



Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
 Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 9/19/14

ONSITE SEWAGE DISPOSAL SYSTEM

P 554638

INSTALLATION APPROVAL DATE: 1/12/15

**PERMIT
CONSTRUCTION**

A _____

PROPERTY ADDRESS: 6555 Cedar Lane

SUBDIVISION: Cedarview LOT: 1 TAX ID: 05-362970

CONTRACTOR: South Carroll Backhoe EMAIL: scbackhoe@comcast.net

CONTRACTOR ADDRESS: 4410 Salem Bottom Road PHONE: 410-596-3618

PROPERTY OWNER: Howard and Shirley Banks EMAIL: _____

OWNER ADDRESS: 6555 Cedar Lane, Columbia, MD 21044 PHONE: 410-531-3192

BAT UNIT MODEL: _____ PUMP SIZE: _____ PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM: GRAVITY LOW PRESSURE DOSED NUMBER OF BEDROOMS: _____

TRENCHES:	LINEAR FEET REQUIRED: <u>SEE BAT PLAN</u>	INLET DEPTH: <u>SEE BAT PLAN</u>
	TRENCH WIDTH: <u>SEE BAT PLAN</u>	MAXIMUM BOTTOM DEPTH: <u>SEE BAT PLAN</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>SEE BAT PLAN</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>SEE BAT PLAN</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Set BAT unit plan.	

ISSUED BY: Dana Bernard ISSUE DATE: 9/19/14 EXPIRATION DATE: 9/19/15

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRAIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

NOT TO SCALE

See Separate Sheet
for As-Built

H-600
w/ pump
chamber

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2'	4'	6'
NUMBER OF TRENCHES		2
TOTAL LENGTH		140'
ABSORPTION AREA		350
DISTRIBUTION BOX LEVEL		Yes
DISTRIBUTION BOX BAFFLE		Elbow
DISTRIBUTION BOX PORT		Yes

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	Yes
MANUFACTURER	Mayer Bros, H-600
CAPACITY	~2,100 GAL
SEAM LOC	Top
TANK LID DEPTH	2.5'-2'
BAFFLES	Front
BAFFLE FILTER	N/A
MANHOLE LOC	Front+Rear
6" PORT LOC	None
WATERTIGHT TEST	No
SLOTTED	N/A
DATE ON LID	Dry

~~PUMP/SEPTIC TANK LEVEL N/A~~

MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION:

10/10/14 Septic was staked by builder/owner, shot contours per BAT plan. Install system exactly per plan. BAT unit may have to be shifted slightly to avoid pub. H₂O line. (Kw)

INSTALLATION:

10/11/14 Trenches installed. Nothing else completed OK to conr. (Kw)

10/29/2014 Septic tank, dist. box and plumbing finished. Need pump and alarm test and proper certification of BAT unit function. (BB)

FINAL INSPECTOR

[Signature]

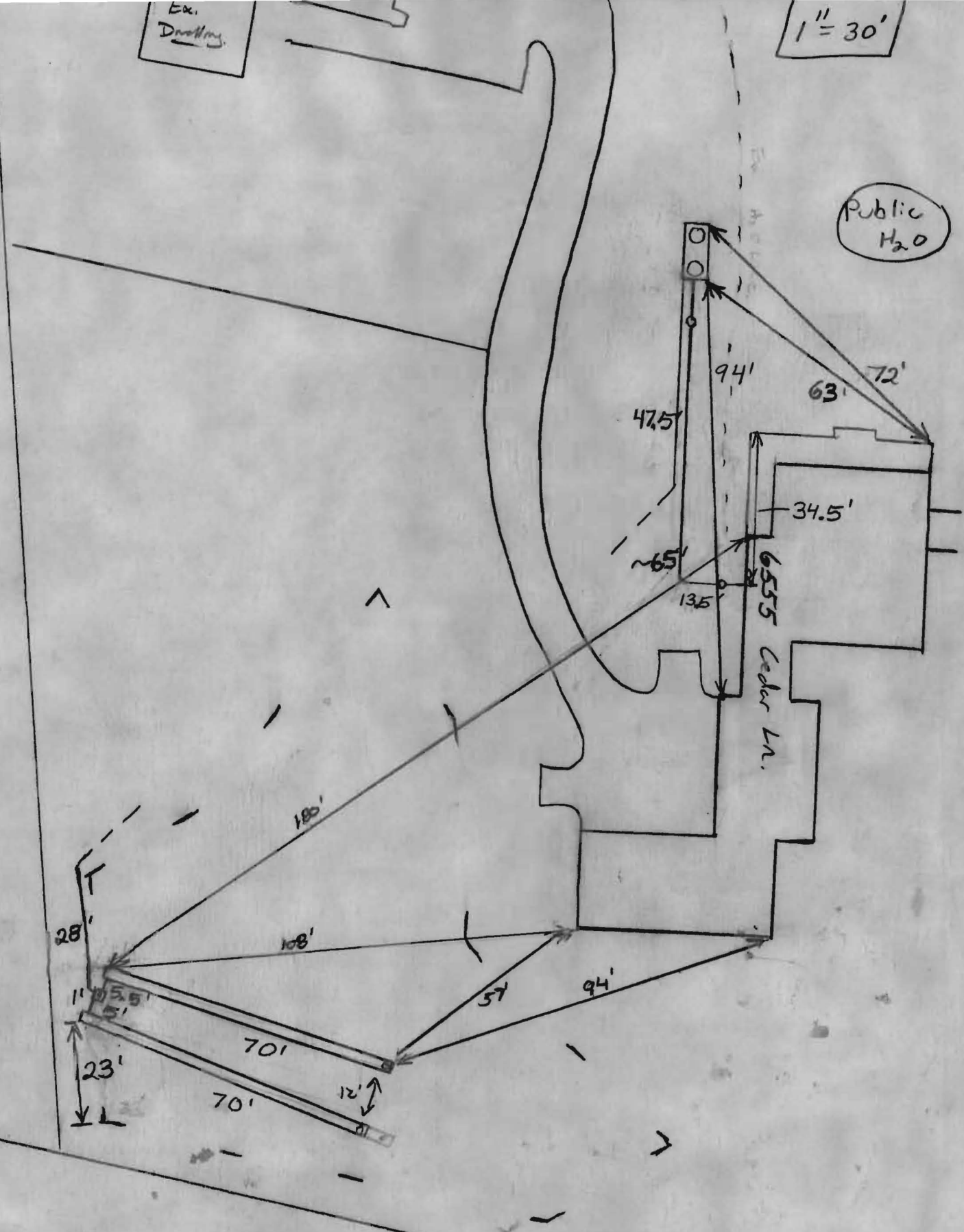
DATE OF APPROVAL

1/13/15

Ex. Drilling

1" = 30'

Public H₂O





MAYER BROS., INC.

Precast Concrete Products

6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 6555 Cedar La.
Columbia, MD 21044

Date of Final Inspection: 12/19/14

Installer: South Carroll Backhoe Service

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

Sincerely,

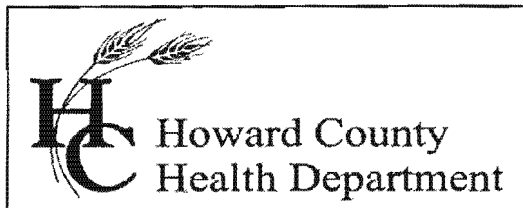
W. Michael Dwyer
Name of Inspector
Mayer Bros., Inc.

PH: 410-796-1434
FX: 410-796-1438

WBE
NPCA Certified Plant

mayerbro@comcast.net
www.mayerbrosprecast.com

Grease Interceptors, Grease Solutions, Aerobic Treatment Units, Septic Tanks, Holding Tanks, Storm Water Structures, Hydroceptors, Bench Barrier, Water Meter Vaults, Sectional Valve Vaults, Top Slabs, Curb Heads, Curb Bumpers, FernoEntry Basement Entries, Scapewal Window Walls, Custom Precast Products



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TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

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Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

January 12, 2015

Howard Bankes
6555 Cedar Lane
Columbia, MD 21044

RE: CedarView, Lot 1
6555 Cedar Lane
Building Permit #: B14001300
PUBLIC WATER

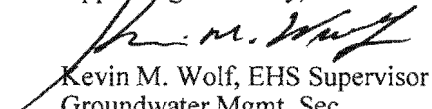
Dear Sir/Madam:

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 1/12/2015.**

The property is served by public water and is therefore exempt from the Health Department water sampling requirements.

By issuance of this letter, this office recommends release of the Use and Occupancy permit for the referenced property.

Approving Authority,



Kevin M. Wolf, EHS Supervisor
Groundwater Mgmt. Sec
Well & Septic Program

KW

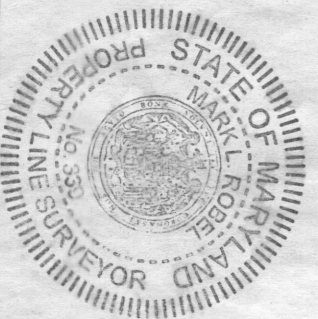
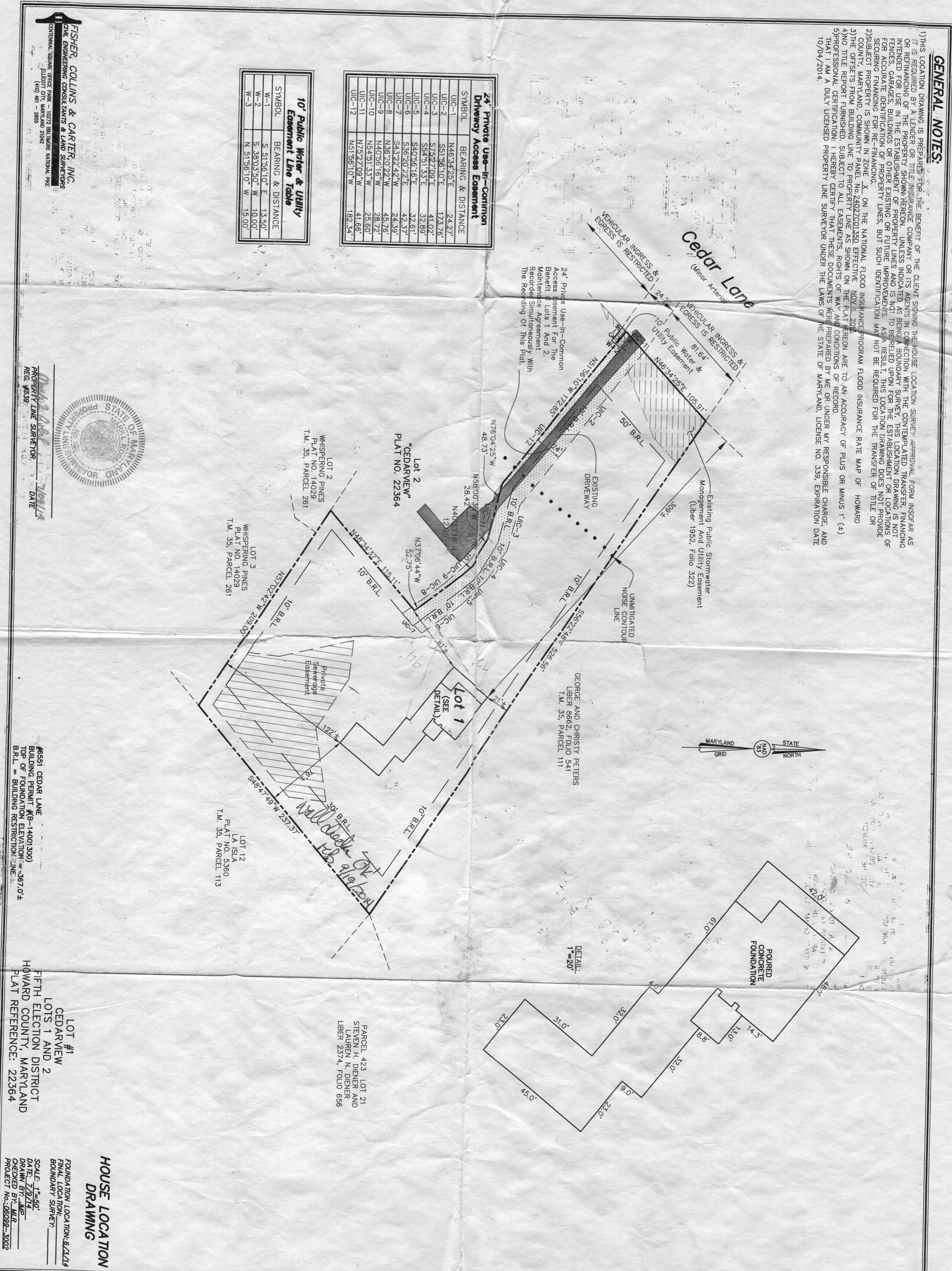
cc: Building Inspector's Office
File

GENERAL NOTES:

- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACQUIRABLE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- 2) SUBJECT PROPERTY IS SHOWN IN ZONE X ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL NO. 2402Z001350 EFFECTIVE NOV. 8, 2015.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 1" (±).
- 4) NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY, AND CONDITIONS OF RECORD.
- 5) PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 339, EXPIRATION DATE 10/04/2014.

24' Private Use-In-Common Driveway Access Easement		
SYMBOL	BEARING & DISTANCE	
UIC-1	N46°34'25"E	24.27'
UIC-2	S51°56'10"E	173.76'
UIC-3	S75°27'09"E	41.02'
UIC-4	S54°51'33"E	32.89'
UIC-5	S40°56'16"E	32.61'
UIC-6	S36°20'22"E	42.37'
UIC-7	S43°22'42"W	24.39'
UIC-8	N36°20'22"W	45.76'
UIC-9	N40°56'16"W	28.72'
UIC-10	N54°51'33"W	25.60'
UIC-11	N75°27'09"W	41.66'
UIC-12	N51°56'10"W	182.34'

10' Public Water & Utility Easement Line Table		
SYMBOL	BEARING & DISTANCE	
W-1	S 51°56'10" E	13.50'
W-2	S 38°03'50" W	10.00'
W-3	N 51°56'10" W	15.00'



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BILTMORE NATIONAL PIKE
 ELLEBOTT CITY, MARYLAND 21042
 (410) 461-2855

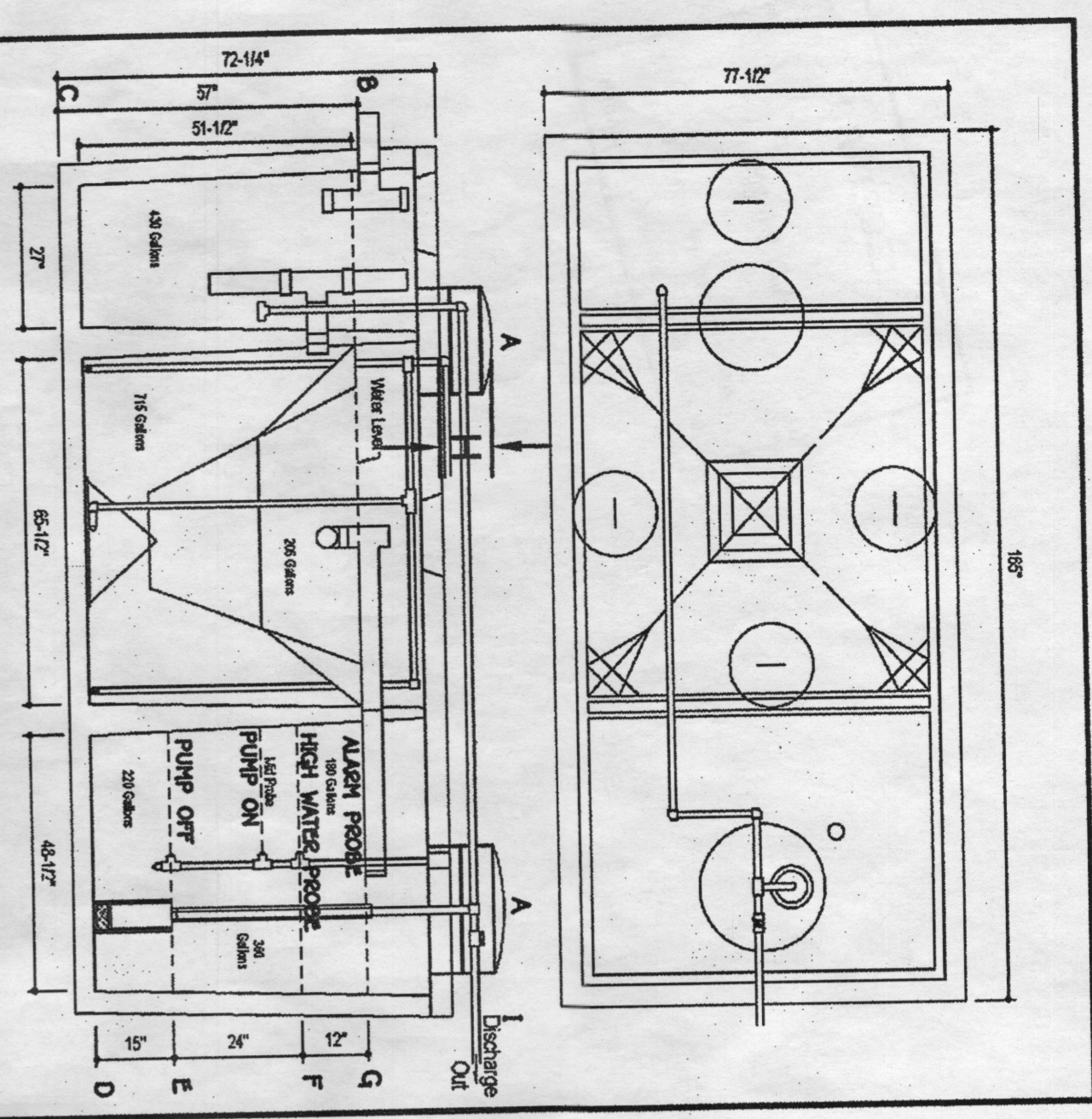
PROPERTY LINE SURVEYOR
 REG. #339
 DATE 7/16/14

#6551 CEDAR LANE
 BUILDING PERMIT #B-14001300
 TOP OF FOUNDATION ELEVATION = 367.0'±
 B.R.L. = BUILDING RESTRICTION LINE

LOT #1
 CEDARVIEW
 LOTS 1 AND 2
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 PLAT REFERENCE: 22364

HOUSE LOCATION DRAWING

FOUNDATION LOCATION: 6/24/14
 FINAL LOCATION: _____
 BOUNDARY SURVEY: _____
 SCALE: 1"=50'
 DATE: 7/9/14
 DRAWN BY: MJE
 CHECKED BY: MJE
 PROJECT NO.: 06099-3002



DESIGN DATA & GENERAL NOTES
 1. All components must be approved by the engineer and the Howard County Health Department prior to installation.
 2. The pump chamber shall be constructed of 12 gauge galvanized steel.
 3. The pump chamber shall be installed on a concrete pad.
 4. The pump chamber shall be installed on a concrete pad.
 5. The pump chamber shall be installed on a concrete pad.
 6. The pump chamber shall be installed on a concrete pad.
 7. The pump chamber shall be installed on a concrete pad.
 8. The pump chamber shall be installed on a concrete pad.
 9. The pump chamber shall be installed on a concrete pad.
 10. The pump chamber shall be installed on a concrete pad.
 11. The pump chamber shall be installed on a concrete pad.
 12. The pump chamber shall be installed on a concrete pad.

600 GPD BNR SYSTEM
H-600 BNR
WITH 750 GALLON PUMP CHAMBER
 March 15, 2009
 Draw No. H-600 BNR-01
 No. Scale

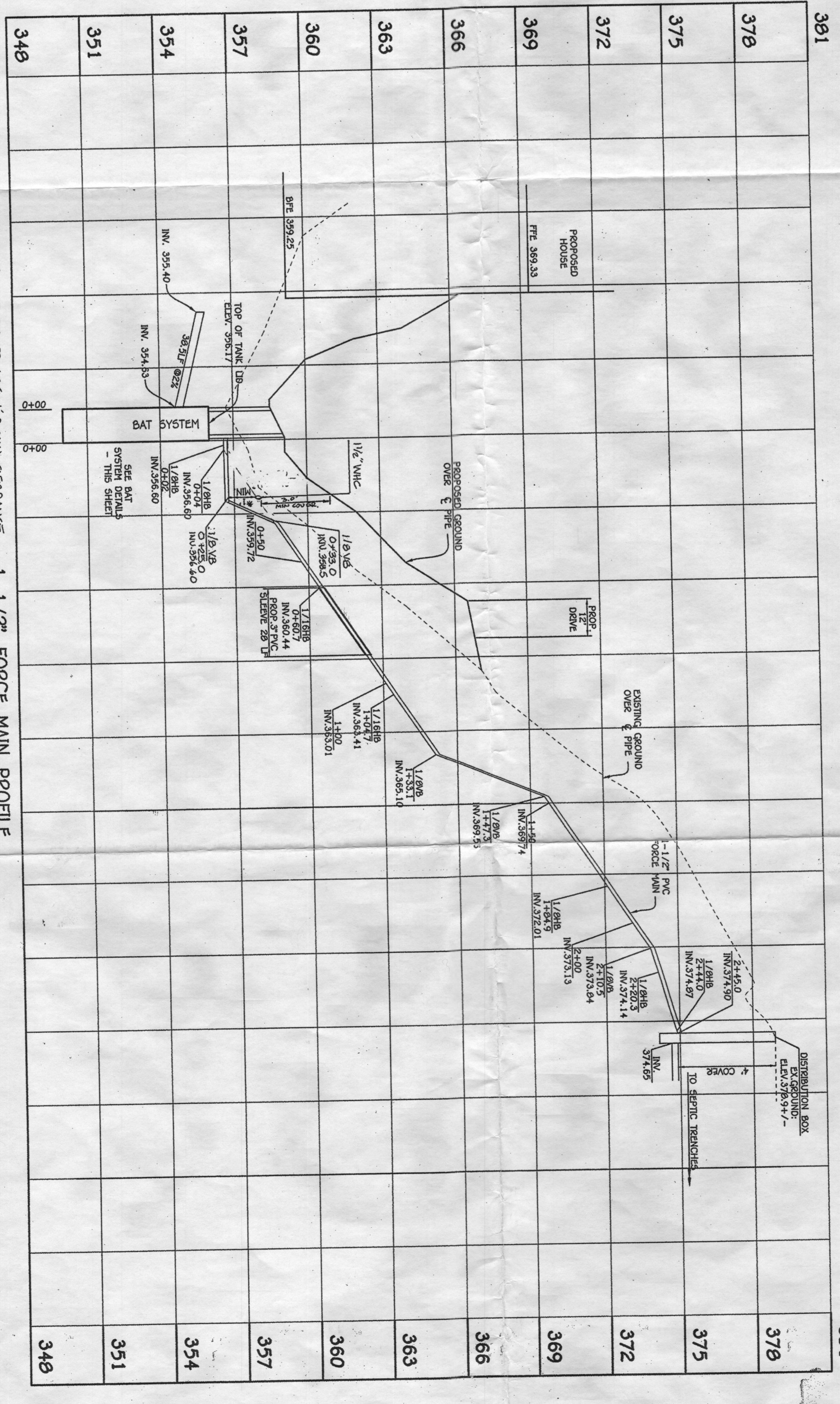
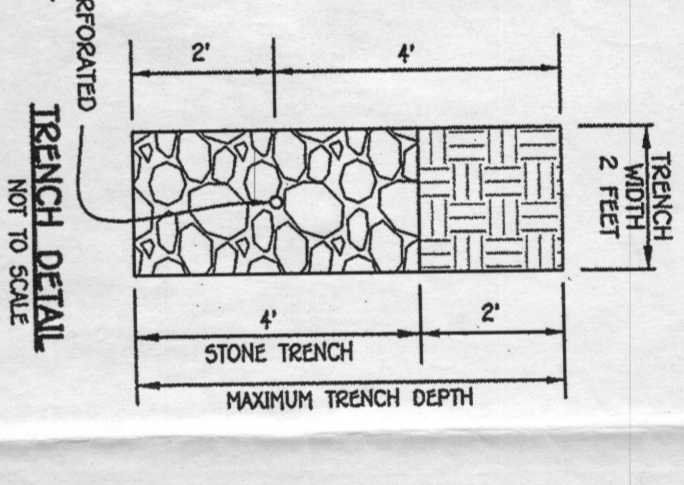
Goulds Pumps
Submersible Effluent Pump
MODEL 3885
 PRESSURE RATED FOR RESIDENTIAL APPLICATIONS

Goulds Pumps
Submersible Effluent Pump
MODEL 3885

SEPTIC SYSTEM DESIGN
 4 BEDROOM HOUSE
 TRENCH LENGTH = 140 FEET
 TRENCH WIDTH = 2 FEET
 TRENCH INVERT = 4.00 FEET
 TRENCH 11 INVERT = 374.7
 TRENCH 12 INVERT = 374.0
 TRENCH 13 INVERT = 372.0
 TRENCH 14 INVERT = 372.0
 EFFECTIVE AREA BEGINS AT 4.00 FEET
 FFE = 359.33
 BFE = 359.33

SEPTIC SYSTEM ELEVATIONS
 A = 354.50 (INV. INTO TANK)
 B = 350.15
 C = 350.46
 D = 351.73
 E = 353.73
 F = 354.74
 G = 354.74
 H = 2.33 (7" MIN.)
 I = 356.60 (INV. OUT OF TANK)
 JFE = 359.33
 BFE = 359.33

- BAT NOTES**
1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION.
 2. THE BATTERY SHALL BE INSTALLED IN A TIGHTLY COVERED TANK. IT IS RECOMMENDED ON THE BATTERY MANUFACTURER'S SPECIFICATION IS 3 FEET.
 3. THE BATTERY SHALL BE INSTALLED ON A CONCRETE PAD.
 4. THE BATTERY SHALL BE INSTALLED ON A CONCRETE PAD.
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 12. THE BATTERY SHALL BE INSTALLED ON A CONCRETE PAD.



PERFORMANCE RATINGS (GPM @ 20' HEAD)

Model	1/2" Dia	3/4" Dia	1" Dia	1 1/4" Dia	1 1/2" Dia	2" Dia	3" Dia	4" Dia
3885	100	150	200	250	300	350	400	450
3885	100	150	200	250	300	350	400	450
3885	100	150	200	250	300	350	400	450

APPLICATIONS
 • Residential
 • Commercial
 • Industrial
 • Municipal

FEATURES
 • Cast Iron
 • Cast Steel
 • Cast Aluminum
 • Cast Bronze

INSTALLATION
 • The pump chamber shall be installed on a concrete pad.
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BAT SYSTEM PROFILE, NOTES AND DETAILS

SINGLE FAMILY DETACHED CEDARVIEW

Lot 1
 PARCEL #280
 FIFTH ELECTION DISTRICT ZONED R-20
 DEPT. OF HEALTH & ENVIRONMENTAL SERVICES
 SCALE: 1" = 30'
 SHEET 6 OF 6
 SDF-14-057

FISHER COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 10000 WOODBURN ROAD, SUITE 200
 WASHINGTON, DC 20027
 (301) 424-2200

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 35888, DESIGNATION: CIVIL ENGINEER.

APPROVED FOR PUBLIC WATER AND SEWAGE SYSTEMS:
 HOWARD COUNTY HEALTH DEPARTMENT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING:

OWNER/DEVELOPER:
 MARK E. COLLETT
 CHEESE COLLETT
 6951 CEDAR DALE
 COLUMBIA, MARYLAND 21044-4029
 410-338-3093

DATE: 5/19/14

PROJECT: CEDARVIEW LOT 1

FLAT NO.: 22364

BLOCK NO.: 23

ZONE: R-20

TAX/ZONE: 35

SECTION: X

PARCEL NO.: 280

CHANGUS TR. ELEC. DIST.: 5TH

DATE: 5/19/14

DATE: 5/19/14

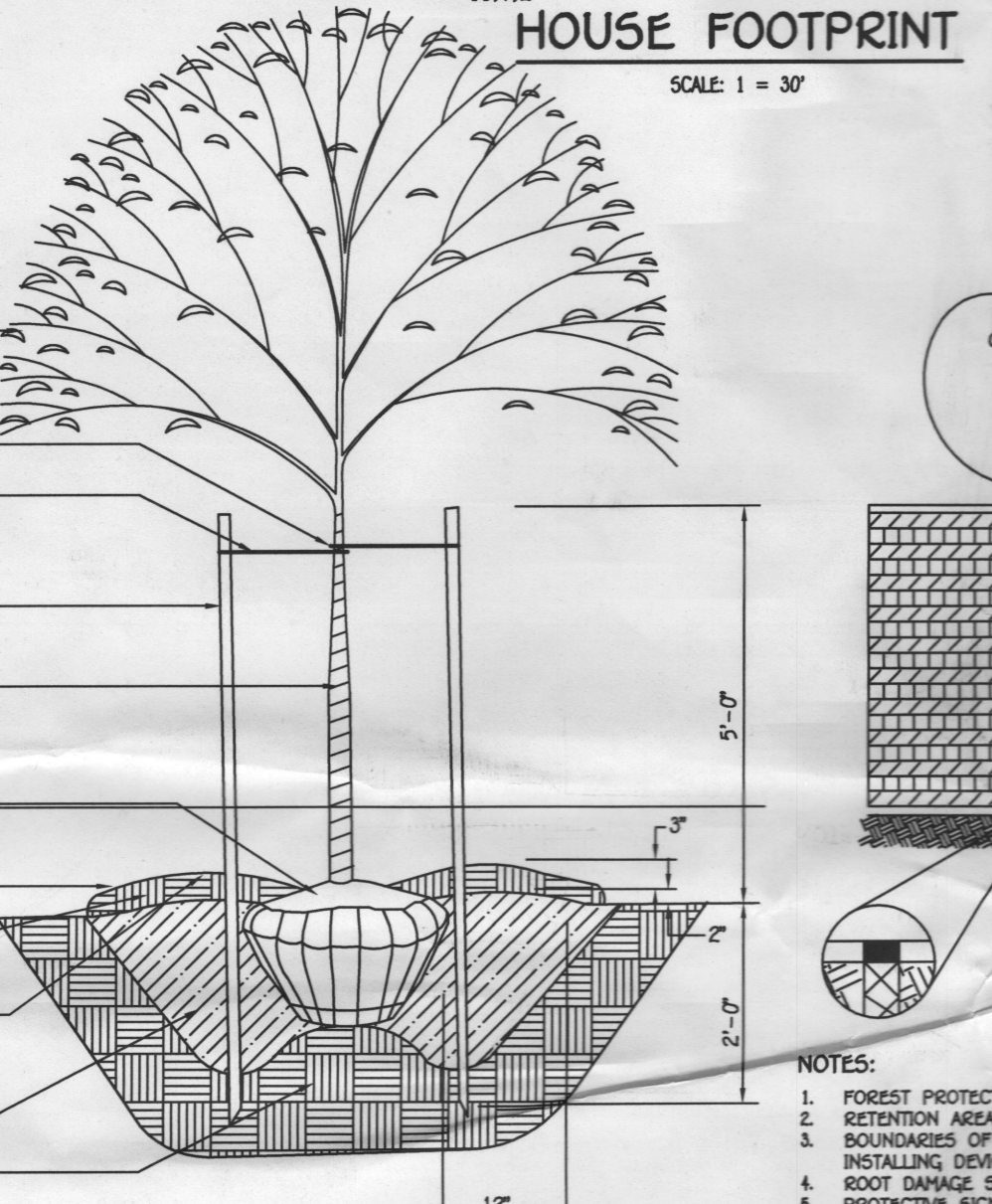
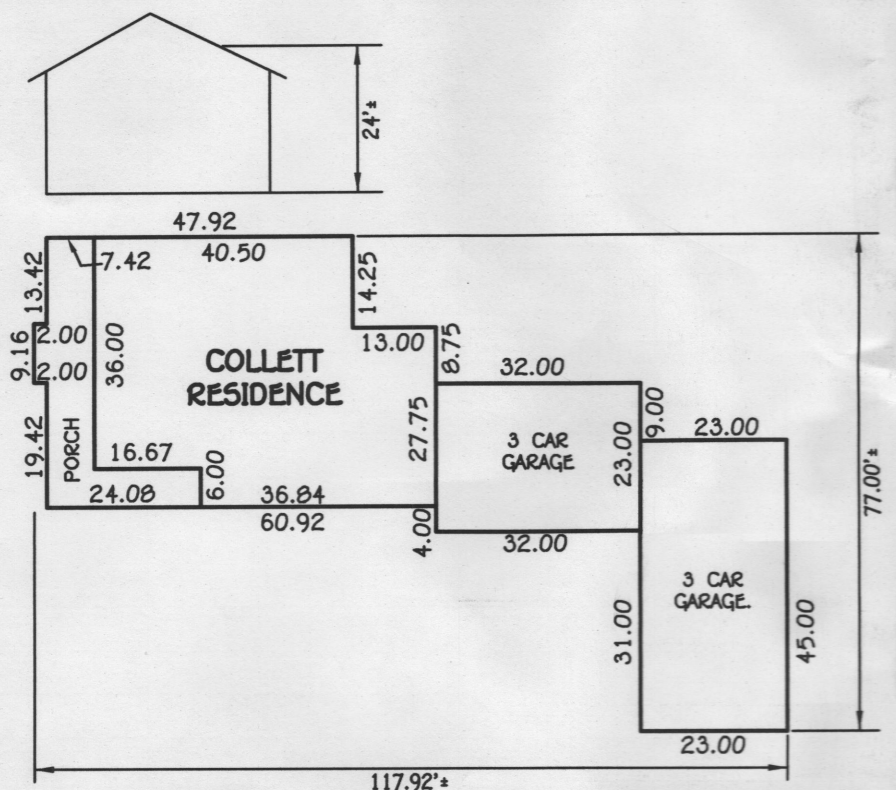
LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	SILT FENCE
---	SUPER SILT FENCE
---	SUPER DIVERSION FENCE
---	TRIP
---	TRIP PROTECTION FENCE
---	TOP SOIL STABILIZATION MATING CHANNEL
---	SHOULDER BUILT PROTECTION
---	LIMIT OF DISTURBANCE
---	EX. LIMIT OF TREES AND FOREST
---	PROPOSED LANDSCAPING
---	EXISTING TREES
---	EXISTING TREES - TO BE CREDITED
---	EXISTING TREES - TO BE REMOVED
---	EXISTING GRAVEL AREA TO BE REMOVED
---	PROPOSED GRAVEL
---	EXISTING GRAVEL
---	EXISTING CONCRETE WALK
---	PROPOSED CONCRETE WALK
---	EXISTING DRIVE TO BE REMOVED
---	PRIVATE LIC ACCESS EASEMENT
---	PRIVATE LIC ACCESS EASEMENT

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	SEDIMENT AND EROSION CONTROL PLAN AND NOTES
4	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
5	BAT SYSTEM SITE PLAN
6	BAT SYSTEM PROFILE, NOTES AND DETAILS

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
LOT 1	6551 CEDAR LANE

SITE DEVELOPMENT PLAN CEDAR VIEW LOT 1

TAX MAP No. 35 GRID No. 23 PARCEL NO. 260
5TH FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



NOTE: CONTRACTOR TO REGRADE, SOO OR HYDROSEED AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF THEIR WORK.

SPRAY WITH MILT-PROOF ACCORDING TO MANUFACTURERS STANDARDS

PRUNE 1/3 LEAF AREA BUT RETAIN NATURAL FORM OF TREE.
2 PIECES OF REINFORCED RUBBER HOSE
DOUBLE #12 GALVANIZED WIRE QUITS TWISTED

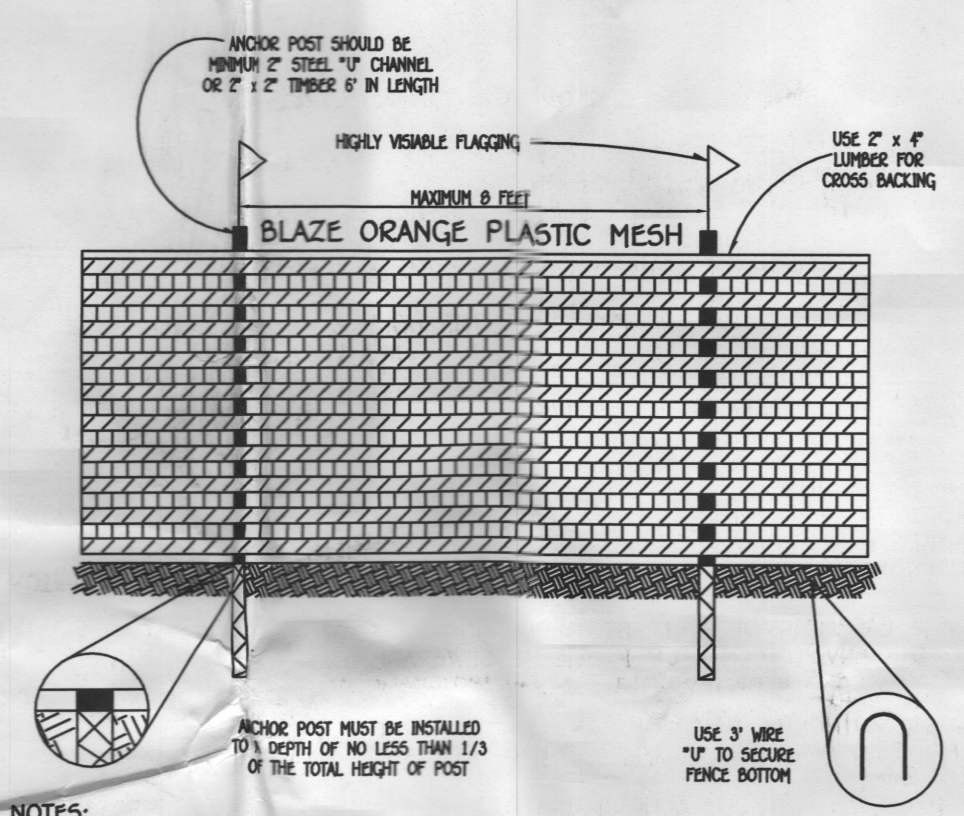
3"-2" x 2" OAK STAKES, NOTCH STAKES TO HOLD WIRE
WRAP TRUNK TO SECOND TIER OF BRANCHES WITH WATERPROOF TREE WRAP, TIE AT 2' INTERVALS
REMOVE ANY COVERING FROM TOP OF ROOT CROWN
3" MULCH
MAINTAIN GROUND LINE WITH TOP OF ROOT CROWN
CONSTRUCT 3" SAUCER 16" FLOOD WITH WATER TWICE WITHIN 24 HOURS
TOP SOIL MIXTURE
CONVEX BOTTOM 6" MIN. HT.

TREE PLANTING DETAIL
NOT TO SCALE

• The owner, tenant and/or their agents shall be responsible for maintenance of the required landscaping, plant materials, 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 required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

• At the time of installation, all shrubs and other plantings herewith listed and approved for this site shall be of the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape survey until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.

• Should any tree designated for preservation, for which credit is given, die prior to release of bonds, the owner will be required to replace the tree with the equivalent species or with a tree which will obtain the same height, spread and growth characteristics. The replacement tree must be a minimum of 3 inches in caliper and installed as required in the Landscape Manual.



TREE PROTECTION DETAIL
NOT TO SCALE

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

PLANTING SPECIFICATIONS

Plans, related material, and operations shall meet the detailed description as given on the plans and as described herein.

All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug; no heeled-in plants from cold storage will be accepted.

Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agenda.

Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.

Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line.

Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction.

Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.

Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence.

All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans.

Positive drainage shall be maintained in planting beds 2 percent slope).

Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.

Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific ground cover to be treated.

All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded.

This plan is intended for landscape use only. see other plan sheets for more information on grading, sediment control, layout, etc.

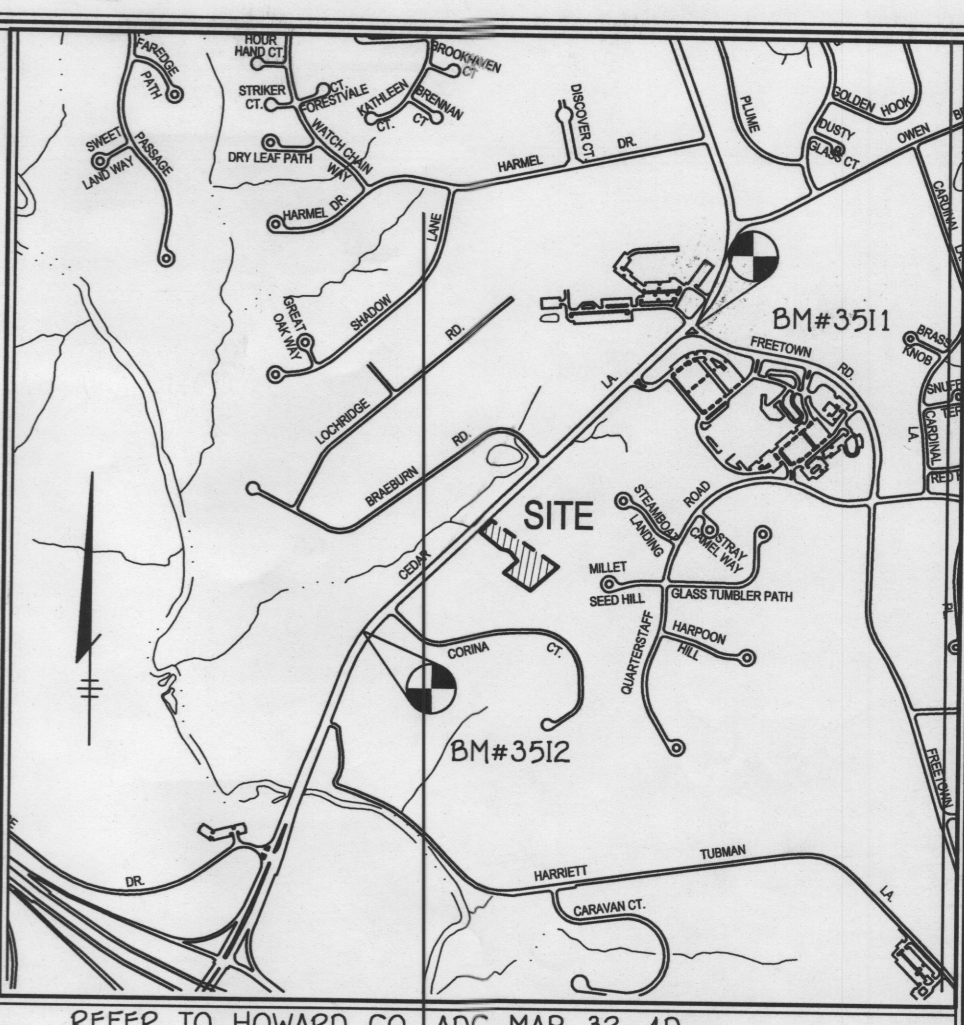
GENERAL NOTES (cont'd)

- ALL RESIDENTIAL DWELLING UNITS SHALL HAVE A 1/2" CONNECTION WITH A 1" OUTSIDE METER SETTING, STD. DET. W-3.28.
- STORMWATER MANAGEMENT (SWM) IS PROVIDED FOR THIS PROJECT. THE ON-SITE PE OF 1.6" IS BEING TREATED THROUGH USE OF MICRO-BIORETENTION AND NON-ROOFTOP DISCONNECTION.
- WATER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.1228 OF THE HOWARD COUNTY CODE.
- PUBLIC WATER ALLOCATIONS WILL BE GRANTED AT TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- PROPERTY SUBJECT TO WAIVER OF SECTION 1.4A OF VOLUME II, WATER AND SEWER OF THE HOWARD COUNTY DESIGN MANUAL WHICH ON JANUARY 27, 2012 THE BUREAU OF ENGINEERING APPROVED A WAIVER TO LOT 1 AND LOT 2 TO CONNECT TO THE PUBLIC SEWER SYSTEM WITH THE FOLLOWING CONDITION: A. LOTS 1 AND 2 OF THE CEDARVIEW DEVELOPMENT MUST CONNECT TO THE PUBLIC SEWER SYSTEM WITHIN ONE YEAR AFTER THE PUBLIC SEWER ABUTTING THE LOTS IS CONSTRUCTED AND PLACED IN SERVICE.
- A COMMUNITY MEETING WAS CONDUCTED AT THE TIME OF SUBDIVISION ON NOVEMBER 28, 2007 FOR THE PURPOSE OF THE DEVELOPER TO PROVIDE INFORMATION TO THE COMMUNITY REGARDING THE PROPOSED RESIDENTIAL DEVELOPMENT AND TO ALLOW THE COMMUNITY TO ASK QUESTIONS AND TO MAKE COMMENTS, PER SECTION 16.128(D), OF THE SUBDIVISION REGULATIONS. NO MEETING IS REQUIRED FOR THIS PLAN STAGE.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDED OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
- ADJUSTMENTS TO SEPTIC EASEMENT AREA ARE NOT PERMITTED WITHOUT ADDITIONAL TESTING.

GENERAL NOTES

- SUBJECT PROPERTY ZONED R-20 per 10/06/13 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF THIS SUBMISSION = 1.891 AC.
- LIMIT OF DISTURBED AREA = 1.108 AC.
- PRESENT ZONING DESIGNATION = R-20 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
- PROPOSED USE: RESIDENTIAL
- PREVIOUS HOWARD COUNTY FILES: F-08-185, PLAT NO. 22364.
- 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 AREA OF FOREST TO BE RETAINED = 0.00 AC.
- TOTAL AREA OF LOTS / BUILDABLE PARCELS = 1.891 AC.
- TOTAL GREEN OPEN AREA = 1.839 AC.
- TOTAL IMPERVIOUS AREA = 0.251 AC.
- TOTAL AREA OF ERODIBLE SOILS = 0.00 AC.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- ALL LOT AREAS ARE MORE OR LESS (±).
- DISTANCES SHOWN ARE BASED ON SURFACE MEASUREMENT AND NOT REDUCED TO NAD '83 GRID MEASUREMENT.
- B.R.L. DENOTES BUILDING RESTRICTION LINE.
- A FEE IN LIEU OF FOREST CONSERVATION EASEMENT HAS BEEN PAID IN THE AMOUNT OF \$13,721.40 TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOREST CONSERVATION ACT UNDER F-08-185.
- A FEE IN LIEU OF PROVIDING OPEN SPACE HAS BEEN PAID IN THE AMOUNT OF \$1,500.00 UNDER F-08-185.
- NOISE STUDY PREPARED BY MARS GROUP DATED OCTOBER, 2007.
- THE 65 DBA NOISE CONTOUR LINE DRAWN ON THIS PLAN IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 DBA NOISE EXPOSURE. THE 65 DBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
- LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A LANDSCAPE SURETY FOR 1 SHADE TREE IN THE AMOUNT OF \$300.00 FOR LOT 1 WILL BE POSTED AS A PART OF THE GRADING PERMIT.
- A PRIVATE USE-IN-COMMON DRIVEWAY ACCESS AND MAINTENANCE AGREEMENT FOR SHARED DRIVEWAY FOR LOTS 1 AND 2 HAS BEEN RECORDED IN LIBER 14866 AT FOLIO 335.
- FOREST STAND DELINEATION AND WETLAND STUDY WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED OCTOBER 26, 2007. NO WETLANDS OR STREAMS EXIST ON SITE PER F-08-185.
- NO CEMETERIES EXIST ON THIS SITE BASED ON BOTH A SITE VISIT AND AN EXAMINATION OF THE HOWARD COUNTY CEMETERY INVENTORY MAP.
- NO 100 YEAR FLOOD PLAIN EXISTS ON SITE.
- THERE ARE NO 15-24.9% SLOPES ON THE SUBJECT PROPERTY.
- THERE ARE NO 25% OR GREATER SLOPES ON THIS SUBJECT PROPERTY.
- THERE ARE NO 25% OR GREATER SLOPES ON THIS SUBJECT PROPERTY.
- PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT OF WAY LINE AND NOT ONTO THE FLAG OR PIPE STEM LOT DRIVEWAY.
- MINIMUM BUILDING RESTRICTION SETBACKS FROM PROPERTY LINES AND PUBLIC ROAD RIGHTS-OF-WAY ARE TO BE IN ACCORDANCE WITH THE DEVELOPMENT CERTIFICA
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL NO. 45-2003 AND THE ZONING REGULATIONS AS AMENDED UNDER COUNCIL BILL NO. 75-2003. 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.
- IN ACCORDANCE WITH SECTION 12B 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 SETBACKS. THE 15' MINIMUM DISTANCE BETWEEN STRUCTURES DOES NOT APPLY TO THOSE REFERENCED FEATURES NOR BETWEEN OPEN DECKS AND A DWELLING STRUCTURE OR ANOTHER DECK.
- FOR DRIVEWAY ENTRANCE DETAIL REFER TO HO.CO. DESIGN MANUAL VOL. IV DETAILS R.6.06.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
 - WIDTH - 12' (16' IF SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - 9" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.)
 - GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT TURNING RADIUS.
 - STRUCTURES - (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS (HEAVY-LOADING)
 - DRAINAGE ELEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.

GENERAL NOTES (CONTINUED THIS SHEET.)



REFER TO HOWARD CO. ADC MAP 32-4D
VICINITY MAP
SCALE: 1" = 1200'

HOWARD COUNTY
GEODETIC SURVEY CONTROL NO. 3511
N 555100.7760
E 1344893.6769
ELEVATION: 400.103'

HOWARD COUNTY
GEODETIC SURVEY CONTROL NO. 3512
N 555100.7760
E 1342733.0493
ELEVATION: 329.782'

SCHEDULE A - PERIMETER LANDSCAPE CHART

PERIMETER	P-1	P-2	P-3	P-4	TOTAL
CATEGORY	ADJACENT TO ROADWAY	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	
LANDSCAPE TYPE	N/A	A	A	A	
LINEAR FEET OF PERIMETER	105.90 L.F.	526.56 L.F.	237.37 L.F.	209.00 L.F.	
NUMBER OF PLANTS REQUIRED					
SHADE TREES	N/A	(526.56' / 60' = 8.77) = 9	(237.37' / 60' = 3.95) = 4	(209.00' / 60' = 3.48) = 4	17
SMALL/MEDIUM DECIDUOUS TREES					
CREDIT FOR WALL, FENCE OR BERM	N/A	N/A	N/A		
CREDIT FOR EXISTING VEGETATION					
SHADE TREES	N/A	10	4	2	12
SMALL/MEDIUM DECIDUOUS TREES (2:1 SUBSTITUTION)		10 EVERGREENS = 5 SHADE TREES	0	2 EVERGREENS = 1 SHADE TREE	4
NUMBER OF PLANTS PROVIDED					
SHADE TREES	N/A	(9 REQUIRED - 5 CREDIT) = 4	(4 REQUIRED - 4 CREDIT) = 0	(4 REQUIRED - 3 CREDIT) = 1	1
SMALL/MEDIUM DECIDUOUS TREES		0	0	0	0

A Total Landscape Surety For 1 Shade Tree @ \$300.00 is provided With Grading Permit Surety Agreement.

APPROVED FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT.

B. Dufour for Maura Rooshman
COUNTY HEALTH OFFICER

5/9/2017
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development	Date				
Chief, Development Engineering Division	Date				
Director - Department of Planning and Zoning	Date				
PROJECT: CEDARVIEW LOT 1	SECTION: X				
PARCEL NO.: 260					
PLAT NO. 22364	BLOCK NO. 23	ZONE R-20	TAX/ZONE 35	ELEC. DIST. 5TH	CENSUS TR. 6056.02

TITLE SHEET

SINGLE FAMILY DETACHED
CEDARVIEW
Lot 1

TAX MAP #35 GRID #23 PARCEL #260
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ZONED: R-20
SCALE: 1"=30' DATE: MARCH 28, 2014
SHEET 1 OF 6

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLIOTT CITY, MARYLAND 21042
(410) 461-1895

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: 1/12/18.

STEPHANIE TUTT
DATE

Developer/Builder: **OWNER/DEVELOPER**
MARK E. COLLETT, CHERIE COLLETT
6551 CEDAR LANE
COLUMBIA, MARYLAND 21044-4028
410-336-3009

LEGEND	
	EXISTING CONTOUR 2' INTERVAL
	PROPOSED CONTOUR 2' INTERVAL
	SALT FENCE
	SUPER SALT FENCE
	SUPER DIVERSION FENCE
	TREE PROTECTION FENCE
	TREE STABILIZATION MATTING CHANNEL
	STANDARD SILT PROTECTION
	LINE OF DISTURBANCE
	EX. LIMIT OF TREES AND FOREST
	PROPOSED LANDSCAPING
	EXISTING TREES
	EXISTING TREES - TO BE CREDITED
	EXISTING TREES - TO BE REMOVED
	EXISTING GRAVEL AREA TO BE REMOVED
	PROPOSED GRAVEL
	EXISTING CONCRETE WALK
	PROPOSED CONCRETE WALK
	EXISTING DRIVE TO BE REMOVED
	PRIVATE USE ACCESS EASEMENT
	NON-ROOFTOP DISCONNECTION CREDIT AREA
	EX. PUBLIC SWM AND UTILITY EASEMENT
	EX. PUBLIC WATER AND UTILITY EASEMENT

SOILS LEGEND		
SOIL	NAME	CLASS
GbB	Gladstone loam, 3 to 8 percent slopes	B
GbC	Gladstone loam, 8 to 15 percent slopes	B
GmB	Glenville silt loam, 3 to 8 percent slopes	C
GmC	Glenville-Baile silt loams, 0 to 8 percent slopes	C
McC	Manor-channery loam, 0 to 15 percent slopes	B

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas

LANDSCAPING PLANT LIST			
QTY.	KEY	NAME	SIZE
6		ACER RUBRUM "OCTOBER GLORY" (OCTOBER RED MAPLE)	2 1/2" - 3" CALIPER FULL CROWN, B&B

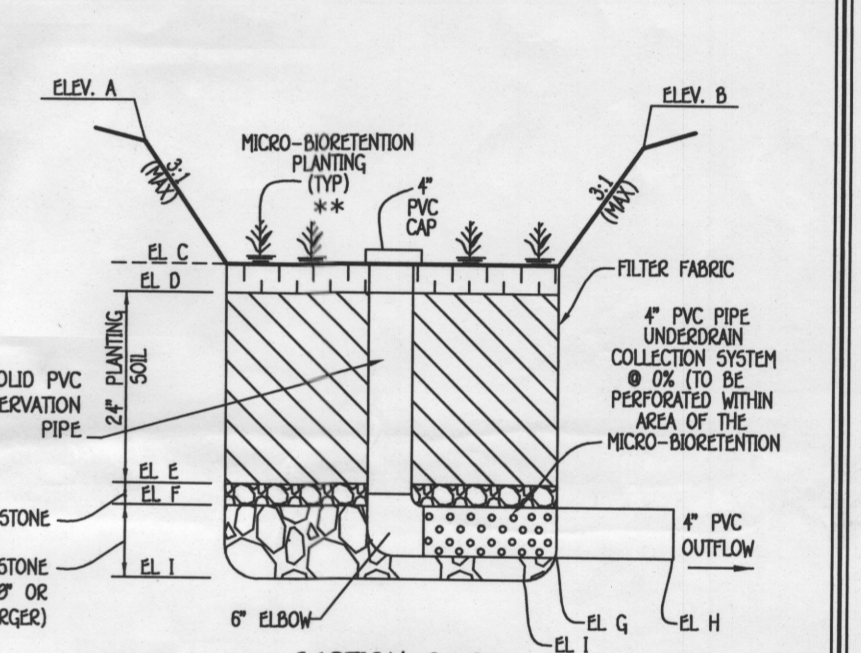
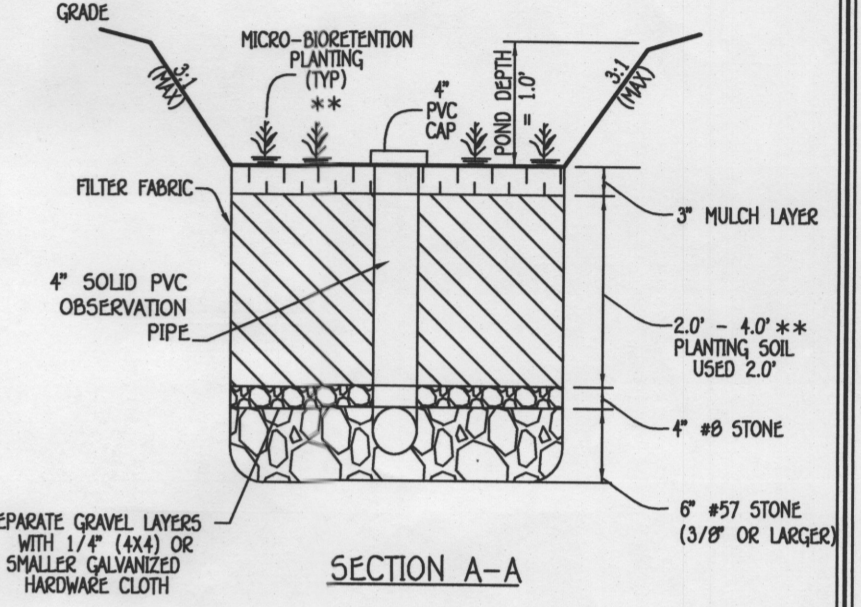
NOTE: IF THE REMOVAL OF ANY TREE DESIGNATED AS TO REMAIN (CREDIT) IS REQUIRED FOR THE INSTALLATION OF THE INITIAL OR REPLACEMENT SPECIFIC TRENCHES, THEN A REPLACEMENT TREE OF SIMILAR SPECIES AND CALIPER WILL BE PLANTED TO FULFILL THE LANDSCAPING OBLIGATION.

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED, PRIVATE BIORETENTION FILTER (M-6)

- 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 SHALL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION. CONSIDER BERRY TOXICITY TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STALKS AND WEEDS.
- MULCH SHALL BE REAPPLIED EACH SPRING. REMOVE EXCESSIVE MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE MONITORED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

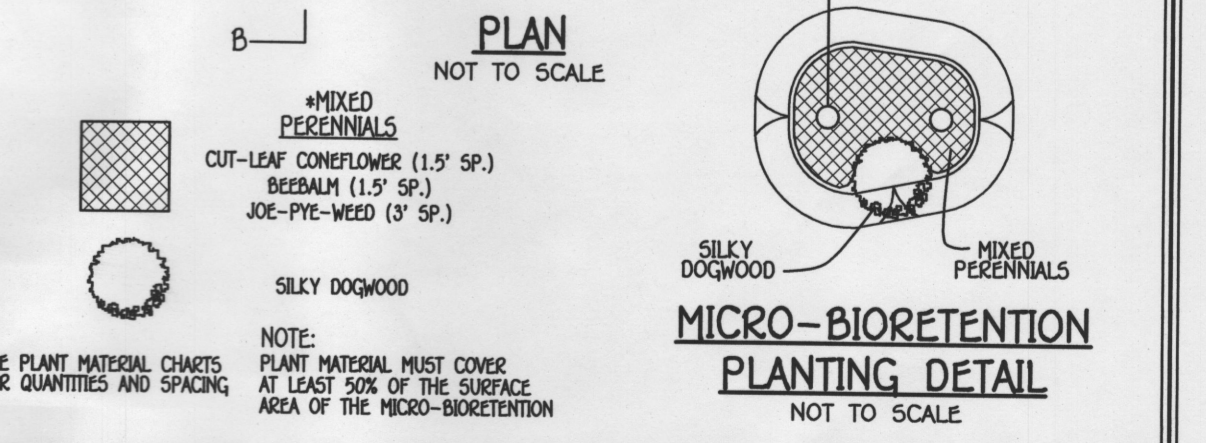
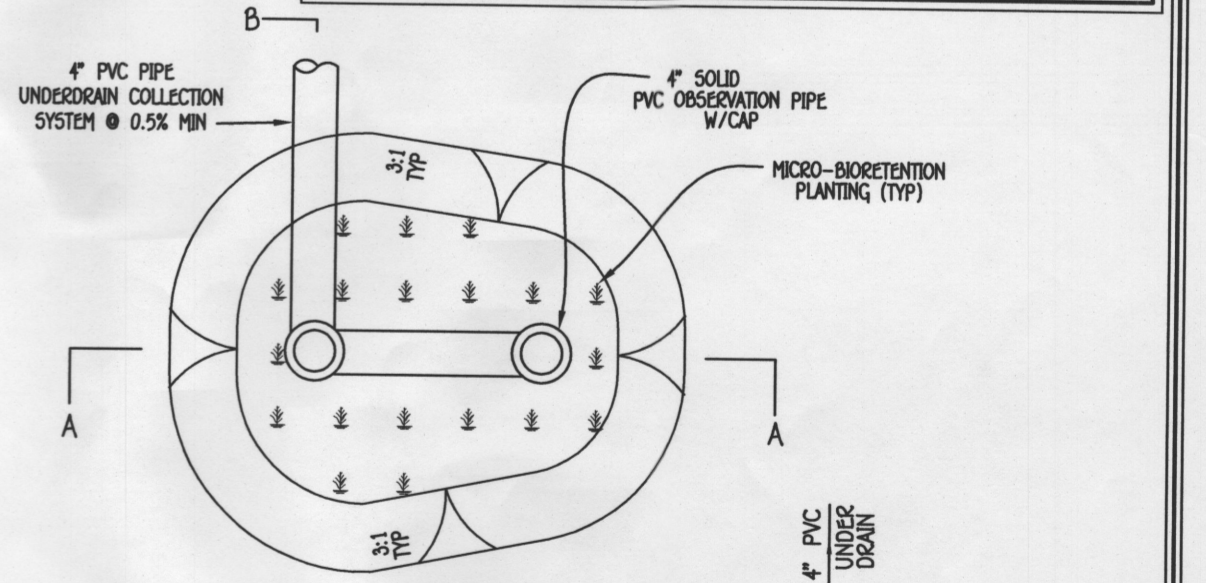
OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED, DISCONNECTION OF NONROOFTOP RUNOFF (N-2)

- MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF PERVIOUS AREA IN COMMERICAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.



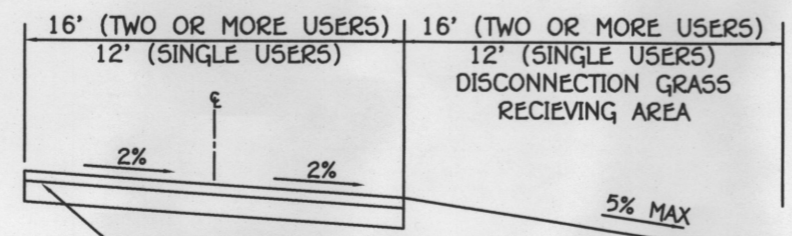
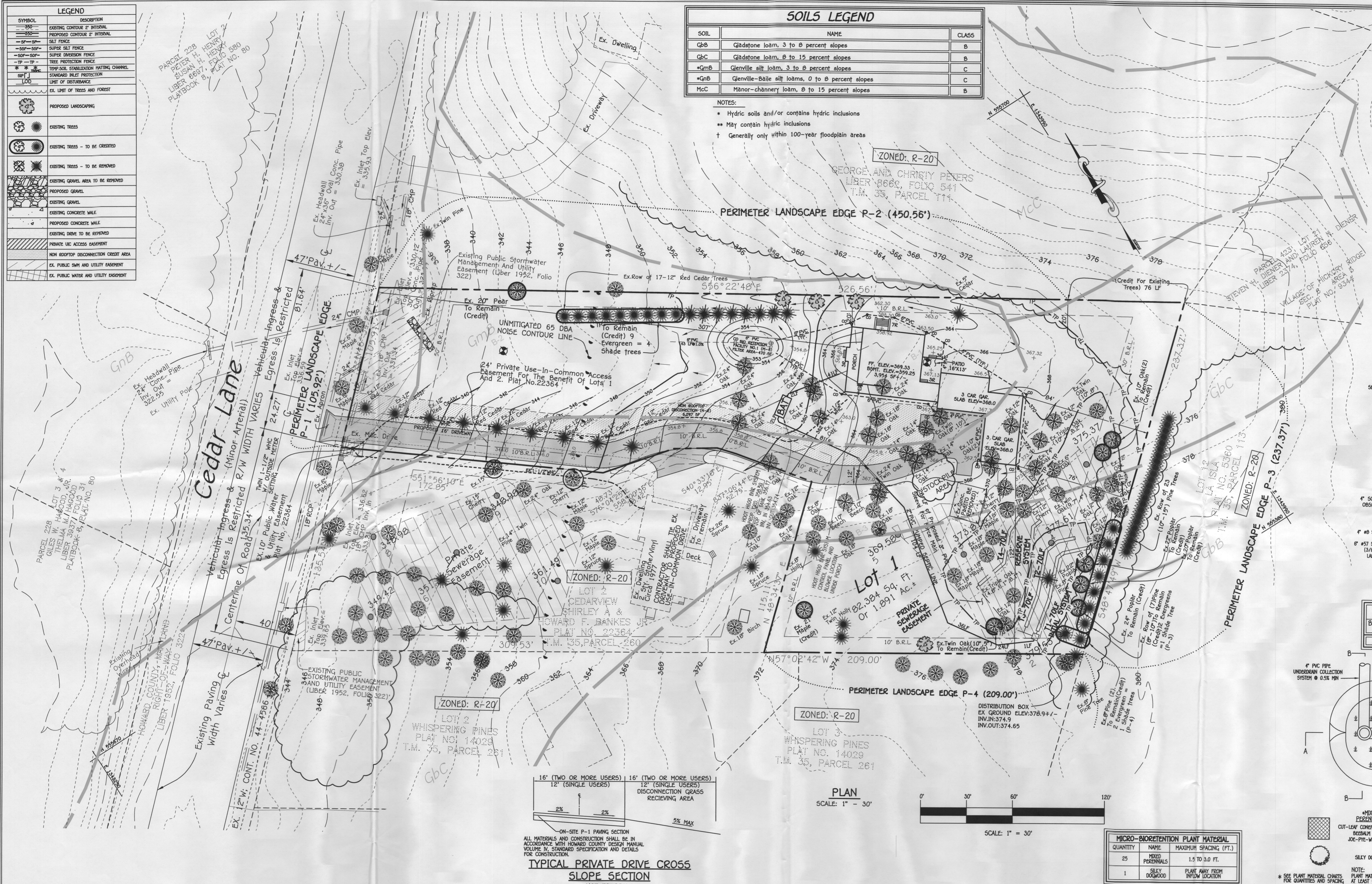
MICRO-BIORETENTION DETAIL (M-6)
NOT TO SCALE

MICRO-BIORETENTION									
BIORETENTION FILTER	A	B	C	D	E	F	G	H	I
LOT 1	354.00	354.00	353.00	352.75	350.75	350.42	350.00	349.64	349.92



MICRO-BIORETENTION PLANT MATERIAL			
QUANTITY	NAME	MAXIMUM SPACING (FT.)	
25	MIXED PERENNIALS	1.5 TO 3.0 FT.	
1	SILKY DOGWOOD	PLANT ANY FROM INFLOW LOCATION	

NOTE: PLANT MATERIAL MUST COVER AT LEAST 50% OF THE SURFACE AREA OF THE MICRO-BIORETENTION



TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION
NOT TO SCALE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PARK
 BELLCOTT CITY, MARYLAND 21042
 (410) 461 - 2995

NO.	REVISION	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: 1/12/16.

STEPHANIE TUTE
 PROFESSIONAL ENGINEER

OWNER/DEVELOPER
 MARK E. COLLETT
 CHERIE COLLETT
 6551 CEDAR LANE
 COLUMBIA, MARYLAND 21044-4028
 410-336-3009

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 Landscaping Manual. I/We further certify that upon completion, a letter of notice, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development _____ Date _____
 Chief, Development Engineering Division _____ Date _____
 Director - Department of Planning and Zoning _____ Date _____

PROJECT: CEDARVIEW LOT 1
 SECTION: X
 PARCEL NO.: 260

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
22364	23	R-20	35	5TH	6095.02

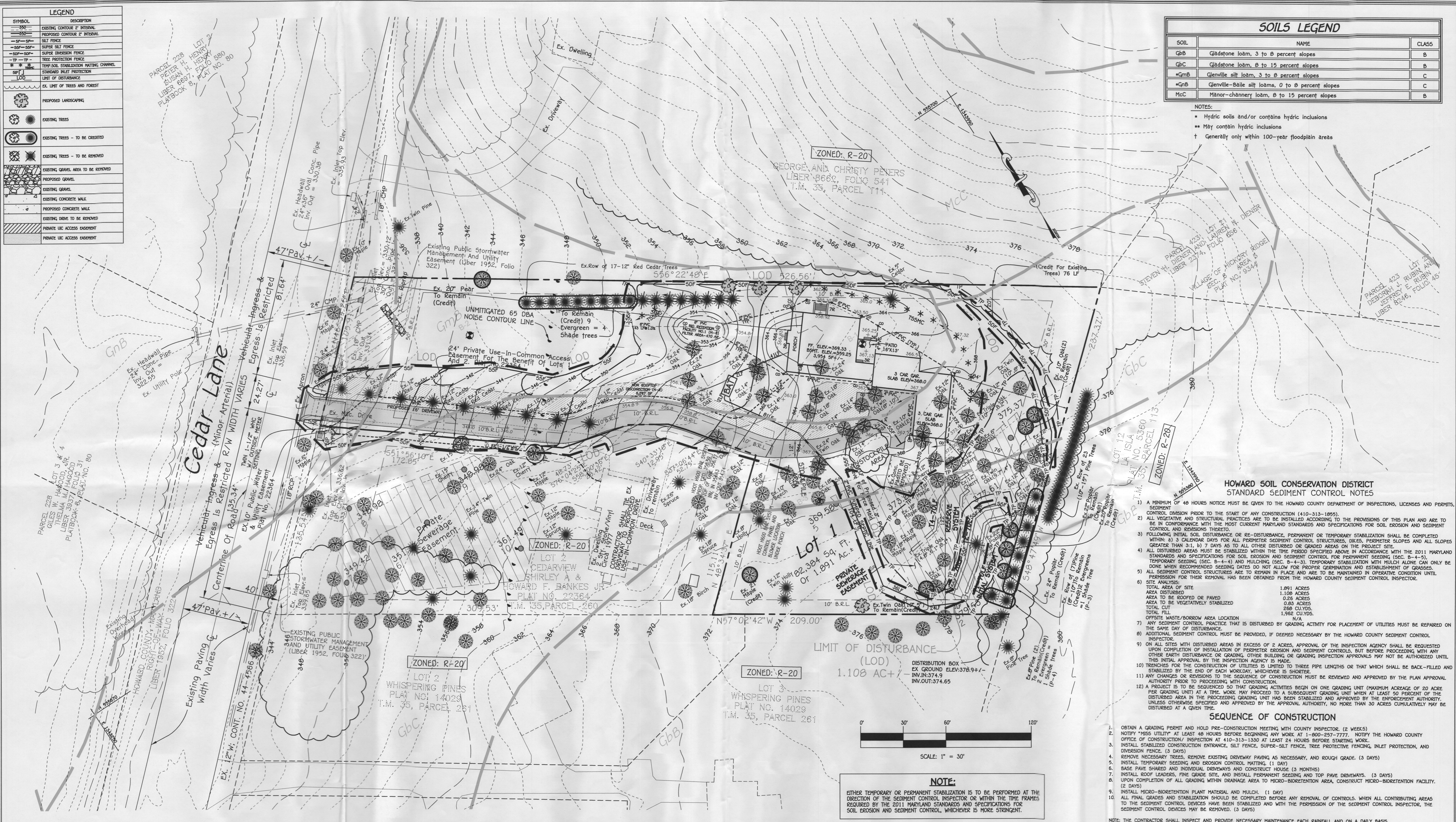
SITE DEVELOPMENT PLAN
SINGLE FAMILY DETACHED CEDARVIEW Lot 1
 TAX MAP #35 GRID #23 PARCEL #260
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 ZONED: R-20
 SCALE: 1" = 30' DATE: MARCH 28, 2014
 SHEET 2 OF 6

SDP-14-057

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	SILT FENCE
---	SUPER SILT FENCE
---	SUPER DIVERSION FENCE
---	TREE PROTECTION FENCE
---	TEMPORARY STABILIZATION MATING CHANNEL
---	STANDARD INLET PROTECTION
---	LIMIT OF DISTURBANCE
---	EX. LIMIT OF TREES AND FOREST
---	PROPOSED LANDSCAPING
---	EXISTING TREES
---	EXISTING TREES - TO BE CROPPED
---	EXISTING TREES - TO BE REMOVED
---	EXISTING GRAVEL AREA TO BE REMOVED
---	PROPOSED GRAVEL
---	EXISTING GRAVEL
---	EXISTING CONCRETE WALK
---	PROPOSED CONCRETE WALK
---	EXISTING DRIVE TO BE REMOVED
---	PRIVATE VIC ACCESS EASEMENT
---	PRIVATE VIC ACCESS EASEMENT

SOILS LEGEND		
SOIL	NAME	CLASS
GbB	Gladstone loam, 3 to 8 percent slopes	B
GbC	Gladstone loam, 8 to 15 percent slopes	B
GmB	Glenville silt loam, 3 to 8 percent slopes	C
GmC	Glenville-Baile silt loams, 0 to 8 percent slopes	C
McC	Manor-channery loam, 8 to 15 percent slopes	B

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas



- HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES**
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1859).
 - ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND SPECIFICATIONS THEREOF.
 - FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - 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 FOR PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). 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 PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 - SITE ANALYSIS:
 TOTAL AREA OF SITE: 1.891 ACRES
 AREA TO BE ROOFED OR PAVED: 0.26 ACRES
 AREA TO BE VEGETATIVELY STABILIZED: 0.83 ACRES
 TOTAL CUT: 268 CU.YDS.
 TOTAL FILL: 1,982 CU.YDS.
 OFFSITE WASTE/BORROW AREA LOCATION: N/A
 - ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 - ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 - ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 5 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION 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.
 - TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
 - ANY CHANGES OR REVISIONS TO A SCHEDULE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
 - A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRES PER 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 ENFORCEMENT AUTHORITY, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
 - NOTIFY "MISC UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, SUPER-SILT FENCE, TREE PROTECTIVE FENCING, INLET PROTECTION, AND DIVERSION FENCE. (3 DAYS)
 - REMOVE NECESSARY TREES, REMOVE EXISTING DRIVEWAY PAVING AS NECESSARY, AND ROUGH GRADE. (3 DAYS)
 - INSTALL TEMPORARY SEEDING AND EROSION CONTROL MATTING. (1 DAY)
 - BASE PAVE SHARED AND INDIVIDUAL DRIVEWAYS AND CONSTRUCT HOUSE (3 MONTHS)
 - INSTALL ROOF LEADERS, FINE GRADE SITE, AND INSTALL PERMANENT SEEDING AND TOP PAVE DRIVEWAYS. (3 DAYS)
 - UPON COMPLETION OF ALL GRADING WITHIN DRAINAGE AREA TO MICRO-BIORETENTION AREA, CONSTRUCT MICRO-BIORETENTION FACILITY. (2 DAYS)
 - INSTALL MICRO-BIORETENTION PLANT MATERIAL AND MULCH. (1 DAY)
 - ALL FINAL GRADES AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. (3 DAYS)
- NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE EACH RAINFALL AND ON A DAILY BASIS.

NOTE:
 EITHER TEMPORARY OR PERMANENT STABILIZATION IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR WITHIN THE TIME FRAMES REQUIRED BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLETT CITY, MARYLAND 21042
 (410) 461-2995

NO.	REVISION	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. 36896, EXPIRATION DATE: 1/12/16.

STEPHANIE TUTTLE DATE: _____

ENGINEER'S CERTIFICATE
 I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer: _____ Date: _____

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: _____ Date: _____

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

Howard SCD _____ Date: _____

OWNER/DEVELOPER
 MARK E. COLLETT
 CHERIE COLLETT
 6551 CEDAR LANE
 COLUMBIA, MARYLAND 21044-4028
 410-336-3009

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development _____ Date: _____

Chief, Development Engineering Division _____ Date: _____

Director - Department of Planning and Zoning _____ Date: _____

PROJECT	SECTION	PARCEL NO.
CEDARVIEW LOT 1	X	260
PLAT NO.	BLOCK NO.	ZONE
22364	23	R-20
TAX/ZONE	ELEC. DIST.	CENSUS TR.
35	5TH	6056.02

SEDIMENT AND EROSION CONTROL PLAN AND NOTES

SINGLE FAMILY DETACHED CEDARVIEW Lot 1

TAX MAP #35 GRID #23 PARCEL #260
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 ZONED: R-20
 SCALE: 1"=30' DATE: MARCH 28, 2014
 SHEET 3 OF 6

50P-14-057

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 harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking 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 lowgrass will be planted, 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 if 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 scratched 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.
 - Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seeded preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seeded loosening may be unnecessary on newly disturbed areas.

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. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil oxidation.
- Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-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 agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsols and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
 - 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 10 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding 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 in order to prevent the formation of depressions or ruts.
 - 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 may otherwise be detrimental to proper grading and seedbed 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 analyses.
- Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to 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 may be substituted except when hydrossed) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 90 to 100 percent will pass through a #20 mesh sieve.
- Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.

- Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

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.
- 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-4-3A.1.b and maintain until the next seeding season.

Hardness Zone (from Figure B.3):	Seed Mixture (from Table B.1):	Fertilizer Rate (10-20-20)	Lime Rate
6b			
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths
BARLEY	96	3/1 - 5/15, 8/15 - 10/15	1"
OATS	72		1"
RYE	112		1"

PERMANENT SEEDING NOTES (B-4-5)

- ### A. Seed Mixtures
- 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 or purpose 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 area over 5 acres, use and show the rates recommended by the soil testing Agency. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 1 1/2 pounds 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 turfgrasses 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 Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars 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 Rye: 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 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 maintenance 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.

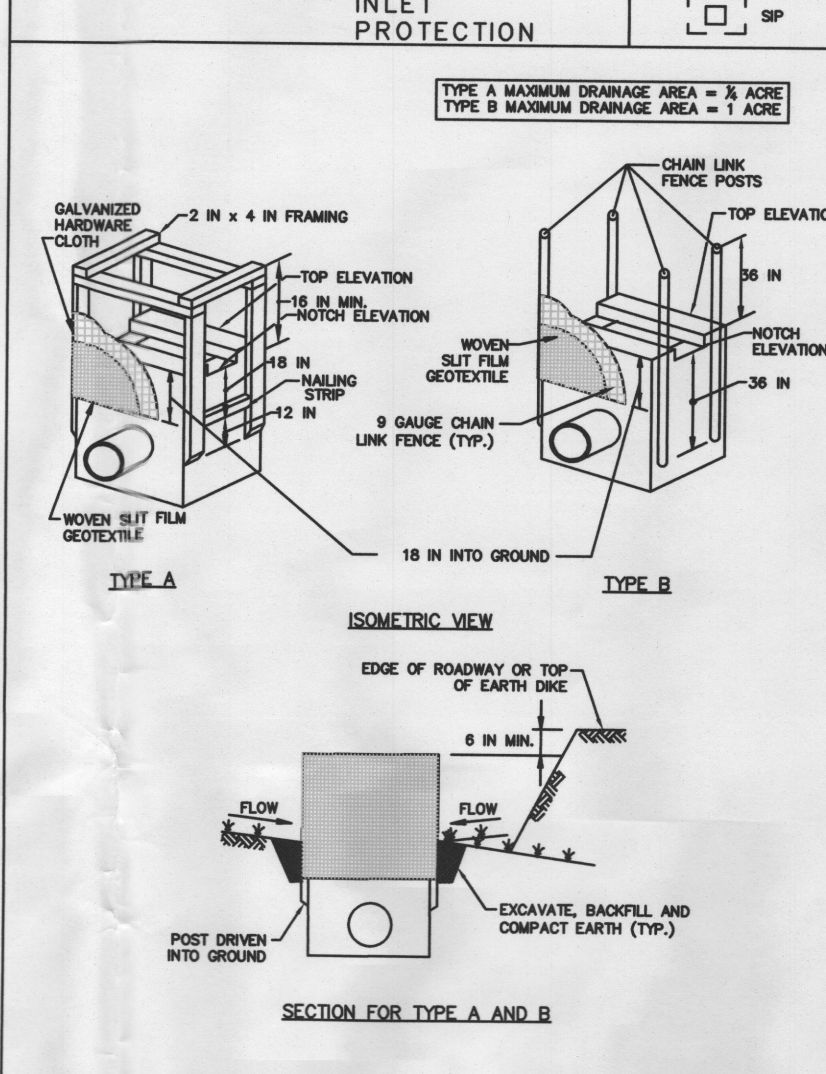
- Notes:**
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland"
- Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.
- Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zones: 5b, 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zones: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zones: 7a, 7b)
 - All areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Seed must be broadcast and evenly distributed. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
 - If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2 to 1 inch 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.

Hardness Zone (from Figure B.3):	Seed Mixture (from Table B.3):	Fertilizer Rate (10-20-20)	Lime Rate				
6b							
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P ₂ O ₅	K ₂ O
B	TALL FESCUE	100	Mar. 1-May 15 Aug. 15-Oct. 15	1 1/2-1/2 in.	45 lbs. per acre (2 lb./1000 sf)	90 lb./ac (2 lb./1000 sf)	2 tons/ac (2 lb./1000 sf)

B. 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 peds 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 transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
 - Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted 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 underlay sods immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sods are thoroughly wet. Complete the operations of laying, tamping, and irrigating for any piece of sod within eight hours.
- Sod Maintenance**
 - Ensure 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 watering is required 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 grass height of at least 3 inches unless otherwise specified.

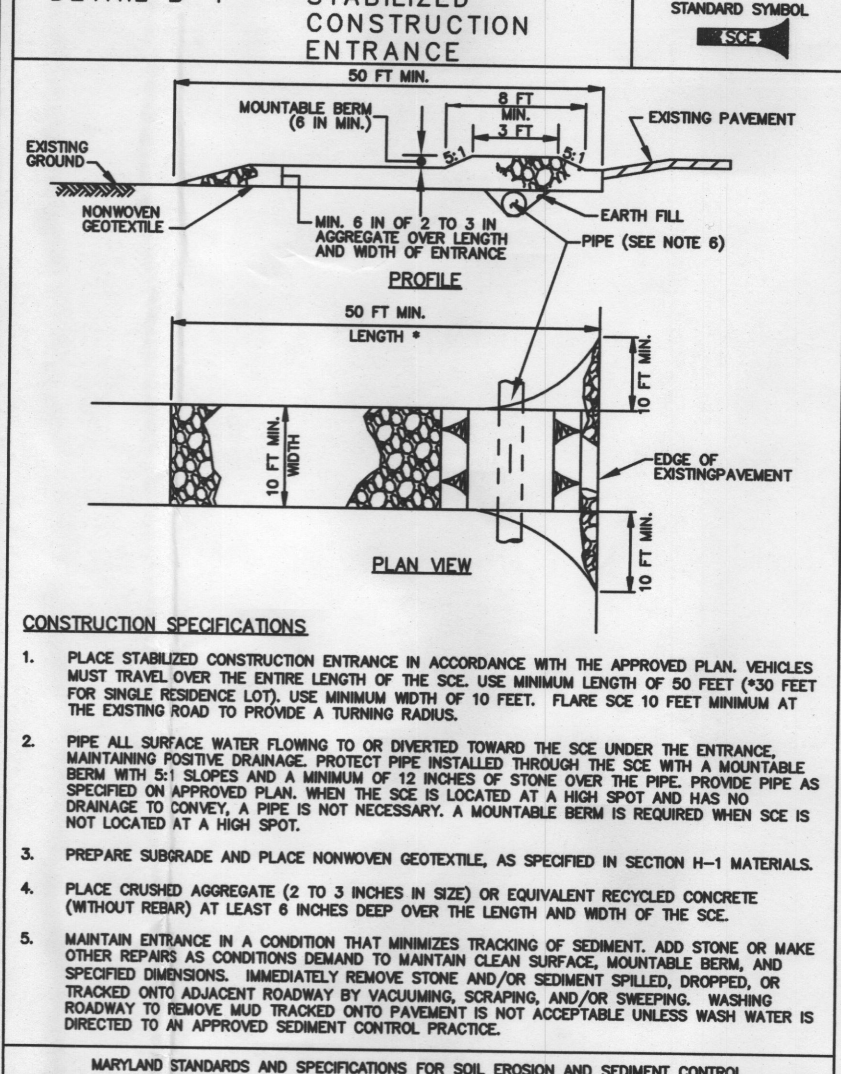
DETAIL E-9-1 STANDARD INLET PROTECTION



DETAIL E-9-1 STANDARD INLET PROTECTION

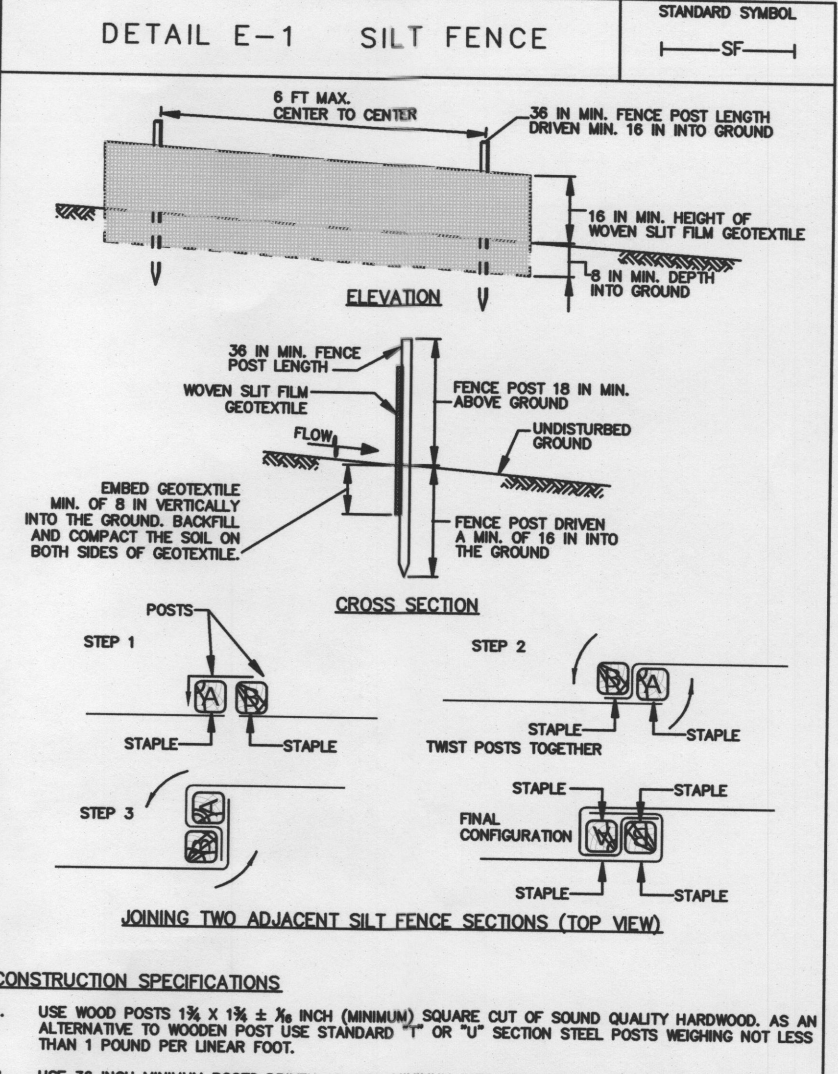
- CONSTRUCTION SPECIFICATIONS
 - USE WOVEN SUT FLM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
 - EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
 - FOR TYPE A, USE NOMINAL 4x8 INCH CONSTRUCTION GRADE LUMBER POSTS 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. SECURE THE WOVEN SUT FLM GEOTEXTILE TO THE HORIZONTAL SURFACE OF THE FRAME AND FASTEN SECURELY TO THE TOP AND MID SECTION LAMBS GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEB CENTER. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.
 - FOR TYPE B, USE 2x4x8 INCH CONSTRUCTION GRADE LUMBER POSTS 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. SECURE THE WOVEN SUT FLM GEOTEXTILE TO THE HORIZONTAL SURFACE OF THE FRAME AND FASTEN SECURELY TO THE TOP AND MID SECTION LAMBS GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEB CENTER. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.
 - STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN TO MAINTAIN FLOW AND AVOID PRESSURE. INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT. IT IS GEOTEXTILE AND STONE.

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE



- CONSTRUCTION SPECIFICATIONS
 - PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SOE. USE MINIMUM LENGTH OF 50 FEET (25 FEET FOR RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SIDE TO FIVE MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
 - PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SOE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAIN PROTECTION THROUGHOUT THE ENTIRE LENGTH OF THE ENTRANCE. OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MAINTAIN BERM AND SLOPE AS SPECIFIED. IMMEDIATELY REPAIR ANY DAMAGE TO BERM AND SLOPE. DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY WADING, SCRAPING, AND/OR SHEETING. WASHING ROADSIDE TO REMOVE MUD TRACKS IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.
 - PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
 - PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE. MAINTAIN ENTRANCE AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SOE.
 - MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF MUD AND STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MAINTAIN BERM AND SLOPE AS SPECIFIED. IMMEDIATELY REPAIR ANY DAMAGE TO BERM AND SLOPE. DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY WADING, SCRAPING, AND/OR SHEETING. WASHING ROADSIDE TO REMOVE MUD TRACKS IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

DETAIL E-1 SILT FENCE



- CONSTRUCTION SPECIFICATIONS
 - USE WOOD POSTS 1 1/2 X 4 X 8 IN. MINIMUM SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATE TO WOODEN POST USE STANDARD "I" OR "U" SECTION STEEL POSTS BEARING NOT LESS THAN 1 1/2 INCHES DIAMETER.
 - USE 36 INCH MINIMUM POSTS OR 18 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
 - USE WOVEN SUT FLM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION. IN SECTION H-1 MATERIALS.
 - PROVE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
 - EMBED GEOTEXTILE A MINIMUM OF 6 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
 - WHERE THE SECTIONS OF GEOTEXTILE ADJOIN, OVERLAP, TIE, AND STAPLE TO POST IN ACCORDANCE WITH THIS SECTION.
 - EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT THE ENDS OF THE SILT FENCE.
 - REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN EXCESSIVE SINK OF FENCE OCCURS. REPLACE GEOTEXTILE IF TORN IF UNDERMINING OCCURS. REINSTALL FENCE.

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

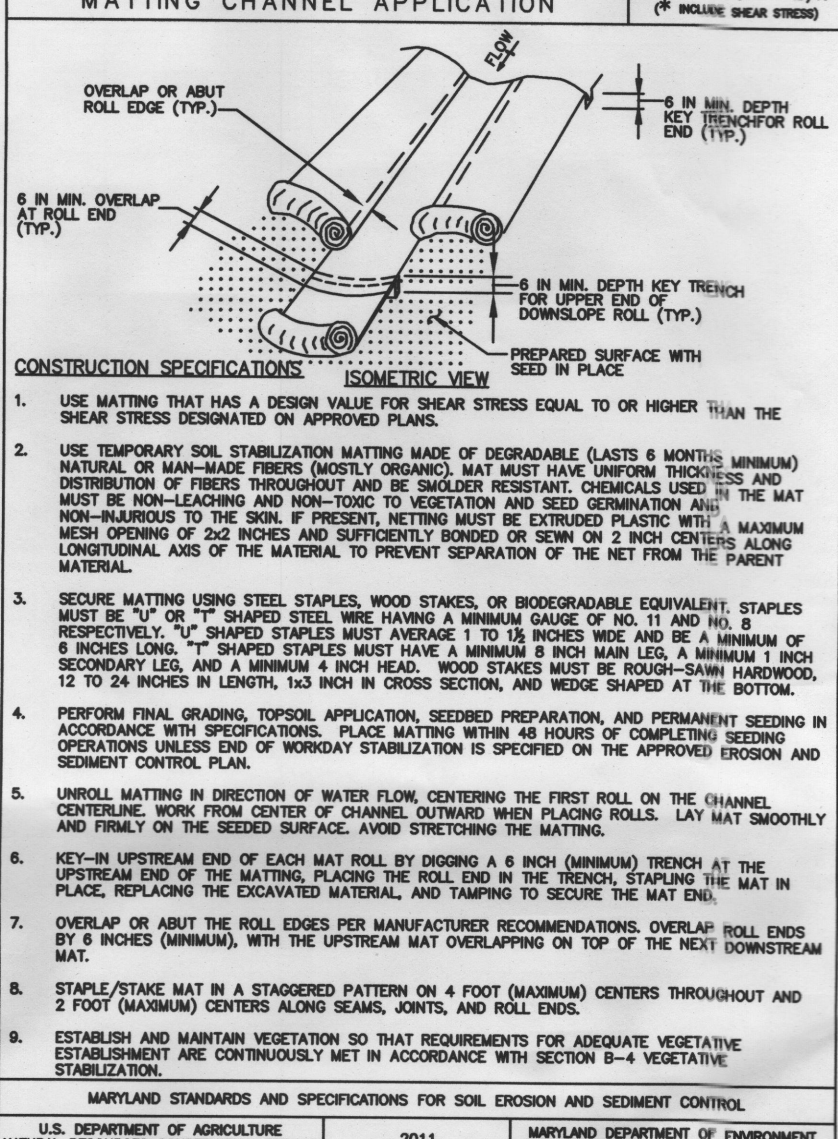
Definition
The application of seed and mulch to establish vegetative cover.

Purpose
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.

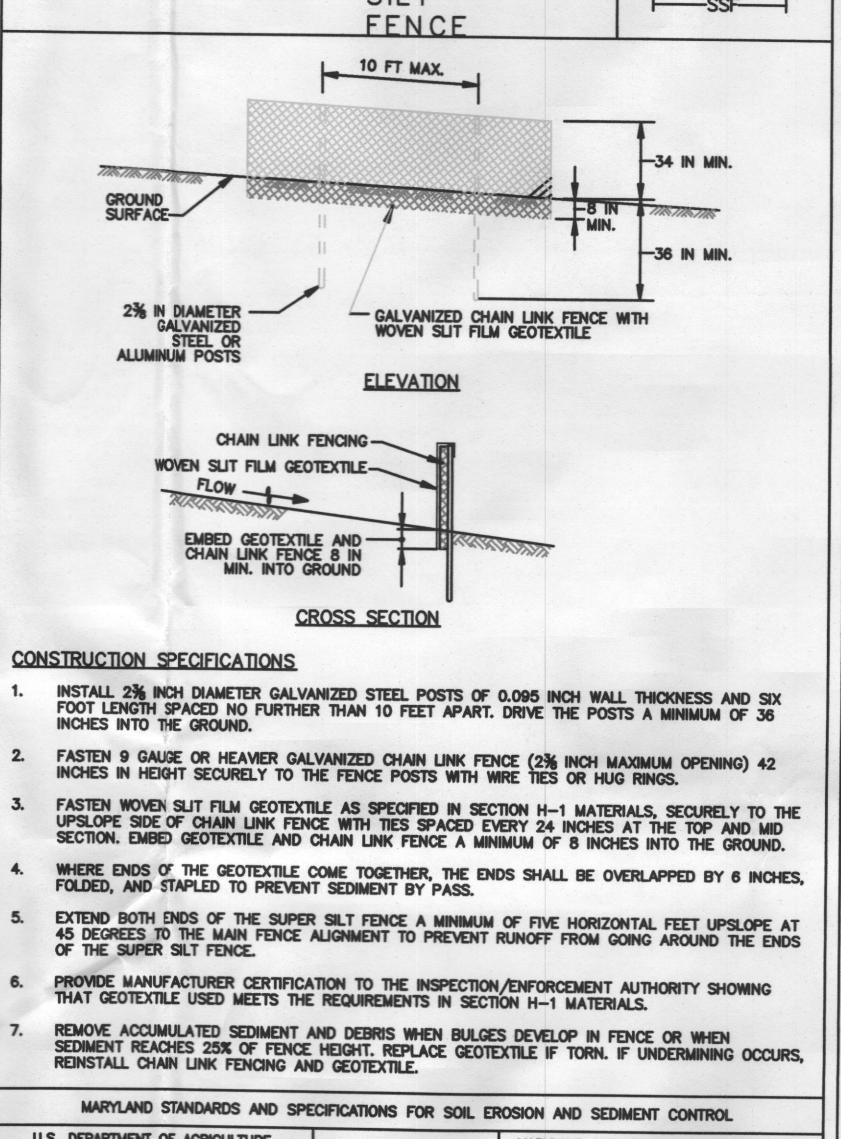
- Seeding**
 - Specifications
 - All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed lots must be available upon request to the inspector to verify type of seed and seedling rates.
 - Mulch alone may be applied between the fall and spring seedings dates only if the ground is frozen. The appropriate seeding method must be applied when the ground thaws.
 - Inoculants: The inoculant for treating legume seed in the seed mixture must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydrossing. Note: It is very important to keep inoculant as cool as possible until use. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
 - Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weedcontrol 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 summaries.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with weighted roller to provide good seed to soil contact.
 - Drill or Outfitter Seeding: Mechanized seeders that apply and cover seed with soil.
 - Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch soil covering. Seeding must be by machine after planting.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - Hydrossing: Apply seed uniformly with hydrosser (slurry includes 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; P (phosphorus), 200 pounds per acre; K (potassium), 200 pounds per acre.
 - Lime: Use only ground organic limestone (3 to 3 tons per acre may be applied by hydrossing). Normally, not more than 2 tons are applied by hydrossing at any one 2.5 times. Do not use lime on soil containing gypsum.
 - Mix seed and fertilizer on site and seed immediately and without interruption.
 - When hydrossing do not incorporate seed into the soil.
- Mulching**
 - Mulch Materials (in order of preference)
 - Straw consisting of thoroughly threshed wheat, rye, 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 sterile straw mulch in areas where one species of grass is desired.
 - Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical state.
 - 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 uniformly spread slurry.
 - WCFM, including dye, must contain no germination or growth inhibiting factors.
 - WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will combine 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 porosity properties and 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 concentration levels that will be phytotoxic.
 - WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.
 - Application
 - Apply mulch to all seeded areas immediately after seeding.
 - When straw mulch is used, spread it over of 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 any mulch anchoring 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 obtain a mixture with 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 draw 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 mulch anchoring. 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 Acryl-20 (Aqua-Tack), DCA-70, Petrocel, Terra-Tac II, Terra-Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys or on crests of berms. Use of caprol binders is strictly prohibited.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4-15 feet wide and 300 to 3,000 feet long.

DETAIL B-4-6-A TEMPORARY SOIL STABILIZATION MATTING CHANNEL APPLICATION



- CONSTRUCTION SPECIFICATIONS
 - USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS ESTIMATED ON APPROVED PLANS.
 - USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (BARKLY OR GRASS). MATS MUST BE 18 INCHES WIDE AND BE A MINIMUM OF 12 INCHES LONG. MATS MUST BE 18 INCHES WIDE AND BE A MINIMUM OF 12 INCHES LONG. MATS MUST BE 18 INCHES WIDE AND BE A MINIMUM OF 12 INCHES LONG. MATS MUST BE 18 INCHES WIDE AND BE A MINIMUM OF 12 INCHES LONG. MATS MUST BE 18 INCHES WIDE AND BE A MINIMUM OF 12 INCHES LONG.
 - PREPARE FINAL GRADING, TOPSOIL APPLICATION, SEEDING PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETED SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
 - USE MATTING IN SECTION OF WADEN FLOW, COVERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MATS SMOOTHLY AND WITHOUT OVERLAP OR GAPS BETWEEN ROLLS.
 - KEY-IN UPSLOPE ENDS OF EACH MAT ROLL BY DRAWING A 4x8 INCH (MINIMUM) BENCH AT THE UPSLOPE END OF THE MATTING. PLACE THE ROLL IN THE TRENCH, STAPLE THE MAT IN PLACE, REMOVE THE EXCESSIVE MATERIAL, AND TAMPING TO SECURE THE MAT END.
 - OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE PATTERN MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
 - STAPLE/STAKE MAT IN A STAGGERED SYSTEM ON 4 FOOT (MINIMUM) CENTERS THROUGHOUT AND 2 FOOT (MINIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
 - ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

DETAIL E-3 SUPER SILT FENCE



- CONSTRUCTION SPECIFICATIONS
 - INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 60S INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DO NOT NEED TO BE SET IN.
 - FASTEN 48 INCH OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MINIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR RICE RINGS.
 - FASTEN WOVEN SUT FLM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION. IN SECTION H-1 MATERIALS.
 - WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES. FOLDS SHALL BE STAPLED TO PREVENT SEEDING BY WIND.
 - EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT THE ENDS OF THE SUPER SILT FENCE.
 - REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN EXCESSIVE SINK OF FENCE OCCURS. REPLACE GEOTEXTILE IF TORN IF UNDERMINING OCCURS. REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.
 - REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN EXCESSIVE SINK OF FENCE OCCURS. REPLACE GEOTEXTILE IF TORN IF UNDERMINING OCCURS. REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

B-4-8 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.

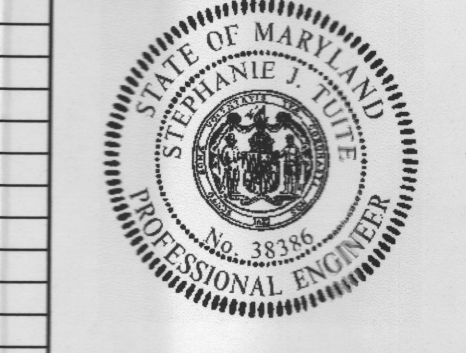
Conditions Where Practice Applies
Stockpile areas are utilized when it is necessary to advance and store soil for later use.

- The footprint of the stockpile 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 area must be minimized by use of a diversion device such as an earth dike, temporary swale or intercept the discharge.
- Stockpiles must be stabilized in accordance with the 0/7 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.

Maintenance
The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

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. 36386, EXPIRATION DATE: 1/12/16.



ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer: _____ Date: _____

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer: _____ Date: _____

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

Signature of Engineer: Howard SCD Date: _____

OWNER/DEVELOPER

MARK E. COLLETT, CHERIE COLLETT, 6551 CEDAR LANE, COLUMBIA, MARYLAND 21044-4028, 410-336-3009

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development Date: _____
Chief, Development Engineering Division Date: _____
Director - Department of Planning and Zoning Date: _____

PROJECT	SECTION	PARCEL NO.			
CEDARVIEW LOT 1	X	260			
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
22364	23	R-20	35	5TH	6056.02

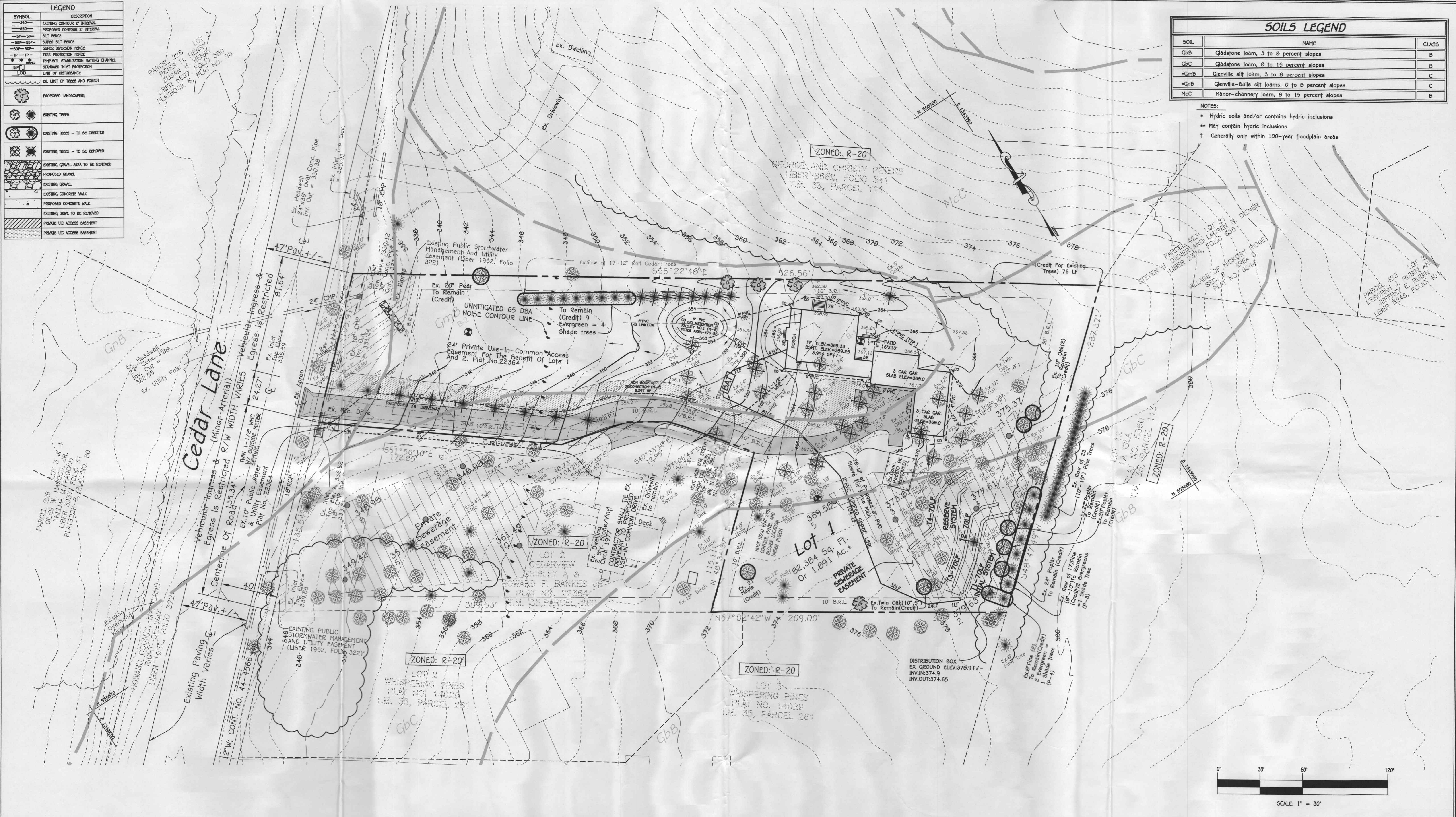
SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

SINGLE FAMILY DETACHED CEDARVIEW Lot 1
TAX MAP #35

LEGEND	
---	EXISTING CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	SALT FENCE
---	SUPER SALT FENCE
---	SUPER DIVISION FENCE
---	TREE PROTECTION FENCE
---	TOP SOIL STABILIZATION MATING CHANNEL
---	SHOULDER INLET PROTECTION
---	LIMIT OF DISTURBANCE
---	EX. LIMIT OF TREES AND FOREST
---	PROPOSED LANDSCAPING
---	EXISTING TREES
---	EXISTING TREES - TO BE CROPPED
---	EXISTING TREES - TO BE REMOVED
---	EXISTING GRAVEL AREA TO BE REMOVED
---	PROPOSED GRAVEL
---	EXISTING GRAVEL
---	EXISTING CONCRETE WALK
---	PROPOSED CONCRETE WALK
---	EXISTING DRIVE TO BE REMOVED
---	PRIVATE UIC ACCESS EASEMENT
---	PRIVATE UIC ACCESS EASEMENT

SOILS LEGEND		
SOIL	NAME	CLASS
GbB	Gladstone loam, 3 to 8 percent slopes	B
GbC	Gladstone loam, 8 to 15 percent slopes	B
GmB	Glenville silt loam, 3 to 8 percent slopes	C
GmC	Glenville-Balle silt loams, 0 to 8 percent slopes	C
McC	Manor-channery loam, 8 to 15 percent slopes	B

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas



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 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2895

NO.	REVISION	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. 36386, EXPIRATION DATE: 12/12/16.

STEPHANIE TUTTLE

APPROVED FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT.

B. Wilson for Mauro Roszman 5/9/2017
 COUNTY HEALTH OFFICER DATE

OWNER/DEVELOPER
 MARK E. COLLETT,
 CHERIE COLLETT
 6551 CEDAR LANE
 COLUMBIA, MARYLAND 21044-4028
 410-336-3009

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development _____ Date _____
 Chief, Development Engineering Division _____ Date _____
 Director - Department of Planning and Zoning _____ Date _____

PROJECT: CEDARVIEW LOT 1 SECTION: X PARCEL NO.: 260

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
22364	23	R-20	35	5TH	6056.02

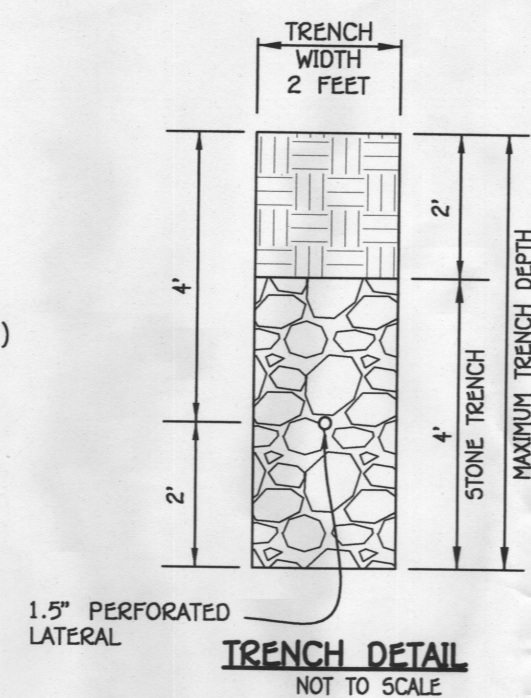
BAT SYSTEM LAYOUT PLAN

SINGLE FAMILY DETACHED CEDARVIEW Lot 1

TAX MAP #35 GRID #23 PARCEL #260
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 ZONED: R-20
 SCALE: 1"=30' DATE: MARCH 28, 2014
 SHEET 5 OF 6

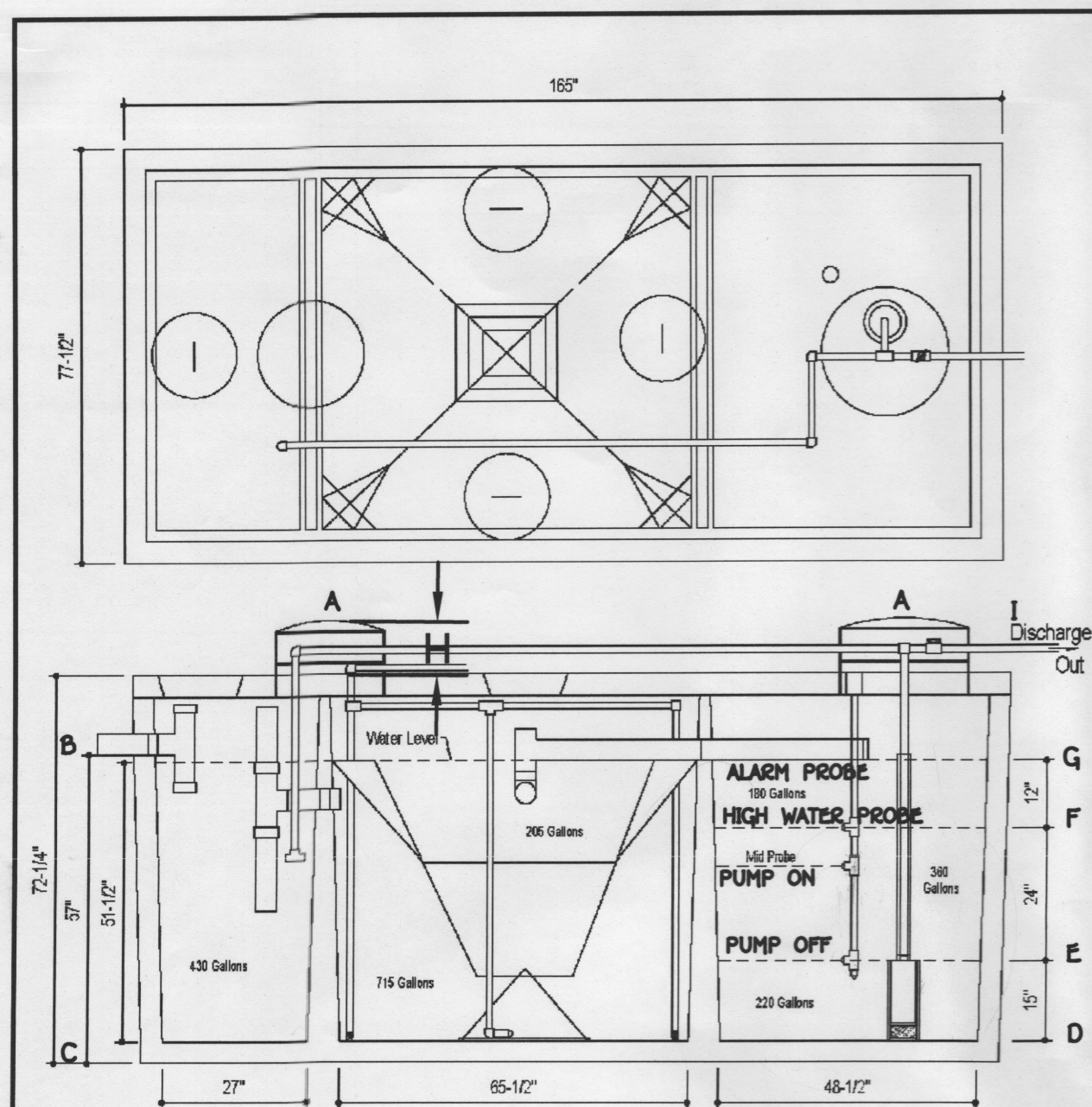
SEPTIC SYSTEM DESIGN
 4 BEDROOM HOUSE
 TRENCH LENGTH = 140 FEET
 TRENCH WIDTH = 2 FEET
 TRENCH INVERT = 4.00 FEET
 TRENCH T1 INVERT = 374.7
 TRENCH T2 INVERT = 374.5
 REPLACEMENT TRENCH T3 = 374.0
 REPLACEMENT TRENCH T4 = 372.0
 TRENCH BOTTOM = 6.00 FEET
 EFFECTIVE AREA BEGINS AT 4.00 FEET

SEPTIC SYSTEM ELEVATIONS
 A = 350.50
 B = 354.63 (INV. INTO TANK)
 C = 350.15
 D = 350.48
 E = 351.73
 F = 353.73
 G = 354.74
 H = 2.33' (7" MIN.)
 I = 356.60 (INV. OUT OF TANK)
 FFE = 369.33
 BFE = 359.25



BAT NOTES

1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM COVER OVER THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET. IF COVER EXCEEDS 3 FEET, THEN A TRAFFIC BEARING TANK IS REQUIRED.
3. THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON THE MANUFACTURER'S SPECIFICATIONS.
4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
5. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
6. WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REFER TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
7. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
8. AN AGREEMENT AND EASEMENT HAS BEEN COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, LIBER FOLK.
9. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
10. SURFACE RUNOFF SHALL BE DIRECTED AROUND THE BAT TANK.
11. AT HIGH WATER PROBE, PUMP WILL HAVE CONTINUOUS OPERATION UNTIL LEVEL GOES BELOW PROBE.
12. IF WATER LEVEL RISES TO THE ALARM PROBE, AN AUDIBLE AND VISUAL ALARM WILL SOUND. SEE MANUFACTURER SPECS FOR ADDITIONAL INFORMATION.



DESIGN DATA & GENERAL NOTES
 1) Concrete strength F'c=4,000 p.s.i., @ 28 days, Density=140 pcf.
 2) Cement - Portland Type III per ASTM C 150-89.
 3) Reinforcing & post-tensioning per ASTM C 208-89 & C 484-02.
 4) Rebar spacing per ASTM A 633, Min. 5" OC cover.

Mayer Brothers, Inc.
 6294 Race Road
 Ellicott City, MD 21042
 Tel: 410.768.5434
 Fax: 410.768.1429
 www.mayerbrothers.com

600 GPD BNR SYSTEM
H-600 BNR
 with 760 GALLON PUMP CHAMBER

Dep. No. Hood Form #1 No Scale March 19, 2009

GOULDS PUMPS

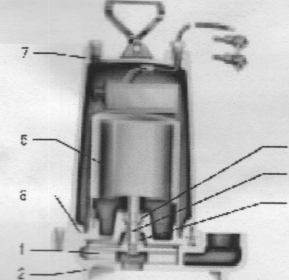


Submersible Effluent Pump

MODEL 3885

PROVIDENCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.

GOULDS PUMPS



Submersible Effluent Pump

MODEL 3885

PROVIDENCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.

APPLICATIONS

- Specifically designed for the following uses:
 - Homes
 - Farms
 - Trailer courts
 - Mobiles
 - Schools
 - Hospitals
 - Industry
 - Effluent systems

SPECIFICATIONS

- Pump**
 - Solids handling capabilities: 3/4" maximum
 - Discharge size: 2" NPT
 - Capacities: up to 140 GPM
 - Total heads: up to 125 feet TDH
 - Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent
- MOTORS**
 - Designed for continuous operation when fully submerged
 - Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer
 - Class B insulation

Single phase:

- Built-in overload with automatic reset
- All single phase models feature capacitor start motors for maximum starting torque
- 6 amp, 1/4 HP - 155 SJTOT three pump plug
- 1/2 HP - 140 SJTOT with bare leads
- Overload protection must be provided in starter unit
- 1/2 HP - 1414 SJTOT with bare leads

Three phase:

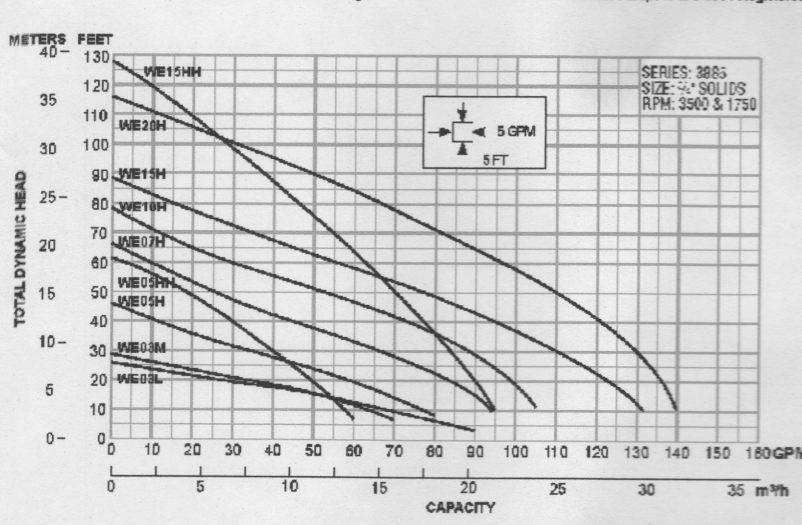
- Overload protection must be provided in starter unit
- 1/2 HP - 1414 SJTOT with bare leads
- 1/2 HP - 1414 SJTOT with bare leads

AGENCY LISTINGS

Goody's Person is ISO 9001 Registered.

FEATURES

- Impeller: Cast iron, semi-open, non-clog with pump-out valves for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.
- Casing: Cast iron volute type for maximum efficiency 2" NPT discharge.
- Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE sealing faces. Stainless steel metal parts, BUWA-N elastomers.



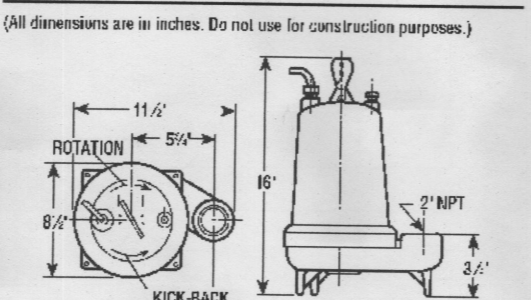
MODELS

Model	HP	Flow (GPM)	Head (feet)	Weight (lbs)	Notes
3885-1	1/4	110	125	15	3700
3885-2	1/2	110	125	15	3700
3885-3	1/2	110	125	15	3700
3885-4	1/2	110	125	15	3700
3885-5	1/2	110	125	15	3700
3885-6	1/2	110	125	15	3700
3885-7	1/2	110	125	15	3700
3885-8	1/2	110	125	15	3700
3885-9	1/2	110	125	15	3700
3885-10	1/2	110	125	15	3700
3885-11	1/2	110	125	15	3700
3885-12	1/2	110	125	15	3700
3885-13	1/2	110	125	15	3700
3885-14	1/2	110	125	15	3700
3885-15	1/2	110	125	15	3700
3885-16	1/2	110	125	15	3700
3885-17	1/2	110	125	15	3700
3885-18	1/2	110	125	15	3700
3885-19	1/2	110	125	15	3700
3885-20	1/2	110	125	15	3700

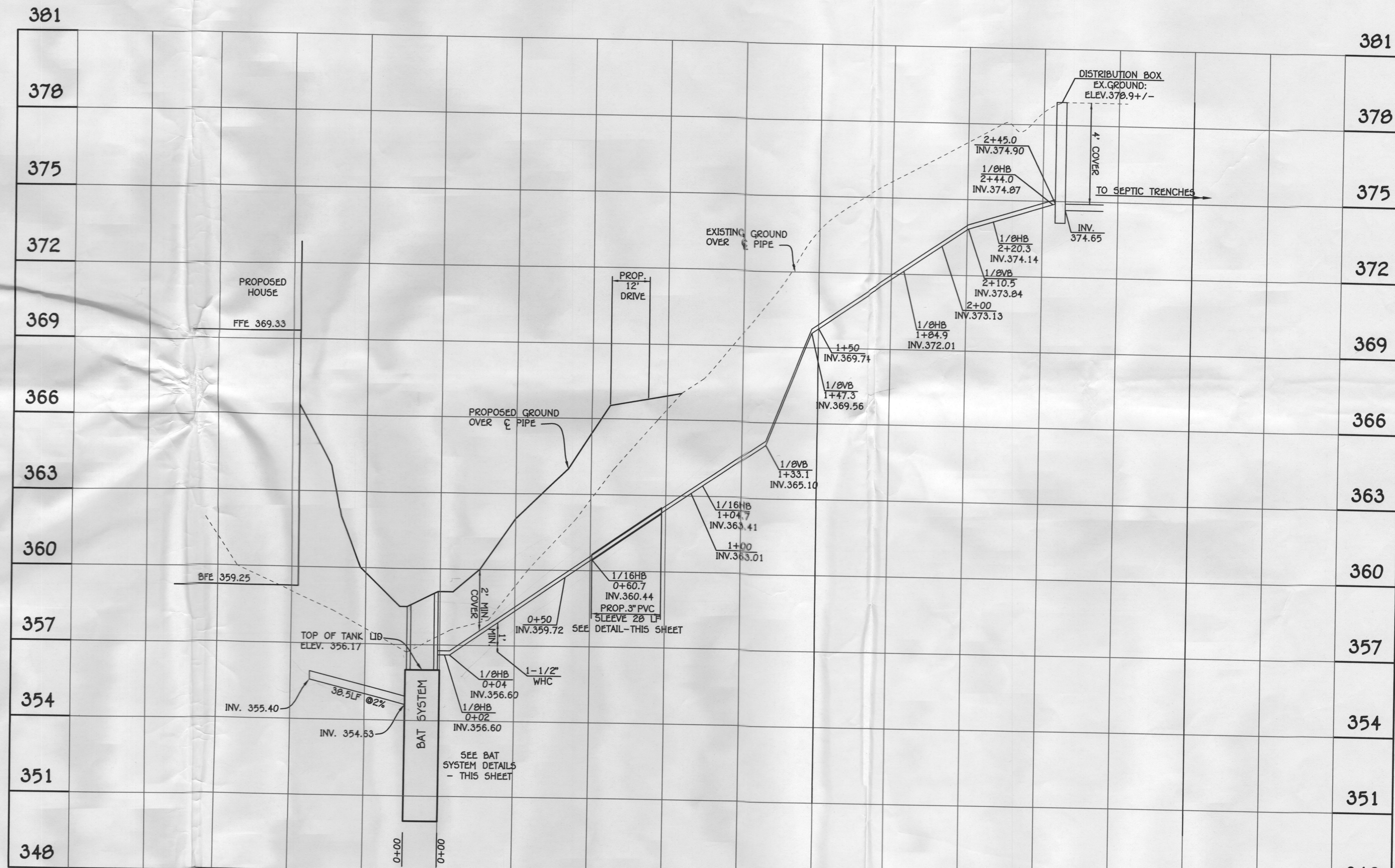
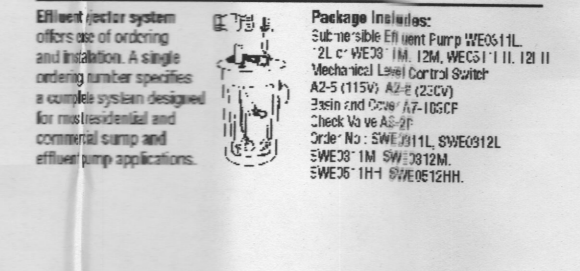
PERFORMANCE RATINGS (gallons per minute)

Head (feet)	1/4 HP	1/2 HP	3/4 HP	1 HP	1 1/2 HP	2 HP	3 HP	4 HP	5 HP
0	110	110	110	110	110	110	110	110	110
10	105	105	105	105	105	105	105	105	105
20	100	100	100	100	100	100	100	100	100
30	95	95	95	95	95	95	95	95	95
40	90	90	90	90	90	90	90	90	90
50	85	85	85	85	85	85	85	85	85
60	80	80	80	80	80	80	80	80	80
70	75	75	75	75	75	75	75	75	75
80	70	70	70	70	70	70	70	70	70
90	65	65	65	65	65	65	65	65	65
100	60	60	60	60	60	60	60	60	60
110	55	55	55	55	55	55	55	55	55
120	50	50	50	50	50	50	50	50	50
125	45	45	45	45	45	45	45	45	45

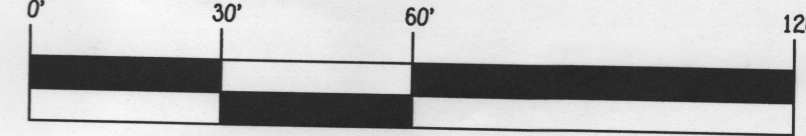
DIMENSIONS



EFFLUENT EJECTOR SYSTEM



SEPTIC PROFILE
 SCALE: HOR : 1"=30'
 VER. : 1"=3'



SCALE: 1" = 30'

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 CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461 - 2055

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STEPHANIE TUTT

APPROVED FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

Mark E. Collett
 COUNTY HEALTH OFFICER

Cherie Collett
 OWNER/DEVELOPER

5/9/2014
 DATE

MARK E. COLLETT,
 CHERIE COLLETT
 6551 CEDAR LANE
 COLUMBIA, MARYLAND 21044-4028
 410-336-3009

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development	Date
Chief, Development Engineering Division	Date
Director - Department of Planning and Zoning	Date

PROJECT: CEDARVIEW LOT 1 SECTION: X PARCEL NO.: 260

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
22364	23	R-20	35	5TH	6056.02

BAT SYSTEM PROFILE, NOTES AND DETAILS

SINGLE FAMILY DETACHED CEDARVIEW Lot 1

TAX MAP #35 GRID #23 PARCEL #260
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 ZONED: R-20
 SCALE: 1"=30' DATE: MARCH 20, 2014
 SHEET 6 OF 6