

**GENERAL NOTES**

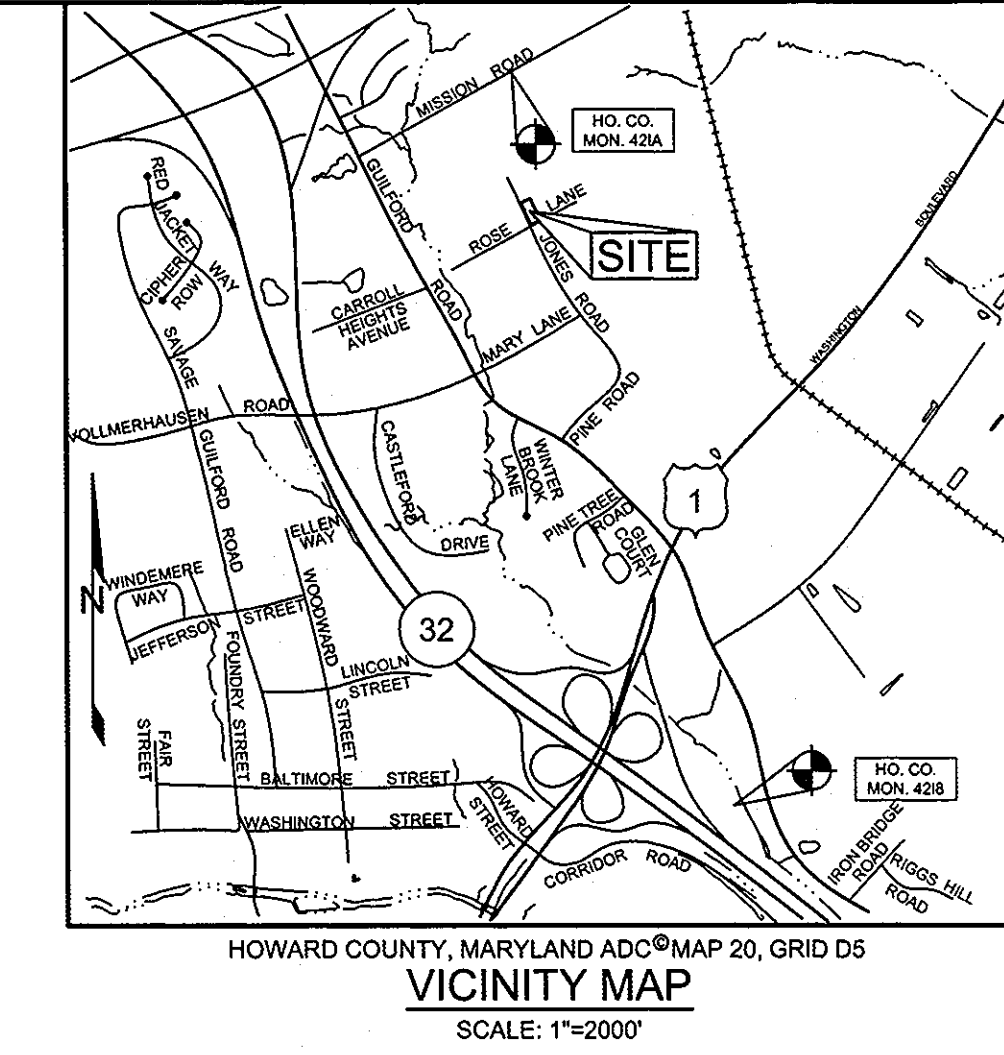
- THIS PROPERTY IS ZONED R-12 PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND THE "COMPLITE" ZONING AMENDMENTS EFFECTIVE 07/28/06.
- AREA CALCULATIONS:  
GROSS AREA OF PROPERTY = 0.8312 AC.  
TOTAL AREA OF PROPOSED LOTS = 0.5888 AC.  
TOTAL AREA OF OPEN SPACE LOTS = 0.0000 AC.  
TOTAL AREA OF RIGHT-OF-WAY DEDICATION = 0.0424 AC.
- PROPERTY IS IN THE METROPOLITAN DISTRICT.
- PUBLIC WATER AND PUBLIC SEWER WILL BE USED WITHIN THIS SITE. WATER CONTRACT #44-1030-D; SEWER CONTRACT #20-0944-D.
- PUBLIC WATER AND SEWAGE ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THE TIME.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:  
STATE HIGHWAY ADMINISTRATION 410.531.5533  
SGE(CONTRACTOR SERVICES) 410.850.4620  
SGE(UNDERGROUND DAMAGE CONTROL) 410.787.9068  
MISS UTILITY 800.257.7777  
COLONIAL PIPELINE COMPANY 410.795.1390  
HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES 410.313.4900  
HOWARD COUNTY HEALTH DEPARTMENT 410.313.2640  
AT&T 800.252.1133  
VERIZON 800.743.0033/410.224.9210
- BOUNDARY SHOWN HEREON IS BASED ON A BOUNDARY SURVEY PREPARED BY SILL, ADCOCK & ASSOCIATES, LLC, DATED NOVEMBER 2006.
- TOPOGRAPHY IS BASED ON A FIELD RUN TOPOGRAPHICAL SURVEY PERFORMED BY SILL, ADCOCK & ASSOCIATES, LLC, DATED NOVEMBER 2006.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- ANY DAMAGE TO PUBLIC UTILITIES, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. DRIVEWAY PAVING TO BE HOWARD COUNTY STANDARD P-1 PAVING SECTION (SEE DETAIL ON SHEET 2). ROAD WIDENING TO BE HOWARD COUNTY STANDARD P-2 PAVING SECTION (SEE DETAIL ON SHEET 2). GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST, PRIOR TO CONSTRUCTION.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS 421A AND 421B WERE USED FOR THIS PROJECT.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING REQUIREMENTS:  
a) WIDTH - 12 FEET SERVING MORE THAN ONE RESIDENCE;  
b) SURFACE - SIX (6) INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MINIMUM);  
c) GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS;  
d) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING);  
e) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE;  
f) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- DRIVEWAY ENTRANCE TO BE PER HOWARD COUNTY STANDARD DETAIL R-6.03.
- SEWER HOUSE CONNECTION(S) TO BE AT 2.0% UNLESS OTHERWISE NOTED. CLEANOUTS ARE TO BE PROVIDED AT ALL BENDS.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- A WETLAND DELINEATION WAS PERFORMED BY EXPLORATION RESEARCH, INC., DATED FEBRUARY 2007.
- THERE ARE NO WETLANDS, STREAMS, STEEP SLOPES, FLOODPLAINS, HISTORIC STRUCTURES OR CEMETERIES LOCATED ON SITE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- LANDSCAPE BUFFERING FOR LOT 12 WILL BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE.
- THIS PLAN COMPLES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY THE FEE-IN-LIEU OF 0.09 ACRES OF AFFORESTATION IN THE AMOUNT OF \$2,941.00.
- IN ACCORDANCE WITH THE MARYLAND STORMWATER DESIGN MANUAL, PROJECTS SHALL BE EXEMPT FROM STORMWATER MANAGEMENT OBLIGATIONS IF IT HAS LESS THAN 5,000 SQUARE FEET OF LAND COVER CHANGE. THIS PLAN PROPOSES 4,189 SQUARE FEET OF LAND COVER CHANGE AND THEREFORE IS EXEMPT FROM PROVIDING STORMWATER MANAGEMENT. THIS AREA INCLUDES THE PROPOSED ROAD IMPROVEMENTS AND THE IMPROVEMENTS PROPOSED UNDER SDP-07-134. STORMWATER MANAGEMENT REQUIREMENTS FOR LOT 12 WILL BE DETERMINED UNDER ITS SITE DEVELOPMENT PLAN.
- A FEE-IN-LIEU OF OPEN SPACE REQUIREMENTS IN THE AMOUNT OF \$1500.00 SHALL BE PAID WITH THIS PLAN.
- A SITE DEVELOPMENT PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON LOT 12 AND 13.
- THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127-RESIDENTIAL INFILL DEVELOPMENT- OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPER OF THIS PROJECT SHALL CREATE COMPATIBILITY WITH THE EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BERMS, FENCES, SIMILAR HOUSING UNIT TYPES AND THE DIRECTION ORIENTATION OF THE PROPOSED HOUSES.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY MARS GROUP, LLC, DATED JANUARY 2008, AND APPROVED ON FEBRUARY 13, 2008.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS". A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)-3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- THE EXISTING HOUSE AS CONSTRUCTED UNDER SDP-07-134 ON LOT 13 IS TO REMAIN.

**STREET SIGN CHART**

SYMBOL	ROAD NAME	STATION	OFFSET	DESCRIPTION
b	ROSE LANE	9+56	15' RIGHT	R1-1 "STOP"

**LEGEND**

- EXISTING CONTOUR
- PROPOSED CONTOUR
- SPOT ELEVATION
- DIRECTION OF FLOW
- SILT FENCE
- LIMIT OF DISTURBANCE
- SOIL BOUNDARY
- STABILIZED CONSTRUCTION ENTRANCE
- EXISTING TREELINE
- EXISTING TREE
- EXISTING SHADE TREE PER SDP-07-134
- EXISTING EVERGREEN TREE PER SDP-07-134
- PROPOSED STREET TREE (SEE SHEET 2)
- EXISTING STREET LIGHT



**BENCHMARKS**

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
421A	543,390.4135	1,364,912.8827	312.00'	74.3' NORTH OF BG&E POLE
421B	542,107.8895	1,362,386.0376	301.46'	283' WEST OF EXIT SIGN 72' NORTH OF EDGE OF MACADAM

**FOREST CONSERVATION WORKSHEET**

NET TRACT AREA

NET TRACT AREA	VALUE
A TOTAL TRACT AREA	0.63 AC
B DEDUCTIONS (AREA OF LOT 1)	0.00 AC
C NET TRACT AREA	0.63 AC

LAND USE CATEGORY

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	1	0	0

D AFFORESTATION THRESHOLD (NET TRACT AREA x 20%) 0.09 AC  
E CONSERVATION THRESHOLD (NET TRACT AREA x 25%) 0.13 AC

EXISTING FOREST COVER

EXISTING FOREST COVER	VALUE
F EXISTING FOREST COVER WITHIN THE NET TRACT AREA	0.00 AC
G AREA OF FOREST ABOVE CONSERVATION THRESHOLD	0.00 AC

BREAK EVEN POINT

BREAK EVEN POINT	VALUE
H BREAK EVEN POINT	0.00 AC
I FOREST CLEARING PERMITTED WITHOUT MITIGATION	0.00 AC

PROPOSED FOREST CLEARING

PROPOSED FOREST CLEARING	VALUE
J TOTAL AREA OF FOREST TO BE CLEARED	0.00 AC
K TOTAL AREA OF FOREST TO BE RETAINED	0.00 AC

PLANTING REQUIREMENTS

PLANTING REQUIREMENTS	VALUE
L REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD	0.00 AC
M REFORESTATION FOR CLEARING BELOW THE CONSERVATION THRESHOLD	0.00 AC
N CREDIT FOR RETENTION ABOVE THE CONSERVATION THRESHOLD	0.00 AC
P TOTAL REFORESTATION REQUIRED	0.00 AC
Q TOTAL AFFORESTATION REQUIRED	0.09 AC
R TOTAL PLANTING REQUIRED	0.09 AC

**SHEET INDEX**

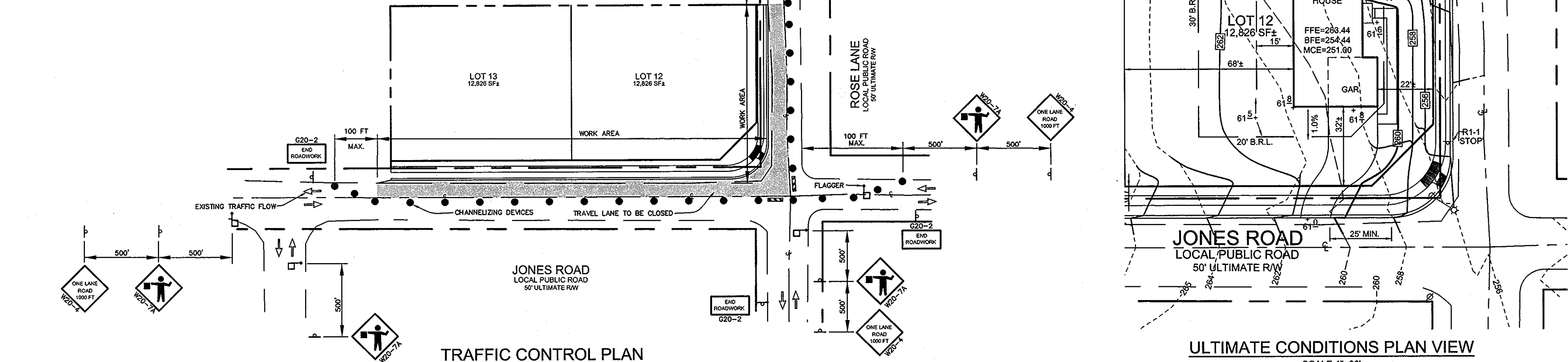
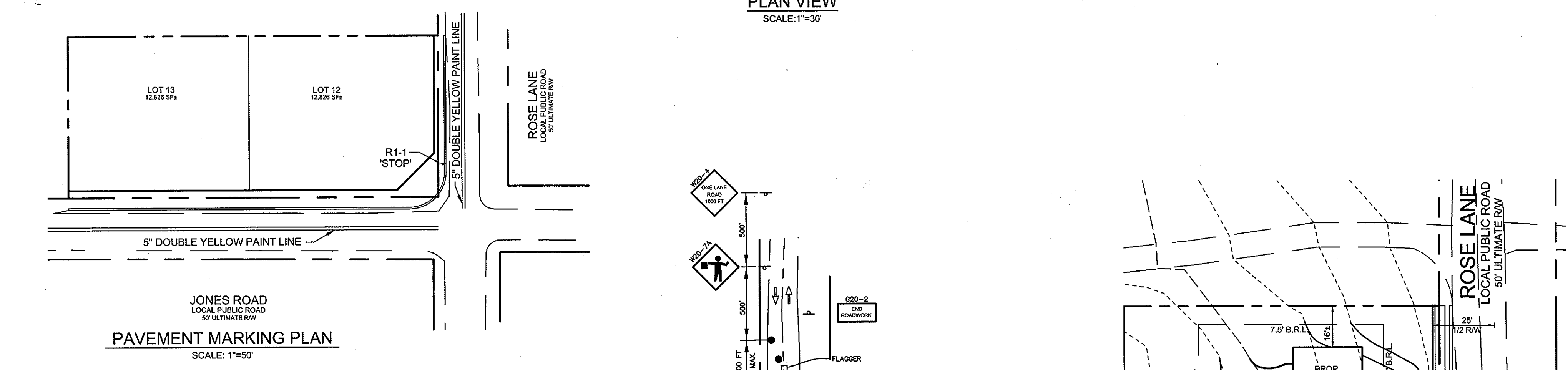
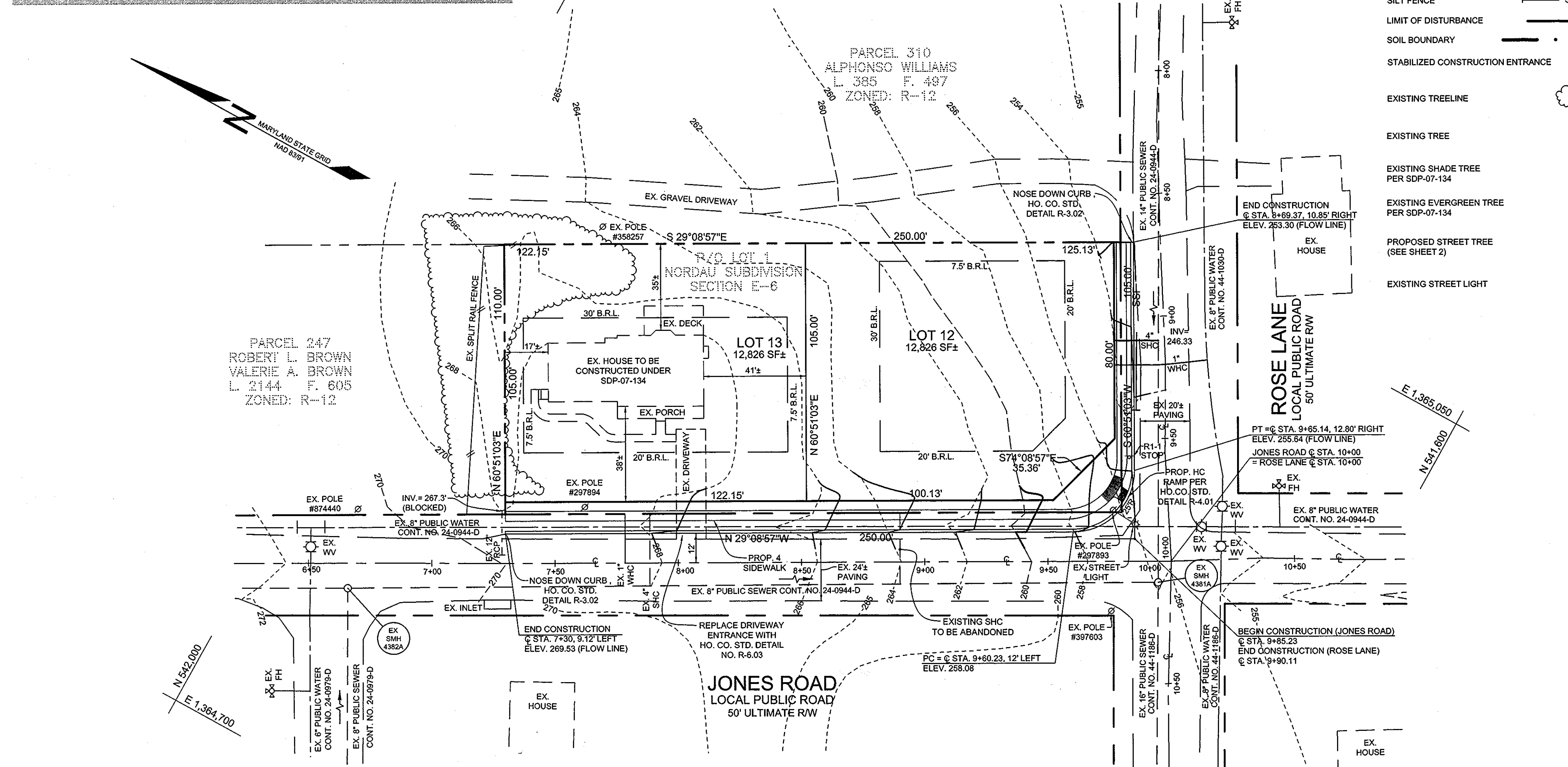
SHEET NO.	DESCRIPTION
1	FINAL ROAD CONSTRUCTION
2	SEDIMENT, EROSION CONTROL AND LANDSCAPE PLAN, CURB FILLET PROFILE AND DETAILS
3	SEDIMENT, EROSION CONTROL AND LANDSCAPE PLAN, CURB FILLET PROFILE AND DETAILS

**OWNER/DEVELOPER**  
BEATRICE M. FAIRLEY  
HELENA M. COLEMAN  
(410) 945-0766  
7871 JONES ROAD  
JESSUP, MARYLAND 20794

**FINAL ROAD CONSTRUCTION**  
**NORDAU SUBDIVISION**  
LOTS 12 AND 13  
A RESUBDIVISION OF NORDAU SUBDIVISION, PLAT BOOK 3, FOLIO 51,  
SECTION E-6, P/O LOT 1  
TAX MAP 42 GRID 24 SINGLE FAMILY DETACHED UNITS PARCEL 246  
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**Sill · Adcock & Associates · LLC**  
Engineers · Surveyors · Planners  
3300 North Ridge Road, Suite 160  
Ellicott City, Maryland 21043  
Phone: 443.325.7682 Fax: 443.325.7685  
Email: info@saaland.com

DESIGN BY: JT  
DRAWN BY: JT/IRM  
CHECKED BY: PS  
SCALE: AS SHOWN  
DATE: SEPT. 12, 2008  
PROJECT #: 06-031  
SHEET #: 1 of 3

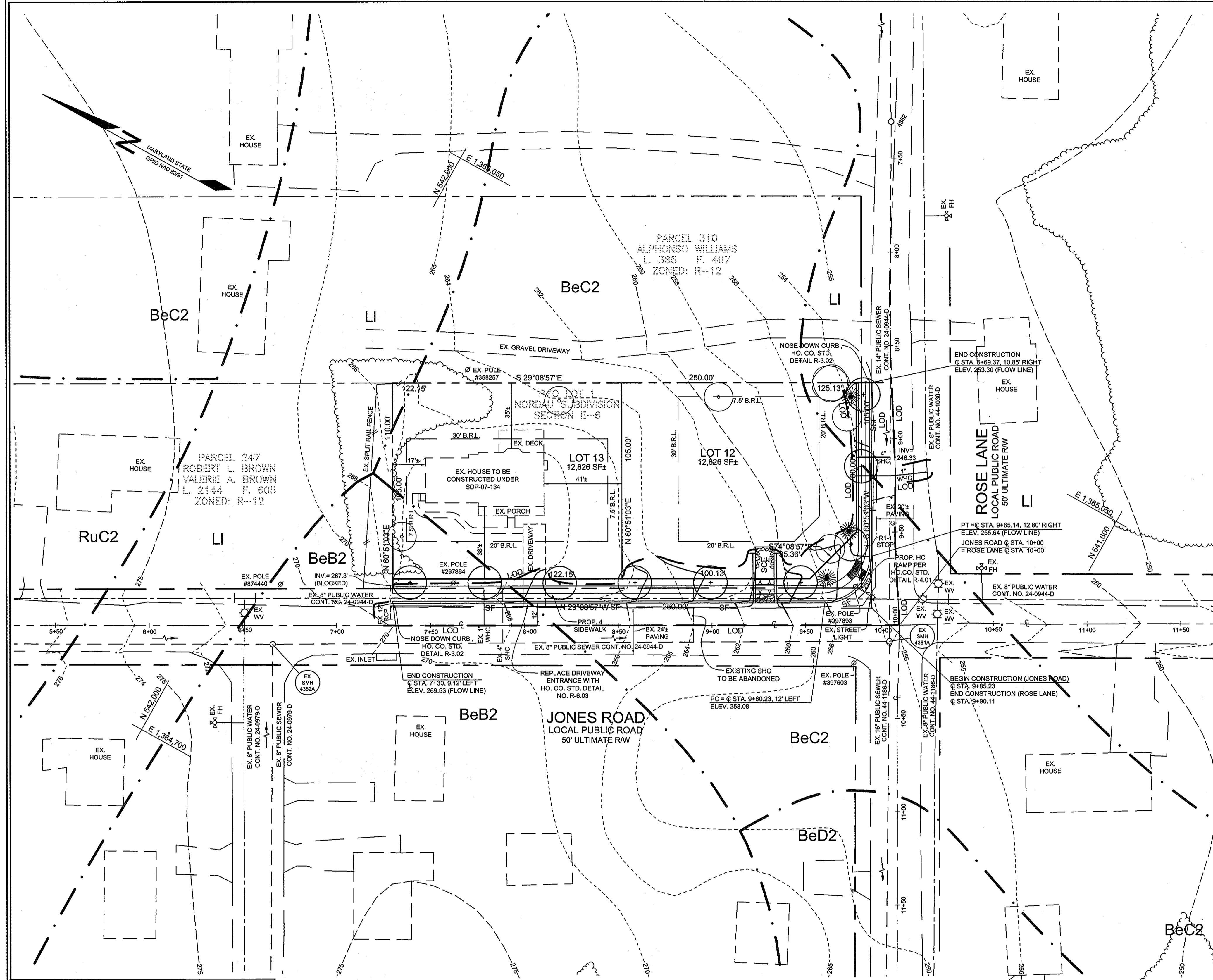


**NOTE:**  
1. CONSTRUCTION ON JONES ROAD AND ROSE LANE TO BE RESTRICTED TO ONE LANE AT A TIME.  
AT NO TIME SHALL BOTH LANES ON JONES ROAD AND/OR ROSE LANE BE CLOSED SIMULTANEOUSLY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*William R. Mohr, Jr.* 9-25-08  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Christina Stewart* 10/14/08  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

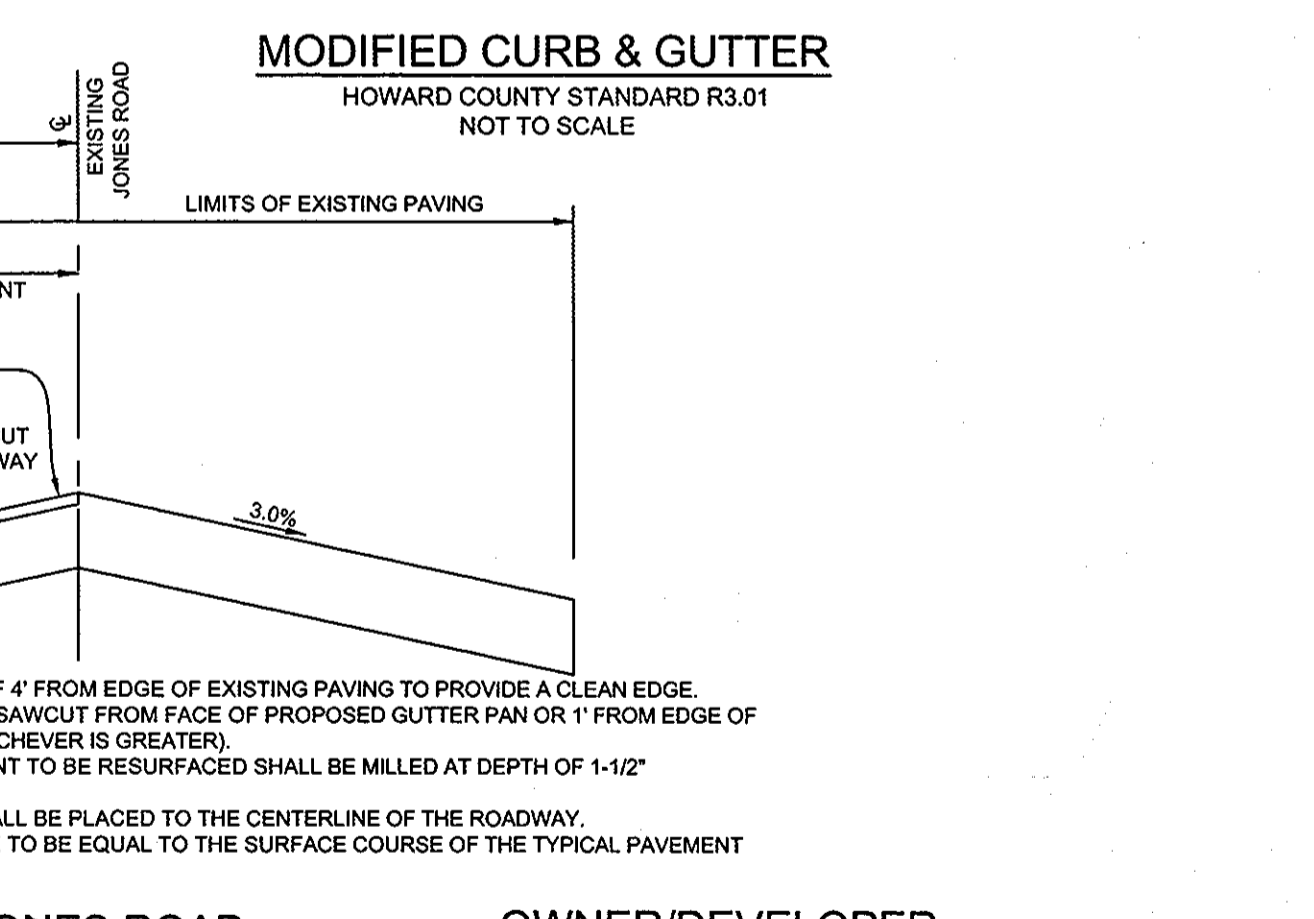
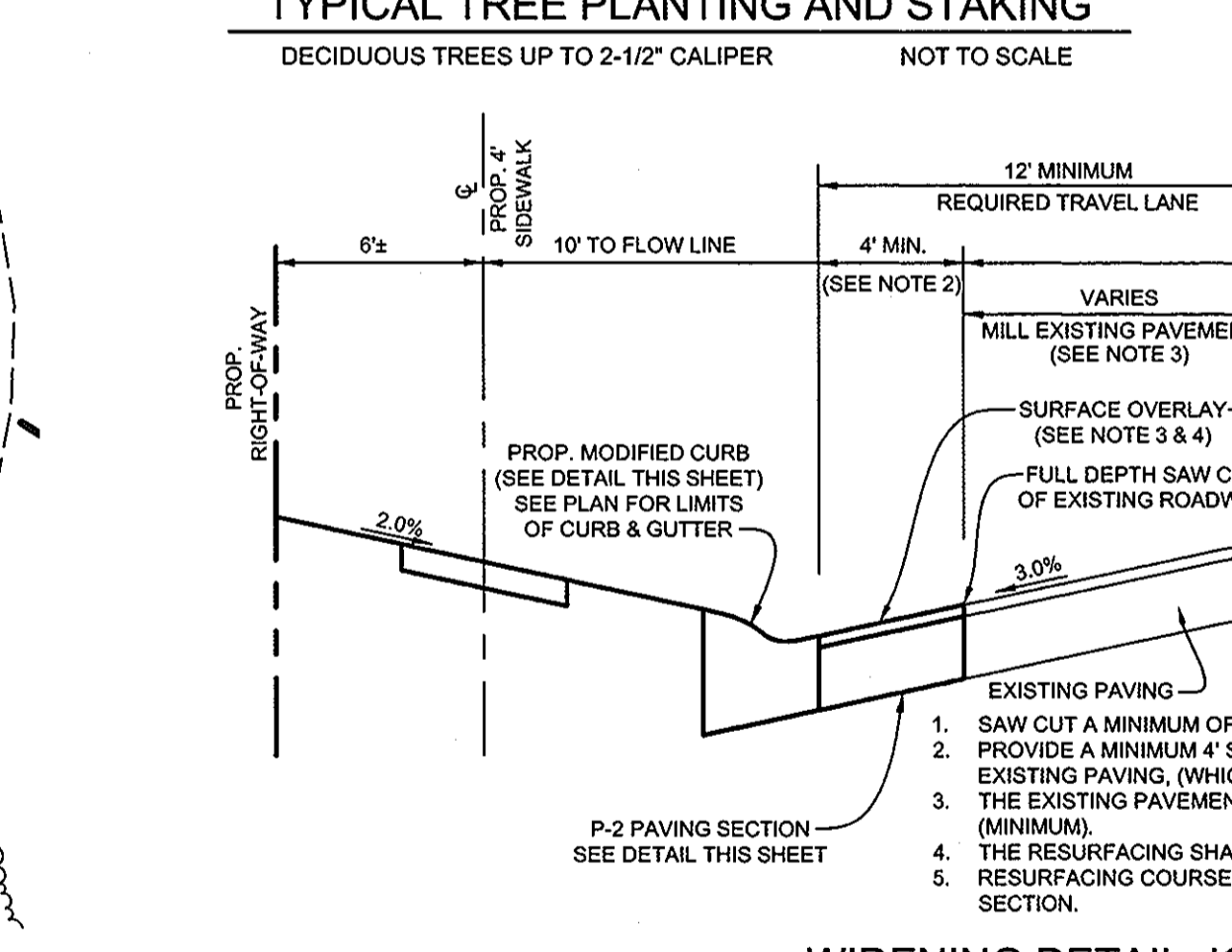
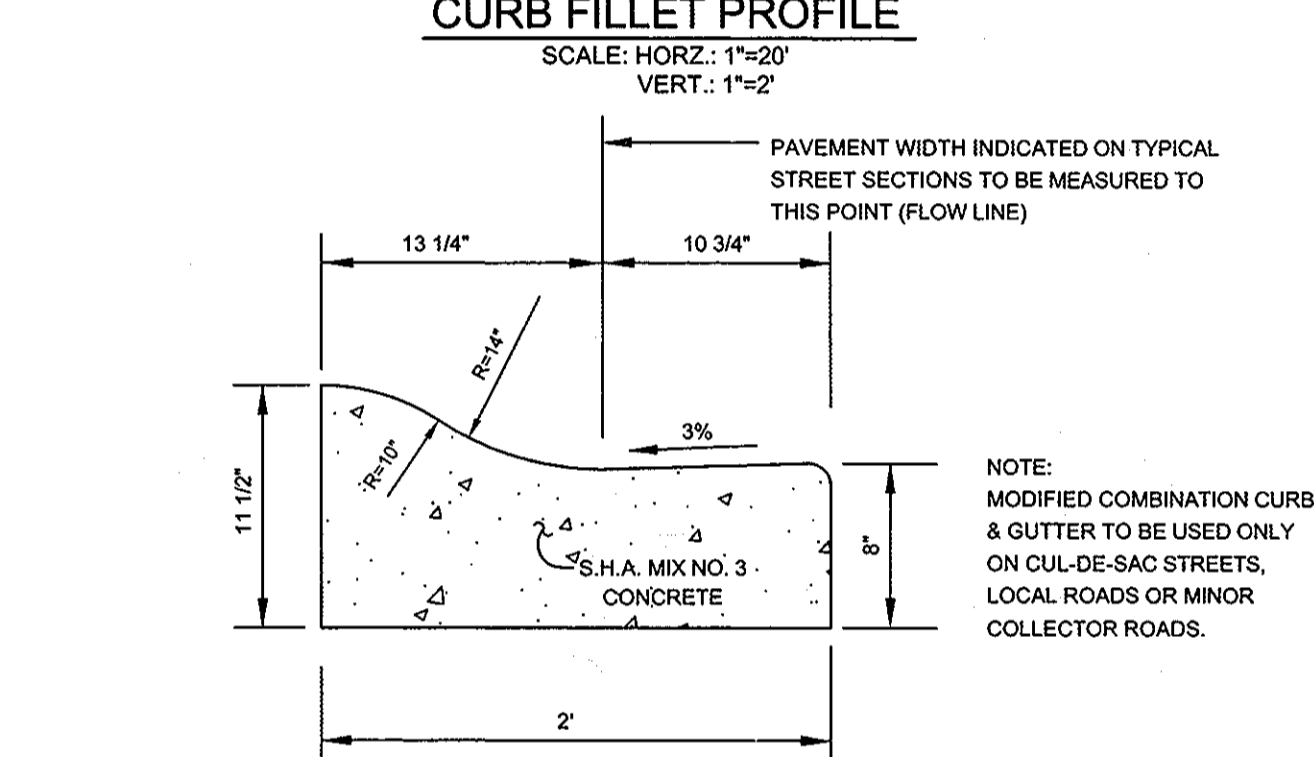
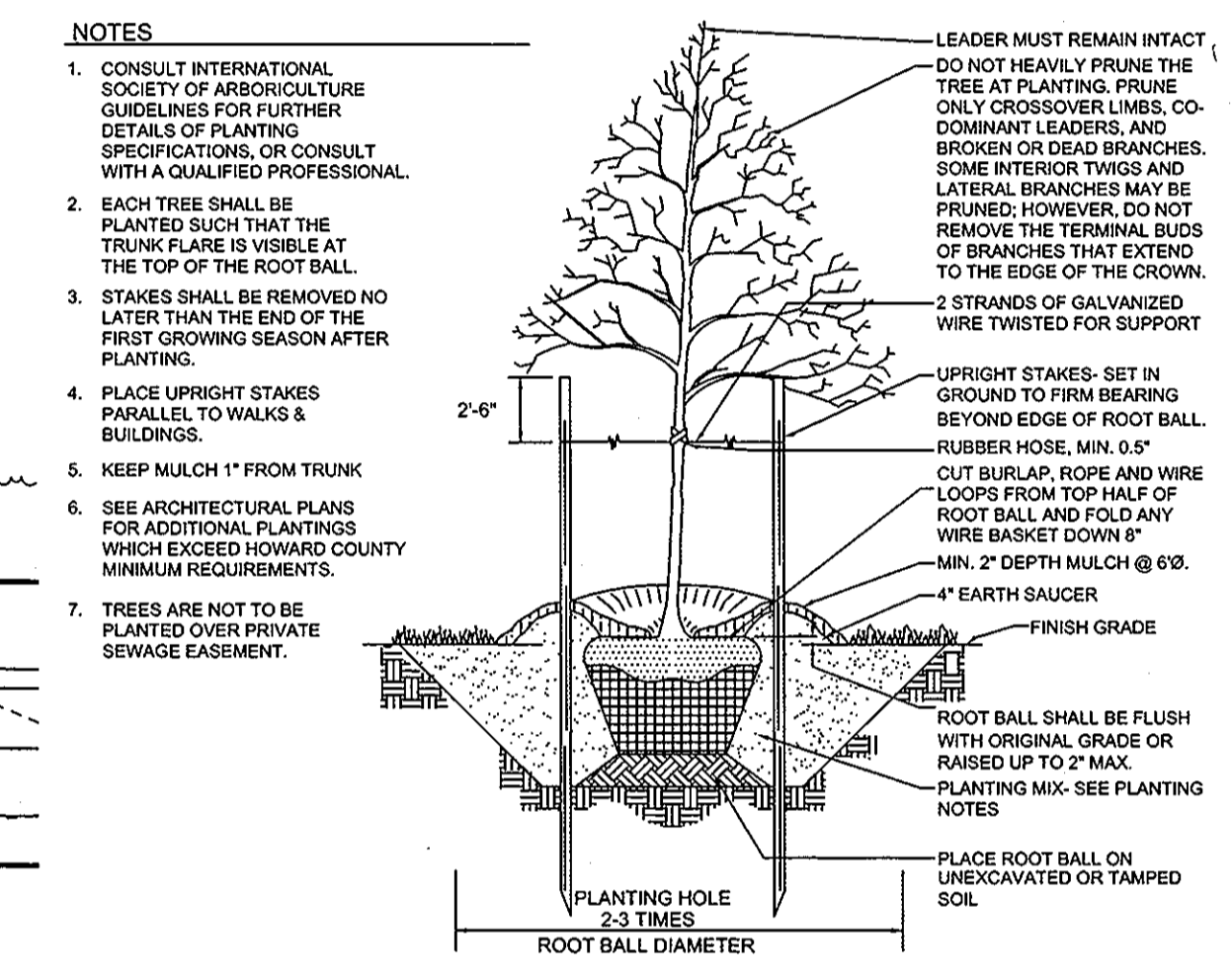
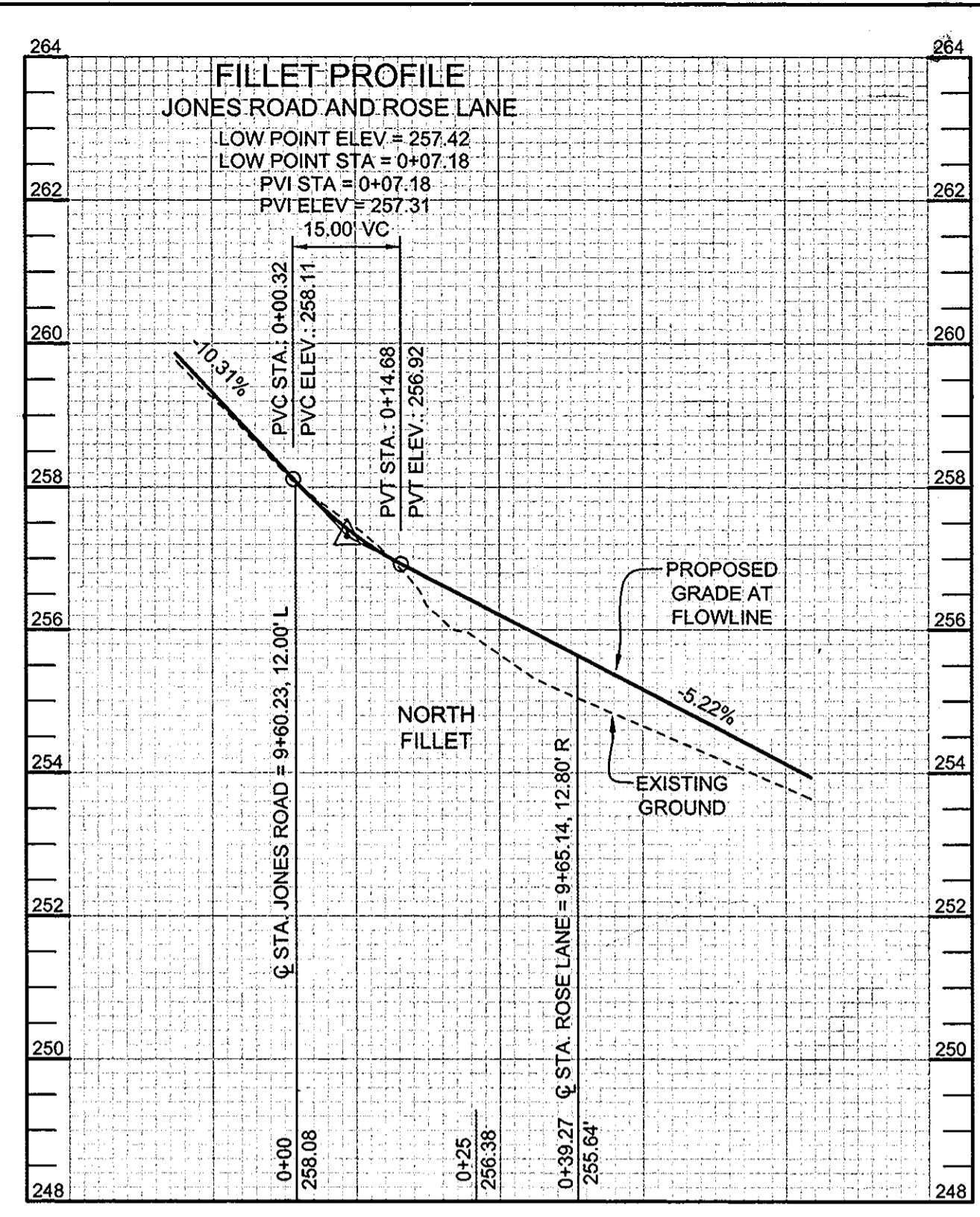
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 30223, EXPIRATION DATE: JUNE 08, 2009



### PAVING SECTIONS

SEC. NO.	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	PAVEMENT MATERIAL (INCHES)	MIN HMA WITH GAB	HMA WITH CONSTANT GAB
P-1	PARKING BAYS: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5
			2.0	2.0	2.0
			2.5	2.5	2.5
P-2	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY ACCESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5
			2.0	2.0	2.0
			2.5	2.5	2.5

HMA SUPERPAVE FINAL SURFACE  
 HMA SUPERPAVE INTERMEDIATE SURFACE  
 HMA SUPERPAVE BASE  
 GRADED AGGREGATE BASE (GAB)



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Walter J. ...* 9-23-09  
 CHIEF, BUREAU OF HIGHWAYS DATE

**DEVELOPER'S BUILDER'S CERTIFICATE**

I 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 HOWARD COUNTY LANDSCAPE MANUAL. I FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

*Helena M. Coleman* 9-11-08  
 HELENA M. COLEMAN DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*John R. Rhuton* 11/5/08  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

### SOIL CHART

SYMBOL	NAME / DESCRIPTION	GROUP
BeB2	BELTSVILLE SILT LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	C
BeC2	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	C
LI	LEONARDTOWN SILT LOAM	D

### STREET TREE SCHEDULE

KEY	QUANTITY	BOTANICAL NAME	SIZE	NOTE
⊙	9	ACER GINNALIA AMUR MAPLE	2 1/2\"/>	

NOTES:  
 1. 222 LINEAR FEET ALONG JONES ROAD.  
 2. 80 LINEAR FEET ALONG ROSE LANE.

**ENGINEERS CERTIFICATE**

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 COUNTY CONSERVATION DISTRICT.

*Paul M. Sill, P.E.* 9.11.08  
 PAUL M. SILL, P.E. DATE

**DEVELOPER'S 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 COUNTY CONSERVATION DISTRICT.

*Helena M. Coleman* 9-11-08  
 HELENA M. COLEMAN DATE

**SEDIMENT, EROSION CONTROL AND LANDSCAPE PLAN, CURB FILLET PROFILE AND DETAILS NORDAU SUBDIVISION**

LOTS 12 AND 13  
 A RESUBDIVISION OF NORDAU SUBDIVISION, PLAT BOOK 3, FOLIO 51, SECTION E-6, P/O LOT 1

TAX MAP 42, GRID 24, SINGLE FAMILY DETACHED UNITS, PARCEL 246  
 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

**Sill · Adcock & Associates · LLC**  
 Engineers · Surveyors · Planners  
 3300 North Ridge Road, Suite 160  
 Ellicott City, Maryland 21043  
 Phone: 443.325.7682 Fax: 443.325.7685  
 Email: info@silladcock.com

DESIGN BY: JT  
 DRAWN BY: JT  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: SEPT. 12, 2008  
 PROJECT #: 06-031  
 SHEET #: 2 of 3

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 06, 2009

**21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOILS**

**DEFINITION**  
 PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

**PURPOSE**  
 TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETABLE 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**  
 I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:  
 A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.  
 B. 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.  
 C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.  
 D. 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 REQUIRING 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**  
 I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

- i. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR A 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 CHINDERS, STONES, SLUGS, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIAL LARGER THAN 1" AND 1/2" IN DIAMETER.
- ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, OR NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- iii. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED 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: 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. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT THE TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ.FT.)
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND APPLY 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 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.05 LBS/1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE 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 218 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.

**TEMPORARY SEEDING NOTES**

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 PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (0.07 LBS/1000 SQ.FT.). FOR THE PERIOD NOVEMBER 1 THRU 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 218 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.

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

**SEDIMENT CONTROL NOTES**

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSE AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
- 2. ALL VEGETATION 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.
- 3. 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.
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7. SITE ANALYSIS:

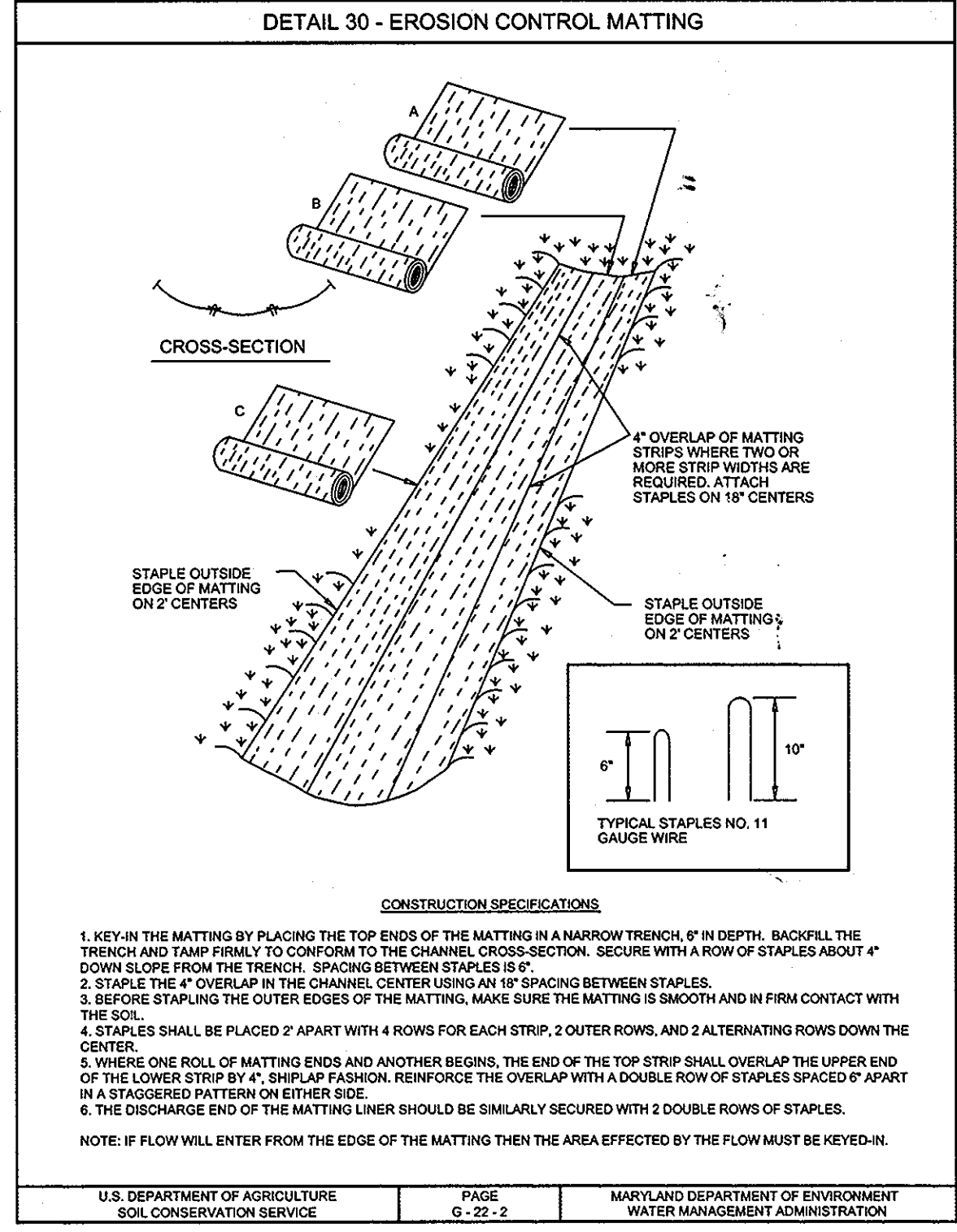
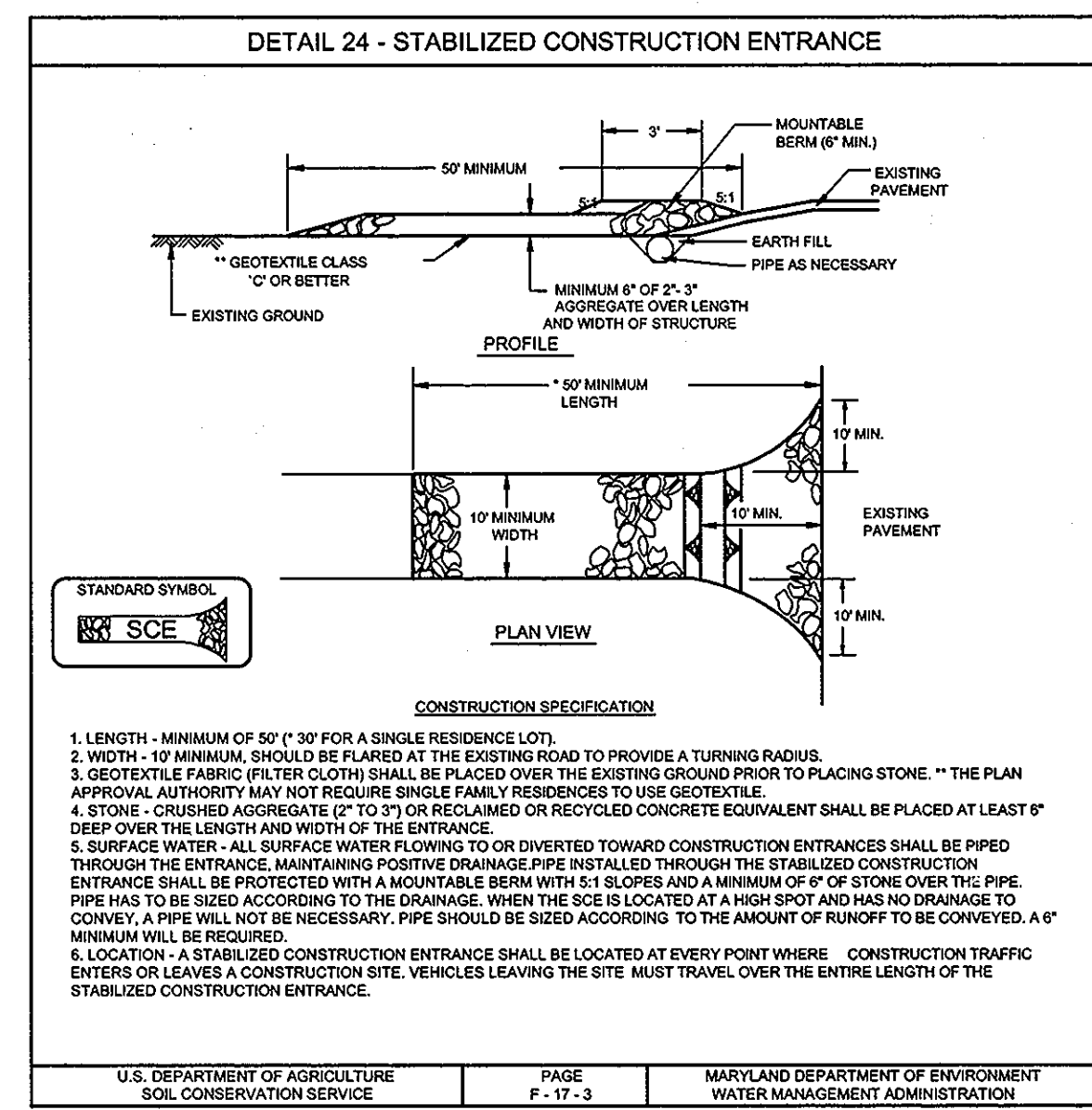
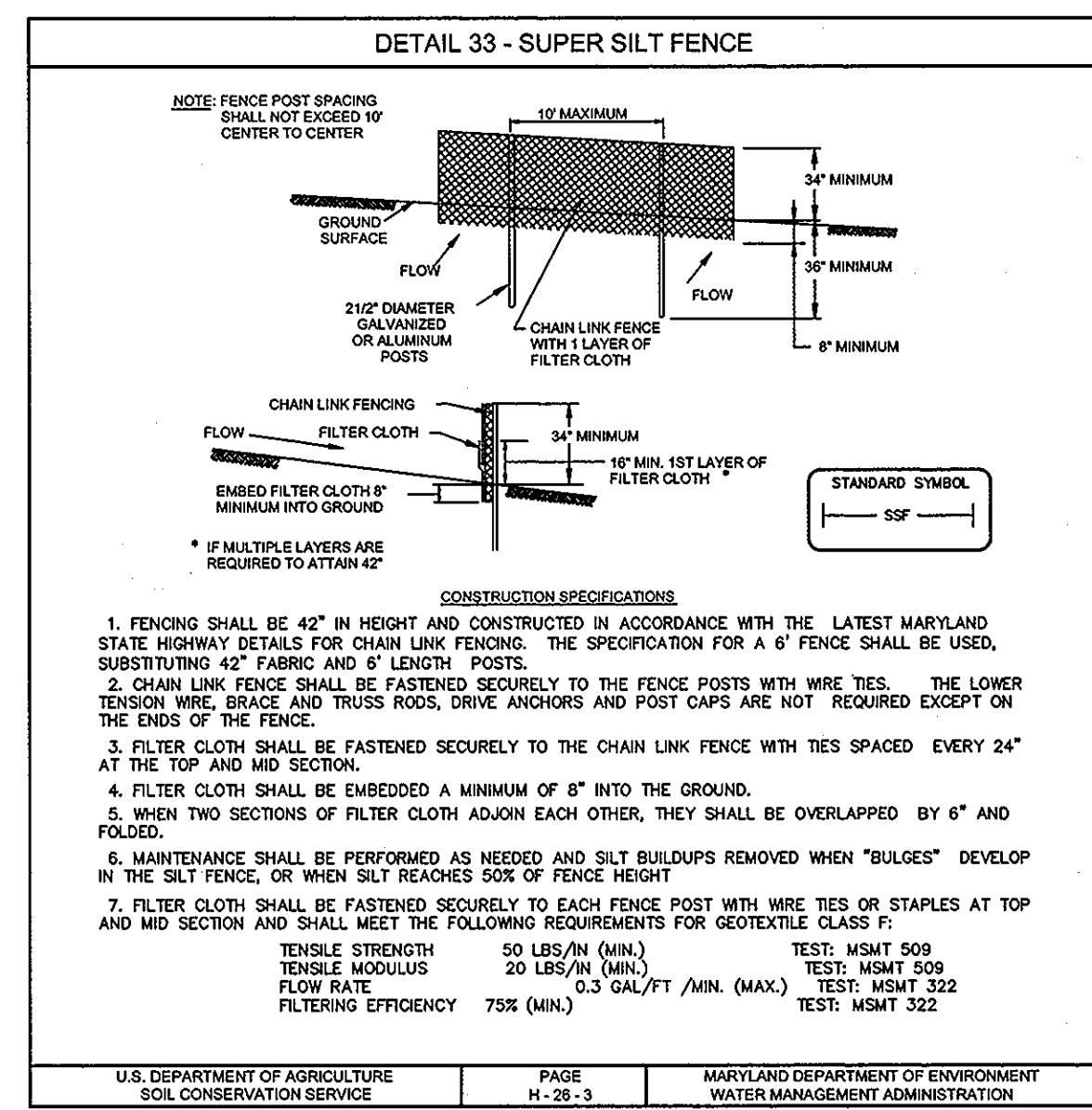
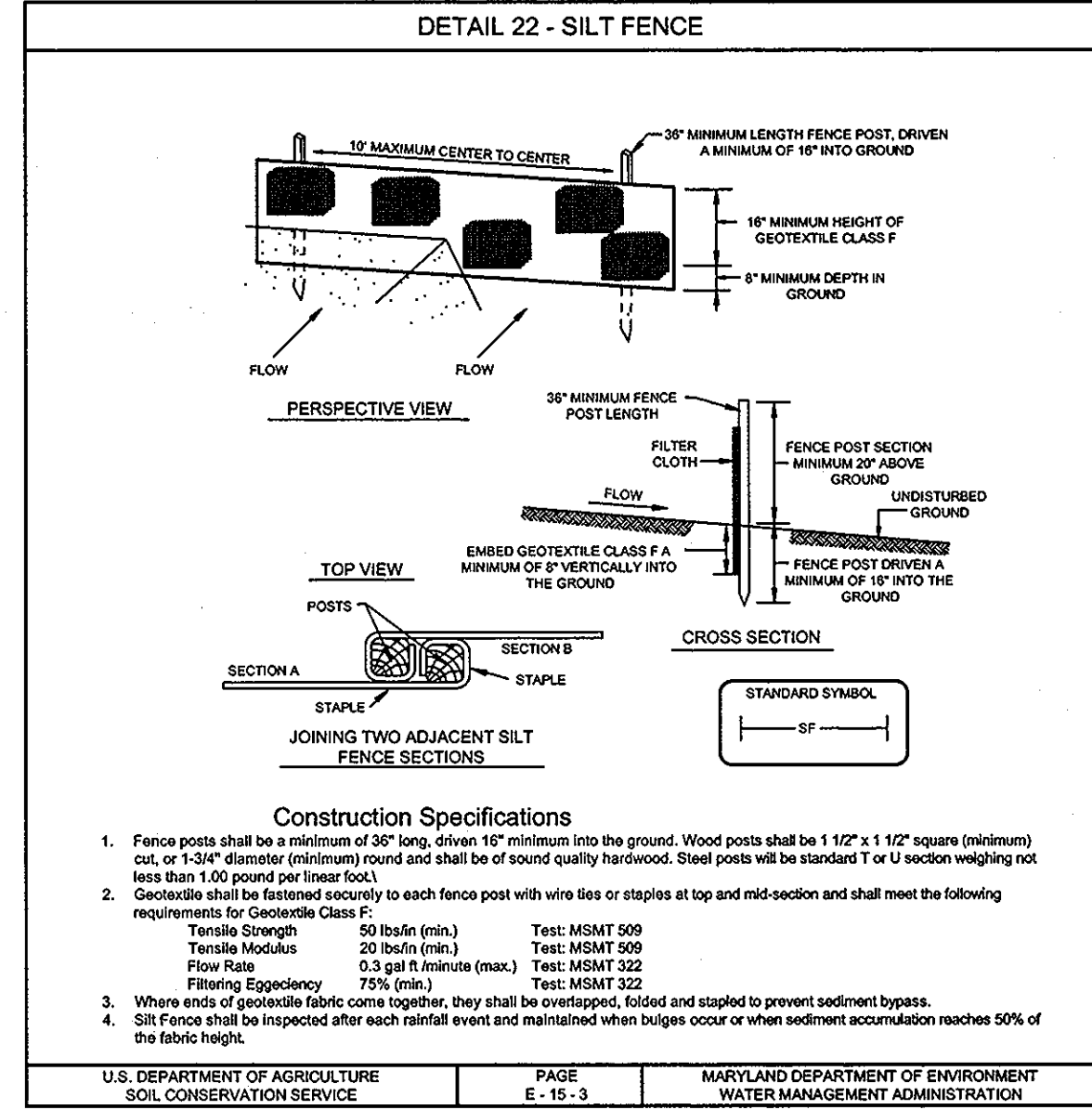
TOTAL AREA:	0.99 ACRES
AREA DISTURBED:	0.24 ACRES
AREA TO BE ROOFED OR PAVED:	0.27 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.15 ACRES
TOTAL CUT:	10 CY
TOTAL FILL:	60 CY
OFFSITE WASTE/BORROW AREA LOCATION:	**

- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER. EARTHWORK QUANTITIES ARE SOLELY FOR THE PURPOSE OF CALCULATING FEES. CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO THE START OF CONSTRUCTION.
- \*\* TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT.

**SEQUENCE OF CONSTRUCTION**

- 1. OBTAIN GRADING PERMIT.
- 2. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSE AND PERMITS AT (410) 313-1880 AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
- 3. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, AND SUPER SILT FENCE. (3 DAYS)
- 4. ROUGH GRADE SITE AND BEGIN BUILDING CONSTRUCTION. (1 WEEK)
- 5. FINISH BUILDING CONSTRUCTION AND PAVE DRIVEWAY. (4 MONTHS)
- 6. FINE GRADE SITE AND INSTALL EROSION CONTROL MATTING. (1 WEEK)
- 7. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL, MEASURES AND STABILIZE ANY REMAINING DISTURBED AREA. (1 WEEK)

NOTE: -FOLLOWING INITIAL SOIL DISTURBANCE OR ANY REDISTURBANCES, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:  
 A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES AND ALL SLOPES GREATER THAN 3:1.  
 B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.  
 -DURING GRADING AND AFTER EACH RAINFALL, CONTRACTOR WILL INSPECT AND PROVIDE NECESSARY MAINTENANCE TO THE SEDIMENT CONTROL MEASURES ON THIS PLAN.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 4/7/08	THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  PAUL M. SILL, PE, LEAD AP DATE: 11/4/08	ENGINEERS CERTIFICATE 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.  PAUL M. SILL, PE, LEAD AP DATE: 11/4/08	DEVELOPER'S CERTIFICATE I HEREBY 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.  HELENA M. COLEMAN DATE: 11/3/08
--	--	--	---

**OWNER/DEVELOPER**  
 BEATRICE M. FAIRLEY  
 HELENA M. COLEMAN  
 (410) 945-0766  
 7871 JONES ROAD  
 JESSUP, MARYLAND 20794

**SEDIMENT, EROSION CONTROL AND LANDSCAPE PLAN, CURB FILLET PROFILE AND DETAILS NORDAU SUBDIVISION**  
 LOTS 12 AND 13  
 A RESUBDIVISION OF NORDAU SUBDIVISION, PLAT BOOK 3, FOLIO 51, SECTION E-6, P/O LOT 1  
 TAX MAP 42 GRID 24 SINGLE FAMILY DETACHED UNITS PARCEL 246  
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**Sill · Adcock & Associates · LLC**  
 Engineers · Surveyors · Planners  
 3300 North Ridge Road, Suite 160  
 Elliotts City, Maryland 21043  
 Phone: 443.325.6825 Fax: 443.325.7685  
 Email: info@sillandac.com

DESIGN BY: JT  
 DRAWN BY: JT  
 CHECKED BY: PS  
 SCALE: AS SHOWN  
 DATE: 09PT 12, 2008  
 PROJECT #: 06-031  
 SHEET #: 3 of 3

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32026, EXPIRATION DATE: JUNE 06, 2009.