

SHEET INDEX	
NO.	DESCRIPTION
1	SITE DEVELOPMENT AND GRADING PLAN
2	STORMWATER MANAGEMENT AND SEDIMENT & EROSION CONTROL PLAN
3	STORMWATER MANAGEMENT NOTES

GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED R-SC PER 2/2/04 COMPREHENSIVE ZONING PLAN AND PER "COMP LITE" ZONING AMENDMENTS EFFECTIVE 7/28/06.
- 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/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410)331-1800 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 BEING DONE.
- ALL ASPECTS OF THIS PROJECT SHALL BE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVER(S) HAVE BEEN APPROVED.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 2910 AND 2054 WERE USED FOR THIS PROJECT.
- THE EXISTING TOPOGRAPHY SHOWN HEREON ARE TAKEN FROM FIELD RUN SURVEY WITH 1 FEET CONTOUR INTERVALS BY KCE ENGINEERING, INC. DATED FEBRUARY, 2002, AND 2 FEET CONTOUR INTERVALS PREPARED BY BENCHMARK ENGINEERING, INC. DATED MARCH, 2009.
- EXISTING UTILITIES SHOWN HEREON ARE BASED ON FIELD LOCATIONS AND RECORD DRAWINGS.
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITY AND SHALL ADJUST ALL UTILITIES AND RIM ELEVATIONS AS NEEDED TO MATCH THIS PLAN.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT WATER AND SEWER SHALL BE PUBLIC. DRAINAGE AREA IS WITHIN THE MIDDLE PATENTED WATERSHED, WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 16.12.2 OF THE HOWARD COUNTY CODE. PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME. PUBLIC WATER AND SEWER CONTRACT NOS. ARE 44-0930 AND 831.
- FOREST STAND DELINEATION PLAN WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN APRIL, 2009. THE REPORT WAS REVIEWED UNDER F-09-116.
- THERE ARE NO WETLANDS, STREAMS, BUFFERS, 100-YEAR FLOODPLAIN OR STEEP SLOPES (25% OR GREATER) LOCATED ON THIS SITE.
- NOISE STUDY WAS PREPARED BY THE BENCHMARK ENGINEERING, INC. DATED AUGUST 18, 2009. THE REPORT WAS APPROVED ON SEPTEMBER 16, 2009 AND REVIEWED UNDER F-09-116.
- AN A.P.F.D. TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT AS IT IS A MINOR SUBDIVISION.
- THERE ARE NO HISTORIC FEATURES OR CEMETERIES ON THIS SITE.
- THERE IS AN EXISTING DWELLING LOCATED ON LOT 3 TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATION REQUIREMENTS.
- UNLESS NOTED AS "PRIVATE" ARE PUBLIC.
- BRL INDICATES BUILDING RESTRICTION LINE.
- THIS PLAN IS SUBJECT TO THE 5th EDITION OF THE HOWARD COUNTY SUBDIVISION REGULATIONS AND THE AMENDED HOWARD COUNTY ZONING REGULATIONS.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
- APPROVAL OF A SITE DEVELOPMENT PLAN IS REQUIRED FOR THE DEVELOPMENT OF ALL RESIDENTIAL LOTS WITHIN THIS SUBDIVISION PRIOR TO ISSUANCE OF ANY GRADING OR BUILDING PERMITS FOR NEW HOUSE CONSTRUCTION IN ACCORDANCE WITH SECTION 16.155 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCY);
B) SURFACE - 6" OF CONCRETE CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN);
C) GEOMETRY - MAX. 1% GRADE; 100' GRADE CHANGE & MIN. 45' TURNING RADIUS;
D) STRUCTURES (CULVERTS/SIGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD);
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE;
F) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- STORMWATER MANAGEMENT SHALL BE PROVIDED FOR THIS PROJECT BASED ON GUIDELINES ESTABLISHED BY THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMES 1 & II. STORMWATER MANAGEMENT SHALL BE PROVIDED BY USE OF LANDSCAPE INFILTRATION (M-3) AND FILTER STRIP FOR ROOFTOP DISCONNECTION AND NON-ROOFTOP DISCONNECTION CREDITS. ALL SWM PRACTICES SHALL BE PRIVATELY OWNED.
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMES 1 AND II. IT WAS DETERMINED THAT THE PROJECT MET THE CRITERIA OUTLINED IN THE MDC STORMWATER MANAGEMENT REGULATIONS GUIDELINES FOR IMPLEMENTATION FOR ACCEPTANCE OF THE 2000 DESIGN CRITERIA AND GRANTED A WAIVER. THIS PLAN RECEIVED FINAL PLAN APPROVAL (F-09-116) ON 4-14-10. THIS PLAN IS ALSO SUBJECT TO THE EXPIRATION OF THIS WAIVER UNLESS ALL STORMWATER MANAGEMENT IS CONSTRUCTED BY MAY 4, 2017.
- THE TOTAL OPEN SPACE REQUIREMENT FOR THIS SUBDIVISION IS BASED ON THE SUBDIVISION OF PARCEL 30. THE OPEN SPACE REQUIREMENT IS 0.25 ACRES (25% OF 1.00 ACRE). OPEN SPACE BEING PROVIDED IS 11,003 S.F./0.25 AC.
- THE FOREST CONSERVATION OBLIGATION OF 0.15 ACRES OF AFFORESTATION FOR THIS SUBDIVISION HAD BEEN MET BY A FEE-IN-LIEU PAYMENT OF \$4,800.50 MADE TO THE HOWARD COUNTY FOREST CONSERVATION FUND UNDER F-09-116.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL FINANCIAL SURETY FOR THE REQUIRE 8 SHADE TREES (\$2,400), 20 SHRUBS (\$800) AND 153 LINEAR FEET OF FENCING (\$1,530) IN THE AMOUNT OF \$4,730.00 AS PART OF THE BUILDING GRADING PERMIT.
- THE 65 DBA NOISE CONTOUR LINE DRAWN ON THIS SUBDIVISION PLAN IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992 AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 DBA NOISE EXPOSURE. THE 65 DBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
- APPLICABLE DPZ FILE REFERENCE NUMBERS: F-07-057/DENIED 07-18-07, AND F-09-116.
- THE 4"x10" CONCRETE REFUSE AND RECYCLE COLLECTION PAD WITHIN THE PUBLIC RIGHT-OF-WAY OF CLARKSVILLE PIKE SHALL BE MAINTAINED BY THE OWNERS OF LOTS 1-3.
- THE MAINTENANCE AGREEMENT FOR THE USE-IN-COMMON DRIVEWAY AND THE HOA DECLARATION OF COVENANTS WERE RECORDED CONCURRENT WITH THE RECORDING OF THE PLAT. LIBER 12414 FOLD 84.
- THE EXISTING DRIVEWAY FOR THE EXISTING STRUCTURE ON LOT 3 IS REQUIRED TO BE REMOVED AND REPLACED WITH THE USE-IN-COMMON DRIVEWAY UPON THE DEVELOPMENT OF ANY ONE OR MORE OF THE RESIDENTIAL LOTS.
- THE HOMEOWNER ASSOCIATION DOCUMENTS HAVE BEEN FILED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION AS RECORDING REFERENCE #D1326049 ON OCTOBER 14, 2009. A DECLARATION OF COVENANTS AND EASEMENTS HAS BEEN RECORDED IN THE LAND RECORDS OF HOWARD COUNTY AS LIBER 12414 FOLD 88.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 18 FEET WITHIN 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 SETBACK.
- HOUSES/GARAGES WILL BE SITED ON LOTS SO THAT A SECOND CAR, IF PARKED IN THE DRIVEWAY, WILL NOT OVERHANG INTO THE PRIVATE ACCESS PLACE DRIVEWAY (18" MINIMUM CLEARANCE).
- THE DEVELOPER HAS PAID A FEE-IN-LIEU OF CONSTRUCTION FOR ROAD IMPROVEMENTS AS PART OF THE DEVELOPER'S AGREEMENT. THE PAYMENT WAS CREDITED TO CAPITAL PROJECT NUMBER 14-0961, ACCOUNT NUMBER 4010090001-K0015.0.3100-3100-3100000000-499900-PWPW0000000000 IN THE AMOUNT OF \$4,800.00 PER HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING LETTER DATED APRIL 23, 2012.

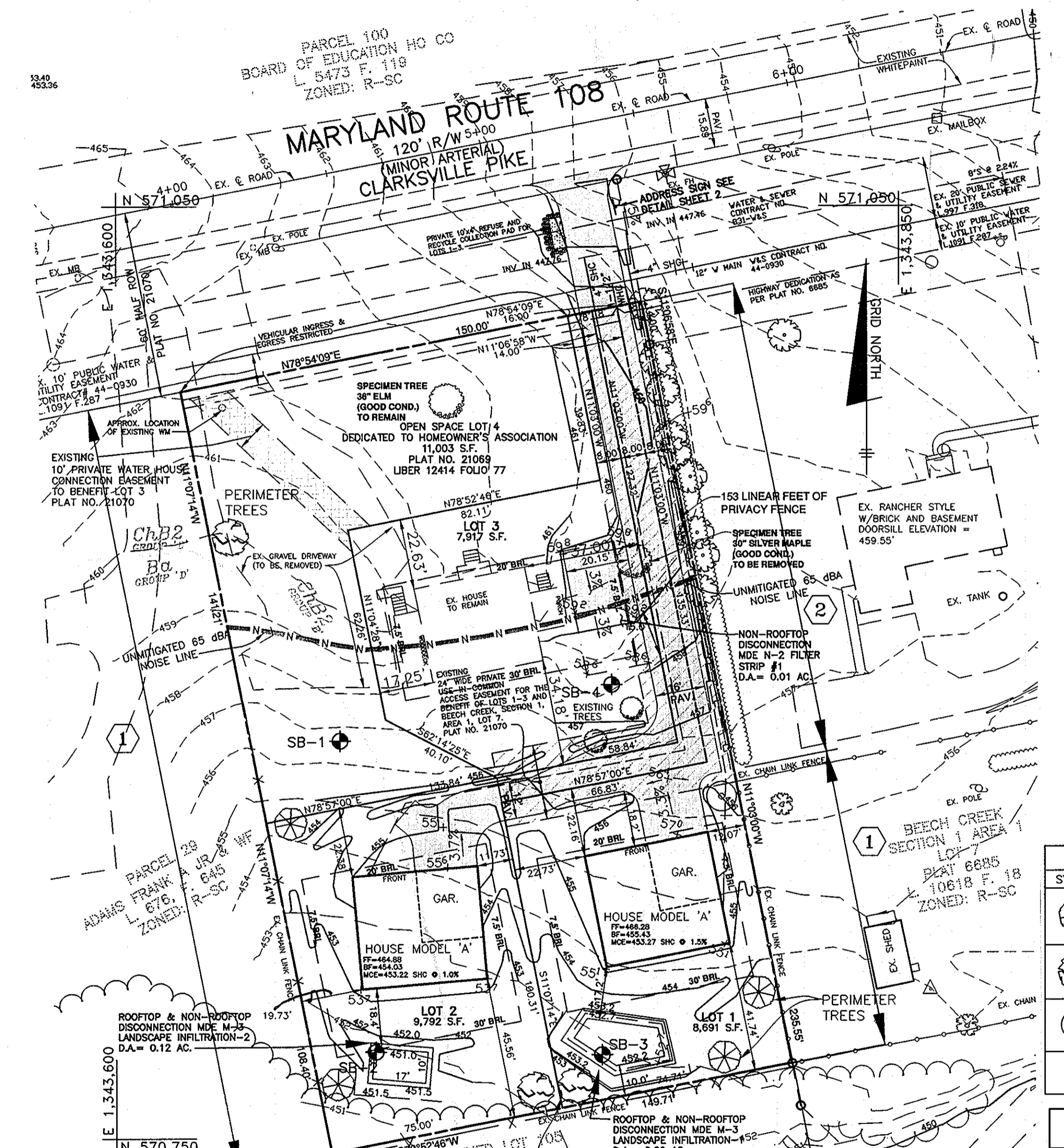
SITE DEVELOPMENT PLAN

CEDAR VILLAGE

LOTS 1 THRU 4

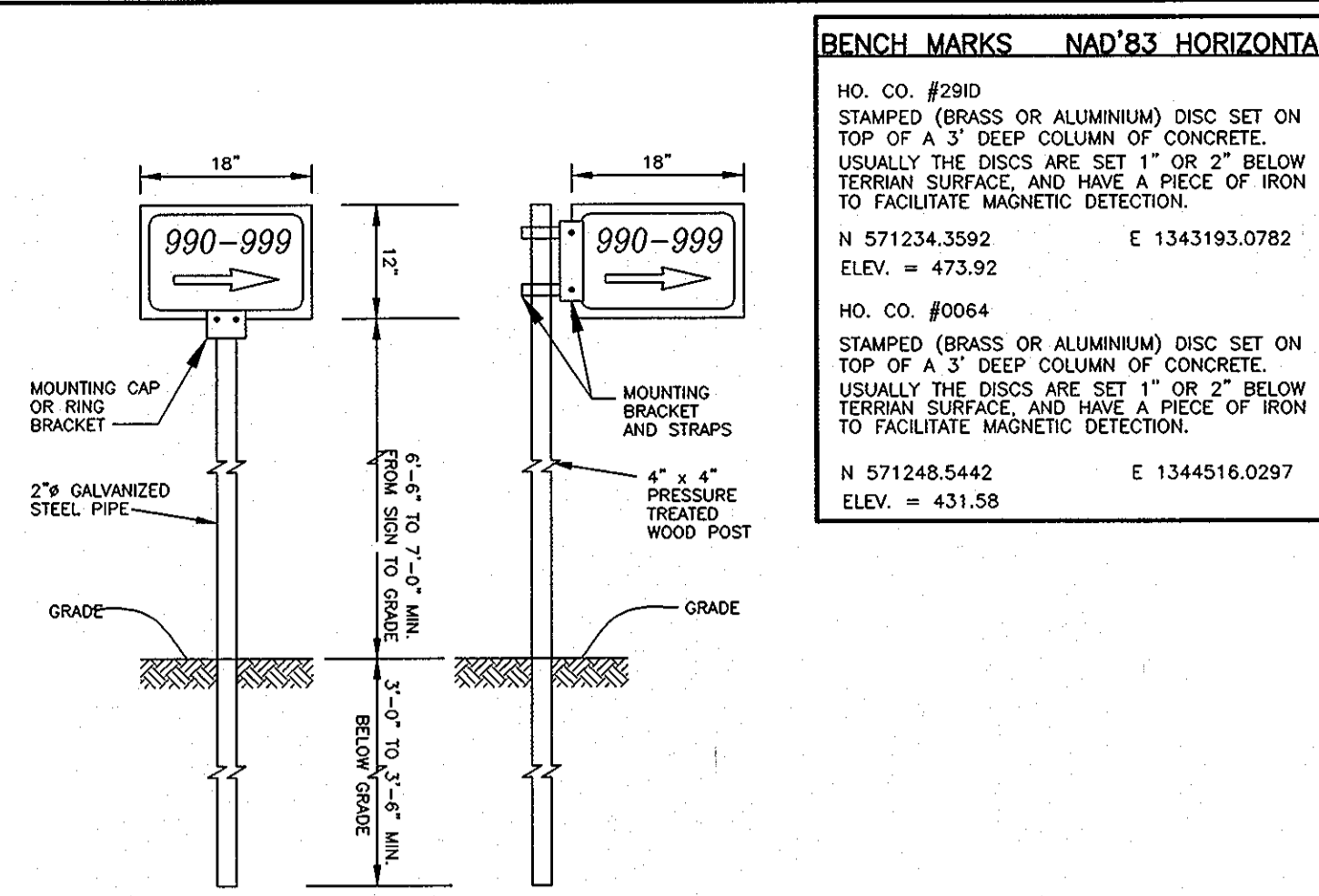
5th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

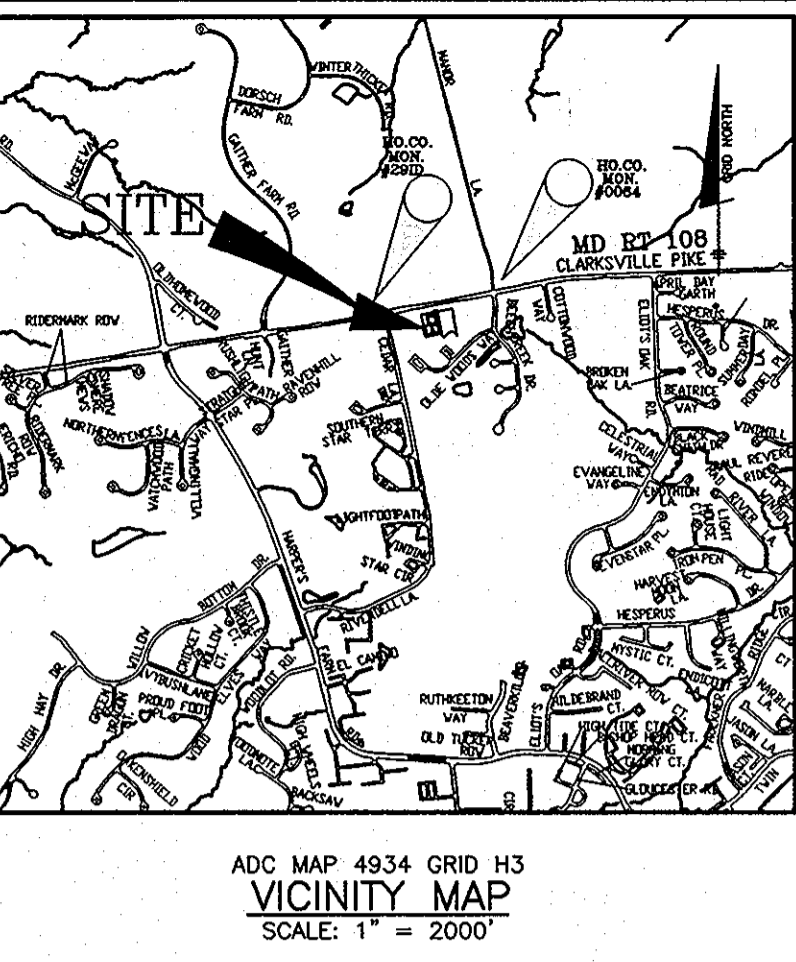


THE FOLLOWING STANDARD SIGN DESIGN SPECIFICATIONS SHALL APPLY:

- THE SIGN SIZE SHALL BE 12" x 18".
- THE SIGN MATERIAL SHALL BE 0.080 GAUGE THICKNESS ANODIZED ALUMINUM.
- THE SIGN SHALL HAVE A GREEN BACKGROUND WITH 3" HIGH WHITE REFLECTIVE NUMBERS AND ARROW WITH A WHITE REFLECTIVE BORDER.
- WHERE A PRIVATE ROAD NAME IS IN USE OR PART OF A PRIVATE HOMEOWNER'S AGREEMENT OF INCORPORATION AGREEMENT THE SIGN SIZE WILL BE ENLARGED TO ACCOMMODATE THE NECESSARY LETTERING BUT REMAIN PROPORTIONAL TO THE ABOVE DESIGN LIMITS.
- THE SIGN WILL BE INSTALLED WITHIN THE COMMON DRIVEWAY EASEMENT AREA AS NOTED ON THE FINAL PLAN.
- ADDRESS NUMBER IDENTIFICATION SIGNS ARE TO BE PROVIDED UNDER THE TENANTS OF THE HOMEOWNER'S ASSOCIATION INCORPORATION OR A PROPERTY MANAGEMENT COMPANY FOR INSTALLATION AND MAINTENANCE IN ACCORDANCE WITH THE DEPARTMENT OF PLANNING AND ZONING ADDRESS NUMBERING SYSTEM AND PER SECTION 3.503(C) OF THE HOWARD COUNTY CODE - PUBLIC SIGNS. MAINTENANCE/REPAIR AND REPLACEMENT OF THE ADDRESS NUMBER DIRECTIONAL SIGNS WILL BE THE RESPONSIBILITY OF THE HOMEOWNER'S ASSOCIATION OR A PROPERTY MANAGEMENT COMPANY.
- COMPLIANCE REGARDING THE INSTALLATION OF THE NEW ADDRESS NUMBER DIRECTIONAL SIGNS WILL BE ENFORCED BY THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF FINAL APPROVAL FOR ISSUANCE OF THE USE AND OCCUPANCY PERMITS.



OPTION #1 OPTION #2
HO. CO. APPROVED SIGN DESIGN AND INSTALLATION DETAIL
NOT TO SCALE



LEGEND

SOILS CLASSIFICATION *ChB2*
SOILS DELINEATION
EXISTING CONTOURS
PROPOSED CONTOURS
EXISTING WOODS LINE
LIMIT OF DISTURBANCE
SILT FENCE
SUPER SILT FENCE
EROSION CONTROL MATTING
PRIVATE USE-IN-COMMON ACCESS EASEMENT
PRIVATE UTILITY EASEMENTS
PERIMETER LANDSCAPE TREES
PROPOSED DRIVEWAY

STORMWATER MANAGEMENT PRACTICES

LOT NUMBER	ADDRESS	BMP - LANDSCAPE INFILTRATION MDC (QUANTITY AND REV)	BMP - NON-ROOFTOP DISCONNECTION MDC (QUANTITY AND REV)	BMP OWNERSHIP	BMP MAINTENANCE
1	10861 CLARKSVILLE PIKE	1		PRIVATE	PRIVATE
2	10865 CLARKSVILLE PIKE	1		PRIVATE	PRIVATE
3	10871 CLARKSVILLE PIKE		1	PRIVATE	PRIVATE

- Wood Picket minimum 5/8" dressed thickness. Attach each picket to rolls with two (2) #6 galvanized nails or #10 galvanized screw.
- All nails and connectors shall be galvanized.
- Wood Rolls Minimum distance from top and bottom 12 inches 24" elsewhere. Minimum roll size 2' x 4" with 3 rails required attached with a minimum of four (4) 10d nails to wood post.
- Wood Post, No. 2 grade wood or better, minimum size 4"x4"x8', refer to chart below for spacing.
- Concrete footing of each post minimum diameter of 10" with a minimum depth of 24" from finish grade. Minimum post embedment is 24".

FENCE DETAIL
NOT TO SCALE

DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATE OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Muham Khan
DEVELOPER
12/12/12
DATE

PERIMETER LANDSCAPE PLANTING LIST

SYMBOL	QUANTITY	NAME	SIZE	COMMENTS
(Symbol)	4	ACER BIRCHUM 'RED SUNSET' / RED SUNSET RED MAPLE	2 1/2"-3" CAL	PLANT MIN. OF 40' APART
(Symbol)	3	TILIA CORDATA 'GREENSPRING' / GREENSPRING LITTLELEAF LINDEN	2 1/2"-3" CAL	
(Symbol)	1	ZELKOVA SERRATA 'VILLAGE GREEN' / VILLAGE GREEN JAPANESE ZELKOVA	2 1/2"-3" CAL	
(Symbol)	20	Juniperus chinensis 'Sargentii' / SARGENT JUNIPER	18"-24" sp.	

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIM. PROP.	ADJACENT TO TRASH PAD	ADJACENT TO DRIVEWAY
PERIMETER DESIGNATION	①		②
LANDSCAPE TYPE	A	B	D
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	496 L.F.	28 L.F. (10'x10'+4'x4')	153 L.F.
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET)	NO	NO	YES FENCE 153'
NUMBER OF PLANTS REQUIRED	496 L.F.	28 L.F.	153 L.F.
SHADE TREES	8	1	3
EVERGREEN TREES	-	-	15
OTHER TREES (2:1 SUBSTITUTE)	-	-	-
NUMBER OF PLANTS PROVIDED	8	-	-
SHADE TREES	-	-	-
EVERGREEN TREES	-	-	-
OTHER TREES (2:1 SUBSTITUTE)	-	-	-
SHRUBS (10:1 SUBSTITUTE)	-	20*	-

*20 SHRUBS SHALL BE SUBSTITUTED FOR THE 1 REQUIRED SHADE TREE AND 1 REQUIRED EVERGREEN TREE AT A 10:1 RATIO. THESE SHRUBS SHALL BE USED TO FORM A HEDGE ROW.

P-1 PAVING DETAIL

SECTION NUMBER	CALIFORNIA BEARING RATIO (CBR)	3 TO <5	5 TO <7	7 TO <9	9 TO <15	15 TO <27
P-1	PAVEMENT MATERIAL (INCHES)					
	HMA SUPERPAVE FINAL SURFACE	1.5	1.5	1.5	1.5	1.5
	HMA SUPERPAVE INTERMEDIATE SURFACE	N/A	N/A	N/A	N/A	N/A
	HMA SUPERPAVE BASE	2.0	2.0	2.0	3.5	3.0
	GRADED AGGREGATE BASE (GAB)	8.5	7.0	5.0	4.0	4.0

LANDSCAPING NOTES

- PERIMETER LANDSCAPING SHALL BE PROVIDED BY THE EXISTING VEGETATION TO REMAIN AND BY THE PLANTINGS AS SHOWN ON THESE PLANS.
- SEE TREE PLANTING DETAIL - THIS SHEET.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR THE PRESERVATION OF THE PERIMETER VEGETATION AND FOR THE PERIMETER PLANTINGS AS SHOWN ON THESE PLANS. BONDING FOR PLANTINGS IS THE OBLIGATION OF THE DEVELOPER AS PART OF THE DEVELOPER'S AGREEMENT.
- TREES MUST BE PLANTED A MINIMUM OF TEN (10) FEET FROM A DRIVEWAY AND MUST BE A MINIMUM OF FIVE (5) FEET FROM ANY STORM DRAIN.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN WILL RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.
- PERIMETER LANDSCAPING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$4,530.00 (\$2,400 FOR 8 SHADE TREES, \$800 FOR THE 20 SHRUBS AND \$1,330 FOR THE 153' OF FENCE) SHALL BE POSTED WITH THE GRADING PERMIT.
- THERE ARE 2 SPECIMEN TREES ON THIS SITE AND ONE ON THE ADJACENT BEECH CREEK LOT. ALL EXISTING TREES TO BE REMOVED UNLESS NOTED TO REMAIN.

ADDRESS CHART

LOT	STREET ADDRESS
1	10861 CLARKSVILLE PIKE
2	10865 CLARKSVILLE PIKE

MINIMUM LOT SIZE CHART

LOT	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
1	8,691 S.F.	1,195 S.F.	7,496 S.F.
2	9,792 S.F.	1,665 S.F.	8,127 S.F.

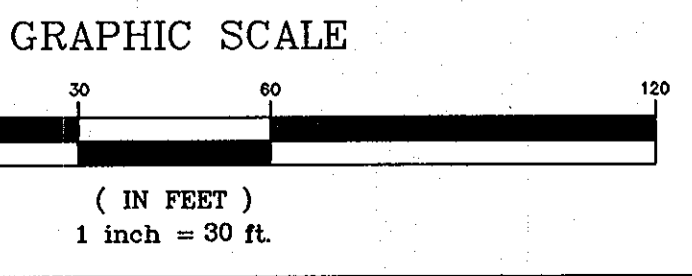
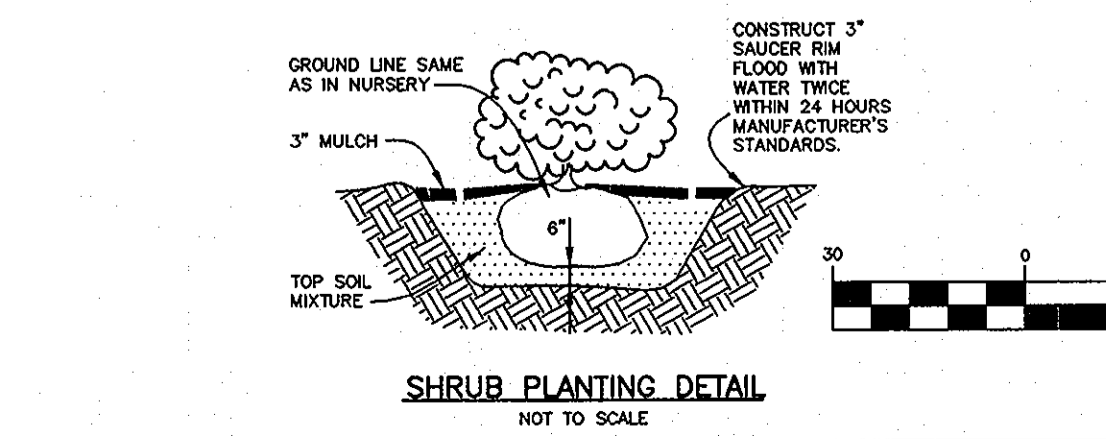
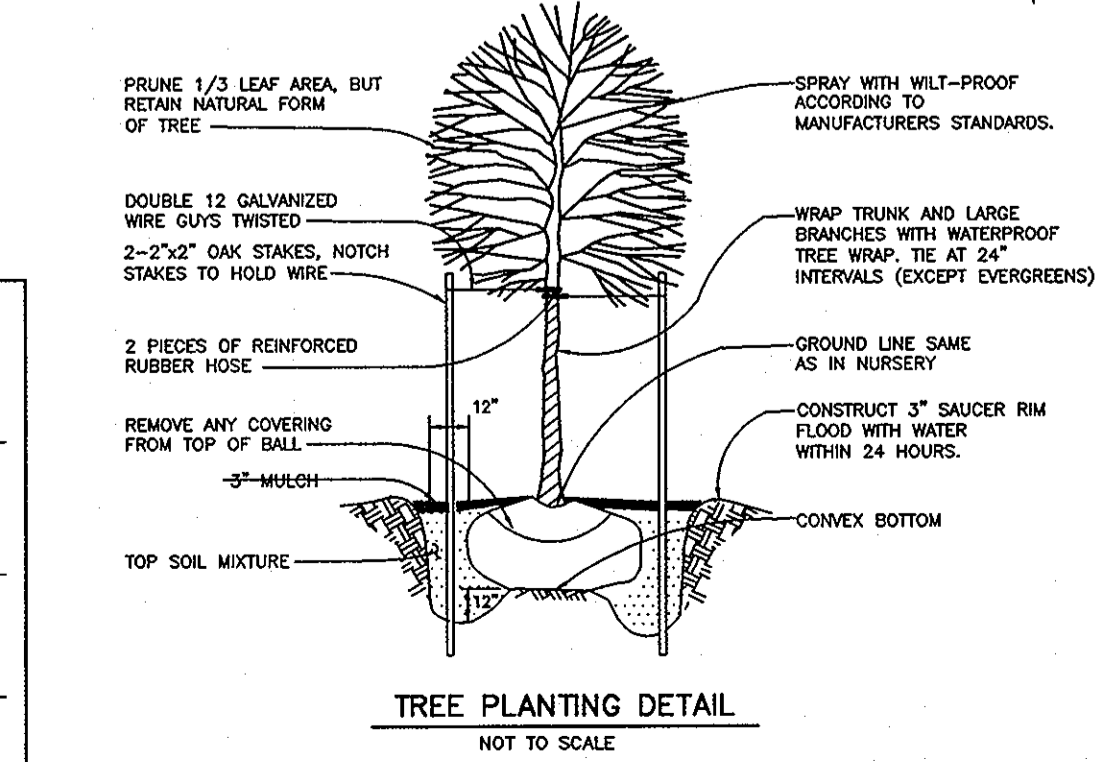
SITE ANALYSIS DATA CHART

- GENERAL SITE DATA**
- PRESENT ZONING: R-SC
 - APPLICABLE DPZ FILE REFERENCES: F-07-057/DENIED ON 07/18/07, F-09-116
 - PROPOSED USE OF SITE: SINGLE FAMILY DETACHED
 - PROPOSED WATER AND SEWER SYSTEMS: PUBLIC
- AREA TABULATION**
- GROSS TRACT AREA: 0.86 AC.±
 - AREA WITHIN 100-YEAR FLOODPLAIN: 0.00 AC.±
 - TOTAL AREA OF 25% OR GREATER STEEP SLOPES: 0.00 AC.±
 - NET TRACT AREA: 0.86 AC.±
 - TOTAL NUMBER OF SFD RESIDENTIAL LOTS: 3
 - PROPOSED ON THIS SUBMISSION
 - TOTAL NUMBER OF PARKING SPACING REQUIRED: 6

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 1/15/13
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 1/15/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION



PERMIT INFORMATION CHART

SUBDIVISION NAME:	SECTION/AREA:	LOT/PARCEL #
CEDAR VILLAGE		PARCEL 30 LOTS 1-4
PLAT No. 21069 21070	GRID No. 11	ZONE R-SC
TAX MAP 29	ELECTION DISTRICT 5th	CENSUS TRACT 6055.03

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
8480 BALTIMORE NATIONAL PIKE & SUITE 418 & ELLICOTT CITY, MARYLAND 21043
(P) 410-485-8105 (F) 410-485-8644
60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
(P) 301-371-3005 (F) 301-371-3004
WWW.BE-CVLENGINEERING.COM

CEDAR VILLAGE
LOTS 1 & 2 SINGLE FAMILY DETACHED DWELLINGS AND DRIVEWAY IMPROVEMENTS ON LOT 3 AND OPEN SPACE LOT 4
F-07-057/DENIED 07-18-07 AND F-09-116.

TAX MAP: 29 GRID: 11 PARCEL: 30
ZONED: R-SC ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN AND GRADING PLAN

DATE: DECEMBER, 2012 BEI PROJECT NO. 2386
SCALE: AS SHOWN SHEET 1 OF 3

DES: JC DRAFT: EDD CHECK: -

LEGEND

SOILS CLASSIFICATION *CRB2*

SOILS DELINEATION

EXISTING CONTOURS

PROPOSED CONTOURS

EXISTING WOODS LINE

LIMIT OF DISTURBANCE

SILT FENCE

SUPER SILT FENCE

EROSION CONTROL MATTING

PRIVATE USE-IN-COMMON ACCESS EASEMENT

PRIVATE UTILITY EASEMENTS

PERIMETER LANDSCAPE TREES

MATERIALS AND SPECIFICATIONS FOR (M-3) LANDSCAPE INFILTRATION

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS (AS REQUIRED)	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2" TO 4" DEEP)	LOAMY SAND (60-80% SAND) & COMPOST (20-40%)	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM; CLAY CONTENT < 2%
PLANTING SOIL (4" TO 6" DEEP)	LOAMY SAND (30% SAND) & COMPOST (70%)	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM; CLAY CONTENT < 2%
ORGANIC CONTENT	MUL (2% BY DRY WEIGHT)	N/A	
MULCH	SHREDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM
PEA GRAVEL DAPHRAGM	FEA GRAVEL ASTM C-448	N/A	MIN. 2" MESH LAYER
GEOTEXTILE	AKSHO M-43	N/A	PE TYPE 1 - NONWOVEN
GRAVEL (UNDERGRANULS & BERMS)	AKSHO M-43	N/A	PE TYPE 1 - NONWOVEN
SAND	AKSHO M-4 OR ASTM C-33	0.075" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DUMPS AND GRAYSTONE (AKSHO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR "COOLING SAND" SUBSTITUTES ARE ACCEPTABLE. NO TRUCK DUMP CAN BE USED FOR SAND

(OPERATION AND MAINTENANCE SCHEDULE FOR LANDSCAPE INFILTRATION (M-3) MICRO-BIOTENTION (M-6), RAIN GARDENS (M-7), BIORETENTION SWALE (M-8), ENHANCED FILTERS (M-9))

A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME II, TABLE A-4.1 AND 2.

B. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DECIDENT STAKES AND WIRES.

C. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.

D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

LANDSCAPE INFILTRATION -- PLANTING DATA

- PLANTINGS WITHIN THE PONDING AREA OF THE RAIN GARDEN ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE. SUGGESTED SPECIES: CREeping BIENERTIA (AUGIA REPTANS), COMMON PERIWINKLE (VINCA MINOR), LILY-TURF (LIRIOPE, SP.).
- PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE RAIN GARDEN ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE. SUGGESTED SPECIES: (PERENNIALS/ANNUALS) IRIS (IRIS VERSICOLOR), DAVY (HEMORICALLIS SP.), WHITE GLORY (ASTILE SP.).
- AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE RAIN GARDEN NEAR O.B. PIPE AND UNDERDRAIN.

LI 2 - PLANTING SCHEDULE

Plant	Quantity
1) Lobelia cardinalis	15
2) Iris pseudacorus	10
3) Andropogon virginicus	10
4) Miscanthus sinensis	4

LI 1 - PLANTING SCHEDULE

Plant	Quantity
1) Lobelia cardinalis	22
2) Iris pseudacorus	14
3) Andropogon virginicus	14
4) Miscanthus sinensis	5



APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 1/15/13 DATE

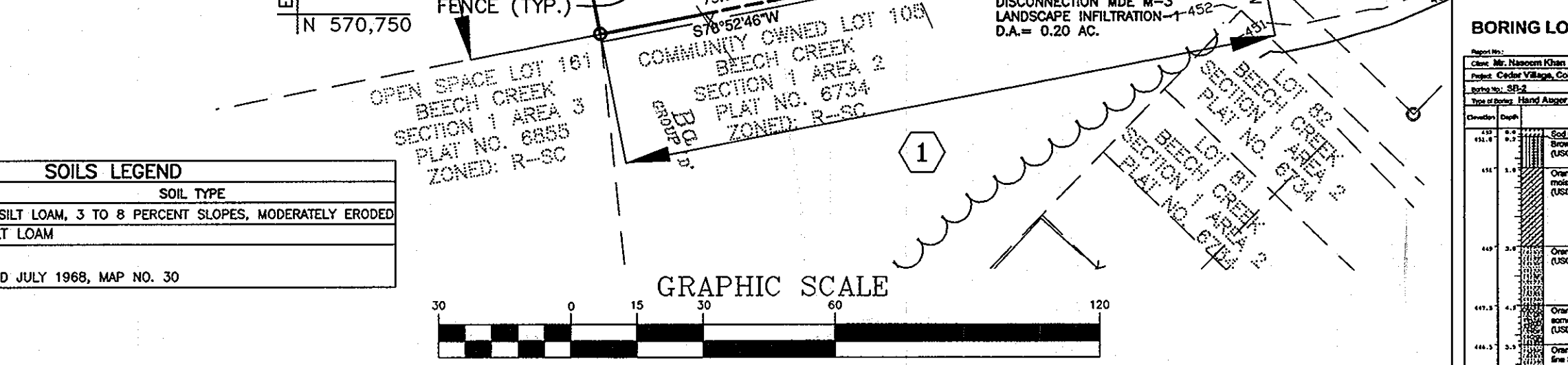
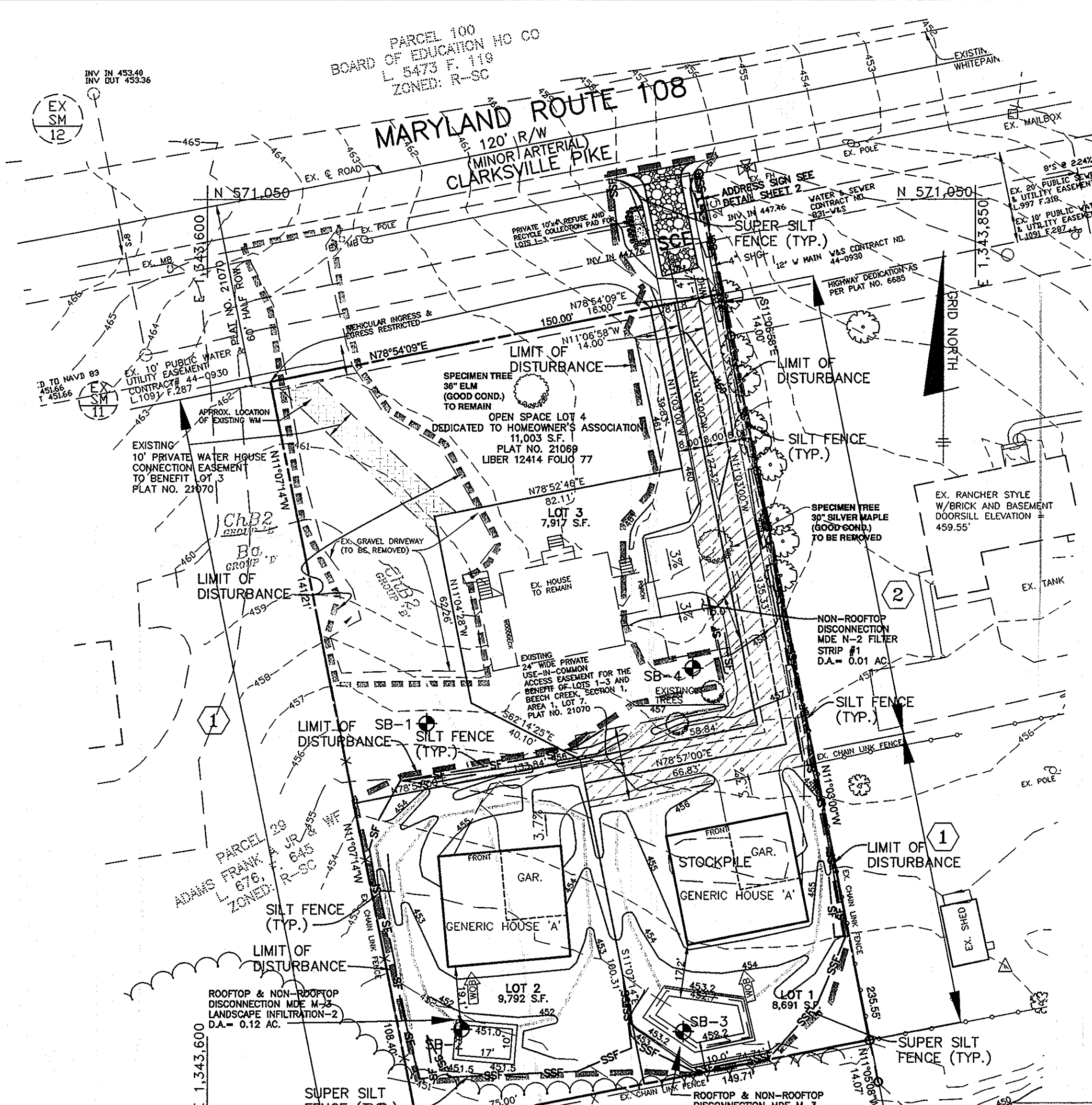
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 1/15/13 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 1/15/13 DATE

DIRECTOR

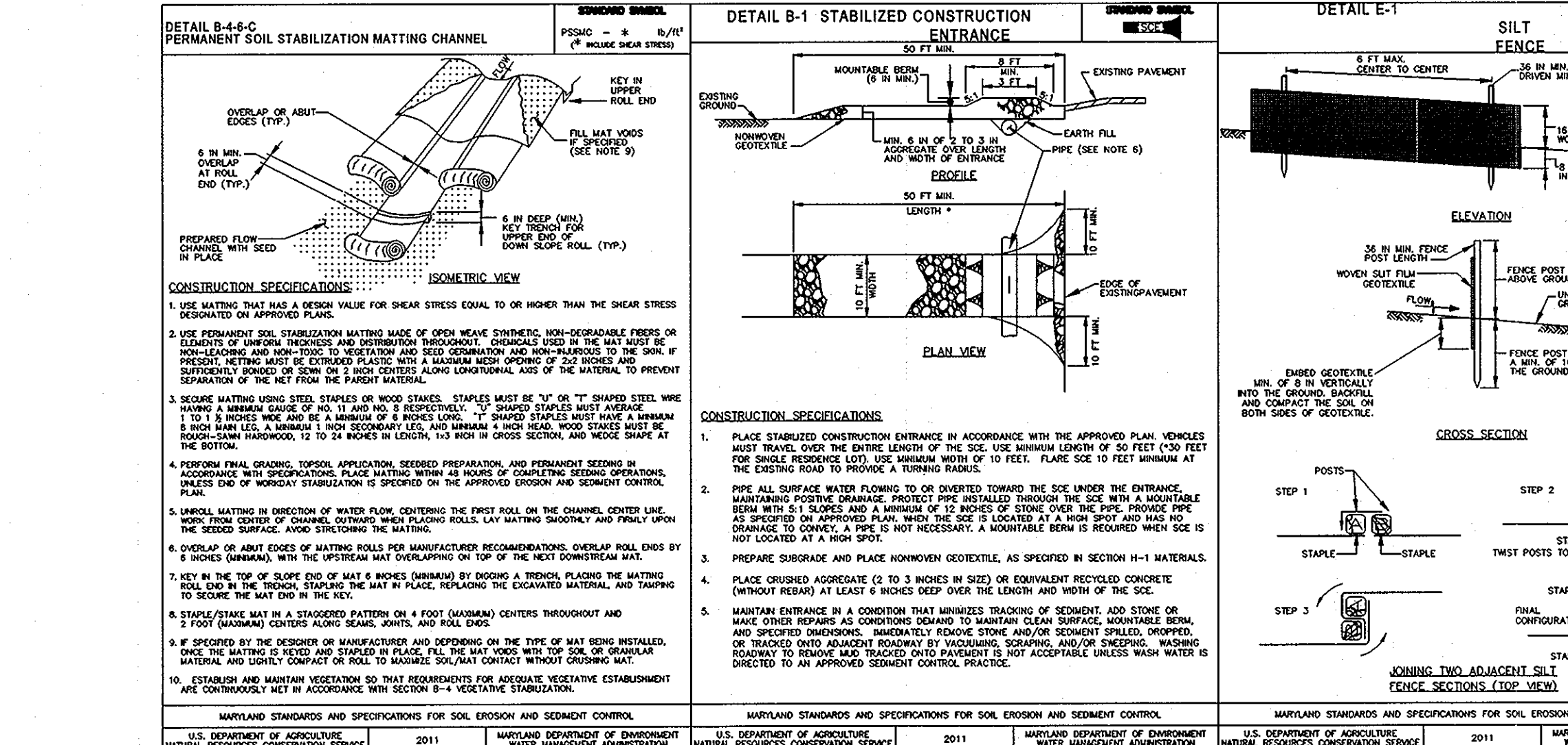


LANDSCAPE INFILTRATION DESIGN

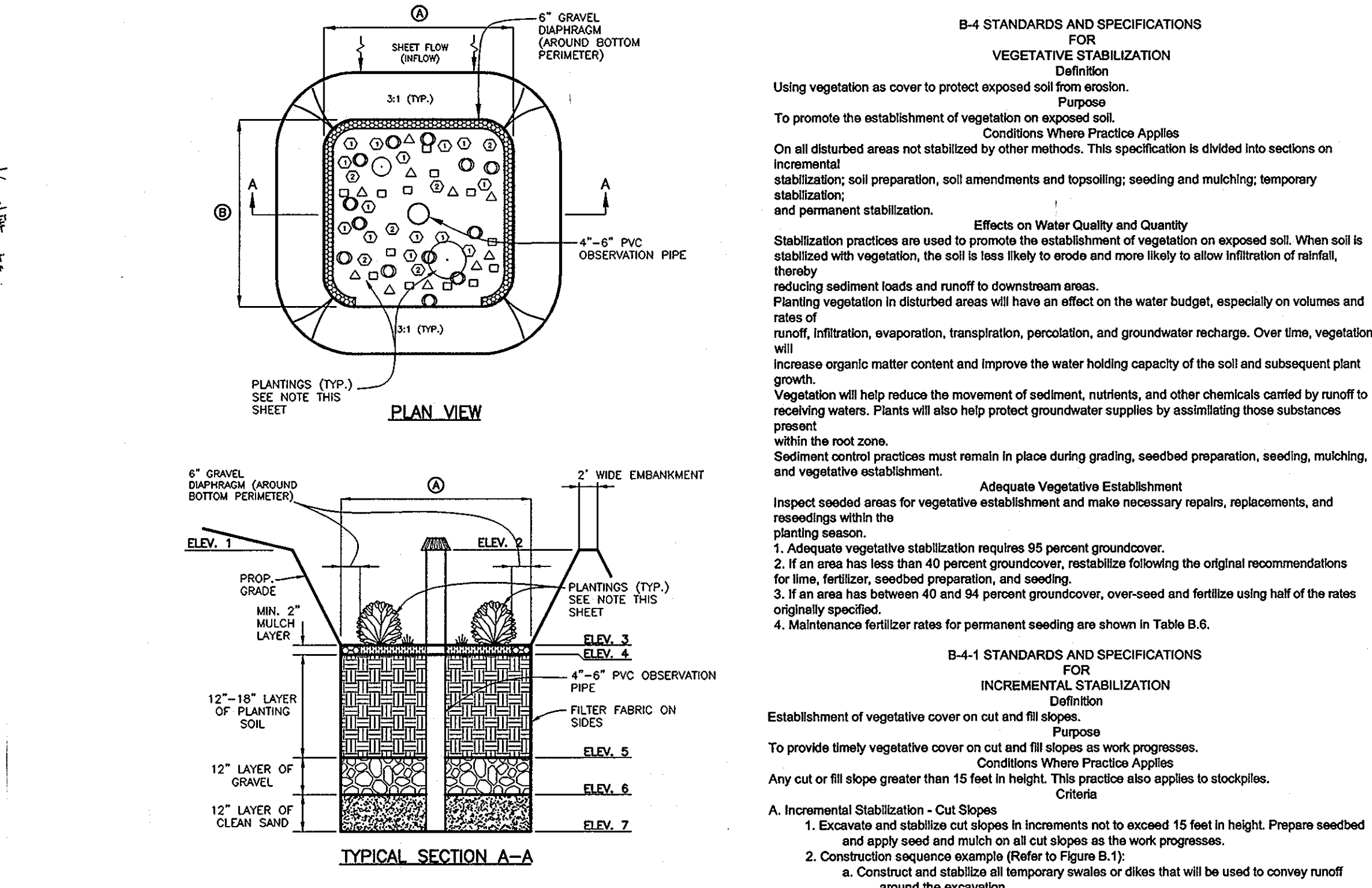
Practice	Type	DA	AF	ESDV/Req	ESDV/Pro	Pa Test
1	M-3	8557	292	486	496	Pass
2	M-3	5355	170	242	247	Pass
Total		13912	462			

Micro-Scale Practices

Practice	Type	DA	AF	ESDV/Req	ESDV/Pro	Pa Test
1	M-3	8557	4371	0.68	486	292
2	M-3	5355	2118	0.54	242	170
Total		13912	6489		743	



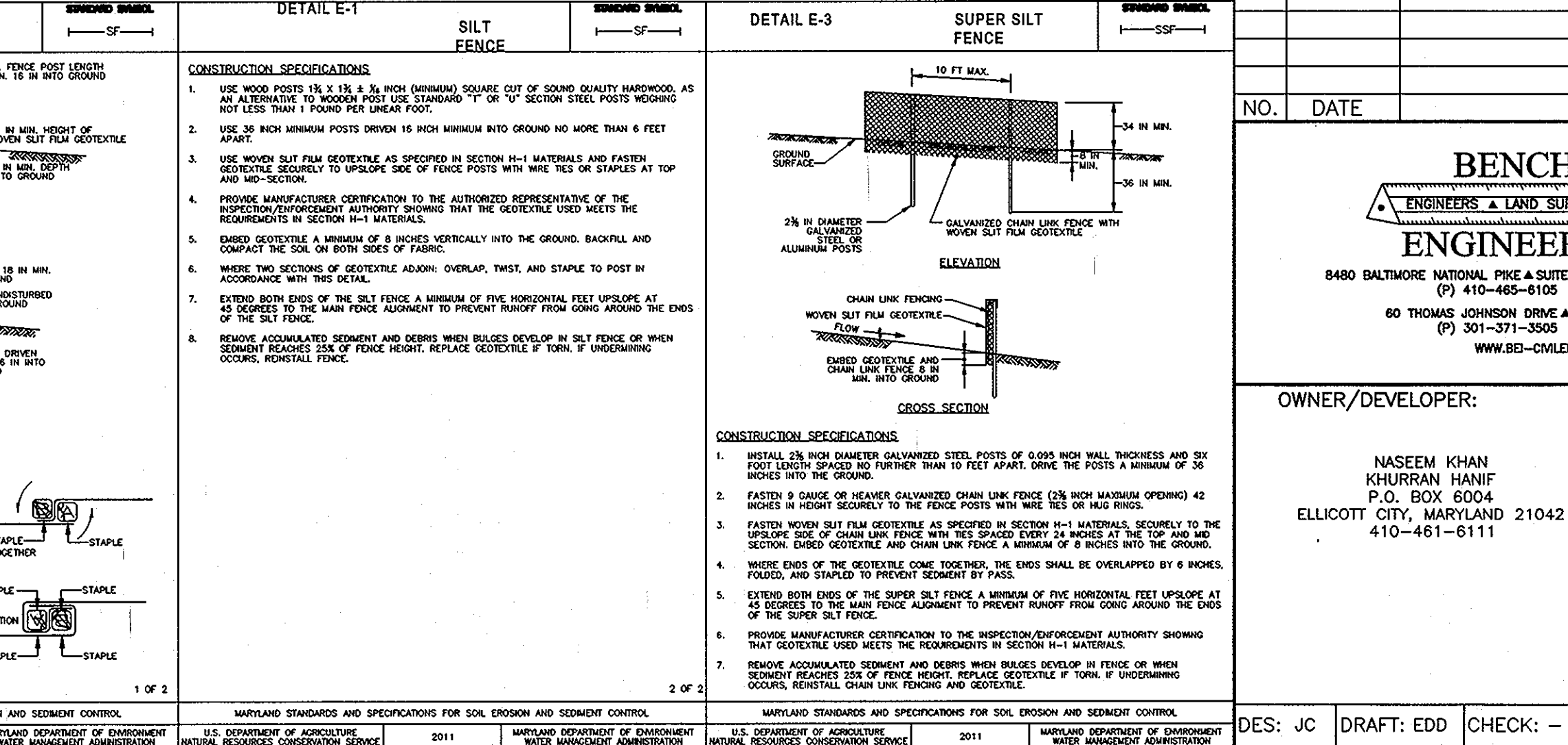
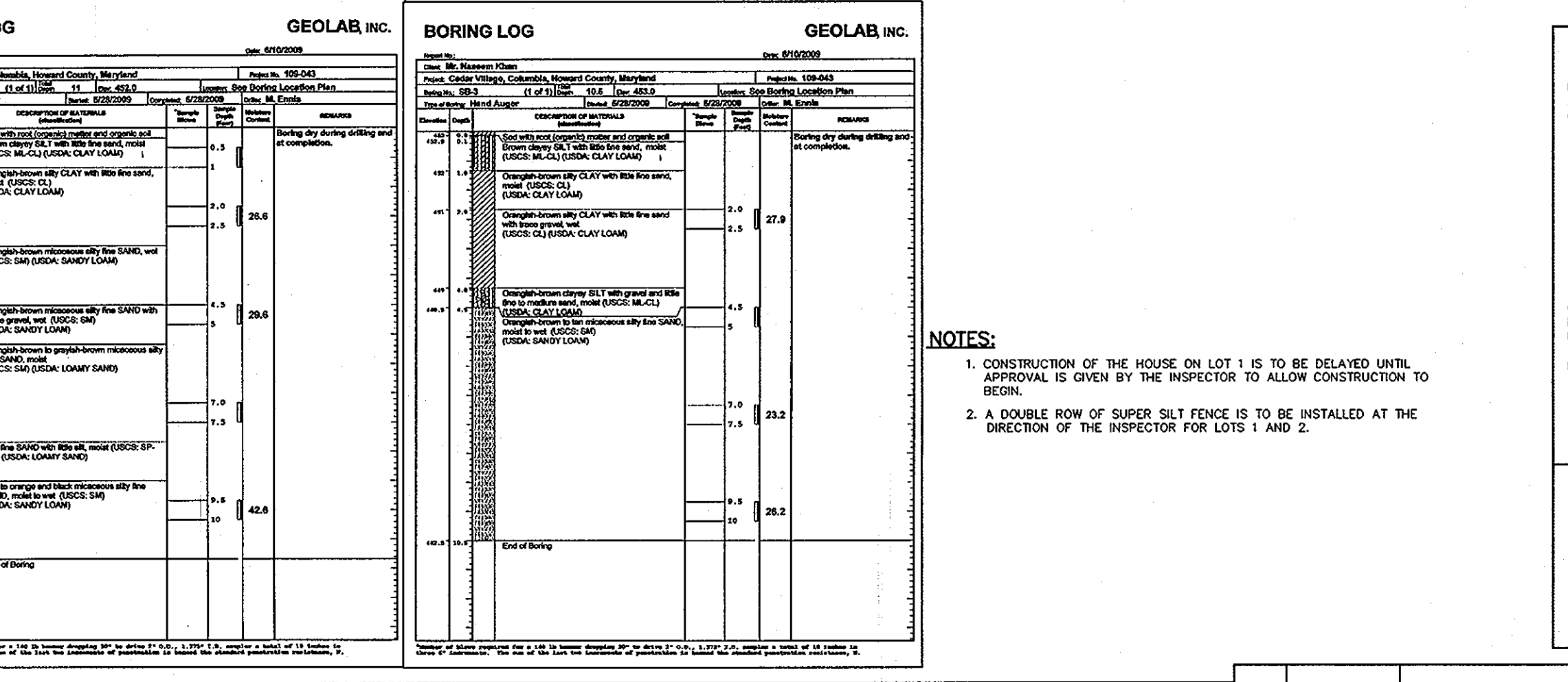
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.



(M-3) LANDSCAPE FILTRATION DESIGN TABLES

#1	#2
ELEV. 1 453.20	ELEV. 1 451.50
ELEV. 2 453.20	ELEV. 2 451.50
ELEV. 3 452.20	ELEV. 3 451.00
ELEV. 4 452.03	ELEV. 4 450.83
ELEV. 5 451.20	ELEV. 5 450.00
ELEV. 6 450.20	ELEV. 6 449.00
ELEV. 7 449.20	ELEV. 7 448.00

DIMENSIONS	DIMENSIONS
'A' 27'±	'A' 17'
'B' 11'±	'B' 10'
TOTAL SF 292	TOTAL SF 170



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

- SEDIMENT CONTROL NOTES**
- 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 (33-1550).
 - 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 SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, REVISIONS THEREOF.
 - FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 72 HOURS. STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, REVISIONS THEREOF. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SLOPES EXCEED 3% AND ONLY FOR PERMANENT STABILIZATION OF GRASSES.
 - 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.
 - 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, REVISIONS THEREOF. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SLOPES EXCEED 3% AND ONLY FOR PERMANENT STABILIZATION OF GRASSES.
 - 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.
 - SITE ANALYSIS:

TOTAL AREA OF SITE (THIS SUBMISSION)	0.86 ACRES
AREA DISTURBED	0.65 ACRES
AREA TO BE ROOFED OR PAVED	0.33 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.32 ACRES
TOTAL CUT	— CY
TOTAL FILL	— CY
OFFSITE WASTE/BORROW AREA LOCATION	*

- SEQUENCE OF CONSTRUCTION**
- A. Incremental Stabilization - Cut Slopes
- Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seeded and apply seed and mulch on all cut slopes as the work progresses.
 - Construct sequence example (Refer to Figure B.1):
 - Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation.
 - Perform Phase 1 excavation, prepare seeded, and stabilize.
 - Perform Phase 2 excavation, prepare seeded, and stabilize. Overseed Phase 1 areas as necessary.
 - Perform final phase excavation, prepare seeded, and stabilize. Overseed previously seeded areas as necessary.
- Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completion of the operation of the seeding season will necessitate the application of temporary stabilization.
- B. Incremental Stabilization - Fill Slopes
- Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seeded and apply seed and mulch on all fill slopes as the work progresses.
 - Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading operation ceases as prescribed in the plans.
 - At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erodible manner.
 - Construct sequence example (Refer to Figure B.2):
 - Construct and stabilize all temporary swales or dikes that will be used to divert runoff around the fill. Construct silt fence on low side of fill unless other methods shown on the plans address this area.
 - At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erodible manner.
 - Place Phase 1 fill, prepare seeded, and stabilize.
 - Place Phase 2 fill, prepare seeded, and stabilize.
 - Place final phase fill, prepare seeded, and stabilize. Overseed previously seeded areas as necessary.
- Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completion of the operation of the seeding season will necessitate the application of temporary stabilization.

ENGINEER'S CERTIFICATE

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

[Signature] 12/7/2012 DATE

ENGINEER

DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT 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.

[Signature] 12/12/12 DATE

DEVELOPER

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

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

[Signature] 1/3/13 DATE

HOWARD SCD

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE SUITE 418 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-8105 (F) 410-465-8844

60 THOMAS JOHNSON DRIVE A FREDERICK, MARYLAND 21702
(P) 301-371-3508 (F) 301-371-3506
WWW.BE-COMPLENENR.COM

OWNER/DEVELOPER: NASEEM KHAN KHURRAM HANIF P.O. BOX 6004 ELLICOTT CITY, MARYLAND 21042 (P) 410-481-6111

CEDAR VILLAGE

LOTS 1 & 2 SINGLE FAMILY DETACHED DWELLINGS AND DRIVEWAY IMPROVEMENTS ON LOT 3 AND OPEN SPACE LOT 4

TAX MAP: 29 GRID: 11 PARCEL: 30
F-07-057/2EN 07-18-07 and F-09-116

ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

STORMWATER MANAGEMENT AND SEDIMENT & EROSION CONTROL PLAN

DATE: DECEMBER, 2012 BEI PROJECT NO. 2386

SCALE: AS SHOWN SHEET 12 OF 3

DES: JC DRAFT: EDD CHECK: -

