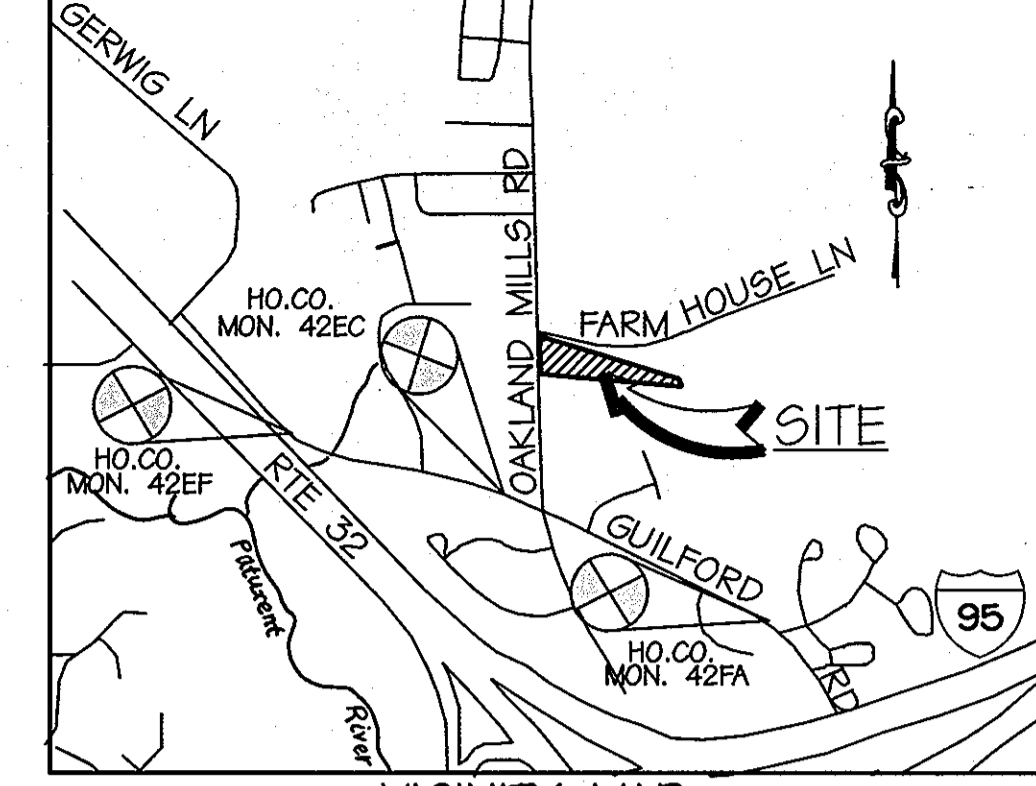


### MINIMUM LOT SIZE CHART

LOT No.	GROSS AREA	PIPESTEM AREA	MIN. LOT SIZE
1	0.2961 AC	0.0000 AC	0.2961 AC (12,985 SF)
2	0.2084 AC	0.0237 AC	0.1787 AC (7,706 SF)
3	0.1940 AC	0.0523 AC	0.1417 AC (6,172 SF)
4	0.3119 AC	0.0000 AC	0.3119 AC (13,555 SF)

### AREA TABULATION CHART

TOTAL NUMBER OF LOTS.....	3
TOTAL NUMBER OF OPEN SPACE LOTS.....	1
TOTAL DEDICATED RIGHT-OF-WAY LOTS.....	1
TOTAL AREA OF BUILDABLE LOTS.....	0.7004 AC
TOTAL AREA OF OPEN SPACE.....	0.3119 AC
TOTAL AREA OF CREDITED OPEN SPACE.....	0.2873 AC
TOTAL AREA OF ROADWAY TO BE RECORDED.....	0.1356 AC
TOTAL AREA TO BE RECORDED.....	1.1480 AC

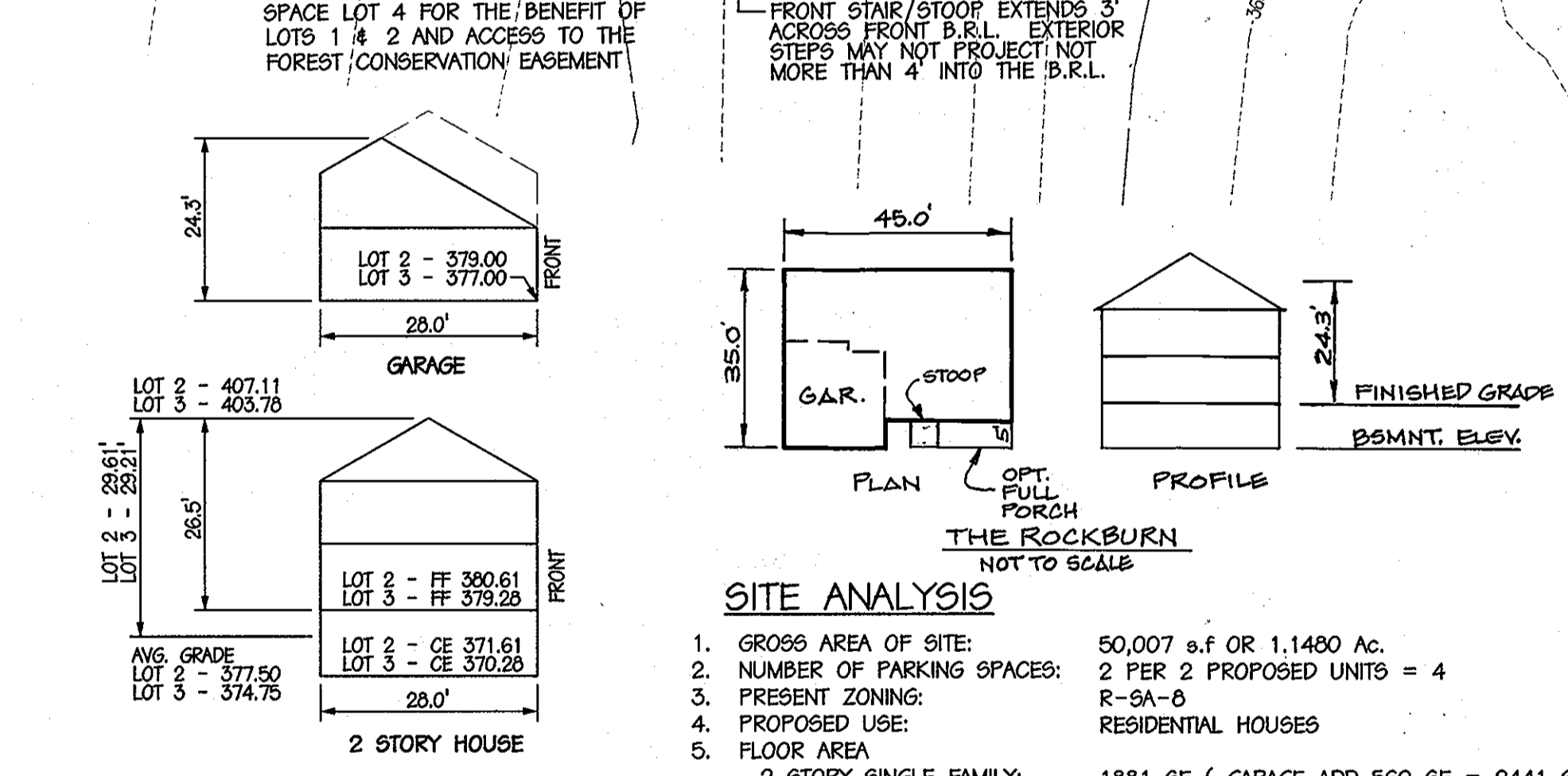


### GENERAL NOTES

- SUBJECT PROPERTY ZONED R-SA-B PER THE 02/02/2004 COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS DATED 7/28/06
- COORDINATES BASED ON NAD 83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 42EC N 545,417.005 E 1,360,140.372 42EF N 545,623.564 E 1,359,444.465
- EXISTING DENOTES PRIVATE DRIVEWAY EASEMENT FOUND
- EXISTING DENOTES FOREST CONSERVATION EASEMENT
- EXISTING DENOTES PRIVATE ACCESS EASEMENT TO OPEN SPACE
- WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 16.122.B 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
- THERE IS AN EXISTING DWELLING/STRUCTURE LOCATED ON LOT 1 TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING(S) ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE
- THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.120 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING OR GRADING OR OTHER CONSTRUCTION SHALL OCCUR IN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED
- DEVELOPER RESERVES TO ITSELF, ITS SUCCESSORS AND ASSIGNS, ALL EASEMENTS SHOWN ON THIS PLAN FOR WATER, SEWER, STORM DRAINAGE, OTHER PUBLIC UTILITIES AND FOREST CONSERVATION (RESERVED) AND FOREST CONSERVATION EASEMENT LOCATED IN, ON, OVER AND THROUGH OPEN SPACE LOT 4. ANY CONVEYANCES OF THE AFORESAID LOTS/PARCELS SHALL BE SUBJECT TO THE EASEMENTS HEREIN GRANTED AND WHETHER OR NOT THEY ARE SHOWN IN THE DEED(S) CONVEYING SAID LOT(S) / PARCELS, DEVELOPER SHALL EXECUTE AND DELIVER DEEDS FOR THE EASEMENTS HEREIN RESERVED TO HOWARD COUNTY WITH DUES AND BOUNDARY DESCRIPTIONS OF THE FOREST CONSERVATION AREA, UPON COMPLETION OF THE PUBLIC UTILITIES AND THEIR ACCEPTANCE BE HOWARD COUNTY, AND IN THE CASE OF THE FOREST CONSERVATION EASEMENT(S) UPON COMPLETION OF THE DEVELOPER'S OBLIGATIONS UNDER SAID AGREEMENT. THE DEVELOPER SHALL INSTALL AND MAINTAIN AGREEMENT EXECUTED BY THE DEVELOPER AND THE COUNTY, AND THE RELEASE OF THE DEVELOPER'S SURETY FOOTED WITH SAID AGREEMENT SHALL ACCEPT THE EASEMENTS AND RECORD THE DEED(S) OF EASEMENT IN THE LAND RECORDS OF HOWARD COUNTY
- THIS PLAN COMPLES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY RETENTION OF 0.1364 ACRES OF FOREST AND REFORESTATION OF 0.1262 ACRES. FINANCIAL SURETY FOR THE 0.1364 ACRES OF RETENTION IN THE AMOUNT OF \$1,180 AND 0.1262 ACRES OF REFORESTATION IN THE AMOUNT OF \$2,749 HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$3,930. ALL FOREST CONSERVATION OBLIGATION WERE FULFILLED WITH F-05-180
- THE OPEN SPACE SHOWN HEREON IS HEREBY DEDICATED TO A PROPERTY OWNERS ASSOCIATION FOR THE RESIDENTS OF THIS SUBDIVISION AND RECORDING REFERENCES OF INCORPORATING RESTRICTIONS ARE SHOWN HEREON. HOME OWNERS ASSOCIATION ID NO. 000361992010195 DATE ACCEPTED 10-13-2005. COVENANTS AND BYLAWS WILL BE RECORDED SIMULTANEOUSLY WITH PLAT
- OPEN SPACE LOT 4 (0.3119 AC.) WILL BE PRIVATELY OWNED AND MAINTAINED BY THE SULLIVAN BLAKE AT OAKLAND MILLS HOME OWNERS ASSOCIATION.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR OTHER BUFFERS AND FOREST CONSERVATION EASEMENT AREAS
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND EXISTING RIGHT-OF-WAY LINE NOT TO THE PIPESTEM OR DRIVEWAY
- NO WETLANDS, STREAMS, STEEP SLOPES, FLOODPLAIN, HISTORIC STRUCTURES OR CEVETERIES EXIST ON-SITE
- NO WETLANDS EXIST ON-SITE PER FIELD INVESTIGATION BY KCI TECHNOLOGIES IN MARCH 2005.
- AREA OF SUBDIVISION= 1.1480 AC. OPEN SPACE REQUIRED= 0.2870 AC (1,140.25% = 0.2870 AC PROVIDED OPEN SPACE= 0.3119 AC CREDITED OPEN SPACE= 0.2873 AC)
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME I, I.E. STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION
- APPROPRIATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE THE START OF WORK SHOWN ON THESE DRAWINGS
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS: M&B UTILITY 1-800-257-7777 HOWARD COUNTY BUREAU OF UTILITIES 752-3976 AT&T CABLE LOCATION DIVISION 392-2366 BALTIMORE GAS & ELECTRIC COMPANY 383-5555 STATE HIGHWAY ADMINISTRATION 685-0123 HOWARD COUNTY CONSTRUCTION / INSPECTION / SURVEY DIVISION 792-7272 (24 HOURS NOTICE FROM FIELD TO COMMENCEMENT OF WORK) 313-1600 TOPO TAKEN FROM FIELD SURVEY DATED JANUARY 7, 2005 BY KCI TECHNOLOGIES
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORAGE AND DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.

### LEGEND

EXISTING TREE LINE	EX. LIGHT POLE	EX. FIRE HYDRANT
EX. UTILITY POLE	EX. MAILBOX	EX. WATER LINE
EX. FLAG POLE	EX. UNKNOWN MANHOLE	PROPERTY LINE
EX. TREE	EX. CLEANOUT	EX. CONTOUR
EX. SIGN	EX. SEWER VALVE	EX. SPOT ELEVATION
EX. SANITARY SEWER MANHOLE	EX. SANITARY SEWER PIPE	SOIL BORING
EX. SANITARY SEWER LINE	EX. STORMDRAIN MANHOLE	PROP. CONTOUR
EX. STORMDRAIN LINE	EX. INLET	PROP. SPOT ELEVATION
EX. REINFORCED CONCRETE PIPE	EX. WATER VALVE	SURVEYOR TRAVERSE POINT
EX. FOREST CONSERVATION EASEMENT		GUY WIRE
		LIMIT OF DISTURBANCE
		SILT FENCE
		STONE CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM
		SOIL TYPE DELINEATION
		PRIVATE DRIVEWAY EASEMENT
		FOREST CONSERVATION EASEMENT



### SITE ANALYSIS

1. GROSS AREA OF SITE:	50,007 s.f. OR 1.1480 AC.
2. NUMBER OF PARKING SPACES:	2 PER 2 PROPOSED UNITS = 4
3. PRESENT ZONING:	R-SA-B
4. PROPOSED USE:	RESIDENTIAL HOUSES
5. FLOOR AREA:	
2 STORY SINGLE FAMILY:	1881 SF ( GARAGE ADD 560 SF = 2441 SF)
6. TOTAL NO. OF UNITS ALLOWED:	3 ( INCLUDES 1 EXISTING UNIT)
7. TOTAL NO. OF UNITS PROPOSED:	2
8. TOTAL DISTURBED AREA:	16,513 s.f. OR 0.43 AC.
9. DPZ FILES:	RECORD PLAT- (9995/380) FILE: *F-05-180

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE: 4/25/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. DATE: 4/25/08

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

BY THE DEVELOPER:

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 INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DATE: 4/25/08

BY THE ENGINEER:

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 SOIL CONSERVATION DISTRICT.

DATE: 1/28/08

### PERMIT INFORMATION CHART

Subdivision Name:	SULLIVAN BLAKE PROPERTY	Section/Area:	NA	Lot/Parcel No.:	PARCEL 374 LOTS 1-3 & OPEN SPACE LOT 4
Plat # or L/F:	16120	Grid #:	16	Zoning:	R-SA-B
Water Code:	E14	Tax Map No.:	42	Elect. Distr.:	6
Sewer Code:	9200400	Census Tract:			

### REVISIONS

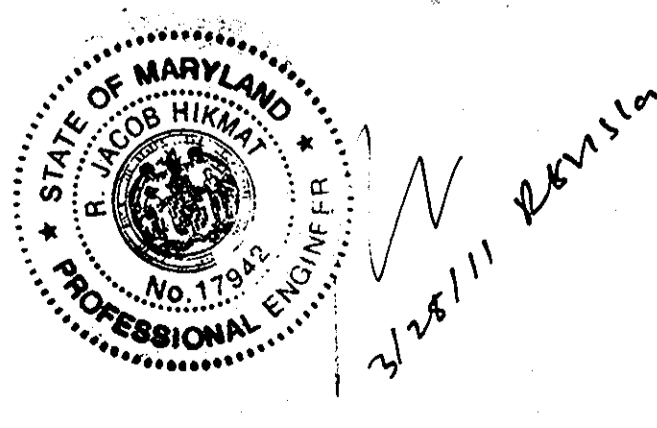
DATE	REVISIONS
9-26-07	REVISED DUE COMMENTS FROM DED DATED 9-6-07
9-28-11	ADD HSB TYPE, REV. LOT 3 ACCORDINGLY (MBA)

**KCI TECHNOLOGIES** ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS

14502 Greenview Drive, Suite 424 Laurel, Maryland 20708 (301) 952-1821 (410) 792-8086 fax: (410) 792-7419 www.kci.com

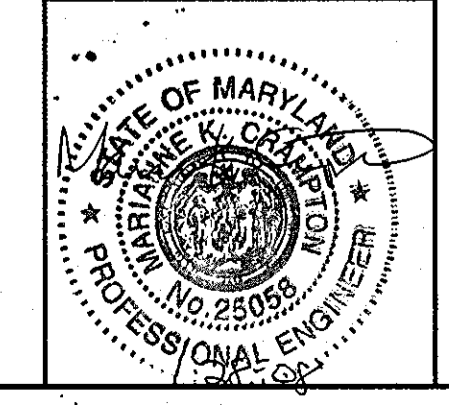
**OWNER:** JOHN G. SULLIVAN JR. & PATRICK J. GOONAN 3275 PINE ORCHARD LANE SUITE A ELLICOTT CITY, MARYLAND 21042 ATTN: JOHN LANS 410-410-9166

**DEVELOPER:** SULLIVAN BLAKE REMODELING, INC. 3275 PINE ORCHARD LANE SUITE A ELLICOTT CITY, MARYLAND 21042 ATTN: JOHN LANS 410-410-9166



### SHEET INDEX

SHEET NO.	TITLE
1	SITE & GRADING PLAN
2	STORMWATER MANAGEMENT PLAN & DETAILS
3	STORMWATER MANAGEMENT NOTES & DETAILS
4	SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL DETAILS
6	SEDIMENT CONTROL & SWM NOTES
7	LANDSCAPE & SUPPLEMENTAL PLAN
8	LANDSCAPE DETAILS & SPECIFICATIONS



**SULLIVAN BLAKE PROPERTY**

LOTS 2 AND 3

SINGLE FAMILY DETACHED PARCEL 374 TAX MAP 16, PARCEL 374 L. 9995 / F. 350, ZONE R-SA-B 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND PLAT# 16120 F-05-180

**BAR SCALE** 1" = 30'

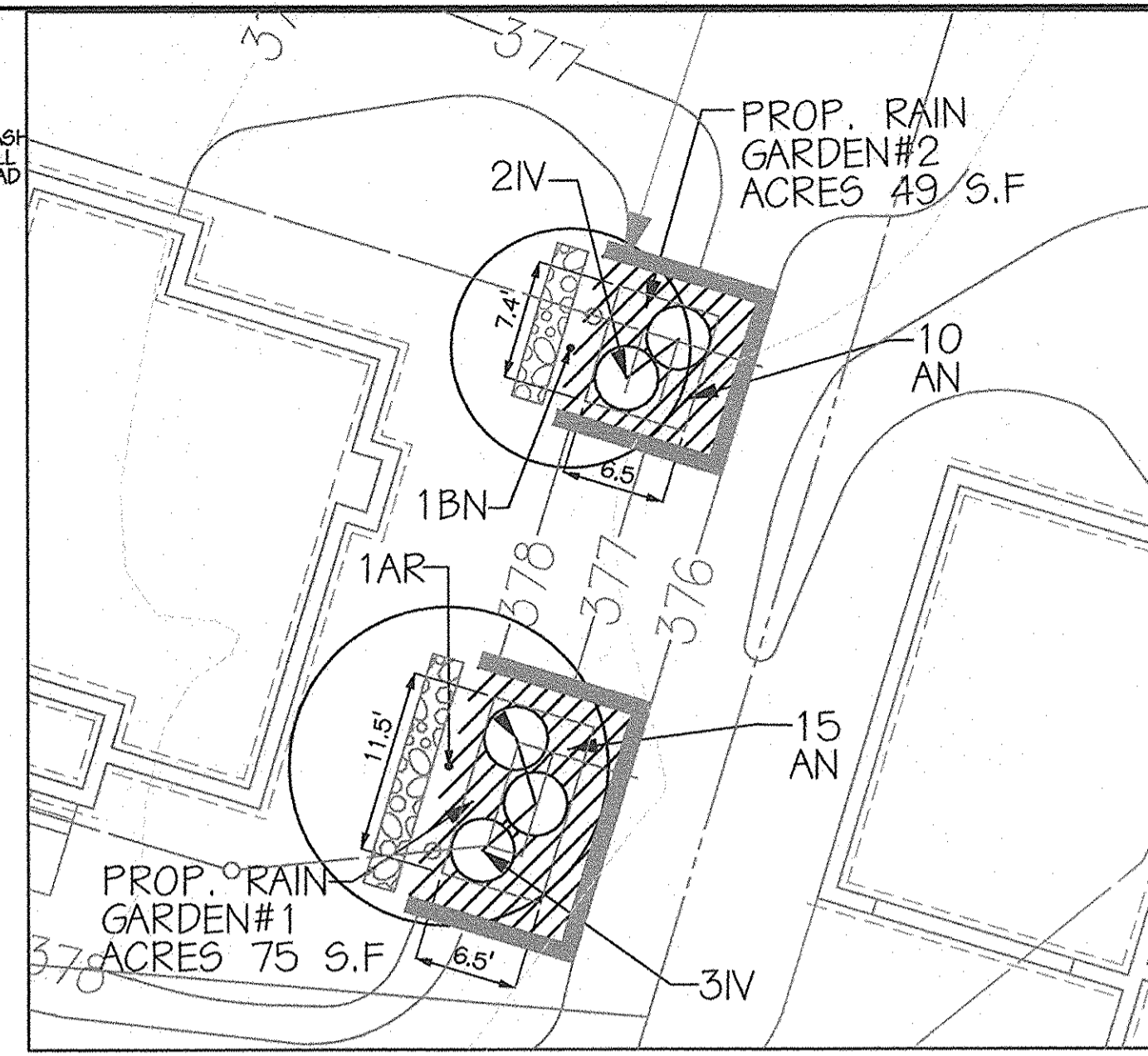
DATE: DECEMBER 4, 2007 SHEET 1 OF 8

STORMWATER MANAGEMENT SUMMARY TABLE						
DA	AREA	WATER QUALITY		RECHARGE		CPV
		REQUIRED	PROVIDED	REQUIRED	PROVIDED	
LOT 2 *	1	75 SF	75 SF	0.0052AC	0.0052AC	THE 1-YR STORM FOR THE ENTIRE PROJECT SITE (AS) IS LESS THAN 2CF. THEREFORE CHANNEL PROTECTION VOLUME (CPV) IS NOT REQUIRED.
	2	48.4 SF	48.4 SF	0.0027AC	0.0027AC	
LOT 3 *		0.001 ac-ft	0.001 ac-ft	0.0002AC-FT	0.0002AC-FT	NON-STRUCTURAL RAIN GARDEN #1 NON-STRUCTURAL RAIN GARDEN #2
ACCESS ROAD *		0.21AC	0.001 ac-ft	0.0002AC-FT	0.0002AC-FT	

\* NON-STRUCTURAL METHODS WERE USED FOR EACH LOT INCLUDING THE ACCESS ROAD

**OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS**

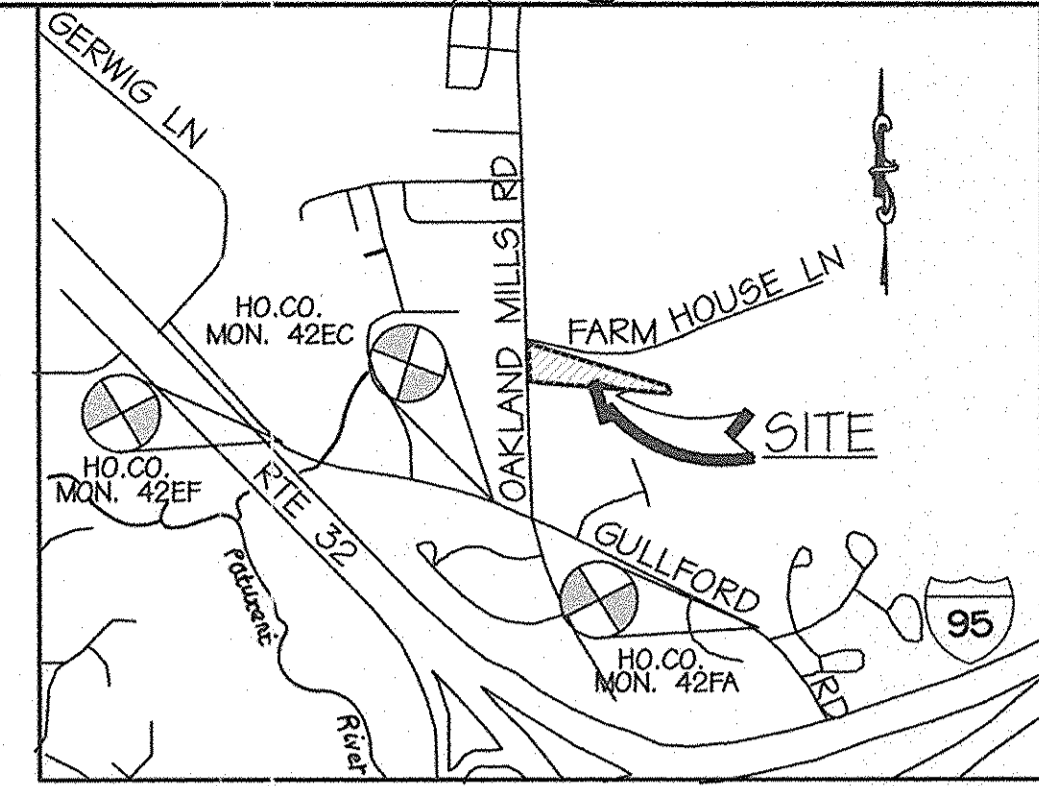
- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



**RAIN GARDEN PLANTING INSERT**  
SCALE: 1" = 10'

\*\*SEE PLANT SCHEDULE ON SHEET #3

- GENERAL NOTES**
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME I.I.E. STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
  - APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
  - CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:  
 MESA UTILITY 1-800-267-7777  
 VERIZON TELEPHONE COMPANY 752-9976  
 HOWARD COUNTY BUREAU OF UTILITIES 292-2966  
 AT&T CABLE LOCATION DIVISION 395-5553  
 BALTIMORE GAS & ELECTRIC COMPANY 685-0125  
 STATE HIGHWAY ADMINISTRATION 531-5545  
 HOWARD COUNTY CONSTRUCTION/INSPECTION/SURVEY DIVISION 792-7272 (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK) 315-1800
  - TOPO TAKEN FROM FIELD SURVEY DATED JANUARY 7, 2005 BY KCI TECHNOLOGIES INC.
  - THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
  - INSTALLATION OF TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
  - ALL ON-SITE PARKING AND DRAINAGE STRUCTURES SHALL BE PRIVATELY OWNED & MAINTAINED.
  - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  - THIS PLAN IS SUBJECT TO THE FIFTH EDITION OF THE SUBDIVISION REGULATIONS AND THE NEW ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001.
  - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
  - STORMWATER MANAGEMENT WILL BE PROVIDED THROUGH NON-STRUCTURAL SWM PRACTICES IN GRASS CHANNELS.
  - AN AFO STUDY IS EXEMPT PER DMIII SECTION 4.7.4.G.
  - THIS SITE IS IN THE PATUXENT RIVER WATERSHED #02-13-11 AND IS CLASSIFIED AS A USE IV.
  - THIS PROJECT IS CONDITIONALLY EXEMPT FROM THE REQUIREMENTS OF SECTION 15.1000 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH THE FILING OF A DECLARATION OF INTENT FOR SINGLE LOT CLEARING LESS THAN 40,000 SQUARE FEET OF FOREST.
  - THERE ARE NO STEEP SLOPES, WETLANDS, STREAMS OR FLOOD PLAINS ON THIS SITE.

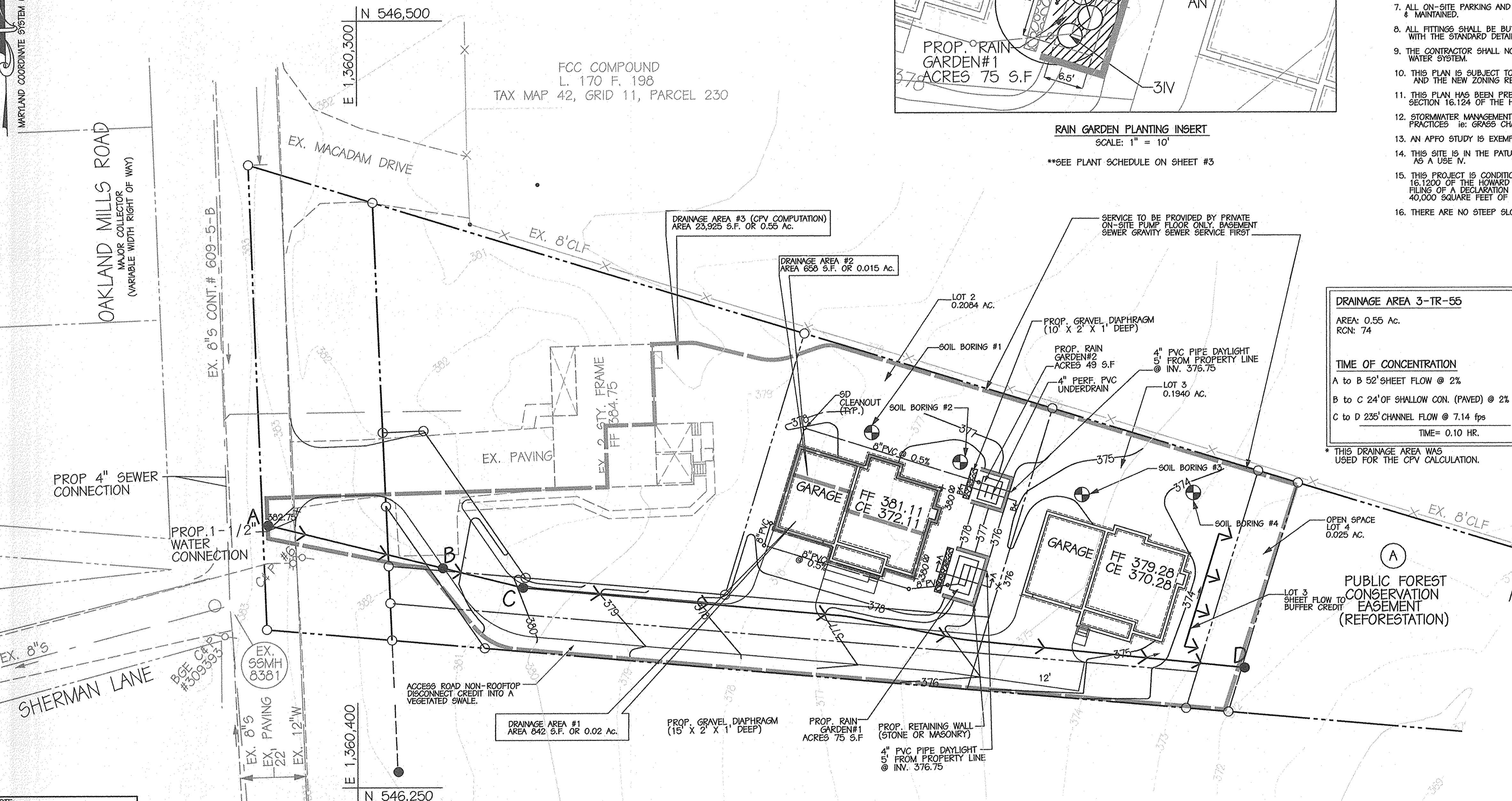


**VICINITY MAP**

SCALE: 1" = 2000'  
ADC MAP: 20 B-2

**BENCH MARK**

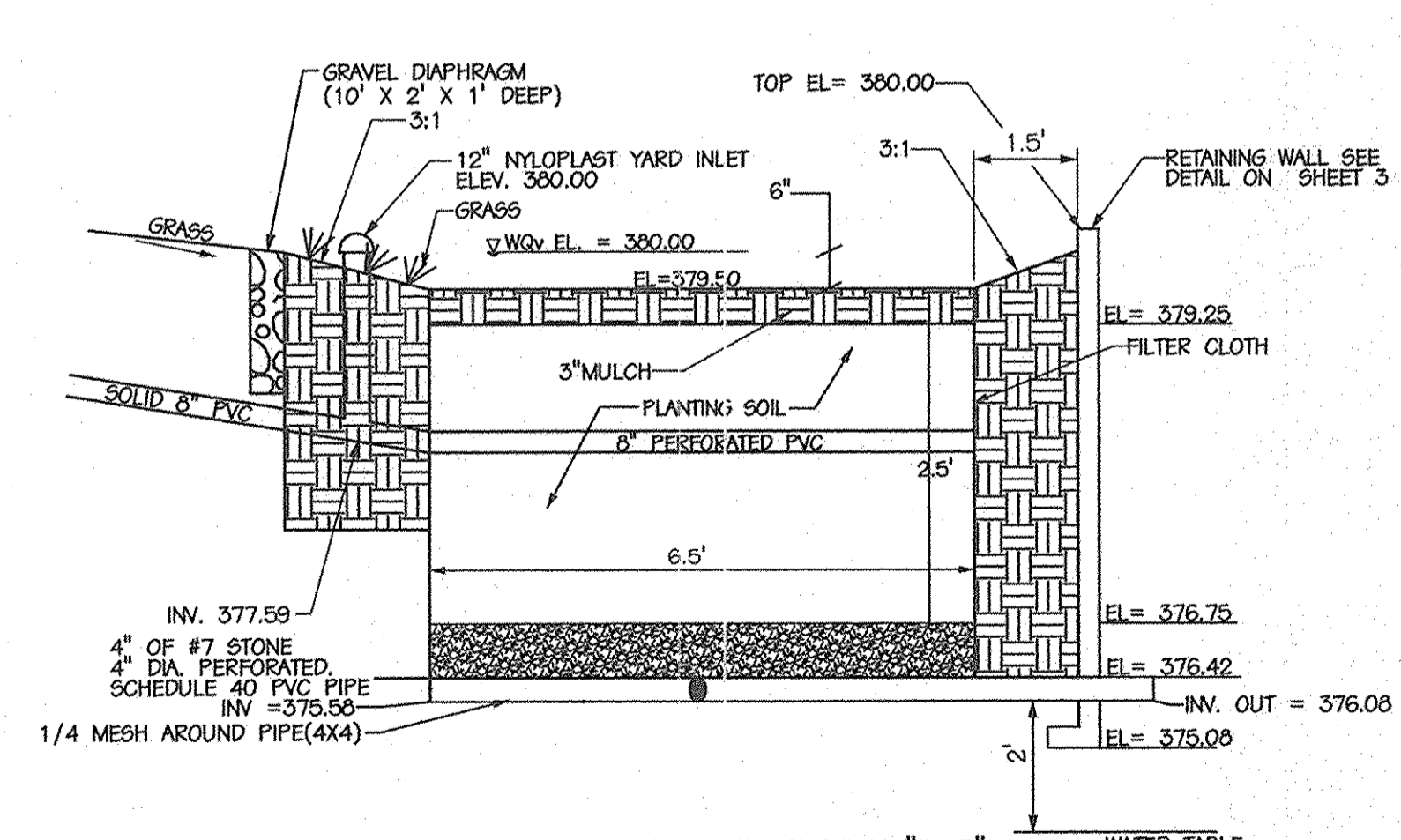
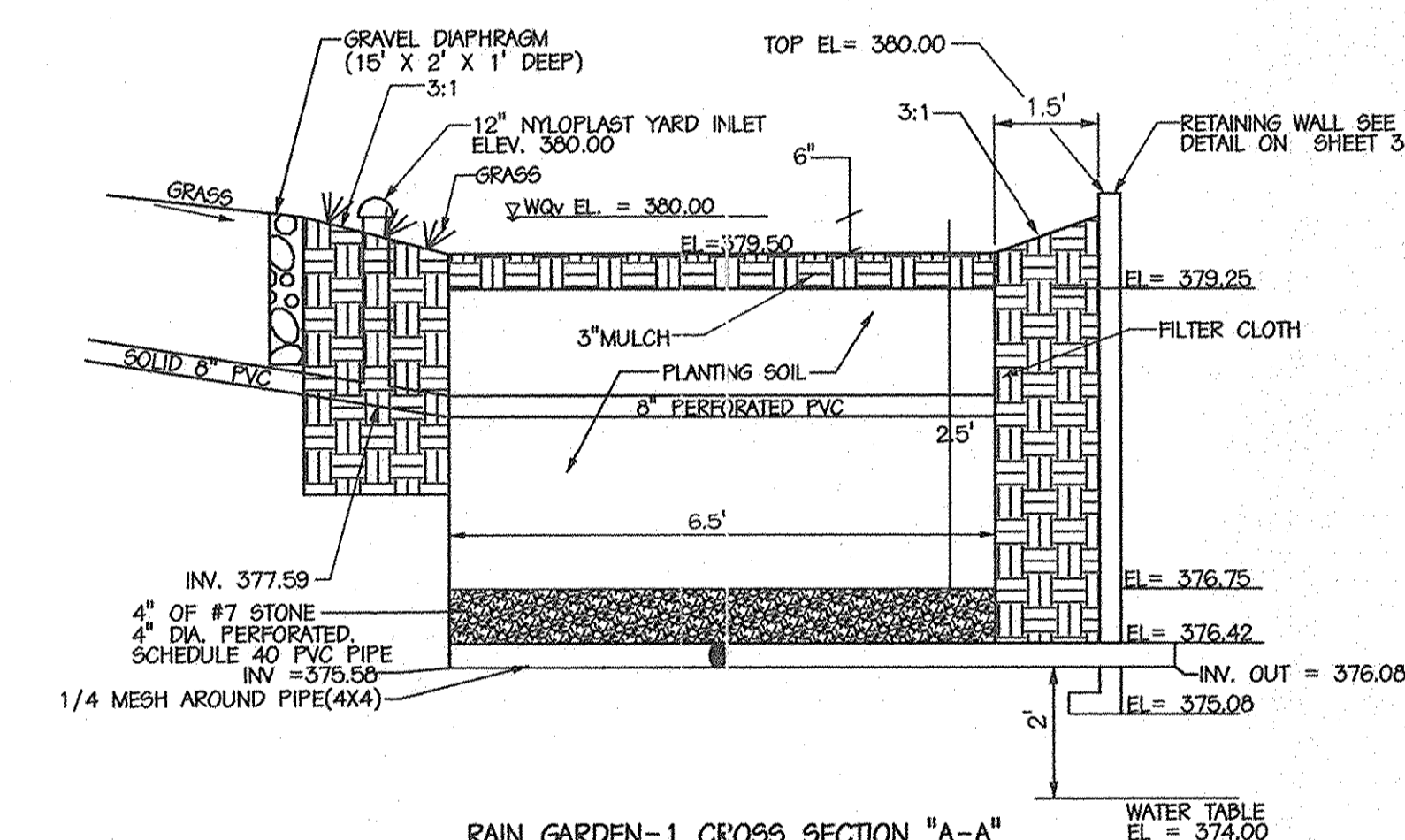
COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODESIC CONTROL STATION NO. 42EC  
 42EC N 545,417.005 E 1,360,140.2672  
 42EF N 545,623.3664 E 1,359,044.4465



**DRAINAGE AREA 3-TR-55**  
AREA: 0.55 AC.  
RCN: 74

**TIME OF CONCENTRATION**  
A to B 52' SHEET FLOW @ 2%  
B to C 24' OF SHALLOW CON. (PAVED) @ 2%  
C to D 235' CHANNEL FLOW @ 7.14 fps  
TIME = 0.10 HR.

THIS DRAINAGE AREA WAS USED FOR THE CPV CALCULATION.



NOTE: ENTIRE SITE IS LEGORE-MONTALO-URBAN LAND COMPLEX (LoB) GROUP B TYPE SOIL

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE  
 DATE: 4/25/08  
 DATE: 4/25/08  
 DATE: 4/30/08

BY THE DEVELOPER:  
 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 INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DATE: 4/19/08

BY THE ENGINEER:  
 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 SOIL CONSERVATION DISTRICT.

Maiane Kimran 01/04/2008  
 DATE: 01/04/2008

**LEGEND**

EX. LIGHT POLE	EX. S.D. MANHOLE	PROP. SPOT ELEVATION
EX. UTILITY POLE	EX. S.D. LINE	SURVEYOR TRAVERSE POINT
EX. FLAG POLE	EX. INLET	GUY WIRE
EX. MAILBOX	EX. REINFORCED CONCRETE PIPE	LIMIT OF DISTURBANCE
EX. UNKNOWN MANHOLE	EX. WATER VALVE	SILT FENCE
EX. TREE	EX. FIRE HYDRANT	SOIL TYPE DELINEATION
EX. SIGN	EX. WATER LINE	PRIVATE DRIVEWAY EASEMENT
EX. CLEANOUT	PROPERTY LINE	FOREST CONSERVATION EASEMENT
EX. SEWER VALVE	EX. CONTOUR	DRAINAGE AREA
EX. SAN. SEWER MANHOLE	EX. SPOT ELEVATION	TIME OF CONCENTRATION
EX. SEWER VENT PIPE	SOIL BORING	
EX. SAN. SEWER LINE	PROP. CONTOUR	

**SHEET INDEX**

SHEET NO.	TITLE
1	SITE DEVELOPMENT & GRADING PLAN
2	STORMWATER MANAGEMENT - PLAN & DETAILS
3	STORMWATER MANAGEMENT - NOTES & DETAILS
4	SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL DETAILS
6	SEDIMENT CONTROL & SWM NOTES
7	LANDSCAPE PLAN
8	LANDSCAPE DETAILS & NOTES

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the state of Maryland, License No. 25056  
 Expiration Date: November 17, 2008.

**SULLIVAN BLAKE PROPERTY**

LOTS 2 AND 3  
 SINGLE FAMILY DETACHED  
 TAX MAP 42, GRID 16, PARCEL 374  
 L. 9995 / F. 380, ZONE R-5A-8  
 5th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 PLAT#18120 F-05-180

**BAR SCALE**  
 1" = 20'

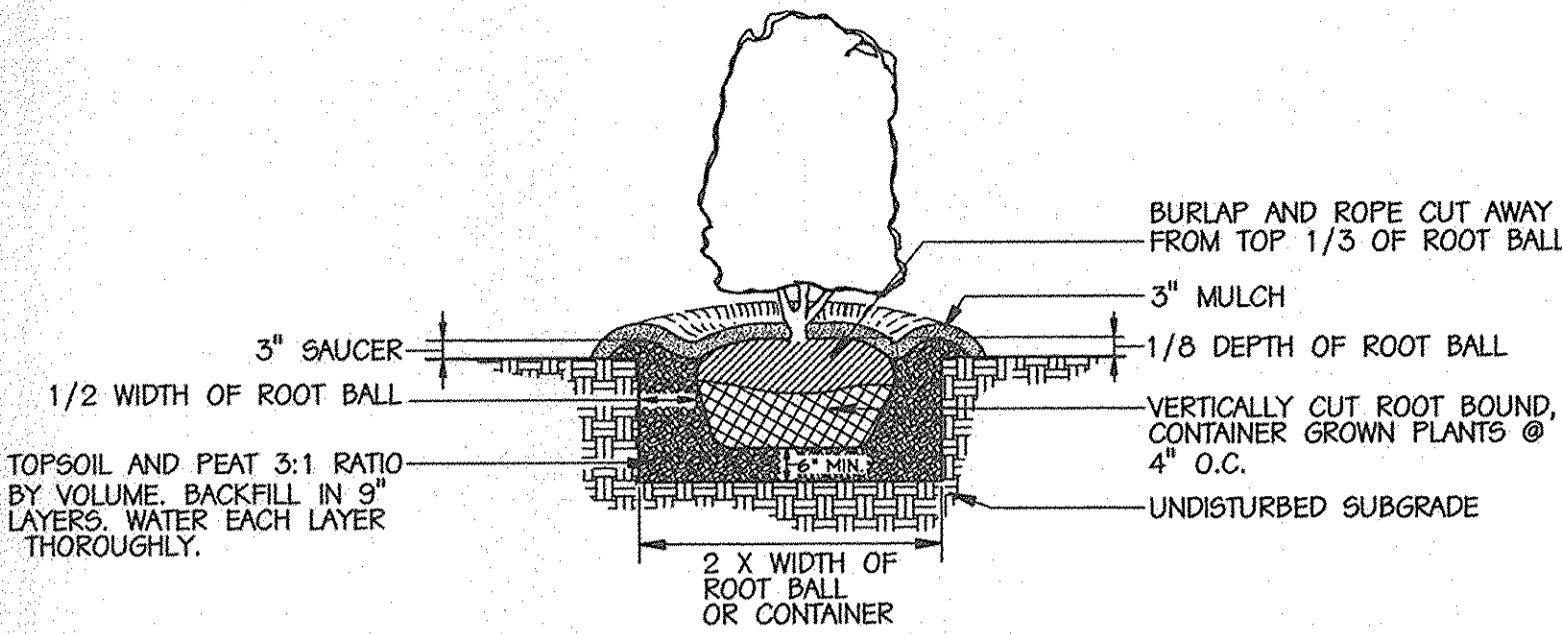
DATE: DECEMBER 4, 2007  
 SHEET 2 OF 8

**KCI TECHNOLOGIES**  
 ENGINEERS, PLANNERS, SCIENTISTS, CONSTRUCTION MANAGERS  
 14502 Greenview Drive, Suite 424  
 Laurel, Maryland 20788  
 (301) 953-1821 (410) 792-8086  
 Fax: (410) 792-7419  
 www.kci.com

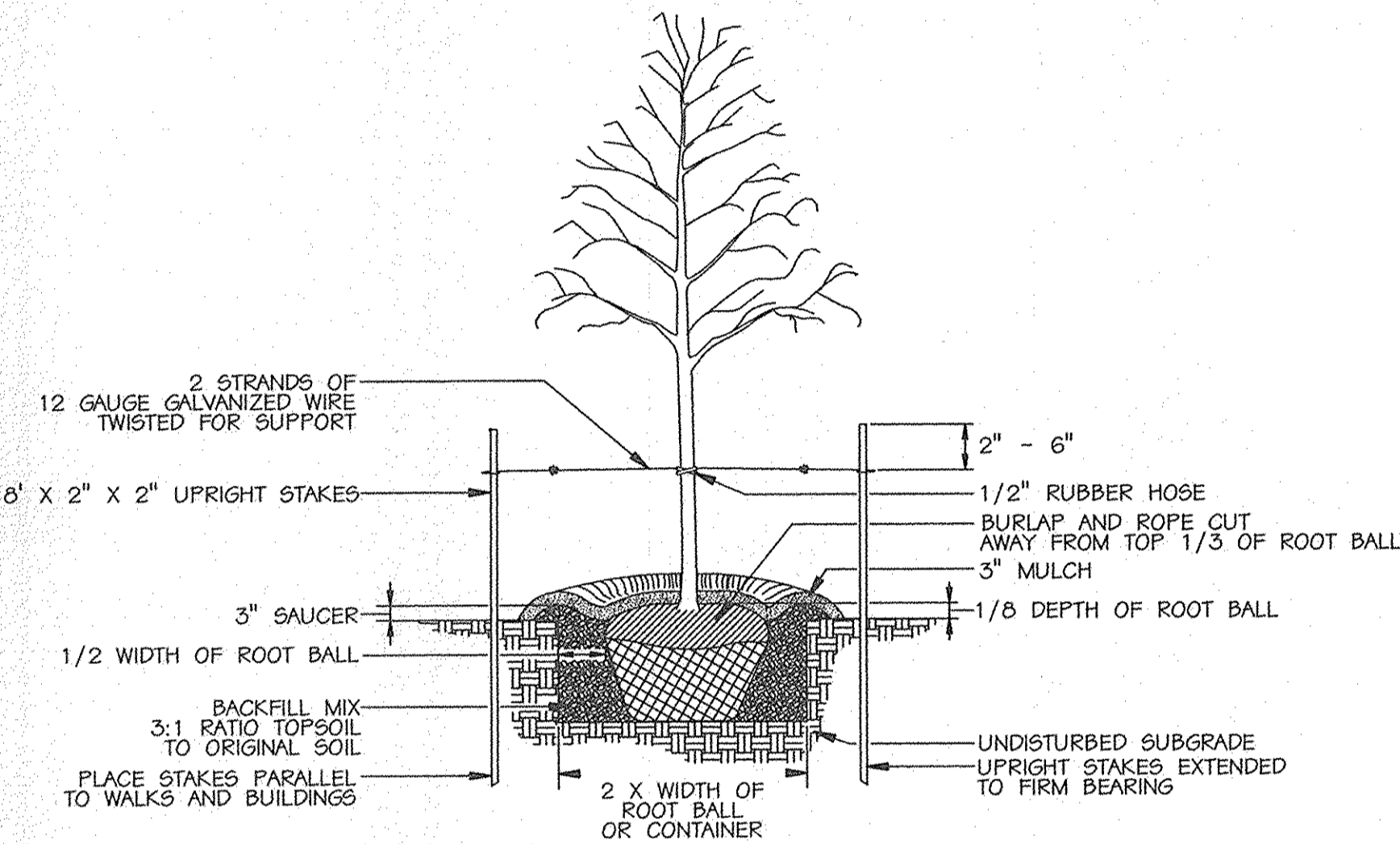
**OWNER**  
 JOHN G. SULLIVAN JR. & PATRICK J. GOOMAN  
 3273 PINE ORCHARD LANE SUITE A  
 ELLICOTT CITY, MARYLAND 21042  
 ATTEN: JOHN LANG  
 410-418-9166

**DEVELOPER**  
 SULLIVAN BLAKE REMODELING, INC.  
 3275 PINE ORCHARD LANE SUITE A  
 ELLICOTT CITY, MARYLAND 21042  
 ATTEN: JOHN LANG  
 410-418-9166

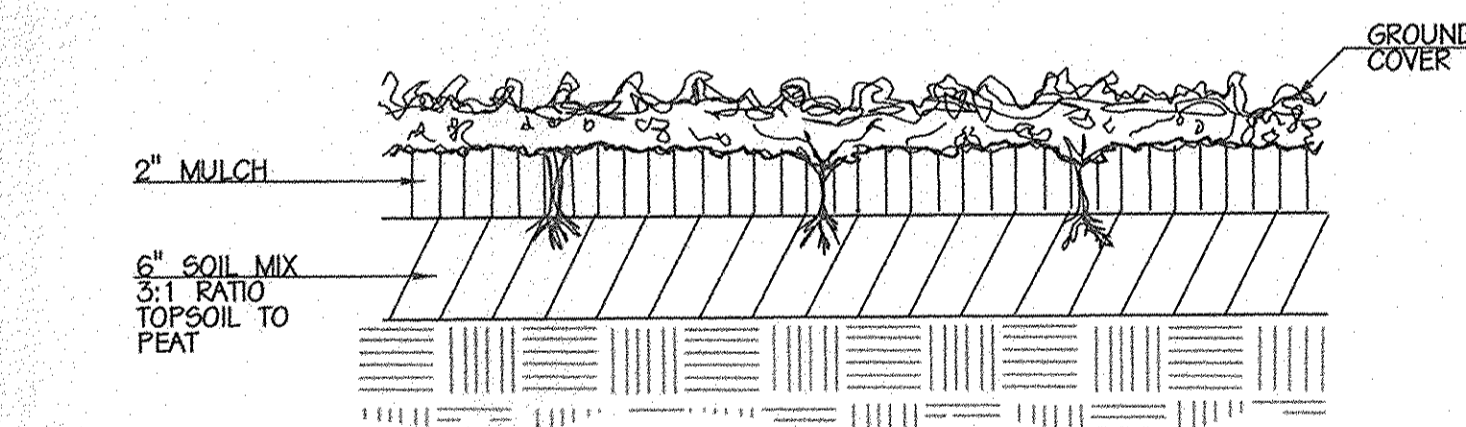
**STORMWATER MANAGEMENT PLAN & DETAILS**



SHRUB PLANTING DETAIL  
B & B AND CONTAINER GROWN  
NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL  
B & B  
NOT TO SCALE



GROUND COVER PLANTING DETAIL  
NOT TO SCALE

PLANT MATERIALS AND PLANTING METHODS

A. PLANT MATERIALS  
THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL AND/OR DIG, BALL, BURLAP, AND TRANSPANT ALL OF THE PLANT MATERIALS CALLED FOR ON DRAWINGS AND/OR LISTED IN THE PLANT SCHEDULE.

- PLANT NAMES  
PLANT NAMES USED IN THE PLANT SCHEDULE SHALL BE IDENTIFIED IN ACCORDANCE WITH "HORTUS THIRD", BY L.H. BAILEY, 1976.
- PLANT STANDARDS  
ALL PLANT MATERIAL SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "AMERICAN ASSOCIATION OF NURSERYMEN" LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (HEREAFTER REFERRED TO AS "A.A.N. STANDARDS"). ALL PLANTS AND SHRUBS SHALL BE FIRST QUALITY, SOUND, VIGOROUS, WELL-BRANCHED AND WITH HEALTHY, WELL-FURNISHED ROOT SYSTEMS. THEY SHALL BE FREE OF DISEASE, INSECT PESTS AND MECHANICAL INJURIES.
- PLANTING METHODS  
A. PLANTS SHALL BE NURSERY GROWN AND SHALL HAVE BEEN GROWN UNDER THE PROPER TIME BASES ON PLANT SPECIES AND WEATHER CONDITIONS, TO MOVE AND INSTALL PARTICULAR PLANT MATERIAL TO MINIMIZE STRESS TO THE PLANT. PLANTING OF DECIDUOUS PLANTS MAY BE CONTINUED DURING THE WINTER MONTHS PROVIDED THERE IS NO FROST IN THE GROUND AND FROST-FREE TOP SOIL PLANTING MIXTURES ARE USED.

ALL PLANT MATERIAL SHALL GENERALLY AVERAGE THE MEDIAN FOR THE SIZE RANGES INDICATED ABOVE AS INDICATED IN THE "A.A.N. STANDARDS".  
H. MINIMUM SIZE FOR PLANTING SHRUBS SHALL BE, IN GENERAL, 18"-24" IN HEIGHT OR SPREAD, AS APPROPRIATE, EXCEPT THAT A LARGER SIZE MAY BE REQUIRED WHEN DEEMED APPROPRIATE BY THE PLANNING DIRECTOR OR DESIGNEE IN THE CASE OF PARTICULAR SPECIES OR PLANTING SITUATION.

B. PLANTING METHODS  
ALL PROPOSED PLANT MATERIAL THAT MEET THE SPECIFICATIONS IN SECTION B ABOVE ARE TO BE PLANTED IN ACCORDANCE WITH THE FOLLOWING PLANTING METHODS DURING THE PROPER PLANTING SEASONS AS DESCRIBED IN THE FOLLOWING:

- PLANTING SEASONS  
A. PROFESSIONAL HORTICULTURALIST / NURSERYMAN SHALL BE CONSULTED TO DETERMINE THE PROPER TIME BASES ON PLANT SPECIES AND WEATHER CONDITIONS, TO MOVE AND INSTALL PARTICULAR PLANT MATERIAL TO MINIMIZE STRESS TO THE PLANT. PLANTING OF DECIDUOUS PLANTS MAY BE CONTINUED DURING THE WINTER MONTHS PROVIDED THERE IS NO FROST IN THE GROUND AND FROST-FREE TOP SOIL PLANTING MIXTURES ARE USED.
- DIGGING  
ALL PLANT MATERIAL SHALL BE DUG, BALLED OR BURLAPPED (B+B), OR BARE ROOT IN ACCORDANCE WITH THE "A.A.N. STANDARDS".
- EXCAVATION OF PLANT PITS  
THE LANDSCAPING CONTRACTOR SHALL EXCAVATE ALL PLANT PITS, VINE PITS, HEDGE TRENCHES AND SHRUB BEDS IN ACCORDANCE WITH THE FOLLOWING:  
A. ALL PITS SHALL BE GENERALLY CIRCULAR IN OUTLINE, VERTICAL SIDES. THE TREE PIT SHALL BE DEEP ENOUGH TO ALLOW OF THE ROOT BALL TO BE ABOVE THE EXISTING 1/3 GRADE. PLANTS SHALL REST ON UNDISTURBED EXISTING SOIL OR WELL COMPACTED BACKFILL. THE TREE PIT MUST BE A MINIMUM OF NINE (9) INCHES LARGER ON EVERY SIDE THAT THE BALL OF THE TREE.  
B. IF AREAS ARE DESIGNATED AS SHRUB BEDS OR HEDGE TRENCHES, THEY SHALL BE EXCAVATED TO AT LEAST 18" DEPTH MINIMUM. AREAS DESIGNATED FOR GROUND COVERS AND VINES SHALL BE EXCAVATED TO AT LEAST 12" IN DEPTH MINIMUM.
- STEAKING, GUYING AND WRAPPING  
SEE THE "LANDSCAPE SPECIFICATION GUIDELINES".
- PLANT PRUNING, EDGING AND MULCHING  
A. EACH TREE, SHRUB OR VINE SHALL BE PRUNED IN AN APPROPRIATE MANNER TO ITS PARTICULAR REQUIREMENTS, IN ACCORDANCE WITH ACCEPTED STANDARD PRACTICE. BROKEN OR BRUISED BRANCHES SHALL BE REMOVED WITH CLEAN CUTS MADE ON AN ANGLE FROM THE BRANCH COLLAR. NO FLUSH CUTS, TO MINIMIZE THE CUT AREA. ALL CUTS SHALL BE MADE WITH SHARP TOOLS. TRIM ALL EDGES SMOOTH. NO TREE WOUND DRESSING SHALL BE APPLIED.  
B. ALL TRENCHES AND SHRUB BEDS SHALL BE EDGED AND CULTIVATED TO THE LINES SHOWN ON THE DRAWING. THE AREAS AROUND ISOLATED PLANTS SHALL BE EDGED AND CULTIVATED TO THE FULL DIAMETER OF THE PIT. SOIL WHICH HAS BEEN REMOVED AND STACKED SHALL BE USED TO TRIM THE EDGES OF ALL EXCAVATED AREAS TO THE NEAR LINES OF THE PLANT PIT SAUCERS, THE EDGES OF SHRUB AREAS, HEDGE TRENCHES AND VINE POCKETS.  
C. AFTER CULTIVATION, ALL PLANT MATERIALS SHALL BE MULCHED WITH A 2-3" LAYER OF TAN BARK, PEAT MOSS, OR ANOTHER APPROVED MATERIAL OVER THE ENTIRE AREA OF THE BED OR SAUCER.
- SEEDING AND GODDING  
A. ALL SEEDING AND GODDING SHALL BE AS PER "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN URBANIZED AREAS" AS PUBLISHED BY THE DEPARTMENT OF NATURAL RESOURCES.

PLANT SCHEDULE

KEY	QUANTITY	BOTANICAL / COMMON NAME	SIZE	ROOT	COMMENT
<b>TREES</b>					
AR	1	ACER RUBRUM/ RED MAPLE	2"-2.5" CAL.	B & B	SPECIMAN
BN	1	BETULA NIGRA/ RIVER BIRCH	4' - 6' HT.	B & B	SPECIMAN (MULTI STEM)
<b>SHRUBS</b>					
IV	5	ITEA VIRGINICA/VIRGINIA SWEETSPICE	12"-15" HT.	CONT.	
<b>GROUNDCOVERS</b>					
AN	25	ASTER NOVI-BELGII PROFESSOR KIPPENBERG/ PROFESSOR KIPPENBERG ASTER	1 GAL.	CONT.	PLANT 1" O.C. SPACED EVENLY THROUGHOUT

\* PLACE 62.5 CUBIC FEET SHREDDED HARDWOOD BARK MULCH, SPREAD EVENLY, OVER BIO-RETENTION FACILITIES. MULCH SHALL BE A CONSTANT THICKNESS OF 2-3 INCHES.

SEQUENTIAL TIMETABLE

- NOTIFY THE OWNER'S ENGINEER AND THE PRINCE GEORGE'S COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES, PROGRAMS AND PLANNING DIVISION, FOR A PRE-CONSTRUCTION MEETING TO FIELD VERIFY THE LIMITS OF CLEARING SPECIFIED ON THE APPROVED PLAN AND AUTHORIZE INSTALLATION OF PROTECTION DEVICES.
- INSTALL TEMPORARY FOREST PROTECTION FENCING (BLAZE ORANGE FENCE) AROUND THE FOREST AND TREE AREAS TO BE PROTECTED, AS INDICATED ON THIS PLAN. CONTACT THE QUALIFIED PROFESSIONAL WHO PREPARED THIS PLAN TO SET THE FENCE LOCATION IN THE FIELD. INSTALL SEDIMENT CONTROL DEVICES AND PROCEED WITH CLEARING AND GRADING ACTIVITIES.
- FOLLOWING THE COMPLETION OF ALL INSTALLATION MEASURES, THE OWNER SHALL REQUEST AN INSPECTION BY STAFF.
- AFTER CONSTRUCTION HAS BEEN COMPLETED ALL SHORT-TERM PROTECTION DEVICES, AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED.

2-YEAR MANAGEMENT PLAN FOR BIO-RETENTION AREA

FIELD CHECK THE BIO-RETENTION AREA ACCORDING TO THE FOLLOWING SCHEDULE:

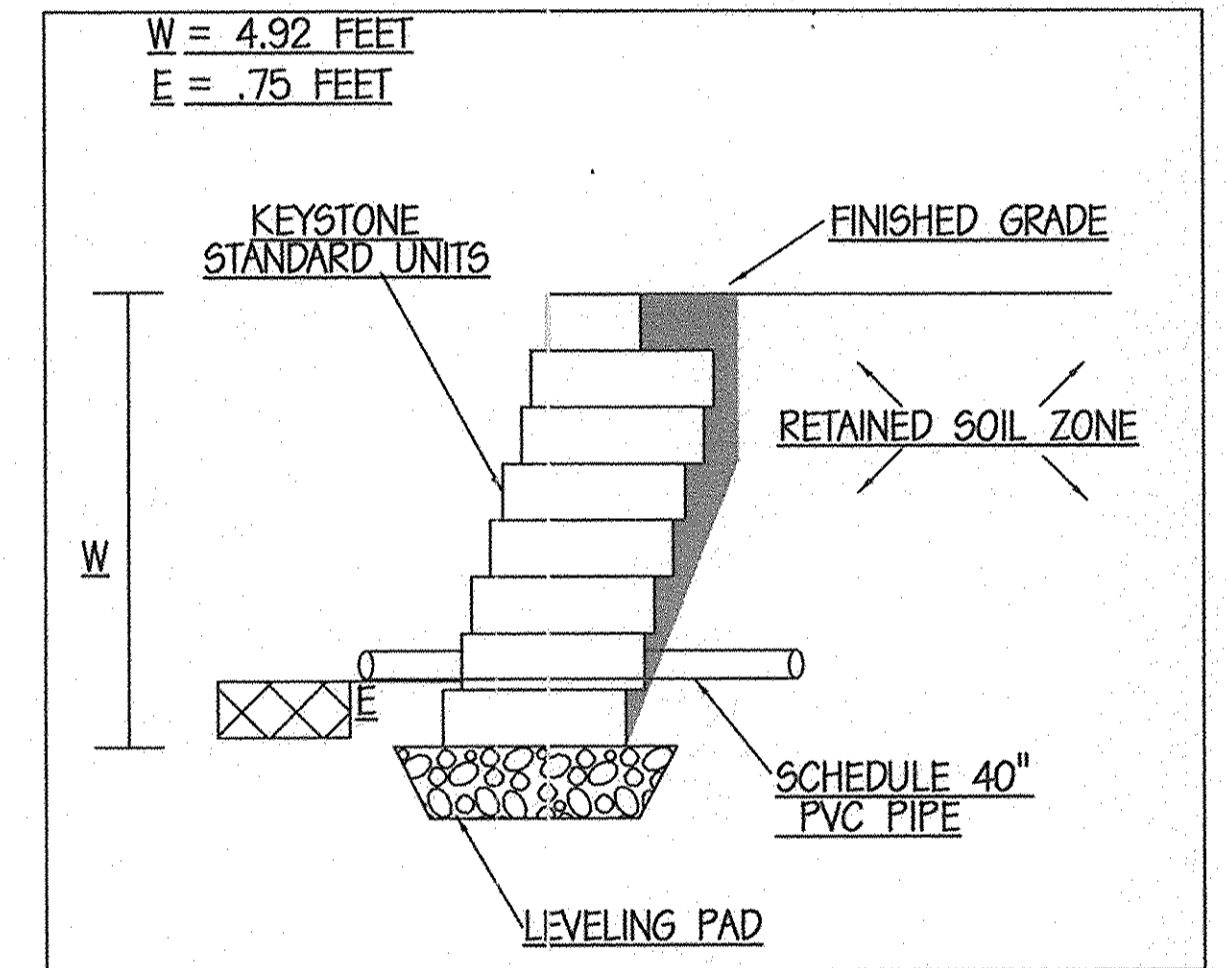
- YEAR 1:  
SITE PREPARATION AND TREE PLANTING SURVIVAL CHECK ONCE ANNUALLY (SEPT. - NOVEMBER, SEE NOTE 1) WATERING IN NEEDED (2 X MONTH) CONTROL OF UNDESIRABLE VEGETATION AS NEEDED (1 X JUNE & 1 X IN SEPTEMBER MINIMUM)
- YEAR 2:  
REINFORCEMENT PLANTING IF NEEDED (SEE NOTE 2) SURVIVAL CHECK ONCE ANNUALLY (SEPT. - NOVEMBER) CONTROL OF UNDESIRABLE VEGETATION AS NEEDED (1 X MAY & 1 X IN AUGUST MINIMUM)

NOTES:

- SURVIVAL CHECKS: CHECK PLANTED STOCK AGAINST PLANT SCHEDULE (OR AS-BUILT) BY WALKING THE SITE AND TAKING INVENTORY. PLANTS MUST SHOW VITALITY. SUBMIT FIELD DATA FORMS (CONDITION CHECK SHEETS) TO OWNER AFTER EACH INSPECTION. REMOVE AND REPLACE ALL DEAD PLANTS.
- REINFORCEMENT PLANTING: REPLACE DEAD OR MISSING PLANTS IN SUFFICIENT QUANTITY TO BRING THE TOTAL NUMBER OF LIVE PLANTS TO AT LEAST 100% OF THE NUMBER ORIGINALLY PLANTED. IF A PARTICULAR SPECIES SHOWS UNUSUALLY HIGH MORTALITY, REPLACE WITH AN ALTERNATE PLANT TYPE (APPROVED BY LANDSCAPE ARCHITECT AND HOWARD COUNTY DEPARTMENT OF ENVIRONMENTAL REVIEW).
- MISCELLANEOUS: FERTILIZATION OR WATERING DURING YEARS 1 AND 2 WILL BE DONE ON AN AS NEEDED BASIS. SPECIAL RETURN OPERATIONS OR RECOMMENDATIONS WILL BE CONDUCTED ON AN AS NEEDED BASIS. REMOVE PERIMETER FENCING AND SIGNAGE AFTER 2ND YEAR BASED ON DATE PLANTED.

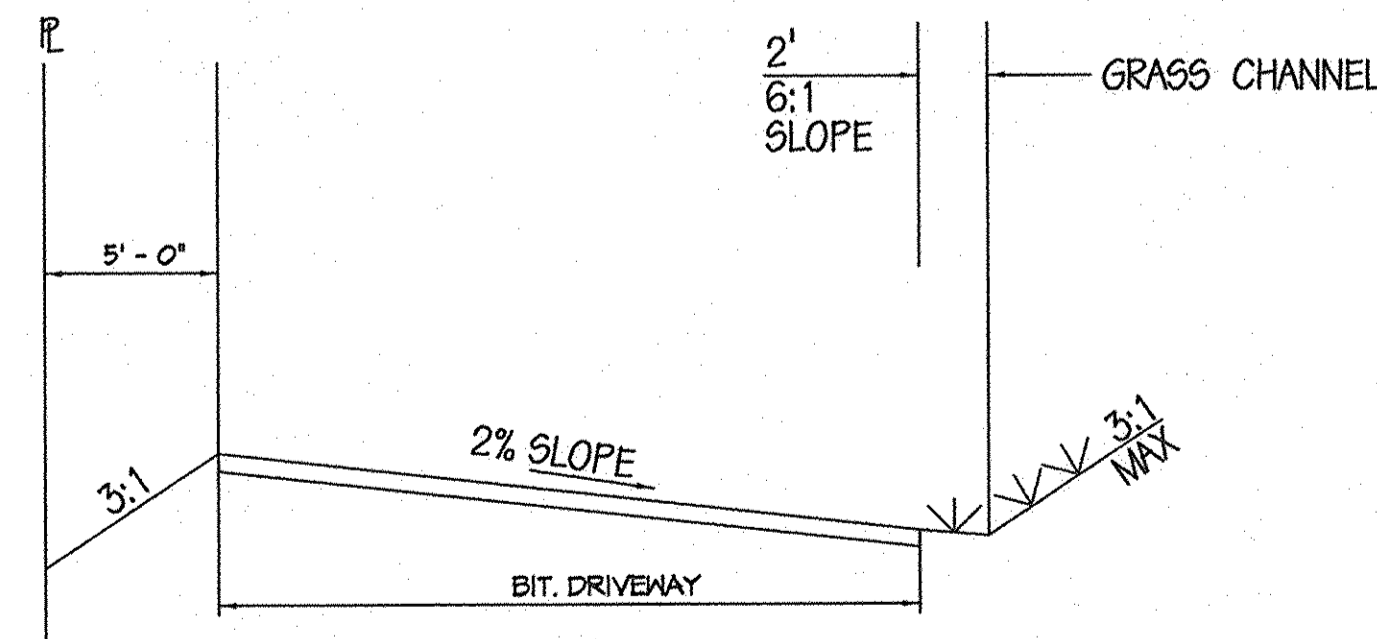
LANDSCAPE SPECIFICATIONS

- ALL PLANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE LATEST EDITION OF HORTUS THIRD, BY "THE STAFF OF THE HORTORIUM".
- ALL NURSERY STOCK SHALL CONFORM TO AMERICAN ASSOCIATION OF NURSERYMEN, INC. STANDARDS AS DESCRIBED IN AMERICAN STANDARD FOR NURSERY STOCK, CURRENT ANSI A-300 SPECIFICATIONS.



RETAINING WALL DETAIL  
NOT TO SCALE

- THIS RETAINING WALL IS BASED ON PRODUCTS PROVIDED BY KEYSTONE RETAINING WALL SYSTEMS.
- THIS SYSTEM WILL BE USING KEYSTONE STANDARD UNITS. (OR EQUAL)
- LEVELING PAD CONSISTS OF #7 STONE WITH A DEPTH OF MINIMUM 1.0'.
- W PERTAINS TO WALL HEIGHT.
- E PERTAINS TO EMBEDMENT DEPTH.
- ALL BACKFILL MATERIALS ARE COMPACTED TO 95% OF ITS MAX DRY DENSITY.
- SETBACK PER UNIT IS 1".
- CONTRACTOR IS TO PROVIDE AND CONSTRUCT PER KEYSTONE SPECIFICATIONS, AND DESIGN. (OR EQUAL)
- CONTRACTOR TO PROVIDE SHOP DRAWINGS OF RETAINING DESIGN PRIOR TO CONSTRUCTION.



GRASS CHANNEL DETAIL  
NOT TO SCALE

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6	SEDIMENT CONTROL & SWM NOTES
7	LANDSCAPE & SUPPLEMENTAL PLAN
8	LANDSCAPE DETAILS & SPECIFICATIONS

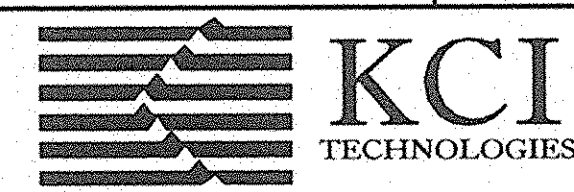
SWM NOTES & DETAILS

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS  
USDA - NATURAL RESOURCES CONSERVATION SERVICE  
DATE: 4/25/08  
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
DATE: 4/25/08  
DIRECTOR: [Signature] DATE: 4/25/08

BY THE DEVELOPER:  
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 INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
DEVELOPER: [Signature] DATE: 4/25/08

BY THE ENGINEER:  
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 SOIL CONSERVATION DISTRICT.  
ENGINEER: [Signature] DATE: 01/04/2008

Drafting	CHC	DATE	REVISIONS
Check	CHC	9-26-07	REVISED DUE COMMENTS FROM DED DATED 9-6-07
Design	CHC		
Check	THM		

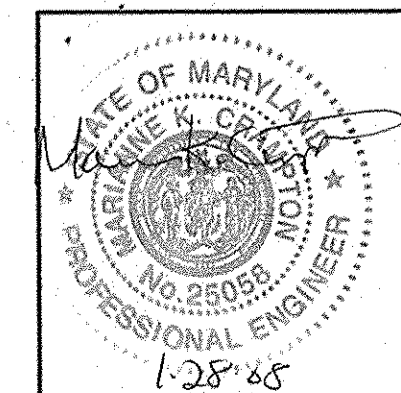


ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS

14502 Greenview Drive, Suite 424  
Laurel, Maryland 20708  
(301) 953-1821 (410) 792-8086  
Fax: (410) 792-7419  
www.kci.com

OWNER  
JOHN G. SULLIVAN JR. &  
PATRICK J. GOONAN  
3272 PINE ORCHARD LANE SUITE A  
ELLCOTT CITY, MARYLAND 21042  
ATTN: JOHN LANG  
410-418-9166

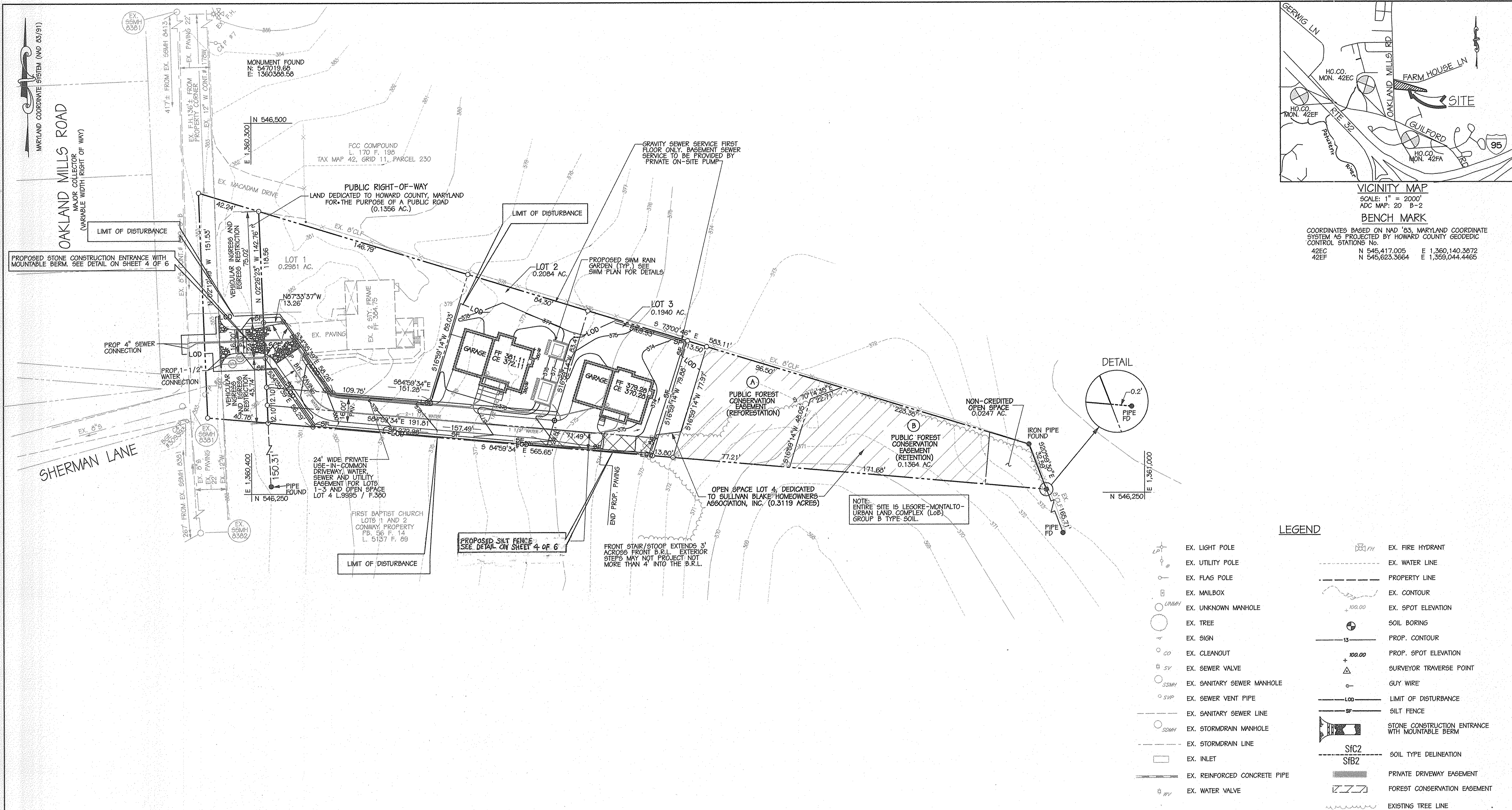
DEVELOPER  
SULLIVAN BLAKE REMODELING, INC.  
3272 PINE ORCHARD LANE SUITE A  
ELLCOTT CITY, MARYLAND 21042  
ATTN: JOHN LANG  
410-418-9166



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the state of Maryland, License No. 25055, Expiration Date: November 17, 2008.

SULLIVAN BLAKE PROPERTY  
LOTS 2 AND 3  
SINGLE FAMILY DETACHED  
TAX MAP 42, GRID 16, PARCEL 374  
L. 9995 / F. 300, ZONE R-SA-8  
6th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
PLAT# 18120 F-05-180

BAR SCALE  
1" = 30'  
DATE: DECEMBER 4, 2007  
SHEET 3 OF 8



REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DATE: 4/25/08  
DATE: 7/23/08  
DATE: 4/30/08

BY THE DEVELOPER:

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 INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DATE: 1/1/08  
DATE: 1/1/08

BY THE ENGINEER:

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.

DATE: 1/1/08  
DATE: 1/1/08

SEE SHEETS 4 & 5 FOR DETAILS AND NOTES

TOTAL LIMIT OF DISTURBANCE = 18,513.0 S.F. / 0.43 AC.

**SHEET INDEX**

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6	SEDIMENT CONTROL & SWM NOTES
7	LANDSCAPE & SUPPLEMENTAL PLAN
8	LANDSCAPE DETAILS & SPECIFICATIONS

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. 25056 Expiration Date: November 17, 2008.

**SULLIVAN BLAKE PROPERTY**

LOTS 2 AND 3  
SINGLE FAMILY DETACHED  
TAX MAP 42, GRID 16, PARCEL 374  
L. 9995 / F. 380, ZONE R-5A-B  
8th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
PLAT# 10120 F-05-180

**BAR SCALE**  
1" = 30'

DATE: DECEMBER 4, 2007  
SHEET 4 OF 8

Drafting	CHC	DATE	REVISIONS
Check	CHC	9-26-07	REVISED DUE COMMENTS FROM DED DATED 9-6-07
Design	CHC		
Check	THM		

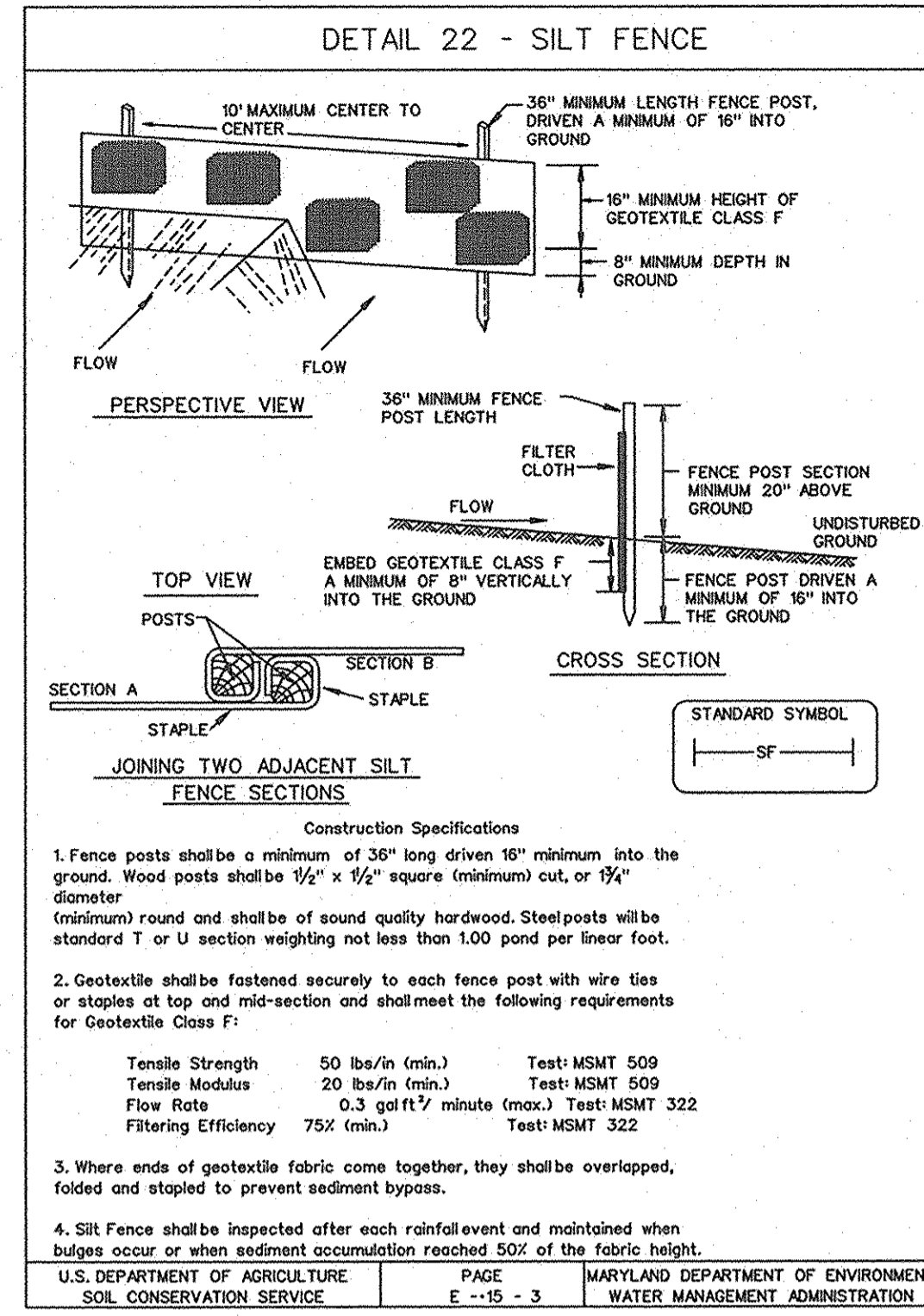
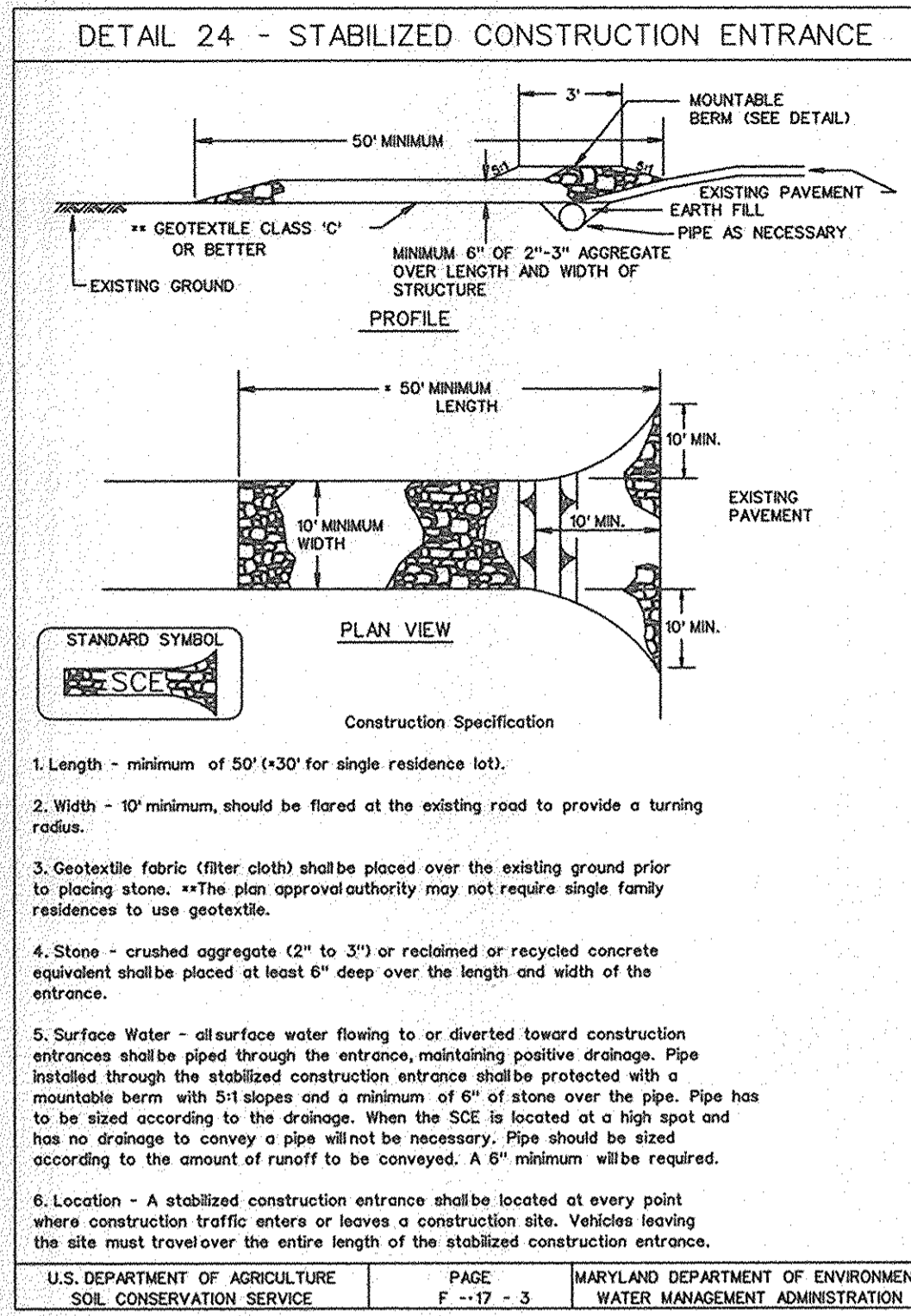
**KCI TECHNOLOGIES**  
ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS

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Laurel, Maryland 20708  
(301) 953-1821 (410) 792-8086  
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**OWNER**  
JOHN G. SULLIVAN JR. & PATRICK J. GOONAN  
3275 PINE ORCHARD LANE SUITE A  
ELLCOTT CITY, MARYLAND 21042  
ATTN: JOHN LANG  
410-418-9166

**DEVELOPER**  
SULLIVAN BLAKE REMODELING, INC.  
3275 PINE ORCHARD LANE SUITE A  
ELLCOTT CITY, MARYLAND 21042  
ATTN: JOHN LANG  
410-418-9166

**SEDIMENT CONTROL PLAN**

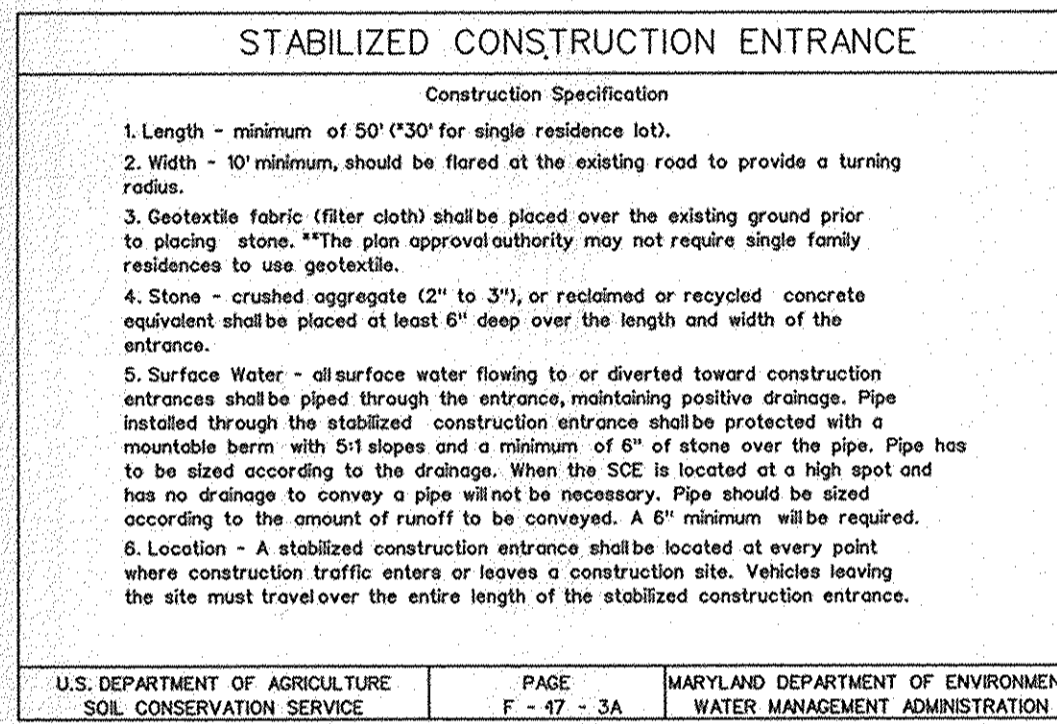


### GENERAL NOTES

- A minimum of 24 hours notice must be given to the Howard County Sediment Control Division prior to the start of any construction (880-3450).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
 

Total Area of Site	1.1483	Acres
Area Disturbed	0.43	Acres
Area to be Roofed or Paved	0.19	Acres
Area to be Vegetatively Stabilized	0.24	Acres
Total Cut	167	Cubic Yards
Total Fill	167	Cubic Yards
Offsite Waste/Borrow Area Location	NONE	
- Any sediment control practices which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County Department of Public Works Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of the 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 backed-filled and stabilized by the end of each work day, whichever is shorter.



### SILT FENCE

**Silt Fence Design Criteria**

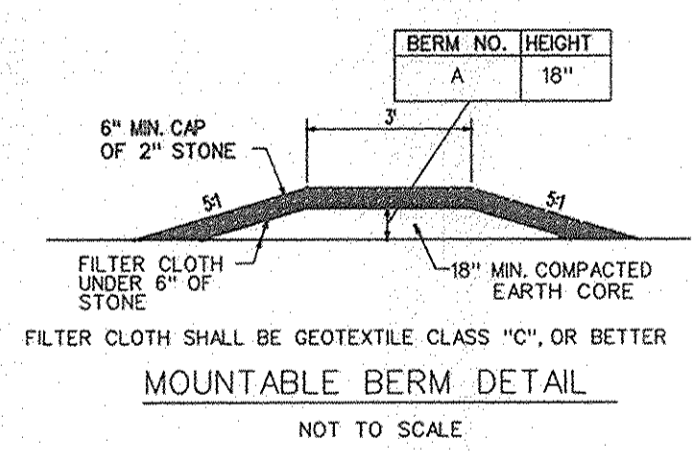
Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE E -- 49 - 3A MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

### SEQUENCE OF CONSTRUCTION

- Obtain Grading Permit. **1 DAY**
- Notify Howard County Sediment Control Inspector for pre-construction meetings as required by note number one (No. 1) of the Standard Erosion and Control Notes shown on this sheet. Notify Miss Utility. **1 DAY**
- Install sediment control measures (i.e. sce & silt fence). **1 DAY**
- With inspectors approval, grade site within the limits of disturbance. Remove existing foundation and existing gravel drive. **3 DAYS**
- Construct house, garage, and rain gardens **3 MONTHS**
- Install sewer and water house connections. **1 WEEK**
- Install driveway. **3 DAYS**
- Stabilize all disturbed areas. **1 DAY**
- With inspector's approval, remove all sediment control measures and stabilize all areas disturbed by this process. **1 DAY**



REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE 8/21/08  
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
 HOWARD SCD DATE 8/21/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 4/25/08  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 4/25/08  
 DIRECTOR DATE 4/30/08

BY THE DEVELOPER:

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 INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DATE 4/9/08

BY THE ENGINEER:

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.

DATE 1/28/08

Drafting	CHC	DATE	REVISIONS
Check	x		
Design	CHC		
Check	THM		

**KCI ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS**

14502 Greenview Drive, Suite 424  
 Laurel, Maryland 20708  
 (301) 953-1821 (410) 792-8086  
 fax: (410) 792-7419  
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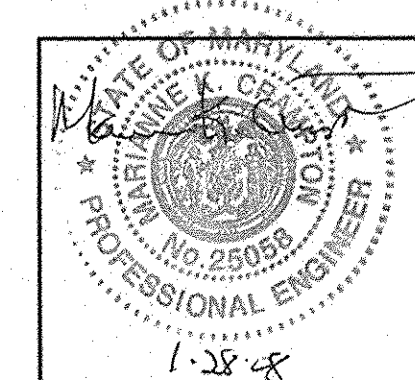
**OWNER/DEVELOPER**  
 JOHN G. SULLIVAN JR. & PATRICK J. GOONAN  
 3273 PINE ORCHARD LANE SUITE A  
 ELLICOTT CITY, MARYLAND 21042  
 ATTN: JOHN LANG  
 410-418-9166

**DEVELOPER**  
 SULLIVAN BLAKE REMODELING, INC.  
 3273 PINE ORCHARD LANE SUITE A  
 ELLICOTT CITY, MARYLAND 21042  
 ATTN: JOHN LANG  
 410-418-9166

### SEDIMENT CONTROL DETAILS

### SHEET INDEX

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5	SEDIMENT CONTROL DETAILS
6	SEDIMENT CONTROL & SWM NOTES
7	LANDSCAPE PLAN
8	LANDSCAPE DETAILS & SPECIFICATIONS



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the state of Maryland, License No. 25058 Expiration Date: November 17, 2008.

**SULLIVAN BLAKE PROPERTY**

LOTS 2 AND 3

SINGLE FAMILY DETACHED  
 TAX MAP 42, GRID 16, PARCEL 374  
 L. 9995 / F. 380, ZONE R-5A-0  
 6th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 PLAT#10120 F-05-180

DATE: SEPTEMBER 26, 2007  
 SHEET 5 OF 8

Section I - Vegetative Stabilization Methods and Materials

A. Site Preparation
i. Install erosion and sediment control structures (either temporary or permanent) such as diversion structures, grade stabilization structures, berms, waterways, or sediment control basins.
ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.

B. Soil Amendments (Fertilizer and Lime Specifications)
i. Soil test must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.

C. Seeded Preparation
i. Temporary Seeding
a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment...

ii. Permanent Seeding
a. Minimum soil conditions required for permanent vegetative establishment:
1. Soil pH between 6.0 and 7.0
2. Soil shall contain less than 500 parts per million (ppm).

b. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3" to 5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.

c. Apply soil amendments as per soil test or as included on the plans.
d. Mix soil amendments into the top 3" - 5" of topsoil by diking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed application.

iii. Inoculant - The inoculant for treating legume seeds in the seed mixtures should be a pure culture of nitrogen-fixing bacteria prepared specifically for the species to be used.

iv. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeder, or a cultipacker seeder.
a. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen: maximum of 100 lbs. per acre...

v. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or tables 25 or 26.

vi. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

vii. Mulch Specifications (In order of preference)
i. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.

ii. Wood Cellulose Fiber Mulch (WCFM)
a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.

iii. G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding.
i. If grading is completed outside of the seeding season, mulch alone should be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.

iv. Securing Straw Mulch (Mulch Anchoring) Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:

v. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

vi. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. The remainder of area should be applied uniformly after binder application.

vii. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15 feet wide and 300 to 3,000 feet long.

ii. Construction sequence (refer to Figure 4, page G-20-6):
a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.

b. Perform phase 1 excavation, dress, and stabilize.
c. Perform phase 2 excavation, dress, and stabilize.

d. Perform final phase excavation, dress, and stabilize. Overseed previously seeded areas as necessary.

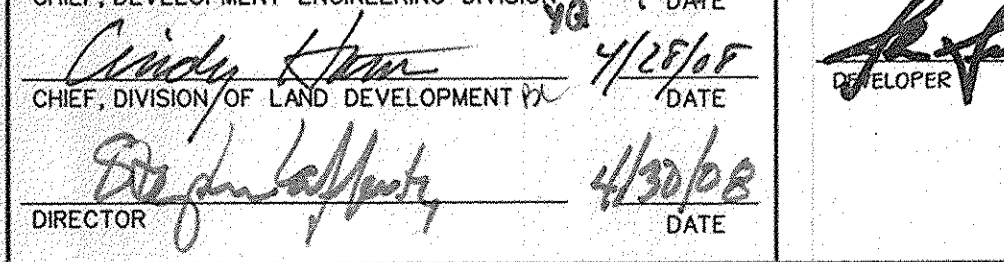


Figure 4 Incremental Stabilization - Cut G-20-6

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 completing the operation out of the seeding season will necessitate the application of temporary stabilization.

J. Incremental Stabilization of Embankments - Fill Slopes

i. Embankments shall be constructed in lifts as prescribed on the plans.
ii. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15' or when the grading operation ceases as prescribed in the plans.
iii. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.

iv. Construction sequence: Refer to Figure 4, page G-20-7.
a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct Slope 3:1 on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.

b. Place phase 1 embankment, dress and stabilize.
c. Place phase 2 embankment, dress and stabilize.
d. Place final phase embankment, dress and stabilize.

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 completing the operation out of the seeding season will necessitate the application of temporary stabilization.

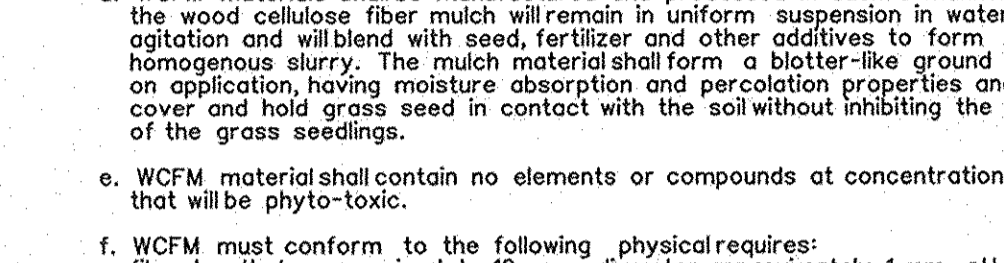


Figure 5 Incremental Stabilization - Fill G-20-7

Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

ii. If straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.

iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

iv. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.

v. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

vi. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. The remainder of area should be applied uniformly after binder application. Synthetic binders such as Acrylic DLR (Ago-Tack), OCA-70, Petrosel, Terra Tax, N Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.

vii. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15 feet wide and 300 to 3,000 feet long.

K. Incremental Stabilization - Cut Slopes

i. All cut slopes shall be dressed, prepared, seeded and mulched as the work progresses. Seeds shall be excavated and stabilized in equal increments not to exceed 15'.
ii. Construction sequence (refer to Figure 4, page G-20-6):

a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
b. Perform phase 1 excavation, dress, and stabilize.

c. Perform phase 2 excavation, dress, and stabilize.
d. Perform final phase excavation, dress, and stabilize. Overseed previously seeded areas as necessary.



Figure 4 Incremental Stabilization - Cut G-20-6

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 completing the operation out of the seeding season will necessitate the application of temporary stabilization.

L. Permanent Seeding Summary

Table with columns: No., Species, Application Rate (lb/acre), Seeding Dates, Seeding Depths, Fertilizer Rate (N, P205, K20), Lime Rate. Contains data for TALL FESCUE, PEN RYE GRASS, and KENT BLUEGRASS.

\* FOR 5-16 to 8-14 add 10 lbs. OF Millet to Mixture \*3

M. Sod Installation

i. During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
ii. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other.

iii. Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transported within this period shall be approved by an agronomist or soil scientist prior to its installation.

iv. Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. The operations of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.

v. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Weeding should be done during the heat of the day to prevent wilting.

vi. The first mowing of sod should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2" and 3" unless otherwise specified.

Section IV - Turfgrass Establishment
Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which receive a medium to high level of maintenance.

Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seedbed. Stones and debris 1/4 inches in diameter or larger shall be removed. The resulting seedbed shall be in such condition that future mowing of grasses will pose no difficulty.

Note: Choose certified material. Certified materials is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture and Seed Section provides a reliable means of consumer protection and assures a pure genetic line.

A. Turfgrass Mixtures
i. Kentucky Bluegrass - Full sun mixture - For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds/1000 square feet. A minimum of three bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

ii. Tall Fescue/Kentucky Bluegrass - Full sun mixture - For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes certified Tall Fescue Cultivars 95 - 100%, certified Kentucky Bluegrass Cultivars 0 - 5%. Seeding rate: 5 to 8 lb/1000 s.f. One or more cultivars may be blended.

iii. Kentucky Bluegrass/Perennial Rye - Full sun mixture - For use when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding rate: 2 pounds mixture/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.

iv. Fine Fescue and Kentucky Bluegrass - Shade mixture - For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes certified Kentucky Bluegrass Cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 1 1/2 - 3 lbs/1000 square feet. A minimum of 3 Kentucky bluegrass cultivars must be chosen with each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland".
B. Ideal times of seeding
Western MD: March 15 - June 1, August 1 - October 1 (Hardiness Zones 5b, 6a)
Central MD: March 1 - May 15, August 15 - October 15 (Hardiness Zone - 6b)
Southern MD, Eastern Shore: March 1 - May 15, August 15 - October 15 (Hardiness Zone - 7a, 7b)

C. Irrigation
If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

D. Repairs and Maintenance
Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season.

i. Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.
ii. If the stand provides less than 40% ground cover, reestablish following original lime, fertilizer, seeded preparation and seeding recommendations.

N. Temporary Seeding Summary

Table with columns: No., Species, Application Rate (lb/acre), Seeding Dates, Seeding Depths, Fertilizer Rate (10-10-10), Lime Rate. Contains data for RYE PLUS and FOXTAIL MILLET.

O. Section III - Permanent Seeding

Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

A. Seed Mixtures - Permanent Seeding
i. Select one or more of the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-SCS Technical Field Office Guide, Section 3-42.

ii. For sites having disturbed area over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the soil testing agency shall be written in.
(45-0-0) at 3/lbs/1000 s.f. (150 lbs/ac), in addition to the above soil amendments shown in the table, page G-20-9, to be performed at the time of seeding.

REVIEWED-FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS. USA-NATURAL RESOURCES CONSERVATION SERVICE. DATE: 4/25/08. APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. DATE: 4/28/08. CHIEF, DIVISION OF LAND DEVELOPMENT: DATE: 4/20/08.

BY THE DEVELOPER: LWV 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.

BY THE ENGINEER: ICERTIFY 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.

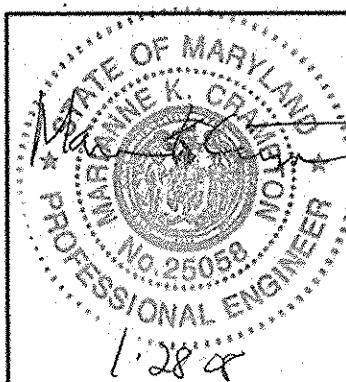
Table with columns: Drafting, Date, Revisions. Includes entries for CHC and THM.

KCI ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS. 14502 Greenview Drive, Suite 424, Laurel, Maryland 20708.

OWNER/DEVELOPER: SULLIVAN BLAKE REMODELING, INC. DEVELOPER: SULLIVAN BLAKE REMODELING, INC. 3273 PINE ORCHARD LANE SUITE A, ELLICOTT CITY, MARYLAND 21042.

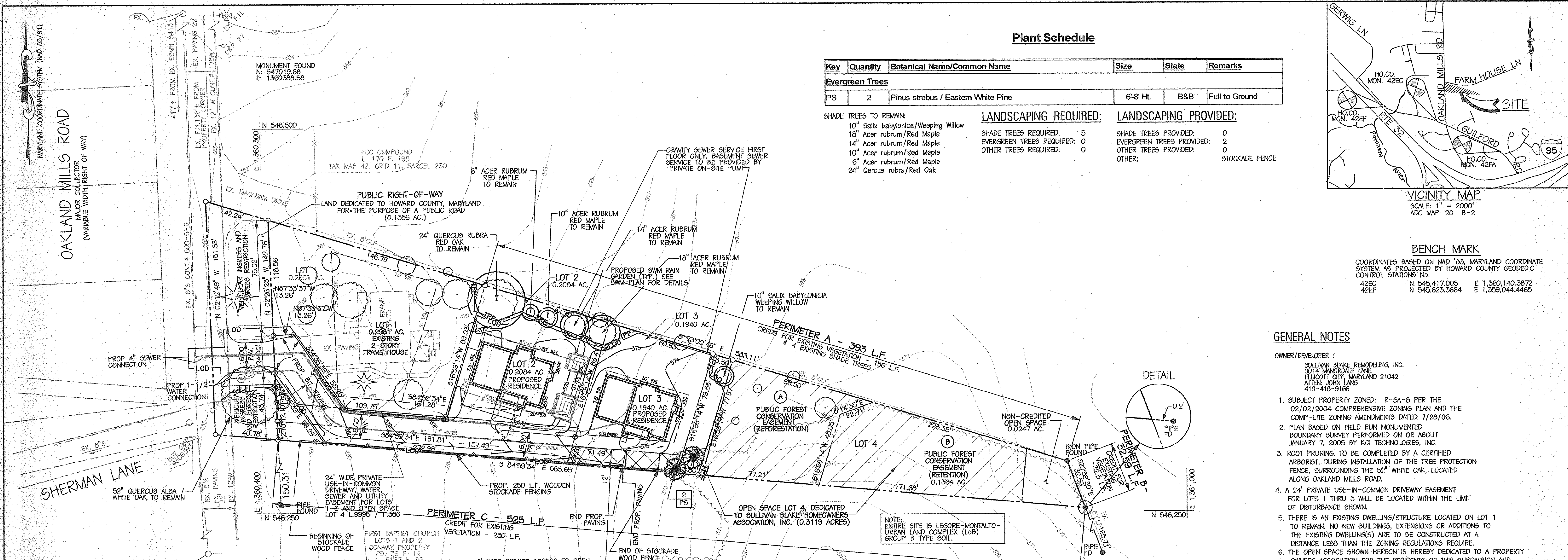
SEDIMENT CONTROL & SWM NOTES

SHEET INDEX table with columns: SHEET NO., TITLE. Lists sheets 1 through 8 including SITE & GRADING PLAN, STORMWATER MANAGEMENT PLAN & DETAILS, etc.



SULLIVAN BLAKE PROPERTY. LOTS 2 AND 3. SINGLE FAMILY DETACHED. TAX MAP 42, GRID 16, PARCEL 374. L. 9995 / F. 360, ZONE R-6A-6. 6th ELECTION DISTRICT. HOWARD COUNTY, MARYLAND. PLAT 10120 F-05-160.

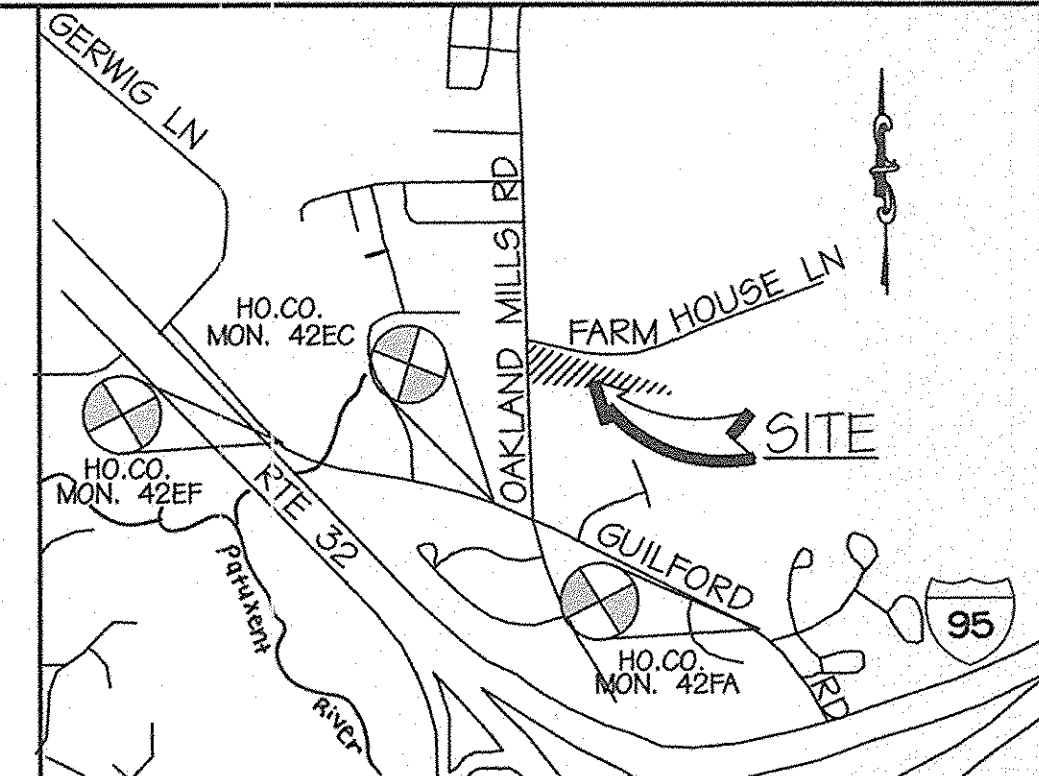
DATE: SEPTEMBER 26, 2007. SHEET 6 OF 8. SDP-07-065



**Plant Schedule**

Key	Quantity	Botanical Name/Common Name	Size	State	Remarks
<b>Evergreen Trees</b>					
PS	2	Pinus strobus / Eastern White Pine	6'-8" Ht.	B&B	Full to Ground

SHADE TREES TO REMAIN:	LANDSCAPING REQUIRED:	LANDSCAPING PROVIDED:
10" Salix babylonica/Weeping Willow	SHADE TREES REQUIRED: 5	SHADE TREES PROVIDED: 0
18" Acer rubrum/Red Maple	EVERGREEN TREES REQUIRED: 0	EVERGREEN TREES PROVIDED: 2
14" Acer rubrum/Red Maple	OTHER TREES REQUIRED: 0	OTHER TREES PROVIDED: 0
10" Acer rubrum/Red Maple		STOCKADE FENCE
6" Acer rubrum/Red Maple		
24" Quercus rubra/Red Oak		



**VICINITY MAP**  
SCALE: 1" = 2000'  
ADC MAP: 20 B-2

**BENCH MARK**  
COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODESIC CONTROL STATIONS No.  
42EC N 545,417.005 E 1,360,140.3872  
42EF N 545,623.3664 E 1,359,044.4465

**GENERAL NOTES**

- OWNER/DEVELOPER : SULLIVAN BLAKE REMODELING, INC. 9014 MANORDALE LANE ELLICOTT CITY, MARYLAND 21042 ATTN: JOHN LANG 410-416-9166
- SUBJECT PROPERTY ZONED: R-SA-B PER THE 02/02/2004 COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS DATED 7/28/06.
  - PLAN BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT JANUARY 7, 2005 BY KCI TECHNOLOGIES, INC.
  - ROOT PRUNING TO BE COMPLETED BY A CERTIFIED ARBORIST, DURING INSTALLATION OF THE TREE PROTECTION FENCE, SURROUNDING THE 56" WHITE OAK, LOCATED ALONG OAKLAND MILLS ROAD.
  - A 24' PRIVATE USE-IN-COMMON DRIVEWAY EASEMENT FOR LOTS 1 THRU 3 WILL BE LOCATED WITHIN THE LIMIT OF DISTURBANCE SHOWN.
  - THERE IS AN EXISTING DWELLING/STRUCTURE LOCATED ON LOT 1 TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING(S) ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.
  - THE OPEN SPACE SHOWN HEREON IS HEREBY DEDICATED TO A PROPERTY OWNERS ASSOCIATION FOR THE RESIDENTS OF THIS SUBDIVISION AND RECORDING REFERENCES OF THE ARTICLES OF INCORPORATION AND RESTRICTIONS ARE SHOWN HEREON.
  - DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
    - WIDTH -- 12' (14' SERVING MORE THAN ONE RESIDENCE);
    - SURFACE -- 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.);
    - GEOMETRY -- MAX 14% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS;
    - STRUCTURES (CULVERTS/BRIDGES) -- CAPABLE OF SUPPORTING 25 GROSS TONS (HSS LOADING);
    - 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.
  - NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
  - 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 NOT TO THE PIPESTEM LOT DRIVEWAY.
  - TOPOGRAPHIC SURVEY PERFORMED ON OR ABOUT JANUARY 7, 2005 BY KCI TECHNOLOGIES, INC.
  - SOILS INFORMATION OBTAINED FROM SOIL SURVEY OF HOWARD COUNTY, DATED JULY 1968, SOIL SURVEY SHEET NUMBER 30
  - LANDSCAPING FOR LOTS 2 AND 3 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING FOR LOT 3 WILL BE BONDED WITH THE BUILDER'S GRADING PERMIT IN THE AMOUNT OF \$2,000.00 FOR 250 LINEAR OF FENCE @ \$10 PER LINEAR FOOT AND 2 EVERGREEN TREES @ \$150 EACH.
  - THERE ARE NO 15% TO 25% OR GREATER SLOPES LOCATED ON SITE.

**SCHEDULE A PERIMETER LANDSCAPE EDGE A**

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	NA	A
Linear Feet of Roadway Frontage/Perimeter	NA	394.08 LF
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NA	Yes 150 LF & 6 Ex. Shade Trees
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NA	NA
Number of Plants Required		
Shade Trees	0	0
Evergreen Trees	0	0
Shrubs	0	0
Number of Plants Provided		
Shade Trees	0	0
Evergreen Trees	0	0
Other Trees (2:1 substitution)	0	0
Shrubs (10:1 substitution) (Describe plant substitution credits below if needed)	0	0

**SCHEDULE A PERIMETER LANDSCAPE EDGE B**

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	NA	A
Linear Feet of Roadway Frontage/Perimeter	NA	32.59 LF
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NA	Yes 32.59 LF
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NA	NA
Number of Plants Required		
Shade Trees	0	0
Evergreen Trees	0	0
Shrubs	0	0
Number of Plants Provided		
Shade Trees	0	0
Evergreen Trees	0	0
Other Trees (2:1 substitution)	0	0
Shrubs (10:1 substitution) (Describe plant substitution credits below if needed)	0	0

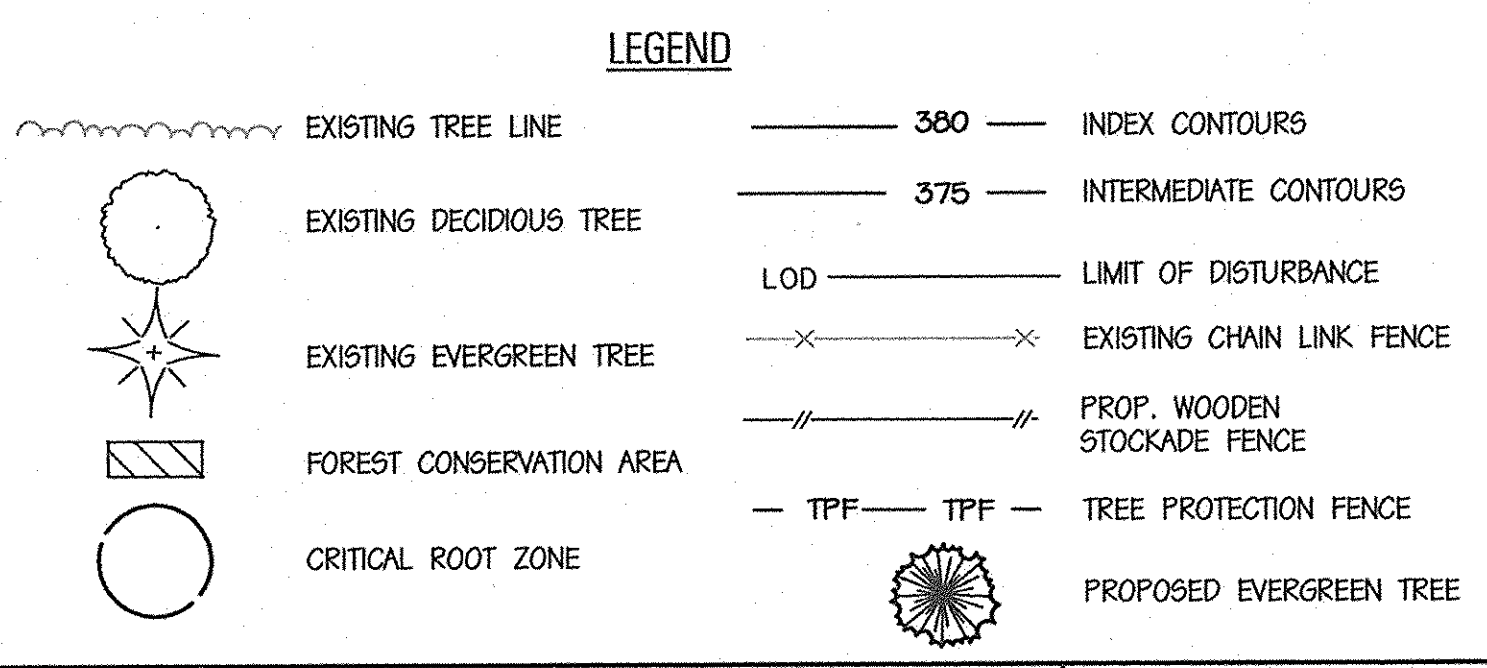
**SCHEDULE A PERIMETER LANDSCAPE EDGE C**

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	NA	A
Linear Feet of Roadway Frontage/Perimeter	NA	524.87 LF
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NA	Yes 250 LF
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NA	Yes 250 LF
Number of Plants Required		
Shade Trees	0	5
Evergreen Trees	0	2
Shrubs	0	0
Number of Plants Provided		
Shade Trees	0	0
Evergreen Trees	0	2
Other Trees (2:1 substitution)	0	0
Shrubs (10:1 substitution) (Describe plant substitution credits below if needed)	0	0

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 4/25/08 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 4/25/08 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 4/25/08 DATE  
 DIRECTOR

**DEVELOPER/BUILDER 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 SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF NOTICE OF LANDSCAPE INSTALLATION ACCOMPANIES BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.  
 [Signature] 4/25/08 DATE  
 [Signature] 4/25/08 DATE  
 DEVELOPER

THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING PLANT MATERIAL, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.



- INSTALLATION OF TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL ON-SITE PARKING AND DRAINAGE STRUCTURES SHALL BE PRIVATELY OWNED & MAINTAINED.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS, UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- GRAVITY SEWER HOUSE CONNECTIONS WILL BE 4" PVC.
- THIS PLAN IS SUBJECT TO THE FIFTH EDITION OF THE SUBDIVISION REGULATIONS AND THE NEW ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001.
- STORMWATER MANAGEMENT WILL BE PROVIDED THROUGH NON-STRUCTURAL SWM PRACTICES IS: GRASS SWALES & ROOF DISCONNECT CREDITS.
- AN AFO STUDY IS EXEMPT PER DMMV SECTION 4.7.4.G.
- THIS SITE IS IN THE PATUXENT RIVER WATERSHED #02-113-11 AND IS CLASSIFIED AS A USE IV-P.
- THERE ARE NO STEEP SLOPES, WETLANDS, STREAMS OR FLOOD PLAINS ON THIS SITE.
- SINGLE USE DRIVEWAY TO A WIDTH OF 12' 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:
  - WIDTH -- 12'
  - SURFACE -- 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.)
  - GEOMETRY -- MAX 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS
  - MAINTENANCE -- SUFFICIENT TO INSURE ALL WEATHER USE
- LANDSCAPING FOR LOTS 2 AND 3 IS PROVIDED IN ACCORDANCE WITH SECTION 16.24 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING FOR LOT 3 WILL BE BONDED WITH THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$2,000.00 FOR 250 LINEAR OF FENCE @ \$10 PER LINEAR FOOT AND 2 EVERGREEN TREES @ \$150 EACH.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAY 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 (APPLIES FOR RESIDENTIAL SDP'S).
- SHC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE. A WARNER OF BASEMENT GRAVITY SEWER SERVICE HAS BEEN APPROVED ON MARCH 15, 2007 BY THE DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN, VOLUME IV, STANDARD DETAIL R-6.06
- USE-IN-COMMON DRIVEWAY OF WIDTH 16' SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLING TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
  - WIDTH -- 16'
  - SURFACE -- 6" OF COMPACTED CRUSHER RUN BASE W/ TAR AND CHIP COATING (1-1/2" MIN.)
  - GEOMETRY -- MAX 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS.
  - MAINTENANCE -- SUFFICIENT TO INSURE ALL WEATHER USE
- STORMWATER MANAGEMENT FOR LOTS 2 & 3 WILL BE THROUGH THE USE OF STORMWATER MANAGEMENT CREDITS. THE GRASS CHANNEL CREDIT WILL BE USED TO TREAT ALL RUNOFF BOTH LOTS AND ANY OPOSITE THAT DRAIN INTO IT.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the state of Maryland, License No. 25056 Expiration Date: November 17, 2008.

**SHEET INDEX**

SHEET NO.	TITLE
1	SITE & GRADING PLAN
2	STORMWATER MANAGEMENT PLAN & DETAILS
3	STORMWATER MANAGEMENT NOTES & DETAILS
4	SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL DETAILS
6	SEDIMENT CONTROL & SWM NOTES
7	LANDSCAPE & SUPPLEMENTAL PLAN
8	LANDSCAPE DETAILS & SPECIFICATIONS

**SULLIVAN BLAKE PROPERTY**

LOTS 2 AND 3  
 SINGLE FAMILY DETACHED  
 TAX MAP 42, GRID 16, PARCEL 374  
 L. 9995 F. 300, ZONE R-SA-B  
 5th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 PLAT # 18120 F-05-180

**BAR SCALE**  
 1" = 30'

DATE: DECEMBER 4, 2007  
 SHEET 7 OF 8

**SPECIFICATIONS:**

**PLANT MATERIALS AND PLANTING METHODS**

**A. Plant Materials**

The landscape contractor shall furnish and install and/or dig, ball, burlap, and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

**1. Plant Names**

Plant names used in the Plant Schedule shall conform to "Standardized Plant Names", latest edition.

**2. Plant Standards**

All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock", latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth, and shall be first quality, sound, vigorous, well-branched and with health, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.

a. All plants shall be nursery grown and shall have been grown under the same climate as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be accepted.

b. Collected plants or transplanted trees may be called for by the landscape architect and used, provided, however, that locations and soil conditions will permit proper baling.

**3. Plant Measurements**

All plants shall conform to the measurements specified in the Plant Schedule as approved by the A.C.

a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve inches (12") above grade for trees four inches (4") in caliper and over.

b. Minimum branching height for all trees shall be six feet (6'), maximum eight feet (8').

c. Minimum size for planting shade trees 1 1/2" - 3" caliper 12' - 14' in height.

e. Caliper, height, spread and size of ball shall be generally as follows:

Caliper	Height	Spread	Size of Ball
2 1/2" - 3"	12' - 14'	6' - 8'	25" diameter
3" - 3 1/2"	14' - 16'	6' - 8'	32" diameter
3 1/2" - 4"	14' - 16'	8' - 10'	36" diameter
4" - 4 1/2"	16' - 18'	8' - 10'	40" diameter
4 1/2" - 5"	16' - 18'	10' - 12'	34" diameter
5" - 5 1/2"	18' - 20'	10' - 12'	48" diameter
5 1/2" - 6"	18' - 20'	12' - 14'	52" diameter

All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".

**4. Plant Identification**

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

**5. Plant Inspection**

The AC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.

**B. Planting Methods**

All proposed plant material that meet the specifications in Section A (preceding page) are to be planted in accordance with the following planting methods during the proper planting seasons as described in the following:

**1. Planting Seasons**

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.

**2. Digging**

All plant material shall be dug, balled and burlapped (B+B) in accordance with the "AAN Standards."

**3. Excavation of Plant Pits**  
The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:

a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.

b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.

c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

d. Diameter and depth of tree pits shall generally be as follows:

Plant Size	Pit	Pit	Root Ball Diameter	Depth
2 1/2" - 3" cal.	28"	56"	24"	
3" - 3 1/2" cal.	32"	64"	28"	
3 1/2" - 4" cal.	36"	72"	32"	
4" - 4 1/2" cal.	40"	80"	36"	
4 1/2" - 5" cal.	44"	88"	40"	
5" - 5 1/2" cal.	48"	96"	44"	
5 1/2" - 6" cal.	52"	104"	48"	

A 20% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

**4. Staking, Guying and Wrapping**

All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:

a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7' - 0" for major trees and 5' - 0" minimum for minor trees.

b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" takeup. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.

c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's tree Braces" may be used in place of wire and hose on trees up to 3" in caliper.

d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail."

**5. Plant Pruning, Edging and Mulching**

a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in diameter shall be painted with an approved antiseptic tree wound dressing.

b. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.

c. After cultivation, all plant materials shall be mulched with a 4" layer of tan bark, peat moss, or another approved material over the entire area of the bed or saucer.

**6. Plant Inspection and Acceptance**

The AC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

**7. Plant Guarantee**

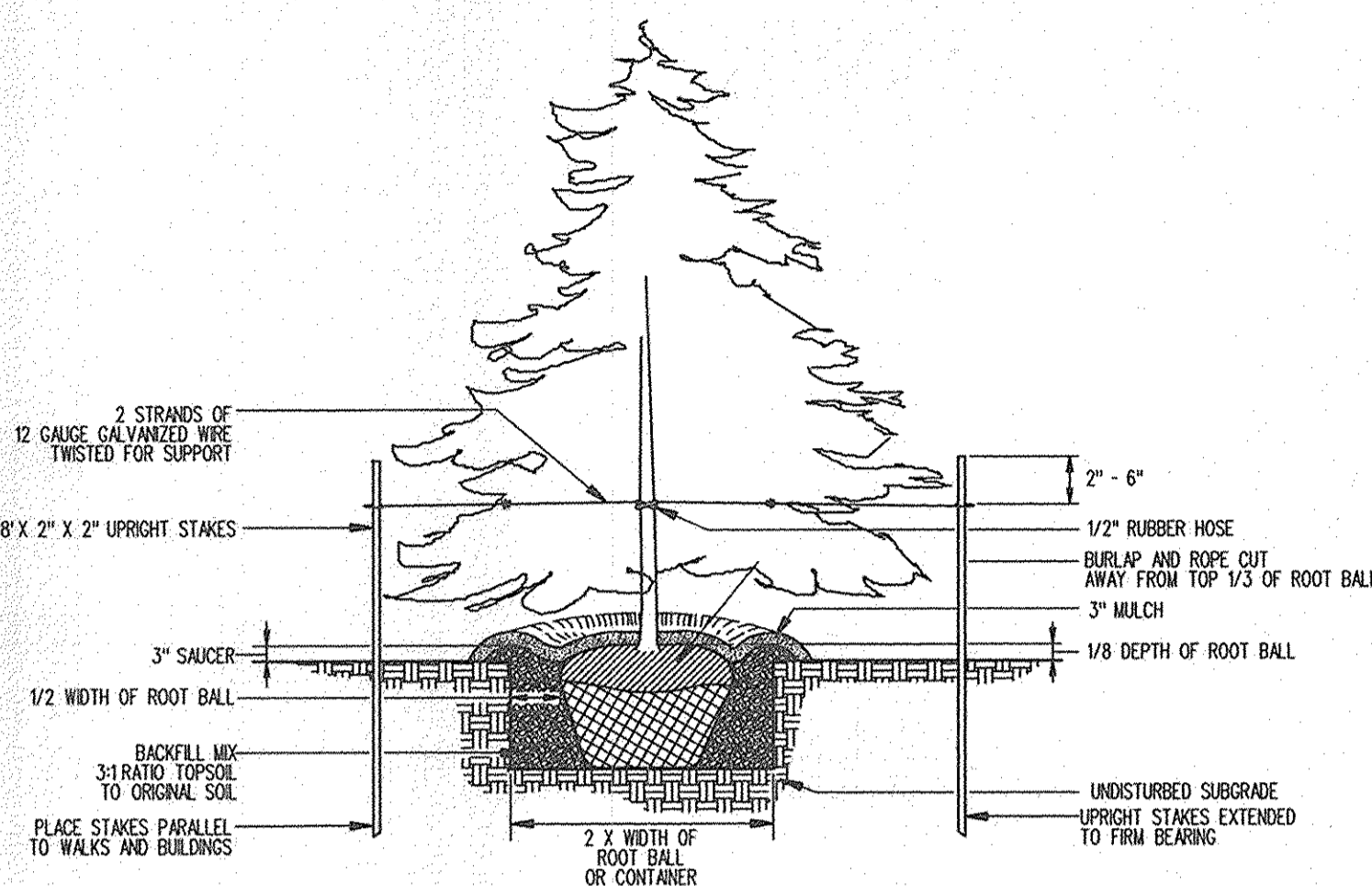
All Plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.

b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

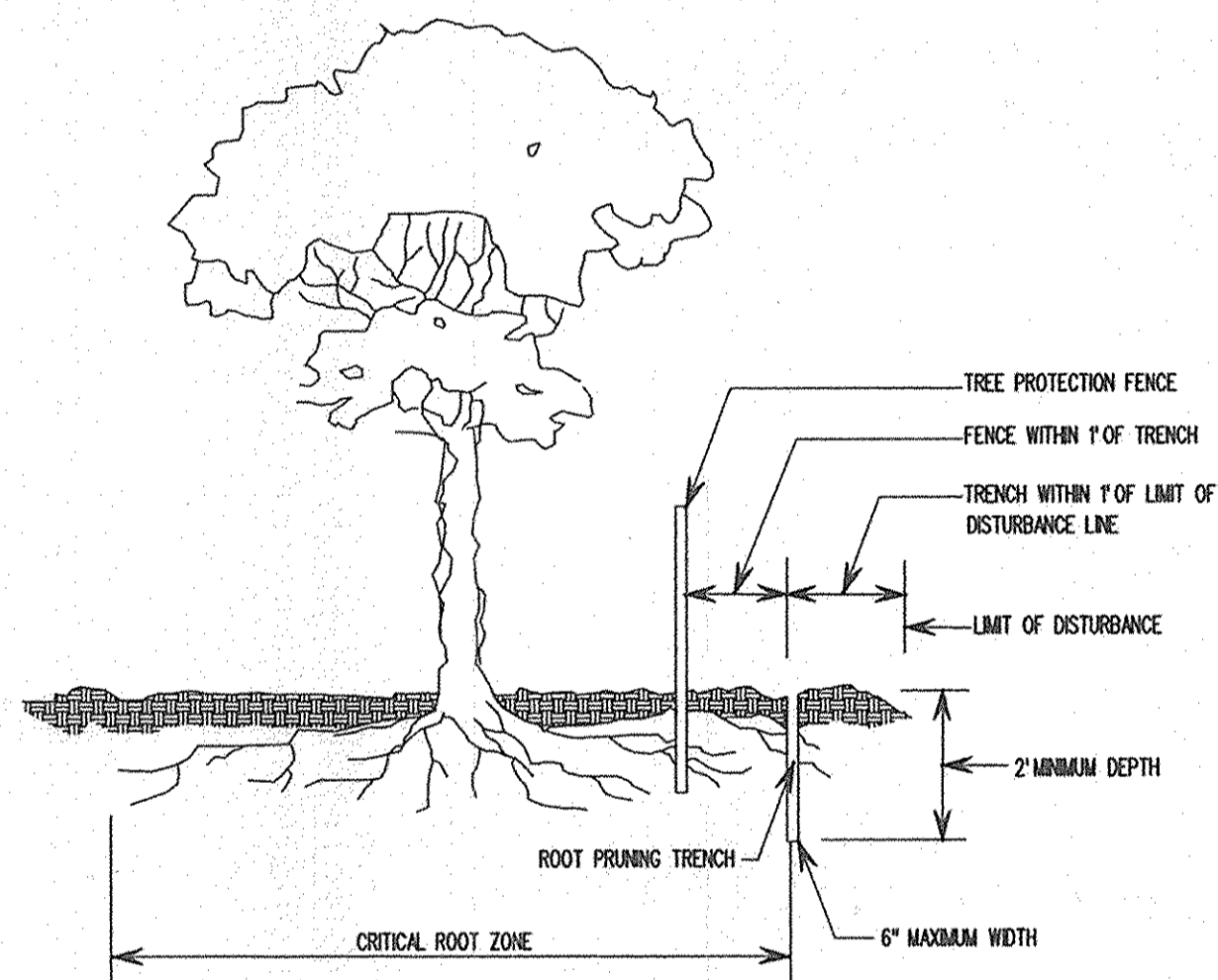
**SEEDING AND SODDING**

A. All seeding and sodding shall be as per "Standards and Specifications for Soil Erosion and Sediment Control in Urbanized Areas" as published by the Department of Natural



**EVERGREEN TREE PLANTING DETAIL**

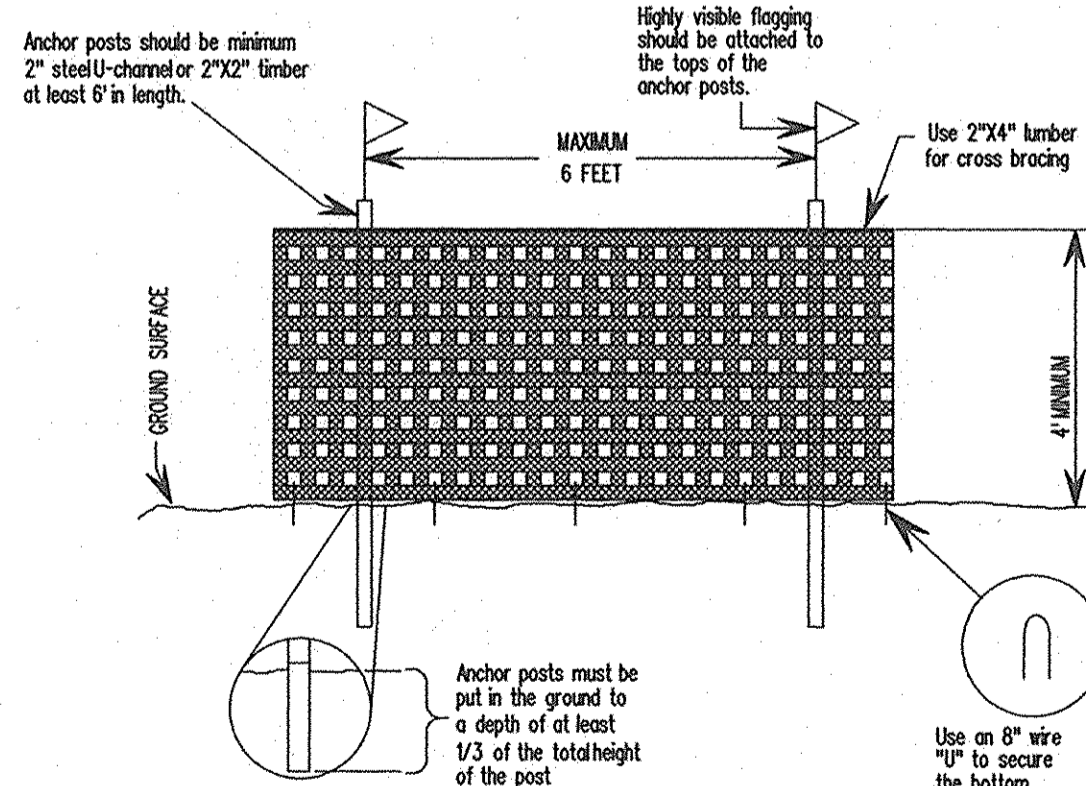
NOT TO SCALE



**ROOT PRUNING DETAIL**

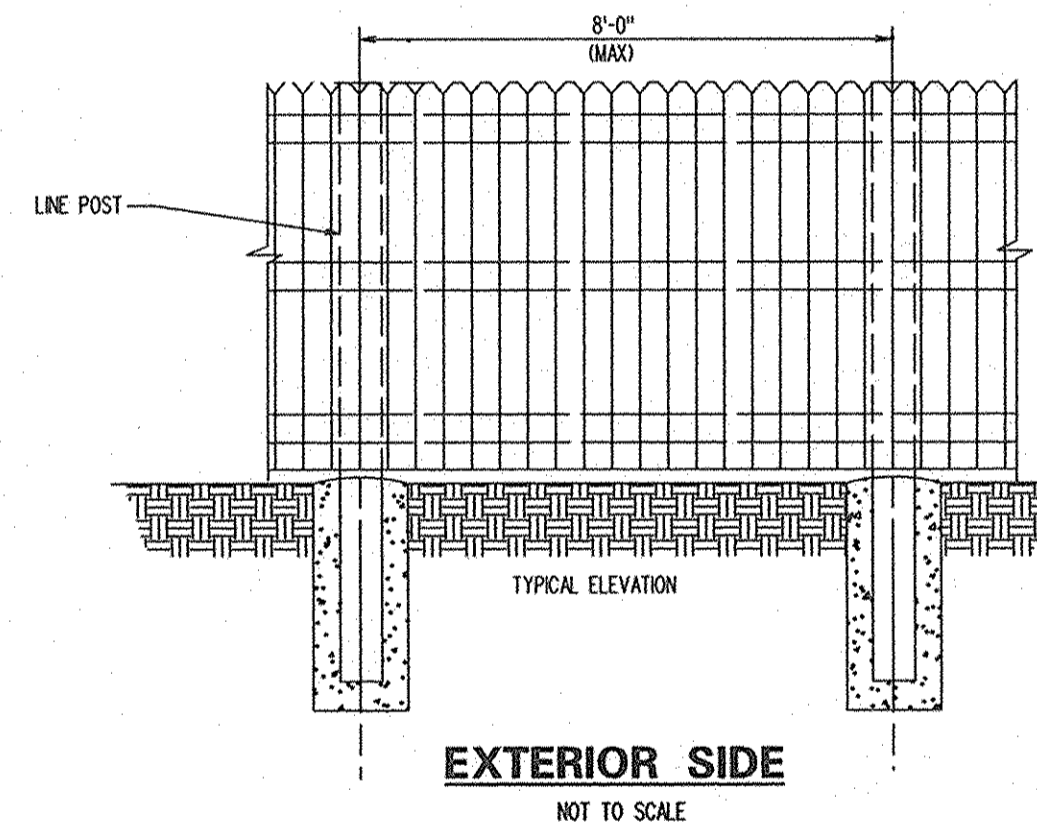
NOT TO SCALE

- Notes:  
 1. Retention Areas to be established as part of the forest conservation plan review process.  
 2. Boundaries of Retention Areas to be staked, flagged and/or fenced prior to trenching.  
 3. Exact location of trench should be identified.  
 4. Trench should be immediately backfilled with soil removed or organic soil.  
 5. Roots should be cleanly cut using vibratory knife or other acceptable equipment.



**TREE PROTECTION FENCE DETAIL**

NOT TO SCALE



**EXTERIOR SIDE**

NOT TO SCALE

**STOCKADE WOOD FENCE**

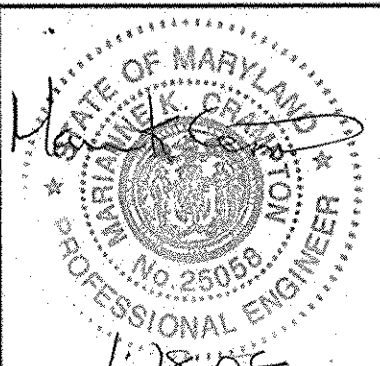
NOT TO SCALE

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Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the state of Maryland, License No. 25056 Expiration Date: November 17, 2008.

**SULLIVAN BLAKE PROPERTY**

LOTS 2 AND 3  
 SINGLE FAMILY DETACHED  
 TAX MAP 42, GRID 16, PARCEL 374  
 L. 9995 / F. 300, ZONE R-6A-0  
 8th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 PLAT# 18120 F-05-180



**BAR SCALE**  
 NOT TO SCALE

DATE: DECEMBER 4, 2007  
 SHEET 8 OF 8

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
 [Signatures and Dates]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DIRECTOR

**DEVELOPER/BUILDER 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 SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF NOTICE OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING PLANT MATERIAL, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.

Drafting	CHC	DATE	REVISIONS
Check	RAR	9-26-07	REVISED DUE COMMENTS FROM DED DATED 9-6-07
Design	CHC		
Check	THM		

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 www.kci.com

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 JOHN G. SULLIVAN JR. & PATRICK J. SOONAN  
 3275 PINE ORCHARD LANE SUITE A  
 ELLICOTT CITY, MARYLAND 21042  
 ATTN: JOHN LANG  
 410-418-9166

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 SULLIVAN BLAKE REMODELING, INC.  
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 ELLICOTT CITY, MARYLAND 21042  
 ATTN: JOHN LANG  
 410-418-9166

**LANDSCAPE DETAILS AND SPECIFICATIONS**