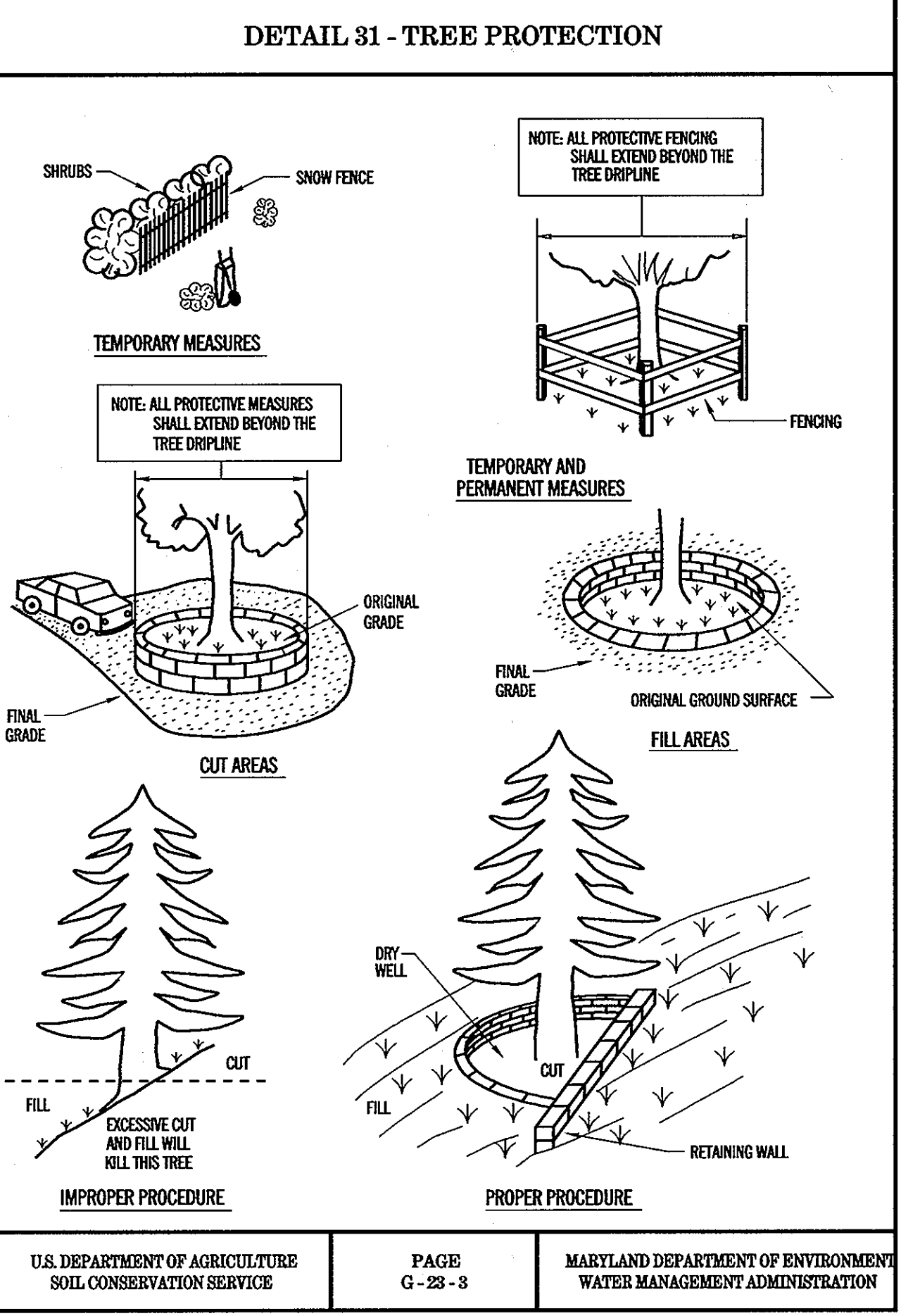
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.

4. 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.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be directed through the entrance into the drainage pipe. The installed pipe 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 SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. 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.

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1. Length - minimum of 50' (* 30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. 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.

4. 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.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be directed through the entrance into the drainage pipe. The installed pipe 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 SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. 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.

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DESIGN CERTIFICATION

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT"

Signature: *Alan K. Arnold* Date: *10-23-08*

Signature: *John A. ...* Date: *10-23-08*

DEVELOPER CERTIFICATE

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

Date: *10-23-08*

Signature: *John A. ...*

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division Date: *11/10/08*

Chief, Division of Land Development Date: *11/24/08*

Director Date: *11/24/08*

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

County Health Officer Date: *11/19/2008*

Howard County Health Department

OWNER/DEVELOPER:
ATHOLTON SWIM CLUB, INC.
P.O. BOX 85
SIMPSONVILLE, MD 21150
CONTACT: MR. JOHN MURPHY
PHONE: (703) 416-8850 X207
FAX: (703) 416-6523

SEAL OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
No. 10-21-08

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 (D13-1810).
- All vegetation 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 permanent 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 located and working 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. Temporary stabilization with such slope as 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 6.427 Acres, Area Disturbed 1.30 Acres, Area to be reseeded or planted 0.44 Acres, Area to be vegetatively stabilized 0.45 Acres, Total Cut 0.09 Cu. Yds. Total Fill 0.04 Cu. Yds. (0.046 cubic yards more area location: N/A)
- 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 prior to completion of installation of perimeter erosion and sediment control, but before proceeding with any earth disturbance or grading. Other building or grading inspection approval will not be authorized until this initial approval by the inspection agency is made.
- Tranches 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 work day, whichever is shorter.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

Signature: *John K. Robertson* Date: *10/30/08*

USA - NATURAL RESOURCES CONSERVATION SERVICE

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

No.	REVISION	DATE	BY

19.0 STANDARDS AND SPECIFICATIONS FOR LAND GRADING

Definition: Reshaping of the existing land surface in accordance with a plan as determined by engineering survey and layout.

Purpose: The purpose of a land grading specification is to provide for erosion control and vegetative establishment on those areas where the existing land surface is to be reshaped by grading according to plan.

Design Criteria: The grading plan shall be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surroundings to avoid excessive grade modifications. Information shall be provided to the contractor to ensure proper construction and to investigate to determine factors that must be improved on the grading operation related to slope stability, effect on adjacent properties and drainage patterns, retaining walls, and surface and subsurface drains. The plan shall also include specific grade provisions. The following shall be incorporated into the plan:

1. Practices shall be made to safely conduct surface runoff to storm drains, protected outlets or to stable water courses to insure that surface water will not damage slopes or other graded areas.
2. Cut and fill slopes that are to be stabilized with grass shall be no steeper than 2:1. Where the slope is to be covered the slope shall be no steeper than 3:1. 4:1 is preferred because of safety factors related to snow slopes. Slopes exceeding 2:1 shall require special design and stabilization considerations that shall be adequately shown on the plan.
3. Reverse benches shall be provided whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet, for 3:1 slope it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slope face as evenly as possible and shall convey the water to a stable outlet. 30%, 40%, 50%, 60%, 70%, 80%, 90% and 100% benches may be used when designing benches.
4. Benches shall be a minimum of six feet wide to provide for areas of maintenance.
5. Benches shall be designed with a reverse slope of 6:1 or flatter to the top of the upper slope and with a minimum of one foot in depth. Benches gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and computations.
6. The flow length within a bench shall not exceed 800' unless accompanied by appropriate design and computations. For flow channel stabilization one temporary bench.
7. Slopes shall not be created so close to property lines as to endanger adjoining properties without adequately protecting such properties against undermining, erosion, slippage, settlement, subsidence or other related damage.
8. Fill material shall be free of trash, rocks, logs, stumps, building debris, and other objectionable material. It shall be free of stones over two (2) inches in diameter where computed by hand or mechanical transport or over eight (8) inches in diameter where computed by others or other equipment. Foreign material shall not be placed in the fill nor shall the fill material be placed on a frozen foundation.
9. Stockpiles, borrow areas and spoil shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.
10. All disturbed areas shall be stabilized structurally or vegetatively in compliance with 2.0 Standards and Specifications for Vegetative Stabilization.

SEDIMENT CONTROL NOTES

1. THE DEVELOPER IS RESPONSIBLE FOR THE ASSISTANTS OF ALL REQUIRED EASEMENT, RIGHT AND/OR RIGHTS OF WAY PURSUANT TO THE DISCHARGE FROM THE EROSION AND SEDIMENT CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORMWATER INTO OR ACROSS AND GRADING OR OTHER WORK TO BE PERFORMED ON ADJACENT OR DOWNSTREAM PROPERTIES AFFECTED BY THIS PLAN.
2. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A MINIMUM CALENDAR DAYS AS TO SURFACE ALL THE PERIMETER CONTROL STRUCTURES, DRAINS, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) AND BY FORTY EIGHT (48) HOURS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THE IN-PLACE SEDIMENT CONTROL MEASURES WILL BE MAINTAINED ON A CONTINUING BASIS UNTIL THE SITE IS PERMANENTLY STABILIZED AND ALL PERMIT REQUIREMENTS ARE MET.
3. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF TWO ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF THE INSTALLATION OF THE PERIMETER EROSION AND SEDIMENT CONTROLS BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING OTHER BUILDING OR GRADING INSPECTION APPROVALS WILL NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
4. APPROVAL SHALL BE REQUESTED UPON FINAL STABILIZATION OF ALL SITES WITH DISTURBED AREA IN EXCESS OF TWO ACRES BEFORE REMOVAL OF CONTROLS.
5. THE OWNER/DEVELOPER THAT SIGNS THE CERTIFICATION ON AN EROSION AND SEDIMENT CONTROL PLAN IS THE RESPONSIBLE PARTY REGARDLESS OF ANY SALE OF THE PROPERTY OR WORK OF SUBCONTRACTORS, EROSION AND SEDIMENT CONTROL PLANS ARE APPROVED FOR ONE OWNER/DEVELOPER ONLY. ALL PERMITS UNDER AN EROSION AND SEDIMENT CONTROL PLAN MUST AND CAN ONLY BE ISSUED TO THE OWNER/DEVELOPER THAT SIGNS THE CERTIFICATION ON THE PLAN.
6. CLASS APPROVAL OF AN EROSION AND SEDIMENT CONTROL PLAN, PURSUANT TO MEETING LOCAL PERMIT REQUIREMENTS FOR GRADING, BUILDING OR STREET PERMITS, ETC., IS VALID ONLY WHEN THE WORK IS PERFORMED UNDER THE PLAN IS THE SAME AS AND NO MORE AND LESS THAN THAT CONTAINED IN THE PLAN AS APPROVED BY THE PSDO.
7. CHANGES OR MODIFICATIONS TO AN APPROVED EROSION AND SEDIMENT CONTROL PLAN NOT APPROVED BY THE PSDO SHALL INVALIDATE THE PLAN APPROVAL.
8. OFFSITE EROSION OR SOIL AREAS MUST HAVE AN APPROVED AND ACTIVE EROSION AND SEDIMENT CONTROL PLAN.
9. TEMPORARY DESIGNED SEDIMENT BASINS SHALL BE REMOVED WITHIN 36 MONTHS AFTER THE BEGINNING OF CONSTRUCTION OF THE BASIN.
10. ON SMALL POND APPROVALS:
 1. THE OWNER OR ENGINEER WILL NOTIFY PSDO PROMPTLY IN WRITING WHEN CONSTRUCTION IS BEGUN AND WHEN CONSTRUCTION IS COMPLETED.
 2. THE PROJECT SHALL BE CONSTRUCTED UNDER THE SUPERVISION OF THE ENGINEER-IN-CHARGE WITHIN 30 DAYS OF THE COMPLETION OF CONSTRUCTION. THE ENGINEER-IN-CHARGE THAT DESIGNED THE STRUCTURE SHALL PROVIDE PSDO WITH AN AS-BUILT PLAN AND SHALL CERTIFY, WITH AN ENGINEER'S SEAL, THAT THE 40-378 POND WAS CONSTRUCTED AS SHOWN ON THE AS-BUILT PLANS.
 3. THE APPROVAL IS VALID ONLY FOR USE BY THE APPLICANT AND MAY NOT BE TRANSFERRED TO ANOTHER UNLESS WRITTEN APPROVAL FOR SUCH TRANSFER IS OBTAINED FROM PSDO.
11. DISTURBED SURFACE AREA, 31 AC. VOLUME OF SOIL MATERIAL, 0 AC. VOLUME OF EROSION MATERIAL, 0 AC.
12. LIST PRESENT AND GENERAL DESCRIPTION PER PSDO SOIL SURVEY: TYPE C (B2) BELTSVILLE SILT LOAM 2 TO 5% SLOPES, MODERATELY ENDED

GREENHORNE & O'MARA
CONSULTING ENGINEERS
6110 POST PLACE LAUREL, MD 20707
PHONE: (301) 982-2800 FAX: (301) 220-2619
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FLORIDA • GEORGIA • MARYLAND • NORTH CAROLINA • PENNSYLVANIA • VIRGINIA • WEST VIRGINIA

TOPSOILING SPECIFICATIONS

1. SITE PREPARATION (WHERE TOPSOIL IS TO BE ADDED)
 - A. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS OVERSLOPES, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, WATERWAYS AND SEDIMENT BASINS.
 - B. GRADING/GRADES ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED, ALBERT 4" HIGHER IN ELEVATION.
 - C. LIME/WHERE THE SUBSOIL IS EITHER HIGHLY ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1000 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.
 - D. TILLING AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY DISCING OR BY SCRAPING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT TILTING OF THE TOPSOIL TO THE SUBSOIL PACK BY PASSING A BULLDOZER UP AND DOWN OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO CREATE HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN THESLOPES.
2. TOPSOIL MATERIAL AND APPLICATION
 - A. MATERIALS: TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND, OTHER SOIL MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. IT SHALL NOT HAVE A MIXTURE OF CONTRASTING TEXTURED SUBSOIL AND CONTAIN NO MORE THAN 5 PERCENT BY VOLUME OF CHINDERS, STONES, SLAC, COARSE FRAGMENT, GRAVEL, STICKS, ROOTS, TRASH OR OTHER EXTRANEOUS MATERIALS LARGER THAN 1/2 INCHES IN DIAMETER. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS OF BENNEDICARASS, QUACKGRASS, JOHNSONGRASS, NITROSE, POISON IVY, THISTLES, OR OTHERS AS SPECIFIED FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES. TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY FOR ORGANIC MATTER CONTENT, PH AND SOLUBLE SALTS. A PH OF 6.0 TO 7.5 AND AN ORGANIC CONTENT OF NOT LESS THAN 15 PERCENT BY WEIGHT IS REQUIRED. IF PH VALUE IS LESS THAN 6.0, LIME SHALL BE APPLIED AND INCORPORATED WITH THE TOPSOIL TO ADJUST THE PH TO 6.5 OR HIGHER. TOPSOIL CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
 - B. TOPSOIL SAVED FROM THE EXISTING SITE MAY BE USED BUT IT SHOULD MEET THE SAME STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SAVERGED SHALL BE NO MORE THAN THE DEPTH DESCRIBED AS A REPRESENTATIVE PROFILE FOR THAT PARTICULAR SOIL TYPE AS DESCRIBED IN THE APPROPRIATE CHART BELOW. NOTE: IF SEDIMENT CONTROL PRACTICES ARE IN FOR LONGER THAN 12 MONTHS, PERMANENT SEEDING IS REQUIRED.
 - C. 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 (4 DAYS MINIMUM) HAS ELAPSED TO PERMIT DISSIPATION OF PHYTOXIC MATERIALS.
 - D. GRADING: THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED AND COMPACTED TO A MINIMUM OF FOUR (4) INCHES. SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE ANYWHERE IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDING PREPARATION.
3. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND ORGANIC COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
 - A. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 1. 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.
 2. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 15 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.
 3. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1000 SQUARE FEET.
 4. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB/1000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

TEMPORARY SEEDING SUMMARY

NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (LBS/AC) (N-P-K)	LIME RATE (LBS/AC)
1	BARLEY PLUS	150	2/1-4/15	1"	600 LB/AC (15 LB/AC N-200 LB/AC P-100 LB/AC K)	2 TONS/AC
2	RYE PLUS	150	2/1-4/15	1"	600 LB/AC (15 LB/AC N-200 LB/AC P-100 LB/AC K)	2 TONS/AC

PERMANENT SEEDING SUMMARY

NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (LBS/AC) (N-P-K)	LIME RATE (LBS/AC)
3	TALL FESCUE (85)	125	3/1-5/15	1 1/2"	12 LB/AC (14 LB/AC N-14 LB/AC P-14 LB/AC K)	2 TONS/AC
4	PERENNIAL BROMUS (80)	10	3/1-5/15	1 1/2"	12 LB/AC (14 LB/AC N-14 LB/AC P-14 LB/AC K)	2 TONS/AC
5	KENTUCKY BLUEGRASS (50)	10	3/1-5/15	1 1/2"	12 LB/AC (14 LB/AC N-14 LB/AC P-14 LB/AC K)	2 TONS/AC
6	TALL FESCUE (85)	10	3/1-5/15	1 1/2"	12 LB/AC (14 LB/AC N-14 LB/AC P-14 LB/AC K)	2 TONS/AC
7	HELMING BLUEGRASS (50)	3	3/1-5/15	1 1/2"	12 LB/AC (14 LB/AC N-14 LB/AC P-14 LB/AC K)	2 TONS/AC
8	SENECA LESPEDEZA (85)	20	3/1-5/15	1 1/2"	12 LB/AC (14 LB/AC N-14 LB/AC P-14 LB/AC K)	2 TONS/AC

NOTES: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.

VEGETATIVE STABILIZATION

PERMANENT AND TEMPORARY SEEDING, SOODING AND MULCHING

1. SITE PREPARATION
 - A. PERMANENT OR TEMPORARY VEGETATION SHALL BE ESTABLISHED WITHIN SEVEN (7) DAYS ON THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS OVERSLOPES, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, SEDIMENT CONTROL BASINS, AND ALL SLOPES GREATER THAN HORIZONTAL TO VERTICAL (3:1) AND WITHIN 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. MULCHING MAY ONLY BE USED ON DISTURBED AREAS AS TEMPORARY COVER WHERE VEGETATION DOES NOT TAKE OR WHERE SEEDING CANNOT BE COMPLETED BECAUSE OF WEATHER.
 - B. SEEDING PREPARATION AND SEEDING APPLICATION: LOOSEN THE TOP LAYER OF THE SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT SUCH AS DISC HARROWS, CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF THE SOIL BY DISCING OR BY OTHER SUITABLE MEANS. ROUGH AREAS SHOULD NOT BE ROLLED OR DRAGGED SMOOTH, BUT LEFT IN A ROUGHENED CONDITION. STEEP SLOPES GREATER THAN 3:1 SHOULD BE LEFT IN A ROUGHENED CONDITION. LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE, THE TOP 1 TO 3 INCHES OF SOIL SHOULD BE LOOSE AND FRAGILE. PERMANENT COVER MAY REQUIRE AN APPLICATION OF TOPSOIL IF SO. IT MUST MEET THE REQUIREMENTS SET FORTH IN SECTION 2.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL FROM THE 1994 STANDARDS AND SPECIFICATIONS.
 - C. SOIL AMENDMENTS: SOIL TESTS SHALL BE MADE ON BOTH SITES OVER FIVE ACRES TO DETERMINE THE EXACT REQUIREMENTS FOR BOTH LIME AND FERTILIZER. FOR SITES UNDER 5 ACRES, IN USE OF A SOIL TEST, APPLY THE FOLLOWING:

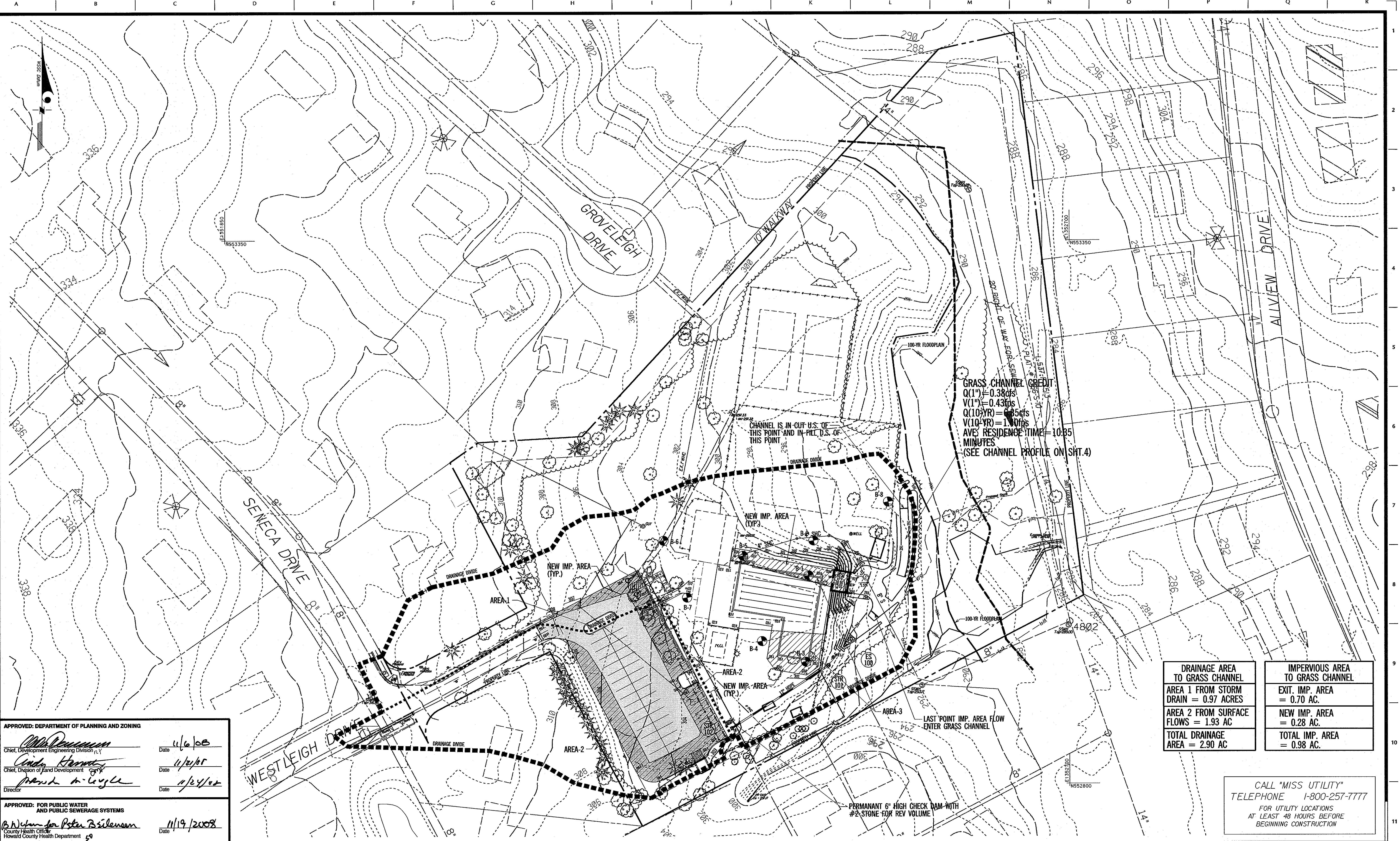
FERTILIZER	NITROGEN	2 LBS/1000 SQ. FT.	(15 LBS/AC)
	P ₂ O ₅	4 LBS/1000 SQ. FT.	(175 LBS/AC)
	K ₂ O	4 LBS/1000 SQ. FT.	(175 LBS/AC)

 FOR LOW MAINTENANCE AREAS APPLY 150 LBS/AC OF UNIFORM FERTILIZER (30-0-0) AT 50 SQ. FT. IN ADDITION TO THE ABOVE FERTILIZER AT THE TIME OF SEEDING.

GROUND LIMESTONE	2 TONS/AC
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 - D. SEDIMENT CONTROL PRACTICE SEEDING: SELECT A SEEDING MIXTURE FROM TABLES 25 OR 26 IN SECTION 6 OF THE 1994 STANDARDS AND SPECIFICATIONS. DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN USING APPROPRIATE CHART BELOW. NOTE: IF SEDIMENT CONTROL PRACTICES ARE IN FOR LONGER THAN 12 MONTHS, PERMANENT SEEDING IS REQUIRED.
 - E. TEMPORARY PERMANENT SEEDING MIXTURES AND RATES: SELECT A SEEDING MIXTURE FROM APPROPRIATE TABLE 25 OR 26 IN SECTION 6 OF THE 1994 STANDARDS AND SPECIFICATIONS. DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN USING APPROPRIATE CHART BELOW.

SEDIMENT CONTROL DETAILS

DESIGN	SCALE	NTS
D1	3"	3 OF 10
D2	3"	3 OF 10
D3	3"	3 OF 10
D4	3"	3 OF 10
D5	3"	3 OF 10
D6	3"	3 OF 10
D7	3"	3 OF 10
D8	3"	3 OF 10
D9	3"	3 OF 10
D10	3"	3 OF 10
D11	3"	3 OF 10
D12	3"	3 OF 10
D13	3"	3 OF 10
D14	3"	3 OF 10
D15	3"	3 OF 10
D16	3"	3 OF 10
D17	3"	3 OF 10
D18	3"	3 OF 10
D19	3"	3 OF 10
D20	3"	3 OF 10
D21	3"	3 OF 10
D22	3"	3 OF 10
D23	3"	3 OF 10
D24	3"	3 OF 10
D25	3"	3 OF 10
D26	3"	3 OF 10
D27	3"	3 OF 10
D28	3"	3 OF 10
D29	3"	3 OF 10
D30	3"	3 OF 10
D31	3"	3 OF 10
D32	3"	3 OF 10
D33	3"	3 OF 10
D34	3"	3 OF 10
D35	3"	3 OF 10
D36	3"	3 OF 10
D37	3"	3 OF 10
D38	3"	3 OF 10
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D40	3"	3 OF 10
D41	3"	3 OF 10
D42	3"	3 OF 10
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D81	3"	3 OF 10
D82	3"	3 OF 10
D83	3"	3 OF 10
D84	3"	3 OF 10
D85	3"	3 OF 10
D86	3"	3 OF 10
D87	3"	3 OF 10
D88		



GRASS CHANNEL CREDIT
 Q(1") = 0.38 cfs
 V(1") = 0.43 fpm
 Q(10-YR) = 0.85 cfs
 V(10-YR) = 1.07 fpm
 AVE. RESIDENCE TIME = 10.85 MINUTES
 (SEE CHANNEL PROFILE ON SHT. 4)

DRAINAGE AREA TO GRASS CHANNEL	IMPERVIOUS AREA TO GRASS CHANNEL
AREA 1 FROM STORM DRAIN = 0.97 ACRES	EXIT. IMP. AREA = 0.70 AC.
AREA 2 FROM SURFACE FLOWS = 1.93 AC	NEW IMP. AREA = 0.28 AC.
TOTAL DRAINAGE AREA = 2.90 AC	TOTAL IMP. AREA = 0.98 AC.

CALL "MISS UTILITY"
 TELEPHONE 1-800-257-7777
 FOR UTILITY LOCATIONS
 AT LEAST 48 HOURS BEFORE
 BEGINNING CONSTRUCTION

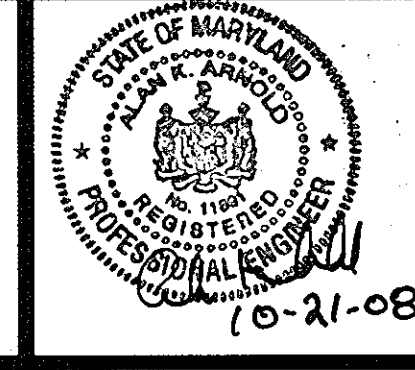
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 Howard County Health Department

11/6/08
 11/21/08
 11/24/08

11/19/2008

OWNER/DEVELOPER:
 ATHOLTON SWIM CLUB, INC.
 P.O. BOX 85
 SIMPSONVILLE, MD 21150
 CONTACT: MR. JOHN MURPHY
 PHONE: (703) 416-8850 X207
 FAX: (703) 416-6523



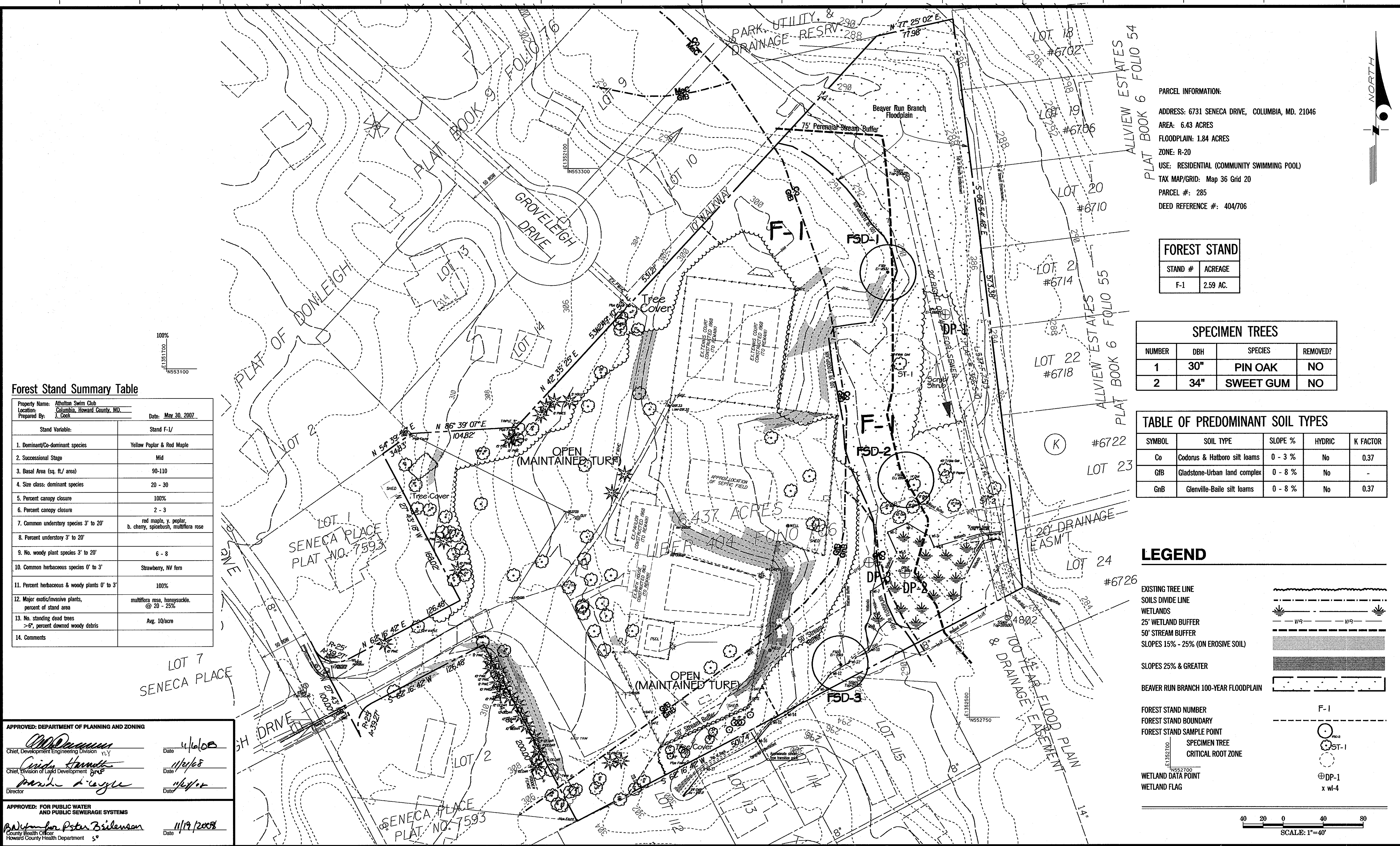
No.	REVISION	DATE	BY



GREENHORNE & O'MARA
 CONSULTING ENGINEERS
 6110 FROST PLACE LAUREL, MD 20707
 PHONE: (301) 982-2800 FAX: (301) 220-2619
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STORMWATER MANAGEMENT AND STORMDRAIN PLAN
 AND DRAINAGE AREA MAP
ATHOLTON SWIM CLUB
 SWIMMING POOL REPLACEMENT
 TAX MAP 36, GRID 20
 PARCEL 285
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DESIGN	SCALE	1" = 40'
DRAWN		6 OF 10
CHECKED	SHEET	
DATE	PROJ. No.	FILE No.
SEP. 2008	094312	



PARCEL INFORMATION:
 ADDRESS: 6731 SENECA DRIVE, COLUMBIA, MD. 21046
 AREA: 6.43 ACRES
 FLOODPLAIN: 1.84 ACRES
 ZONE: R-20
 USE: RESIDENTIAL (COMMUNITY SWIMMING POOL)
 TAX MAP/GRID: Map 36 Grid 20
 PARCEL #: 285
 DEED REFERENCE #: 404/706

FOREST STAND	
STAND #	ACREAGE
F-1	2.59 AC.

SPECIMEN TREES			
NUMBER	DBH	SPECIES	REMOVED?
1	30"	PIN OAK	NO
2	34"	SWEET GUM	NO

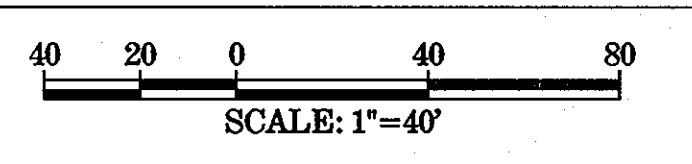
TABLE OF PREDOMINANT SOIL TYPES				
SYMBOL	SOIL TYPE	SLOPE %	HYDRIC	K FACTOR
Co	Codorus & Hatboro silt loams	0 - 3 %	No	0.37
GfB	Gladstone-Urban land complex	0 - 8 %	No	-
GnB	Glenville-Baile silt loams	0 - 8 %	No	0.37

Forest Stand Summary Table

Stand Variable:	Stand F-1/
1. Dominant/Co-dominant species	Yellow Poplar & Red Maple
2. Successional Stage	Mid
3. Basal Area (sq. ft./ area)	90-110
4. Size class: dominant species	20 - 30
5. Percent canopy closure	100%
6. Percent canopy closure	2 - 3
7. Common understory species 3' to 20'	red maple, y. poplar, b. cherry, spicebush, multiflora rose
8. Percent understory 3' to 20'	
9. No. woody plant species 3' to 20'	6 - 8
10. Common herbaceous species 0' to 3'	Strawberry, NV fern
11. Percent herbaceous & woody plants 0' to 3'	100%
12. Major exotic/invasive plants, percent of stand area	multiflora rose, honeysuckle, @ 20 - 25%
13. No. standing dead trees >6", percent downed woody debris	Avg. 10/acre
14. Comments	

LEGEND

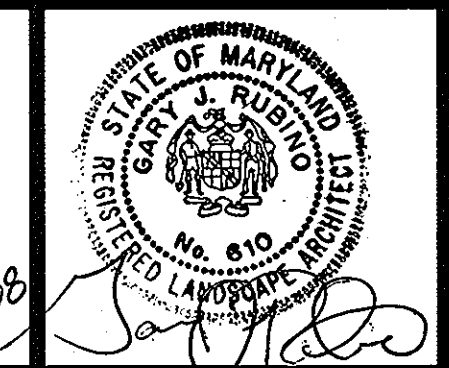
- EXISTING TREE LINE
- SOILS DIVIDE LINE
- WETLANDS
- 25' WETLAND BUFFER
- 50' STREAM BUFFER
- SLOPES 15% - 25% (ON EROSION SOIL)
- SLOPES 25% & GREATER
- BEAVER RUN BRANCH 100-YEAR FLOODPLAIN
- FOREST STAND NUMBER
- FOREST STAND BOUNDARY
- FOREST STAND SAMPLE POINT
- SPECIMEN TREE
- CRITICAL ROOT ZONE
- WETLAND DATA POINT
- WETLAND FLAG



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

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 Howard County Health Department

OWNER/DEVELOPER:
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 P.O. BOX 85
 SIMPSONVILLE, MD 21150
 CONTACT: MR. JOHN MURPHY
 PHONE: (703) 416-8850 X207
 FAX: (703) 416-6523



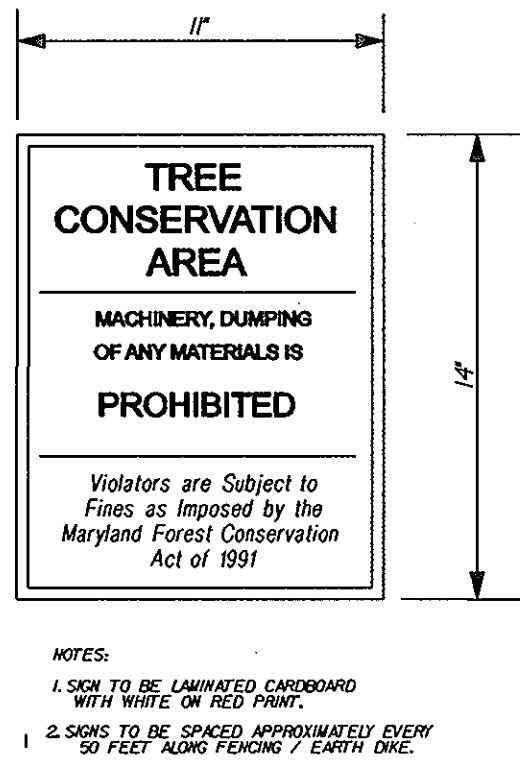
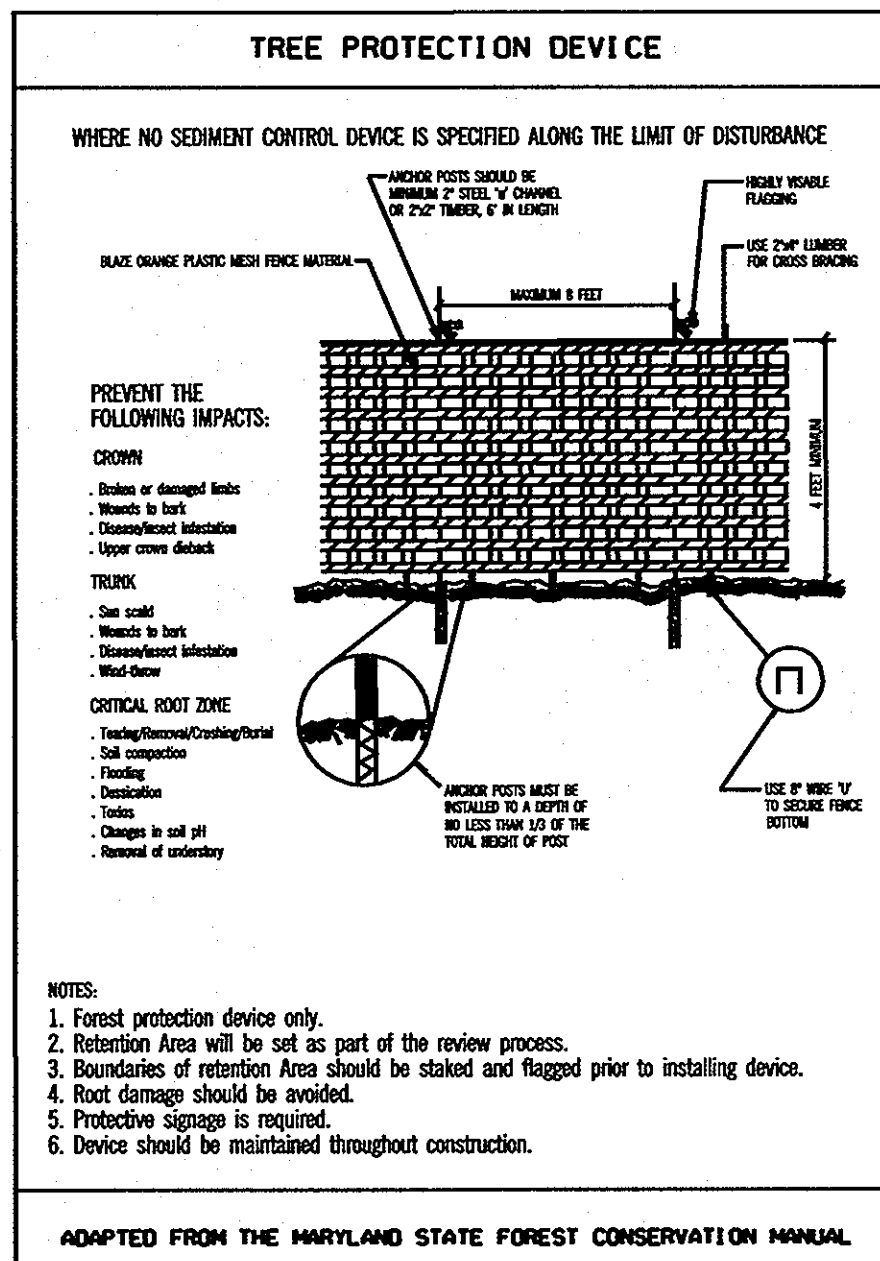
No.	REVISION	DATE	BY
1	Adjusted wetland boundary, specimen trees, critical root zone, & stream buffer	3/18/08	JJW
2	Added Beaver Branch Floodplain label	9/4/08	JJW
3	Plotted for signature approval.	10/20/08	JJW



GREENHORNE & O'MARA
 CONSULTING ENGINEERS
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FOREST STAND DELINEATION
ATHOLTON SWIM CLUB
 SWIMMING POOL REPLACEMENT
 TAX MAP 36, GRID 20
 PARCEL 285
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

JC DESIGN	SCALE	1" = 40'
JJW DRAWN		7 OF 10
AKA CHECKED	SHEET	
4/2008 DATE	094312 PROJ. No.	FILE No.



TYP TREE CONSERVATION SIGN NTS

FOREST CONSERVATION WORKSHEET

NET TRACT AREA
 A. TOTAL TRACT AREA
 B. DEDUCTIONS
 C. NET TRACT AREA

LAND USE CATEGORY
 INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY
 ARA MDR IDA HDR MDP GIA
 0 0 0 0 0 1

D. AFFORESTATION THRESHOLD (NET TRACT AREA X 15%)
 E. CONSERVATION THRESHOLD (NET TRACT AREA X 15%)
 F. EXISTING FOREST COVER
 G. AREA OF FOREST ABOVE CONSERVATION THRESHOLD
 H. BREAK EVEN POINT
 I. FOREST CLEARING PERMITTED WITHOUT MITIGATION
 J. TOTAL AREA OF FOREST TO BE CLEARED
 K. TOTAL AREA OF FOREST TO BE RETAINED

PLANTING REQUIREMENTS
 L. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD
 M. REFORESTATION FOR CLEARING BELOW THE CONSERVATION THRESHOLD
 N. CREDIT FOR RETENTION ABOVE THE CONSERVATION THRESHOLD
 O. TOTAL REFORESTATION REQUIRED
 P. TOTAL AFFORESTATION REQUIRED
 Q. TOTAL PLANTING REQUIREMENT

NOTE: The forest conservation obligation incurred by this project has been satisfied with the retention of 0.31 acres credited easement, which meets or exceeds the break-even point obligation of 0.31 acres for this site. Forest Conservation surety in the amount of \$2,701 has been posted for this project.

The forest conservation easement has been established to fulfill the requirements of Section 16-1200 of the Howard County Code and Forest Conservation Manual. No clearing, grading, or construction is permitted within the forest conservation easement, however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.

A = 3.09 AC
 B = 1.84 AC
 C = 1.25 AC

D = 0.19 AC
 E = 0.19 AC
 F = 0.79 AC
 G = 0.80 AC
 H = 0.31 AC
 I = 0.48 AC
 J = 0.02 AC
 K = 0.77 AC
 L = 0.00 AC
 M = 0.00 AC
 N = 0.00 AC
 O = 0.00 AC
 P = 0.00 AC
 Q = 0.00 AC
 R = 0.00 AC

WOODLAND CONSERVATION CERTIFICATION
 PLAN CERTIFIED BY:
 NAME: Gary J. Rubino
 ADDRESS: 6110 Frost Place
 Laurel, MD 20707
 LICENSE: #610

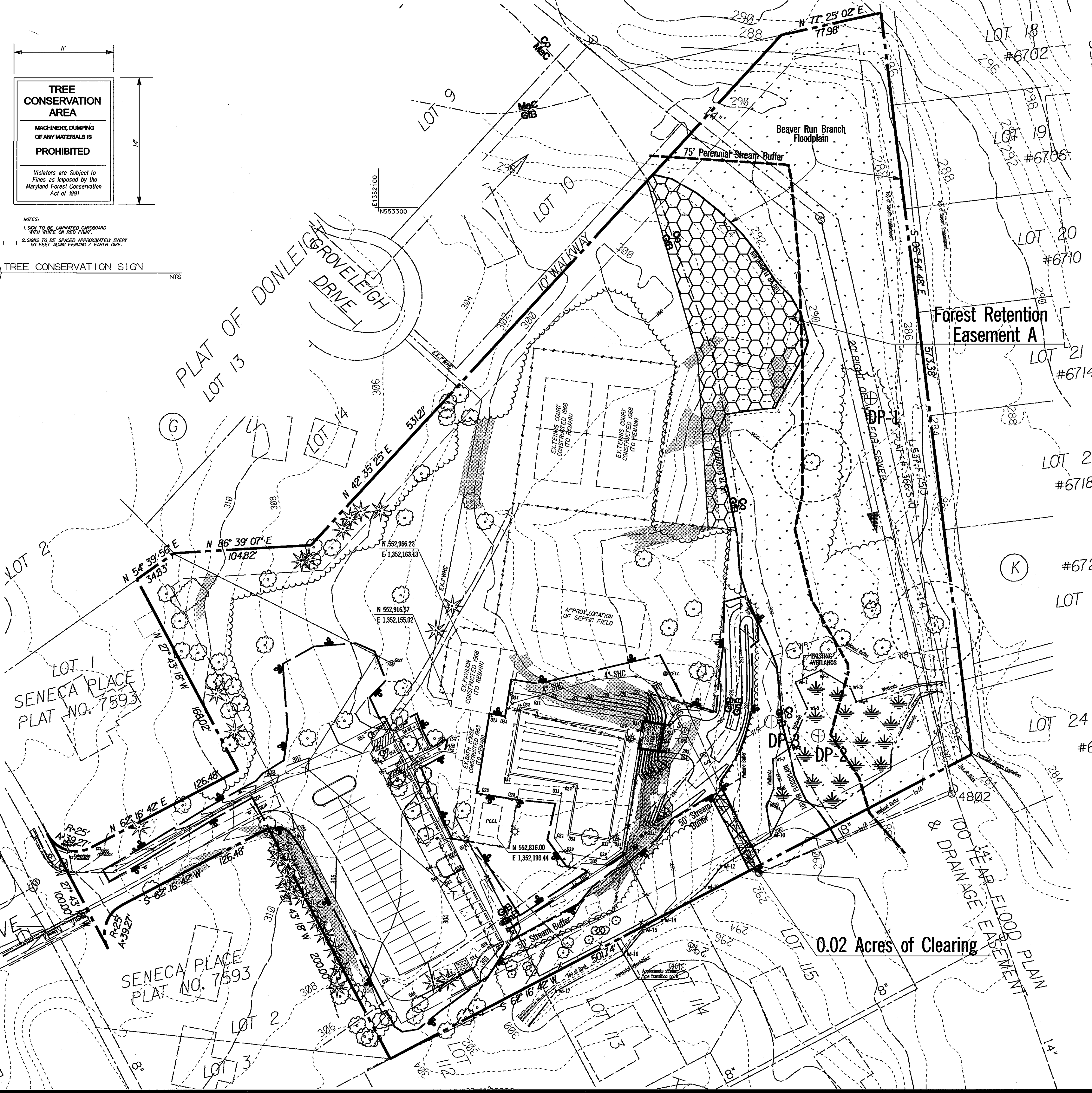
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Department Engineering Division: *[Signature]* Date: 11/16/08
 Chief, Division of Land Development: *[Signature]* Date: 11/2/08
 Director: *[Signature]* Date: 11/2/08

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

County Health Officer: *[Signature]* Date: 11/19/2008
 Howard County Health Department

OWNER/DEVELOPER:
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 P.O. BOX 85
 SIMPSONVILLE, MD 21150
 CONTACT: MR. JOHN MURPHY
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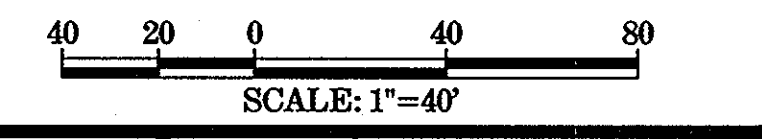
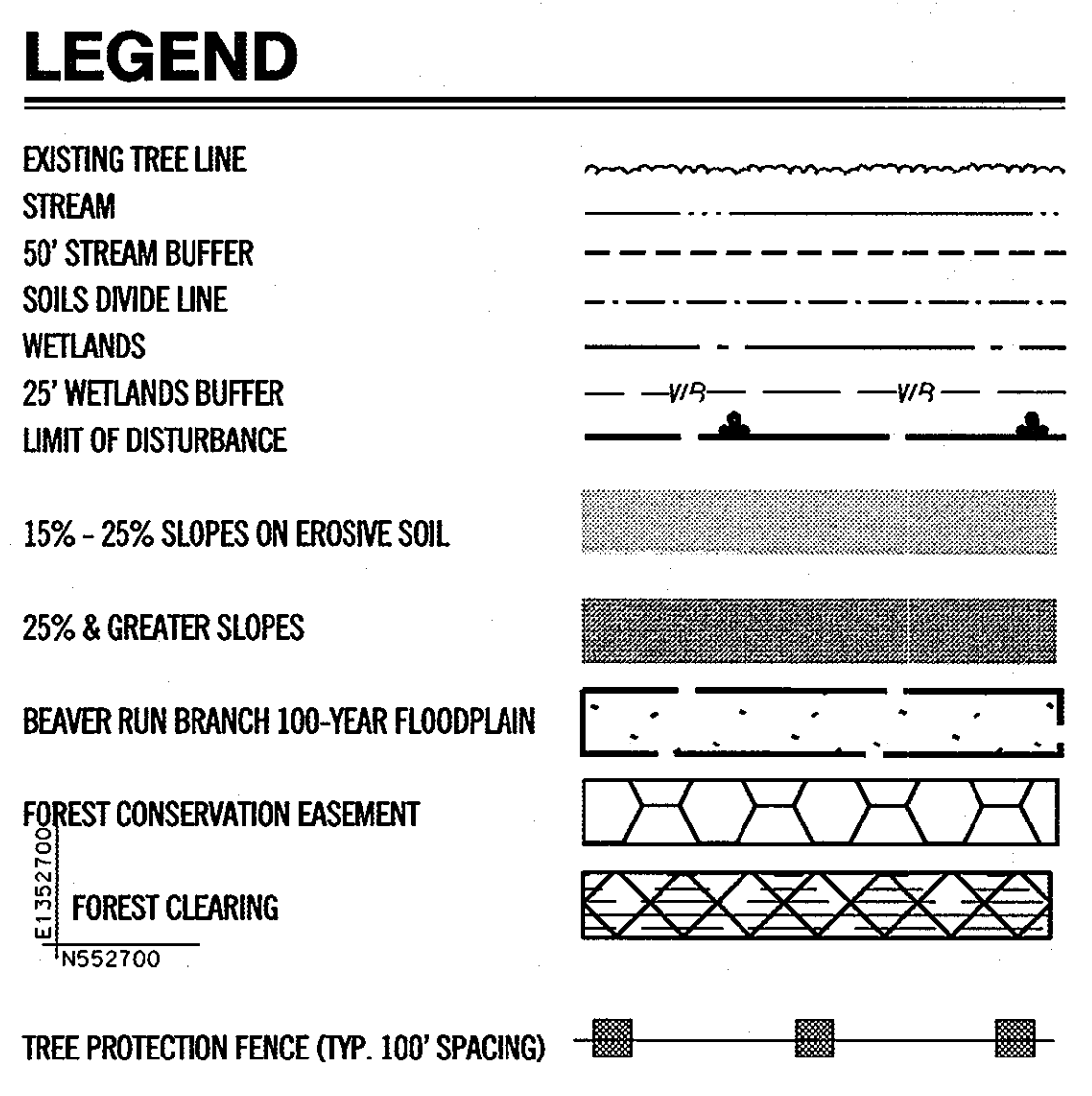
- GENERAL NOTES**
- The subject property is zoned R-20.
 - The property gross tract area is 6.43 acres, and the area previously disturbed is 3.34 acres.
 - The Boundary and topographic information is from Greenhorne & O'Mara, Inc.
 - The net tract area is 1.25 acres, see Forest Conservation Worksheet for details.
 - There is 1.84 acres of floodplain on this site.
 - There are wetlands on this site.
 - There are two specimen trees on this site. Both trees will remain on-site.
 - Existing forest on site totals 2.59 acres

FOREST RETENTION EASEMENT TABULATION

EASEMENT AREA	SQUARE FEET	ACRES
A	13,395	0.31

TABLE OF PREDOMINANT SOIL TYPES

SYMBOL	SOIL TYPE	SLOPE %	HYDRIC	K FACTOR
Co	Codorus & Harboro silt loams	0 - 3 %	No	0.37
GfB	Gladstone-Urban land complex	0 - 8 %	No	-
GnB	Glenville-Baite silt loams	0 - 8 %	No	0.37



REVISION

No.	REVISION	DATE	BY
1	Recall worksheet to include only undeveloped land. Added specimen trees	4/16/08	JW
2	Revised LOD	6/9/08	JW
3	Moved Forest Conservation Easement Areas	9/1/08	JW
4	Plotted for signature approval.	10/20/08	JW

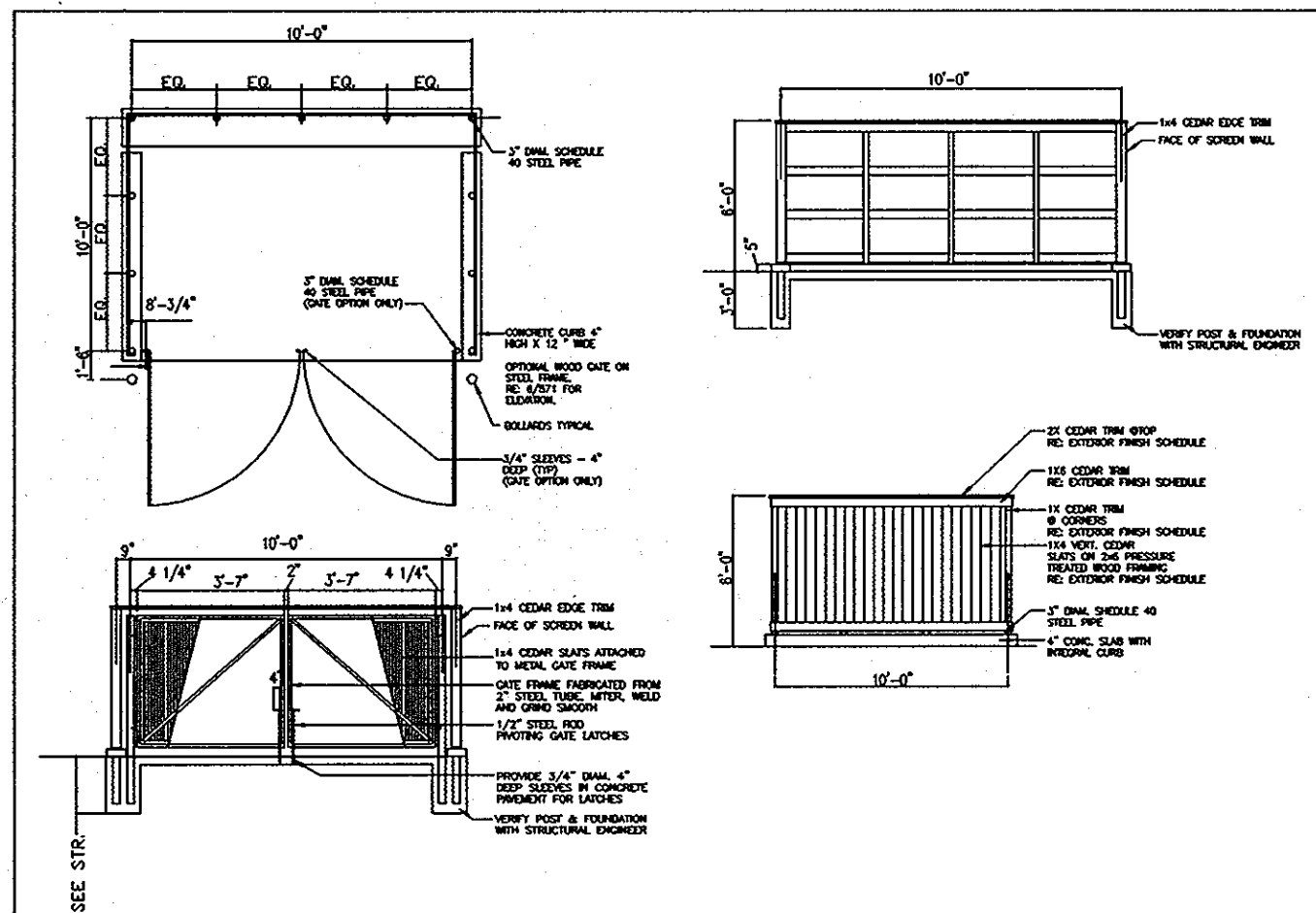
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FOREST CONSERVATION PLAN
ATHOLTON SWIM CLUB
 SWIMMING POOL REPLACEMENT
 TAX MAP 36, GRID 20
 PARCEL 285
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

JW DESIGN SCALE 1" = 40'

JW DRAWN AKA CHECKED SHEET 8 OF 10

4/2008 DATE 094312 PROJ. No. FILE No.



PLANT LIST

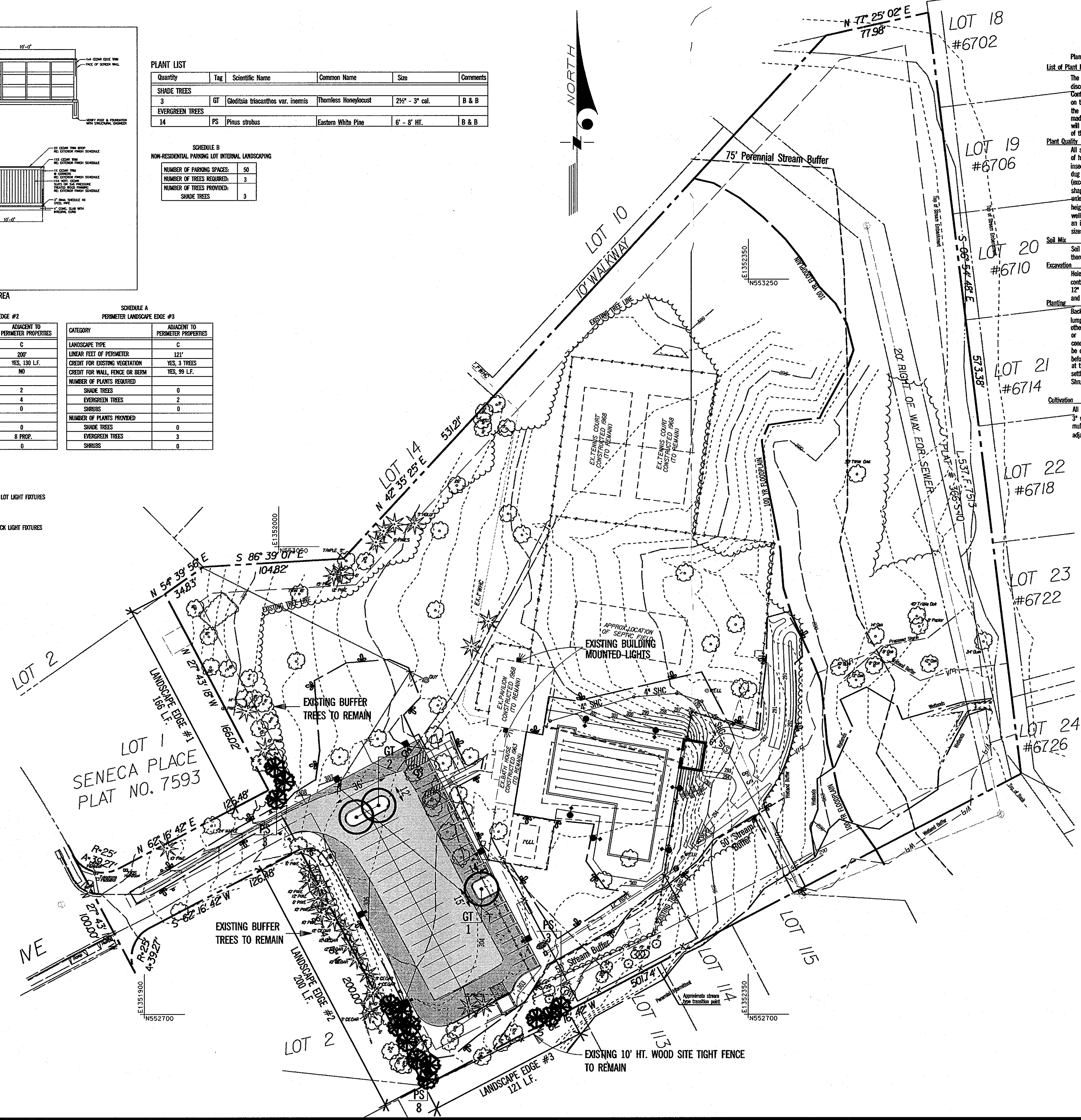
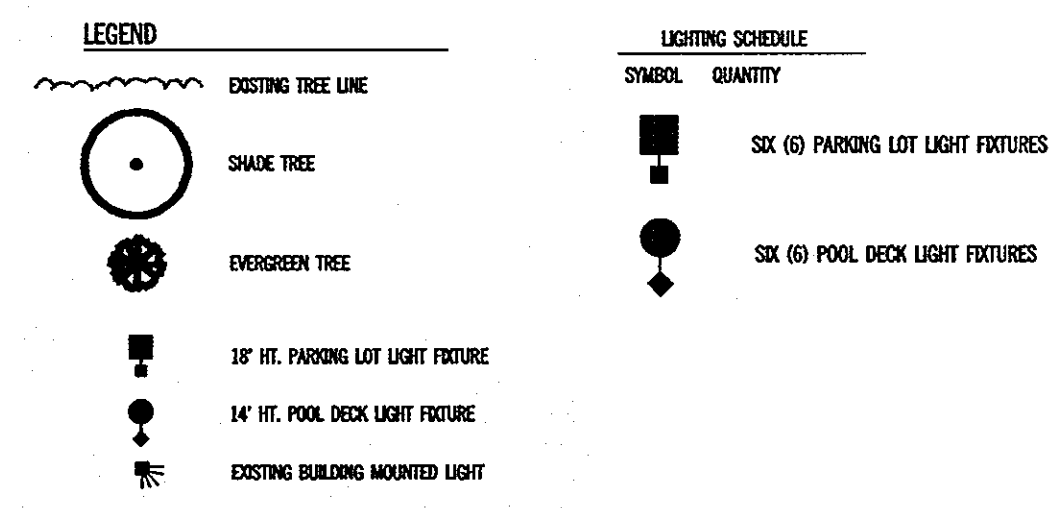
Quantity	Tag	Scientific Name	Common Name	Size	Comments
3	GT	Gleditsia triacanthos var. inermis	Thornless Honeylocust	2 1/2" - 3" cal.	B & B
14	PS	Pinus strobus	Eastern White Pine	6' - 8' HT.	B & B

**SCHEDULE B
NON-RESIDENTIAL PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PARKING SPACES:	50
NUMBER OF TREES REQUIRED:	3
NUMBER OF TREES PROVIDED:	3
SHADE TREES:	3

**SCHEDULE A
PERIMETER LANDSCAPE EDGE #1**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	C	C
LINEAR FEET OF PERIMETER	166'	200'
CREDIT FOR EXISTING VEGETATION	YES, 149 L.F.	YES, 130 L.F.
CREDIT FOR WALL, FENCE OR BERM	NO	NO
NUMBER OF PLANTS REQUIRED		
SHADE TREES	1	2
EVERGREEN TREES	1	4
SHRUBS	0	0
NUMBER OF PLANTS PROVIDED		
SHADE TREES	0	0
EVERGREEN TREES	3 PROP.	8 PROP.
SHRUBS	0	0



SPECIFICATIONS FOR PLANTING

Plant Identification: All plants shall be properly marked for identification.

List of Plant Material:

The Contractor shall verify the plant quantities prior to bidding and any discrepancies shall be brought to the attention of the Landscape Architect. The Contractor shall furnish and plant all plants required to complete the work shown on the drawings. Substitutions shall not be made without the written approval of the Landscape Architect. A written request for plant substitutions shall be made to the ARCHITECT prior to any plant substitutions being made. This Contract will be based on the bidder having verified prior to bidding, the availability of the required plant material as specified on the Plant Materials List.

Plant Quality:

All shrubs shall be dense, heavy to the ground, and well grown, showing evidence of having been sheared regularly, and shall be sound, free of plant disease or insect eggs and shall have a healthy normal root system. Plants shall be freshly dug and not heeled-in stock from cold storage. All plants shall be nursery grown (except as noted below). Plants shall not be pruned prior to delivery. The shape of the plant shall in general conform to its natural growth proportions unless otherwise specified. Trees shall conform to the branching, caliper, and height specifications of the American Association of Nurserymen, and shall have a well-shaped, heavy branch structure for the species. Evergreen trees are to have an internode no greater than 18" and shall be uniformly well shaped. All plant sizes shall average at least the middle of the range given in the plant list.

Soil Mix:

Soil mix will be 2/3 existing soil, 1/3 loam/loam or equal organic material, thoroughly mixed and homogenized.

Excavation:

Holes for all plants shall be 18" larger in diameter than size of ball or container and shall have vertical sides. Hedges shall be planted in a trench 12" wider beds for mass planting shall be entirely retitled to a depth of 8" and shall be 18" beyond the average outside edge of plant balls.

Planting:

Backfilling shall be done with soil mix, reasonably free of stones, subsoil, clay lumps, stumps, roots, weeds, Bermuda grass, filler, toxic substances or any other material which may be harmful to plant growth, or hinder grading, planting, or maintenance operations. Should any unfertile or unsuitable planting conditions arise, such as faulty soil drainage or chemical residues, they should be called to the attention of the Landscape Architect and Owner for adjustment before planting. The plant shall be set plumb and straight and shall be staked at the time of planting. Backfill shall be well worked about the roots and settled by watering. Plants will be planted higher than surrounding grade. Shrubs will be 1" higher and trees will be 3" higher.

Utilization:

All trunks and shrub beds shall be cultivated, edged and mulched to a depth of 3" with fine shredded hardwood bark. The area around isolated plants shall be mulched to at least a 6" greater diameter than that of the hole. Plant beds adjacent to buildings shall be mulched to the building wall.

Maintenance:

The Contractor shall be responsible during the contract and up to the time of acceptance, for keeping the planting and work incidental thereto in good condition, by replanting, plant replacement, watering, weeding, cultivating, pruning and spraying, restaking and cleaning up and by performing all other necessary operations of care for promotion of good plant growth so that all work is in satisfactory condition at time of acceptance, at no additional cost to the Owner.

Fertilizer:

Fertilizer shall be a slow release type contained in polyethylene perforated bags with microsphere holes for controlled feeding such as Easy Grow as manufactured by Specialty Fertilizer, Inc. Box 355, Suffern, New York 10991 or approved equal. The bags shall contain 1 ounce of soluble fertilizer analysis 16-16-16 per unit to last for three years and shall be applied during planting as recommended by the manufacturer. If fertilizer packets are not used the Contractor shall apply granular fertilizer to the soil mix with 10-6-4 analysis at the following rates: Tree Plts., 2-3 lbs. per caliper inch; Shrub Beds, 3-5 lbs. per 100 square feet; Ground Cover, 2-3 lbs. per 100 square feet.

Ground Cover:

All areas of ground cover shall be retitled to a depth of 6". Apply 2" of organic material and rotill until thoroughly mixed. Apply fertilizer as stated above.

Guarantee and Replacement:

All materials shall be unconditionally guaranteed for one year. The Contractor is not responsible for losses or damages caused by mechanical injury or vandalism. Guarantee shall cover both labor and materials. Earth saucers and stakes and guys shall be removed and trees and shrubs mulched to 3" maximum depth with shredded bark just prior to expiration of the one-year guarantee. The owner shall be notified in writing when this work is to occur.

Plant Spacing:

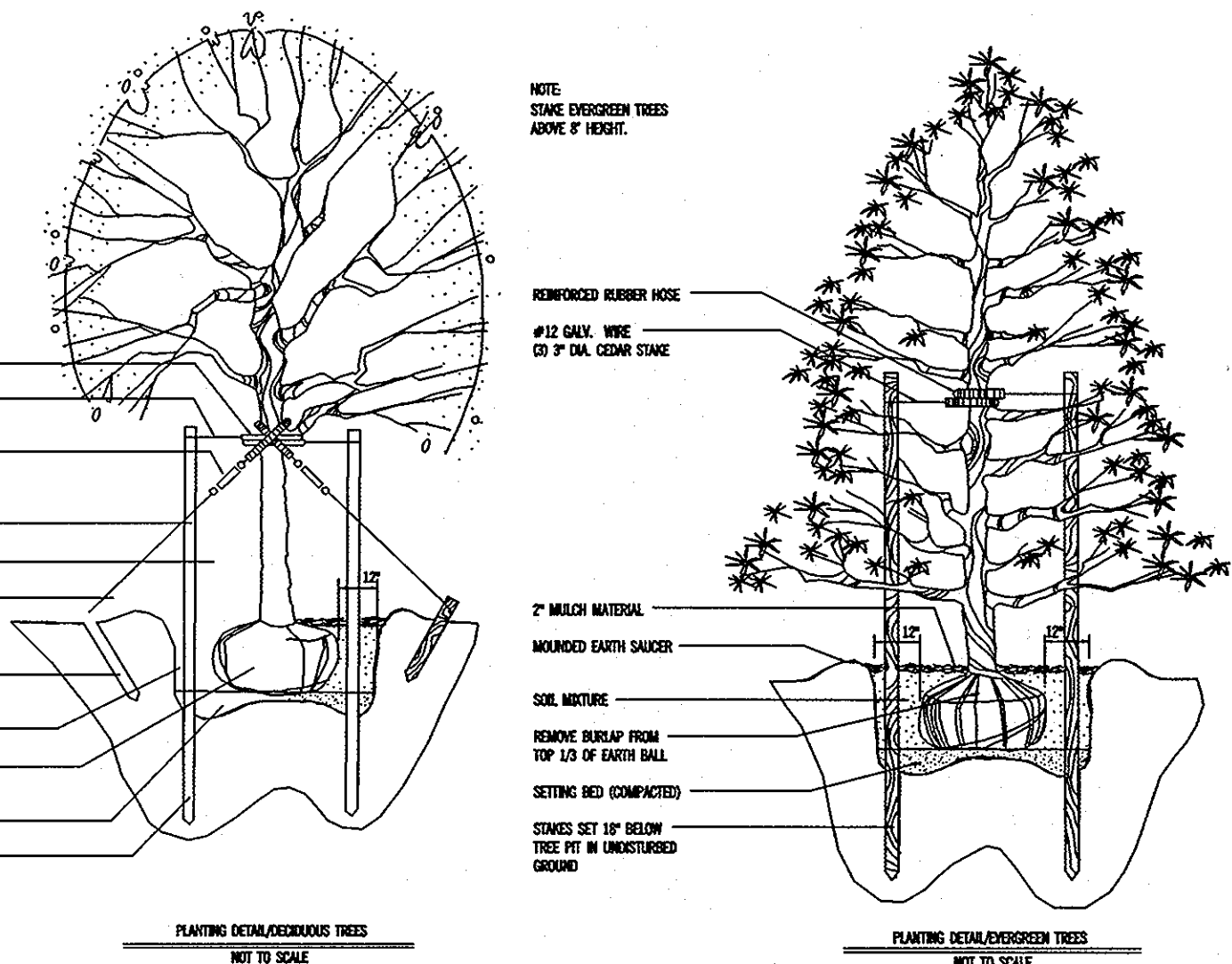
Plant spacing is generally to scale on plan. Shrub spacing is noted in the plant list. No plants except viney ground covers or espaliered material shall be closer than 30" to building, walks or curbs.

At the time of plant installation, all shrubs and trees listed and approved on the Landscape Plan, shall comply with the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning.

Planting and Zoning: Any deviation from the approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or relocations are made to the applicable plans.

The owner, tenants and/or their agents shall be responsible for maintenance of the required landscaping including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

This plan has been prepared in accordance with Section 16.124 of the Howard County Code and the Landscape Manual with 3 shade trees, and 14 evergreen trees provided with landscape surety in the amount of \$3,000 with the Grading Permit.



Developer's/Owner's Landscape Certificate

I/we certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Landscape Manual. I/we further certify that upon completion a Letter of Landscape Installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

John A. Schaffer
John A. Schaffer, President - Atholton Swim Club Inc.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] Date: 11/16/08
Chief, Development Engineering Division

[Signature] Date: 11/21/08
Chief, Division of Land Development

[Signature] Date: 11/24/08
Director

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWER SYSTEMS

[Signature] Date: 11/19/2008
County Health Officer
Howard County Health Department

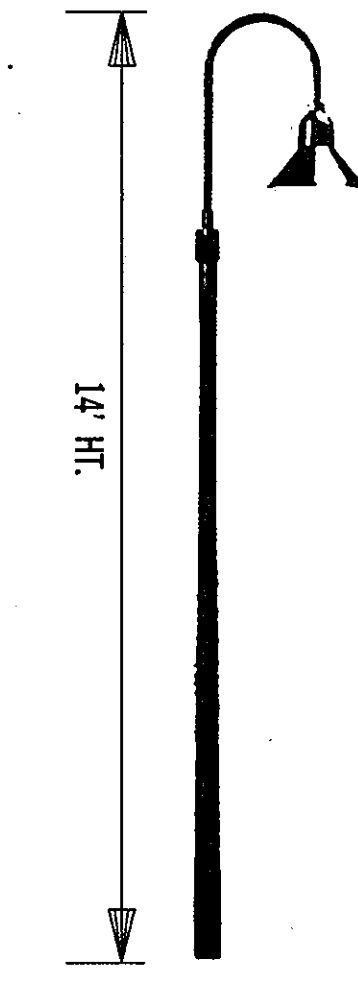
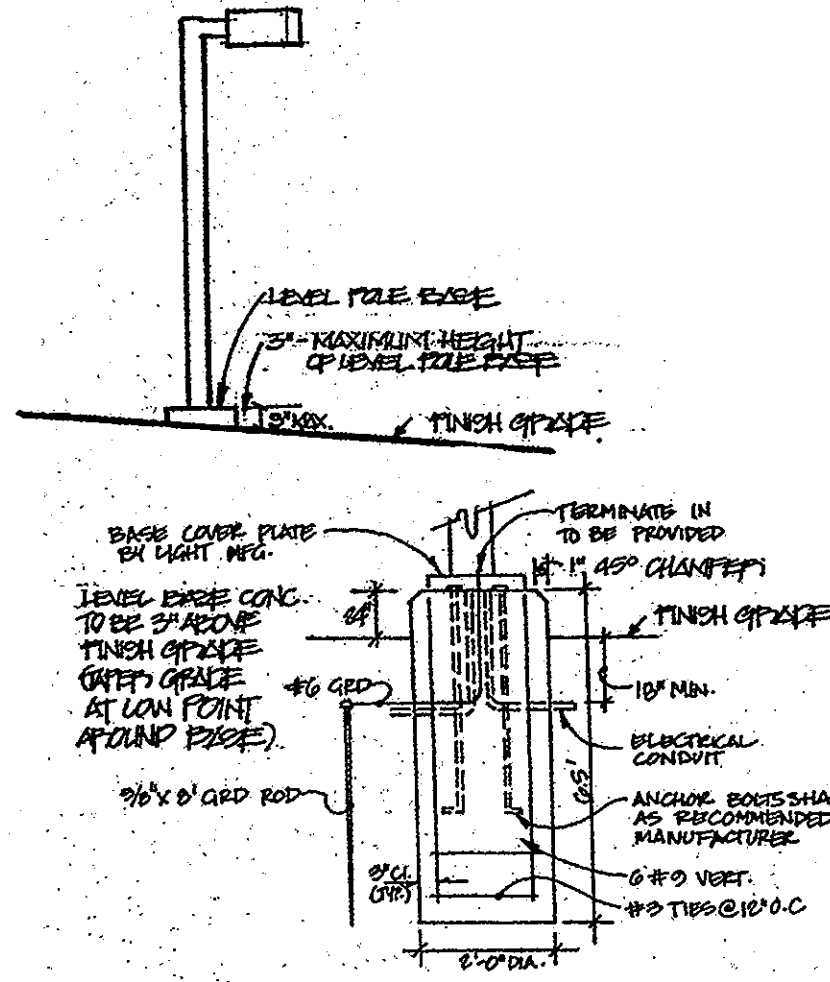
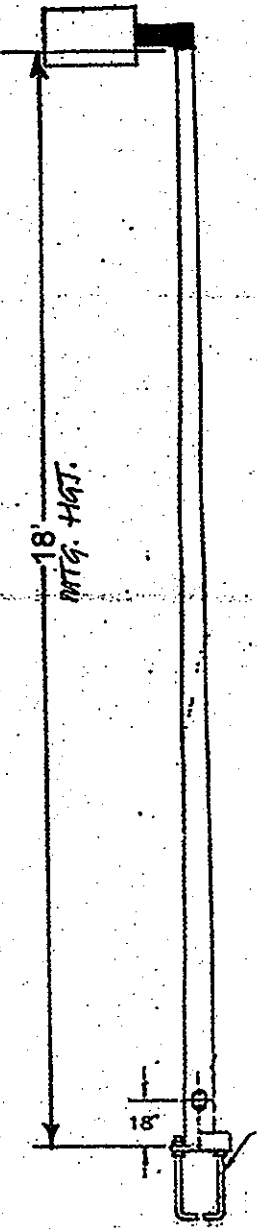
OWNER/DEVELOPER
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CONTACT: MR. JOHN MURPHY
PHONE: (703) 416-8850 X207
FAX: (703) 416-6523

No.	REVISION	DATE	BY

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LANDSCAPE AND LIGHTING PLAN
ATHOLTON SWIM CLUB
SWIMMING POOL REPLACEMENT
TAX MAP 36, GRID 20
PARCEL 285
644th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

CJM DESIGN	SCALE	SCALE: 1" = 40'
CJM	9	OF 10
DRAWN	JLF	AA
CHECKED		
DATE	PROJ. No.	FILE No.



Model #CF6AAGF3ND175HE/HPF510P4A/401-4011-14
 14 FOOT HT., FULL CUTOFF, SEGMENTED SPECULAR
 ALUMINUM INTERNAL CUTOFF REFLECTOR LIGHT SHIELD, 16000 LUMENS
 MANUFACTURER:
 LIGHTOLIER
 9108 GUILFORD RD.
 COLUMBIA, MD 21046
 301-470-2717

WIDE-LITE #AL3P-250-4H-QV-SS-BLK / SSP18-4-11-BLK-D1-DT
 18 FOOT HT., FULL CUTOFF, SHOE-BOX LIGHT SHIELD, 23000 LUMENS

MANUFACTURER:
 LIGHTOLIER
 9108 GUILFORD RD.
 COLUMBIA, MD 21046
 301-470-2717

INTERIOR PARKING LIGHTING
 NTS

NOTE:
 STAKE TREES UNDER 4" CALIBER
 CAN BE REMOVED AT DISCRETION
 PRUNE TREES JUST AFTER CLOSING
 TO REMOVE DROPPING BRANCHES TO PREVENT
 CUT MAIN BRANCHES. IF SIDE
 BRANCHES ARE CUT TO REMOVE
 TREE, MAKE CUTS FLUSH WITH A
 LATERAL BRANCH.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
John D. Williams
 Chief, Development Engineering Division
 Date: 11/10/08
Andy Hansen
 Chief, Division of Land Development
 Date: 11/2/08
Paul D'Agostino
 Director
 Date: 1/6/09

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
William A. Bickelmann
 County Health Officer
 Date: 11/19/2008
 Howard County Health Department

OWNER/DEVELOPER
 ATHOLTON SWIM CLUB, INC.
 P.O. BOX 85
 SIMPSONVILLE, MD 21150
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No.	REVISION	DATE	BY



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 64th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

CJM DESIGN	SCALE: 1" = 40'
CJM	10 OF 10
DRAWN JLF	SHEET
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DATE	PROJ No.