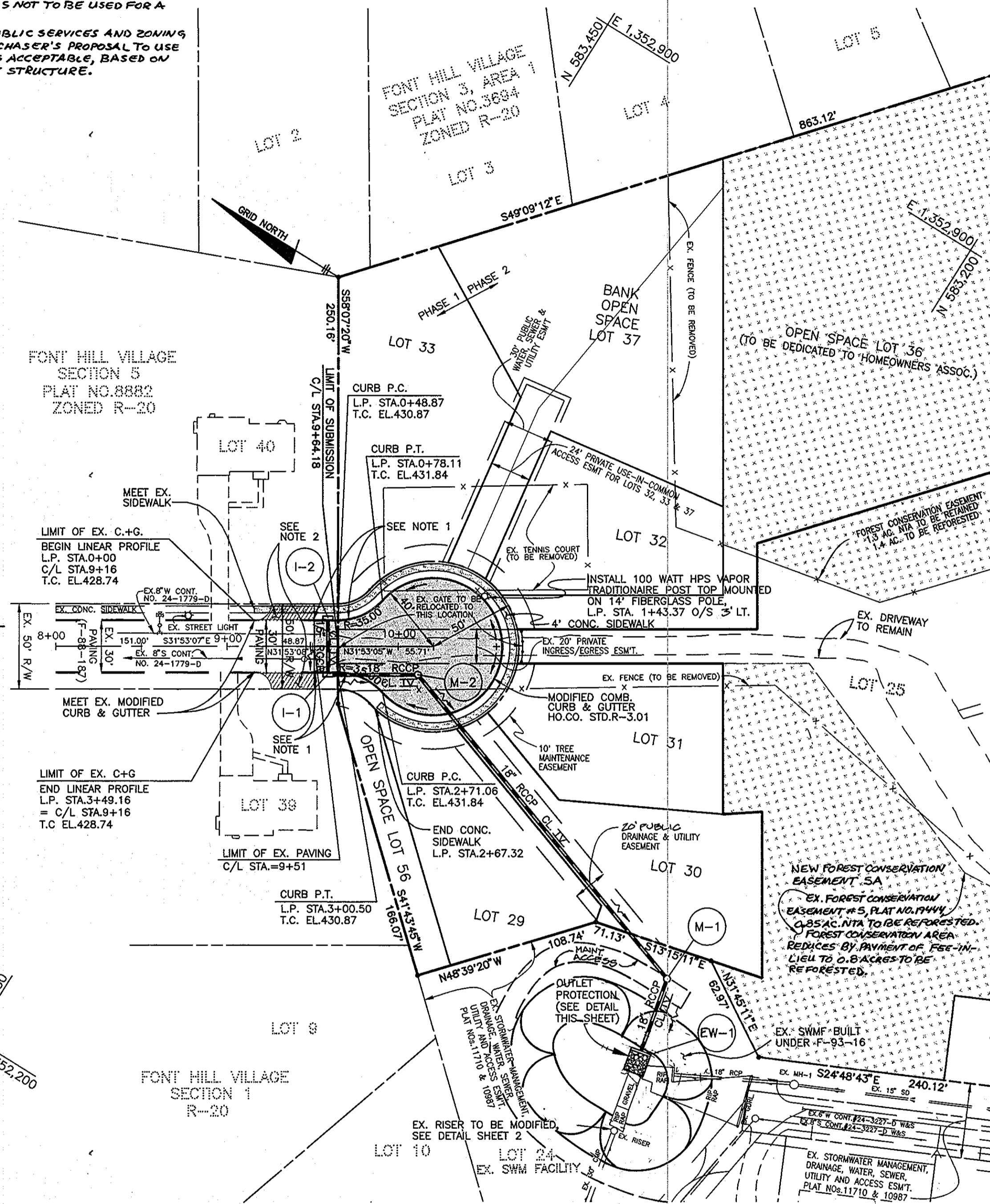


SHEET INDEX	
NO.	DESCRIPTION
1	ROAD PLAN, PROFILE AND DETAILS
2	GRADING/SEDIMENT & EROSION CONTROL/SWM DETAILS
3	SEDIMENT & EROSION CONTROL NOTES AND DETAILS
4	LANDSCAPING/DRAINAGE AREA MAP/STORM DRAIN PROFILE
5	FOREST CONSERVATION PLAN
6	FOREST CONSERVATION DETAILS

GENERAL NOTES CONT. NO. 22

- CONSTRUCT THE BUILDING USING A DESIGN AND MATERIALS APPROPRIATE TO THE HISTORIC SITE.
- APPLY FOR A BUILDING PERMIT TO CONSTRUCT THE ACCESSORY STRUCTURE, INDICATING THAT IT IS NOT TO BE USED FOR A GARAGE.
- VERIFY WITH THE DIVISION OF PUBLIC SERVICES AND ZONING ADMINISTRATION THAT THE PURCHASER'S PROPOSAL TO USE EXISTING STRUCTURE AS A GARAGE IS ACCEPTABLE, BASED ON THE SIZE AND LOCATION OF THAT STRUCTURE.



TIMBERKNOLL LANE  
(PUBLIC ROAD)

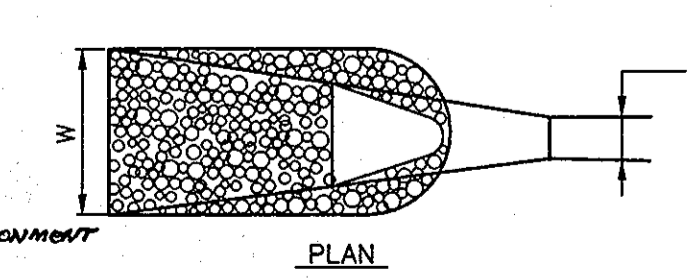
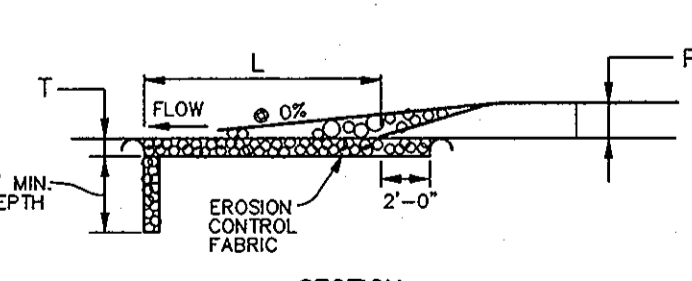
NOTES:

- CURB TRANSITION HO. CO. STD. R-3.05
- REMOVE EXISTING TEE TURN-AROUND AND CONNECT PROPOSED CURB & GUTTER

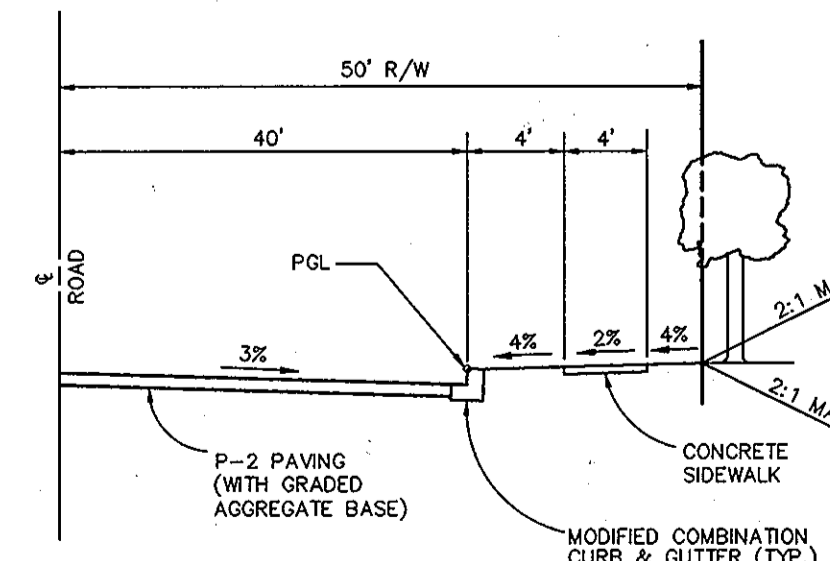
GENERAL NOTES CONT.

- WAIVER PETITION WP-06-056 WAS APPROVED FEBRUARY 2, 2006, TO WAIVE SECTION 16.120(b)(1)(ii)(A) TO ALLOW A LOT LESS THAN 10 ACRES IN SIZE WITH AN EXISTING FOREST CONSERVATION EASEMENT AND ENVIRONMENTAL SETBACK TO REMOVE A PORTION OF THE EXISTING 35 FOOT RECORDED ENVIRONMENTAL SETBACK FROM THE P.C.E. AREA FOR THE PURPOSE OF CONSTRUCTING AN ACCESSORY STRUCTURE AND FOR ENHANCING THE HISTORIC LANDSCAPE CONTEXT OF THE SITE. THIS WAIVER AUTHORIZES THE ABANDONMENT OF 0.03 AC. OF P.C.E. FROM LOT 68 AND REDUCTION OF THE RECORDED 35 FOOT SETBACK AS MEASURED RELATIVE TO RECORDED P.C.E. #5 (AS SHOWN ON THE WAIVER EXHIBIT) TO 10 FEET FOR THE PURPOSE OF CONSTRUCTING A 40 X 40 ACCESSORY BUILDING.
- WITHIN ONE YEAR OF THIS WAIVER APPROVAL, RESUBMIT THE "ORIGINALS ONLY" REQUEST WITH THIS REQUEST PLEASE SUBMIT A PAPER COPY OF THE PLAT EXACTLY AS IT WILL BE SUBMITTED, INCLUDING THE CORRECTED 35-FOOT ENVIRONMENTAL SETBACK AND ALL NOTES APPROPRIATE TO THE PLAT OF RECORD.
- ONCE AUTHORIZATION HAS BEEN GIVEN FROM DEPARTMENT OF PLANNING AND ZONING TO PROCEED WITH "ORIGINALS ONLY" PROCESS, PROCEED WITH THE SUBMISSION OF THE REVISION PLAT TO REDUCE A PORTION OF THE 35-FOOT ENVIRONMENTAL SETBACK TO 10 FEET AND TO ABANDON PORTIONS OF THE FOREST CONSERVATION EASEMENT (C.O.S.A.C.) IN ADDITION, THIS OFFICE STRONGLY RECOMMENDS THAT THE ENTIRE FOREST CONSERVATION EASEMENT LOCATED WITHIN THE REAR WALLED YARD BE ABANDONED AT THE SAME TIME. BE ADVISED THAT THE ABANDONMENT FEE IS \$1,000 PER SQUARE FOOT OF FOREST CONSERVATION EASEMENT ABANDONED. THIS FEE WILL BE COLLECTED CONCURRENTLY WITH THE SUBMISSION OF THE REVISED PLAT OF RECORD.
- CONTACT REAL ESTATE SERVICES TO DETERMINE THE PROCESS FOR AMENDING THE DEED OF FOREST CONSERVATION EASEMENT TO ABANDON PORTIONS OF THE FOREST CONSERVATION EASEMENT.
- CONTACT THE HISTORIC DISTRICT COMMISSION TO DETERMINE WHETHER THE COMMISSION HAS THE AUTHORITY TO REVIEW AND APPROVE THE PROPOSED STRUCTURE.
- LOCATE THE STRUCTURE IN ACCORDANCE WITH THE SETBACKS REQUIRED IN THE R-ED DISTRICT AND PROVIDE APPROPRIATE LANDSCAPE SCREENING FROM ADJACENT LOT 64.

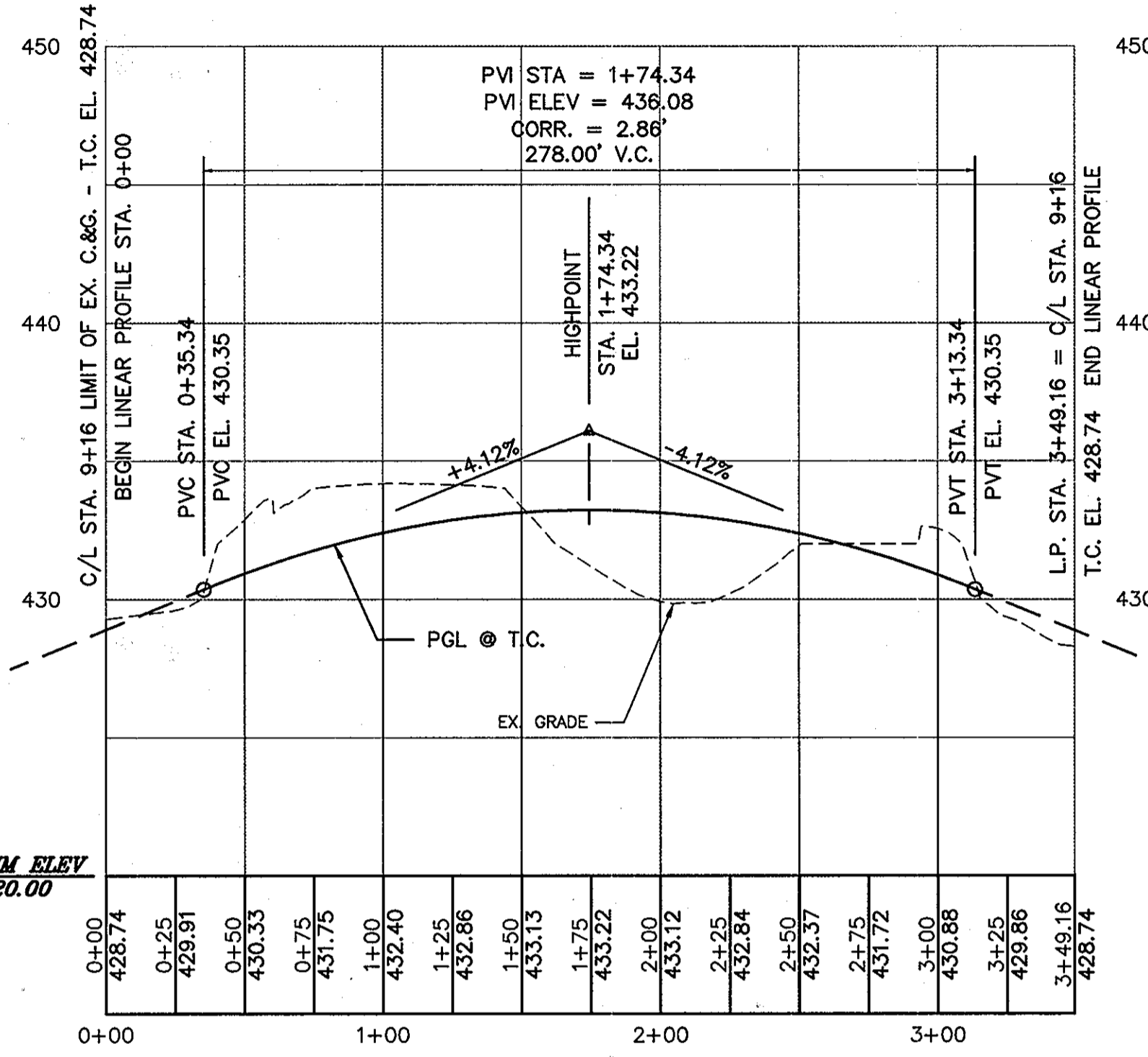
PLAN  
SCALE: 1" = 50'



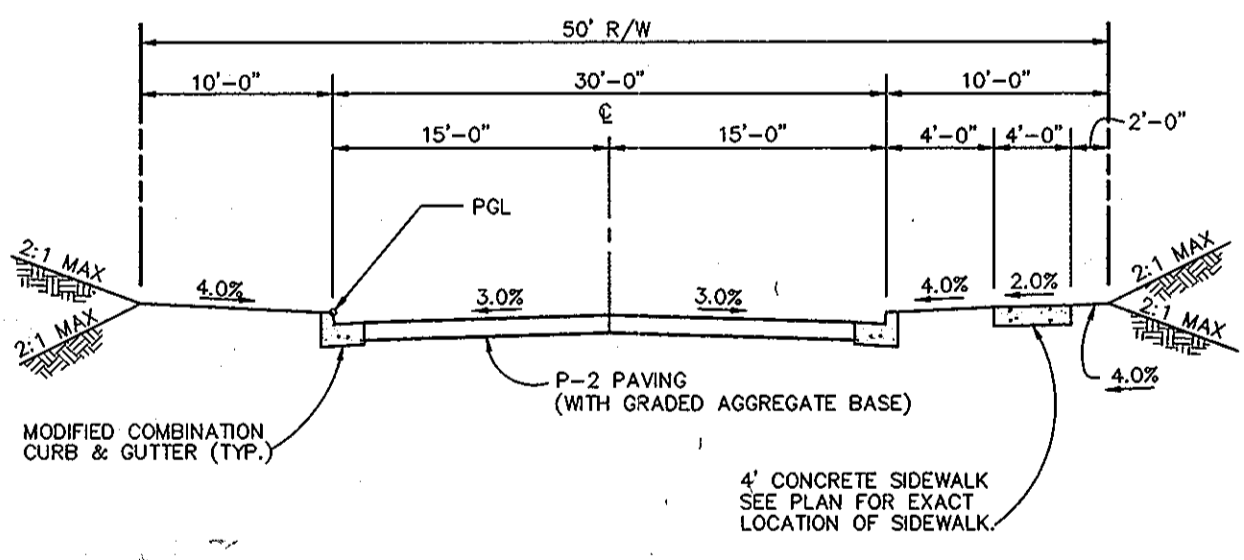
STRUCTURE	4-50	LENGTH (L)	WIDTH (W)	THICKNESS (T)	SHA CLASS
EW-1	0.75'	20.0'	7.0'	1.50'	I



LOCAL ROAD DESIGN SPEED 25MPH  
TIMBERKNOLL LANE  
CUL-DE-SAC BULB  
NOT TO SCALE



LOCAL ROAD DESIGN SPEED 25MPH  
LINEAR PROFILE  
TIMBERKNOLL LANE  
HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 5'



LOCAL ROAD DESIGN SPEED 25MPH  
TYPICAL SECTION FOR  
CUL-DE-SAC STREET  
NOT TO SCALE

**BENCH MARKS**

**VERTICAL CONTROLS**

BM 1 ELEV. 421.82  
X CUT IN TOP OF FH ON SOUTHWEST CORNER OF FARROTT DRIVE & SPRING FIELD DRIVE.

BM 2 ELEV. 405.23  
TOP OF MH NEAR THE NORTHERNMOST CORNER OF LOT 10 FONT HILL MANOR FARM ESTATES.

**HORIZONTAL CONTROLS**

HO. CO. NO. 240B NAD '83 SURVEY DISC SET ON CONC. MONUMENT LOCATED AT THE SOUTHWEST CORNER OF THE ENTRANCE TO CENTENNIAL ELEMENTARY SCHOOL AT THE INTERSECTION WITH CENTENNIAL LANE N-582,098.3273

HO. CO. NO. 240B NAD '83 ALUMINUM CAP SET ON 3/4" REBAR SET FLUSH WITH GROUND LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION BETWEEN CENTENNIAL LANE & OLD ANNAPOLIS ROAD N-579,069.4623 E-1,350,441.8549

**VICINITY MAP**  
SCALE: 1" = 2000'

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST 24 HOURS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- PROJECT BACKGROUND:  
LOCATION: TAX MAP 24 - PARCEL 725  
ZONING: R-ED  
TOTAL TRACT AREA: 13.79 AC.  
TOTAL NUMBER OF PROPOSED LOTS: 27 BUILDABLE, 3 OPEN SPACE (PHASE 1 - 7 BUILDABLE, 3 OPEN SPACE) (PHASE 2 - 20 BUILDABLE)DATE PRELIMINARY PLAN APPROVED: 12/97  
DPZ REFERENCE # : S-97-02, P-93-07, P-92-12, F-93-16, F-95-147, S-96-21, F-97-150, PB-310, P-98-07, WP-97-109
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT 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.
- TOPOGRAPHY TAKEN FROM FIELD RUN SURVEY BY JOHN MELLEMA, INC. AT A 2' INTERVAL ON/OR ABOUT MAY, 1992.
- HORIZONTAL DATUM FOR THIS PROJECT IS NAD 83 AS PROJECTED FROM HOWARD COUNTY GEODETIC CONTROL STATIONS NO.240B AND NO.240B; VERTICAL CONTROL PROVIDED BY BM1 & BM2.
- ALL ROAD FILLS SHALL BE COMPACTED TO 95% AS DETERMINED BY AASHTO T-180.
- ALL SIDEWALKS AND SIDEWALK RAMPS SHALL BE IN CONFORMANCE WITH CURRENT ADA CRITERIA.
- WATER AND SEWER FOR THIS SUBDIVISION IS PUBLIC. DRAINAGE AREA IS 108 PUMP STATION, CONTRACT NO. 24-3853-D.
- TRAFFIC STUDY COMPILED BY LEE CUNNINGHAM & ASSOC., INC. DATED JULY 1995.
- NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- EXISTING UTILITIES WERE LOCATED BY RECORD DRAWINGS AND/OR FIELD RUN SURVEY BY TSA GROUP, INC. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
- UNLESS NOTED AS "PRIVATE" ALL EASEMENTS ARE PUBLIC.
- STORMWATER MANAGEMENT SHALL BE PROVIDED BY THE EXISTING FACILITY CONSTRUCTED UNDER F-93-16.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN WETLANDS, WETLANDS BUFFERS, STREAM BUFFERS OR FOREST CONSERVATION AREAS.
- FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- PLANNING BOARD CASE NO. PB-310 WAS APPROVED IN ACCORDANCE WITH THE DECISION AND ORDER DATED MARCH 13, 1997 TO APPROVE A SKETCH PLAN IN AN R-ED ZONING DISTRICT.
- WP-97-109 WAS APPROVED APRIL 25, 1997 TO WAIVE SECTION 16.144(g) REQUIRING A SKETCH PLAN; SECTION 16.144(f) REQUIRING A PRELIMINARY PLAN; AND SECTION 16.121(g)(6) REQUIRING 25% OPEN SPACE FOR THE RECORDING OF THE SUBDIVISION PLAT SUBMITTED AS F-97-150.
- STREET LIGHTS PLACEMENT AND TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY THE "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE, 1993)", WHICH DETERMINED HORIZONTAL AND LONGITUDINAL PLACEMENT. A MINIMUM SPACING OF 20 FEET SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THE 0.59 ACRES OF THE FOREST CONSERVATION EASEMENT ABANDONED PER PLAT 19444 WERE REFORESTATION AREAS THAT WERE NOT YET PLANTED. AN ABANDONMENT FEE OF \$1.00 PER S.F. OR \$25,700 HAS BEEN PAID TO THE FOREST CONSERVATION FUND, ACCOUNT NO. 810-028-4206. ADDITIONALLY 7.51 S.F. OF FOREST CONSERVATION EASEMENT ABANDONED PER PLAT 19444 WERE REFORESTATION AREAS THAT WERE NOT YET PLANTED. AN ABANDONMENT FEE OF \$1.00 PER S.F. OR \$938.75 WILL BE PAID TO THE FOREST CONSERVATION FUND, ACCOUNT NO. 810-028-4206.

**STRUCTURE SCHEDULE**

NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP EL.	HO. CO. STD.
I-1	A-5 INLET	15.43' RT. C/L STA 9+58.94	423.26	423.06	430.91	SD-4.01 or SD-4.40
I-2	A-5 INLET	15.43' LT. C/L STA 9+58.94	-	423.06	430.91	SD-4.01 or SD-4.40
MH-2	STD. MH	17' RT. C/L STA 10+11.47	422.49	422.29	432.00	G-5.01 or G-5.12
MH-1	STD. MH	N 583.124 E 1,352.243	411.25	411.05	416.40	G-5.01 or G-5.12
EW-1	TYPE "C" ENHANCED	N 583.108 E 1,352.409	405.50	405.50	410.40	G-5.01 or G-5.12

**CENTERLINE CONTROL DATA**

DESCRIPTION	C/L STATION	NORTH	EAST
TIMBERKNOLL LANE	Ex. 9+16	583,432.1833	1,352,481.4102
INT. @ P/L	9+42.16	583,390.7384	1,352,507.1927
CENTER OF CUL-DE-SAC	10+20.57	583,343.3909	1,352,536.6467

**STREET LIGHT SCHEDULE**

STREET NAME	STATION	OFFSET	NOTES
TIMBERKNOLL LANE	1+43.34 L.P.	3' LEFT	100 WATT TRADITIONAL

NO.	DATE	REVISION
1	7-28-09	ADD GENERAL NOTES 21 & 22

**TSA GROUP, INC.**  
planning • architecture • engineering • surveying  
8460 Baltimore National Pike • Ellicott City, Maryland 21043 • (410)465-8105

**OWNER:** TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLCOTT CITY, MARYLAND  
21041-1447

**DEVELOPER:** TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLCOTT CITY, MARYLAND  
21041-1447

**DESIGNER:** DAM DRN: MCR

**PROJECT:** FONT HILL MANOR FARM ESTATES  
SECTION 2, PHASE 1  
A RESUB. OF LOTS 26 & 27 SECTION 2 RECORDED AS PLAT NO. 12986  
LOCATION: BLOCKS 8 & 14  
TAX MAP 24 - PARCEL 725  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**TITLE:** ROAD PLAN, PROFILE, AND DETAILS - PHASE 1  
WP-06-056, S-97-02, P-93-07, P-92-12, F-93-16, F-95-147, F-97-150, P-98-07, P-98-07, WP-97-109

**DATE:** FEBRUARY, 1998  
JULY 24, 1998

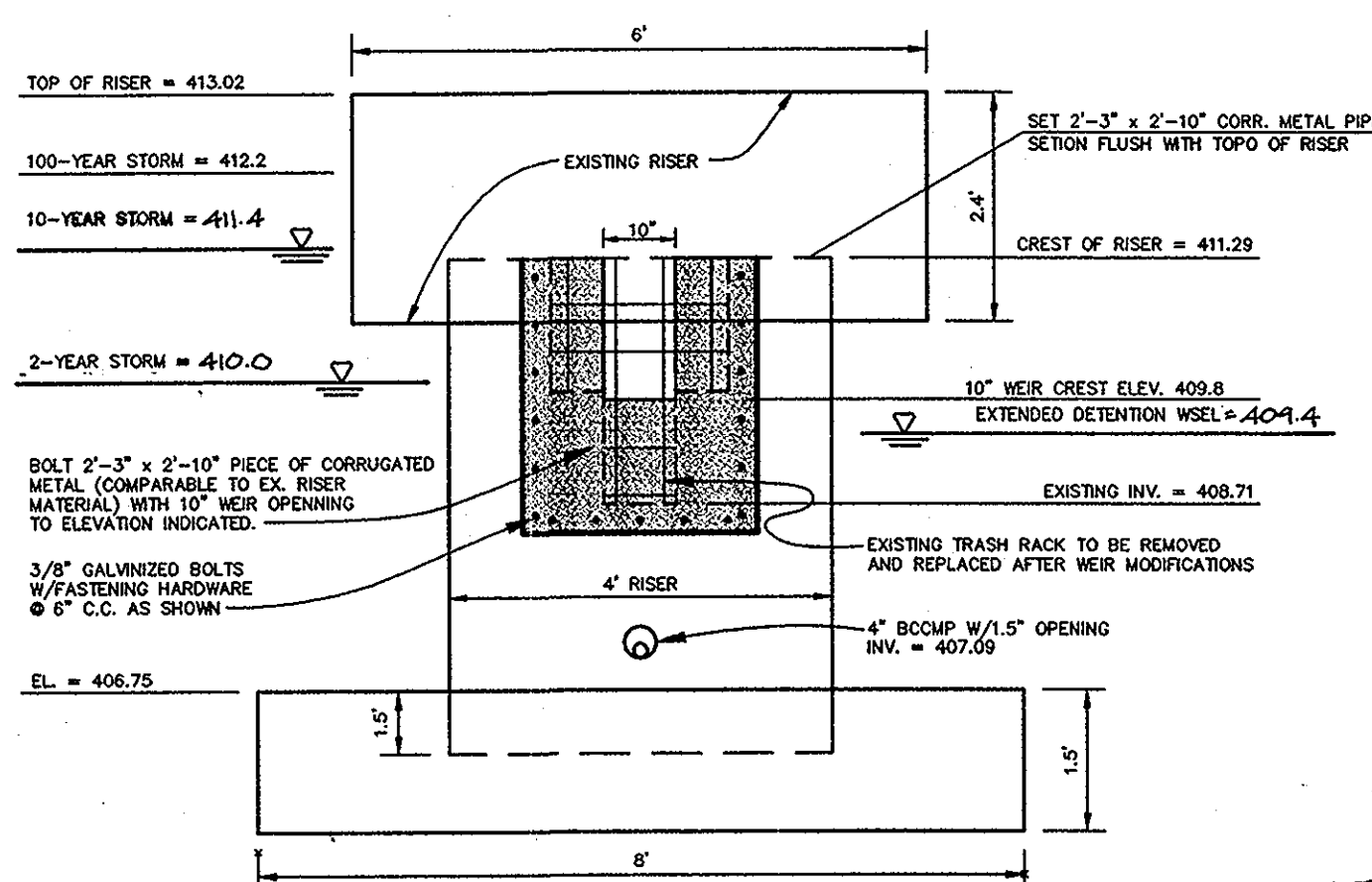
**PROJECT NO.:** 1070

**SCALE:** AS SHOWN

**DRAWING NO.:** 1 OF 6

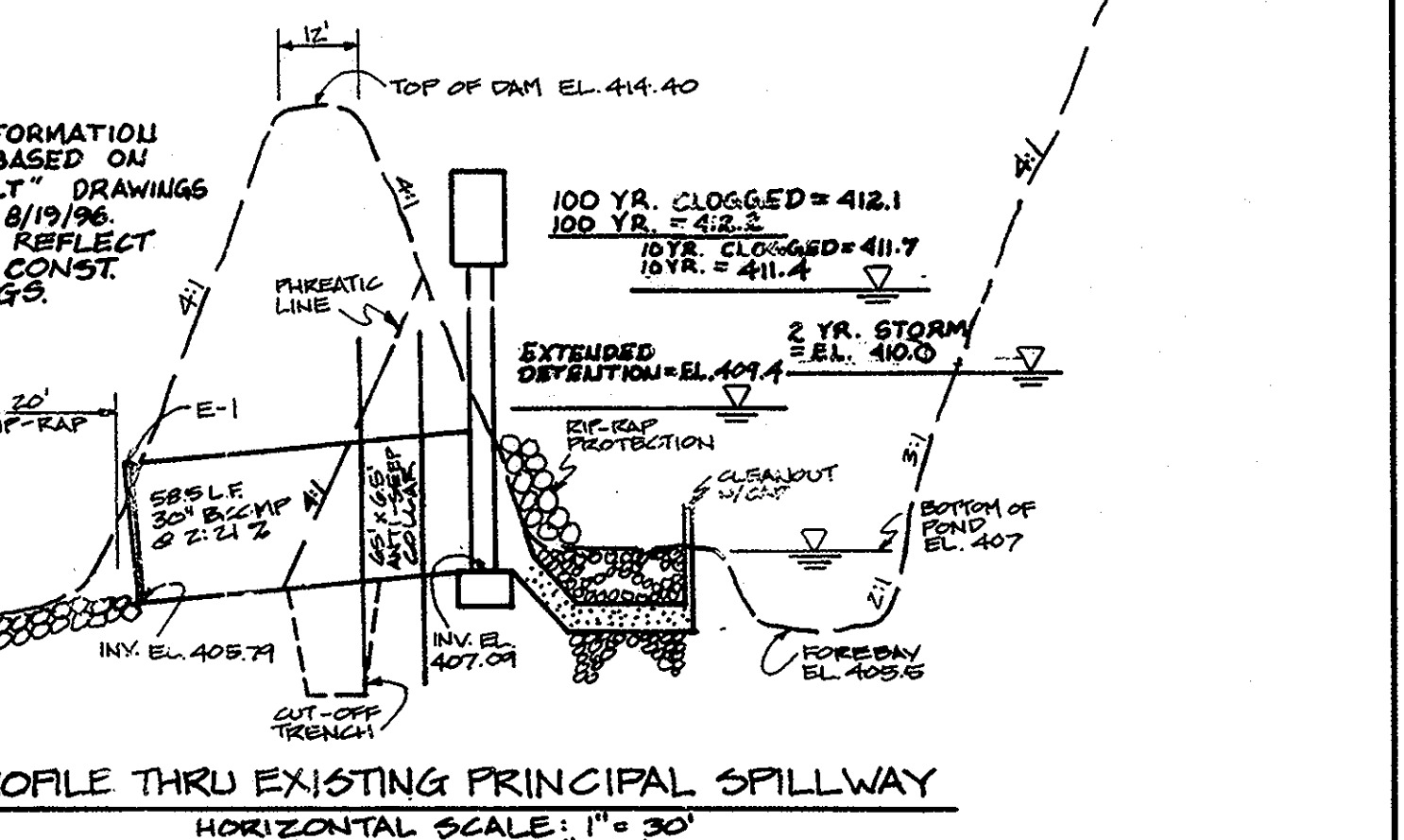
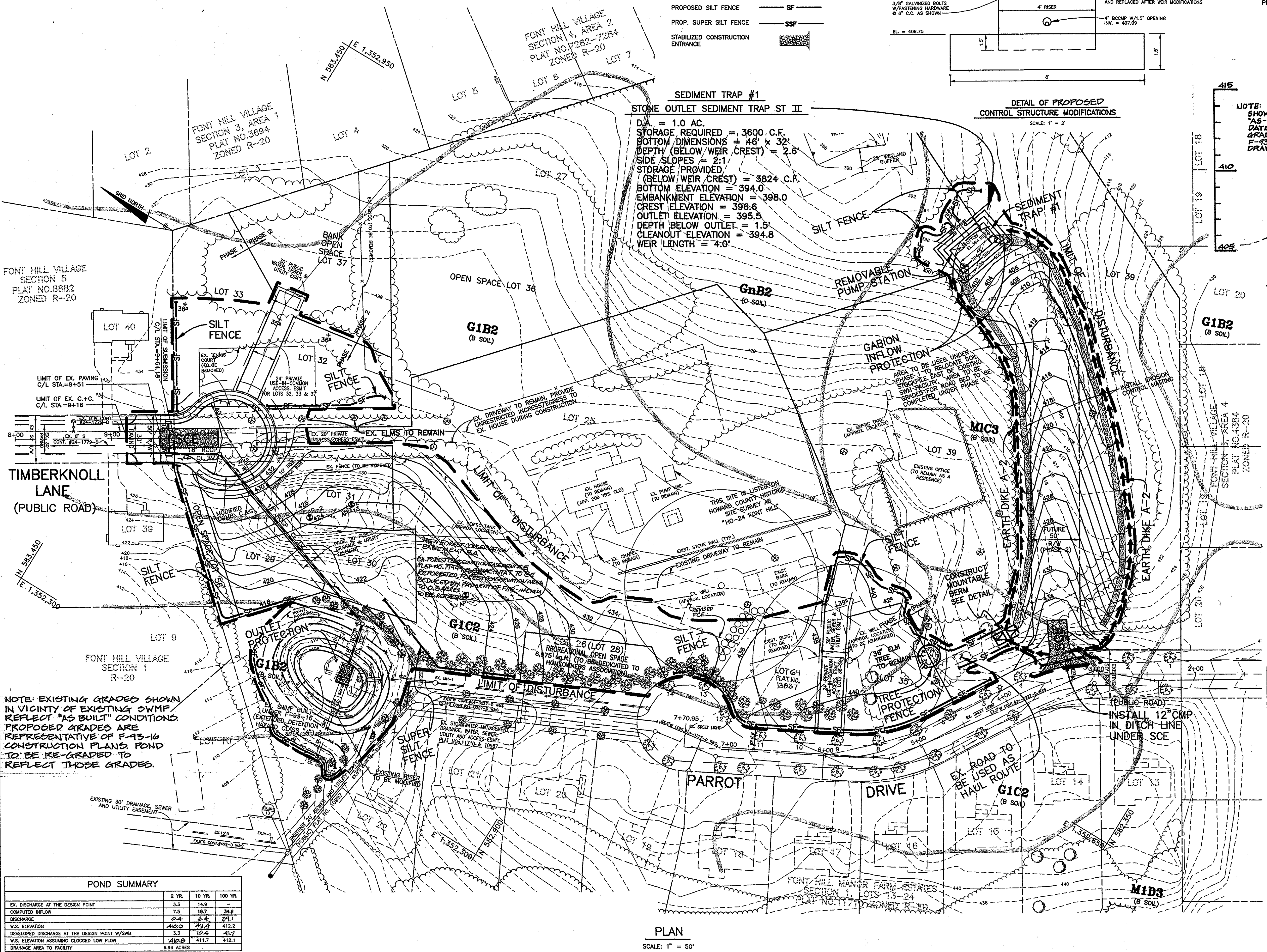
SOILS LEGEND		
MAP SYMBOL	SOIL TYPE	MAPPING UNIT
G1B2	B	GLENNVILLE LOAM - 3 TO 8 PERCENT SLOPES - MODERATELY ERODED
GnB2	C	GLENNVILLE SILT LOAM - 3 TO 6 PERCENT SLOPES - MODERATELY ERODED
GnC2	B	GLENNVILLE LOAM - 8 TO 15 PERCENT SLOPES - MODERATELY ERODED
MnS3	B	MANOR LOAM - 8 TO 15 PERCENT SLOPES - SEVERELY ERODED
MnS3	B	MANOR LOAM - 15 TO 25 PERCENT SLOPES - SEVERELY ERODED

- ### SEQUENCE OF CONSTRUCTION
- NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION**
- DAY 1** 1.) OBTAIN GRADING PERMIT.
- DAY 2-32** 2.) INSTALL STABILIZED CONSTRUCTION ENTRANCES, TREE PROTECTION FENCES, CLEAR AND GRUB AS REQUIRED TO INSTALL SEDIMENT CONTROL DEVICES AND INSTALL OR CONSTRUCT DEVICES, MASS GRADE SITE AND PROVIDE TEMPORARY STABILIZATION TO ALL DISTURBED AREAS.
- DAY 33-64** 3.) CONSTRUCT UTILITIES AND STORM DRAIN SYSTEM, CONSTRUCT TIMBERKNOLL LANE CUL-DE-SAC AND DRIVEWAY APPROX ON PARROT DRIVE (SEE DETAIL FOR ELEVATIONS AND GRADING DETAILS). THIS SHEET SHALL BE USED IN CONJUNCTION WITH SHEET 129-21 (SEE SHEET 129-21 FOR DETAILS OF PARROT DRIVE AND SILENT HILLS DRIVE).
- DAY 65-72** 4.) WITH THE APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND PERMANENTLY STABILIZE ALL DISTURBED AREAS.
- NOTE:** SEDIMENT CONTROL LOCATION AND IMPLEMENTATION SHOWN ON THESE PLANS IS SUBJECT TO REVISION IN THE FIELD AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR.
- ### LEGEND
- EXISTING CONTOURS - 999 -
  - PROPOSED CONTOURS - 999 -
  - LIMIT OF WETLANDS - - - - -
  - EXISTING WOODS LINE - - - - -
  - PROPOSED WOODS LINE - - - - -
  - EXISTING STRUCTURE - [Symbol]
  - PROPOSED EARTH DIKE - [Symbol]
  - LIMIT OF DISTURBANCE - [Symbol]
  - PROPOSED SILT FENCE - [Symbol]
  - PROP. SUPER SILT FENCE - [Symbol]
  - STABILIZED CONSTRUCTION ENTRANCE - [Symbol]



**NOTE: STOCKPILED MATERIALS FOR ROADWAYS**

THE MATERIALS ENCOUNTERED IN THE AREA OF AP-1 AND AP-2 APPEAR TO BE SUITABLE FOR USE IN THE PROPOSED ROADWAYS. THE MATERIALS ENCOUNTERED FROM A DEPTH OF 14.5 FT. TO 26.5 FT. HOWEVER, DO NOT MEET HOWARD COUNTY SPECIFICATIONS (PH-10) FOR THE TOP 2 FT. OF PAVEMENT SUBGRADE. THEREFORE, THESE SOILS SHOULD NOT BE USED IN THE UPPER 2 FT. OF PAVEMENT AREAS. IN ADDITION, IT SHOULD BE NOTED THAT TRACE AMOUNTS OF FINE ROOTS WERE ENCOUNTERED AT THESE TESTED LOCATIONS. THEREFORE, IT SHOULD BE ANTICIPATED THAT AT LEAST TRACE AMOUNTS OF FINE ROOTS WILL BE ENCOUNTERED AT OTHER LOCATIONS WITHIN THIS STOCKPILE. IN ADDITION, COBBLES AND SMALL BOULDERS WERE EVIDENT ON THE TOP OF THE STOCKPILE AND AT THE TOE OF THE SLOPES. IT SHOULD BE EXPECTED THAT THESE MATERIALS MAY BE ENCOUNTERED WITHIN THE STOCKPILE. A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE SHOULD BE ON-SITE TO EXAMINE THE STOCKPILED MATERIALS DURING EXCAVATION IN ORDER TO DETERMINE THEIR SUITABILITY FOR ROADWAY CONSTRUCTION. ALL MATERIALS WITH LARGE AMOUNTS OF SOIL, ROOTS, OR LARGE DIAMETER ROCKS WILL NOT BE SUITABLE FOR USE AS STRUCTURAL FILL. THE STOCKPILE IN THE AREA OF BORING AP-3 CONSISTED OF TOPSOIL TO A DEPTH OF APPROXIMATELY 16 FT. THESE MATERIALS WILL NOT BE SUITABLE FOR ROADWAY CONSTRUCTION. A REVIEW OF THE SITE BORINGS REVEALED A LAYER OF SC MATERIAL IN THE NORTHERN MOST STOCKPILE (BORING AP-2). THIS MATERIAL MAY BE SUITABLE AS CORE OR CUT-OFF TRENCH MATERIALS (FOR PHASE 2 STORMWATER MANAGEMENT FACILITY EMBANKMENT CONSTRUCTION) DEPENDING ON THE AMOUNT OF SAND IN THE MATERIAL ONCE IT HAS BEEN CUT FROM THE FILE.



**BY THE DEVELOPER:**  
I/CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION-BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Joseph G. ...* 3/19/98 DATE

**BY THE ENGINEER:**  
I/CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
*Donald Mason* 2/3/98 DATE  
ENGINEER

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Cheryl Simmons* 2/3/1998 DATE  
NATURAL RESOURCES CONSERVATION SERVICE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*John R. Robertson* 2/3/1998 DATE  
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Andrew M. Dwyer* 2/2/98 DATE  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*John Simmons* 10/14/98 DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Andy Hamilton* 1/16/98 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

NO	DATE	REVISION
1	7-28-09	REV LOT 34 TO 64 PER PLAT #13837; REV. F.C.E. PER EXISTING CONDITIONS

TSA GROUP, INC.  
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8480 Baltimore National Pike • Elliott City, Maryland 21043 • (410)685-8105

OWNER: TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLICOTT CITY, MARYLAND  
21041-1447

PROJECT: FONT HILL MANOR FARM ESTATES  
SECTION 2, PHASE 1  
A RESUB. OF LOTS 26 & 27 SECTION 2 RECORDED AS PLAT NO. 12988  
LOCATION: BLOCKS 8 & 14  
TAX MAP 24 - PARCEL 725  
2ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

DEVELOPER: TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLICOTT CITY, MARYLAND  
21041-1447

TITLE: GRADING, SEDIMENT & EROSION CONTROL PLAN AND S&M DETAILS - PH. 1  
DATE: FEBRUARY 1998  
SCALE: AS SHOWN

DES: DAM DRN: MCR PROJECT NO. 1070  
DRAWING 2 OF 6

	2 YR.	10 YR.	100 YR.
EX. DISCHARGE AT THE DESIGN POINT	3.3	14.9	-
COMPUTED INFLOW	7.5	19.7	34.9
DISCHARGE	0.4	6.4	24.1
W.S. ELEVATION	408.0	412.4	412.9
DEVELOPED DISCHARGE AT THE DESIGN POINT W/WW	3.3	12.4	41.7
W.S. ELEVATION ASSUMING CLOGGED LOW FLOW	412.8	411.7	412.1
DRAINAGE AREA TO FACILITY	6.96 ACRES		

PLAN  
SCALE: 1" = 50'

Plotted: MAY 28, 1998  
Acad Dwg: 70260151

**SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). 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: 13.79 ACRES  
TOTAL AREA DISTURBED: 4.24 ACRES  
AREA TO BE ROOFED OR PAVED: 0.14 ACRES  
AREA TO BE VEGETATIVELY STABILIZED: 4.10 ACRES  
TOTAL CUT: 10.470 CU. YDS.  
TOTAL FILL: 10.470 CU. YDS.  
OFFSITE WASTE 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 CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER 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 ARE LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

**TEMPORARY SEEDBED PREPARATION**

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

SEEDING: FOR PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (0.7 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 216 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FT. OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**PERMANENT SEEDBED PREPARATION**

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ON OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 216 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL**

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

- Conditions Where Practice Applies**
- This practice is limited to areas having 2:1 or flatter slopes where:
    - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
    - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
    - The original soil to be vegetated contains material toxic to plant growth.
    - The soil is so acidic that treatment with limestone is not feasible. II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

**Construction and Material Specifications**

- 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 1/2" 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 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 20.0 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:
    - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
    - Organic content of topsoil shall be not less than 1.5 percent by weight.
    - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
  - No 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.
- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

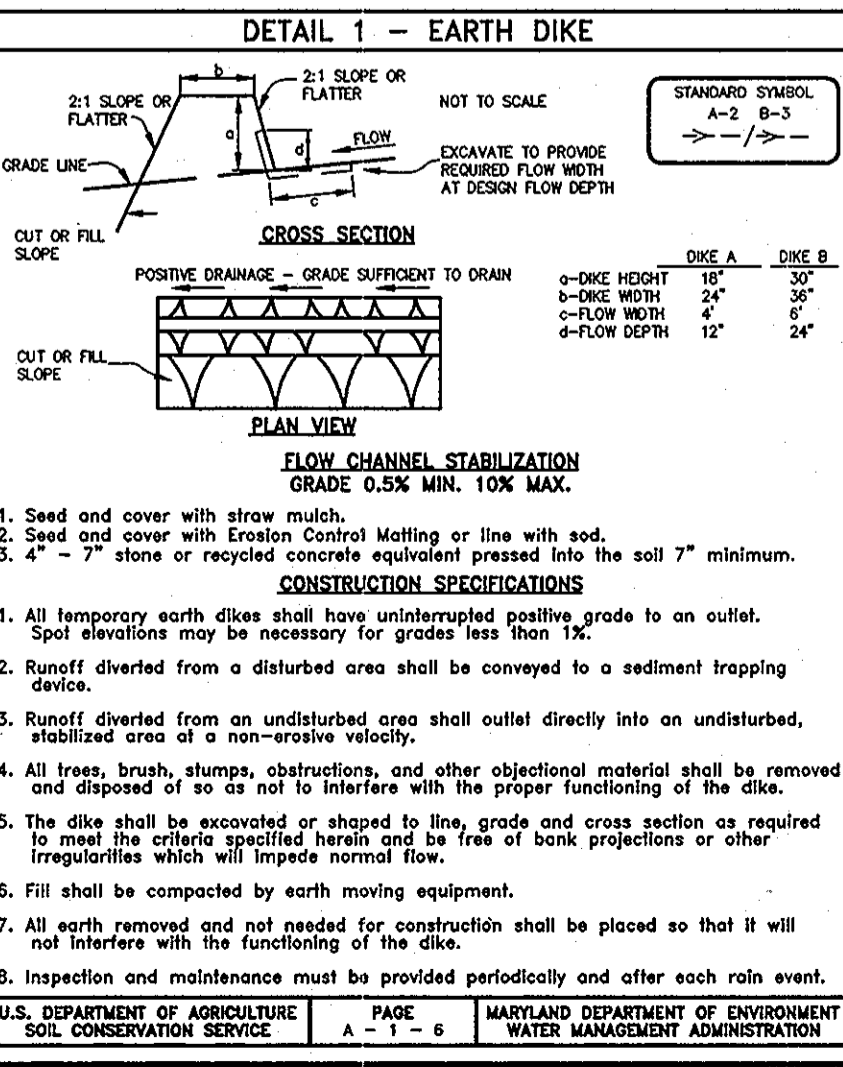
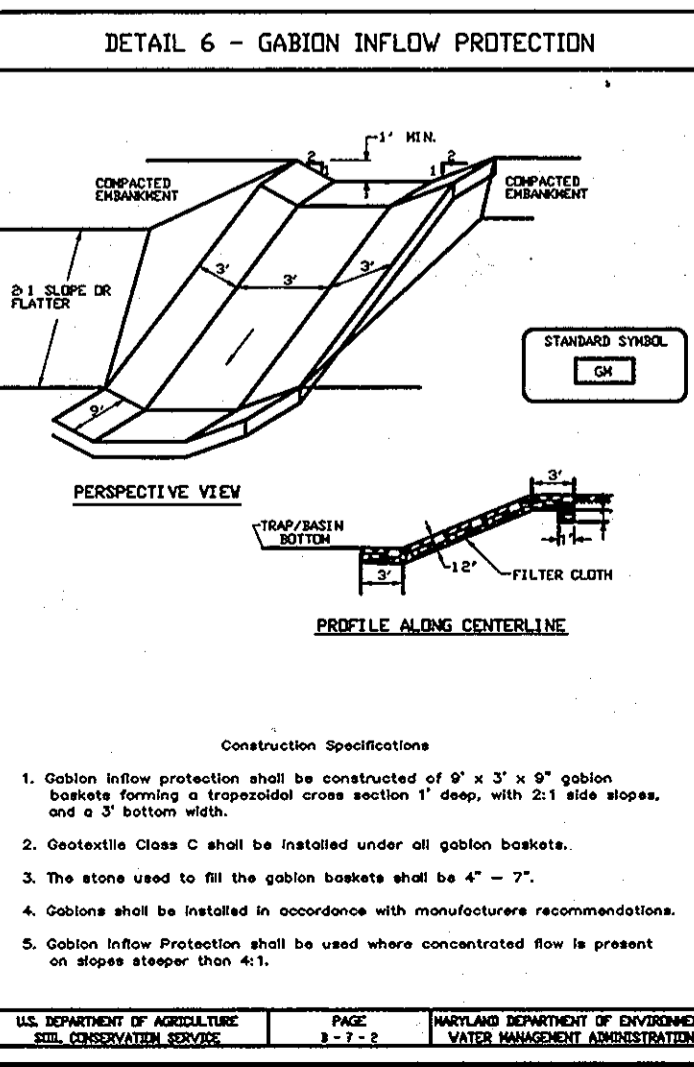
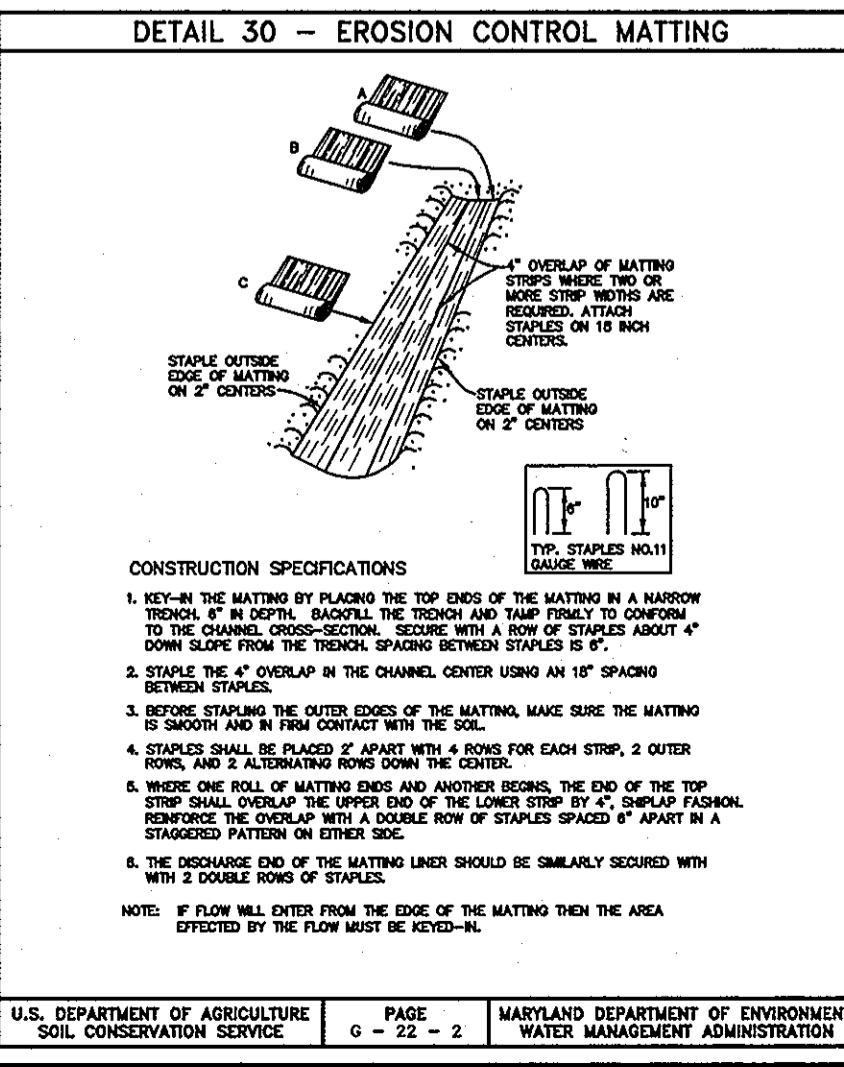
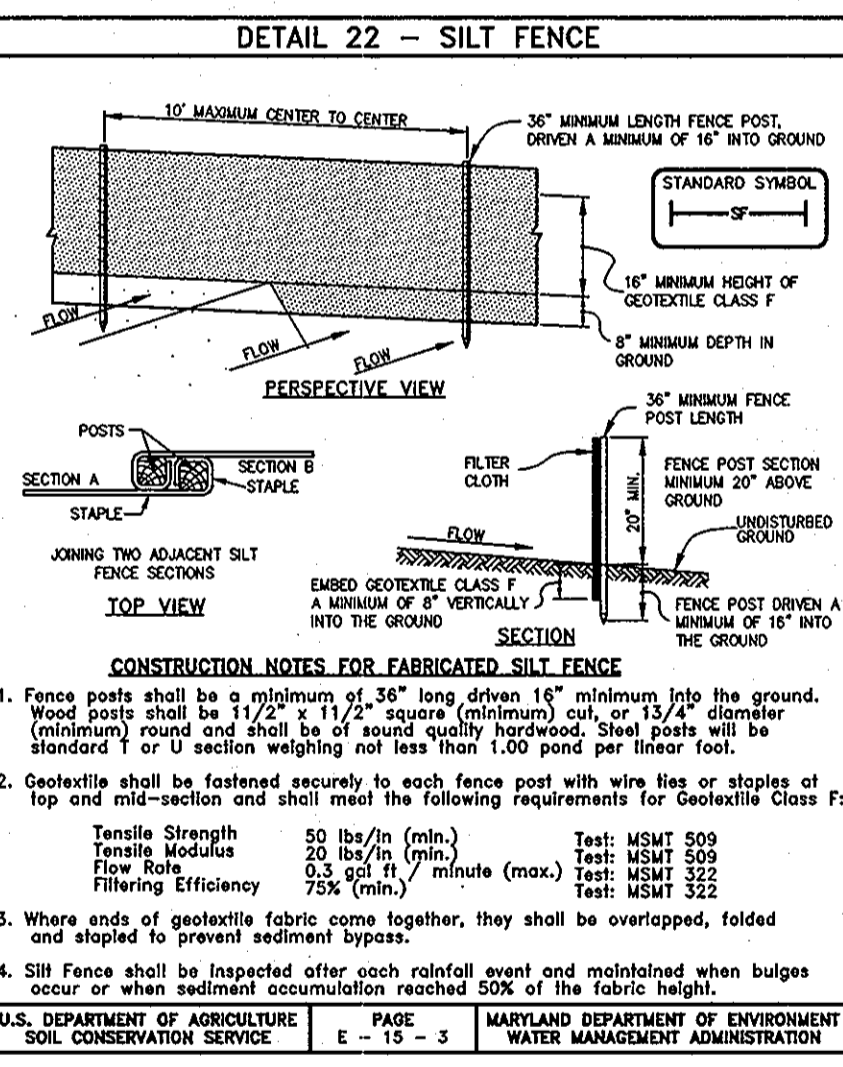
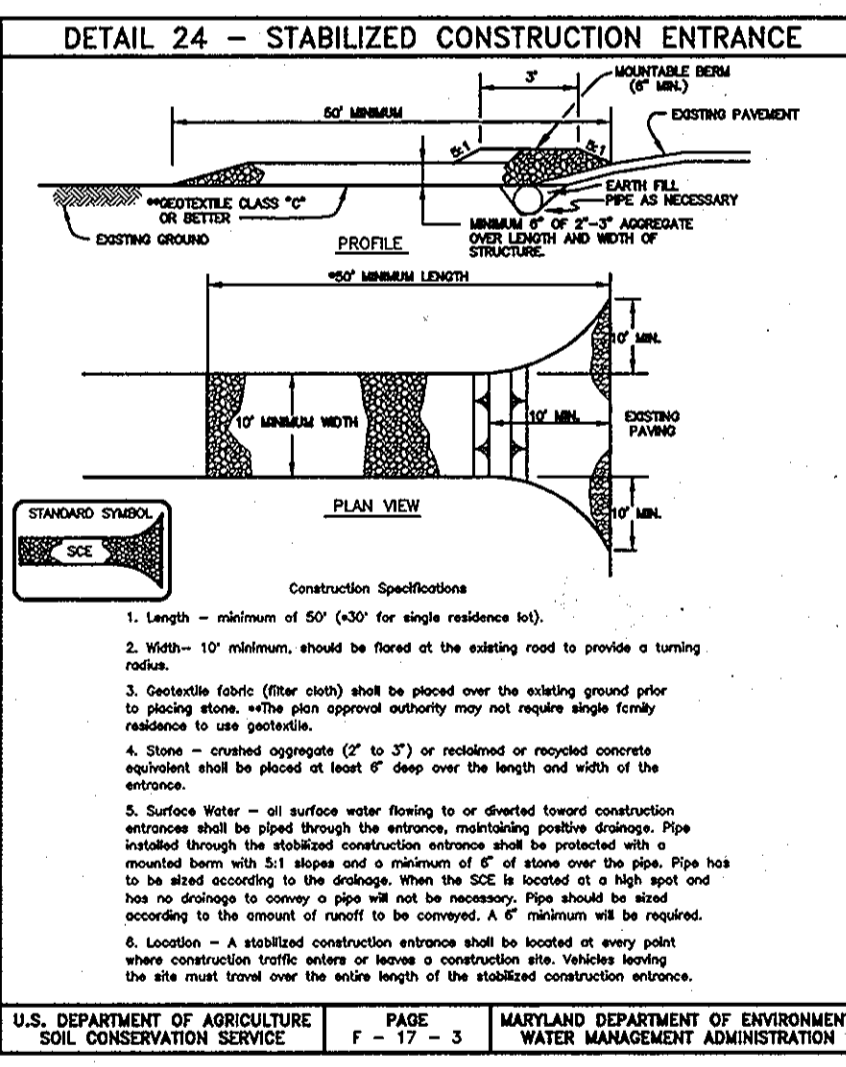
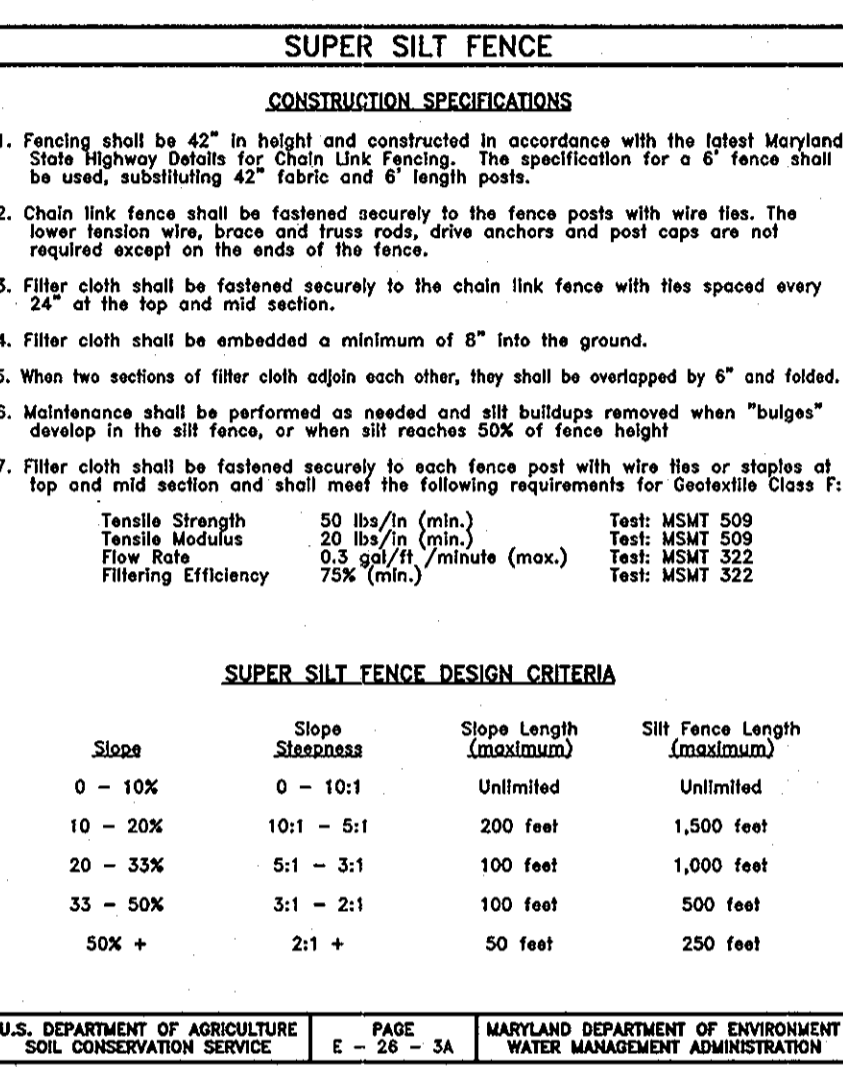
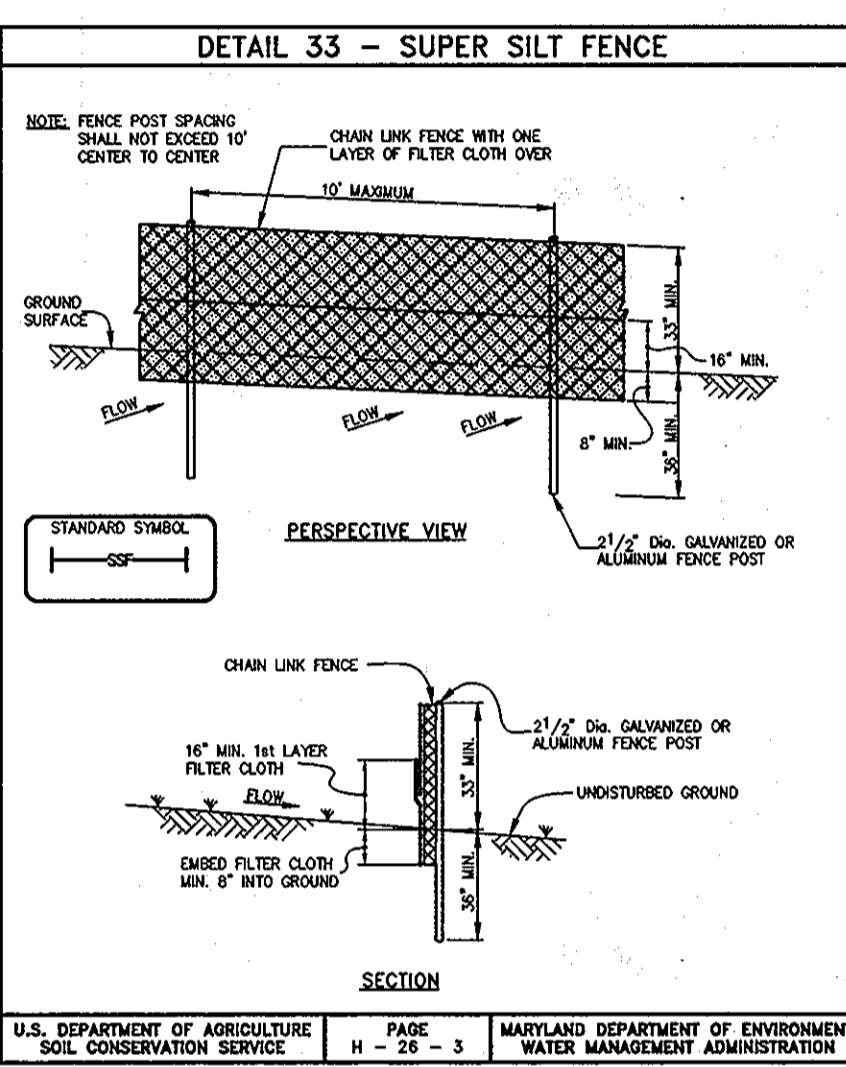
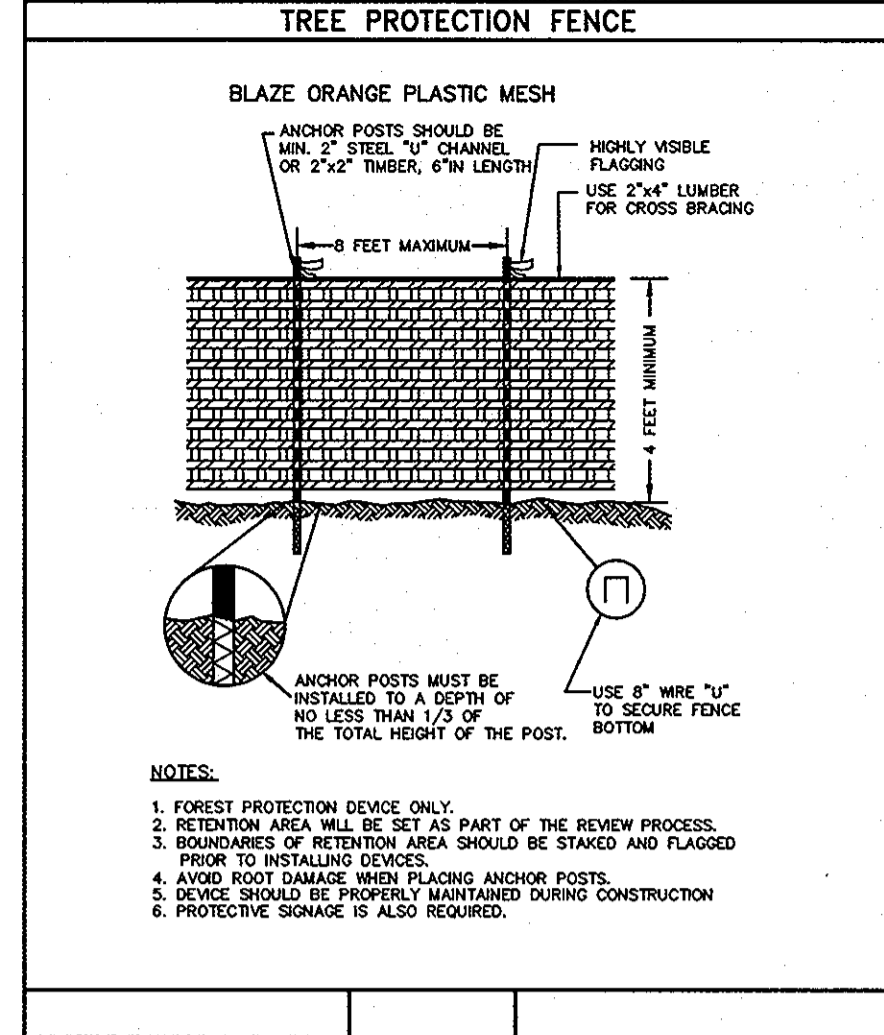
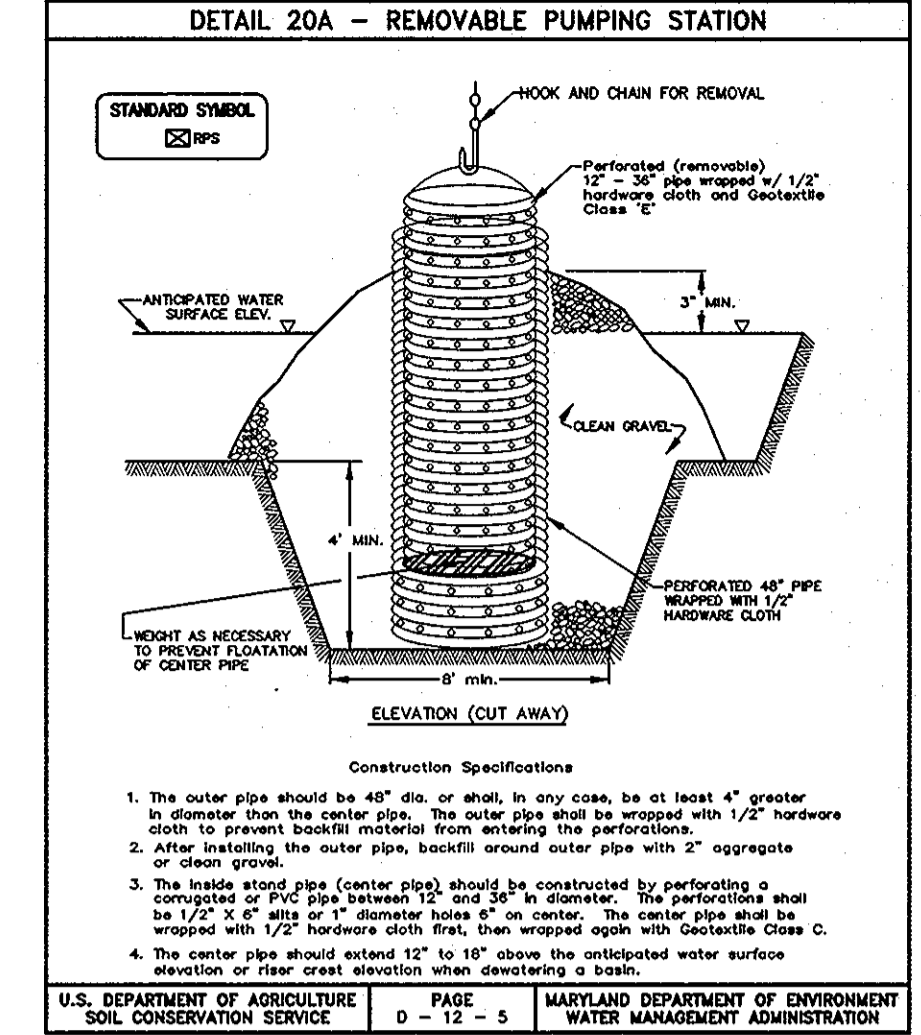
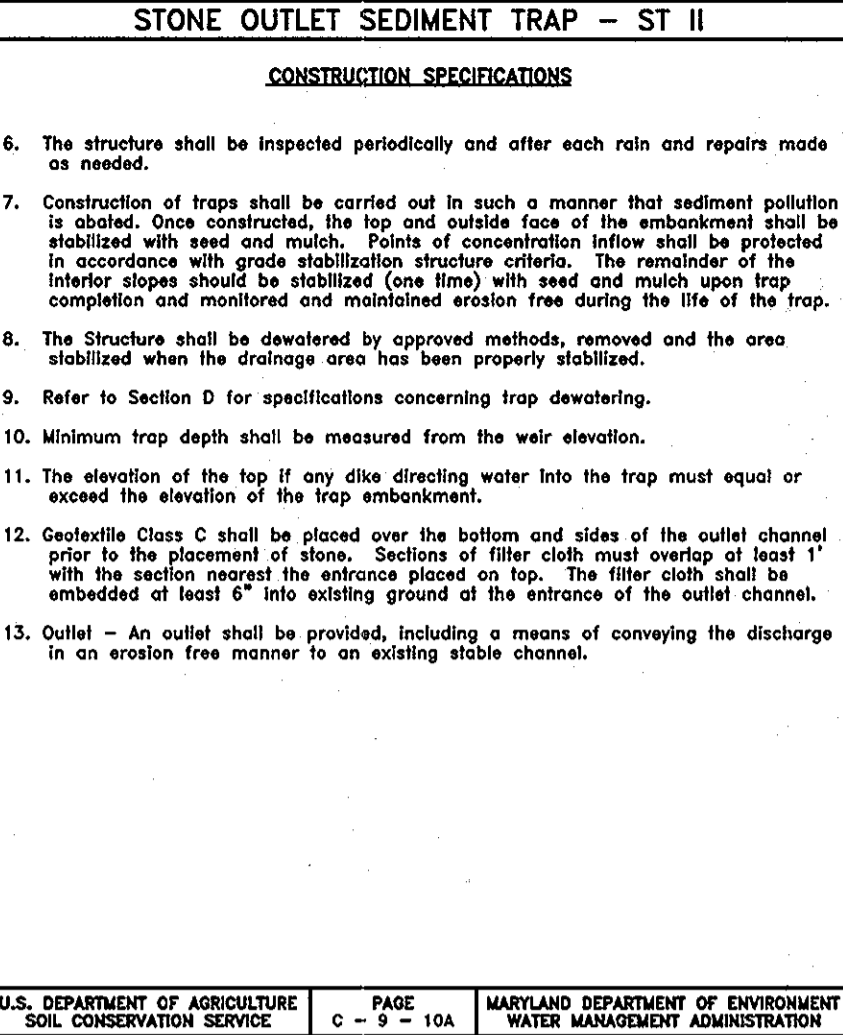
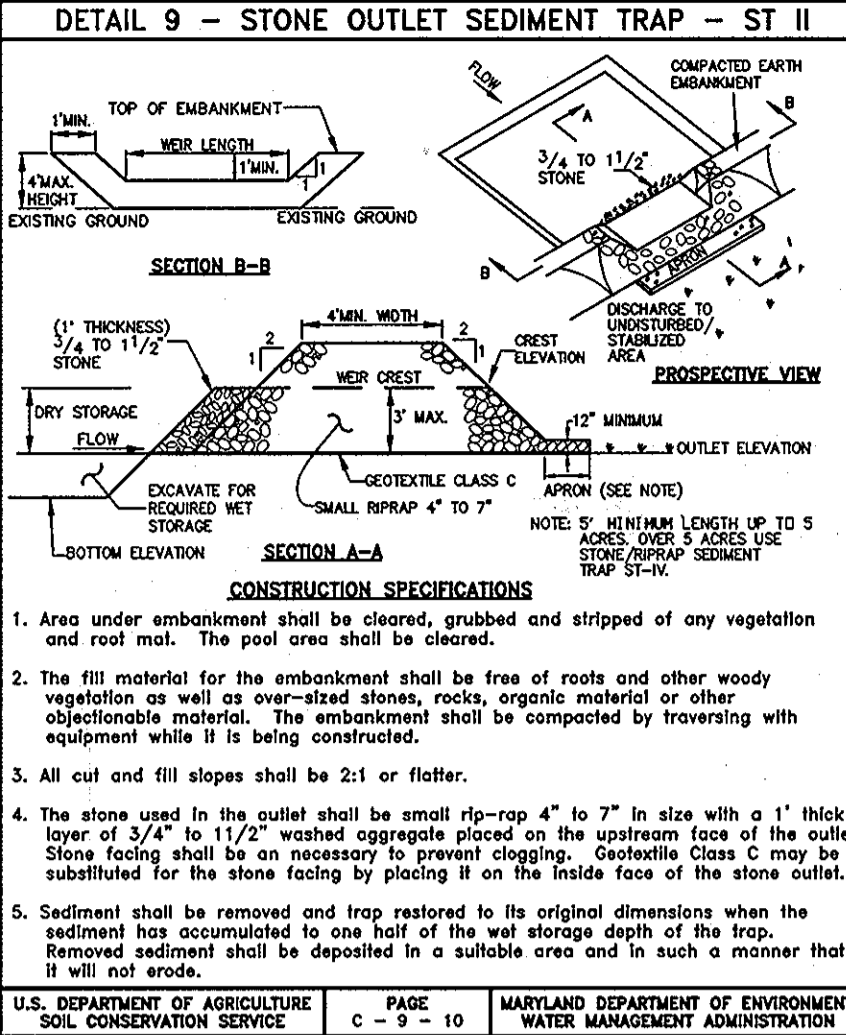
Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

- Topsoil Application
  - When topsoiling, maintain needed erosion and sediment control practices such as diversion, 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" - 8" higher in elevation.
  - 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 preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
  - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation. G-21-2

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 prescribed 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 compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
  - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
  - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub. #1. Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute. Revised 1973.



BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
*Frederick C. Beach*  
DEVELOPER  
8/19/98  
DATE

BY THE ENGINEER:  
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
*Donald Mason*  
ENGINEER  
6/1/98  
DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
*Cheryl Simmons*  
NATURAL RESOURCES CONSERVATION SERVICE  
8/31/98  
DATE

REVIEWED BY HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*John R. Robertson*  
HOWARD COUNTY SOIL CONSERVATION DISTRICT  
8/3/98  
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Andrew M. Daneker*  
CHIEF, BUREAU OF HIGHWAYS  
9/2/98  
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Chris Simmons*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
10/14/98  
DATE

*Andy Hamilton*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
1/16/98  
DATE

1 7-28-09 REVISE TITLE BLOCK TO SHOW WP-06-056 F-07-217  
NO DATE REVISION

TSA GROUP, INC.  
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8460 Baltimore National Pike • Ellicott City, Maryland 21045 • (410)465-8105

OWNER: TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLCOTT CITY, MARYLAND  
21041-1447

DEVELOPER: TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLCOTT CITY, MARYLAND  
21041-1447

PROJECT: FONT HILL MANOR FARM ESTATES  
A RESUB. OF LOTS 26 & 27 SECTION 1 PHASE 1 RECORDED AS PLAT NO. 12986  
LOCATION: BLOCKS 8 & 14  
TAX MAP 24 - PARCEL 725  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: SEDIMENT CONTROL NOTES AND DETAILS - PHASE 1  
DATE: FEBRUARY, 1988  
PROJECT NO. 1070

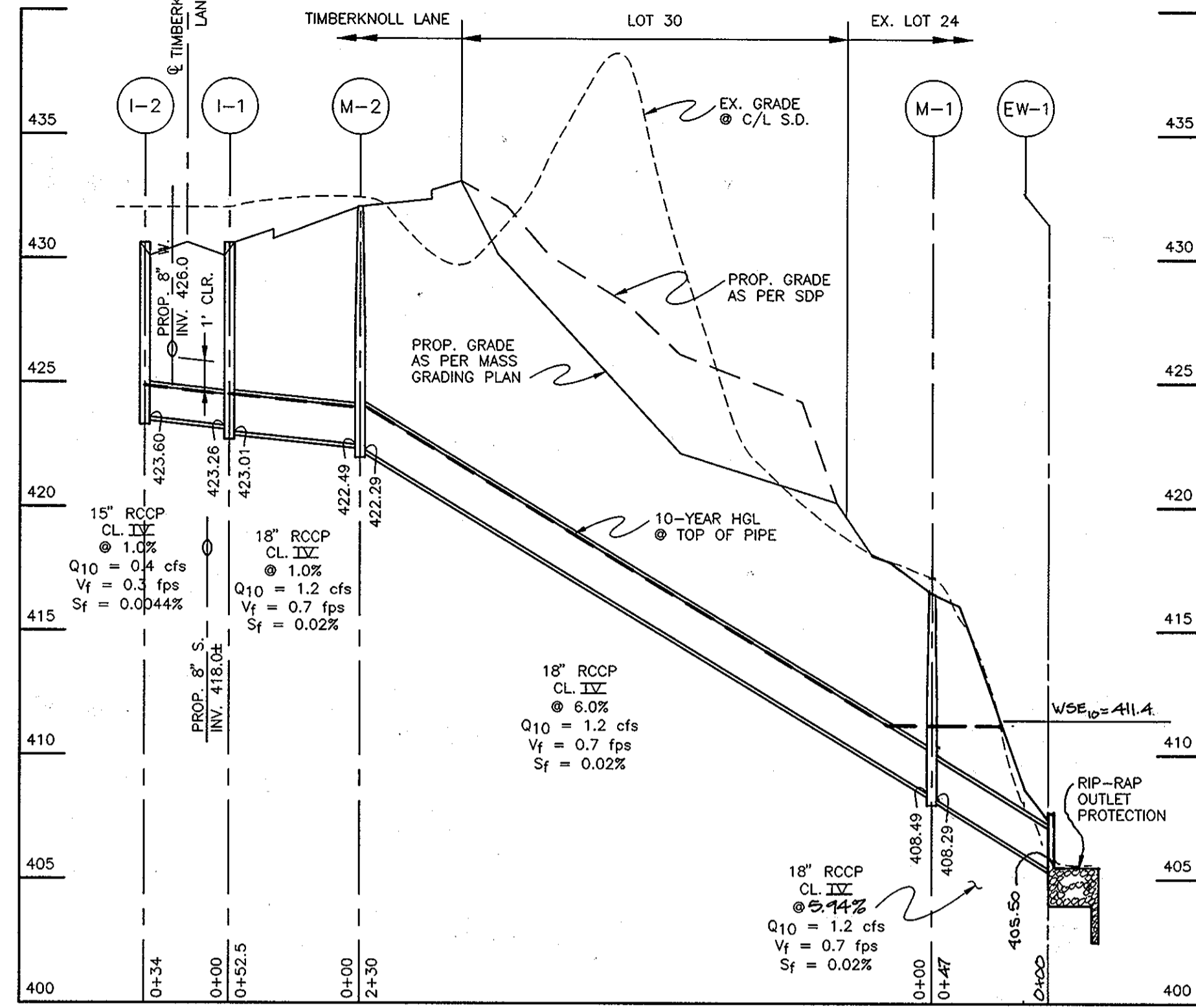
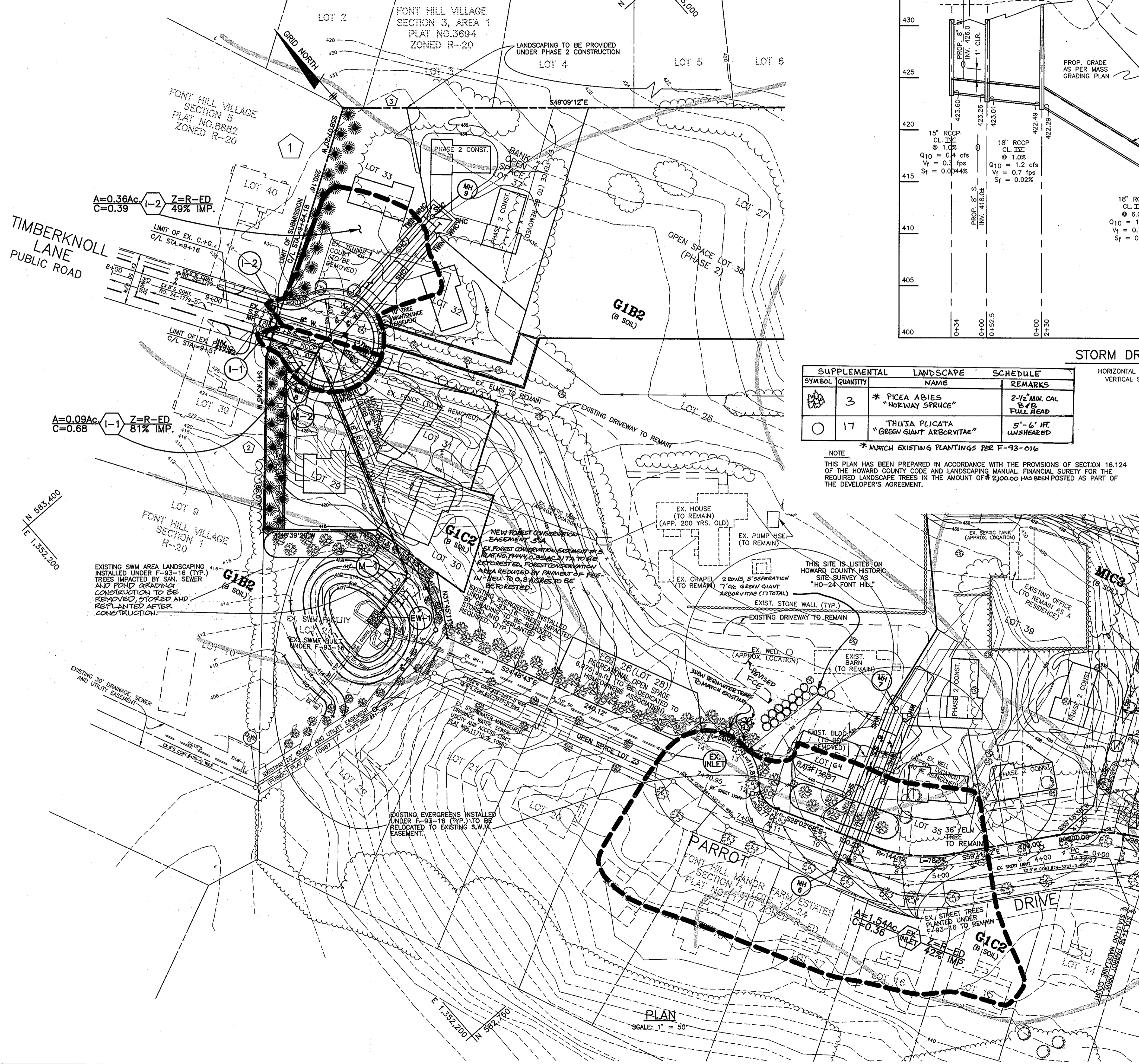
DES: DAM DRN: MCR SCALE: AS SHOWN DRAWING 3 OF 6

SOILS LEGEND		
MAP SYMBOL	SOIL TYPE	MAPPING UNIT
G1B2	B	GLENGLE LOAM - 3 TO 8 PERCENT SLOPES - MODERATELY ERODED
G1B2	C	GLENGLE SILT LOAM - 3 TO 8 PERCENT SLOPES - MODERATELY ERODED
G1C2	B	GLENGLE LOAM - 8 TO 15 PERCENT SLOPES - MODERATELY ERODED
M1C3	B	MANOR LOAM - 8 TO 15 PERCENT SLOPES - SEVERELY ERODED
M1D3	B	MANOR LOAM - 15 TO 25 PERCENT SLOPES - SEVERELY ERODED

NO. CO. SOILS MAP No. 15

GROSVENOR DRIVE

FONT HILL VILLAGE  
SECTION 4, AREA 2  
PLAT NO. 7282-7284  
ZONED R-20



STORM DRAIN PROFILE

HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 5'

SUPPLEMENTAL LANDSCAPE SCHEDULE			
SYMBOL	QUANTITY	LANDSCAPE NAME	SCHEDULE REMARKS
	3	* PICEA ABIES "NORWAY SPRUCE"	2-1/2" MIN. CAL B & F FULL HEAD
	17	THUSA PLICATA "GREEN GIANT ARBORVITAE"	5'-6" HT. UNSHARED

\*MATCH EXISTING PLANTINGS PER F-93-016  
NOTE  
THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPE TREES IN THE AMOUNT OF \$ 2100.00 HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT.

LEGEND

- EXISTING CONTOURS ——— 999 ———
- PROPOSED CONTOURS ——— 999 ———
- LIMIT OF WETLANDS ——— 999 ———
- EXISTING WOODS LINE ——— 999 ———
- PROPOSED WOODS LINE ——— 999 ———
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- INDICATES OPEN SPACE LESS THAN 35' IN WIDTH
- PROP. DRIVE AREAS
- SOILS DELINEATION
- SOIL GROUP G1C2 (B SOIL)

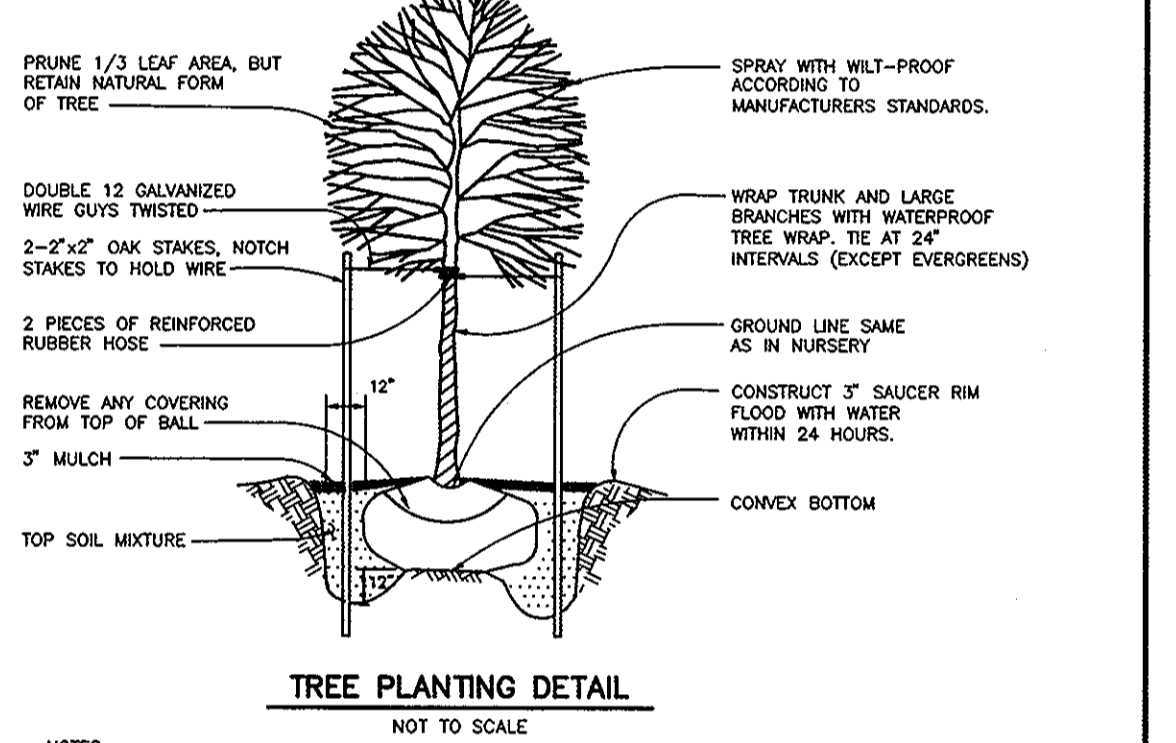
SCHEDULE A PERIMETER LANDSCAPE EDGE				
CATEGORY	ADJACENT TO ROADWAY	ADJACENT TO PERIMETER PROPERTIES		
		NO	YES	NO
PERIMETER NO. / LANDSCAPE TYPE		① A	② A	③ A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER		250	166	60
CREDIT FOR EXISTING VEGETATION (NO OR YES W/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		NO	NO	YES
CREDIT FOR WALL, FENCE OR BERM (NO OR YES W/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		NO	NO	NO
NUMBER OF PLANTS REQUIRED: SHADE TREES (10:1 SUBSTITUTION) EVERGREEN TREES (2:1 SUBSTITUTION) OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)		4	3	0
NUMBER OF PLANTS PROVIDED: SHADE TREES (10:1 SUBSTITUTION) EVERGREEN TREES (2:1 SUBSTITUTION) OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)		0	19	0

① AS PART OF AN ACCORD BETWEEN THE PROPERTY OWNER AND THE SURROUNDING COMMUNITY IT WAS AGREED THAT THE OWNER PROVIDE AN INCREASED BUFFER AREA BETWEEN THE RESIDENCES ON TIMBERKNOLL LANE AND THE FONT HILL MANOR DEVELOPMENT.  
② 60 FEET OF CREDIT FOR EXISTING WOODS (2" MINIMUM WIDTH) AT REAR OF LOT 30 BANK OPEN SPACE LOT 37 AND OPEN SPACE LOT 35 LANDSCAPING IS UNDER PHASE 2 (F-93-118) AND WILL BE ADDRESSED UNDER THAT PHASE.

STREET TREE PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
	6	QUERCUS PALLISTRIS (PIN OAK)	2 1/2" MIN. CAL. B & F FULL HEAD

LANDSCAPE PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
	36	PINUS STROBUS (EASTERN WHITE PINE)	5'-6" HT. UNSHARED

LANDSCAPE LEGEND	
SYMBOL	REMARKS
	STREET TREES TO BE PROVIDED BY DEVELOPER AND TO BE INCORPORATED ON FINAL PLANS
	LANDSCAPE TREES TO BE PROVIDED BY DEVELOPER AND TO BE INCORPORATED ON FINAL PLANS



NOTES:  
1. TREES SHOULD BE PLANTED A MINIMUM OF SIX(6) FEET FROM THE EDGE OF PAVING AND MUST BE A MINIMUM OF FIVE(5) FEET FROM ANY STORM DRAIN.  
2. TREES MUST BE PLANTED A MINIMUM OF FIVE(5) FEET FROM ANY OPEN SPACE ACCESS STRIP AND TEN(10) FEET FROM A DRIVEWAY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Andrew M. Sauer*  
CHIEF, BUREAU OF HIGHWAYS 7/2/08 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*John W. Cummings*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION 10/14/08 DATE

*Cindy Hanstra*  
CHIEF, DIVISION OF LAND DEVELOPMENT 10/6/08 DATE

NO	DATE	REVISION
1	7-28-09	REV. LOT 34 TO 64 PER PLAT # 13837; REV. FCE PER EXISTING CONDITIONS

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OWNER: TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLICOTT CITY, MARYLAND 21041-1447

DEVELOPER: TIMOTHY E. WELSH  
P.O. BOX 1447  
ELLICOTT CITY, MARYLAND 21041-1447

DES: GWF/DAM DRN: MCR

PROJECT: FONT HILL MANOR FARM ESTATES  
SECTION 2, PHASE 1  
A RESUB. OF LOTS 26 & 27 SECTION 2 RECORDED AS PLAT NO. 12986  
LOCATION: BLOCKS B & 14  
TAX MAP 24 - PARCEL 725  
2ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

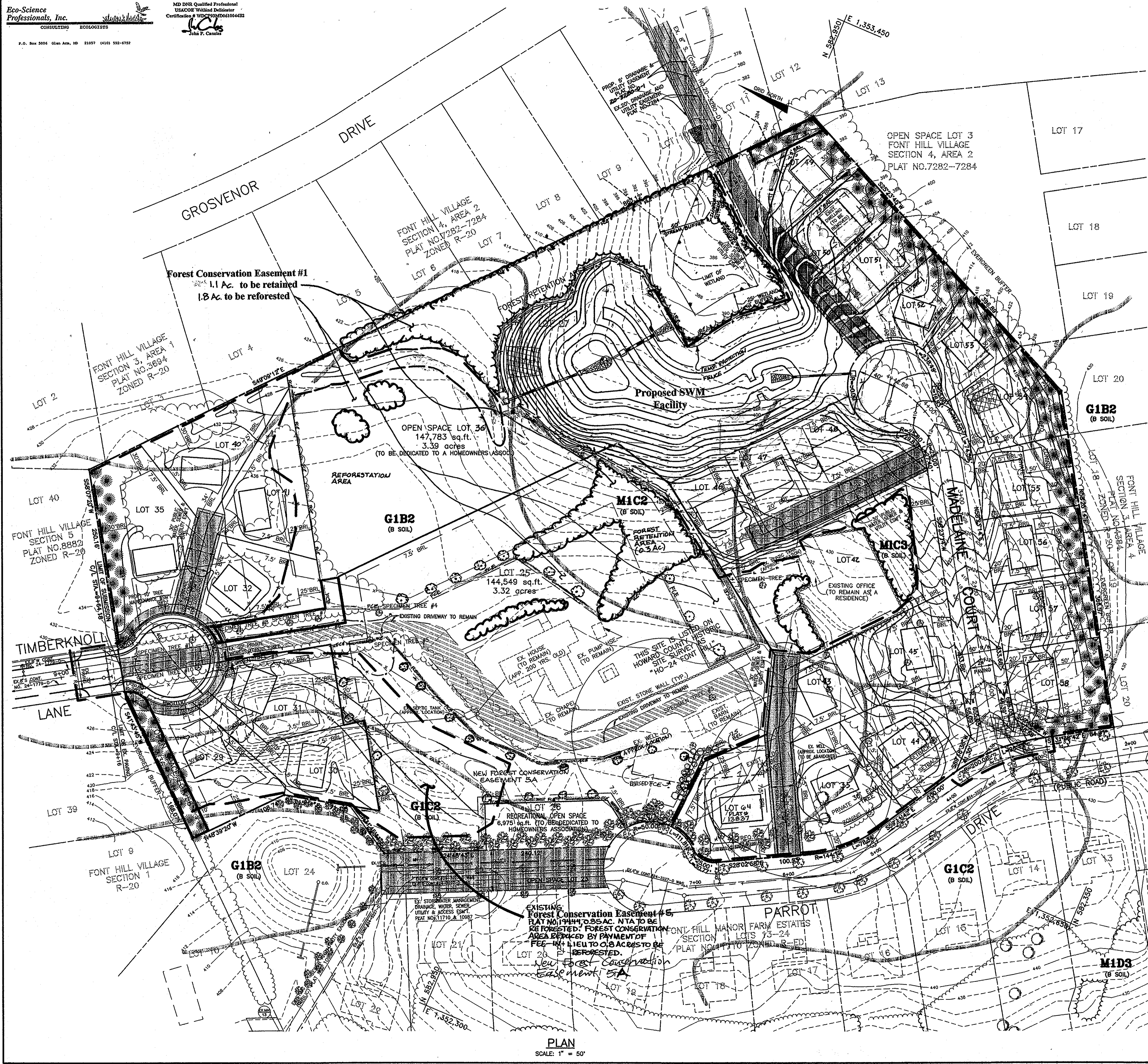
TITLE: LANDSCAPING/DRAINAGE AREA MAP/  
STORM DRAIN PROFILE - PHASE 1  
DATE: FEBRUARY, 1998  
PROJECT NO. 1070

SCALE: AS SHOWN DRAWING 4 OF 6

SOILS LEGEND		
MAP SYMBOL	SOIL TYPE	MAPPING UNIT
G1B2	B	GLENHOLM LOAM - 3 TO 8 PERCENT SLOPES - MODERATELY ERODED
G1B2	C	GLENHOLM SILT LOAM - 3 TO 8 PERCENT SLOPES - MODERATELY ERODED
G1C2	B	GLENHOLM LOAM - 8 TO 15 PERCENT SLOPES - MODERATELY ERODED
M1C2	B	MANOR LOAM - 8 TO 15 PERCENT SLOPES - MODERATELY ERODED
M1D3	B	MANOR LOAM - 8 TO 15 PERCENT SLOPES - SEVERELY ERODED
M1D3	B	MANOR LOAM - 15 TO 25 PERCENT SLOPES - SEVERELY ERODED

\* INDICATES MAPPING SYMBOLS  
 NO. CO. SOILS MAP No.15

NOTE: FONT HILL MANOR FARM ESTATES, SECTION 2 IS COMPRISED OF PHASE 1 AND PHASE 2 CONSTRUCTION (F-98-117 AND F-98-118). THE LOT NUMBERS ON THIS PLAN REFLECT THOSE INDICATED ON PHASE 2 (F-98-118) PLAN.



**SITE TABULATION**

GROSS AREA .....	13.79 AC.
100 YEAR FLOODPLAIN .....	0.0 AC.
AREA OF SLOPES (25% OR GREATER) ...	0.06 AC.
NET AREA .....	13.13 AC.

**FCP Legend**

- Forest to be Retained
- Limits of Forest Conservation Easement
- Temporary Protective Fencing/LOD (see FCP note 6)
- Permanent Protective Signage

**LEGEND**

- SOILS CLASSIFICATION
- EXISTING CONTOURS
- PROPOSED CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- INDICATES OPEN SPACE LESS THAN 35' IN WIDTH
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- LIMIT OF DISTURBANCE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Andrew M. ...* 9/2/98  
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*...* 10/14/98  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*...* 10/16/98  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

NO	DATE	REVISION
1	7-28-09	REV. LOT 34 TO 64 PER PLAT # 13837; REV. FCE PER EXISTING CONDITIONS

**TSA GROUP, INC.**  
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 6400 Baltimore National Pike • Millcott City, Maryland 21045 • (410)455-0100

OWNER: TIMOTHY E. WELSH P.O. BOX 1447 ELLCOTT CITY, MARYLAND 21041-1447	PROJECT: <b>FONT HILL MANOR FARM ESTATES</b> SECTION 2, PHASE 1 & 2 RECORDED AS PLAT NO. 13786 LOCATION: BLOCKS 8 & 14 TAX MAP 24 - PARCEL 725 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: TIMOTHY E. WELSH P.O. BOX 1447 ELLCOTT CITY, MARYLAND 21041-1447	TITLE: <b>FOREST CONSERVATION PLAN</b> DATE: AUGUST, 1997 PROJECT NO. 1070
DES: DAM	DRN: MCR/JR
SCALE: AS SHOWN	DRAWING 5 OF 6

# Planting Schedule

## Forest Conservation Easement #1 (1.8 acres)

Qty.	Species	Size	Spacing
5	Acer rubrum - Red maple	1" cal.	##
4	Fraxinus americana - White ash	1" cal.	##
3	Liriodendron tulipifera - Tulip poplar	1" cal.	##
119	Acer rubrum - Red maple	2-3' cont.	**
79	Juniperus virginiana - Red cedar	2-3' cont.	**
114	Liriodendron tulipifera - Poplar	2-3' cont.	**
77	Prunus serotina - Black cherry	3-4' cont.	**
99	Quercus rubra - Red Oak	3-4' cont.	**
64	Sassafras albidum - Sassafras	2-4' cont.	**
71	Viburnum prunifolium - Blackhaw	18-24" b.t.	**

## Forest Conservation Easement 5A (6.8 acres)

Qty.	Species	Size	Spacing
8	Acer rubrum - Red maple	1" cal.	##
4	Fraxinus americana - White ash	1" cal.	##
6	Liriodendron tulipifera - Tulip poplar	1" cal.	##
45	Cornus florida - Flowering dogwood	2-3' cont.	**
40	Juniperus virginiana - Red cedar	2-3' cont.	**
55	Liriodendron tulipifera - Poplar	2-3' cont.	**
40	Prunus serotina - Black cherry	2-4' cont.	**
35	Quercus rubra - Red Oak	3-4' cont.	**
35	Sassafras albidum - Sassafras	2-4' cont.	**
35	Viburnum prunifolium - Blackhaw	18-24" b.t.	**

**KEY:**  
 cal. - caliper cont. - container grown b.t. - branched transplant  
 ## - one inch caliper trees shall be installed in planting locations shown by ##. Species shall be randomly selected for each planting location.  
 \*\* - trees and shrubs shall be planted, on average, at a spacing of 11 feet on center, not in a grid pattern. Limited clumping of shrubs is permitted.

### Planting/Soil Specifications

- Planting of nursery stock shall take place between March 15th and April 30th.
- A twelve (12) inch layer of topsoil shall be spread over all reforestation areas impacted by site grading to assure a suitable planting area. Disturbed areas shall be seeded and stabilized as per general construction plan for project. Planting areas not impacted by site grading shall have no additional topsoil installed.
- All bare-root planting stock shall have their root systems dipped into an anti-desiccant gel prior to planting.
- Plants shall be installed so that the top of root mass is level with the top of existing grade. Backfill in the planting pits shall consist of 3 parts existing soil to 1 part pine fines or equivalent.
- Fertilizer shall consist of Agriforms 22-8-2, or equivalent, applied as per manufacturer's specifications.
- A two (2) inch layer of hardwood mulch shall be placed over the root area of all plantings.
- Fresh material shall be transported to the site in a tarped or covered truck. Plants shall be kept moist prior to planting.
- All non-organic debris associated with the planting operation shall be removed from the site by the contractor.

### Sequence of Construction

- Sediment control and tree protection devices shall be installed in accordance with general construction plan for site. Site shall be graded in accordance with general construction plans.
- Proposed reforestation areas impacted by site grading shall be topsoiled and stabilized as per #2 of Planting/Soil Specifications for project.
- Plants shall be installed as per Plant Schedule and the Planting/Soil Specifications for the project.
- Upon completion of the planting, signage shall be installed as per the Forest Retention Area Protection Devices shown on Sheet 2 of the Forest Conservation Plan.
- Plantings shall be maintained and guaranteed in accordance with the Maintenance and Guarantee requirements for project.

### Maintenance of Plantings

- Maintenance of plantings shall last for a period of 24 months.
- All plant material shall be watered twice a month during the 1st growing season. Watering may be more or less frequent depending on weather conditions. During second growing season, once a month during May-September, if needed.
- Invasive exotics and noxious weeds will be removed from reforestation areas. Old field agricultural species will be retained.
- Plants will be examined a minimum two times during the growing season for serious plant pests and diseases. Serious problems will be treated with the appropriate agent.
- Dead branches will be pruned from plantings.

### Guarantee Requirements

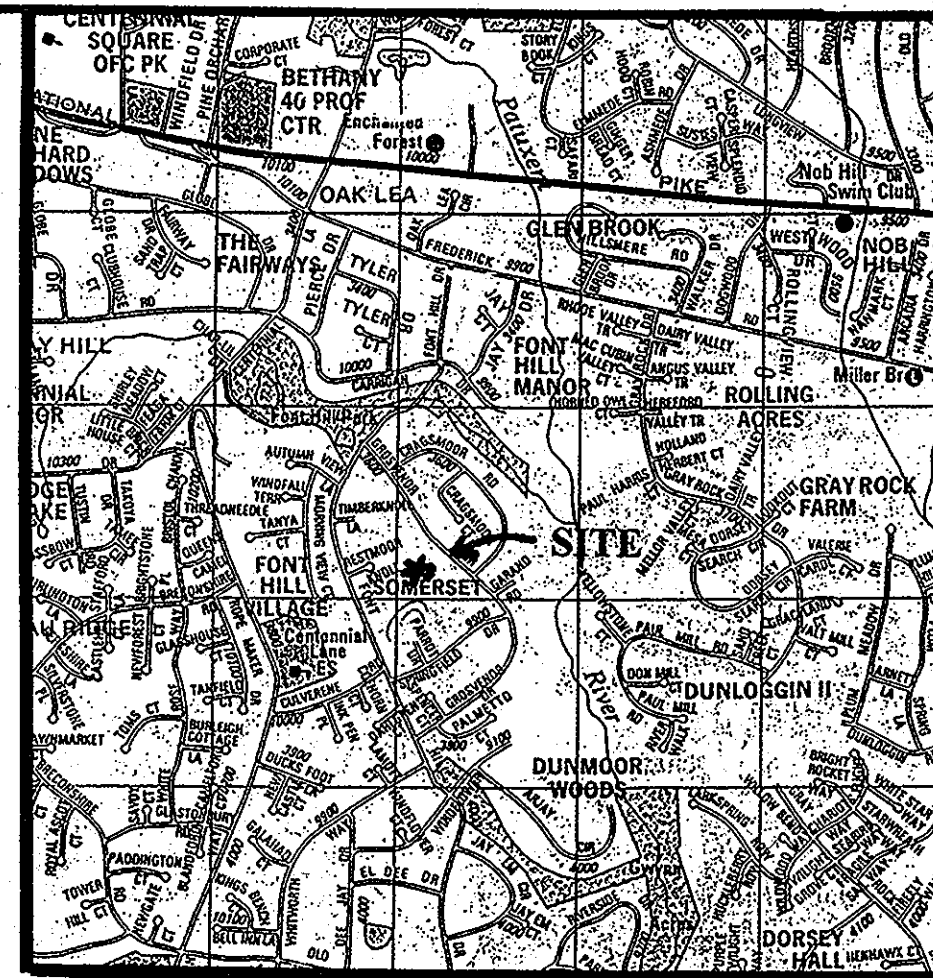
- A 75 percent survival rate of reforestation plantings will be required at the end of the 24 month maintenance period. All plant material below the 75 percent threshold will be replaced at the beginning of the next growing season. After one growing season, plant material shall be maintained at 90% survival threshold.
- The contractor will not be liable for plant loss due to theft or vandalism.

### Surety for Reforestation

- The developer shall post a surety (bond, letter of credit) to ensure that reforestation plantings are completed. Upon acceptance of the plantings by the County, the bond shall be released.

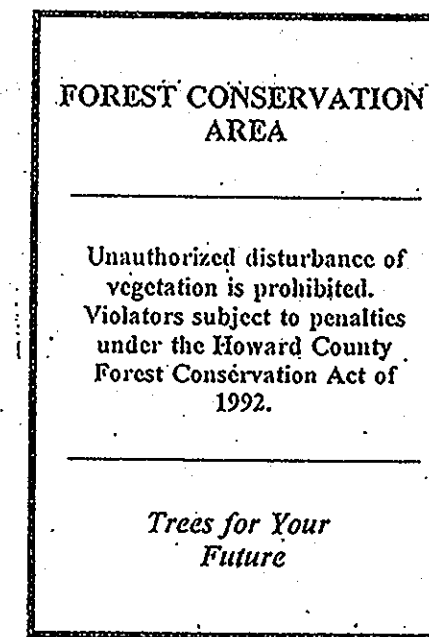
### FCP NOTES

- Any Forest Conservation Easement (FCE) area shown hereon is subject to protective covenants which may be found in the Land Records of Howard County which restrict the disturbance and use of these areas.
- Forested areas occurring outside of the FCE shall not be considered part of the FCE and shall not be subject to protective land covenants.
- Limits of disturbance shall be restricted to areas outside the limit of temporary fencing or the FCE boundary, whichever is greater.
- There shall be no clearing, grading, construction or disturbance of vegetation in the Forest Conservation Easement, except as permitted by Howard County DPZ.
- No stockpiles, parking areas, equipment cleaning areas, etc. shall occur within areas designated as Forest Conservation Easements.
- Temporary fencing shall be used to protect forest resources during construction. The fencing shall be placed along all FCE boundaries which occur within 15 feet of the proposed limits of disturbance.
- Permanent signage shall be placed 50-100' apart along the boundaries of all areas included in Forest Conservation Easements.

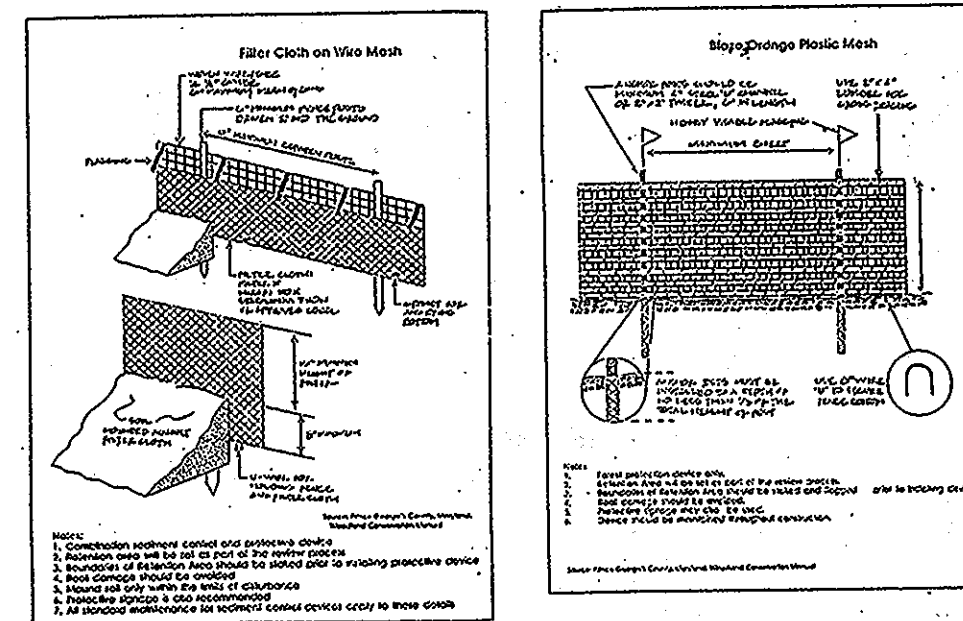


Site Vicinity Map  
Scale 1"=2000'

### Permanent Protective Signage



### Temporary Protective Fencing



FOREST DATA	
	Acres
Gross Area:	13.8
Ex. Lots/Unforested Preservation Parcel:	3.0
Net Tract Area (NTA):	10.8
Existing Forest (NTA):	4.2
Afforestation Threshold:	1.6
Reforestation Threshold:	2.2
Forest to be Cleared (NTA):	3.1
Forest to be Retained (NTA):	1.1
Reforestation Required:	2.7
Reforestation Proposed:	2.6
Total FCE Proposed:	3.7*

\* THE OWNER OF LOT 63 HAS PAID A FEE-IN-LIEU OF FOREST CONSERVATION.

See Sheet 6 for FCE locations and site development plans

**TSA GROUP, INC.**  
 planning • architecture • engineering • surveying  
 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410)465-8105

**OWNER:** TIMOTHY E. WELSH  
 P.O. BOX 1447  
 ELLICOTT CITY, MARYLAND  
 21041-1447

**DEVELOPER:** TIMOTHY E. WELSH  
 P.O. BOX 1447  
 ELLICOTT CITY, MARYLAND  
 21041-1447

**PROJECT:** FONT HILL MANOR FARM ESTATES  
 SECTION 2, PHASE 1 - RESUBDIVISION OF LOTS 26 & 27  
 SEC. 2, RECORDED AS PLAT NO. 16734

**TITLE:** FOREST CONSERVATION-DETAILS  
 WF-06-056, F-07-27, S-02-07, P-03-12, P-03-10, P-08-07, F-03-16, F-03-147, S-06-21, F-07-150, WF-07-109

**DATE:** AUGUST, 1997  
**DATE:** JULY 24, 1998

**PROJECT NO.:** 1070  
**DRAWING:** 2 OF 6

NO.	DATE	REVISION
1	7-28-09	REV. LOT 34 TO 64 PER PLAT # 13837, REV. FCE PER EXISTING CONDITIONS

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Andrew M. Davelos*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 9/2/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*John P. Conner*  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 10/16/98

**Eco-Science Professionals, Inc.**  
 CONSULTING ECOLOGISTS

MD DNR Qualified Professional  
 USACOE Wetland Deliberator  
 Certification # WDCP93/MD06004482

John P. Conner

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