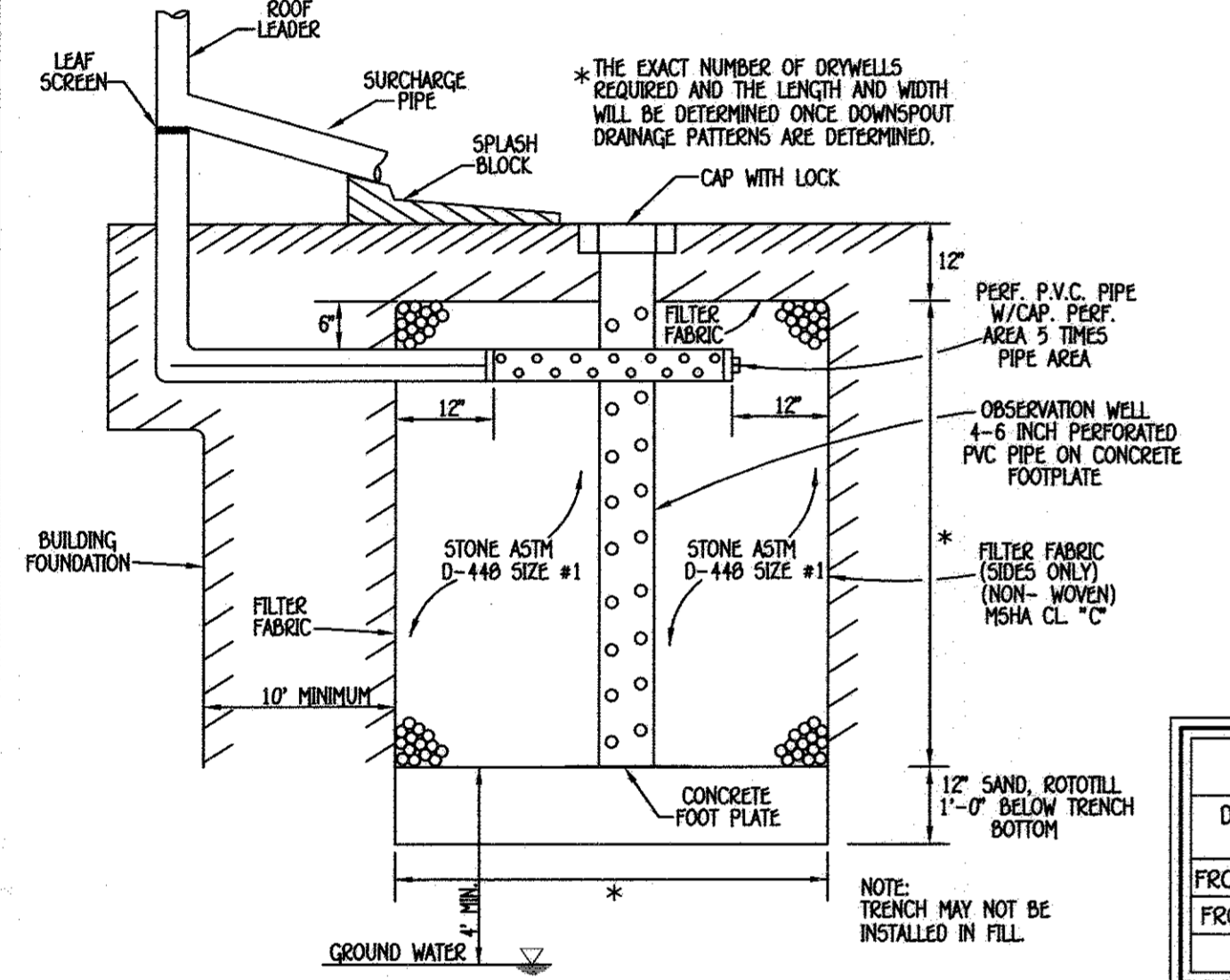


SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	SEDIMENT & EROSION CONTROL NOTES & DETAILS

SOILS LEGEND			
SOIL	NAME	CLASS	K FACTOR
GbC	Gladesboro loam, 0 to 15 percent slopes	B	0.20
GbD	Gladesboro-Urban land complex, 0 to 8 percent slopes	B	0.20
GaB	Glenville-Urban land-Udorthents complex, 0 to 8 percent slopes	C	0.43

STORMWATER MANAGEMENT SUMMARY			
AREA ID.	ESDV REQUIRED CU.FT.	ESDV PROVIDED CU.FT.	REMARKS
SITE	395	472	DRY WELLS (M-5)
TOTAL	395	472	

GROSS AREA = 0.62 ACRES (SITE)
 LOD = 0.30 ACRES
 RCN = 30
 TARGET Pe = 1.0'



GUTTER DRAIN FILTER DETAIL
NOT TO SCALE

STORMWATER MANAGEMENT NOTES

- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
- MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DRYWELL SHALL BE 1,000 SQ. FT. OR LESS.
- DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5% GRADE. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
- FINAL GRADING IS SHOWN ON THIS SITE DEVELOPMENT PLAN.

DRY WELL CHART					
DRYWELL NO.	AREA OF ROOF PER DOWN SPOUT	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	L W D
FRONT RIGHT	826 SQ. FT.	66 C.F.	200 C.F.	100%	10' x 10' x 5'
FRONT LEFT	929 SQ. FT.	74 C.F.	200 C.F.	100%	10' x 10' x 5'
REAR	504 SQ. FT.	40 C.F.	72 C.F.	100%	6' x 6' x 5'

* AREA OF TREATMENT EXCEEDS THAT REQUIRED.

SITE DEVELOPMENT PLAN ALLVIEW ESTATES SECTION 3 BLOCK G LOT 17

TAX MAP No. 36 GRID No. 14 PARCEL NO. 237
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 1200'

BENCHMARK INFORMATION	
B.M.#1 - HOWARD COUNTY CONTROL STATION #0070 - HORIZONTAL - (NAD '83)	N 556,041,795 E 1,355,394,704 ELEVATION = 706.331 - VERTICAL - (NAVD '88)
B.M.#2 - HOWARD COUNTY CONTROL STATION #36PF - HORIZONTAL - (NAD '83)	N 558,122,368 E 1,349,924,266 ELEVATION = 392.348 - VERTICAL - (NAVD '88)

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

- THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.
- THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---492---	EXISTING 2' CONTOURS	---	PROPOSED CONTOUR
---490---	EXISTING 10' CONTOURS	+	SPOT ELEVATION
---	SOILS LINES AND TYPE	---	LIMITS OF DISTURBANCE
---	EXISTING TRENCHLINE	---	DRAINAGE AREA DIVIDE
---	EXISTING INDIVIDUAL TREES	---	SILT FENCE
---	EXISTING FENCE LINE	---	PERMANENT SOIL STABILIZATION MATING
---	PROPOSED PAVING	---	SUPER SILT FENCE
---	EX. FOREST CONSERVATION EASEMENT	---	STABILIZES CONSTRUCTION ENTRANCE

General Notes:

- SUBJECT PROPERTY ZONED R-20 PER 10/06/13 COMPREHENSIVE ZONING PLAN.
- COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 311 AND NO. 37CA.
- THIS PLAN IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT DECEMBER, 2016 BY FISHER, COLLINS & CARTER, INC.
- ALL AREAS ARE MORE OR LESS (±).
- DISTANCES SHOWN ARE BASED ON SURFACE MEASUREMENT AND NOT REDUCED TO M.D. GRID MEASUREMENT.
- FOR FLAG OR PIPE STEM LOTS, SEWER COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE, SEE PROVIDED TO THE JUNCTION OF FLAG OR PIPE STEM AND ROAD RIGHT-OF-WAY LINE ONLY AND NOT ONTO THE FLAG OR PIPE STEM LOT DRAINAGE.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
 - WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE);
 - SURFACE - SIX (6) INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1 - 1/2" MINIMUM);
 - MAXIMUM 1% GRADE CHANGE AND 45-FOOT TURNING RADIUS;
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING);
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER SURFACE;
 - STRUCTURE CLEARANCE - MINIMUM 12 FEET;
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- NO HISTORIC STRUCTURES OR CONTEMPORARIES EXIST ON THE SUBJECT PROPERTY BASED ON VISUAL OBSERVATION OR LISTED IN AVAILABLE HOWARD COUNTY CEMETERY INVENTORY MAP.
- SITE IS NOT ADJACENT TO A SCENIC ROAD.
- NO 100 YEAR FLOODPLAIN, WETLANDS, STREAM(S) AND/OR THEIR BUFFERS, NOR STEEP SLOPES EXIST ON-SITE.
- STORMWATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. NON-STRUCTURAL PRACTICES IN ACCORDANCE WITH CHAPTER 9 ARE BEING UTILIZED. THREE (3) DRYWELLS ARE PROPOSED.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT.
- THERE ARE NO WETLANDS ON THIS SITE. PER INVESTIGATION DATED DECEMBER, 2016 BY ECO-SCIENCE PROFESSIONALS, INC.
- 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) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-227-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, WARNING SIGNS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN TOPOGRAPHIC SURVEY WITH (MAXIMUM TWO FOOT) CONTOUR INTERVALS PREPARED BY FISHER, COLLINS & CARTER, INC. DATED NOVEMBER, 2016 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY.
- TRASH AND RECYCLABLES COLLECTION WILL BE AT BEECHWOOD DRIVE WITHIN 5' OF THE COUNTY ROADWAY.
- DRIVEWAY SHALL BE PROVIDED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL R-6.06 IN THE VOL. IV DESIGN MANUAL.
- SOILS INFORMATION BASED ON NCS WBS SOIL SURVEY FOR HOWARD COUNTY, MARYLAND AND HOWARD COUNTY SOILS MAP #24.
- IN ACCORDANCE WITH SECTION 129 (01)(1)(c) OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

STATE HIGHWAY ADMINISTRATION	410.531.9533
BGE(CONTRACTOR SERVICES)	410.890.4820
BGE(UNDERGROUND DAMAGE CONTROL)	410.787.9068
MISS UTILITY	1.800.227.7777
COLONIAL PIPELINE COMPANY	410.795.1990
HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES	410.313.4900
HOWARD COUNTY HEALTH DEPARTMENT	410.313.2840
AT&T	1.800.222.1133
VERIZON	1.800.743.0033/410.224.9210
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- WATER AND SEWER SERVICE FOR THIS LOT WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.2 OF THE HOWARD COUNTY CODE.
- WATER AND SEWER SERVICE FOR THIS PROJECT WILL BE PROVIDED THROUGH CONTRACT NO. 14-4412-0-SERVICES WILL BE PROVIDED THROUGH CONTRACT NO. 365-5 AND 710-W. EXISTING WHO WILL BE UTILIZED.
- PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- ALL WATER HOUSE CONNECTIONS SHALL BE OUTSIDE METERS SETTING UNLESS OTHERWISE NOTED ON THE PLANS OR IN SPECIFICATIONS.
- TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THERE ARE NO HISTORIC STRUCTURES EXISTING ON THIS SITE TO THE BEST OF THE OWNERS' KNOWLEDGE. THERE ARE NO BURIAL/CEMETERY LOCATIONS EXISTING ON THIS SITE.
- LOT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS PER SECTION 16.122(2)(b)(1)(i) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SINCE IT IS A SINGLE LOT WITH A TOTAL AREA LESS THAN 40,000 SQ.FT.
- LANDSCAPING IS NOT REQUIRED SINCE LOT 17 IS INTERIOR TO THE ALLOWED ESTATES SUBDIVISION.
- THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
- PARKING FOR THIS PROJECT IS PROVIDED AS FOLLOWS:
 - 4 SPACES PER LOT (2 CAR GARAGE - 2 SPACES + 2 SPACES PER PRIVATE ON-LOT DRIVEWAYS)
 - TWO CAR GARAGE SHALL BE USED FOR PARKING PURPOSES ONLY OR STORAGE SPACE.
- REF. DPZ FILE NO'S: PB 5, FOLD 96, ECP-17-030.

SITE ANALYSIS DATA CHART

- TOTAL AREA OF THIS SUBMISSION = 26,805 SQ.FT. OR 0.62 AC.±.
- LIMIT OF DISTURBED AREA = 12,900 SQ.FT. OR 0.30 AC.±.
- PRESENT ZONING DESIGNATION = R-20 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
- PROPOSED USE: RESIDENTIAL
- PREVIOUS HOWARD COUNTY FILES: PLAT BOOK 5 FOLD 96
- TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0.00 AC
- TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 AC
- TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC
- TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0.00 AC
- TOTAL AREA OF EXISTING FOREST = 0.00 AC
- TOTAL GREEN OPEN AREA = 0.53 AC±
- TOTAL IMPERVIOUS AREA = 0.09 AC±
- TOTAL AREA OF ERODIBLE SOILS = 0.00 AC.
- TOTAL AREA OF ROAD DEDICATION = 0.00 AC.

ADDRESS CHART	
LOT #	STREET ADDRESS
17	6505 BEECHWOOD DRIVE

TITLE SHEET

ALLVIEW ESTATES,
SECTION 3, BLOCK G, LOT 17
6505 BEECHWOOD DRIVE
ZONED R-20

TAX MAP No. 36 GRID No. 14 PARCEL NO. 237
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: MAY, 2017
SHEET 1 OF 3

OWNERS
JOSEPH & DOLORES JABLONSKI
6509 BEECHWOOD DRIVE
COLUMBIA, MD 21046
C/O JOHN MINUTOLI 410-409-0333

DEVELOPER
BEECHWOOD DRIVE, LLC
6139 WHITE MARBLE COURT
CLARKSVILLE, MD 21029
410-409-0333

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLIOTT CITY, MARYLAND 21042
(410) 461 - 2899

NO.	REVISION	DATE	X

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

John R. Robertson 5/29/17
Howard SCD Date

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386, EXPIRATION DATE: 01/12/2018.

Stephanie Jantz 5/22/17
Signature of Professional Engineer DATE

BUILDER/DEVELOPER'S CERTIFICATE

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

[Signature] 5/22/17
SIGNATURE OF DEVELOPER DATE

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

[Signature] 5/22/17
SIGNATURE OF ENGINEER DATE

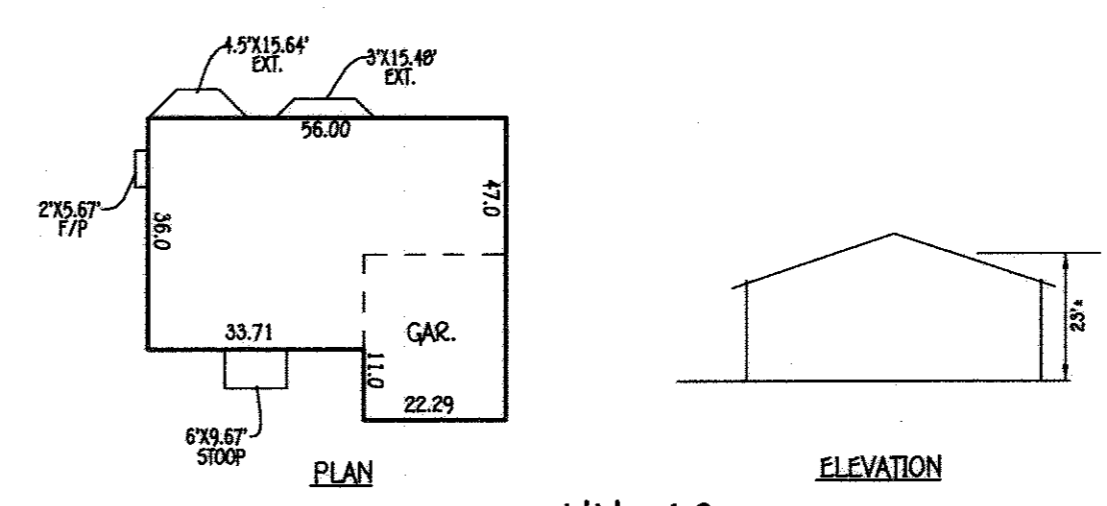
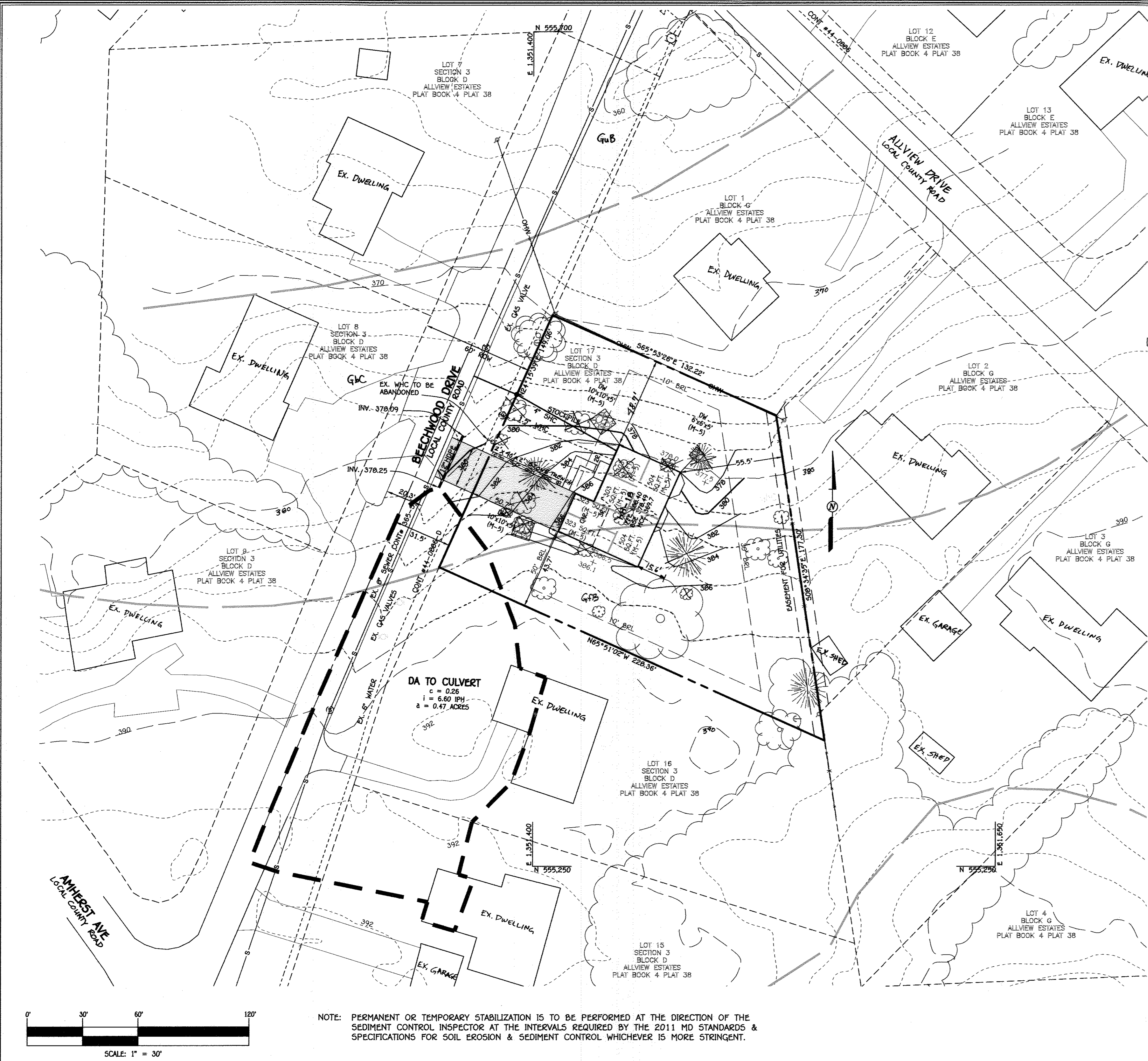
APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 6-14-17
Director - Department of Planning and Zoning Date

[Signature] 6-14-17
Chief, Division of Land Development Date

[Signature] 6-17-17
Chief, Development Engineering Division Date

PROJECT		PARCEL NO.	
PLAT	BLOCK NO.	ZONE	TAX/ZONE
PB 5, PG 96	14	R-20	36
ALLVIEW ESTATES SECTION 3, BLOCK G LOT 17		ELEC. DIST.	CENSUS TR.
		3	237

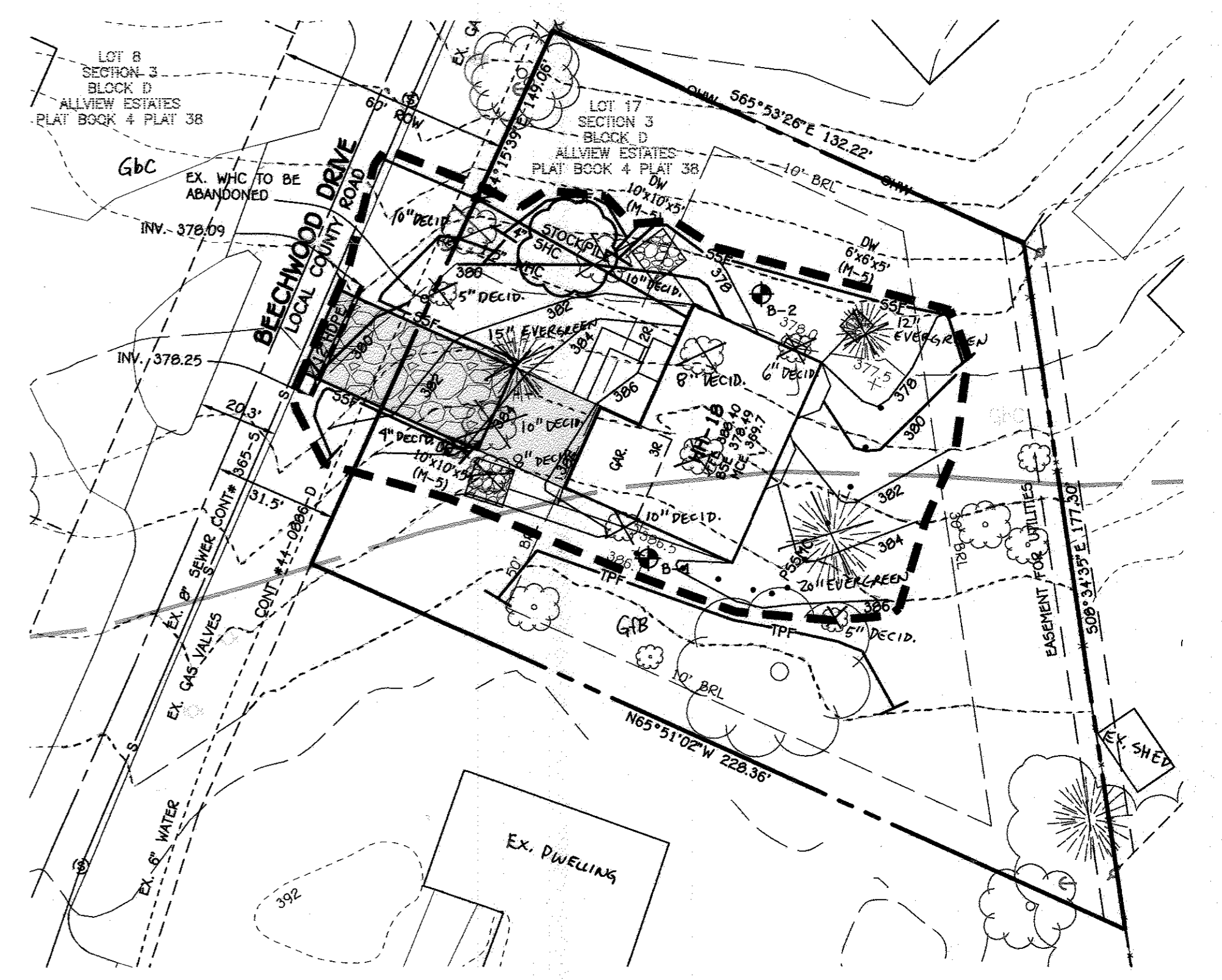


HH-10
SCALE: 1"=30'

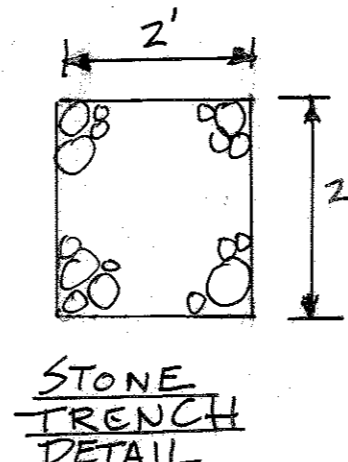
LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING 2' CONTOURS		PROPOSED CONTOUR
	EXISTING 10' CONTOURS		SPOT ELEVATION
	SOILS LINES AND TYPE		LDD
	EXISTING TREE LINE		PROPOSED TREE LINE
	EXISTING FENCE LINE		SILT FENCE
	PROPOSED PAVING		EROSION CONTROL MATTING
	DRAINAGE AREA DIVIDE		SUPER SILT FENCE
			STABILIZES CONSTRUCTION ENTRANCE

SEWER HOUSE CONNECTION CHART						
LOT	SLOPE	ELEVATION AT MH	ELEVATION AT ROW	ELEV AT HOUSE	MCE	BSE
17	2%	364.02	364.02	365.06	369.7	378.23

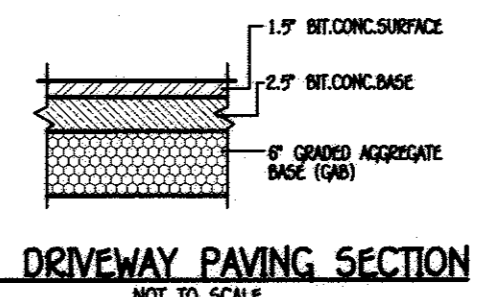
STORMWATER MANAGEMENT PRACTICES			
LOT NO.	ADDRESS	DRY WELLS (M-5) Y/N, NUMBER	GRASS SWALE (M-8) Y/N, NUMBER
17	6505 BEECHWOOD DRIVE	YES, THREE (3)	-



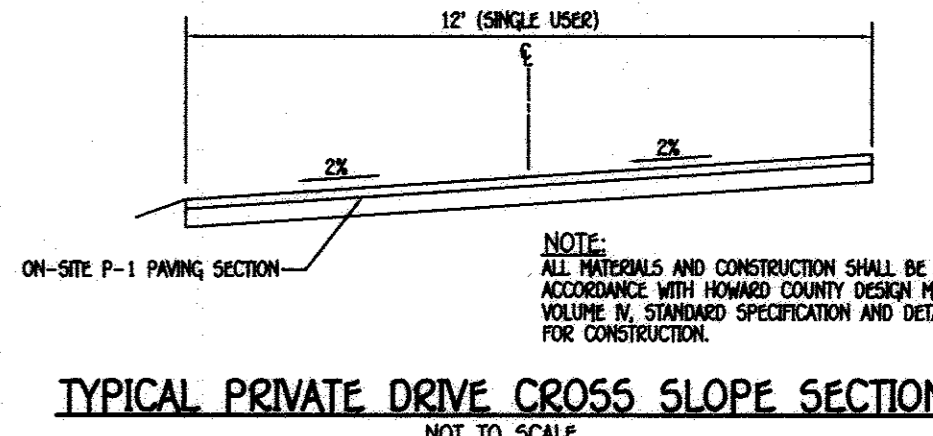
GRADING & SEDIMENT CONTROL



STONE TRENCH DETAIL



P-1 DRIVEWAY PAVING SECTION
NOT TO SCALE



TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION
NOT TO SCALE

NOTE: PERMANENT OR TEMPORARY STABILIZATION IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR AT THE INTERVALS REQUIRED BY THE 2011 MD STANDARDS & SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL WHICHEVER IS MORE STRINGENT.

OWNERS
JOSEPH & DOLORES JABLONSKI
6505 BEECHWOOD DRIVE
COLUMBIA, MD 21046
C/O JOHN MINUTOLI 410-409-0333

DEVELOPER
BEECHWOOD DRIVE, LLC
6139 WHITE MARBLE COURT
CLARKSVILLE, MD 21029
410-409-0333

NO.	REVISION	DATE	X

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

John R. Blanton 5/24/17
Howard SCD

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. 38386, EXPIRATION DATE: 01/12/2018.

Stephen J. Junt 5/22/17
Signature of Professional Engineer DATE

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

JMS 5/22/17
SIGNATURE OF DEVELOPER DATE

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

Stephen J. Junt 5/22/17
SIGNATURE OF ENGINEER DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Walter J. J. J. 6-14-17
Director - Department of Planning and Zoning

Kent S. S. 6-14-17
Chief, Division of Land Development

W. J. J. 6-12-17
Chief, Development Engineering Division

PROJECT	SECTION	PARCEL NO.
ALLVIEW ESTATES SECTION 3, BLOCK G LOT 17	3	237

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
PB 5, PG 96	14	R-20	36	SIXTH	606701

SITE DEVELOPMENT PLAN

ALLVIEW ESTATES,
SECTION 3, BLOCK G, LOT 17
6505 BEECHWOOD DRIVE
ZONED R-20
TAX MAP No. 36 GRID No. 14 PARCEL No. 237
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: MAY, 2017
SHEET 2 OF 3

SDP-17-038

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10270 BALDWIN NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

A. Soil Preparation

- Temporary Stabilization**
 - Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrow or chain plow or ripper mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the rough condition. Slopes 3:1 or flatter are to be treated with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as specified on the plans.
 - Incorporate lime and fertilizer into the top 3 to 5 inches of soil by diking or other suitable means.
- Permanent Stabilization**
 - A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - Soil pH between 6.0 and 7.0.
 - Soluble salts less than 500 parts per million (ppm).
 - Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: If loesslike soil is present, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
 - Soil contains 1.5 percent minimum organic matter by weight.
 - Soil contains sufficient pore space to permit adequate root penetration.
 - Application of amendments or topsoil is required on-site soils do not meet the above conditions.
 - Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
 - Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.

B. Topsoiling

- Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Topsoil is placed over prepared subsoil by means of a tractor drawn topsoiler, but not less than 1/2 inch of topsoil is to be added for a given soil type as can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
- Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- Areas having slopes steeper than 2:1 require special consideration and design.

- Topsoil Specifications:** Soil to be used as topsoil must meet the following criteria:
 - Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an approved authority.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, fields, or other noxious weeds.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, fields, or other noxious weeds.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Topsoil Application**
 - Erosion and sediment control practices must be maintained when applying topsoil.
 - Uniformly distribute topsoil in a 5 to 6 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in a manner that adding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected to prevent the formation of depressions or water ponds.
 - Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that otherwise be detrimental to proper grading and seeded preparation.

C. Soil Amendments (Fertilizer and Lime Specifications)

- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
- Fertilizers must be uniform in composition, free flowing and suitable for agricultural application by appropriate equipment. Fertilizers may be pre-mixed for approval from the appropriate approval authority. Fertilizers must all be delivered by the site fully labeled according to the applicable laws and must bear the name, trade name, or trademark and warranty of the producer.
- Lime materials must be ground limestone (hydrated or burnt lime) but not be substituted except when hydroxyapatite which contains at least 50 percent total calcium oxide plus magnesium oxide. Limestone that is used in such amounts that at least 50 percent will pass through a #100 mesh sieve and 80 to 100 percent will pass through a #20 mesh sieve.
- Lime and fertilizer must be incorporated into the top 3 to 5 inches of soil by diking or other suitable means.
- Mix the subsoil is either highly acidic or composed of heavy clay, spread ground limestone at the rate of 4 to 8 tons/acre (2000-4000 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

- The application of seed and mulch to establish vegetative cover.
- To protect disturbed soils from erosion during and at the end of construction.
- Conditions Where Practice Applies**
- To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.
- Seeding**
 - Specifications**
 - All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory; All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4.1 regarding the quality of seed. Seed time must be available upon request to the inspector to verify type of seed and seeding rate.
 - Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
 - Incubators: The incubator for treating legume seed in the seed mixture must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Incubators that are not used after the date indicated on the certificate. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculants as cool as possible until use. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
 - Seed or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min) to permit dissipation of phytotoxic materials.
 - Application**
 - Dry Seeding:** This includes use of conventional drop or broadcast spreaders.
 - Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding mixtures.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Soil the seeded area with weighted roller to provide good seed to soil contact.
 - Drill or Outdragger Seeding: Mechanized seeders that apply and cover seed with soil.
 - Outdragger seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - Apply seed uniformly with hydroseeder (slurry included seed and fertilizer).
 - If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P₂O₅ (phosphorus), 200 pounds per acre; K₂O (potassium), 200 pounds per acre.
 - Lime: Use only ground agricultural limestone (0 to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons per acre are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - Seed and fertilizer must be applied immediately after the soil has been prepared.
 - When hydroseeding do not incorporate seed into the soil.
 - Mulching**
 - Mulch Material (in order of preference):
 - Straw consisting of thoroughly cleaned wheat, rice, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only straw straw mulch in areas where an species of grass is desired.
 - Wood cellulose fiber mulch (WCFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical fiber.
 - WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformity of spread.
 - WCFM, including dye, must contain germination or growth inhibiting factors.
 - WCFM materials are to be manufactured and processed in a manner that the wood cellulose fiber mulch will remain in uniform suspension and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material must not contain elements or compounds at concentrations levels that will be phytotoxic.
 - WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, particle elongation of 4.0 to 8.0, ash content of 1.0 percent maximum and water holding capacity of 90 percent minimum.

- Application**
 - Apply mulch to all seeded areas immediately after seeding.
 - When after mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch spreading tool, increase the application rate to 2.5 tons per acre.
 - Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- Anchoring**
 - Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
 - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 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 follow the contour.
 - Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - Synthetic binders such as Acrylic GSR (Aqua-Tack), DCA-70, Petro-Tack, Terra Tex, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches much, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
 - Lightweight plastic netting may be applied over the mulch according to manufacturer recommendations. Netting is usually available in 10' x 10' sheets.

TEMPORARY SEEDING NOTES (B-4-4)

Definition
To stabilize disturbed soils with vegetation for up to 6 months.

Purpose
To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies
Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

Criteria

- Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
- For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.
- When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.B and maintain until the next seeding season.

Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth	Fertilizer Rate (10-20-20)	Lime Rate (50 lb/acre (1000 sf))
BARLEY	96	3/1 - 5/15	1"	456 lb/acre (90 lb/1000 sf)	2 tons/acre (1000 sf)
OATS	72	8/15 - 10/15	1"	1000 sf)	1000 sf)
RYE	112		1"		

Hardness Zone (from Figure B.3):	6b	Fertilizer Rate (10-20-20)	Lime Rate
Seed Mixture (from Table B.1):			

Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth
BARLEY	96	3/1 - 5/15	1"
OATS	72	8/15 - 10/15	1"
RYE	112		1"

Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth
BARLEY	96	3/1 - 5/15	1"
OATS	72	8/15 - 10/15	1"
RYE	112		1"

- General Use**
 - Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition rates found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
 - 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-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.
 - For sites having disturbed areas over 5 acres, use and show the rates recommended by the soil testing agency. For areas receiving low maintenance, apply urea fertilizer (46-0-0) at 1/2 pound per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
- Turfgrass Mixtures**
 - Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
- Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - Kentucky Bluegrass:** Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and coastal areas. Recommended mixture includes: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - Kentucky Bluegrass/Perennial Ryegrass:** Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Cultivars Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - 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 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
 - Kentucky Bluegrass/Fine Fescue:** 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 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.

Hardness Zone (from Figure B.3):	6b	Fertilizer Rate (10-20-20)	Lime Rate
Seed Mixture (from Table B.3):			

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth	N	P ₂ O ₅	K ₂ O	Lime Rate (2 tons/acre (90 lb/1000 sf))
1	TALL FESCUE	100	Mar. 1-May 15 Aug. 15-Oct. 15	1/4"-1/2" in.	45 lb. per acre (9 lb/1000 sf)	90 lb/acre (18 lb/1000 sf)	90 lb/acre (18 lb/1000 sf)	2 tons/acre (90 lb/1000 sf)

- Sod:** To provide quick cover on disturbed areas (2:1 grade or flatter).
 - General Specifications**
 - Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
 - Sod must be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/8 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
 - Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
 - Sod must not be harvested or transported when moisture content (excessively dry wet) will adversely affect its survival.
 - Sod must be delivered, delivered, and installed within a period of 36 hours. Sod not transported within this period must be approved by an agronomist or soil scientist prior to its installation.
 - Sod Installation**
 - During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
 - Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
 - Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
 - Water the sod immediately following rolling and tamping until the underside of the new sod and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping, and irrigating for any piece of sod within eight hours.
 - Sod Maintenance**
 - In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
 - After the first week, sod must be irrigated as necessary to maintain adequate moisture content.
 - Do not mow until the sod is firmly rooted. No more than 1/2 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

B-4-B STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS

Definition
A mound or pile of soil protected by appropriate designed erosion and sediment control measures.

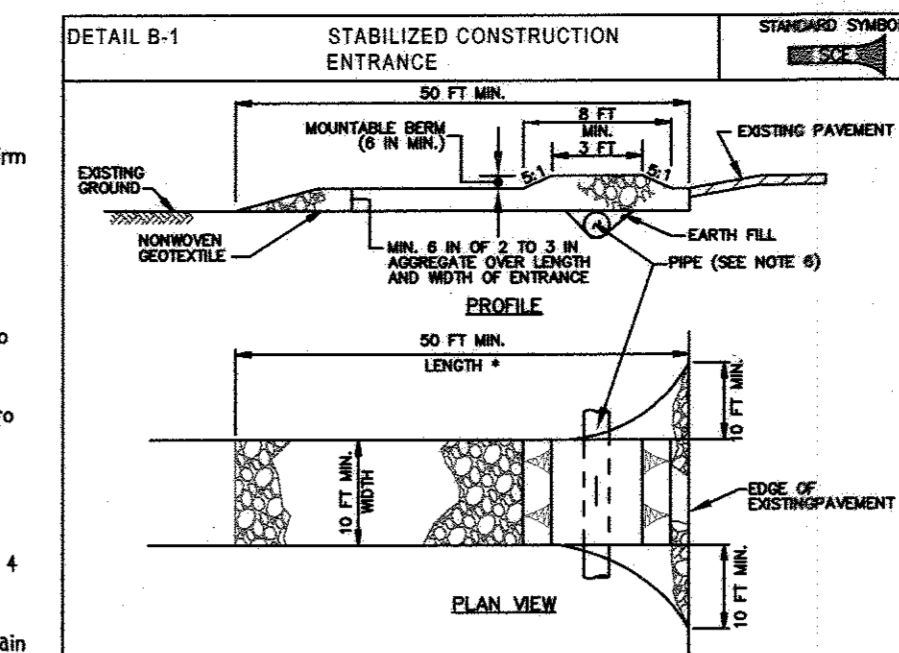
Purpose
To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies
Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

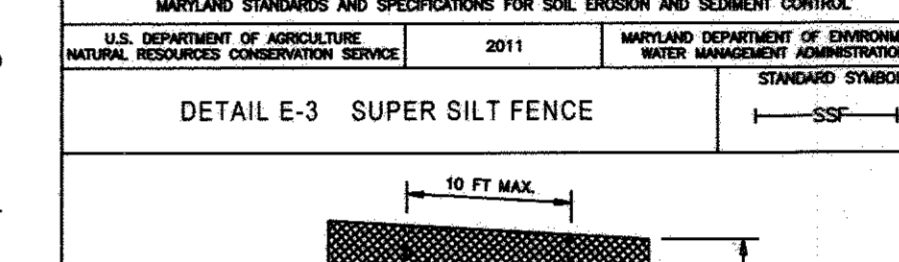
- The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
- The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
- Runoff from the stockpile area must drain to a suitable sediment control practice.
- Access the stockpile area from the upgrade side.
- Clear water runoff into the stockpile must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
- Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
- Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.
- If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

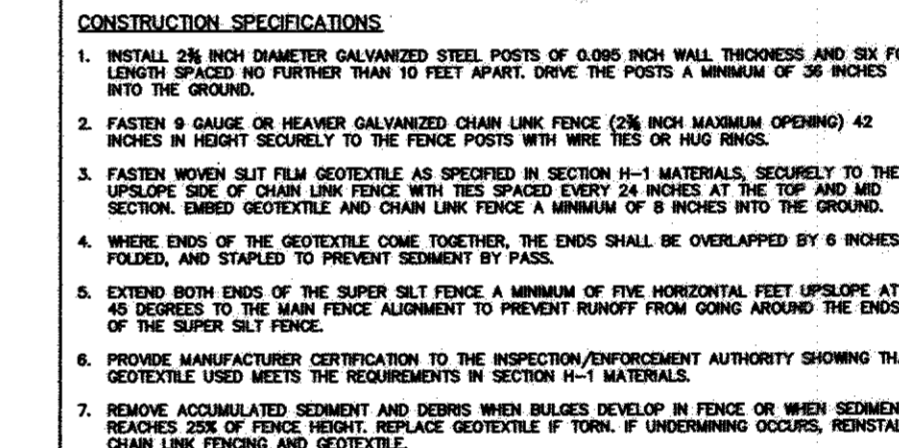
- A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-315-1999 after the future LCO and protected areas are marked clearly in the field. A minimum of 48 hour notice to CID must be given at the following stages:
 - Prior to the start of earth disturbance.
 - Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading.
 - Prior to the start of another phase of construction or sediment control, and relations thereto.
 - Prior to the removal or modification of sediment control practices.
- Other grading or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to avoid conflict with this plan.
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and relations thereto.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and relations thereto. Incremental stabilization (Sec. B-4-1), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be applied between the fall and spring seeding dates if the ground is frozen. Incremental stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15% of cut and/or fill. Stockpiles (Sec. B-4-B) in excess of 20' in height or 20' in diameter shall be anchored with stable output. All concentrated flow, steep slopes, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-B).
- 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 CID.
- Site Analysis:**
 - Total Area of Site: 0.62 Acres
 - Area Disturbed: 0.30 Acres
 - Area to be roofed or paved: 0.09 Acres
 - Area to be vegetatively stabilized: 0.21 Acres
 - Total Cut: 300 Cu. Yds.
 - Total Fill: 300 Cu. Yds.
- Turfgrass/water/borrow area location: N/A
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control to be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection date and should include:
 - Inspection type (routine, pre-storm event, during rain event)
 - Name and title of inspector
 - Weather information (current conditions as well as time and amount of last recorded precipitation)
 - Brief description of project's status (e.g., percent complete) and/or current activities
 - Evidence of sediment discharges
 - Identification of plan deficiencies
 - Identification of sediment controls that require maintenance
 - Identification of missing or improperly installed sediment controls
 - Compliance status regarding the sequence of construction and stabilization requirements
 - Photographs
 - Monitoring/sampling
 - Maintenance and/or corrective action performed
- Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDC).
- Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each workday, whichever is shorter.
- Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be allowed by the CID per the list of HSCD-approved field changes.
- Disturbance shall not occur outside the L.C.O.A. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the HSCD. Unless otherwise specified and approved by the HSCD, disturbance shall not occur more than 30 days continuously after a given time.
- Wash water from any equipment, vehicles, wheelbarrows, and other sources must be treated in a sediment basin or other approved washout structure.
- Topsoil shall be stockpiled and preserved on-site for redistribution onto final grade.
- All Silt Fence and Super Silt Fence shall be placed on-the-contour, and be lubricated at 25 minimum intervals, with lower ends curled up by 2' in elevation.
- Stream channels must not be disturbed during the following restricted time periods (include):
 - Use I and II March 1 - June 15
 - Use III and IIII October - April 30
 - Use V March 1 - May 31
- A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on-site and available when the site is active.



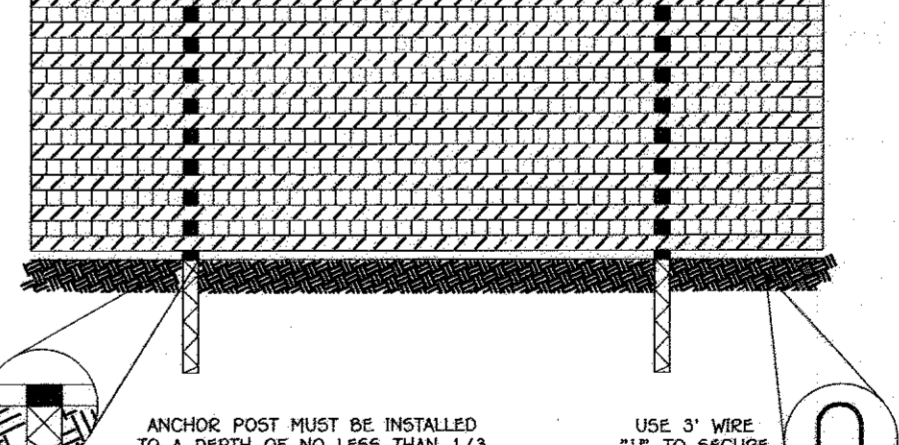
- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SOIL WITH A MINIMUM WIDTH OF 50 FEET (100 FEET FOR SINGLE RESURFACING LOTS). USE MINIMUM WIDTH OF 10 FEET. PLACE SOIL 10 FEET MINIMUM AT THE EXISTING ROAD TO THE ENTRANCE.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED THROUGH THE ENTRANCE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SOIL WITH A WOODEN BRACE WITH 5/8 IN. SLOPE AND A MINIMUM OF 12 FEET OF STEEL PIPE. PROTECT PIPE WITH A WOODEN BRACE SPECIFIED ON APPROVED PLAN. WHEN THE SOIL IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A DRAINAGE DITCH IS NOT ACCEPTABLE UNLESS HIGH SPOT IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE WOVEN SUEDE GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- PLACE CURBED ASPHALT (2 TO 3 INCHES IN SIZE) ON EQUIPMENT RIGIDITY CONCRETE (MINIMUM 4 INCHES THICK) AT LEAST 8 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SOIL.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR HAVE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. REMOVE SEDIMENT, STALLS, DROPPED, OR TRACKED INTO ADJACENT ROADWAY BY VACUATING, SCRAPING, AND/OR SPEEDING. WASHING ROADWAY TO REMOVE AND TRACKED INTO FLOW. NOT ACCEPTABLE UNLESS HIGH SPOT IS NOT LOCATED AT A HIGH SPOT.



- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 48 INCH WALL THICKNESS AND 36 FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN A GAUGE OR HEAVY GALVANIZED CHAIN LINK FENCE (26 HIGH MAXIMUM OPENING 46-50") AT 3 1/2 FEET INTERVALS TO THE FENCE POSTS WITH WIRE TIES OR RIVETS.
- FASTEN WOVEN SUEDE GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURE TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH STAPLES EVERY 24 INCHES AT THE TOP AND MID SECTION. WOVEN SUEDE GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES TO THE GROUND.
- WHERE ENDS OF GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES. FOLDING AND STAPLE TO PREVENT SEEDING BY PASS.
- EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF 6 HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- PROTECT MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BUILDS DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE WIDTH. REPLACE GEOTEXTILE IF TORN IF UNDERMINING OCCURS. REINSTALL FENCE.



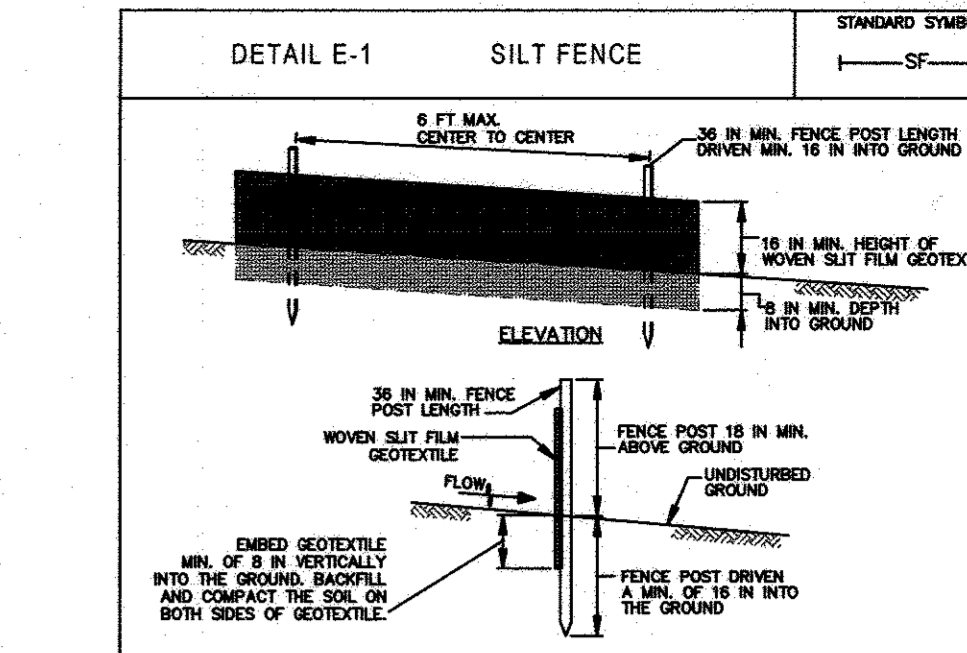
- USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS EXHIBITED ON APPROVED PLANS.
- USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-Biodegradable FIBERS OF DIMENSIONS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. ORGANICALS USED IN THE MAT MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS. MATTING MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES. PREPARED FLOW WITH SEED IN PLACE.
- SECURE MATTING USING STEEL STAPLES OR WOOD STAPLES. STAPLES MUST BE "U" OR "J" SHAPED STEEL WITH A MINIMUM BENCH OF 1/2 INCH AND NO. 10. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES.
- PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDING PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS. UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE. WORK FROM CENTER OF CHANNEL OUTWARD BEHIND FLOWING ROLLS. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDING SURFACE. AVOID STRETCHING THE MATTING.
- OVERLAP OR ADJACENT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS WITH A MINIMUM BENCH OF 1/2 INCH AND NO. 10. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES.
- HYDROLYZABLE MAT IS A STAGNANT PATTERN ON 4 FOOT (MAXIMUM) SPACINGS THROUGHOUT AND 2 FOOT (MAXIMUM) SPACINGS ALONG SLOPES AND ROLL ENDS.
- IF SEEDING IS NOT COMPLETED WITHIN 48 HOURS OF THE END OF THE TYPE OF MAT BEING INSTALLED, THE MATTING IS REQUIRED TO BE STAPLED IN PLACE. LAY THE MATS WITH TOP SOIL OR GRANULAR MATTING SURFACE TO THE DOWNSTREAM SIDE OF THE MATTING. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES. STAPLES MUST BE APPLIED TO THE ENTIRE CHANNEL BED AND SIDES.
- ESTABLISH AND MAINTAIN VEGETATION THAT MEETS REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MAINTAINED IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.



- OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
- NOTIFY "PRESS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-315-1332 AT LEAST 24 HOURS BEFORE STARTING WORK.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, SUPER SILT FENCE, AND TREE PROTECTIVE FENCING. (1 DAY)
- REMOVE NECESSARY TREES AND ROUGH GRADE LOT. (2 DAYS)
- INSTALL TEMPORARY SEEDING. (1 DAY)
- CONSTRUCT ROADS AND DRIVEWAYS. INSTALL SEWER AND WATER HOUSE CONNECTIONS. (4 MONTHS)
- INSTALL PERMANENT SOIL STABILIZATION MATTING IN SWALES AS SHOWN. (3 DAYS)
- INSTALL PERMANENT SEEDING WITH CONSTRUCTION. (1 DAY)
- FINAL GRADING AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND THE SEDIMENTATION OF THE SEDIMENT CONTROL DEVICES HAS BEEN COMPLETED, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. (3 DAYS)
- DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION DETAIL

- FOREST PROTECTION DEVICE ONLY.
- RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
- BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
- ROOT DAMAGE SHOULD BE AVOIDED.
- PROTECTIVE SIGNAGE MAY ALSO BE USED.
- DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.



- WOOD POSTS 1 1/2 x 1 1/2 x 1/4 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD, AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "U" OR "J" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
- USE 36 INCH MINIMUM POSTS DRIVEN 18 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
- USE WOVEN SUEDE FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT 10" TOP AND MID-SECTION BY 4 INCHES.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BUILDS DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE WIDTH. REPLACE GEOTEXTILE IF TORN IF UNDERMINING OCCURS. REINSTALL FENCE.

