

GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION DIVISION AT 410-313-1800 AT LEAST FIVE(5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- TOPOGRAPHY SHOWN HEREON WAS TAKEN FROM ROAD CONSTRUCTION PLANS F-98-117 AND F-98-118. CONTOUR INTERVAL IS 2 FEET.
- HORIZONTAL AND VERTICAL DATUM ARE NAD '83 - MONUMENTS 24GB, 24OB AND BM1 AND BM2
- ALL ROADWAYS ARE PUBLIC.
- EXISTING UTILITIES SHOWN HAVE BEEN TAKEN FROM CONTRACT DRAWINGS 24-3689-D & 24-3653-D AND ROAD CONSTRUCTION PLANS F-98-117 AND F-98-118. IF NECESSARY, CONTRACTOR SHALL ADJUST ALL TOP ELEVATIONS TO MATCH SDP GRADES.
- STORMWATER MANAGEMENT IS PROVIDED FOR THESE LOTS UNDER ROAD CONSTRUCTION PLANS F-98-117 AND F-98-118. BY MEANS OF EXTENDED DETENTION.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN WETLANDS, WETLAND BUFFERS, STREAM BUFFERS OR FOREST CONSERVATION AREAS.
- PORCHES, FIREPLACES, CHIMNEYS, EXTERIOR STAIRWAYS, DECKS AND BAY WINDOWS WHICH EXTEND ACROSS THE BRL SHALL BE IN ACCORDANCE WITH SECTION 128 (c)(1) OF THE HOWARD COUNTY ZONING REGULATIONS.
- PREVIOUS HOWARD COUNTY FILE NOS. S-92-07, P-93-07, P-93-12, F-93-16, F-95-147, S-96-21, F-97-150, P8-310, P-98-07, WP-97-109, F-98-117, F-98-118, F-99-169.
- THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE BUILDERS EXPENSE.
- BRL INDICATES BUILDING RESTRICTION LINE.
- FOR DRIVEWAY ENTRANCE DETAIL SEE HOWARD COUNTY STANDARD DETAILS R-6.03, R-6.06 AND R-6.06.
- FOR EASEMENT, LOT SIZE AND OTHER RELATED INFORMATION REFER TO PLAT NOS. 13446-13448, 13456-13458 AND 13836-13837.
- HOUSES/GARAGES WILL BE SITED ON LOTS SO THAT A SECOND CAR, IF PARKED IN THE DRIVEWAY, WILL NOT OVERHANG THE USE-IN-COMMON ACCESS DRIVEWAY.
- DRIVEWAY SLOPES SHOWN ARE AVERAGE. THE SLOPE AT THE OUTSIDE EDGES COULD BE FLATTER OR STEEPER DEPENDING ON GRADE OF ROADWAY.
- ON APRIL 25, 1997, WAIVER PETITION WP-97-109 WAS APPROVED TO WAIVE SECTION 16.144(c) REQUIRING A SKETCH PLAN, SECTION 16.144(f) REQUIRING A PRELIMINARY PLAN, AND SECTION 16.121(c)(6) REQUIRING 25% OPEN SPACE FOR THE RECORDING OF THE SUBDIVISION PLAT SUBMITTED AS F-97-150.
- PERIMETER LANDSCAPING HAS BEEN FULFILLED UNDER F-98-117 AND F-98-118.
- FOREST CONSERVATION REQUIREMENTS HAVE BEEN FULFILLED UNDER F-98-118.
- THE PRIVATE SETBACKS SHOWN IN EXCESS OF THE ZONING SETBACKS ARE TO PROVIDE ADDITIONAL SETBACKS FROM ADJOINING RESIDENTIAL LOTS FOR THE PURPOSES OF COMPLYING WITH PRIVATE AGREEMENTS, RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY AS LIBER 3861 FOLIO 0413. HOWARD COUNTY IS NOT RESPONSIBLE FOR ENFORCING THE PRIVATE SETBACKS. ENFORCEMENT SHALL BE IN ACCORDANCE WITH THE RECORDED PRIVATE AGREEMENTS.
- DRIVEWAYS TO SINGLE RESIDENCES SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY. DRIVEWAYS TO MULTIPLE RESIDENCES SHALL BE INSTALLED PRIOR TO BUILDING PERMIT ISSUANCE TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - 6" OF COMPACT CRUSHER RUN BASE W/ TAR AND CHIP COATING OR P-1 PAVING SECTION.
 - GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (225 LOADINGS).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.

SITE DEVELOPMENT PLAN

FONT HILL MANOR FARM ESTATES

SECTION 2; LOTS 29-33, 35, 64 PHASE 1 AND LOTS 40, 41, 43-48, 53, 59-62 PHASE 2

2nd ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

BENCH MARKS

VERTICAL CONTROLS

BM 1 ELEV. 421.82
 2' CUT IN TOP OF FH ON SOUTHWEST CORNER OF PARROTT DRIVE & SPRINGFIELD DRIVE.

BM 2 ELEV. 405.23
 TOP OF 4" NAIL NEAR THE NORTHEAST CORNER OF LOT 10 FONT HILL MANOR FARM ESTATES.

HORIZONTAL CONTROLS

NO. CO. NO.240B NAD '83 SURVEY DISC SET ON CONC. MONUMENT LOCATED AT THE SOUTHWEST CORNER OF THE ENTRANCE TO GENTENAL ELEMENTARY SCHOOL AT THE INTERSECTION WITH CENTENNIAL LANE. E 1,351,468.9649' N 582,098.3273'

NO. 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 579,089.4623' E 1,350,441.8549'

VICINITY MAP
SCALE: 1" = 2000'

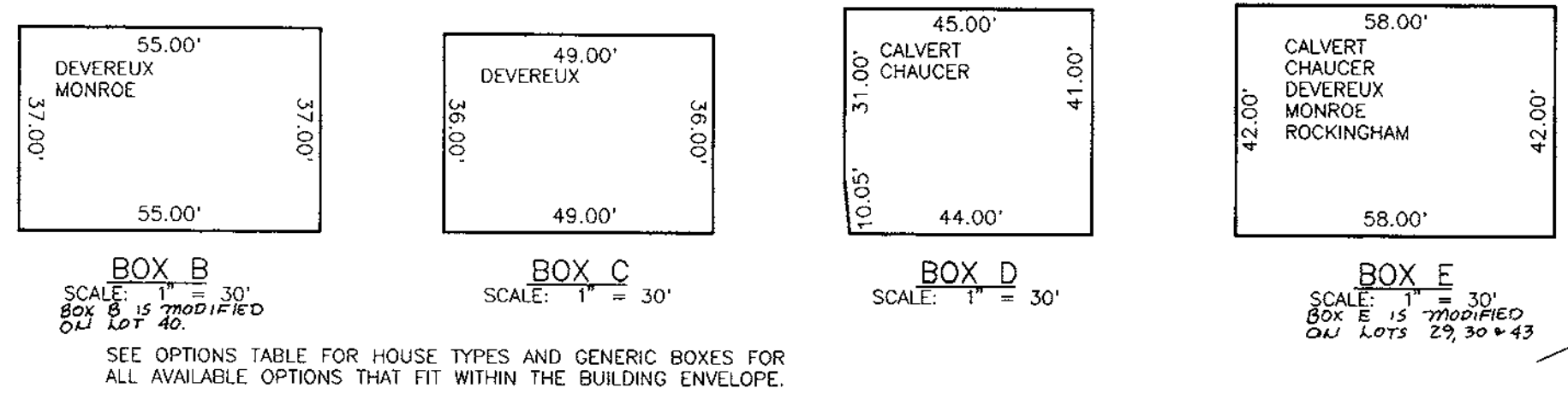
SITE ANALYSIS DATA CHART

GENERAL SITE DATA

- PRESENT ZONING: R-ED
- APPLICABLE DPZ FILE REFERENCES: S-92-07 P-93-07 P-92-12 F-93-16 F-95-147 S-96-21 F-97-150 P8-310 P-98-07 WP-97-109 F-98-117 F-98-118 F-99-169
- PROPOSED USE OF SITE: SINGLE FAMILY DETACHED
- PROPOSED WATER AND SEWER SYSTEMS: PUBLIC PRIVATE

AREA TABULATION

- TOTAL PROJECT AREA: 13.78 AC.
- AREA OF THIS PLAN SUBMISSION: 4.39 AC.
- APPROXIMATE LIMIT OF DISTURBANCE: 4.23 AC.
- TOTAL NUMBER OF LOTS ALLOWED AS SHOWN ON FINAL PLAT(S): 20
- TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION: 20
- OPEN SPACE ON-TOTAL SITE: 3.66 AC. (SECTION 2) PERCENTAGE OF GROSS AREA: 28.5%
- AREA OF RECREATIONAL OPEN SPACE REQUIRED: 6,750 S.F.
- AREA OF RECREATIONAL OPEN SPACE PROVIDED: 6,975 S.F.



OPTIONS TABLE FOR HOUSE TYPES AND GENERIC BOXES

LOT	BOX OR HOUSE	CALVERT	CHAUCER	DEVEREUX	MONROE	ROCKINGHAM
29	E MOD	N	N	N	N	Y,2,5
30	E MOD	Y,1	N	N	N	Y,2,5
31	E MOD	Y,2	N	N	N	Y,2,5
32	E MOD	Y,3	N	N	N	Y,2,5
33	E MOD	Y,4	N	N	N	Y,2,5
35	MONROE	N	N	N	N	Y,5
40	B MOD	N	N	Y,10	N	N
41	B MOD	N	N	Y,10	N	N
43	E MOD	Y,2	N	N	N	Y,2,5
44	MONROE	N	N	N	N	Y,2,5
45	E MOD	Y,3	N	N	N	Y,2,5
46	E MOD	Y,4	N	N	N	Y,2,5
47	C	Y,1	N	Y,10	N	N
48	CHAUCER	N	Y,8	N	N	N
53	DEVEREUX	N	N	Y,10	N	N
59	CHAUCER	N	Y,8	N	N	N
60	CHAUCER	N	Y,8	N	N	N
61	CHAUCER	N	Y,8	N	N	N
62	CHAUCER	N	Y,8	N	N	N
64	MONROE	N	N	N	N	Y,3,5,7
AREA*		2,753 SF	2,329 SF	2,198 SF	2,968 SF	2,567 SF

Y - MODEL FITS WITH OPTIONS AS INDICATED
 N - MODEL DOES NOT FIT
 MOD - Boxes on Lots 29, 30, 40-43 HAVE BEEN MODIFIED.

- OPTIONS:**
- NO GARAGE
 - NO MORNINGROOM
 - NO REC. ROOM
 - NO REAR SUNROOM
 - NO SIDE SUNROOM
 - NO BRICK OR STONE FACE
 - NO 3 CAR GARAGE
 - NO FULL FRONT PORCH
 - NO OPTIONAL AREAWAY
 - NO FAMILYROOM EXTENSION
- * BUILDING AREA IS TAKEN FROM ARCHITECTURALS AND EXCLUDES BASEMENT AND GARAGE AREAS.

PERMIT INFORMATION CHART

SUBDIVISION NAME FONT HILL MANOR FARM ESTATES	SECTION/AREA 1 AND 2	LOT/PARCEL# PHASE 1: 29-33, 35, AND 64 PHASE 2: 40, 41, 43-48, 53 AND 59-62
PLAT Nos. 13446-13448, 13456-13458, 13836-13837	BLOCK Nos. B & 14	ZONE R-ED
TAX MAP 24	ELECTION DISTRICT 2nd	CENSUS TRACT 6023.01
WATER CODE F12	SEWER CODE 5880000 & 5881200	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/20/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 7/30/99
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 8/3/99
 DIRECTOR



PLAN VIEW
SCALE: 1" = 100'

LOT AREA TABLE

LOT	AREA	LOT	AREA
29	9,549 SF	44	11,454 SF
30	10,528 SF	45	8,584 SF
31	10,034 SF	46	8,617 SF
32	9,616 SF	47	7,515 SF
33	15,412 SF	48	9,670 SF
64	10,568 SF	53	6,630 SF
35	10,903 SF	59	8,299 SF
40	11,898 SF	60	7,832 SF
41	11,815 SF	61	7,121 SF
43	8,653 SF	62	6,080 SF

ADDRESS CHART

LOT	ADDRESS	LOT	ADDRESS
29	9967 TIMBERKNOLL LANE	45	9805 MADELAINE COURT
30	9963 TIMBERKNOLL LANE	46	9817 MADELAINE COURT
31	9959 TIMBERKNOLL LANE	47	9821 MADELAINE COURT
32	9930 TIMBERKNOLL LANE	48	9825 MADELAINE COURT
33	9952 TIMBERKNOLL LANE	53	9820 MADELAINE COURT
35	3844 PARROT DRIVE	59	9836 MADELAINE COURT
40	9942 TIMBERKNOLL LANE	60	9832 MADELAINE COURT
41	9938 TIMBERKNOLL LANE	61	9828 MADELAINE COURT
43	3846 PARROT DRIVE	62	9824 MADELAINE COURT
44	3840 PARROT DRIVE	64	3850 PARROT DRIVE

BENCHMARK ENGINEERING INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS

8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-665-6105 FAX: 410-665-6844

[Signature]

OWNER/DEVELOPER: PULTE HOME CORPORATION
 1501 SOUTH EDGEWOOD STREET SUITE K BALTIMORE, MD 21227 410-644-5603

PROJECT: FONT HILL MANOR FARM ESTATES SECTION 2 LOTS 29-33, 35, 64 PHASE 1 AND LOTS 40, 41, 43-48, 53, 59-62 PHASE 2

LOCATION: TAX MAP 24 - BLOCKS 8 & 14 - PARCEL 725 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

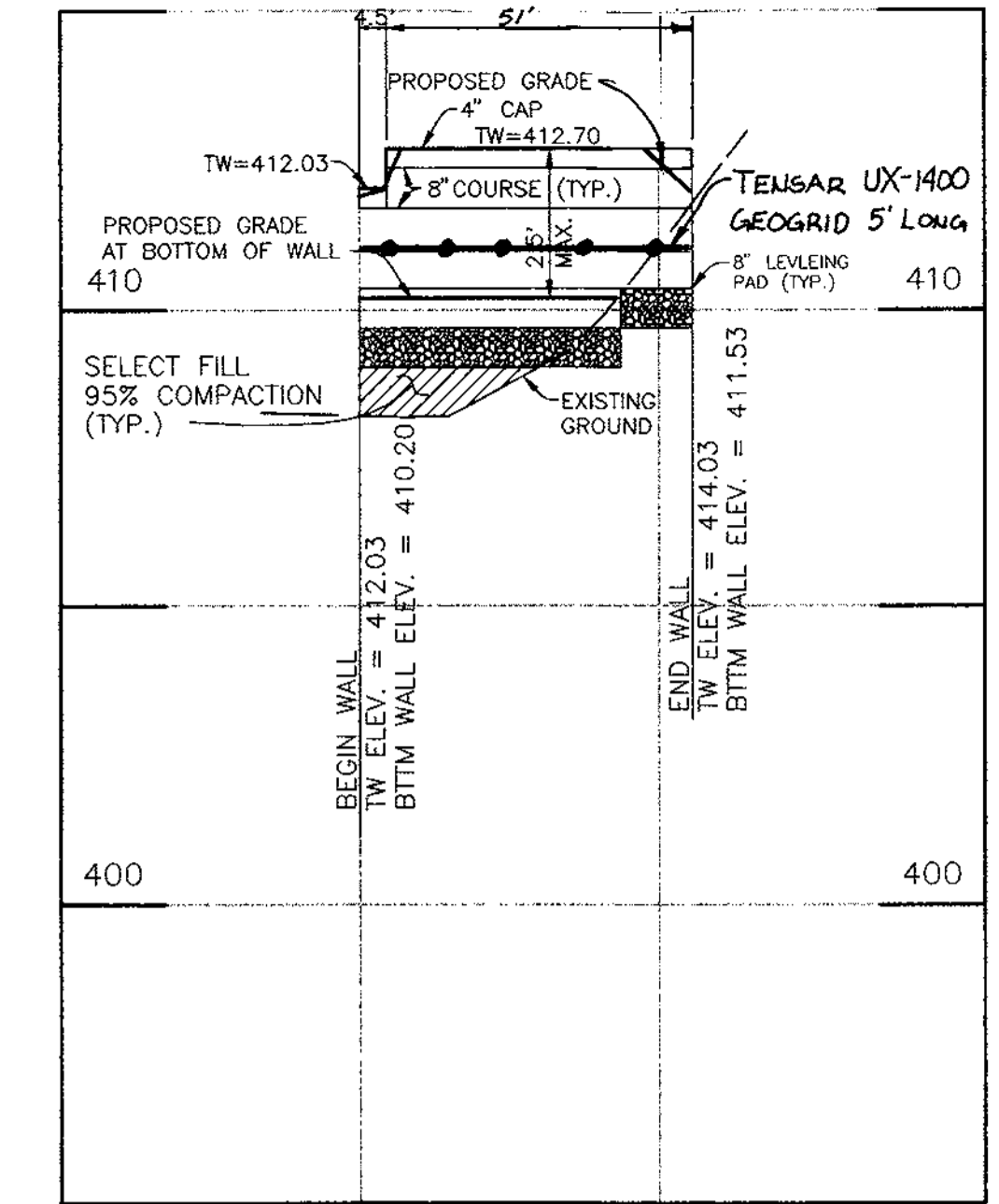
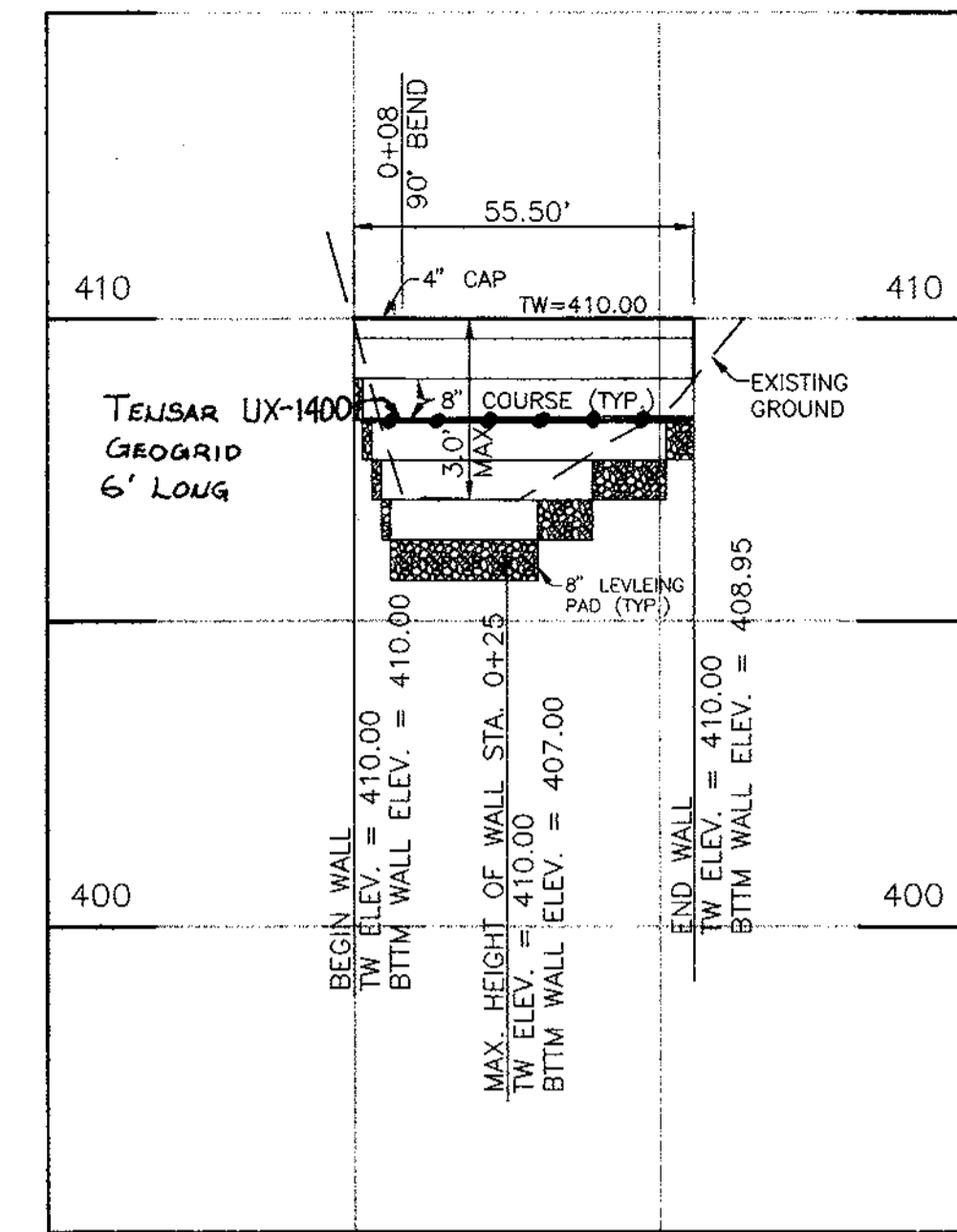
TITLE: SITE DEVELOPMENT PLAN

DATE: MAY, 1999 PROJECT NO. 1239

DESIGN: JMC DRAFT: JMC SCALE: AS SHOWN DRAWING 1 OF 6

SHEET INDEX

NO.	DESCRIPTION
1	TITLE SHEET
2 & 3	SITE DEVELOPMENT PLAN
4 & 5	SEDIMENT AND EROSION CONTROL PLAN
6	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS HOUSE FOOTPRINT DETAIL SHEET



LOWER RETAINING WALL
SCALE: HORT. 1" = 30'
VERT. 1" = 3'

UPPER RETAINING WALL
SCALE: HORT. 1" = 30'
VERT. 1" = 3'

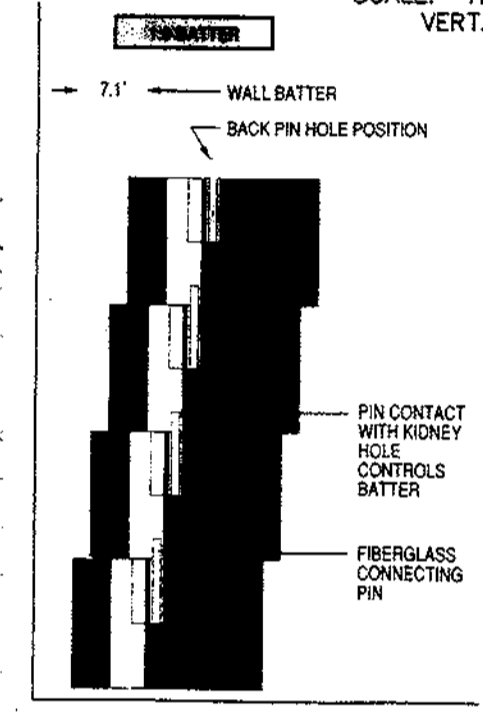
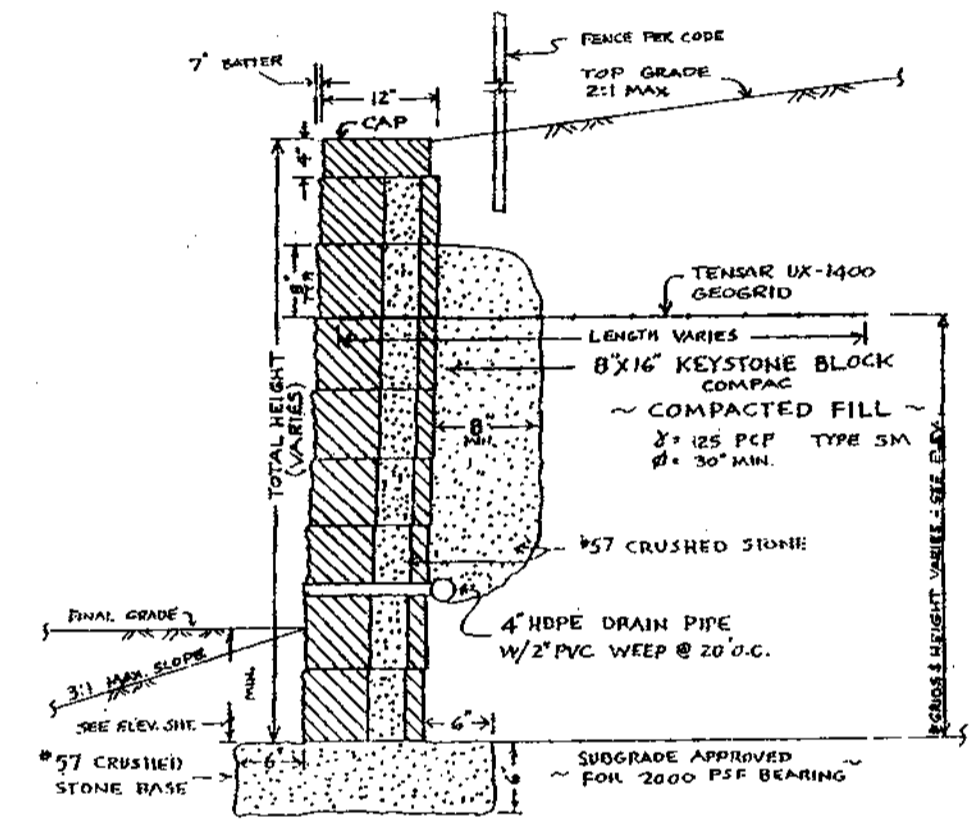
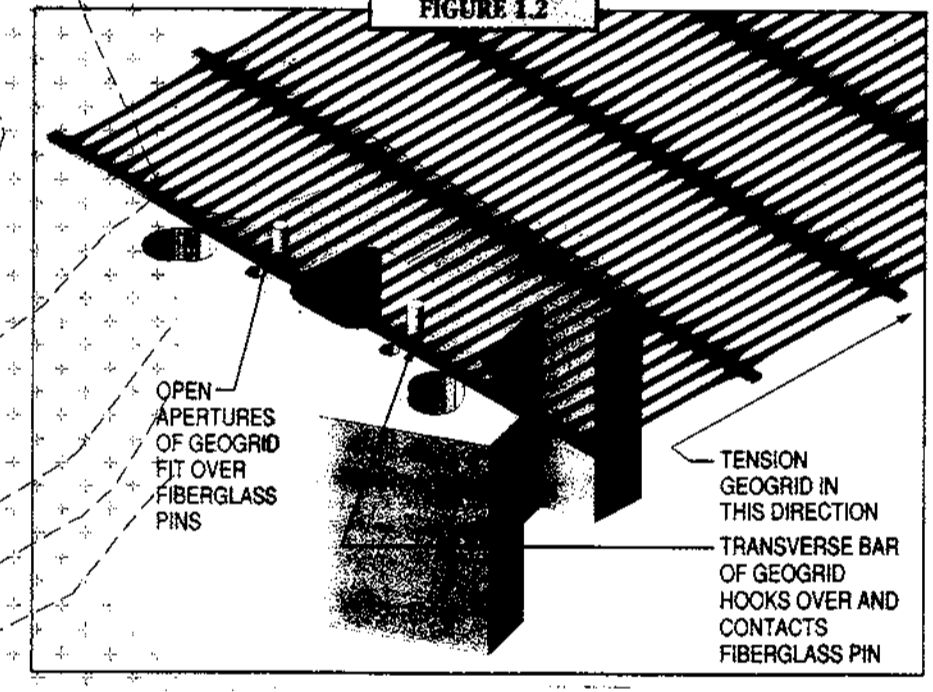
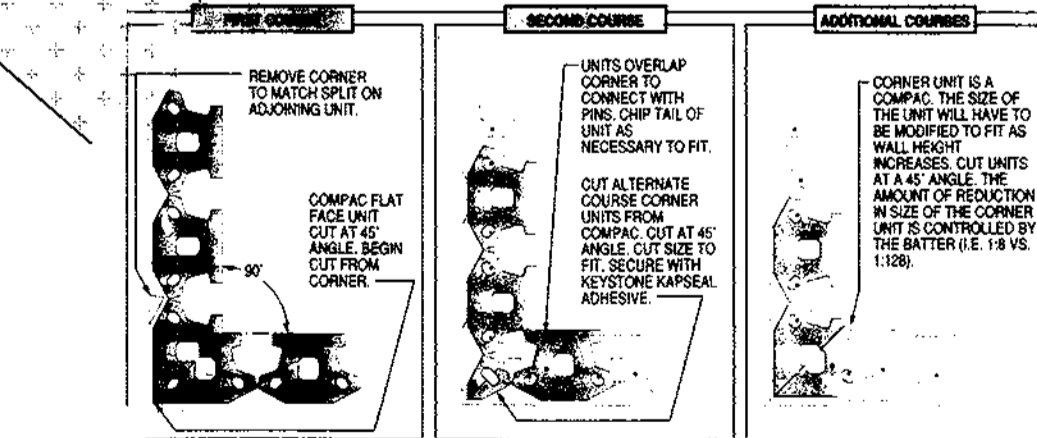
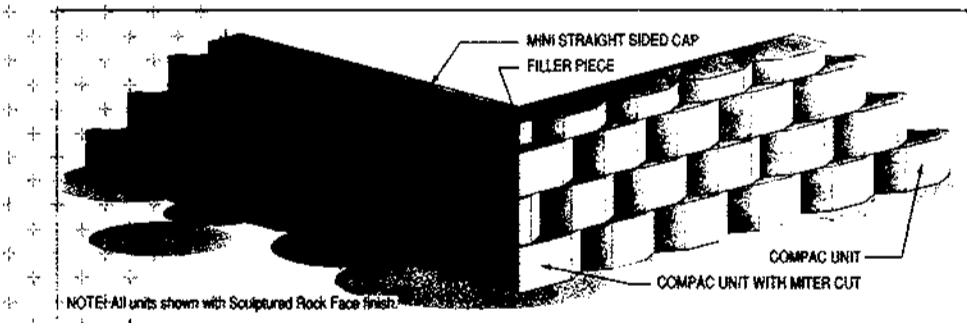


FIGURE 1.2



TYPICAL WALL PROFILE
N.T.S.

- NOTES:**
1. THE EARTH WORK AND CONSTRUCTION OF THE RETAINING WALLS SHALL BE PERFORMED UNDER THE OBSERVATION OF A MARYLAND REGISTERED PROFESSIONAL ENGINEER.
 2. THE BEARING CAPACITY OF THE SOIL MUST BE VERIFIED IN THE FIELD PRIOR TO WALL CONSTRUCTION. THE FOLLOWING SOIL PROPERTIES WERE ASSUMED FOR DESIGN:
GRANULAR FILL - SOIL FRICTION ANGLE = 30±
UNIT WEIGHT - 110 TO 125 LB/C.F.
BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR WITH THE PROPER EQUIPMENT (ASTM D-690)
MINIMUM VIBRABLE BEARING PRESSURE IS 2500 PSF. IF BEARING IS FOUND TO BE INADEQUATE, AREA UNDER WALL AND REINFORCED BACKFILL MUST BE UNDERCUT AND REPLACED W/APPROPRIATE MATERIAL AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER.
 3. BASE LEVELING PAD AND UNIT/DRAINAGE MATERIAL SHALL BE COMPACTED 3/4" MIN. CRUSHED STONE.
 4. WALLS SHALL BE KEYSTONE UNITS AND PINS. CORNER UNITS SHALL BE SET CUTS, CAPS AND CORNER UNITS SHALL BE SECURED W/FLEXIBLE EPOXY BASED ADHESIVE SUCH AS KEYSTONE KAPSEAL.
 5. GEOGRID SHALL BE TENSAR UX1400SB.
 6. WORK SHALL BE PERFORMED PER KEYNOTES CONSTRUCTION MANUAL BY A QUALIFIED CONTRACTOR.



SEQUENCE OF CONSTRUCTION FOR KEYSTONE RETAINING WALL

- 1.) REMOVE ALL SURFACE VEGETATION AND DEBRIS
- 2.) EXCAVATE BASE TRENCH TO ALLOW FOR BASE LEVELING PAD AND FIRST COURSE OF KEYSTONE UNIT.
- 3.) PLACE AND COMPACT BASE LEVELING PAD.
- 4.) SET AND ALIGN BASE COURSE.
- 5.) INSERT FIBERGLASS CONNECTING PINS.
- 6.) PLACE UNIT/DRAINAGE MATERIAL. DRAINAGE MATERIAL SHALL BE NUMBER 57 CRUSHED STONE OR AS DIRECTED BY THE KEYSTONE MANUFACTURER. DO NOT OPERATE COMPACTOR EQUIPMENT DIRECTLY FOR THE KEYSTONE UNIT. INSTALL GEOGRID REINFORCEMENT AT INTERVALS INDICATED ON WALL DETAIL.
- 7.) BACKFILL AND COMPACT ALL SOILS PLACED BETWEEN THE UNIT/DRAINAGE MATERIAL AND THE RETAINED BACKFILL.
- 8.) SWEEP TOP OF UNITS CLEAN PRIOR TO PLACEMENT OF THE NEXT COURSE.
- 9.) INSTALL ADDITIONAL COURSES OF KEYSTONE UNIT AS INDICATED IN ABOVE STEPS 5-9.
- 10.) POSITION AND INSTALL CAP UNITS.
- 11.) FINISH GRADING.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Howard County
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Richard Blood
CHIEF, DIVISION OF LAND DEVELOPMENT

Joseph Katter
DIRECTOR

7/20/99
7/30/99
8/6/99

PLAN VIEW
SCALE: 1" = 30'

NO.	DATE	REVISION

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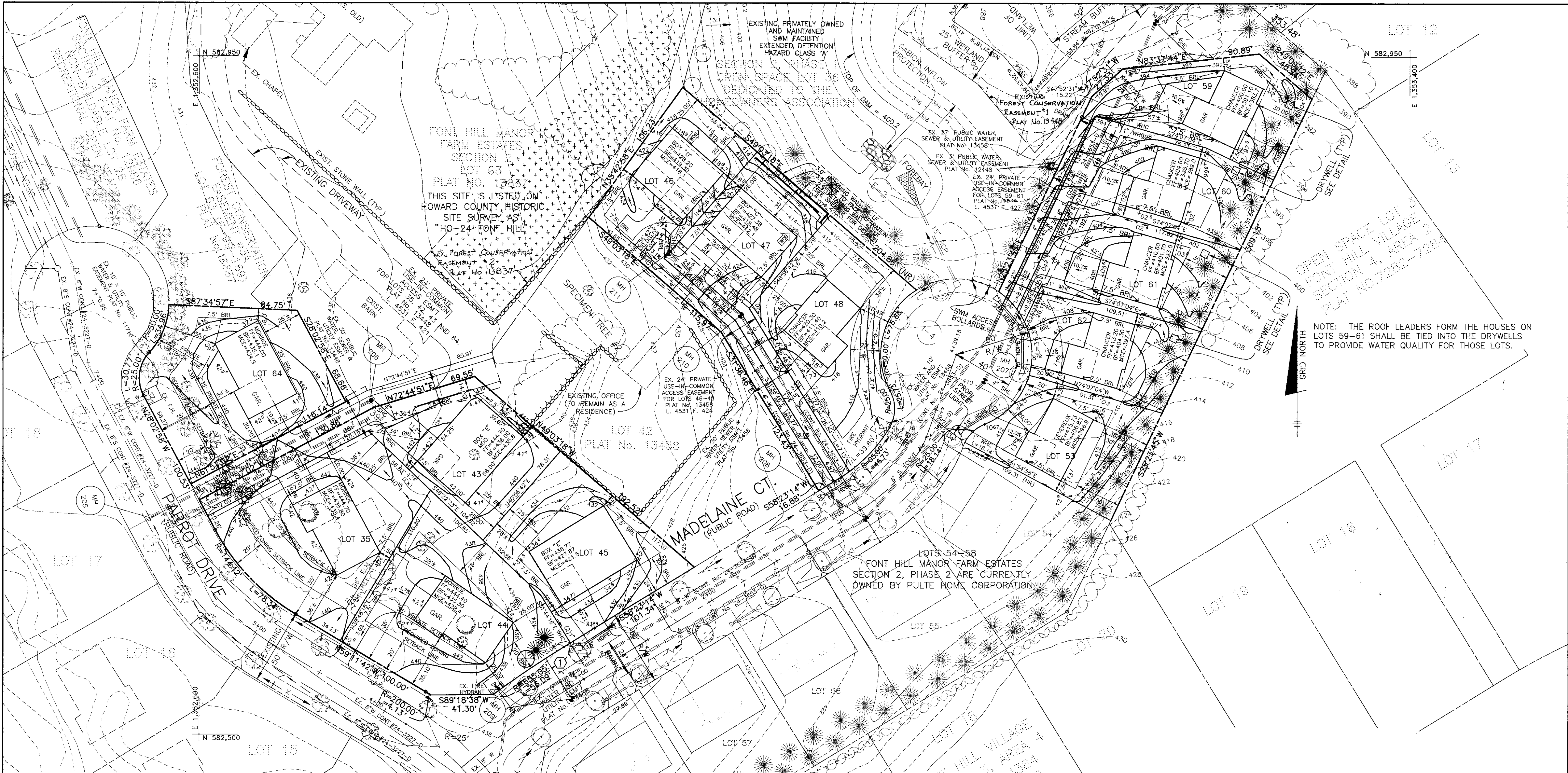
8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644

OWNER/DEVELOPER: PULTE HOME CORPORATION
1501 SOUTH EDGEWOOD STREET SUITE K BALTIMORE, MD 21227 410-644-5603

PROJECT: FONT HILL MANOR FARM ESTATES SECTION 2
LOTS 29-33, 35, 84 PHASE 1 AND LOTS 40, 41, 43-48, 53, 59-62 PHASE 2
LOCATION: TAX MAP 24 - BLOCKS B & 14 - PARCEL 725
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **SITE DEVELOPMENT PLAN**

DATE: MAY, 1999 PROJECT NO. 1239
DESIGN: JMC DRAFT: JMC SCALE: 1" = 30' DRAWING 2 OF 6

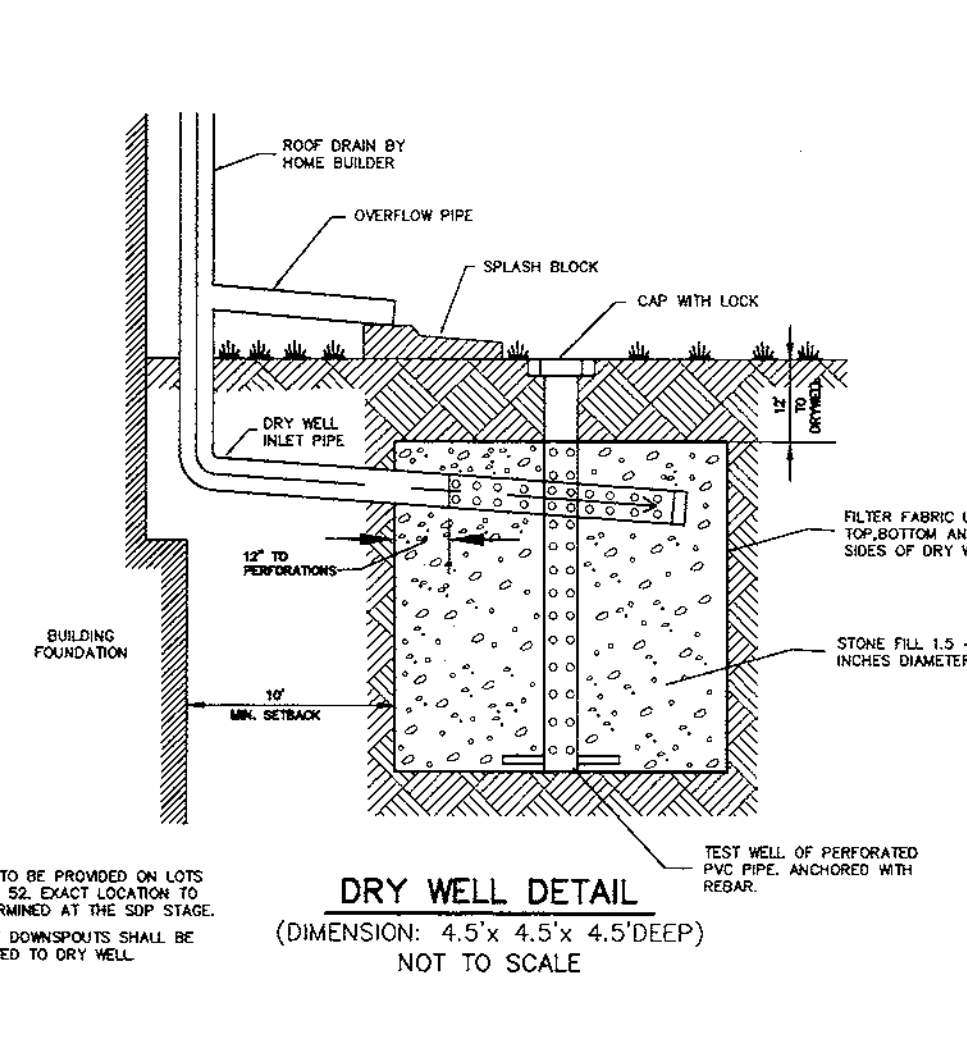
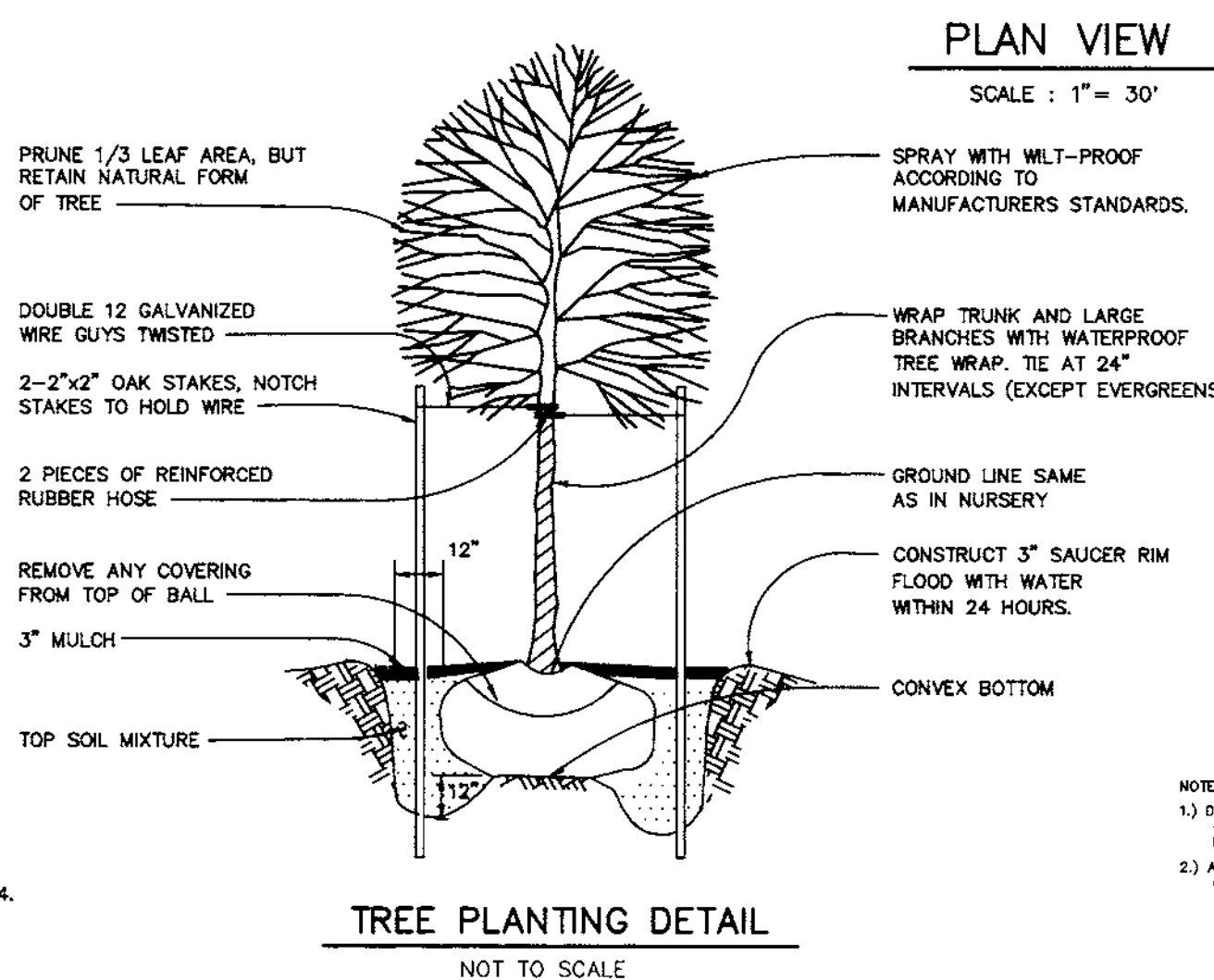


NOTE: THE ROOF LEADERS FROM THE HOUSES ON LOTS 59-61 SHALL BE TIED INTO THE DRYWELLS TO PROVIDE WATER QUALITY FOR THOSE LOTS.

LANDSCAPE LEGEND	
SYMBOL	DESCRIPTION
	SHADE TREES TO MEET LANDSCAPE REQUIREMENTS FOR PROPERTY ADJACENT TO ROADWAY AND TO BE PROVIDED BY THE BUILDER.
	EVERGREEN TREES TO MEET LANDSCAPE REQUIREMENTS FOR PROPERTY ADJACENT TO ROADWAY AND TO BE PROVIDED BY THE BUILDER.

PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
	1	ACER SACCHARUM (Sugar Maple)	2 1/2" MIN. CAL. BAB FULL HEAD
	2	PINUS STROBUS (Eastern White Pine)	6'-8' ht. UNSHEARED

SCHEDULE A PERIMETER LANDSCAPE EDGE		
CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO ROADWAYS
LANDSCAPE TYPE	A	B
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	61'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	
NUMBER OF PLANTS REQUIRED		
SHADE TREES	1	
EVERGREEN TREES	2	
OTHER TREES (2:1 SUBSTITUTE) SHRUBS	-	
NUMBER OF PLANTS PROVIDED		
SHADE TREES	1	
EVERGREEN TREES	2	
OTHER TREES (2:1 SUBSTITUTE) SHRUBS (10:1 SUBSTITUTE)	-	
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)		



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blood
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 7/30/99

Richard Blood
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 7/30/99

Richard Blood
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/13/99

- NOTES:
- SURETY IN THE AMOUNT OF \$600.00 FOR 1 SHADE TREE AND 2 EVERGREEN TREES WILL BE POSTED WITH THE GRADING PERMIT FOR LOT 44.
 - STREET TREES AND PERIMETER LANDSCAPING WERE PROVIDED IN ACCORDANCE WITH APPROVED F-98-117 AND F-98-118.

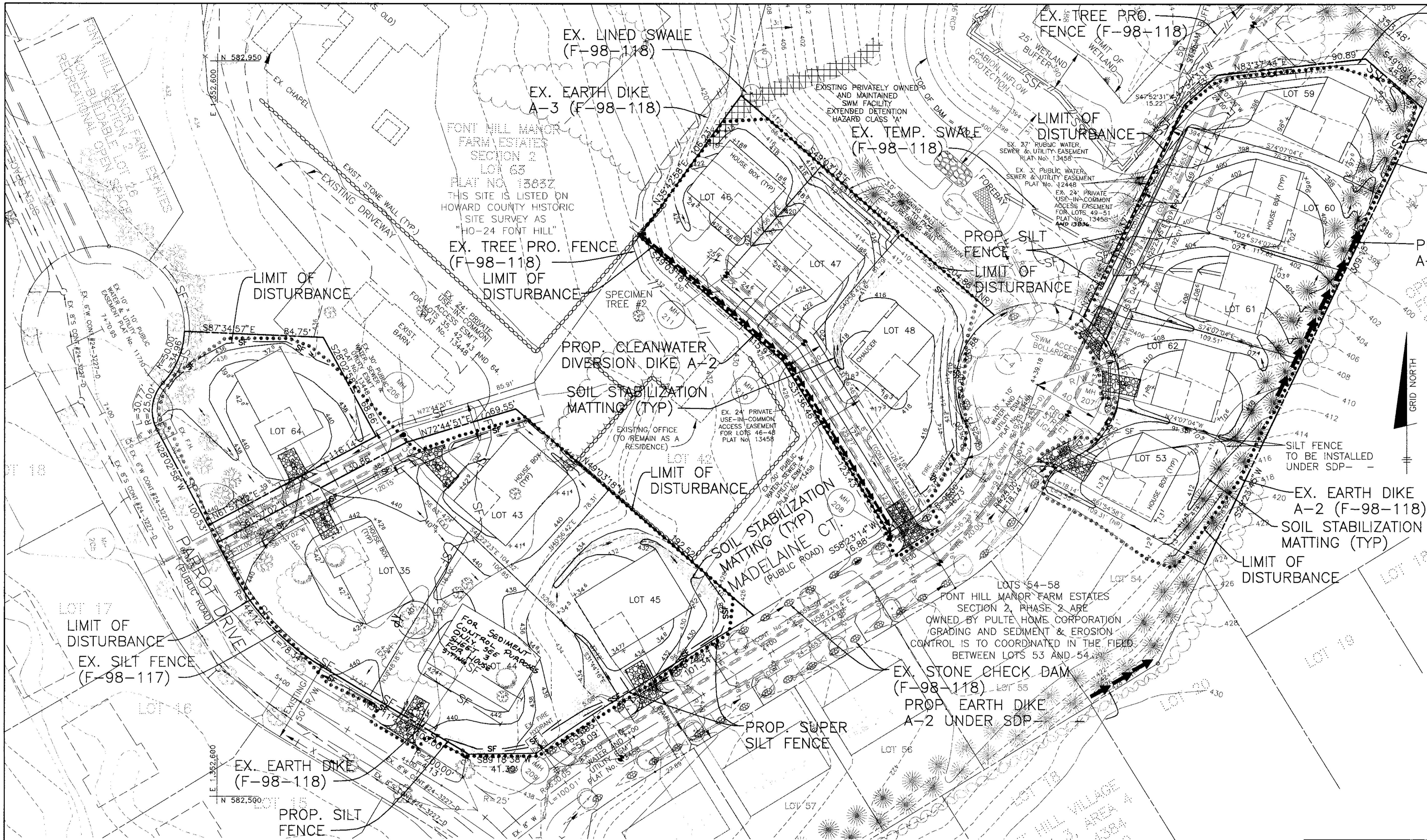
NO.	DATE	REVISION

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Donald Maas

8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644

OWNER/DEVELOPER: PULTE HOME CORPORATION 1501 SOUTH EDGEWOOD STREET SUITE K BALTIMORE, MD 21227 410-644-5603	PROJECT: FONT HILL MANOR FARM ESTATES SECTION 2 LOTS 29-33, 35, 64 PHASE 1 AND LOTS 40, 41, 43-48, 53, 59-62 PHASE 2 LOCATION: TAX MAP 24 - BLOCKS 8 & 14 - PARCEL 725 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE: SITE DEVELOPMENT AND LANDSCAPE PLAN	DATE: MAY, 1999 PROJECT NO. 1239
DESIGN: JMC DRAFT: JMC	SCALE: AS SHOWN DRAWING 3 OF 6



BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR 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.

Jan A. Frank 5/5/99
 DEVELOPER - PULTE HOME CORPORATION DATE

BY THE ENGINEER:
 I/WE 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 M. Mason 5/4/99
 ENGINEER - DONALD A. MASON, P.E. # 21443 DATE

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

Reena Simmons 7/15/99
 NATURAL RESOURCES CONSERVATION SERVICE DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

J. Roberts 5/5/99
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blood 7/30/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Richard Blood 7/30/98
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

James S. Smith 8/3/99
 DIRECTOR DATE

PLAN VIEW
 SCALE: 1" = 30'

NO.	DATE	REVISION

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ENGINEERING INC.

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DESIGN: JMC DRAFT: JMC	TITLE: SEDIMENT AND EROSION CONTROL PLAN DATE: MAY, 1999 PROJECT NO. 1239 SCALE: 1" = 30' DRAWING 5 OF 6

SEDIMENT CONTROL NOTES

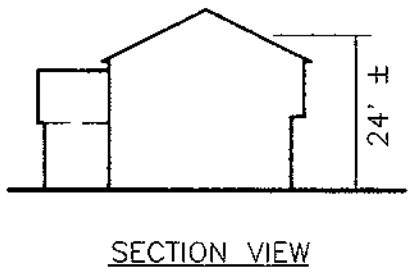
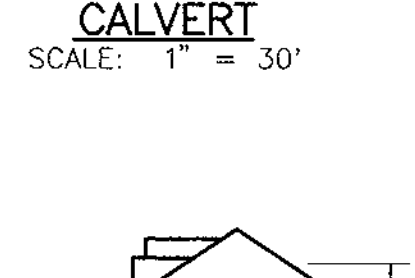
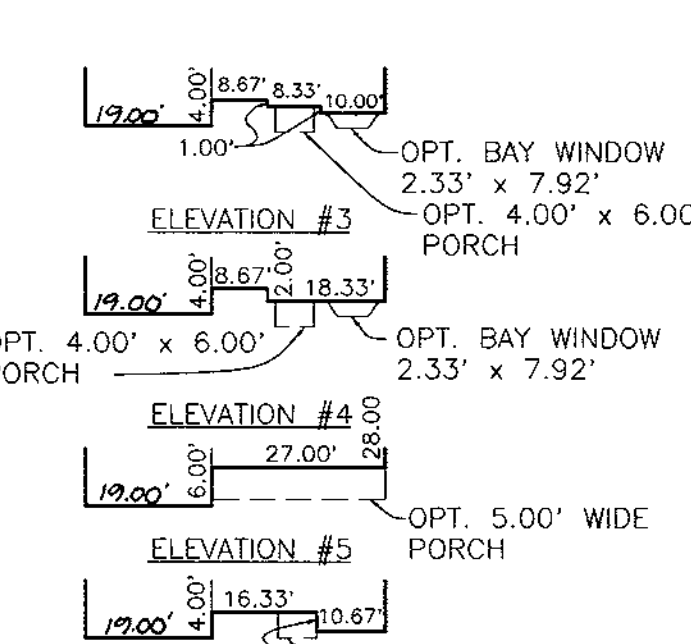
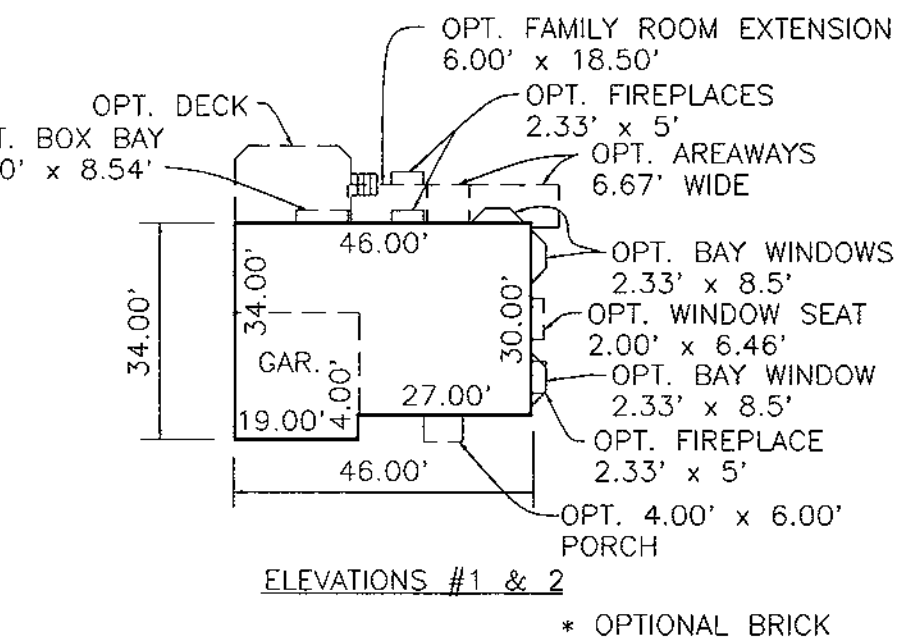
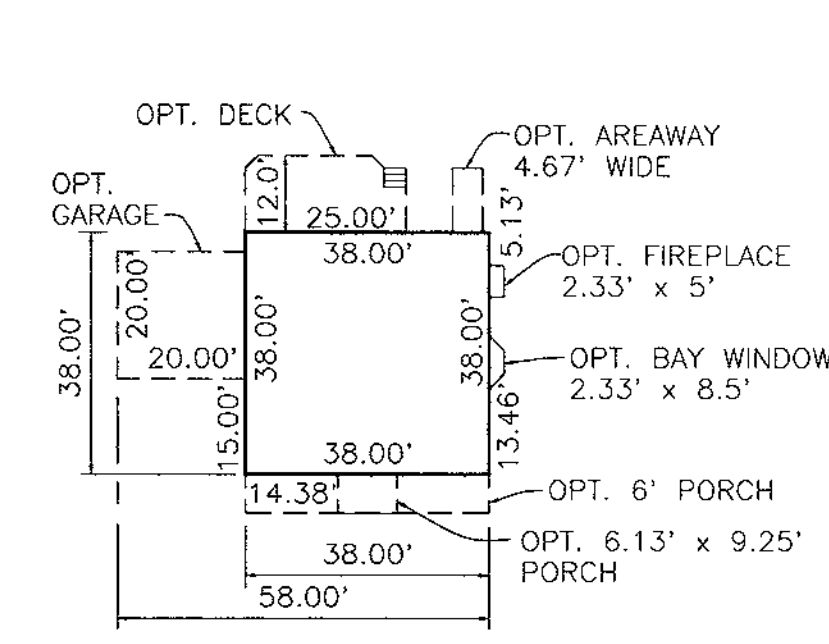
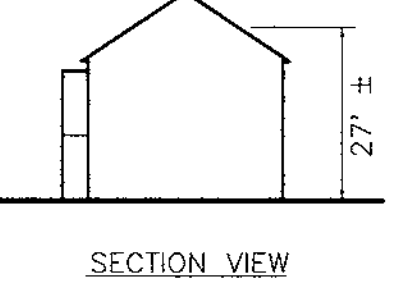
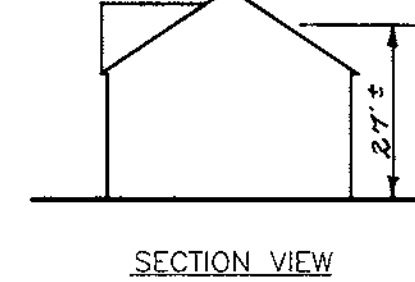
TOPSOIL SPECIFICATIONS

TEMPORARY SEEDBED PREPARATIONS

- 1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION... 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL... 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERMITS... B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE... 4. ALL SEDIMENT TRAPS/BASINS SHALL BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE... 5. 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... 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR... 7. SITE ANALYSIS: TOTAL AREA OF SITE (THIS SUBMISSION) 4.39 ACRES AREA DISTURBED 4.13 ACRES AREA TO BE ROOFED OR PAVED 1.12 ACRES AREA TO BE VEGETATIVELY STABILIZED 3.01 ACRES TOTAL CUT 5.344 CY TOTAL FILL (INCLUDES COMPACTION OF 1.15) 7.762 CY OFFSITE WASTE/BORROW AREA LOCATION N/A

- 1. Topsoil salvaged from the existing site may be used provided that it meets that standards as set forth in these specifications... 2. Topsoil Specifications - Soil to be used as topsoil must meet the following: a. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand... b. Topsoil must be free of plant or plant parts such as Bermuda grass, quack grass, Johnson grass, nutsedge, poison ivy, helle, or others as specified... c. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil... 3. For sites having disturbed areas under 5 acres: a. Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials... 4. For sites having disturbed areas over 5 acres: a. On soil meeting topsoil specifications, obtain test results indicating fertilizer and lime amendments required to bring the soil into compliance with the following: i. pH for topsoil shall be between 6.0 and 7.5... ii. Organic content or topsoil shall be not greater than 1.5 percent by weight... iii. Topsoil having soluble salt content greater than 500 parts per million shall not be used... iv. No soil or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials... b. 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... c. Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials... 5. Topsoil Application: i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins... ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, unless 4" - 8" higher in elevation... iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4"... iv. 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... 6. 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: a. Composted Sludge Material for use as a soil conditioner for sites having distributed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements: i. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of application of the compost) by the Maryland Department of the Environment under CSMAR 26.04.05... ii. 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... iii. Compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use... b. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet... c. 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: Guidelines Specifications, Soil Preparation and Sowing, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1973.

- 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 3-1/2 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 2 1/2 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS; ON SLOPES, 8 FT. OR HIGHER, USE 3/4 GALLONS PER ACRE (9 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.



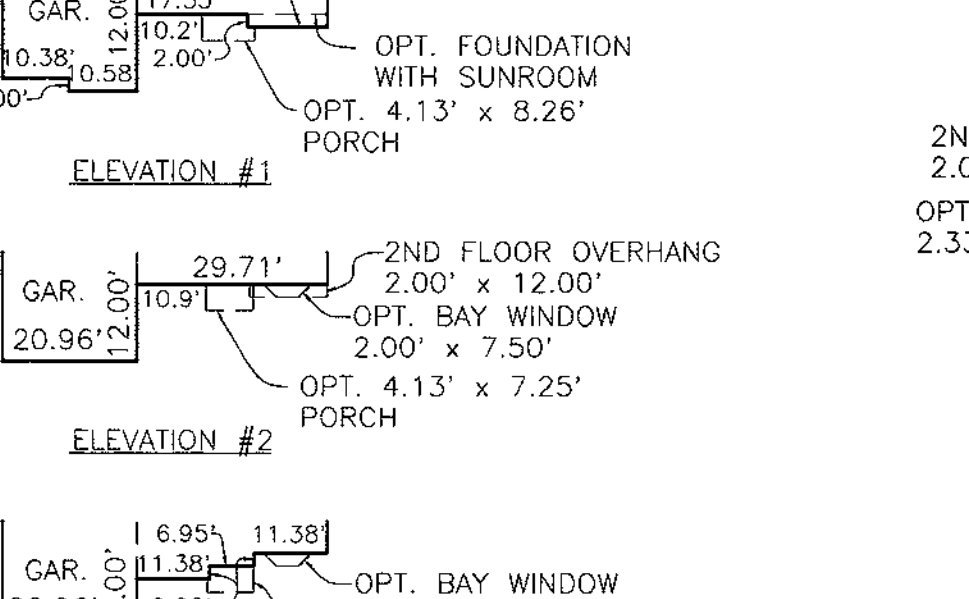
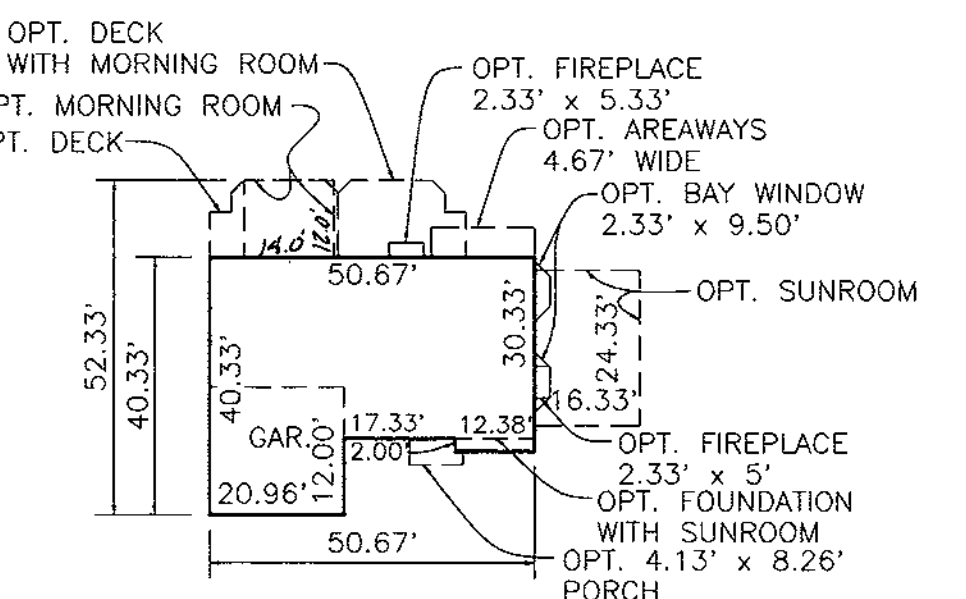
PERMANENT SEEDBED PREPARATIONS

- 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 ONE OF THE FOLLOWING SCHEDULES: 1. 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... 2. 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... SEEDING: FOR THE PERIOD 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... 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... MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

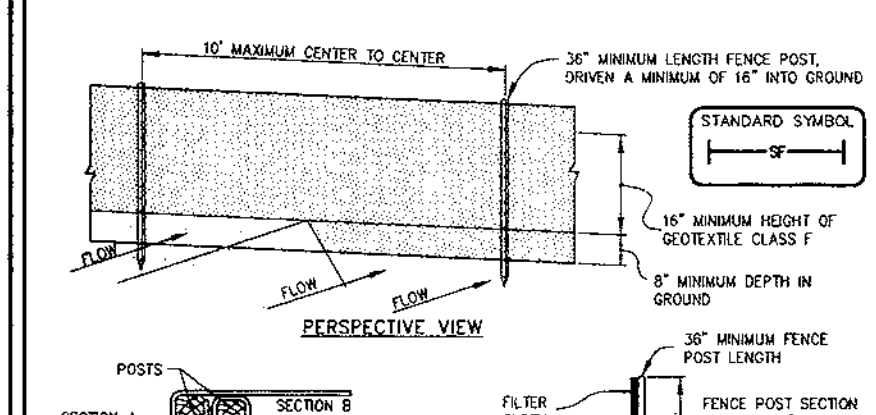
- VI. Alternative for Permanent Seeding - instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below: a. Composted Sludge Material for use as a soil conditioner for sites having distributed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements: i. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of application of the compost) by the Maryland Department of the Environment under CSMAR 26.04.05... ii. 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... iii. Compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use... b. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet... c. 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: Guidelines Specifications, Soil Preparation and Sowing, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1973.

SEQUENCE OF CONSTRUCTION

- NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION DAY 1 - OBTAIN GRADING PERMIT. DAY 2-8 - 1) INSTALL SEDIMENT CONTROLS THAT ARE NOTED TO BE INSTALLED UNDER THIS SDP... 2) INSTALL SEDIMENT CONTROLS THAT ARE NOTED TO BE INSTALLED UNDER THIS SDP... DAY 9-12 - 3) EXCAVATE FOR FOUNDATIONS, ROUGH GRADE AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDBED NOTES. DAY 13-87 - 4) CONSTRUCT HOUSES, BACKFILL AND CONSTRUCT DRIVEWAYS. DAY 83-87 - 5) FINAL GRADE AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDBED NOTES... DAY 88-91 - 6) WITH THE APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE ANY REMAINING DISTURBED AREAS.



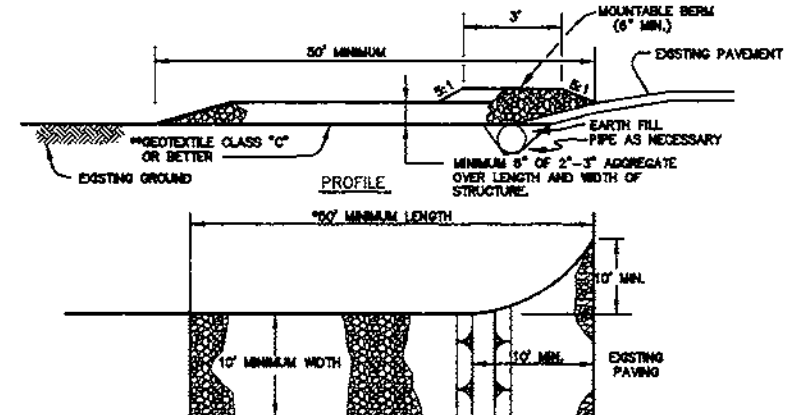
DETAIL 22 - SILT FENCE



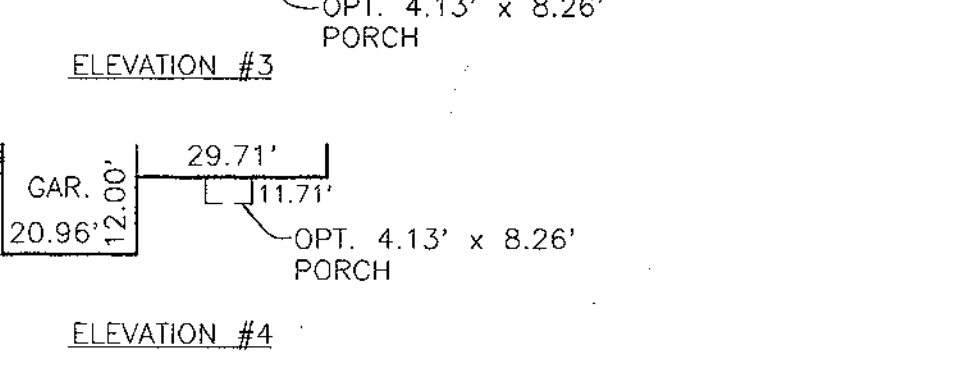
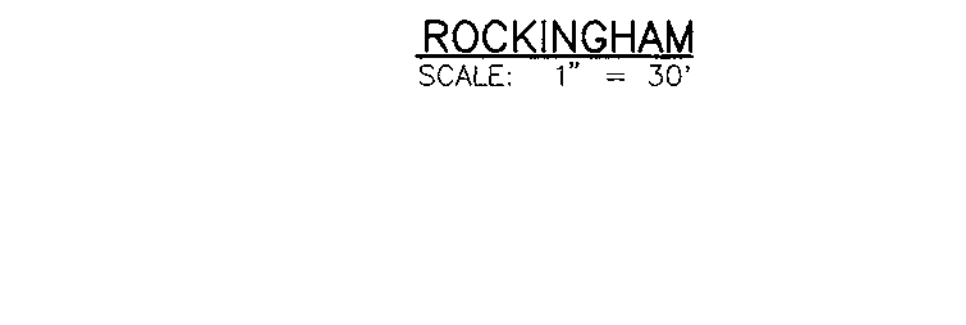
SILT FENCE

SILT FENCE DESIGN CRITERIA table with columns for Slope Steepness, Filter Cloth Length, and Silt Fence Length. Includes a note: 'In areas of less than 2% slope and sandy soils (USDA general classification system, soil class A), maximum slope length and filter cloth length will be unlimited. In these areas a silt fence may be the only perimeter control required.'

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



FOUNDATION PLAN



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 1. Fence posts shall be a minimum of 24" long driven 18" minimum into the ground... 2. Geotextile shall be fastened securely to each fence post with wire ties or staples of top and mid-section and shall meet the following requirements for Geotextile Class F... 3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass... 4. Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of fabric height.

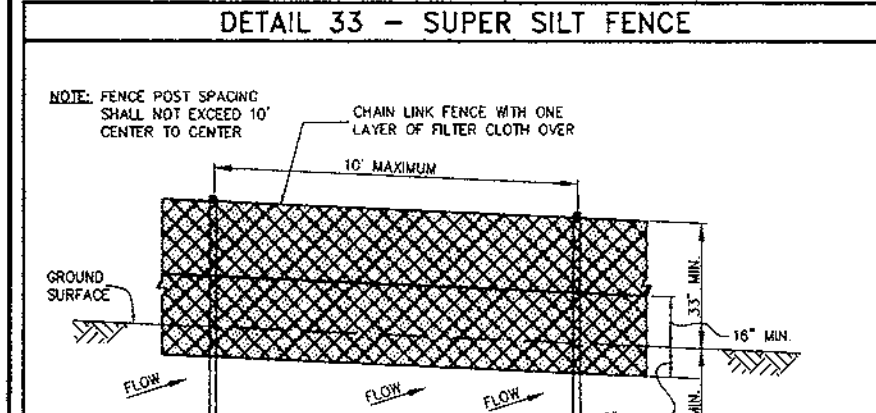
CONSTRUCTION SPECIFICATIONS

- 1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Uniform Fencing Law... 2. Chain link fence shall be fastened securely to the fence posts with wire ties... 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" of 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 of top and mid-section and shall meet the following requirements for Geotextile Class F...

CONSTRUCTION SPECIFICATIONS

- 1. Seed and cover with straw mulch... 2. Seed and cover with Erosion Control Matting or lime with sod... 3. All temporary earth dikes shall have undisturbed positive grade to an outlet... 4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike... 5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow... 6. Fill shall be compacted by earth moving equipment... 7. All earth removed and soil needed for construction shall be placed so that it will not interfere with the functioning of the dike... 8. Inspection and maintenance must be provided periodically and after each rain event.

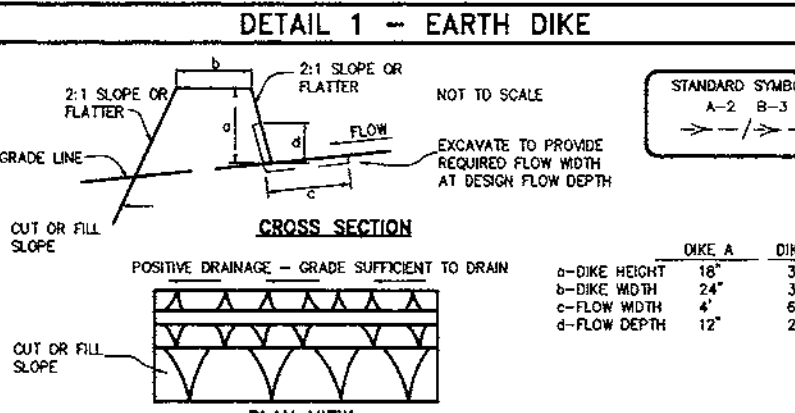
DETAIL 33 - SUPER SILT FENCE



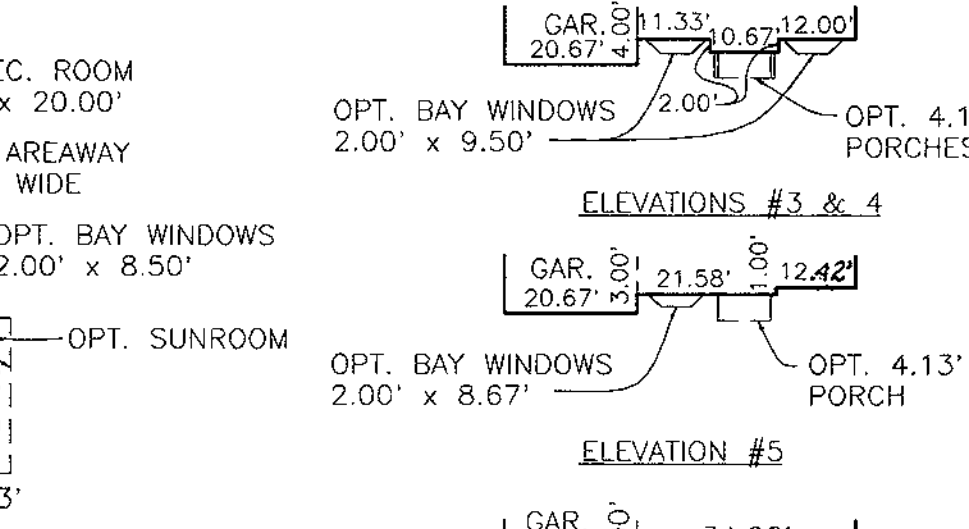
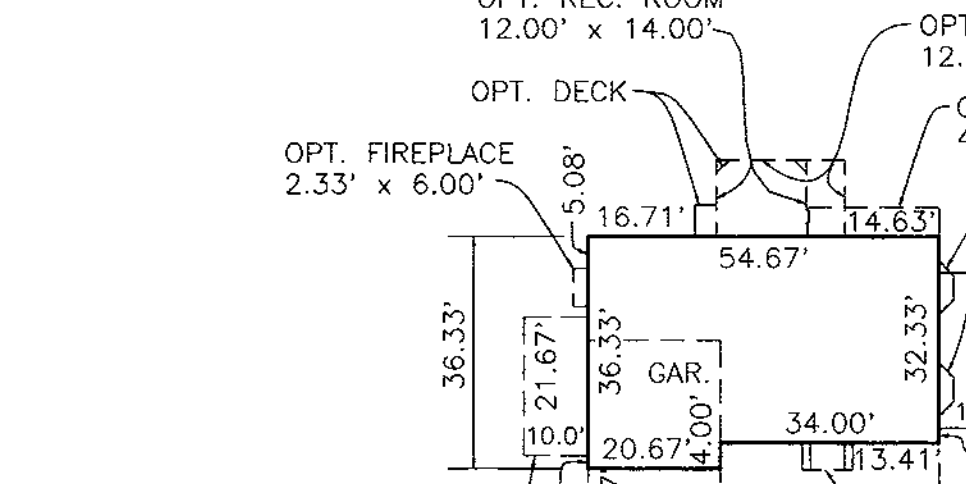
SUPER SILT FENCE

SUPER SILT FENCE DESIGN CRITERIA table with columns for Slope Steepness, Filter Cloth Length, and Silt Fence Length. Includes a note: 'In areas of less than 2% slope and sandy soils (USDA general classification system, soil class A), maximum slope length and filter cloth length will be unlimited. In these areas a silt fence may be the only perimeter control required.'

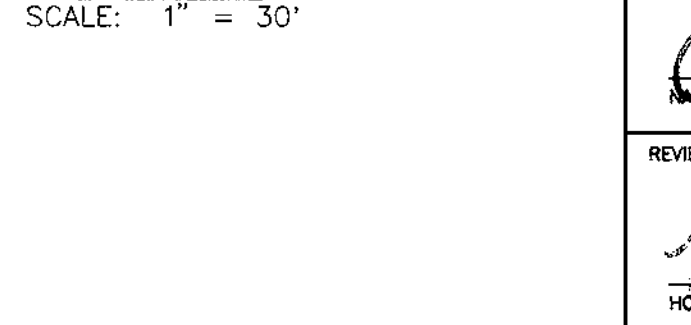
DETAIL 1 - EARTH DIKE



FOUNDATION PLAN

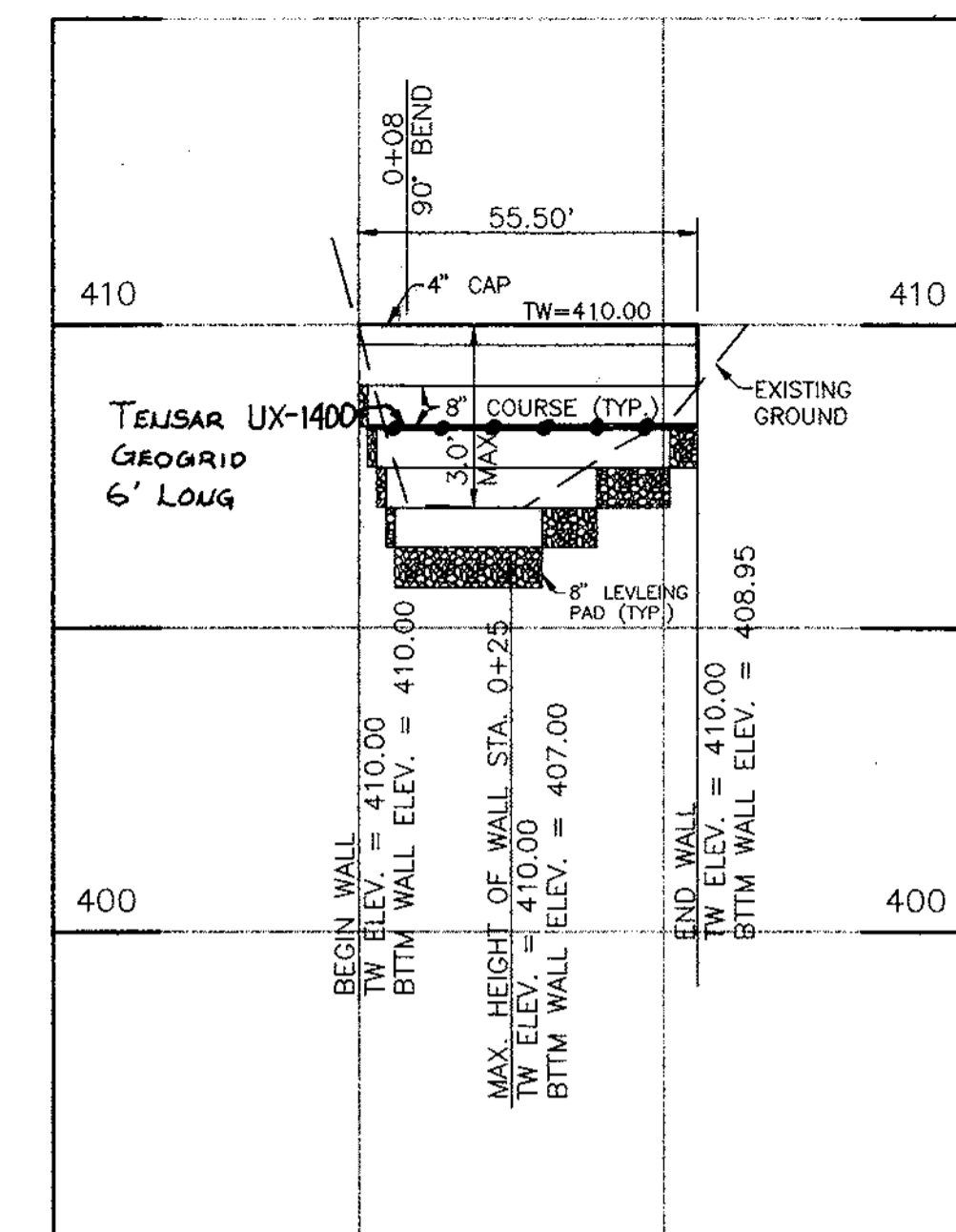


FOUNDATION PLAN



Professional engineering stamps and signatures for the developer (Pulte Home Corporation), engineer (Donald A. Mason, P.E.), and other project participants, including dates and titles.

Project information for BENCHMARK ENGINEERING INC., including owner/developer (Pulte Home Corporation), project name (Font Hill Manor Farm Estates), location (Baltimore, MD), title (Sediment and Erosion Control Notes & Details), date (May 1999), and drawing number (6 of 6).



LOWER RETAINING WALL
SCALE: HORT. 1" = 30"
VERT. 1" = 3"

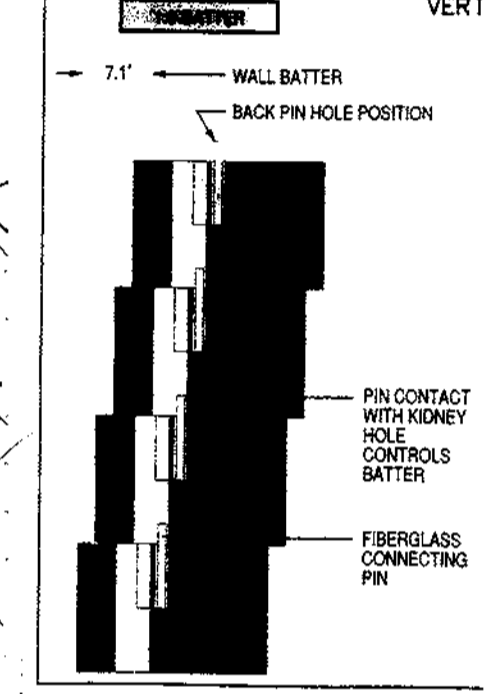
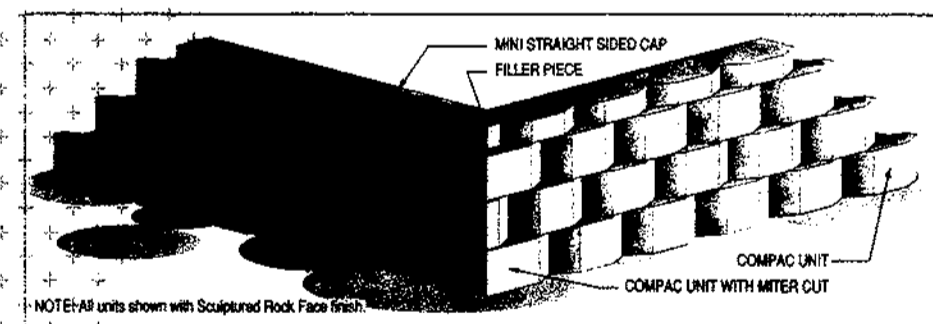
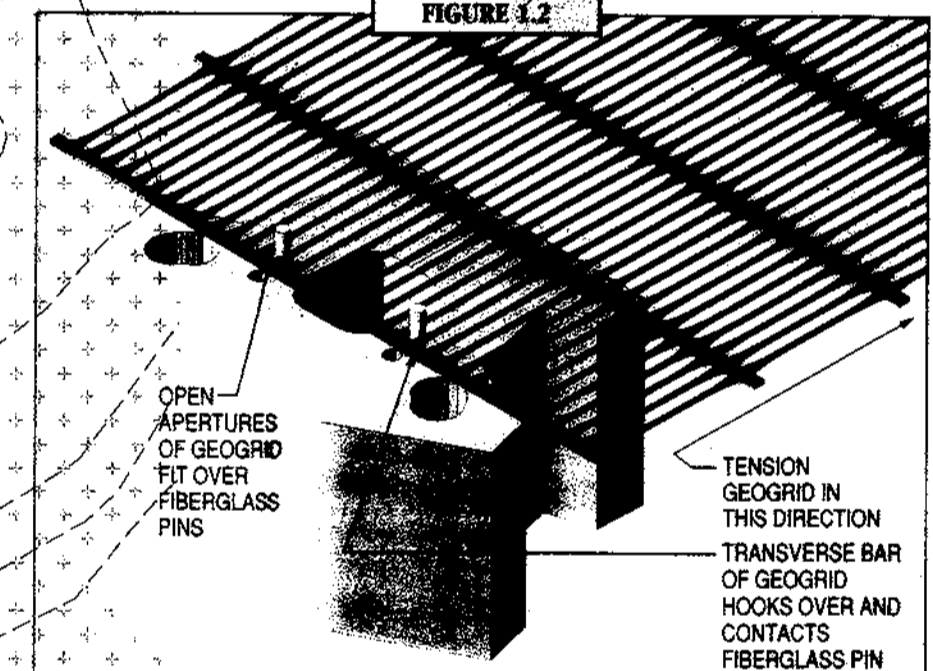
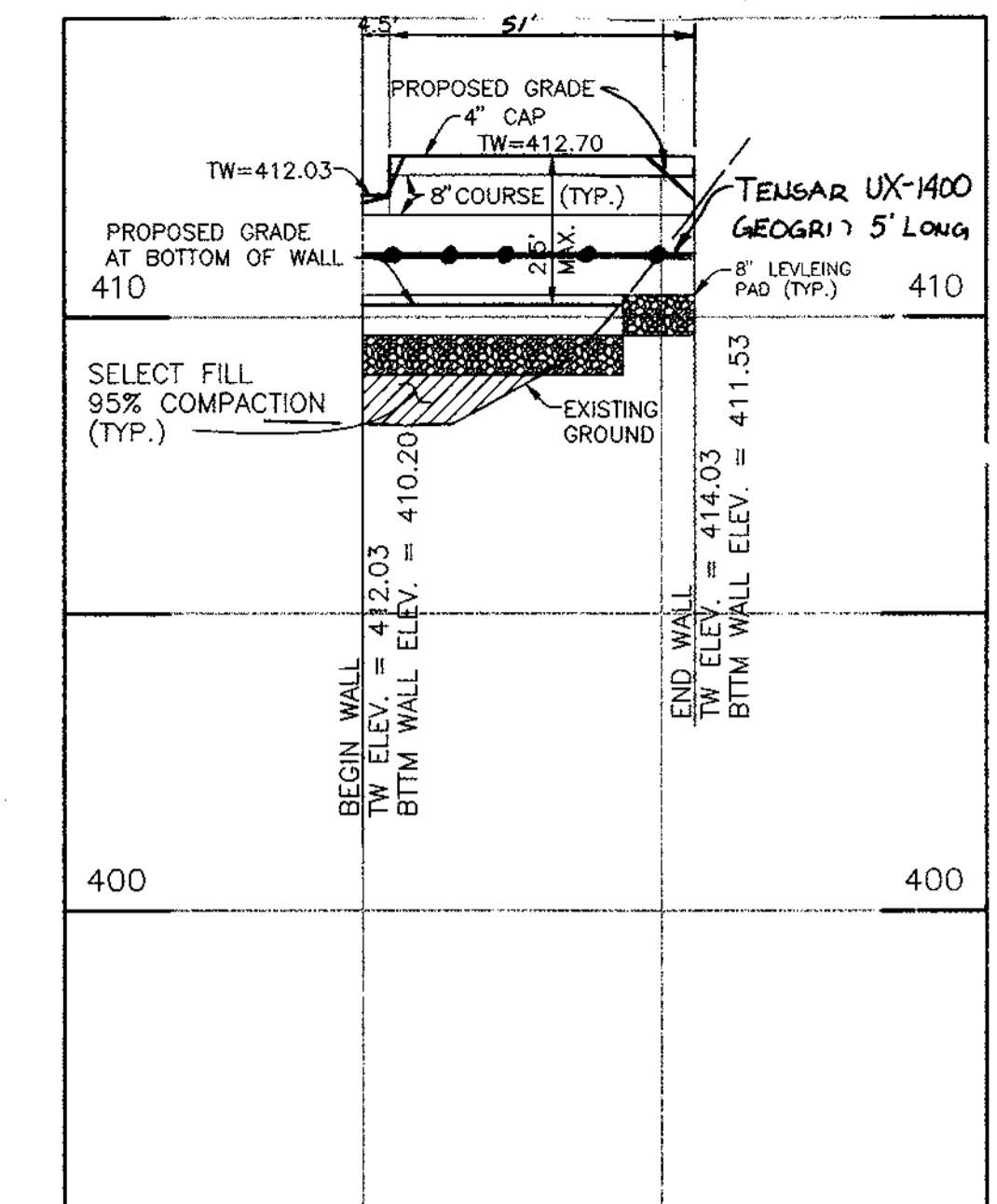


FIGURE 1.2

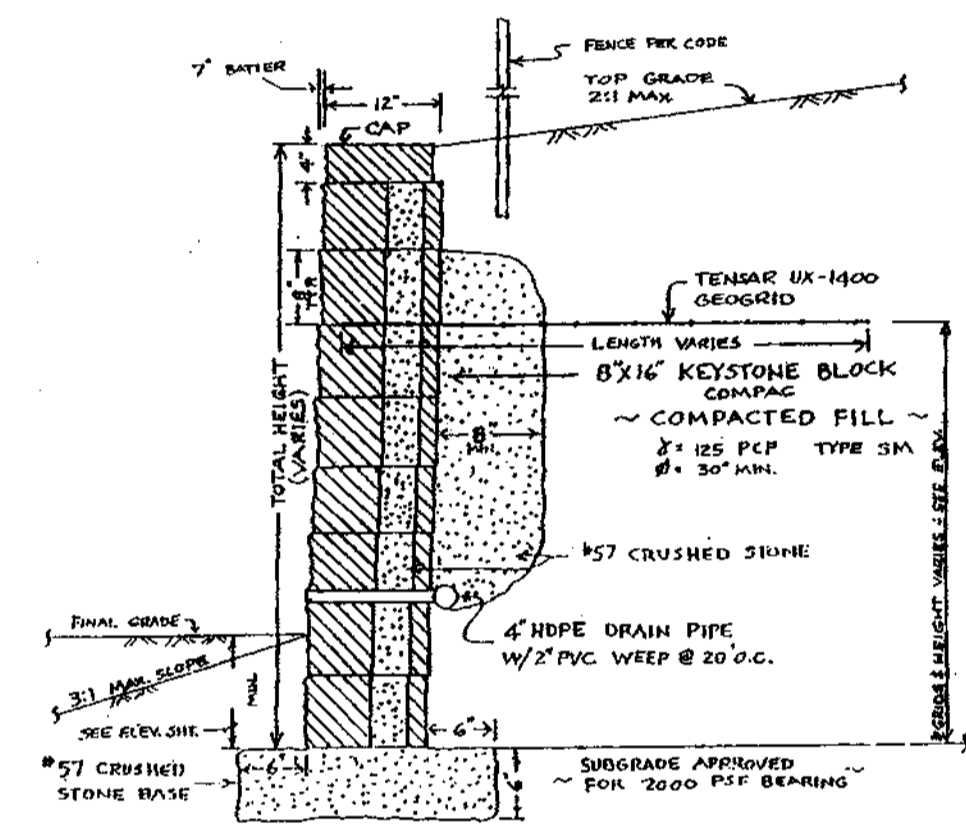


SEQUENCE OF CONSTRUCTION FOR KEYSTONE RETAINING WALL

- 1.) REMOVE ALL SURFACE VEGETATION AND DEBRIS
- 2.) EXCAVATE BASE TRENCH TO ALLOW FOR BASE LEVELING PAD AND FIRST COURSE OF KEYSTONE UNIT.
- 3.) PLACE AND COMPACT BASE LEVELING PAD.
- 4.) SET AND ALIGN BASE COURSE.
- 5.) INSERT FIBERGLASS CONNECTING PINS.
- 6.) PLACE UNIT/DRAINAGE MATERIAL. DRAINAGE MATERIAL SHALL BE NUMBER 57 CRUSHED STONE OR AS DIRECTED BY THE KEYSTONE MANUFACTURER. DO NOT OPERATE COMPACTION EQUIPMENT DIRECTLY ON THE KEYSTONE UNIT. INSTALL GEGRID REINFORCEMENT AT INTERVALS INDICATED ON WALL DETAIL.
- 7.) BACKFILL AND COMPACT ALL SOILS PLACED BETWEEN THE UNIT/DRAINAGE MATERIAL AND THE RETAINED BACKFILL.
- 8.) SWEEP TOP OF UNITS CLEAN PRIOR TO PLACEMENT OF THE NEXT COURSE.
- 9.) INSTALL ADDITIONAL COURSES OF KEYSTONE UNIT AS INDICATED IN ABOVE STEPS 5-9.
- 10.) POSITION AND INSTALL CAP UNITS.
- 11.) FINISH GRADING.



UPPER RETAINING WALL
SCALE: HORT. 1" = 30"
VERT. 1" = 3"



TYPICAL WALL PROFILE
N.T.S.

NOTES:

1. THE EARTH WORK AND CONSTRUCTION OF THE RETAINING WALLS SHALL BE PERFORMED UNDER THE OBSERVATION OF A MARYLAND REGISTERED PROFESSIONAL ENGINEER.
2. THE BEARING CAPACITY OF THE SOIL MUST BE VERIFIED IN THE FIELD PRIOR TO WALL CONSTRUCTION. THE FOLLOWING SOIL PROPERTIES WERE ASSUMED FOR DESIGN:
GRANULAR FILL - SOIL FRICTION ANGLE = 30±
UNIT WEIGHT = 110 TO 125 LB/C.F.
BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR WITH THE PROPER EQUIPMENT (ASTM D-690).
MINIMUM 11" CWABLE BEARING PRESSURE IS 2500 PSF. IF BEARING IS FOUND TO BE INADEQUATE, AREA UNDER WALL AND REINFORCED BACKFILL MUST BE UNDERCUT AND REPLACED W/APPROPRIATE MATERIAL AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER.
3. BASE LEVELING PAD AND UNIT/DRAINAGE MATERIAL SHALL BE COMPACTED 3/4" MIN. CRUSHED STONE.
4. WALLS SHALL BE KEYSTONE UNITS AND PINS. CORNER UNITS SHALL BE SET CUTS. CAPS AND CORNER UNITS SHALL BE SECURED W/FLEXIBLE EPOXY BARNED ADHESIVE SUCH AS KEYSTONE KAPSEAL.
5. GEGRID SHALL BE TENSAR UX1400SB.
6. WORK SHALL BE PERFORMED PER KEYNOTES CONSTRUCTION MANUAL BY A QUALIFIED CONTRACTOR.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blund
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 7/20/99

Richard Blund
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 7/20/99

Howard Katt
DIRECTOR
DATE: 8/1/99

PLAN VIEW
SCALE: 1" = 30"

NO.	1	DATE	10/7/99	REVISION	RESITE LOT 29
<p>BENCHMARK ENGINEERING INC. ENGINEERS • LAND SURVEYORS • PLANNERS</p> <p>8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043 PHONE: 410-465-6105 FAX: 410-465-6644</p>					
OWNER/DEVELOPER:			PROJECT:		
PULTE HOME CORPORATION 1501 SOUTH EDGEWOOD STREET SUITE K BALTIMORE, MD 21227 410-644-5603			FONT HILL MANOR FARM ESTATES SECTION 2 LOTS 29-33, 35, 64 PHASE 1 AND LOTS 40, 41, 43-48, 53, 59-62 PHASE 2 LOCATION: TAX MAP 24 - BLOCKS 8 & 14 - PARCEL 725 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: SITE DEVELOPMENT PLAN					
DESIGN: JMC		DRAFT: JMC		DATE: MAY, 1999 PROJECT NO. 1239	
SCALE: 1" = 30'				DRAWING 2 OF 6	