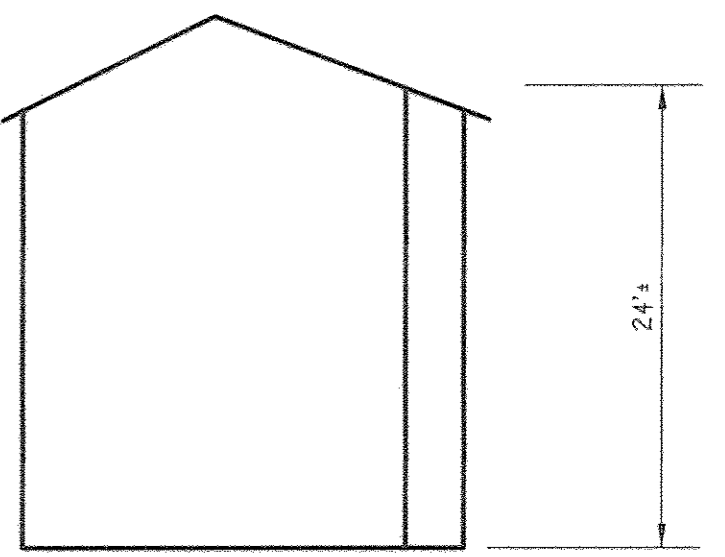
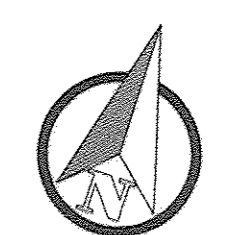


VICINITY MAP
SCALE: 1" = 1200'



SCHEMATIC HOUSE PROFILE
SCALE: 1" = 10'

STREET ADDRESS CHART	
LOT No.	STREET ADDRESS
5A	5295 Kerger Road

STORMWATER MANAGEMENT PRACTICES		
LOT No.	DISCONNECTION OF ROOFTOP RUNOFF (N-1)	DISCONNECTION OF RAIN GARDENS RUNOFF (N-2)
5A	YES	NO

SITE ANALYSIS DATA CHART

A. TOTAL AREA OF THIS SUBMISSION = 1.136 Ac.
 B. LIMIT OF DISTURBED AREA = 24,394 SQ. FT. or 0.56 Ac.
 C. PRESENT ZONING DESIGNATION = R-20 (PER 10/06/13 COMPREHENSIVE ZONING PLAN).
 D. PROPOSED USE: RESIDENTIAL SUBDIVISION (SINGLE FAMILY DETACHED).
 E. OPEN SPACE ON SITE: N/A
 F. RECREATIONAL AREA PROVIDED: N/A
 G. BUILDING COVERAGE OF SITE: 6,970 SQ. FT. OR 0.16 Ac.
 H. PREVIOUS HOWARD COUNTY FILES: ECP-11-006
 I. TOTAL AREA OF FLOODPLAIN LOCATED ON SITE: 0.04 Ac.
 J. TOTAL AREA OF SLOPES IN EXCESS OF 25% = 0.00 Ac.
 K. NET TRACT AREA = 1.096 Ac.
 L. TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA
 M. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 Ac.
 N. TOTAL AREA OF FOREST = 0.00 Ac.
 O. TOTAL GREEN OPEN AREA = 0.976 Ac.
 P. TOTAL IMPERVIOUS AREA = 0.16 Ac.
 Q. AREA OF ERODIBLE SOILS = 0.09 Ac. (WITHIN AREA OF DEVELOPMENT)

- GENERAL NOTES:**
- The Contractor Shall Notify the Construction Inspection Division At (410) 313-1880 At Least (5) Fire Working Days Prior To The Start Of Work.
 - The Contractor Shall Notify "Miss Utility" At 1-800-257-7777 At Least 48 Hours Prior To Any Excavation Work.
 - Subject Property Zoned R-20 Per 02/02/04 Comprehensive Zoning Plan And The "Comp Use" Zoning Amendments Effective 07/28/06.
 - Coordinates Based On NAD 83, Maryland Coordinate System As Projected By Howard County Geodetic Control Stations No. 31GD And 31R1.
 - Contractor Will Check Sewer House Connection Elevation At Easement Line Prior To Construction.
 - Existing Utilities Are Based On The Following:
 Existing Water Is Public (Contract No. 44-4693 (Capital Project No. W-8310))
 Existing Sewer Is Public (Contract No. 5-6200 (Capital Project No. 10-3697))
 - Stormwater Management Will Be Provided In Accordance With The 2007 Maryland Chapter 5 Regulations And The Latest Howard County Design Manual, Vol. I, Chapter 5 Adopted On Or Around May 4, 2010. Backflow Volume Will Be Provided Through The Use Of A Storm Reservoir, Water Quality And Channel Protection Volume Will Be Provided By Non-Rooftop Disconnection & Rain Gardens. Overbank Flood Protection Volume And Extreme Flood Volumes Are Not Required For This Site. All Stormwater Management Facilities Will Be Privately Owned & Maintained By The Homeowner.
 - This Property Is Based On Field Run Monumented Boundary Survey Dated June 6, 2009 By Sill, Adcock & Associates, LLC.
 - This Property Is Located Within The Metropolitan District.
 - No Cemeteries Or Historic Structures Exist Within This Subdivision.
 - For Flag Or Pipetern Lots, Refuse Collection, Snow Removal And Road Maintenance Are Provided To The Junction Of The Flag Or Pipetern And Road Right-Of-Way Line And Not To The Pipetern Lot Driveway. "Trash And Recycling Collection Will Be At The Intersection Of Mario Austin Way And Harvey Lane Within 5 Feet Of The County Roadway For Collection."
 - 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:
 a) Width - 12 Feet (16 Feet) Serving More Than One Residence;
 b) Surface - Six (6) Inches Of Compacted Crusher Run Base With Tar And Chip Coating, (1 - 1/2" Minimum);
 c) Geometry - Maximum 15% Grade, Maximum 10% Grade Change And 45-Foot Turning Radius;
 d) Structures (Culverts/Bridges) - Capable Of Supporting 25 Gross Tons (H25-Loading);
 e) Drainage Elements - Capable Of Safely Passing 100 Year Flood With No More Than 1 Foot Depth Over Surface;
 f) Structure Clearances - Minimum 12 Feet;
 g) Maintenance - Sufficient To Ensure All Weather Use.
 - All Lot Areas Are More Or Less (+/-).
 - No Historic Structures Or Cemeteries Exist On The Subject Property.
 - Previous Department Of Planning And Zoning File Number: ECP-11-006.
 - The Existing Topography Is Taken From A Field Run Topographic Survey With 2 Foot Contour Intervals Prepared By Fisher, Collins & Carter, Inc. on July, 2010.
 - This Plan Is Exempt From Forest Conservation Per Section 16.1202(b)(1)(viii) Of The Howard County Code And Forest Conservation Manual, Section 16.1202(b)(1)(viii) of the Howard County Code. Additional Land Use Regulations, Departmental, Single Lot Preservation Of Intent Has Been Filed.
 - 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 Setback.
 - No Grading Or Removal Of Vegetative Cover Or Trees, Paving And New Structures Shall Be Permitted Within The Required Wetlands, Stream Or Their Buffers, Forest Conservation Easement Areas And 100 Year Floodplain.
 - Landscape Is Exempt Since A Deeded Parcel Does Not Require Landscaping.

- GENERAL NOTES: CONTINUED**
- Any Damage To The County's Right-Of-Way Shall Be Corrected At The Developer's Expense.
 - SHC Shown Are Located At The Property Line.
 - For Driveway Entrance Details, Refer To The Howard County Design Manual, Vol IV Standard Detail R-6.06.

SITE PLAN
SCALE: 1" = 60'

SOILS LEGEND

SOIL	NAME	CLASS	EV
AgB2	Aud gravelly loam, 1 to 5 percent slopes, moderately eroded	B	0.20
BaB2	Beltville silt loam, 1 to 5 percent slopes, moderately eroded	B	0.20
CB3	Chillum gravelly loam, 3 to 10 percent slopes, severely eroded	C	0.20
CD3	Chillum gravelly loam, 10 to 15 percent slopes, moderately eroded	C	0.20
CnB2	Chillum silt loam, 1 to 5 percent slopes, moderately eroded	C	0.20
CnB3	Chillum-fairly loam, 1 to 5 percent slopes, moderately eroded	C	0.20
CnD3	Chillum-fairly loam, 3 to 15 percent slopes, severely eroded	C	0.20
EnB2	Chillum loam, 3 to 8 percent slopes, moderately eroded	B	0.17
EnC2	Elmhurst loam, 8 to 15 percent slopes, moderately eroded	B	0.17
Ha	Hatfield silt loam	D	0.27
HaB	Hatfield silt loam, level alluvium, 1 to 5 percent slopes	C	0.20
EnC2	Keopot silt loam, 3 to 10 percent slopes, moderately eroded	B	0.20
LaB2	Lagrange silt loam, 3 to 8 percent slopes, moderately eroded	B	0.20
LaC3	Lagrange silt loam, 8 to 15 percent slopes, severely eroded	C	0.20
U	Lenshire silt loam	D	0.24
Ms	Mide sand	C	0.20
Ms	Mide silt loam	C	0.20
HgB2	Montble all loam, 3 to 8 percent slopes, moderately eroded	B	0.20
HgC3	Montble silt loam, 8 to 15 percent slopes, severely eroded	B	0.20
HC	Montble-and-kidby soils, 15 to 45 percent slopes	B	0.20
NeB2	Neshaminy silt loam, 3 to 8 percent slopes, moderately eroded	B	0.20
NeC2	Neshaminy silt loam, 8 to 15 percent slopes, moderately eroded	B	0.20
NeD3	Neshaminy silt loam, 15 to 25 percent slopes, severely eroded	B	0.20
ScB	Sandy and clayey sand, gently sloping	D	0.20
ScD	Sandy and clayey sand, moderately sloping	D	0.20
SaB2	Sassafras gravelly sandy loam, 1 to 5 percent slopes, moderately eroded	B	0.24
SaC3	Sassafras gravelly sandy loam, 5 to 10 percent slopes, moderately eroded	B	0.24
SaD3	Sassafras loam, 5 to 9 percent slopes, moderately eroded	B	0.24
SaE3	Sassafras loam, 10 to 10 percent slopes, moderately eroded	B	0.24
SaF3	Sassafras loam, 10 to 15 percent slopes, moderately eroded	B	0.24
SaG3	Sassafras loam, 15 to 40 percent slopes, moderately eroded	B	0.24
SaH3	Sassafras fine sandy loam, 1 to 5 percent slopes, moderately eroded	B	0.24
SaI3	Sassafras fine sandy loam, 5 to 15 percent slopes, moderately eroded	B	0.24
SaJ3	Sassafras silt loam, 3 to 8 percent slopes	B	0.20

NOTES:
 * Public site and/or contains hydric inclusions
 ** May contain hydric inclusions
 *** Certified only within 100-year floodplain areas

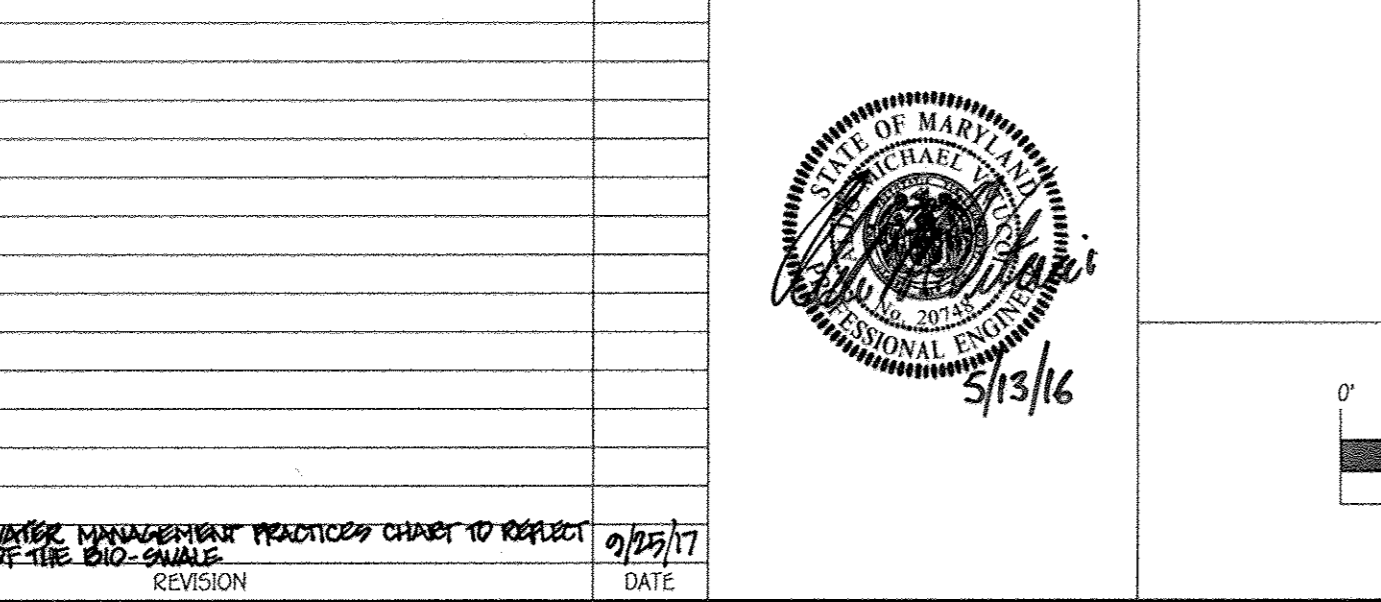
LEGEND

SYMBOL	DESCRIPTION
[Symbol]	EX. PUBLIC WATER AND UTILITY EASEMENT
[Symbol]	EX. PUBLIC SEWER AND UTILITY EASEMENT
[Symbol]	BOUNDARY/RIGHT OF WAY LINE
[Symbol]	BUILDING RESTRICTION LINE
[Symbol]	EXISTING PAVING
[Symbol]	PROPOSED L.O.D.
[Symbol]	PROPOSED CONCRETE
[Symbol]	EXISTING SOILS LINE
[Symbol]	DENOTES STREAM BANK BUFFER
[Symbol]	DENOTES FLOODPLAIN LIMIT
[Symbol]	EXISTING TREE LINE
[Symbol]	DENOTES CENTER LINE EX. STREAM
[Symbol]	DENOTES EXISTING MINOR CONTOUR
[Symbol]	DENOTES EXISTING MAJOR CONTOUR

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 1627 BALDORNE NATIONAL PARK
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2895

Professional Engineer Seal: 5/13/16

DATE: 09/25/17



OWNER	BUILDER
TODD & MOLLY KUEHL 5427 JOSIE COURT ELLICOTT CITY, MARYLAND 21043 (410-489-6729)	VIKING CUSTOM HOMES 1715 ARCHERS GLEN SYKESVILLE, MARYLAND 21784 (410-489-6729)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Kat Schlor
Chief, Division of Land Development 6-9-16 Date

John J. Japelli
Chief, Development Engineering Division NY 6-8-16 Date

William Japelli
Director, Department of Planning and Zoning 6-16-16 Date

SUBDIVISION	SECTION/AREA	LOT Nos.
KUEHL PROPERTY	---	5-A

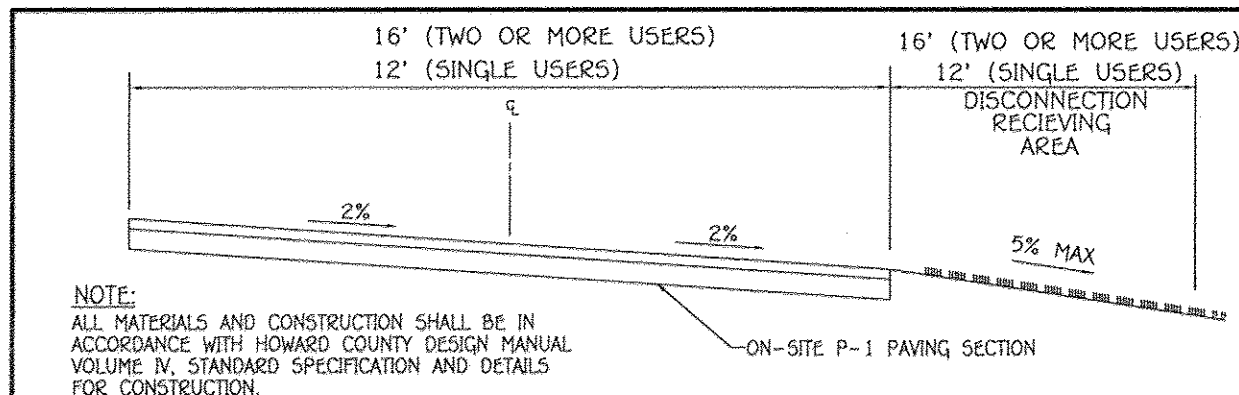
PLAT No.	BLOCK No.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
N/A	---	R-20	31	1st	602800

TITLE SHEET

KUEHL PROPERTY
 Lot 5-A
 (Liber 16420, Folio 499)

TAX MAP #31 PARCEL 656
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 ZONED: R-20

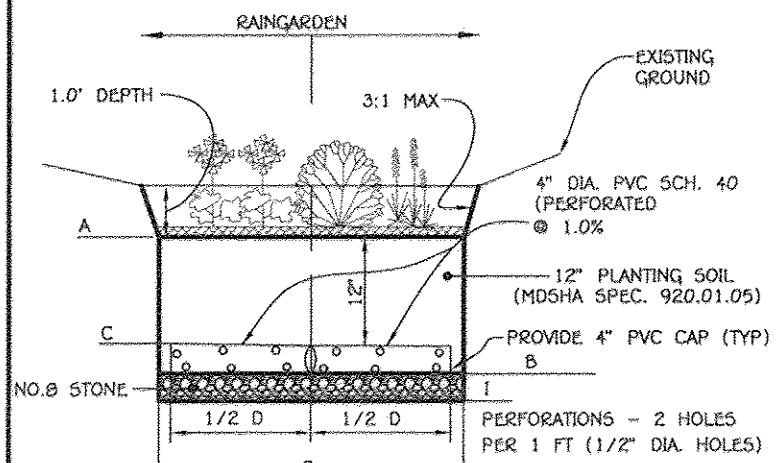
SCALE: AS SHOWN DATE: FEBRUARY 2, 2016
 SHEET 1 OF 3 SDP 16-043



Typical Private Drive Cross Slope Section
NO SCALE

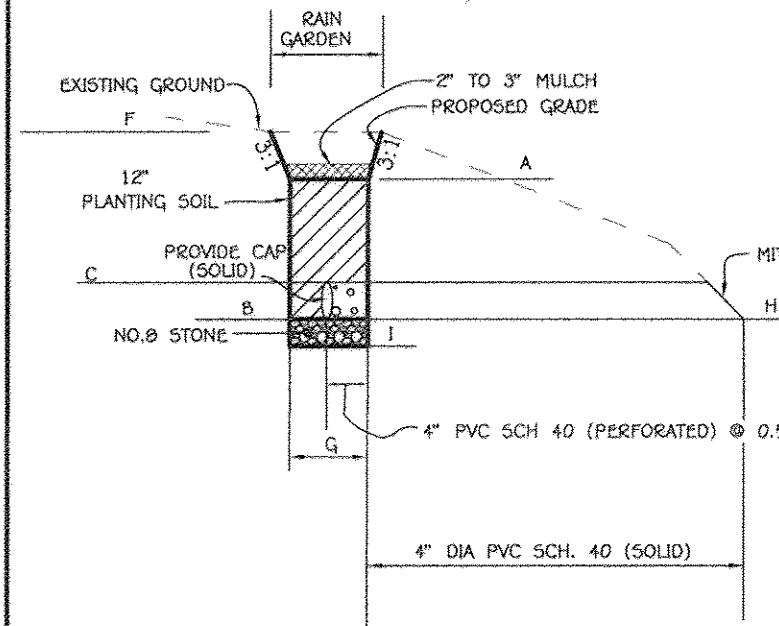
Operation & Maintenance Schedule For Privately Owned And Maintained Disconnection Of Rooftop Runoff (N-1), Disconnection Of Non-Rooftop Runoff (N-2)

1. 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 Impervious Area. In Commercial Areas, Foot Traffic Should Be Discouraged As Well.
- OPERATION AND MAINTENANCE SCHEDULE FOR RAINGARDEN AREAS (M-7)**
- The owner shall maintain the plant material, mulch layer and soil layer annually, maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design manual volume II, table A.4.1 and 2.
 - The owner shall perform a plant in the spring and in the fall each year. During the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, treat diseased trees and shrubs and replace all deficient stakes and wires.
 - The owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.
 - The owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.



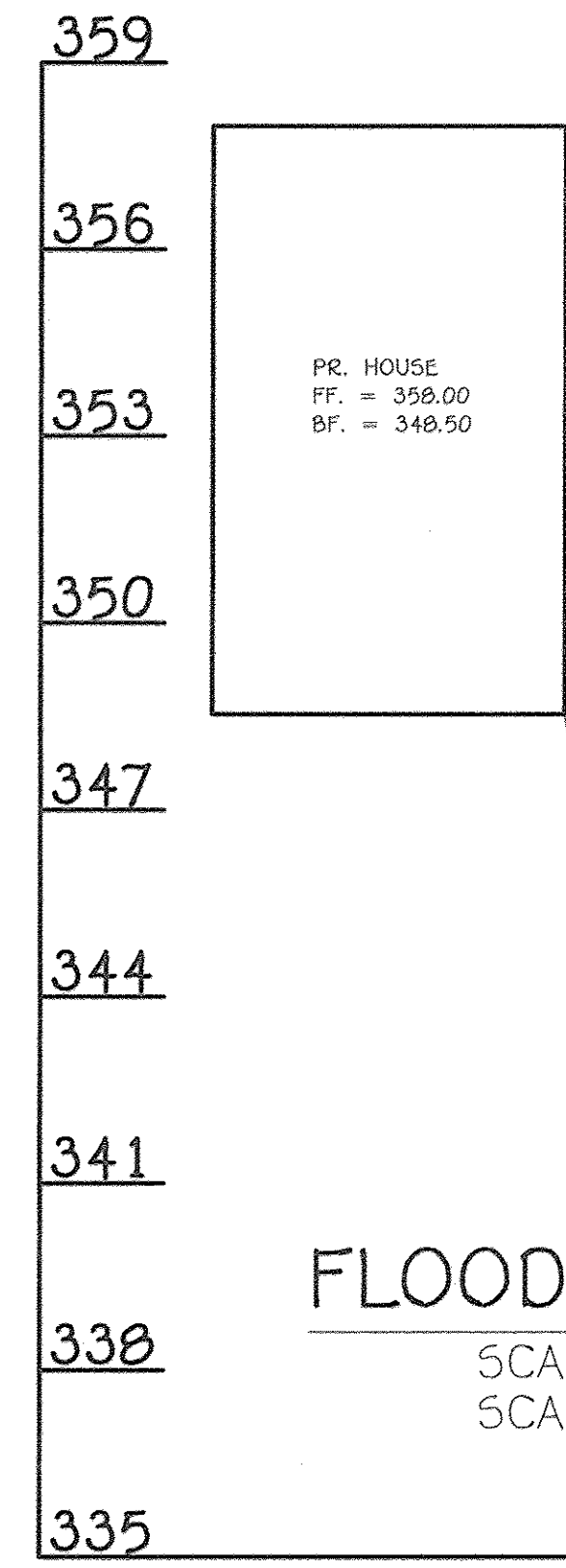
PROFILE ALONG VARIABLE PVC UNDERDRAIN
NO SCALE

PROPOSED RAIN GARDEN DESIGN								
A	B	C	D	F	G	H	I	REMARKS
347.00	345.50	346.00	30'	348.00	14'	344.50	10'	RAIN GARDEN #2

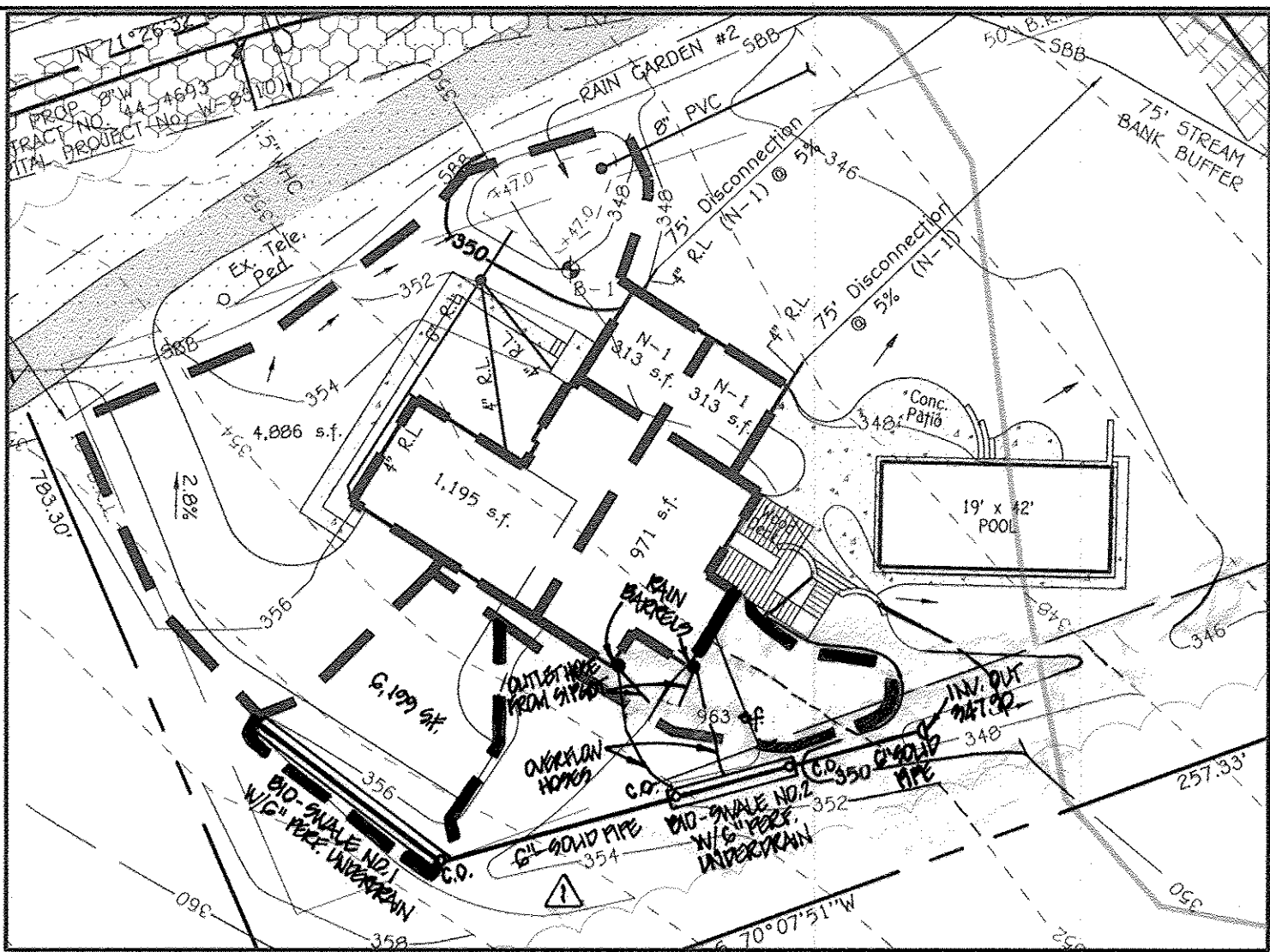


TYPICAL RAINGARDEN DETAIL (M-7)
NOT TO SCALE

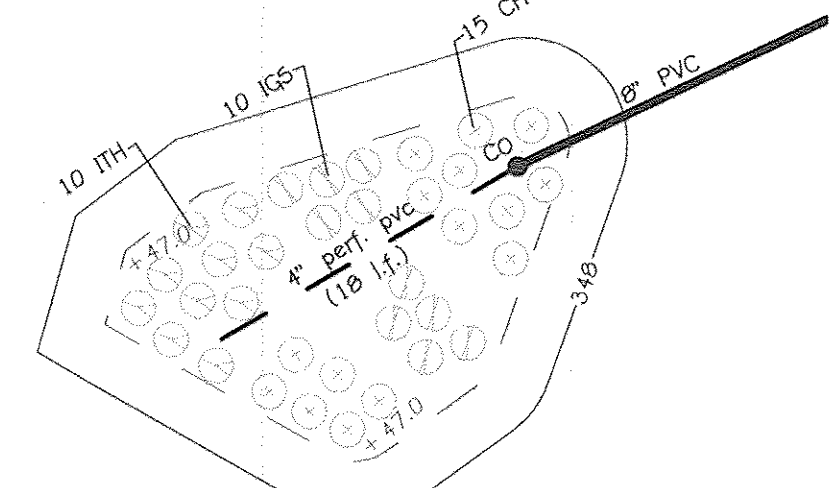
LEGEND	
SYMBOL	DESCRIPTION
[Symbol]	EX. 24' PRIVATE INGRESS/EGRESS EASEMENT
[Symbol]	EX. PUBLIC WATER AND UTILITY EASEMENT
[Symbol]	EX. PUBLIC SEWER AND UTILITY EASEMENT
[Symbol]	BOUNDARY/RIGHT OF WAY LINE
[Symbol]	B.R.L. BUILDING RESTRICTION LINE
[Symbol]	EXISTING PAVING
[Symbol]	PROPOSED L.O.D.
[Symbol]	PROPOSED CONCRETE
[Symbol]	EXISTING SOILS LINE
[Symbol]	55F-55F DENOTES STREAM BANK BUFFER
[Symbol]	FP DENOTES FLOODPLAIN LIMIT
[Symbol]	EXISTING TREE LINE
[Symbol]	DENOTES CENTER LINE EX. STREAM
[Symbol]	DENOTES EXISTING MINOR CONTOUR
[Symbol]	DENOTES EXISTING MAJOR CONTOUR



FLOODPLAIN PROFILE
SCALE: HOR. 1"=30'
SCALE: VERT 1"=3'

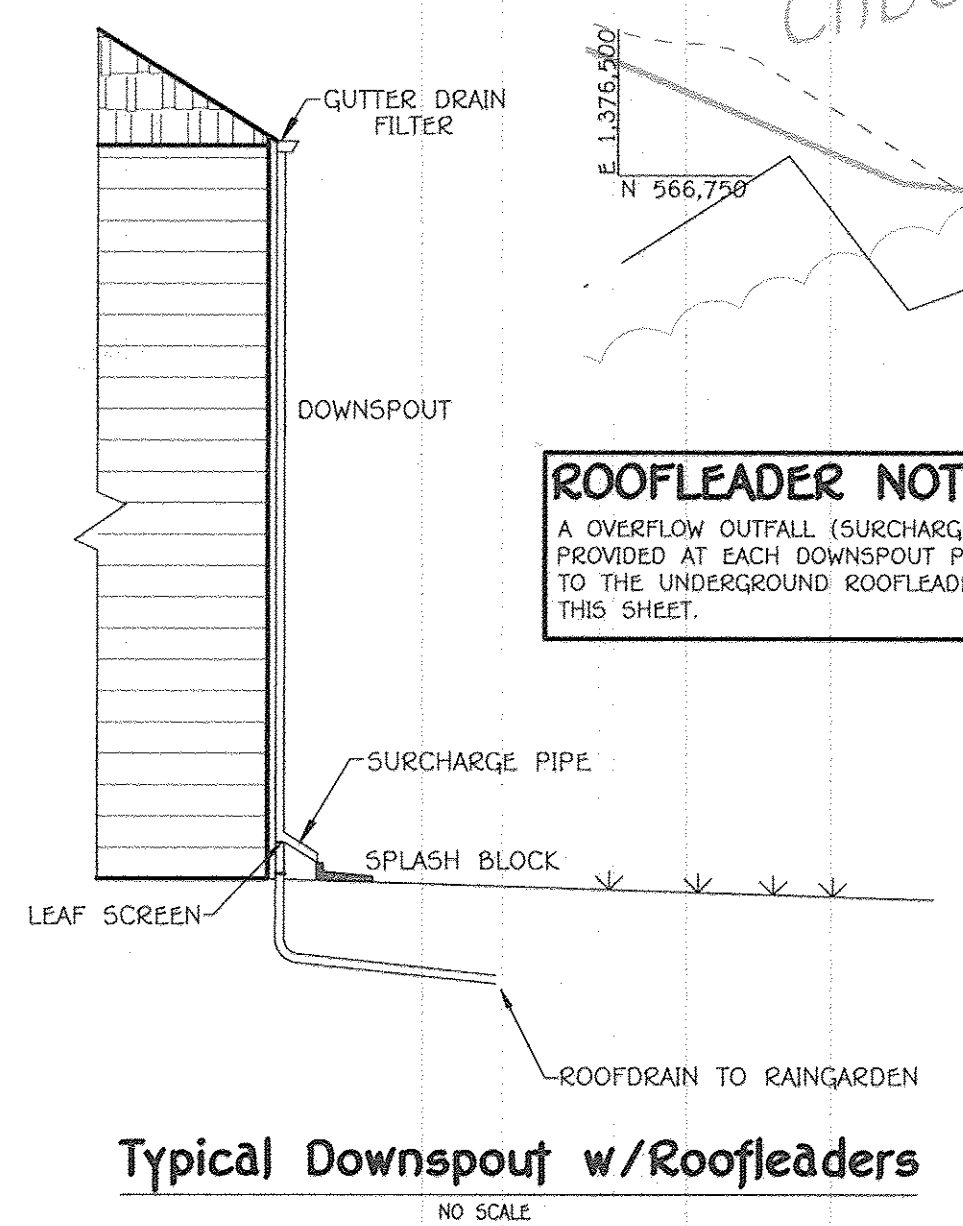
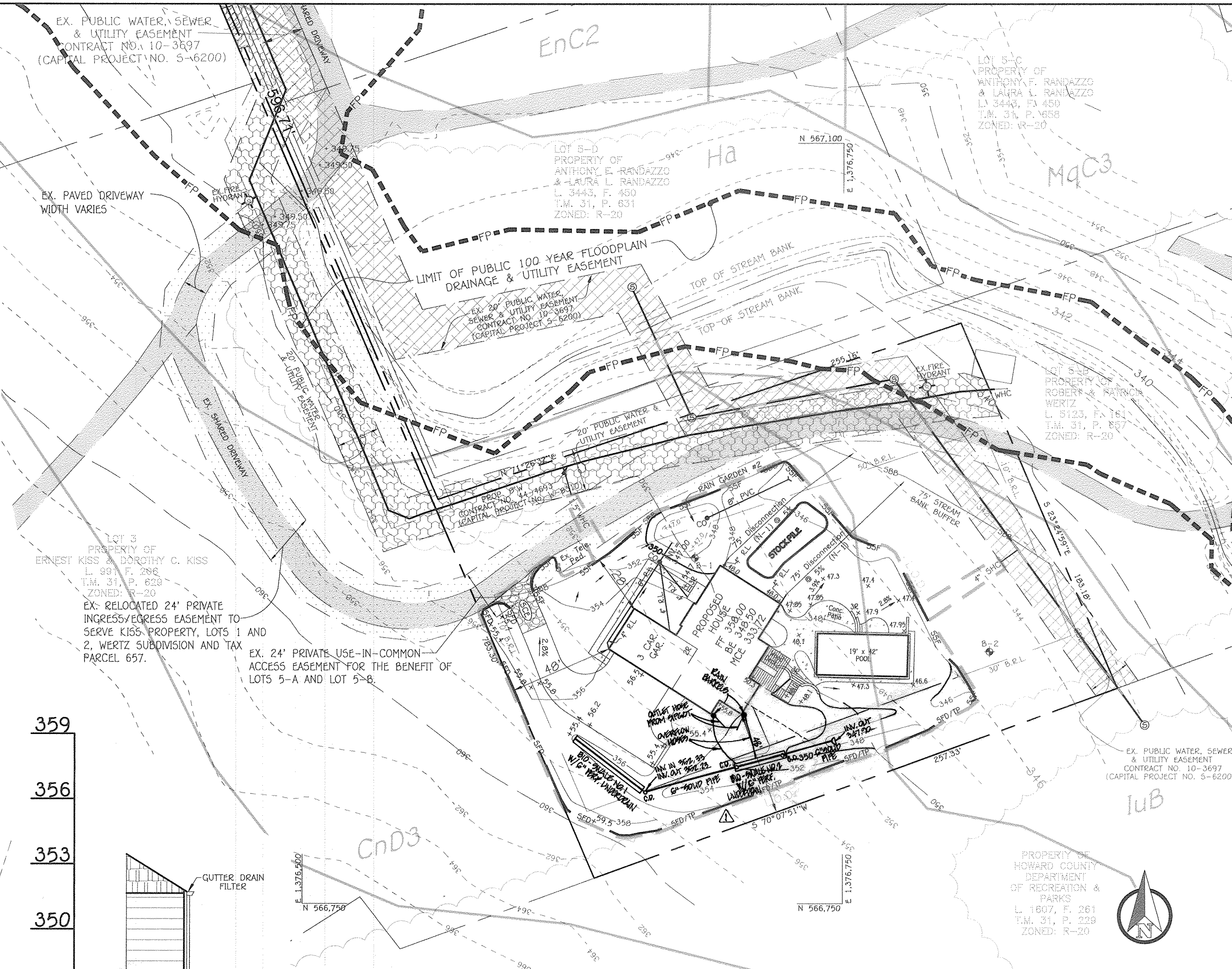


S.W.M. DRAINAGE AREA MAP
SCALE: 1"=30'

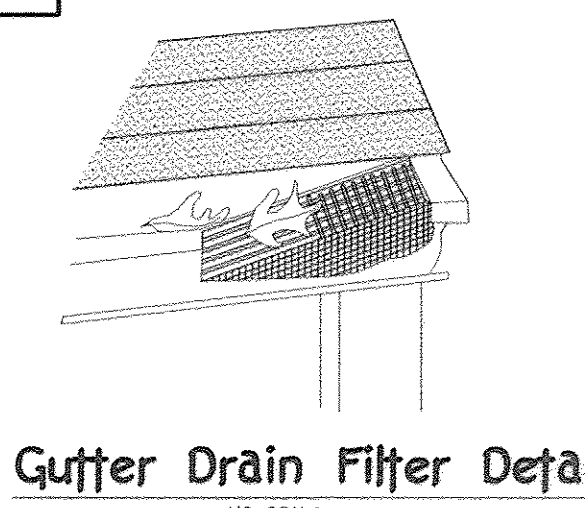


RAINGARDEN No. 2 (M-7)
SCALE: 1"=10'

ESD SHRUBS/PERENNIALS - RAIN GARDEN NO. 2					
QTY.	SYM.	BOTANICAL/COMMON NAME	SIZE	CONT.	REMARKS
10	CHG	Chelone glabra White Turtlehead	#1	Cont.	24" O.C.
10	IGS	Ilex glabra 'Shamrock' Inkberry	24"-30" Ht.	Cont.	30" o.c./Male Cultivar
10	ITH	Itea virginica 'Little Henry' Dwarf Virginia Sweetspire	18"-24" Ht.	3 Gal.	30" o.c. min.



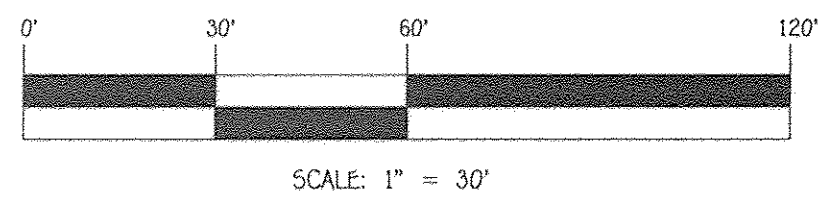
Typical Downspout w/ Roofleaders
NO SCALE



Gutter Drain Filter Detail
NO SCALE

ROOFLEADER NOTE:
A OVERFLOW OUTFALL (SURCHARGE) SHALL BE PROVIDED AT EACH DOWNSPOUT PRIOR TO CONNECTION TO THE UNDERGROUND ROOFLEADER. SEE DETAIL, THIS SHEET.

SEDIMENT CONTROL LEGEND	
[Symbol]	55F-55F-55F SUPER-SILT FENCE
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	L.O.D. LIMIT OF DISTURBANCE



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10672 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2995

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
No. 20728

REVISION

NO.	REVISION	DATE
1	REVISED TO PROVIDE THE PLAN PERMANENTLY IN INSTALLATION BARRELS AND 100' SQUARE TO TREAT THE RUNOFF	2/19/17

ENGINEER'S CERTIFICATE
"I certify that this plan for sediment and erosion control represents a practical and workable plan based on 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 (print name below signature) *John M. Veltz* 5/13/16 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 (print name below signature) *Todd & Molly A. Kuehl* 5/20/16 Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Signature of Howard SCD *John M. Veltz* 5/31/16 Date

OWNER	BUILDER
TODD & MOLLY KUEHL 5427 JOSIE COURT ELLICOTT CITY, MARYLAND 21043 (410)-489-6728	VIKING CUSTOM HOMES 1719 ARCHERS GLEN SYKESVILLE, MARYLAND 21784 (410)-489-6728

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Neil Schaefer 6-9-16 Date
Chief, Division of Land Development

W. J. Clark 6-8-16 Date
Chief, Development Engineering Division

William J. J. J. 6-16-16 Date
Director - Department of Planning and Zoning

SUBDIVISION	SECTION/AREA	LOT Nos.
KUEHL PROPERTY	---	5-A

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
NA	---	R-20	31	1st.	608000

SITE DEVELOPMENT, GRADING, STORMWATER MANAGEMENT, SEDIMENT & EROSION CONTROL PLAN

KUEHL PROPERTY
Lot 5-A
(Liber 16429, Folio 499)

TAX MAP #31 PARCEL 656
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ZONED: R-20

SCALE: AS SHOWN DATE: FEBRUARY 2, 2016
SHEET 2 OF 3

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

A. Soil Preparation

- 1. Temporary Stabilization
a. Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment...
b. Apply fertilizer and lime as prescribed on the plans.
c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable methods.

B. Topsoiling

- 1. Topsoil to be placed over prepared subsoil prior to establishment of permanent vegetation...
2. Topsoil to be placed over prepared subsoil prior to establishment of permanent vegetation...
3. Topsoiling is limited to areas having 2:1 or flatter slopes where...
4. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth...
5. The soil is so acidic that treatment with limestone is not feasible.

B. Mulching

1. Materials (in order of preference)

- a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color...
b. Wood Cellulose Fiber Mulch (WCFFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical stote.

2. Application

- a. Apply mulch to all seeded areas immediately after seeding...
b. When straw 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...
c. Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds of wood cellulose fiber per 100 gallons of water.

3. Anchoring

- a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water...

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMITS. (2 WEEKS)
2. NOTIFY "MSS" UTILITY AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK...
3. INSTALL STABILIZED CONSTRUCTION ENTRANCES, SILENT FENCE, SUPER-SILT FENCE AND DIVERSION FENCE WHERE SHOWN ON THE PLANS. (1 WEEK)
4. INSTALL REMAINING PERIMETER SEDIMENT CONTROL MEASURES AS SHOWN (2 WEEKS)
5. STABILIZE ALL DISTURBED AREAS WITH TEMPORARY SEEDING, CONTACT THE COUNTY DESIGNER EROSION CONTROL INSPECTOR BEFORE PROCEEDING. (2 DAYS)
6. GRADE IN THE DRIVEWAY TO THE GRADES AS SHOWN ON THE PLAN. (1 WEEK)
7. BEGIN HOUSE EXCAVATION FOR FOUNDATION AND PLACE EXCAVATED MATERIAL INTO THE STOCKPILE AREA. (8 WEEKS)
8. STABILIZE ALL OBTAINANCE WITH TEMPORARY SEEDING, RECEIVE PERMISSION TO CONTINUE FROM THE EROSION AND SEDIMENT CONTROL INSPECTOR. (2 DAYS)
9. INSTALL DECK AND POOL AREA AS SHOWN ON THE PLANS. (4 WEEKS)
10. STABILIZE ALL DISTURBANCE WITH TEMPORARY SEEDING, RECEIVE PERMISSION TO CONTINUE FROM THE EROSION AND SEDIMENT CONTROL INSPECTOR. (2 DAYS)
11. INSTALL THE 2 PROPOSED RAIN GARDENS TO TREAT THE SWM FOR THE HOUSE. INSTALL THE FILTER MEDIA AND CONNECT THE ROOF LEADAGE SYSTEM INTO THE FACILITIES. INSTALL THE ROOF LEADERS FOR THE DISCONNECTED CROCKET AREAS.
12. INSTALL FINAL COURSE OF PAVING FOR THE DRIVEWAY. (2 WEEKS)
13. STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEEDING. (1 DAY)
14. BEGIN REMOVAL OF THE PERIMETER SEDIMENT CONTROL FEATURES WITH THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR. ONCE ALL SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED PROVIDE PERMANENT SEEDING TO ANY DISTURBED AREAS. (1 WEEK)
NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS.

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

- 1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-513-1855 after the future LUD and protected areas are marked clearly in the field...
2. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading...
3. Prior to the start of another phase of construction or opening of another grading, apply the removal or modification of sediment control practices...
4. All disturbed areas shall be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL...
5. All sediment control structures are to remain in place, and are to be maintained in operative condition until permanent stabilization has been obtained from the CID.

PERMANENT SEEDING NOTES (B-4-5)

A. Seed Mixtures

- 1. General Use
a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3.1) and based on the site conditions or purposes listed in Table B.2 (e.g., selected mixtures), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.

Table with 4 columns: Species, Application Rate (lb/acre), Seeding Date, and Seeding Depth (inches).

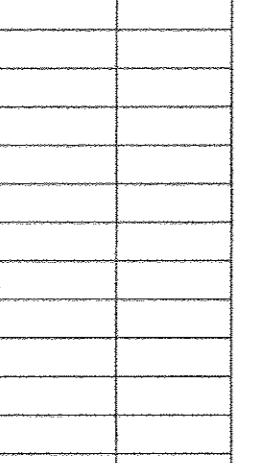
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED SURFACE STORMWATER FILTRATION SYSTEMS

- 1. THE STORMWATER FILTERING FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS...
2. THE TOP AND SIDE SLOPES OF THE FOUNDATION SHALL BE REMOVED A MINIMUM OF ONCE PER YEAR...
3. FILTERS THAT HAVE A GRADES COVER SHALL BE REMOVED AT LEAST ONCE PER YEAR...
4. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MAINTENANCE VISITS AND AS NEEDED...
5. VISIBLE SIGNS OF EROSION IN THE FACILITY SHALL BE REPAIRED AS SOON AS IT IS NOTICED...
6. REMOVE SEDIMENT WHEN IT EXCEEDS FOUR (4) INCHES DEEP IN THE FOREBAY...
7. FILTER MATERIAL MUST BE REPLACED WHEN WATER REMAINS ON THE SURFACE OF THE FILTER...
8. THE PERFORMANCE CHARACTERISTICS OF THE FACILITY MUST BE MONITORED THROUGH VISUAL INSPECTIONS...
9. THE FACILITY SHALL BE MAINTAINED TO EXCEED THE RATE AT WHICH THE FACILITY DESIGNS...
10. THE PERFORMANCE CHARACTERISTICS OF THE FACILITY MUST BE MONITORED THROUGH VISUAL INSPECTIONS...
11. THE FACILITY SHALL BE MAINTAINED TO EXCEED THE RATE AT WHICH THE FACILITY DESIGNS...
12. THE PERFORMANCE CHARACTERISTICS OF THE FACILITY MUST BE MONITORED THROUGH VISUAL INSPECTIONS...

TEMPORARY SEEDING SUMMARY

Table with 6 columns: Species, Application Rate (lb/acre), Seeding Date, Seeding Depth (inches), Fertilizer Rate (lb/acre), and Line Rate (lb/1000 sq ft).

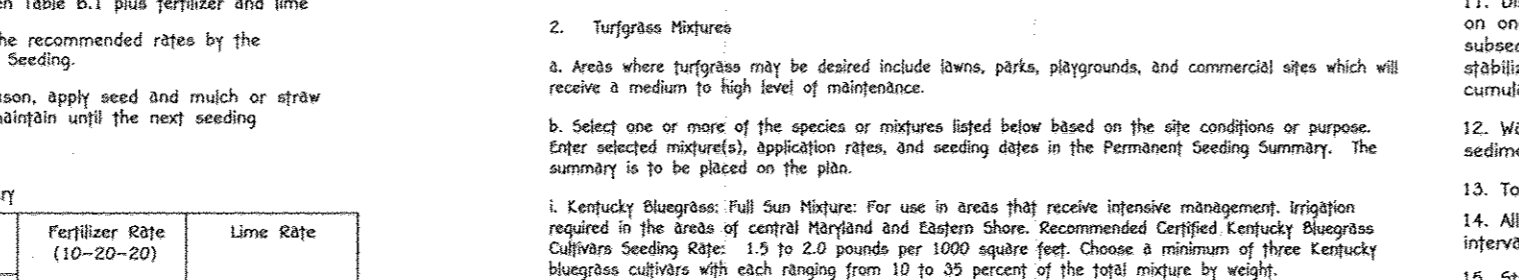
RAIN BARREL DETAIL



HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

- 1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-513-1855 after the future LUD and protected areas are marked clearly in the field...
2. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading...
3. Prior to the start of another phase of construction or opening of another grading, apply the removal or modification of sediment control practices...
4. All disturbed areas shall be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL...
5. All sediment control structures are to remain in place, and are to be maintained in operative condition until permanent stabilization has been obtained from the CID.

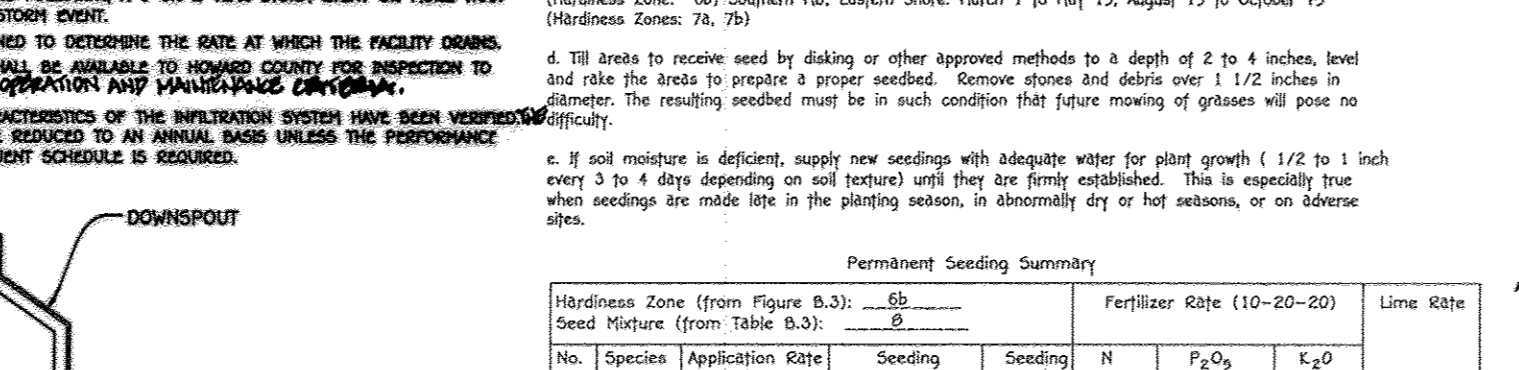
DETAIL E-3 SUPER SILT FENCE



CONSTRUCTION SPECIFICATIONS

- 1. INSTALL 2% IN DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART...
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS...
3. FASTEN WOVEN SILT FLM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION...
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS...
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE...
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS...
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHICH BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES EMBED GEOTEXTILE, REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS...
8. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SALT BEACHES REMOVED WHEN "BULGED" DEVELOP IN THE SILT FENCE OR WHEN SALT BEACHES FORM OF FENCE BEHIND...
9. FILTER CLOTH SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT 50' MAX. AND THE SECTION AND SHALL FULFILL THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS 9...

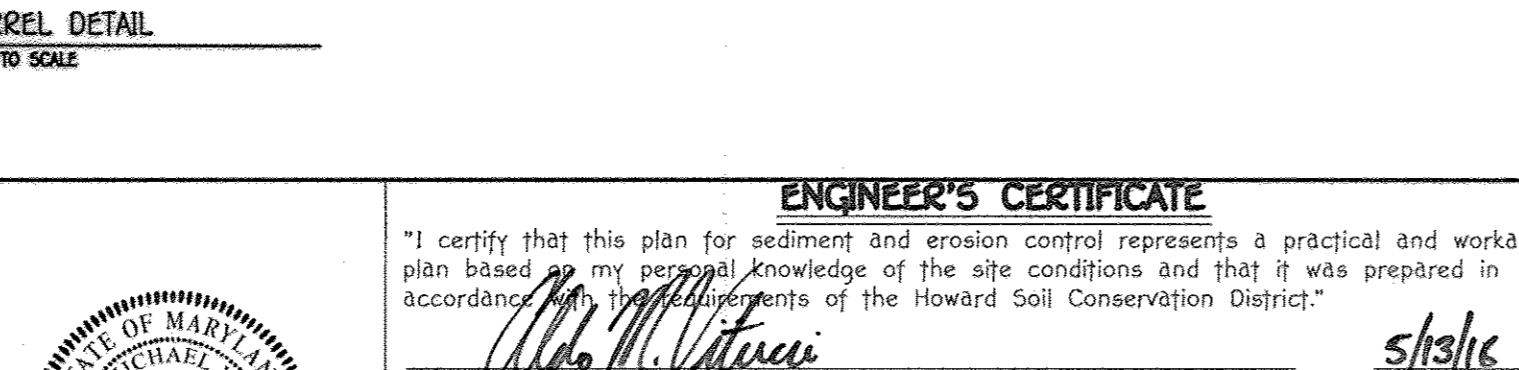
DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE



CONSTRUCTION SPECIFICATIONS

- 1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN...
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE...
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS...
4. PLACE CRUSHED AGGREGATE TO 2 TO 3 INCHES IN SIZE OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE...
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MALE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE...
6. WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING AWAY FROM ENTRANCE...
7. KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION, REMOVE ACCUMULATED SEDIMENT AND DEBRIS, MAINTAIN POSITIVE DRAINAGE, REPLACE IMPERMEABLE SHEETING IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE...

DETAIL C-9 DIVERSION FENCE



CONSTRUCTION SPECIFICATIONS

- 1. USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2% INCH MAXIMUM OPENING)...
2. SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION AND BELOW GROUND SURFACE...
3. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES...
4. SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION AND BELOW GROUND SURFACE...
5. EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 6 INCHES INTO GROUND...
6. WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING AWAY FROM ENTRANCE...
7. KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION, REMOVE ACCUMULATED SEDIMENT AND DEBRIS, MAINTAIN POSITIVE DRAINAGE, REPLACE IMPERMEABLE SHEETING IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE...

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

1. Definitions

- a. Application of seed and mulch to establish vegetative cover...
b. To protect disturbed soils from erosion during and at the end of construction...
c. To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

A. Seeding

- 1. Specifications
a. 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...
b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen...
c. Inoculants: The inoculant for existing legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species...
d. 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 phyto-toxic materials.

2. Application

- a. Dry Seeding: This includes use of conventional dry or broadcast spreaders...
b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil...
c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer)...

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 (print name below signature) Date: 5/13/16

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..."

Signature of Developer (print name below signature) Date: 5/20/16

SEDIMENT & EROSION CONTROL NOTES & DETAILS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
K. S. Shelton, Chief, Division of Land Development, 6-9-16
D. J. [Name], Chief, Development Engineering Division, 6-8-16
N. [Name], Director - Department of Planning and Zoning, 6-16-16

OWNER
TODD & JOLLY KUEHL
5427 JOSSE COURT
ELLICOTT CITY, MARYLAND 21043
(410-489-6728)

BUILDER
VIKING CUSTOM HOMES
1715 ARCHERS GLEN
SHYKENOTON, MARYLAND 21784
(410-489-6728)

Table with columns: SUBDIVISION, SECTION/AREA, LOT Nos., PLAT NO., BLOCK NO., ZONE, TAX/ZONE, ELEC. DIST., CENSUS TR.

TAX MAP #31 PARCEL 656
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ZONED: R-20
SCALE: AS SHOWN DATE: FEBRUARY 2, 2016
SHEET 3 OF 3

KUEHL PROPERTY

Lot 5-A
(Liber 16479, Folio 479)

TAX MAP #31 PARCEL 656
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ZONED: R-20

SCALE: AS SHOWN DATE: FEBRUARY 2, 2016
SHEET 3 OF 3

SDP 10-03