

SITE PLAN
SCALE: 1"=50'

SITE LIGHTING SCHEDULE

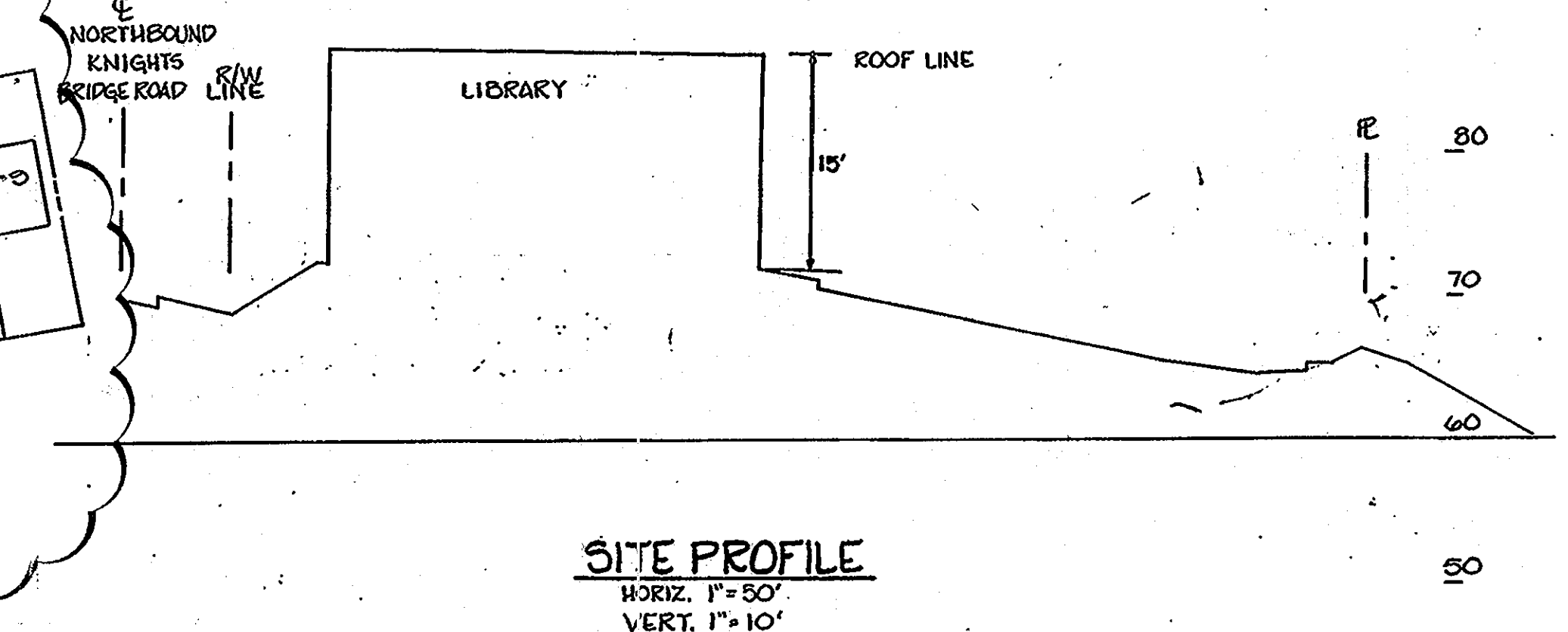
- LIGHTING FIXTURE MANUFACTURED BY L.S.I. CAT # CTM-3-250WMH-F-208-BRZ-NO. WITH POLE # 4 SQWCTM-SIIG-208-180-BRZ-4BC
- LIGHTING FIXTURE MANUFACTURED BY L.S.I. CAT # CTM-3-250WMH-F-208-BRZ-NO. WITH POLE # 4 SQWCTM-SIIG-208-180-BRZ-4BC
- LIGHTING FIXTURE MANUFACTURED BY L.S.I. CAT # CTM-3-250WMH-F-208-BRZ-NO. PROVIDE HOUSE-SIDE SHIELD. POLE # 4 SQWCTM-SIIG-208-180-BRZ-4BC.

SEE SHEET 16 FOR REVISED LIGHTING PLAN AND SCHEDULE

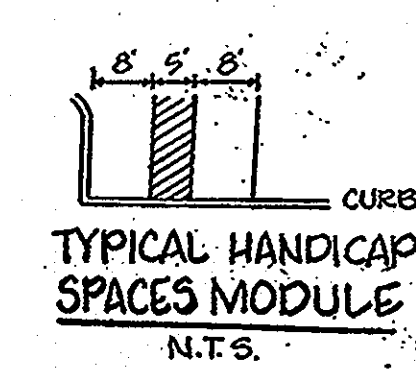
INDEX OF SITE PLAN SHEETS

1. SITE DEVELOPMENT PLAN
 2. STORM DRAIN AND SEDIMENT CONTROL PLAN
 3. PLANTING PLAN
 4. PLANTING PLAN DETAILS
 5. EXTERIOR ELEVATIONS
 6. OIL-GRIT SEPARATOR DETAIL
- ADDITIONAL SHEETS 7-30 SEE SHEET 7 FOR INDEX

SEE SHEETS 7-30 FOR REVISIONS TO SITE PLAN



SITE PROFILE
HORIZ. 1"=50'
VERT. 1"=10'



NOTE: SEE SHEET C-3 FOR HANDICAP SIGNING AND DETAILS

NOTE: SITE WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING HOWARD COUNTY STANDARD DETAILS:

- SIDEWALK - R3.05
- HANDICAP RAMP - R4.01 OR R4.03 AS SPECIFIED. THE CONTRACTOR MUST ENSURE THAT THE MAXIMUM GRADES SPECIFIED FOR THE RAMP IN THE REFERENCED STANDARDS ARE NOT EXCEEDED.
- CURB - R3.01 (STANDARD 7")
- PAVING - R2.01 (P-2)
- DODGYPUR PAD AND DODGYPUR DRIVEWAY - R4.10
- WATER MAIN VALVE - U3.65

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIALS	
		FULL DEPTH BIT. CONC. ALTERNATE	GRANULAR BASE ALTERNATES
P-2	RESIDENTIAL ZONES LOCAL CUL-DE-SACS, ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY*	1 1/2" BIT. CONC. SURFACE 5" BIT. CONC. BASE	1 1/2" BIT. CONC. "BASE" 2 1/2" BIT. CONC. "BASE" PRIME 8" CRUSHER RUN BASE COURSE (2 COURSES) OR 6" DENSE GRADED STABILIZED AGGREGATE BASE COURSE

TYPICAL PAVING SECTION FOR PARKING LOT

MATERIAL INDEX	COLOR
1 FACEBRICK	SEE SPEC
2 STANDING SEAM METAL ROOF (PREFINISHED)	
3 ALUMINUM FRAME WINDOW SYSTEM	DARK BRONZE
4 CAST STONE	
5 HOLLOW METAL DOOR FRAME (PAINTED)	
6 PREFINISHED ALUM. FASCIA	
7 SKYLIGHT ASSEMBLY	
8 EXTERIOR QYP. FD. SOFFIT (P/D)	
9 GLAZING, SOLAR BRONZE (TYPE "B")	
10 STEEL RIBBED MECH. SCREEN (PRE-FINISHED)	
11 CONTINUOUS PREFINISHED COPING	

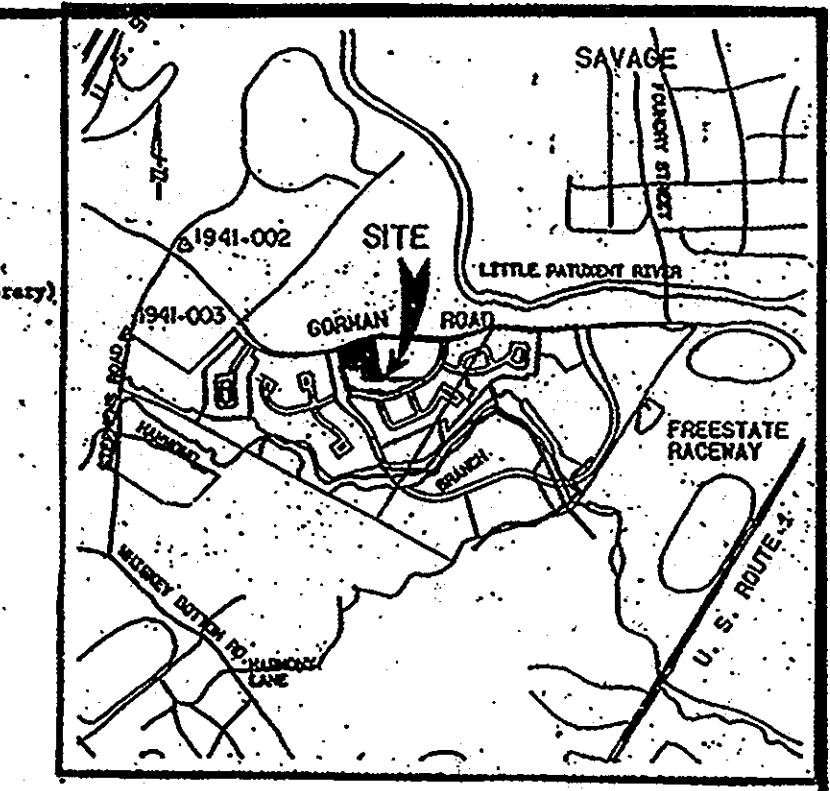
GREENMAN-PEDERSEN, INC. CERTIFIES THAT NO "WETLANDS" EXIST ON THIS SITE, AS SUCH SECTIONS 401 AND 404 DO NOT APPLY AND NO PERMITS ARE REQUIRED.

OWNER
HOWARD CO. GOVERNMENT

DEVELOPER
HOWARD COUNTY LIBRARY & HEALTH DEPT.
3430 COURT HOUSE DRIVE
ELLICOTT CITY, MD 21043
ATTN: MR. KENNETH EDWARDS
(301) 992-2040

ENGINEER
GREENMAN-PEDERSEN, INC.
14504 GREENVIEW DRIVE
SUITE 100
LAUREL, MD 20708
ATTN: PETER HEDRICH
(301) 880-3055

DATE	REVISION
9/18/89	APPENDIX #5
1/16/90	SHIFT BLDG. 5' SOUTH ELIMINATE SOUTHEAST PORTION OF LOT
5/14/90	ADD BACK SOUTHEAST PARKING LOT
11/13	ESD RETROFIT



VICINITY MAP

SCALE: 1"=2000' AREA: 2.78 AC

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

DATE: 7-31-89

APPROVED HOWARD COUNTY DEPT. OF PLANNING & ZONING

DATE: 8-31-89

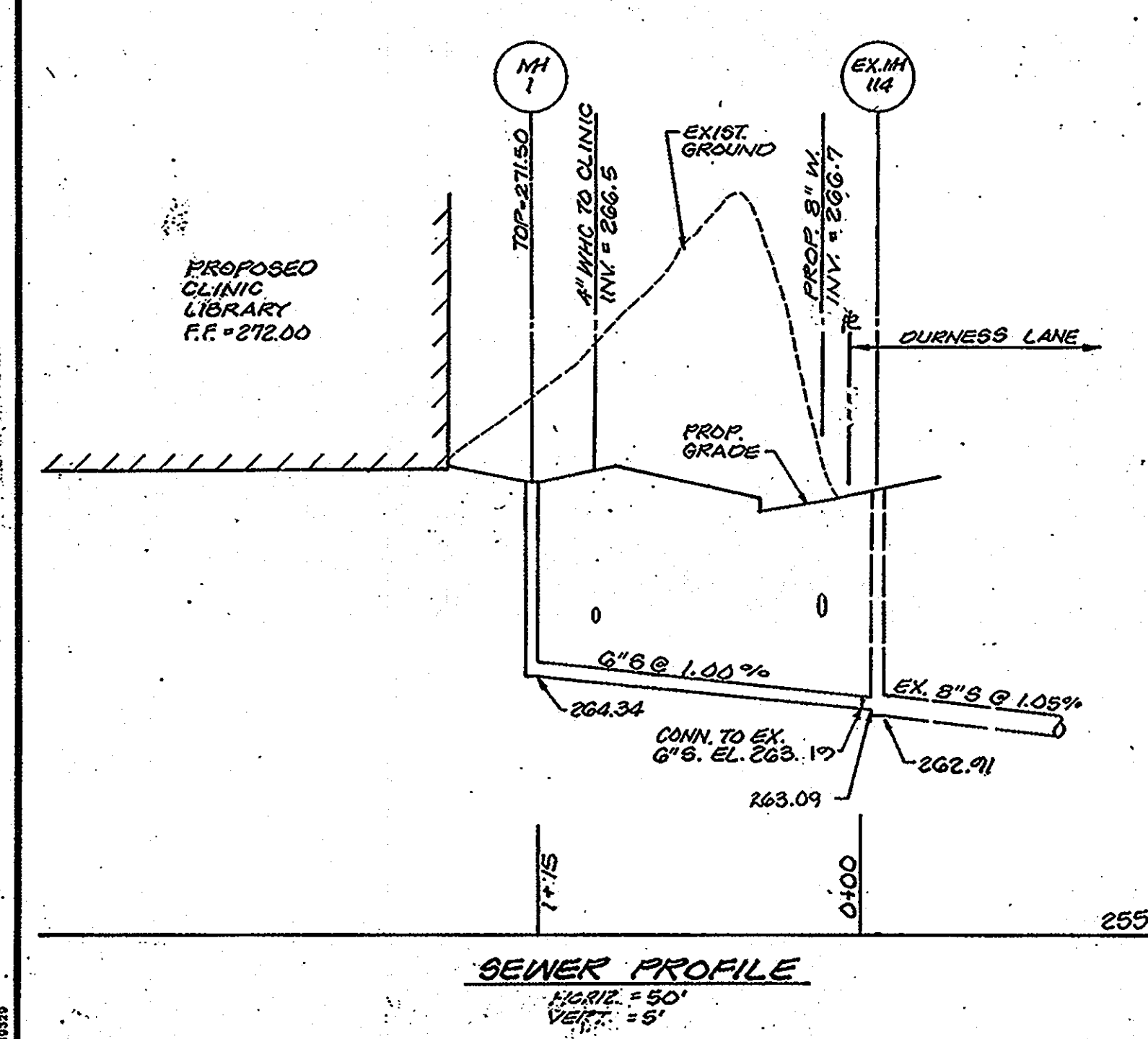
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: 7-28-89

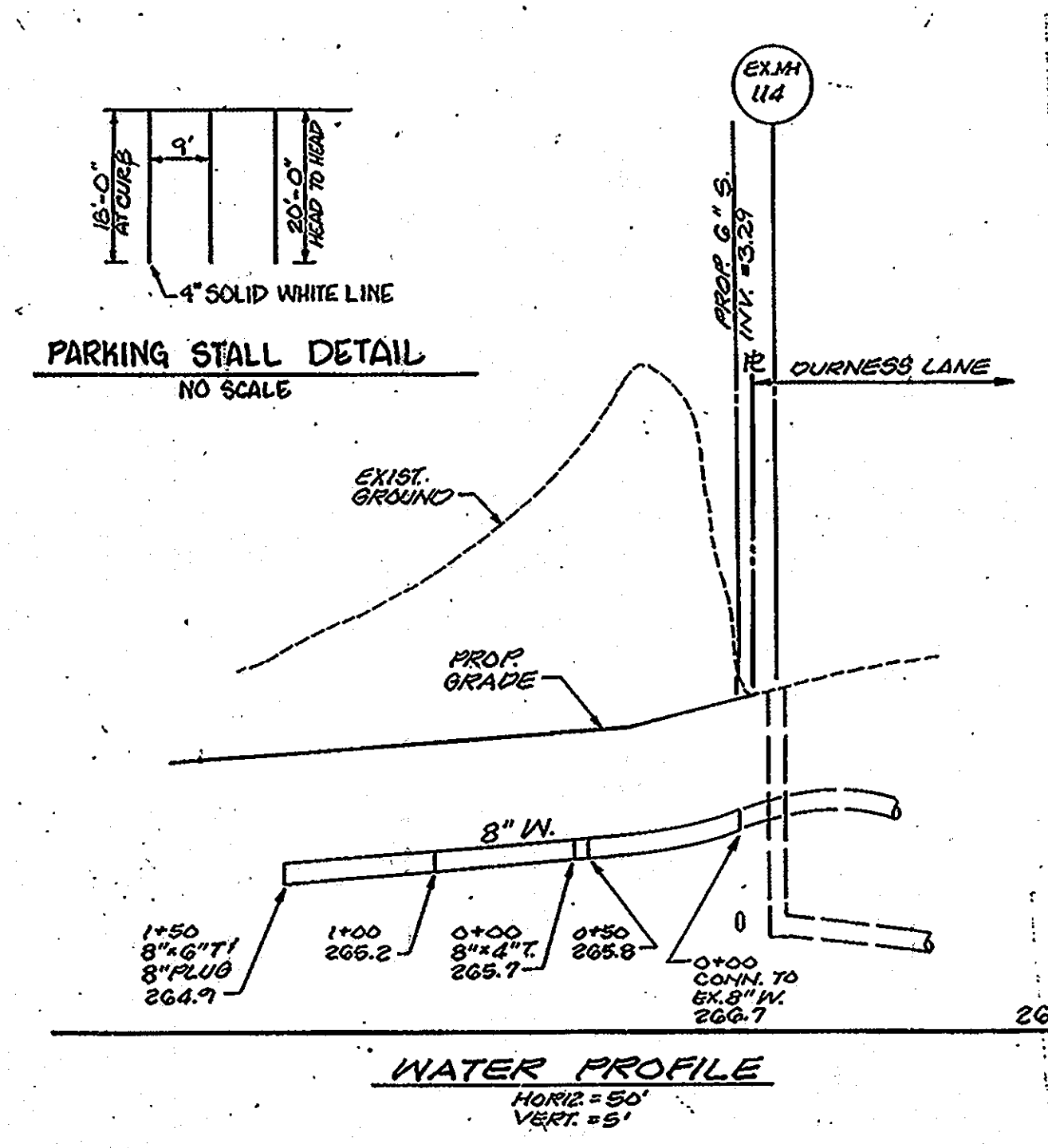
APPROVED
DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND

DATE: 6-8-89

THE PURPOSE OF THE SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN REDLINE REVISION IS TO DEMONSTRATE INNOVATIVE STORMWATER MANAGEMENT AND TO EXTEND LIBRARY PROGRAMS OUTSIDE OF THE BUILDING ENVELOPE AND INTO THE LANDSCAPE.



SEWER PROFILE
HORIZ. 1"=50'
VERT. 1"=5'



WATER PROFILE
HORIZ. 1"=50'
VERT. 1"=5'

SUBDIVISION NAME	SECT./AREA	PARCEL #
Bowling Brook Farms	N.A.	N
PLAT	ZONE	TAX/ZONE MAP
8410	R-SC	47
WATER CODE	SEWER CODE	6 6063
C-03		7270000
ADDRESS CHART		
LOT NUMBER	STREET ADDRESS	
N	9525 DURNNESS LANE	

SITE DEVELOPMENT PLAN - ZONE-RSC

SOUTHEASTERN MULTIPURPOSE CENTER

HOWARD COUNTY, MARYLAND

BOWLING BROOK FARMS, PARCEL N

CAPITOL PROJECT, C-0191

JOB NO. 88141 SR

SCALE (AS NOTED)

DATE (MAY 31, 1989)

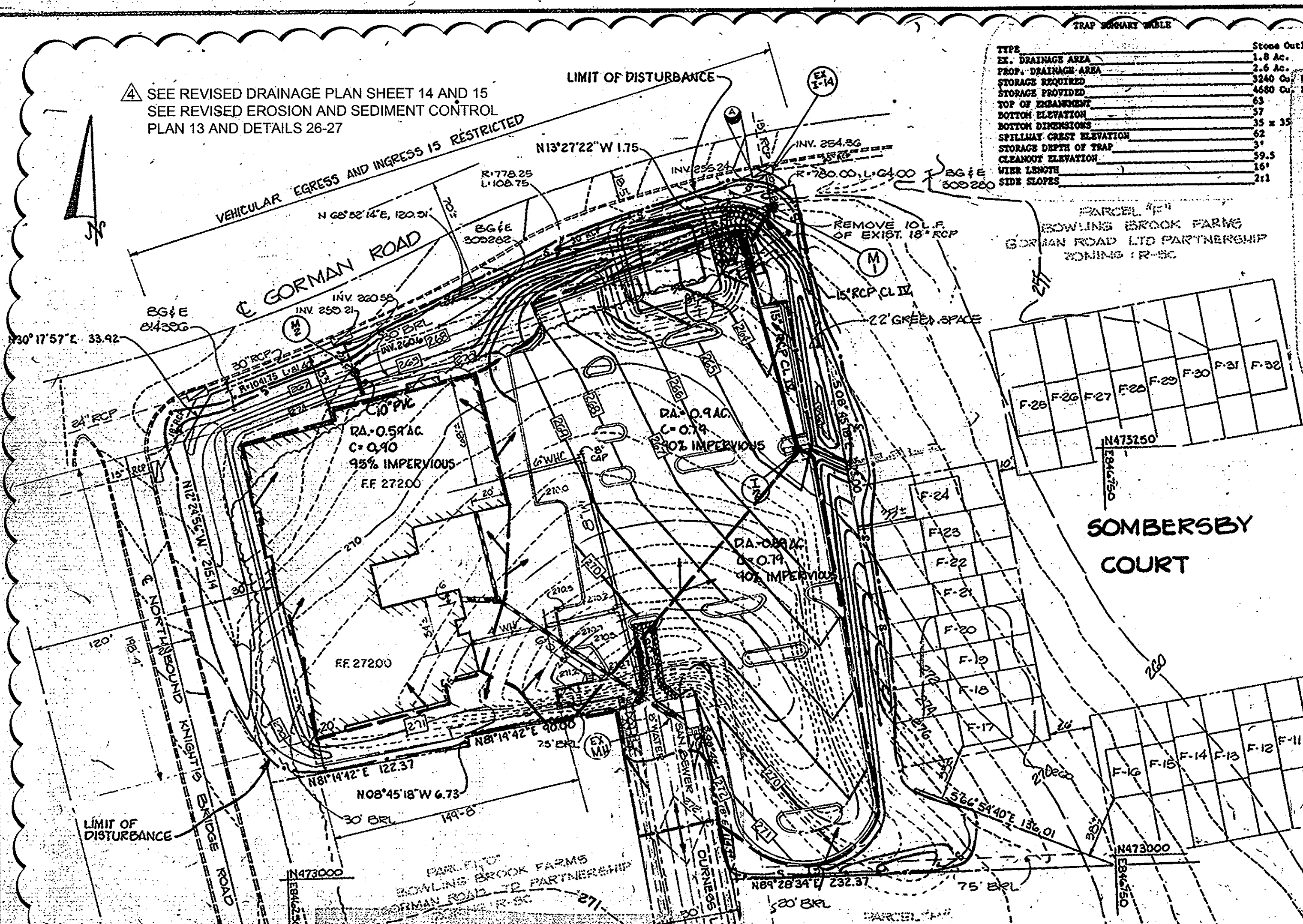
SHEET NO. 11 OF 30

GREENMAN-PEDERSEN INC.
ENGINEERS/ARCHITECTS/PLANNERS - LAUREL, MARYLAND

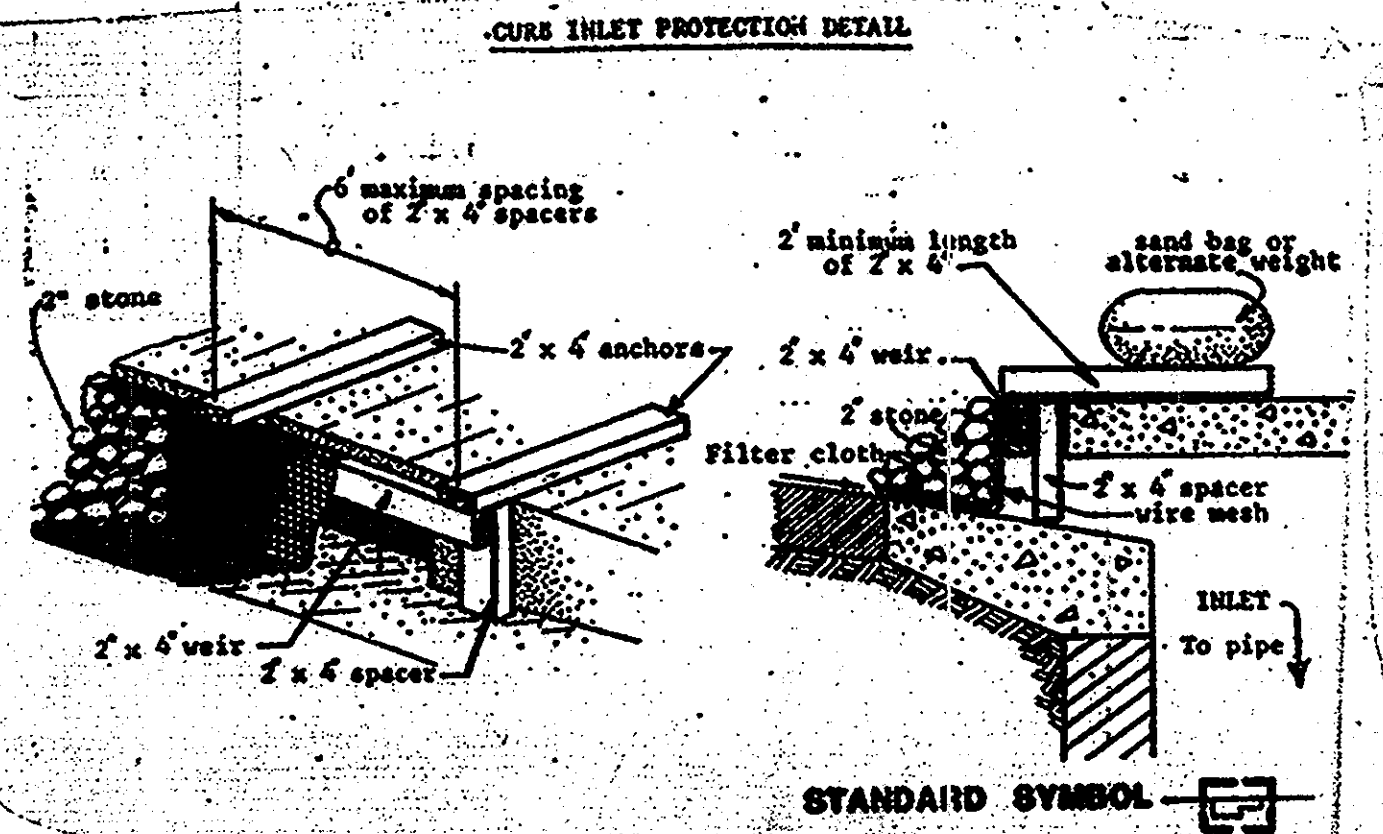
KEEP W/ ORIGINAL CONSTR. DWG.

SDP-89-232

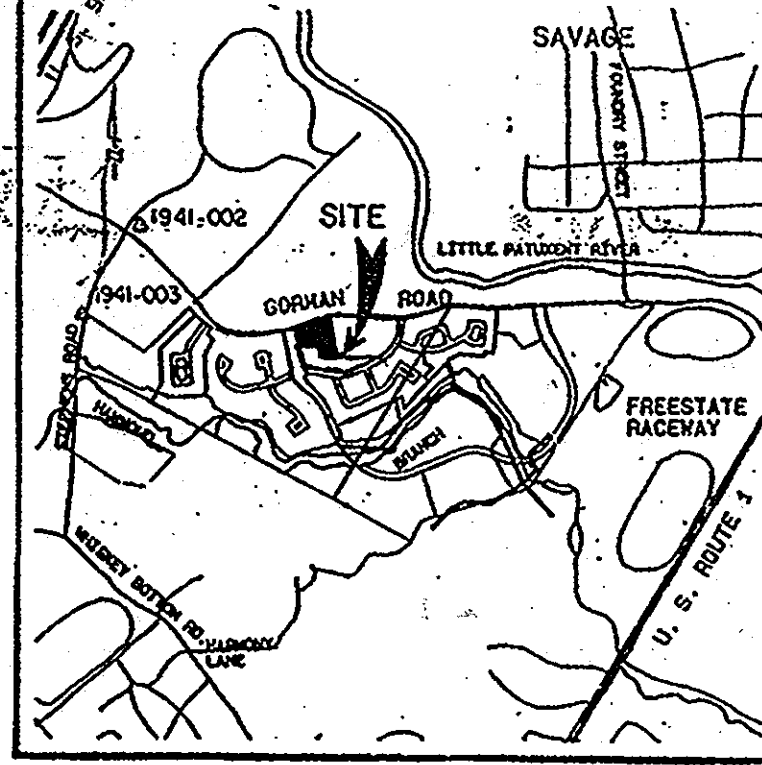
SEE REVISED DRAINAGE PLAN SHEET 14 AND 15
SEE REVISED EROSION AND SEDIMENT CONTROL
PLAN 13 AND DETAILS 26-27



TYPE	STONE OUTLET
DRAINAGE AREA	1.8 AC.
PROP. DRAINAGE AREA	2.6 AC.
STORAGE REQUIRED	3540 CU. FT.
STORAGE PROVIDED	4680 CU. FT.
TOP OF EXCAVATION	63
BOTTOM DIMENSIONS	35 x 35
SPILLWAY GIRT ELEVATION	62.5
STORAGE DEPTH OF TRAP	5.5
CLEARANCE ELEVATION	161
PILE LENGTH	21
SIDE SLOPES	2:1



1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the attached drawing.
 2. Place a piece of approved filter cloth (40-80 sieve) of the same width as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
 3. Securely attach the 2" x 4" weir to 8" long vertical spacers to be located between the weir and inlet face (max. 6" apart).
 4. Place the assembly against the inlet throat and wall (minimum 2" ledge of 2" x 4" to the top of the weir at opening locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
 6. From the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 1" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
2. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.



VICINITY MAP
SCALE 1" = 2000' AREA = 2.78 AC

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Signature DATE 7-21-89

APPROVED HOWARD COUNTY DEPT. OF PLANNING & ZONING

Signature DATE 7-21-89

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Signature DATE 7-23-89

CHIEF BUREAU OF ENGINEERING DATE

APPROVED
DIVISION OF
COMMUNITY PLANNING
& LAND DEVELOPMENT
HOWARD COUNTY,
MARYLAND

DATE 6-8-89

SEDIMENT CONTROL

"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources 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 DATE 8/6/89

Signature of Developer
DANIEL BENNETT

By the Engineer:

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

Signature DATE 8/28/89

Signature of Engineer
KENNETH J. BALESKE

Reviewed for HOWARD S.C.D. and
met Technical Requirements

Signature DATE 8/28/89

Soil Conservation District
Service 520-89-232

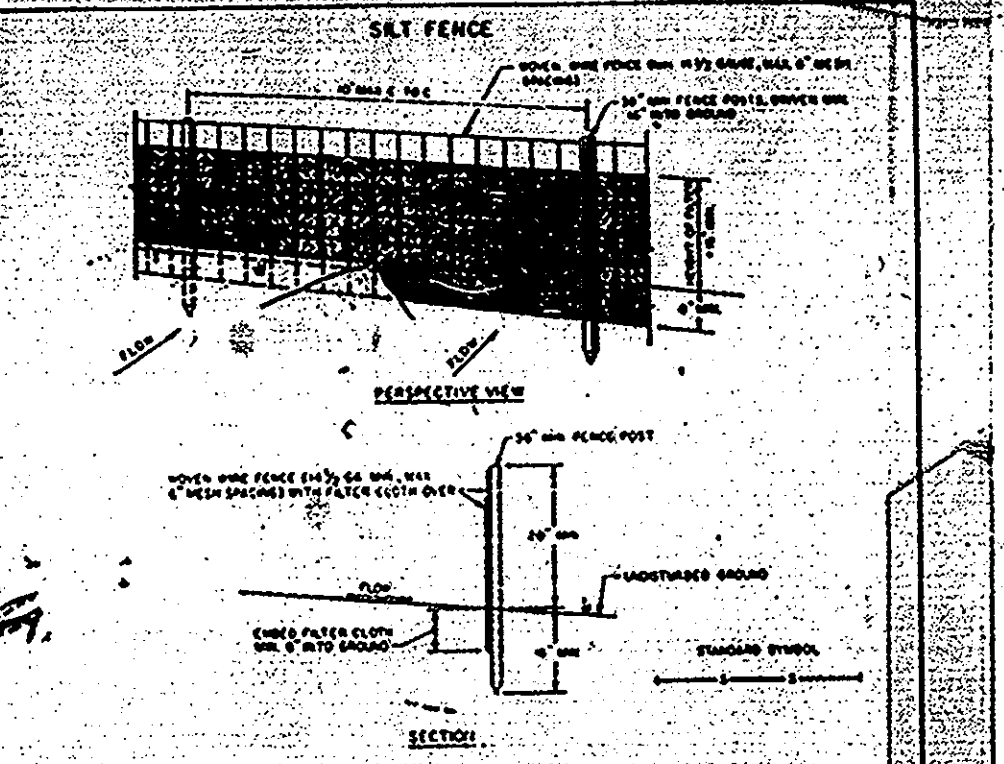
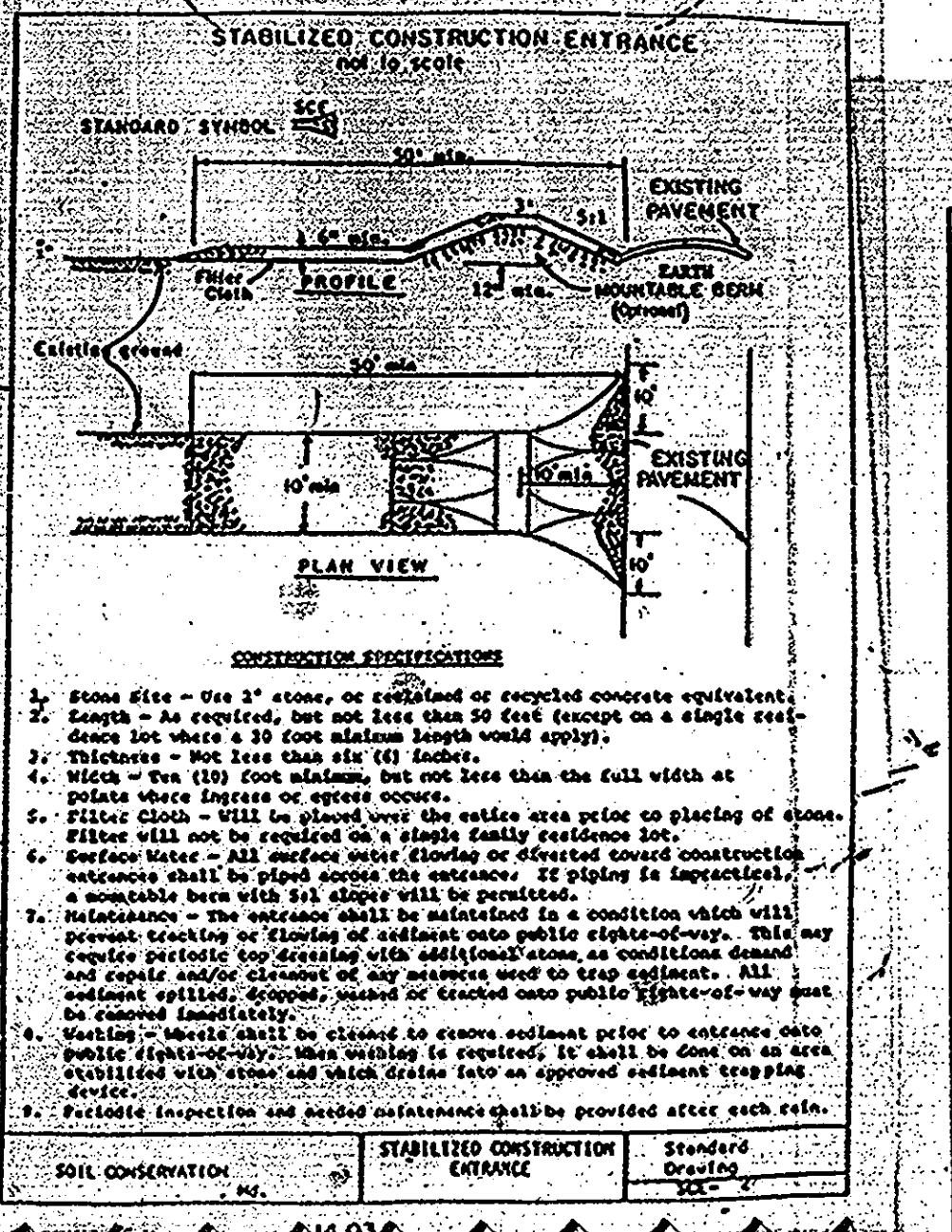
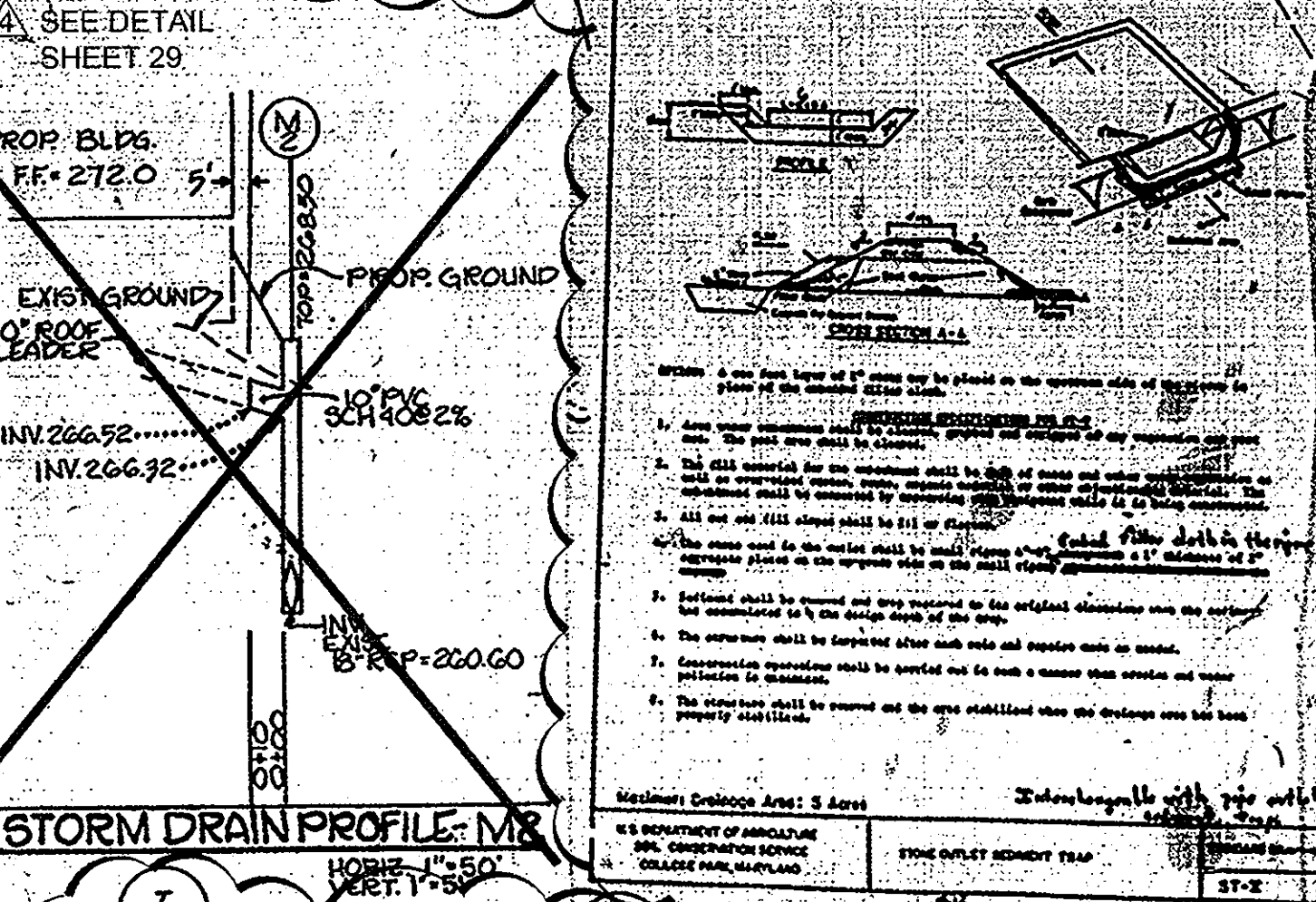
THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT CONTROL
BY THE HOWARD SOIL CONSERVATION
DISTRICT

Signature DATE 8/28/89

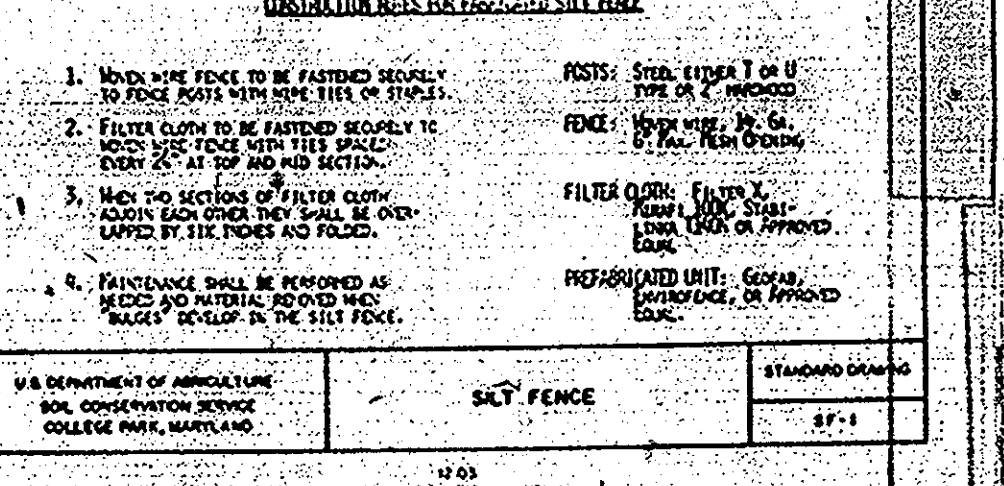
HOWARD S.C.D. DATE

- GENERAL NOTES
1. THE CONTRACTOR SHALL NOTIFY "GROSS UTILITY" AT 1-800-257-7777 FOR UNDERGROUND UTILITY LOCATIONS, AT LEAST FIVE DAYS PRIOR TO COMMENCING WORK SHOWN ON THE PLANS.
 2. ALL TOP ELEVATIONS FOR THE PROPOSED DRAINAGE AND MANHOLES ARE APPROXIMATE, AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND HIS ENGINEER.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ALL EXISTING DRIVEWAYS DAMAGED DURING CONSTRUCTION. SEE MEASUREMENT AND PAINTING IN SPECIAL PROVISIONS. EXISTING DRIVEWAYS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED AS FOLLOWS:
 - 1-1 4-INCH DEPTH OF BITUMINOUS CONCRETE BASE COURSE
 - 2-1 1-INCH DEPTH OF BITUMINOUS CONCRETE SURFACE COURSE
 4. TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION SITE ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 5. CONTRACTOR TO GRADE AROUND THE TOP OF THE PROPOSED INLETS IN ORDER TO PROVIDE POSITIVE DRAINAGE TO THE INLETS. LADING SHALL BE AS SHOWN ON THE PLANS OR AS INDICATED BY THE ENGINEER.
 6. COORDINATES ARE BASED ON THE MARYLAND STATE GRID SYSTEM.
 7. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION BEFORE COMMENCING CONSTRUCTION. NEITHER THE ENGINEER NOR THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WARRANT OR GUARANTEE THE COMPLETENESS OR CORRECTNESS OF THE INFORMATION SHOWN.
 8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES. ANY DAMAGE TO THE CONTRACTOR'S RESPONSIBILITY SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE. CLEAR ALL UTILITIES BY A MINIMUM OF 6-INCHES.
 9. TEST PITS SHALL BE DIG AT ALL UTILITY CROSSINGS TO DETERMINE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF UTILITIES. TEST PITS SHALL BE DIG A SUFFICIENT DEPTH TO THE ADJACENT END OF THE CONSTRUCTION OR EXISTING OPERATION IN ORDER TO ALLOW FOR NECESSARY ADJUSTMENTS.
 10. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE TO BE REPAIRED IN THE SPOT. THE RESULTS OF TEST PITS ARE TO BE INDICATED ON THE STORM DRAIN PROFILES.
 11. ALL UTILITY PILES MUST BE CLEARED BY 2-FEET OR THE PROPOSED STORM DRAIN SHALL BE PLACED BY TANGENTIAL. ALL COSTS FOR TANGENTIAL ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING THE STORM DRAIN PIPE.
 12. ALL VERTICAL CURVES ARE BASED ON U.S.G.S. FORM OF 1975.
 13. ALL FIVE ELEVATIONS SHOWN ARE DRAINAGE ELEVATIONS.
 14. CONTRACTOR SHALL REMOVE TREES, STUMPS AND EXISTING BENCH MARKS IN EXTENSION AS SHOWN BY THE ENGINEER. EXISTING BENCH MARKS SHALL BE REPAIRED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING STORM DRAIN PIPE.
 15. PLACE REGULATION "WEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
 16. EXISTING WATER HOUSE SERVICES, THAT ARE IN CONFLICT WITH THE PROPOSED STORM DRAINAGE FACILITIES, SHALL BE IN CONFLICT WITH THE PROPOSED STORM DRAINAGE FACILITIES.
 17. FOR DETAILS NOT SHOWN ON THE DRAWINGS AND FOR MATERIALS AND CONSTRUCTION METHODS, THE CONTRACTOR SHALL REFER TO THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND THE SPECIAL PROVISIONS. IN THE EVENT OF ANY DISCREPANCY BETWEEN THESE TWO SOURCES, THE LATTER SHALL GOVERN.
 18. EXISTING FENCES, MAILBOXES, SIGNS AND SHRUBS DISTURBED BY THE WORK SHALL BE RECONSTRUCTED OR REPLACED IN KIND.
 19. ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE 2-INCH DEPTH OF TOPSOIL AND SOILING SEEDING, WHERE OTHERWISE INDICATED ON THE PLANS, OR AS INDICATED BY THE ENGINEER.
 20. LOCATION SIGNS FOR INLETS, MANHOLES AND STRUCTURES:
- | ITEM | HORIZONTAL LOC. | VERTICAL LOC. |
|------------------|---------------------|---------------|
| CURB TYPE INLETS | CENTER FACE OF CURB | TOP OF CURB |
| CURB TYPE INLETS | CENTER OF GRADE | TOP OF CURB |
| MANHOLES | CENTER OF GRADE | TOP OF CURB |
| MANHOLES | CENTER OF WALL | TOP OF WALL |
21. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF 10 FEET IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES. COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR STORM DRAIN PILES.
 22. STANDARD DETAILS FOR THIS CONTRACT SHALL BE THE HOWARD COUNTY STANDARD DETAILS AS SUPPLEMENTED BY THE MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD DETAILS.
 23. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE COMMENCING WORK SHOWN HEREON:
 - UTILITY: MARYLAND STATE HIGHWAY ADMINISTRATION
 - UTILITY: MARYLAND STATE WATER AND POWER ADMINISTRATION
 - UTILITY: MARYLAND STATE DEPARTMENT OF TRANSPORTATION
 - UTILITY: MARYLAND STATE DEPARTMENT OF GENERAL SERVICES
 - UTILITY: MARYLAND STATE DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES
 - UTILITY: MARYLAND STATE DEPARTMENT OF PUBLIC WORKS
 - UTILITY: MARYLAND STATE DEPARTMENT OF HEALTH
 - UTILITY: MARYLAND STATE DEPARTMENT OF EDUCATION
 - UTILITY: MARYLAND STATE DEPARTMENT OF LABOR AND INDUSTRY
 - UTILITY: MARYLAND STATE DEPARTMENT OF AGRICULTURE
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE POLICE
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE FIRE ADMINISTRATION
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE CORRECTIONS
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE ARCHIVES
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE HISTORICAL SOCIETY
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE PARKS AND RECREATION
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE OFFICIALS AND COURTS
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE SENATE
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE HOUSE OF DELEGATES
 - UTILITY: MARYLAND STATE DEPARTMENT OF MARYLAND STATE GOVERNMENT

- SEEDING REQUIREMENTS
- Apply to grades or cleared areas not to be constructed where a permanent vegetation cover is desired.
- Seeding - Apply 15 to 20 lbs per acre (15 to 20 lbs/1000 sq ft) of certified small grain (wheat or rye) seed to the topsoil immediately after excavation or grading. Seeding shall be done immediately after excavation or grading. Seeding shall be done immediately after excavation or grading. Seeding shall be done immediately after excavation or grading.
- Soiling - Apply 15 to 20 lbs per acre (15 to 20 lbs/1000 sq ft) of certified small grain (wheat or rye) seed to the topsoil immediately after excavation or grading. Seeding shall be done immediately after excavation or grading. Seeding shall be done immediately after excavation or grading. Seeding shall be done immediately after excavation or grading.
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- SEQUENCE OF CONSTRUCTION
1. NOTIFY THE HOWARD COUNTY DEPARTMENT OF LICENSES AND PERMITS INSPECTOR 48 HOURS BEFORE BEGINNING WORK.
 2. INSTALL SEDIMENT CONTROL DEVICES.
 3. CLEAR, GRUB AND GRADE SITE AND INSTALL UTILITIES.
 4. INSTALL CURBING AND INLET PROTECTION, EXCEPT IN AREA OF TRAP.
 5. CONSTRUCT BUILDING AND EXHAUSTER OF PARKING LOT.
 6. STABILIZE ALL DISTURBED AREAS.
 7. PAVE AND STABILIZE PARKING AREA THEN BACKFILL TRAP.



NO.	TYPE	TOP EL.	INV. OUT.	REMARKS
M-1	SMALL DRAIN	261.00	255.50	HO. CO. 65.05
M-2	STR. PRECAST	262.50	260.00	HO. CO. 85.12
I-1	UTILITY	263.0	255.01	DETAIL SHEET C-9
I-2	A-5	265.0	261.50	HO. CO. 50.01

SIZE	TYPE	LENGTH
15"	RCP CL. 12	141 L.F.

NOTE: SEE SHEET C-4 FOR TOPSOIL AND SEEDING NOTES

OWNER
HOWARD CO. GOVERNMENT

DEVELOPER
HOWARD COUNTY LIBRARY & HEALTH DEPT.
3430 COURT HOUSE DRIVE
ELLIOTT CITY, MD 21043
ATTN: MR. KENNETH EDWARDS
(301) 992-2040

ENGINEER
GREENMAN-PEDERSEN, INC.
14504 GREENVIEW DRIVE
SUITE 100
LAUREL, MD 20708
ATTN: PETER HEORICH
(301) 886-3055

DATE	REVISION
11/13	ESD RETROFIT

STORM DRAIN & SEDIMENT CONTROL

SOUTHEASTERN MULTIPURPOSE CENTER
HOWARD COUNTY, MARYLAND
BOWLING BROOK FARMS, PARCEL N
CAPITOL PROJECT C-0191

PLAT 8410
JOB NO. 88141.SD

SCALE 1" = 50'

DATE MAY 31, 1989

SHEET NO. 30 OF 30

GREENMAN-PEDERSEN, INC.
ENGINEERS/ARCHITECTS/PLANNERS - LAUREL, MARYLAND

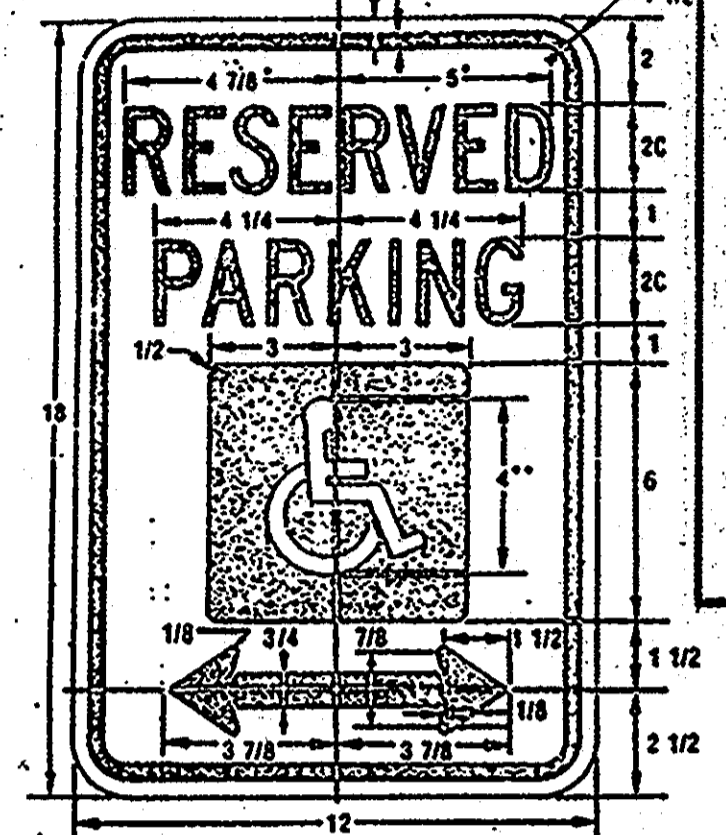
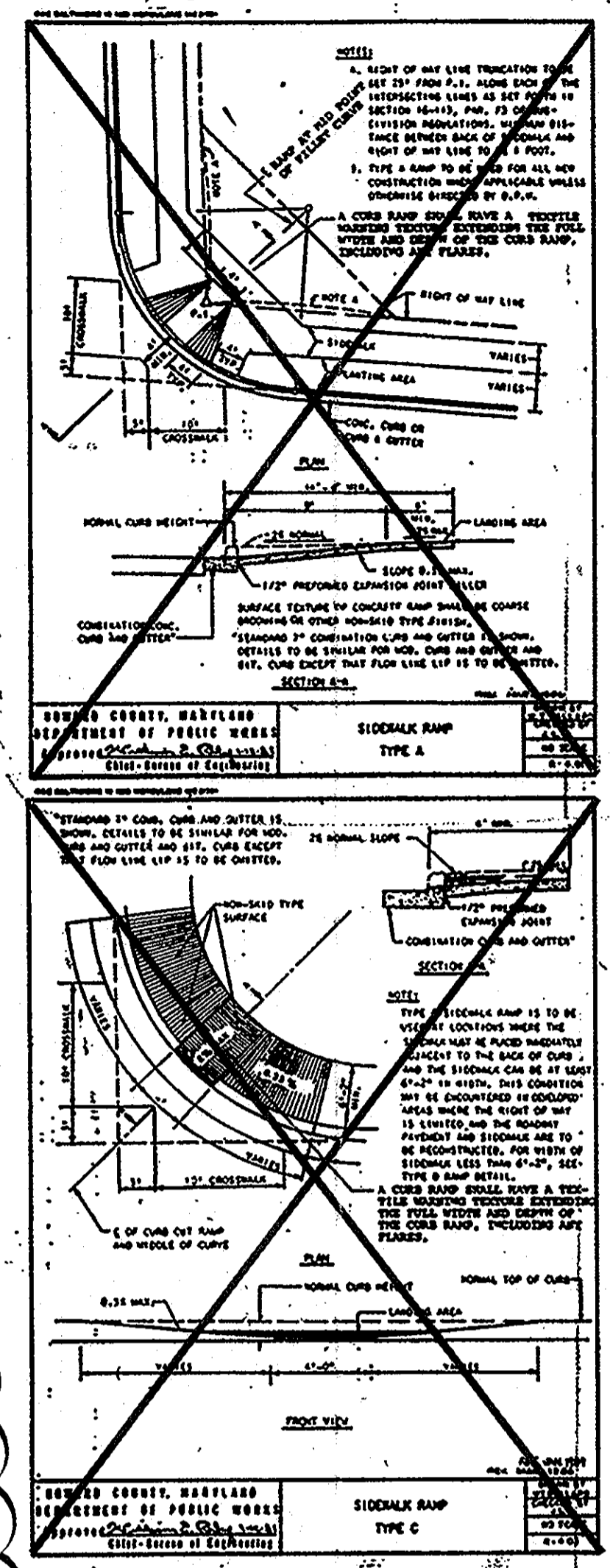
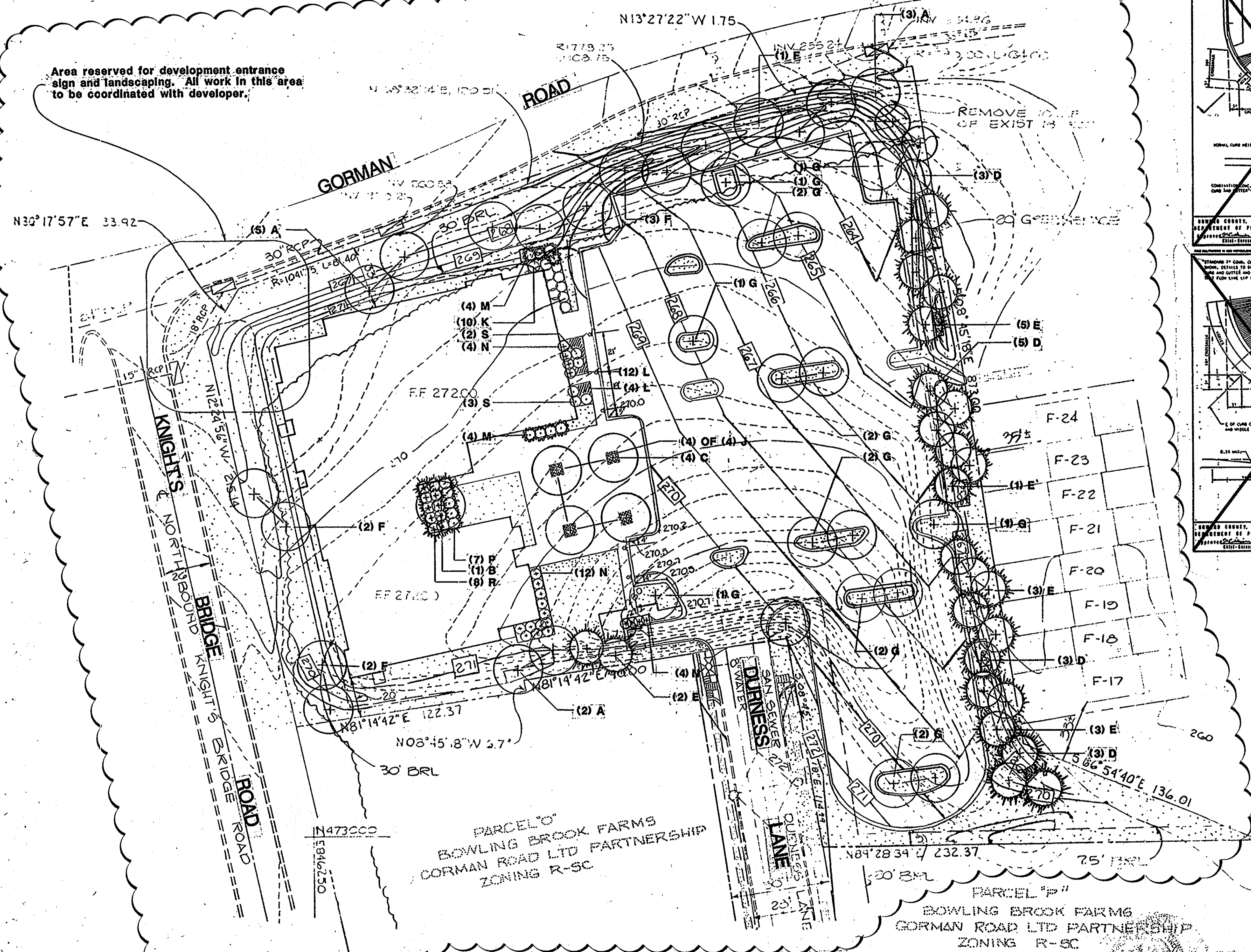
1512

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 7-31-89
 COUNTY HEALTH OFFICER
 APPROVED HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DATE 8-23-89
 DIRECTOR
 Chief, Division of Community Planning and Land Development
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 8/28/89
 DIRECTOR
 CHIEF BUREAU OF ENGINEERING

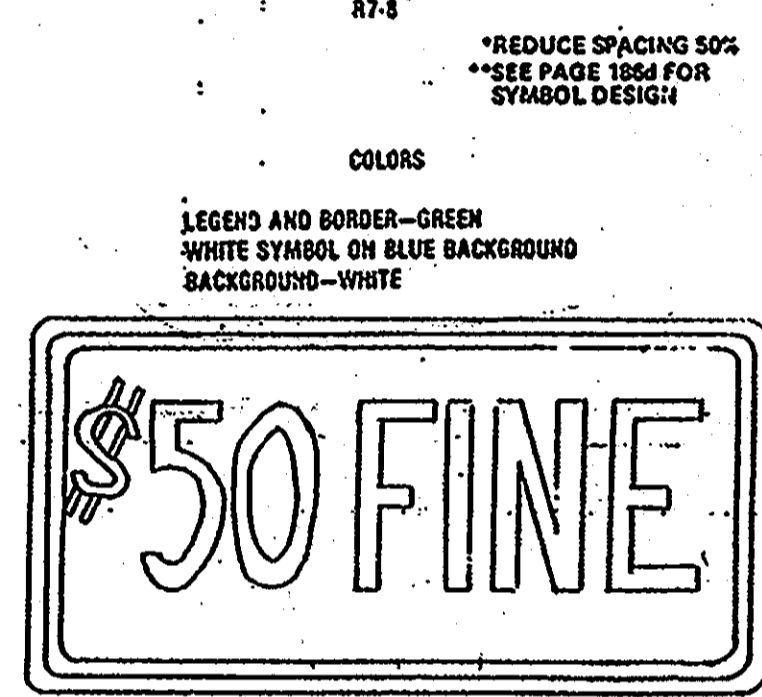
SEE SHEET 10 FOR LANDSCAPING TO BE REMOVED AND SHEET 17 FOR REVISED PLANTING PLAN

REPLACE WITH TYPE B SIDEWALK RAMP (R-4.02) - SEE SHEET 22

Area reserved for development entrance sign and landscaping. All work in this area to be coordinated with developer.



APPROVED
 DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
 HOWARD COUNTY, MARYLAND
 DATE 6-8-89



Notes:
 Refer to Sheet C-4 for landscape legend, notes and details.
 All areas of the site shall not under building or pavement shall receive lawn as per notes on Sheet C-2.

- SEEDING CONTROL NOTES**
- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (892-2137)
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - Following lateral soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all permanent sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days for all other disturbed or graded areas on the project site.
 - All sediment traps/basins shall be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 - All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seedings (Sec. 313) and (Sec. 34), temporary seedings (Sec. 30) and mulching (Sec. 32). Temporary stabilization which mulch alone can only be done when recommended seeding rates do not allow for proper germination and establishment of grasses.
 - All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
 - Site Analysis:
 Total Area of Site: 2.793 acres
 Area to be roofed or paved: 1.722 acres
 Area to be vegetatively stabilized: 1.071 acres
 Total Disturbance: 2.793 acres
 Office Hours/Borrow Area Deduction: 0.000 acres
 - Any sediment control practices which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 - Additional sediment controls must be provided, if deemed necessary, by the Howard County Sediment Control Inspector.
 - On all sites with disturbed areas in excess of 2-acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.



DATE	REVISION
11/13	ESD RETROFIT

PLANTING PLAN

SOUTHEASTERN MULTIPURPOSE CENTER
 HOWARD COUNTY, MARYLAND

CAPITAL PROJECT C-0191

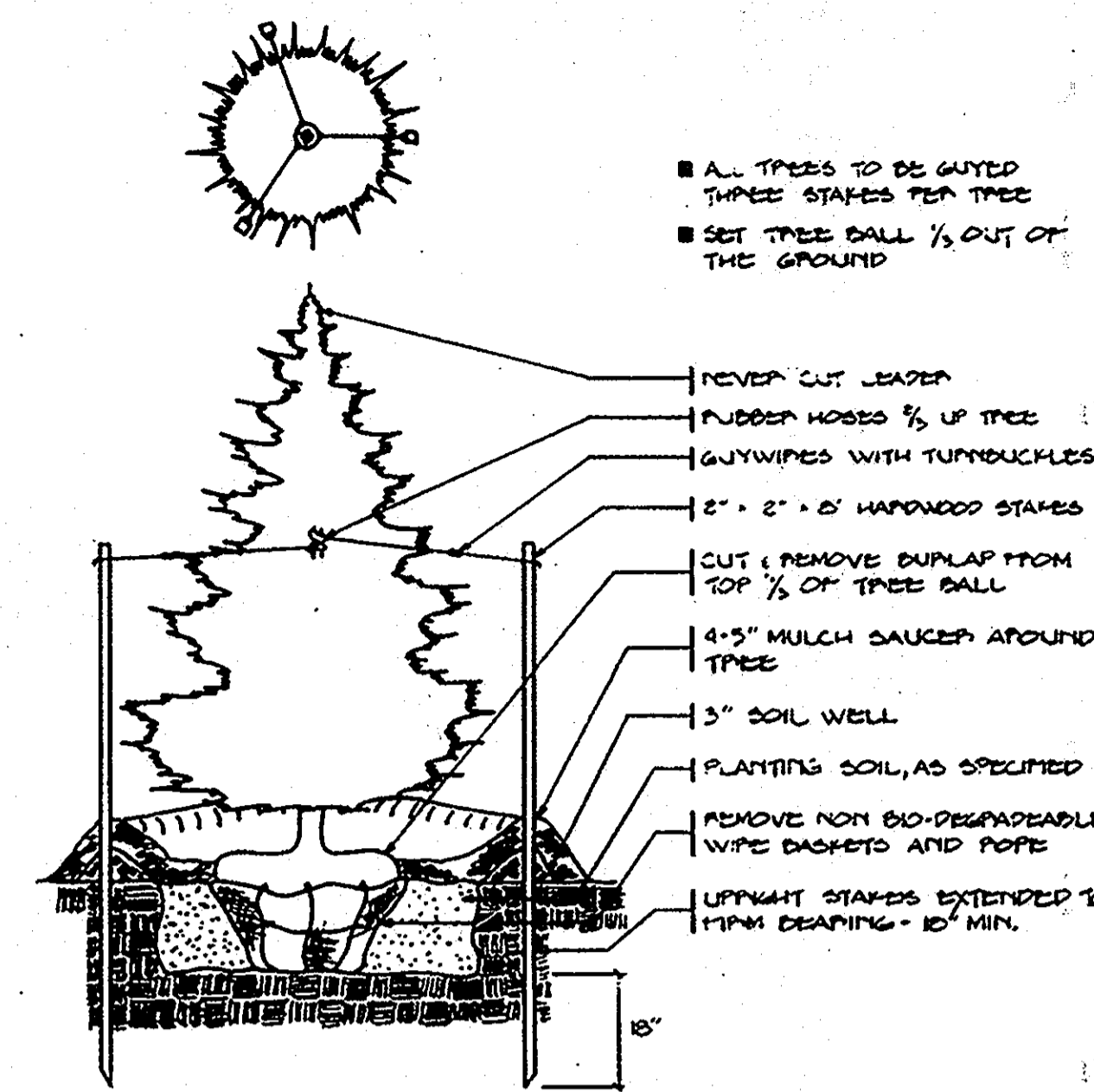
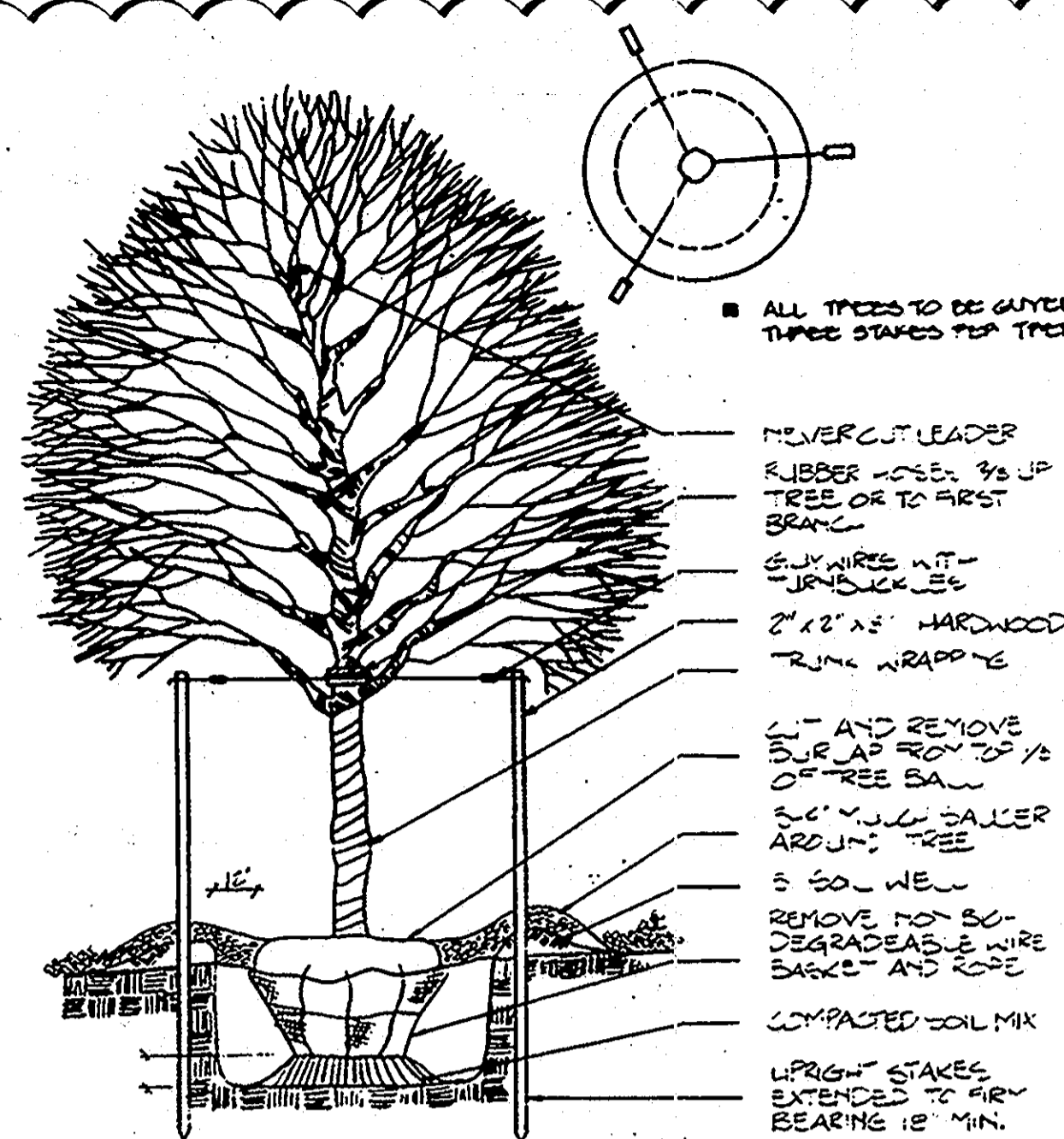
JOB NO. 88141.00	SCALE 1" = 30'	DATE MAY 31, 1989	SHEET NO. 30 OF 30
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GREENMAN-PEDERSEN INC.
 ENGINEERS/ARCHITECTS/PLANNERS - LAUREL, MARYLAND

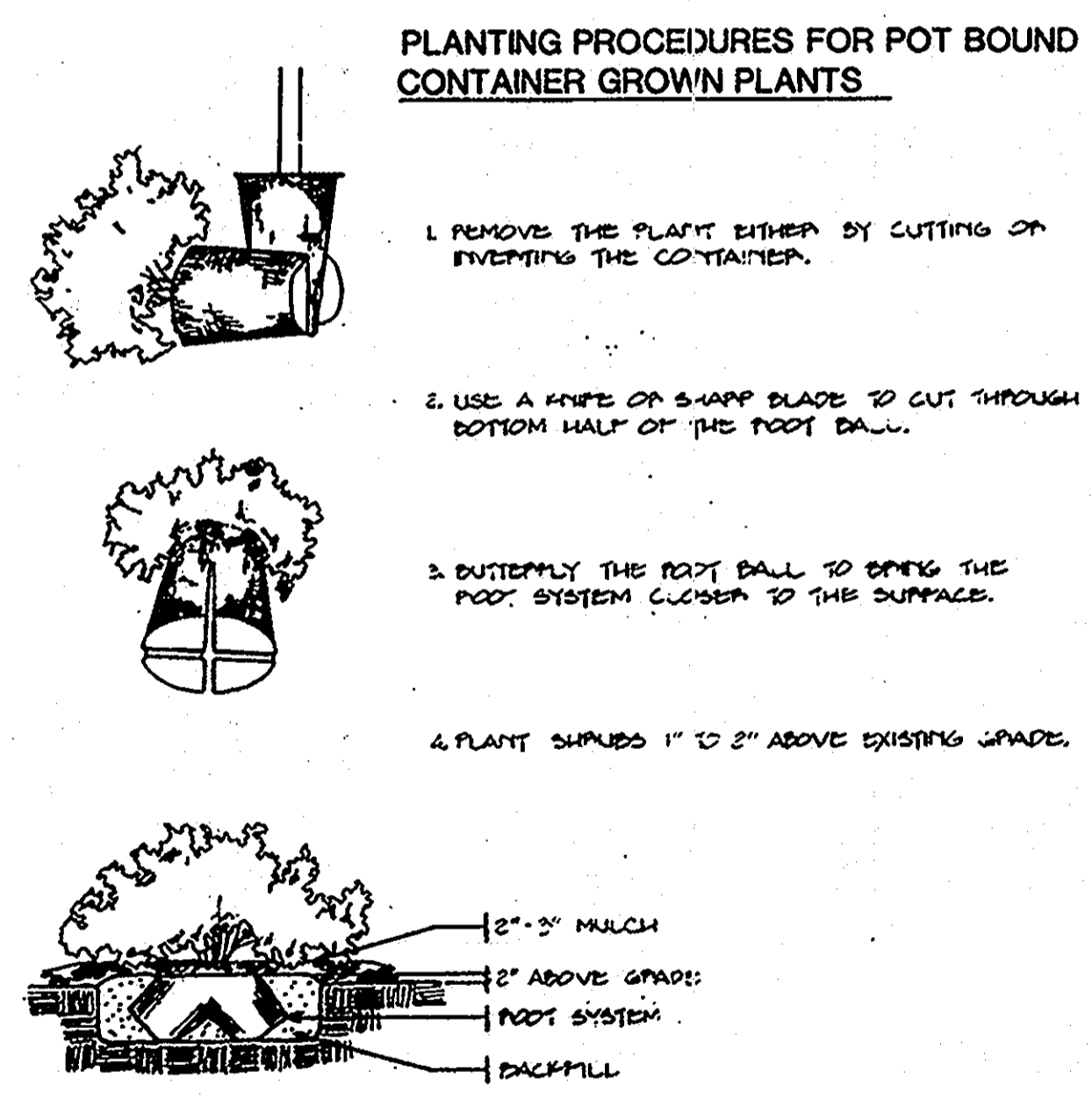
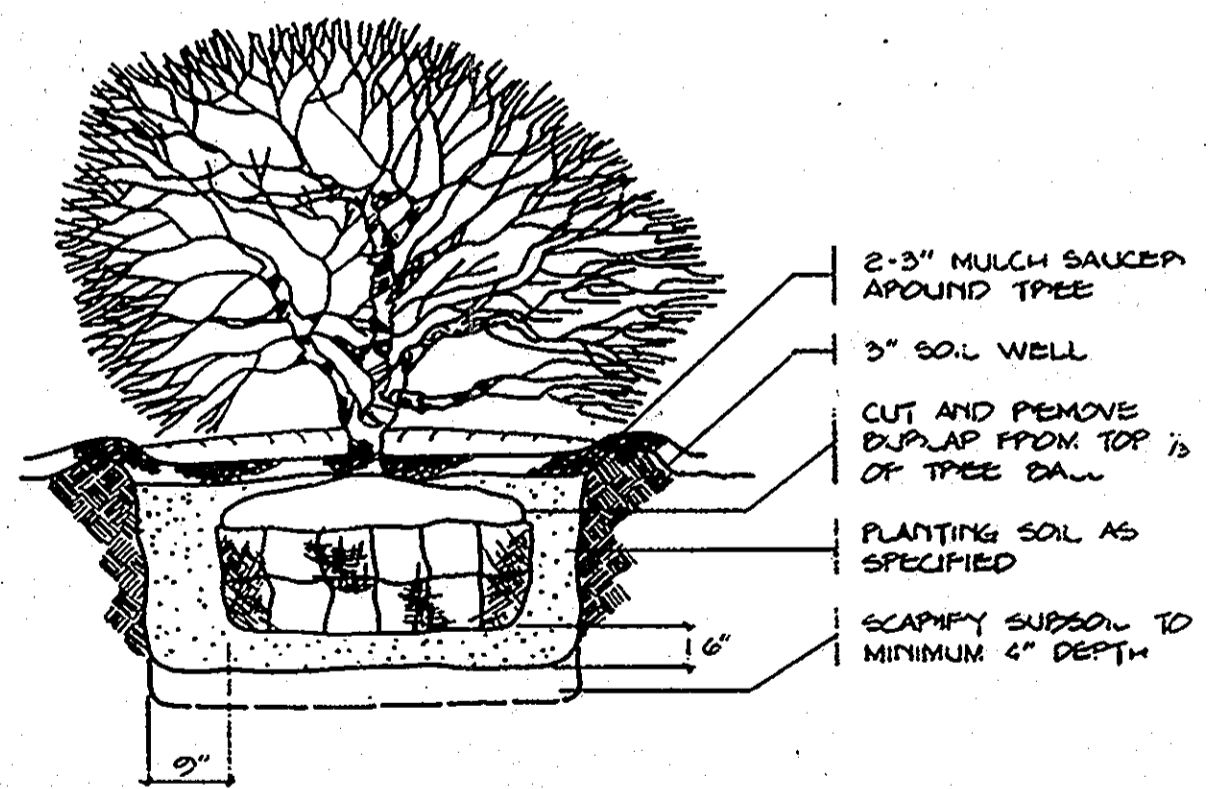
1512

PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COND	REMARKS
TREES						
A	10	ACEF R. 'OCTOBER GLORY'	OCTOBER GLORY MAPLE	1 1/4" - 2" CAL	P4 B	
B	1	BETULA P. 'YOUNGII'	YOUNGII BIRCH	2" - 2 1/2" CAL		
C	4	POELETIA P. PANICULATA	GOLDEN RAINTREE	2 1/2" - 3" CAL		MATCHED HEADS
D	14	PICEA ADIES'	NORWAY SPRUCE	7-8' HT.		
E	14	PIBUS STROBUS	WHITE PINE	7-8' HT.		NATURAL
F	8	QUERCUS RUBRA	RED OAK	1 1/4" - 2" CAL		
G	16	ZELKOA S. 'VILLAGE GREEN'	VILLAGE GREEN ZELKOVA	1 1/4" - 2" CAL		MATCHED HEADS
SHRUBS						
J	16	ARCTOSTAPHYLOS UVA-URSI	LINNINICK	1 GAL.	CONT.	
K	10	COTONASTER D. 'LOWFAS'	LOWFAST COTONASTER	3 GAL.		
L	16	IBEX C. 'SEMPERVIRENS'	EVERGREEN CANDYTUFF	1 GAL.		
M	5	ILEX C. 'COMPACTA'	COMPACTA HOLLY	5 GAL.		
N	20	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	10-24" HT.	B & B	
P	7	PRUNUS L. 'OTTO WYKEN'	OTTO WYKEN LAUREL	10-24" HT.	B & B	
R	5	KHOODENDRON 'P.J.M.'	PJM KHOODENDRON	3 GAL.	CONT.	
S	5	SPIEA N. 'SNOWMOUND'	SNOWMOUND SPIREA	3 GAL.	CONT.	



- GENERAL NOTES**
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regards to size, growth, size of ball, and density of branch structure.
 - All plants (848 or container) shall be properly identified by weather-proof labels securely attached thereto before delivery to project site. Labels shall identify plants by name species and size. Labels shall not be removed until the final inspection by the Landscape Architect.
 - Any material and/or work may be rejected by the Landscape Architect if it does not meet the requirements of the specifications. All rejected materials shall be removed from the site by the Contractor.
 - The Contractor shall furnish all plants in quantities and sizes to complete the work as specified in plant schedule.
 - Substitutions in plant species or size shall not be permitted except with the written approval of the Landscape Architect.
 - Plants shall be located as shown on the drawings and by scaling or as designated in the field by the Landscape Architect. All locations are to be approved by the Landscape Architect before excavation.
 - Contractor shall contact Miss Utility prior to any excavation.
 - If utility lines are encountered in excavation of tree pits, other locations for the trees shall be selected by the Landscape Architect. Such changes shall be made by the contractor without additional compensation. No changes of location shall be made without the approval of the Landscape Architect.
 - All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow.
 - During planting operations, excess and waste materials shall be promptly and frequently removed from the site.



PLANTING PROCEDURES FOR POT BOUND CONTAINER GROWN PLANTS

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

John E. Bala 7-31-89
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

James P. ... 6/20/89
DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC WORKS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James P. ... 7-28-89
DIRECTOR DATE

William S. ... 6-8-89
CHIEF BUREAU OF ENGINEERING DATE

- TOPSOIL NOTES**
- Section I - Site Preparation (Where Topsoil is to be added)**
- When topsoiling, maximum needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, vetweays and sediment basins.
 - Grading:** Grades on the areas to be topsoiled which have been previously established shall be maintained.
 - Liming:** Where the subsoil is either highly acid or composed of heavy clay, ground limestone shall be spread at the rate of 4-8 pounds (100-200 pounds per 1,000 square feet). Lim shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - Filling:** After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the surface shall be loosened by discing or by scarifying to a depth of at least 3 inches to permit bedding of the topsoil to the subsoil. This by passing a bulldozer up and down over the entire surface area of the slope to create horizontal erosion check slots to prevent topsoil from sliding down the slope.
- Section II - Topsoil Material and Application**
- Note:** Topsoil salvaged from the existing site may often be used but it should meet the same standards as set forth in these specifications. The depth of topsoil to be salvaged shall be no more than the depth described as a representative profile for that particular soil type as described in the soil survey published by USDA-NC in cooperation with Maryland Agricultural Experimental Station.
- Material:** Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by an agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of clumps, rocks, slag, coarse fragment, gravel, sticks, twigs, brush or other excessive material larger than 1/2 inches in diameter. Topsoil must be free of plants or plant parts of any species, weeds, grasses, forbs, sedges, ferns, mosses, lichens, fungi, or other as specified. All topsoil shall be tested by a recognized laboratory for organic matter content, pH and soluble salts. If the organic matter is less than 1.5 percent by weight in topsoil, lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoil containing soluble salts greater than 200 parts per million shall not be used.
 - No soil or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed to permit dissipation of toxic materials.
 - Note:** Topsoil substitutes or amendments as approved by a qualified agronomist or soil scientist, may be used in lieu of natural topsoil.
 - Grading:** The topsoil shall be uniformly distributed and compacted to a minimum of four (4) inches. Spreading shall be performed in such a manner that settling or sinking of the topsoil with a minimum of additional soil preparation and tilling. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Top soil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- Alternative for Permanent Liming**
- As an option to applying the full amount of lime and commercial fertilizer, apply Composted Sludge at specified below, a potassium fertilizer at the rate of 4 pounds per 1,000 square feet and 1/3 the normal lime application rate.
- Composted Sludge Material:**
- Be supplied by or originate from a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of Health and Mental Hygiene under Regulation 10.17.05.
 - Shall contain at least 1 percent nitrogen, 1.5 percent phosphorus and 2 percent potassium and have a pH of 7.0 and 8.0.
 - If compost does not meet these requirements, the appropriate constituents must be added so that the requirements are met prior to use of the compost.
 - Be applied at a rate of 2,000 pounds per 1,000 square feet.

SEE SHEETS 18 AND 19 FOR PLANT SCHEDULES AND PLANTING DETAILS

DATE	REVISION
11/13	ESD RETROFIT

PLANTING PLAN

SOUTHEASTERN MULTIPURPOSE CENTER
HOWARD COUNTY, MARYLAND

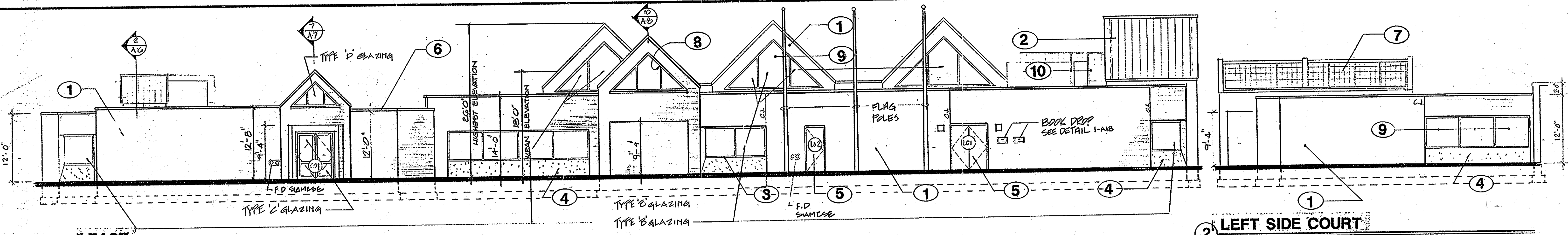
CAPITAL PROJECT C-0191

JOB NO. 88141.00 SCALE 1" = 30' DATE MAY 31, 1989 SHEET NO. 30 OF 30

PROJ. MGR. GEF
DESIGN DMS
DRAWN DMS
CHECKED GEF

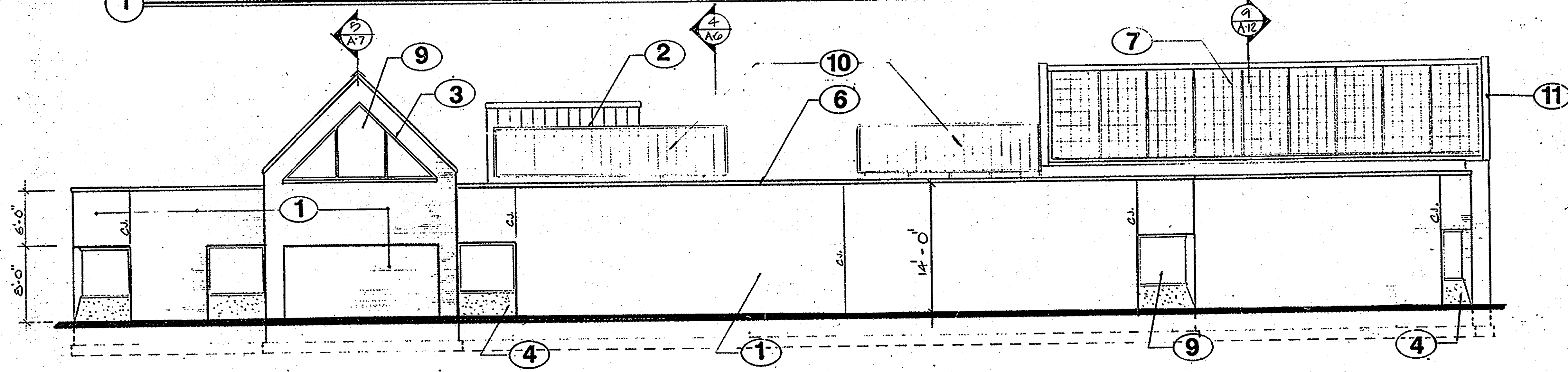
spi GREENMAN-PEDERSEN INC.
ENGINEERS/ARCHITECTS/PLANNERS - LAUREL, MARYLAND

15/12



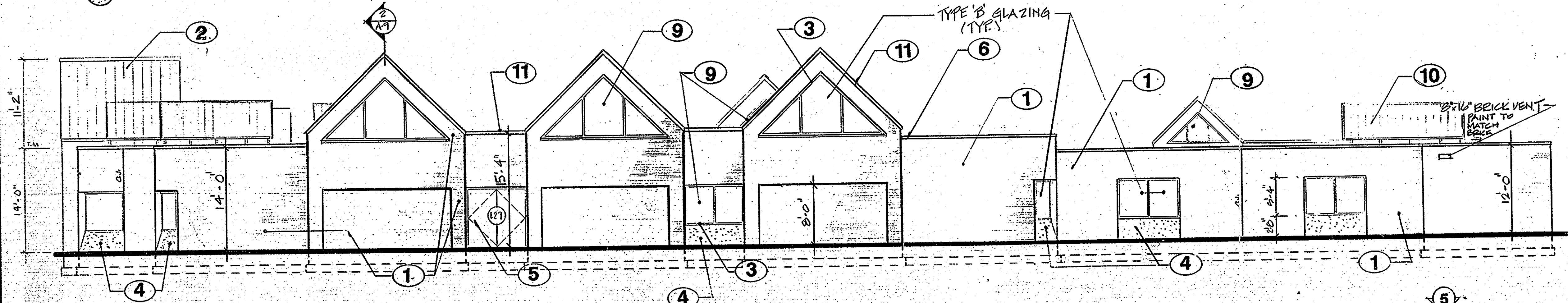
1 EAST

2 LEFT SIDE COURT

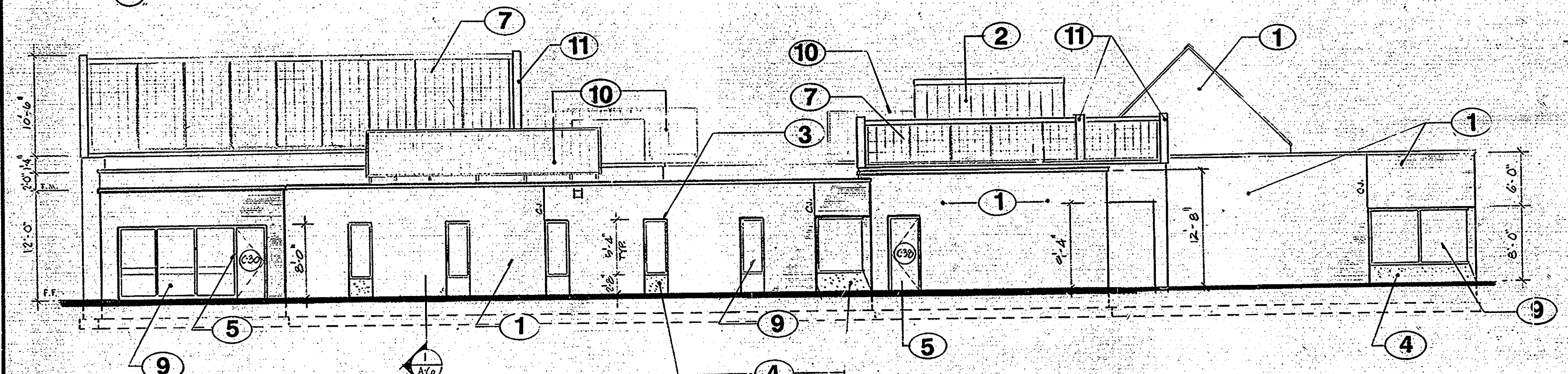


3 NORTH

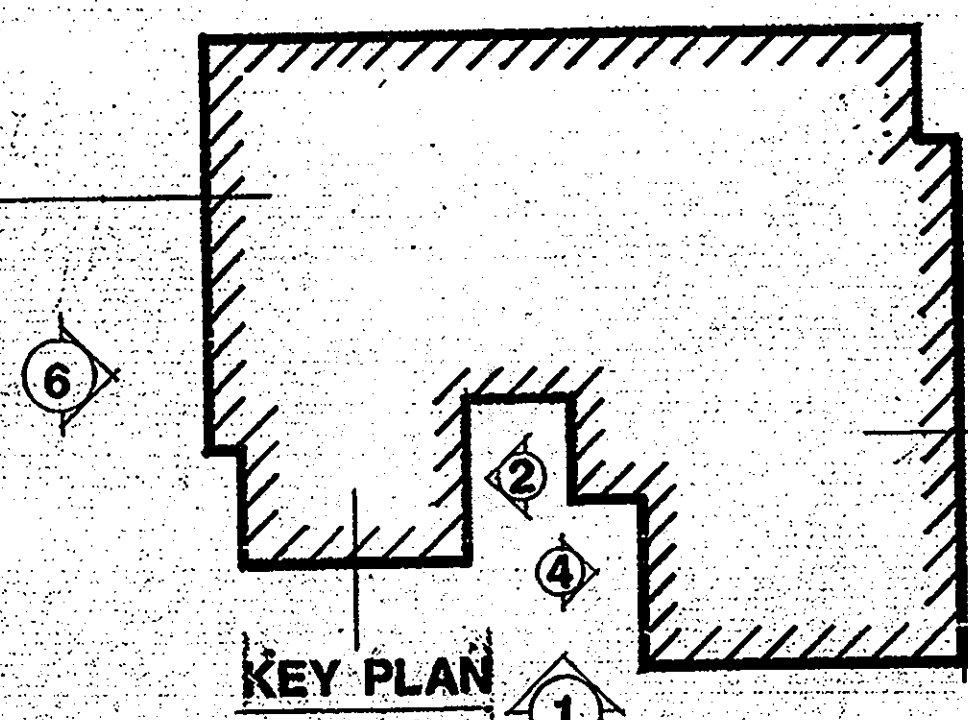
4 RIGHT SIDE COURT



5 WEST



6 SOUTH



KEY PLAN

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *John Boyle* 7-31-89
 DATE: 8-31-89

APPROVED HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DIRECTOR: *Mark S. 2. 1989* 8/31/89
 DATE: 8/31/89
 Chief, Division of Community Planning and Land Development

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *James P. 1989* 7-28-89
 DATE: 7-28-89
 CHIEF BUREAU OF ENGINEERING

APPROVED
 DIVISION of
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE: 6-2-89
 LS

SEE SHEET C-1 FOR MATERIAL INDEX

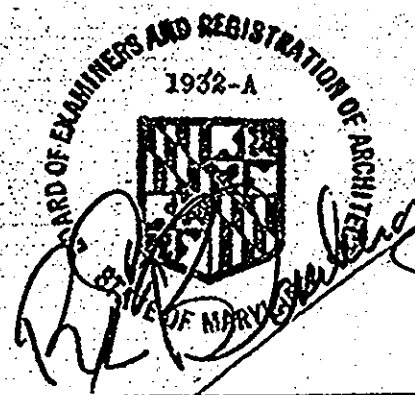
EXTERIOR ELEVATIONS

SOUTHEASTERN MULTI-PURPOSE CENTER
 HOWARD COUNTY, MARYLAND

DATE	REVISION
9/1/89	ADDENDUM #5

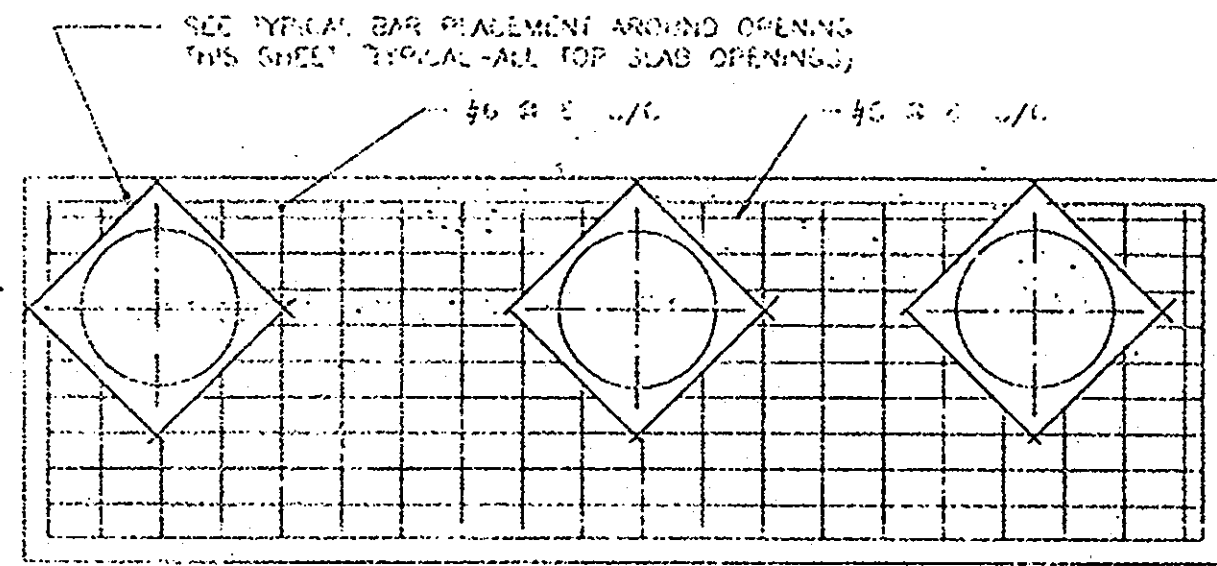
JOB NO. 88141.00 SCALE 1/8" = 1'-0" DATE MAY 31, 1989 SHEET NO. 05 OF 30
 CAPITAL PROJECT C-0191

gpi GREENMAN-PEDERSEN INC.
 ENGINEERS/ARCHITECTS/PLANNERS - LAUREL, MARYLAND.



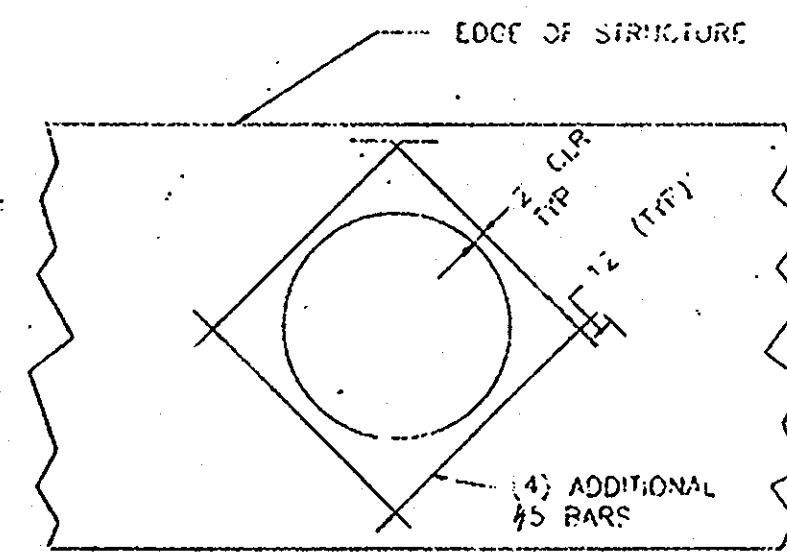
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SEE SHEET 29 FOR REVISED EXISTING CONDITIONS



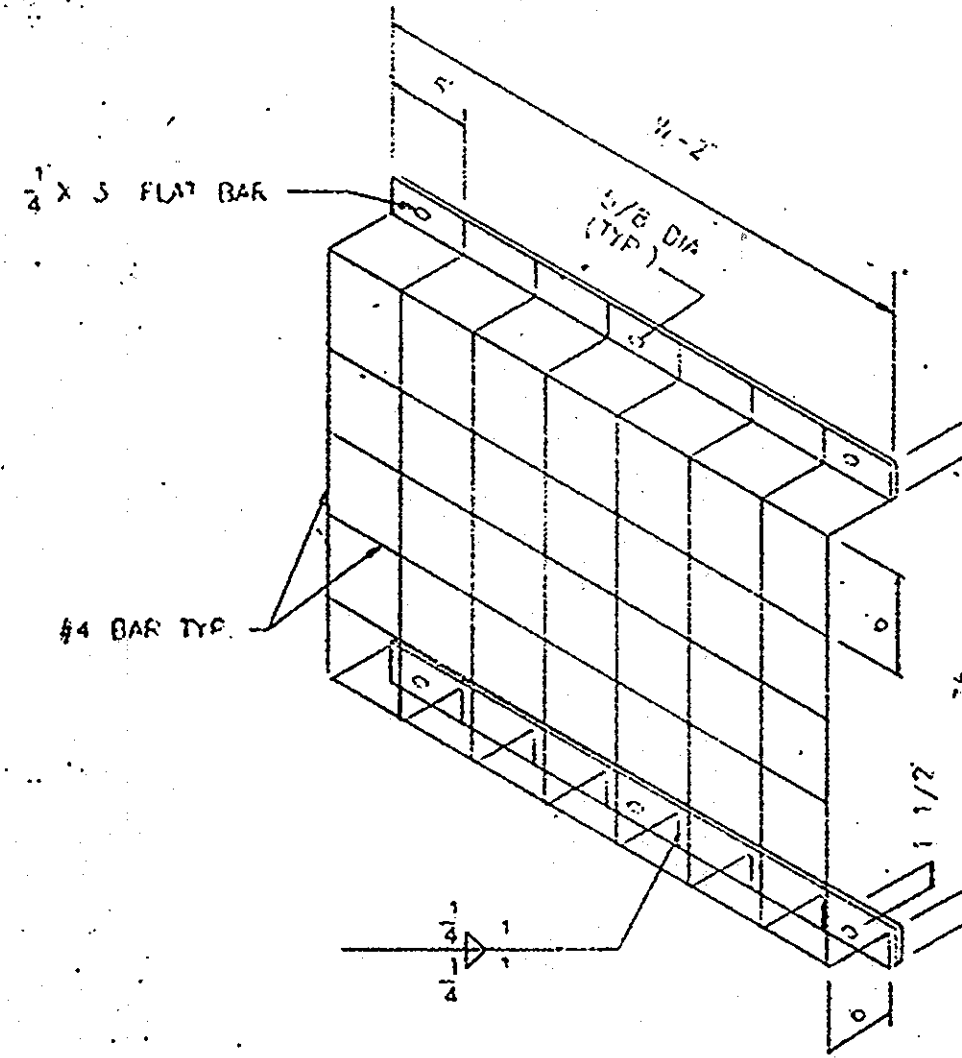
TOP SLAB REINFORCEMENT DETAIL

NOT TO SCALE



TYPICAL BAR PLACEMENT AROUND OPENING

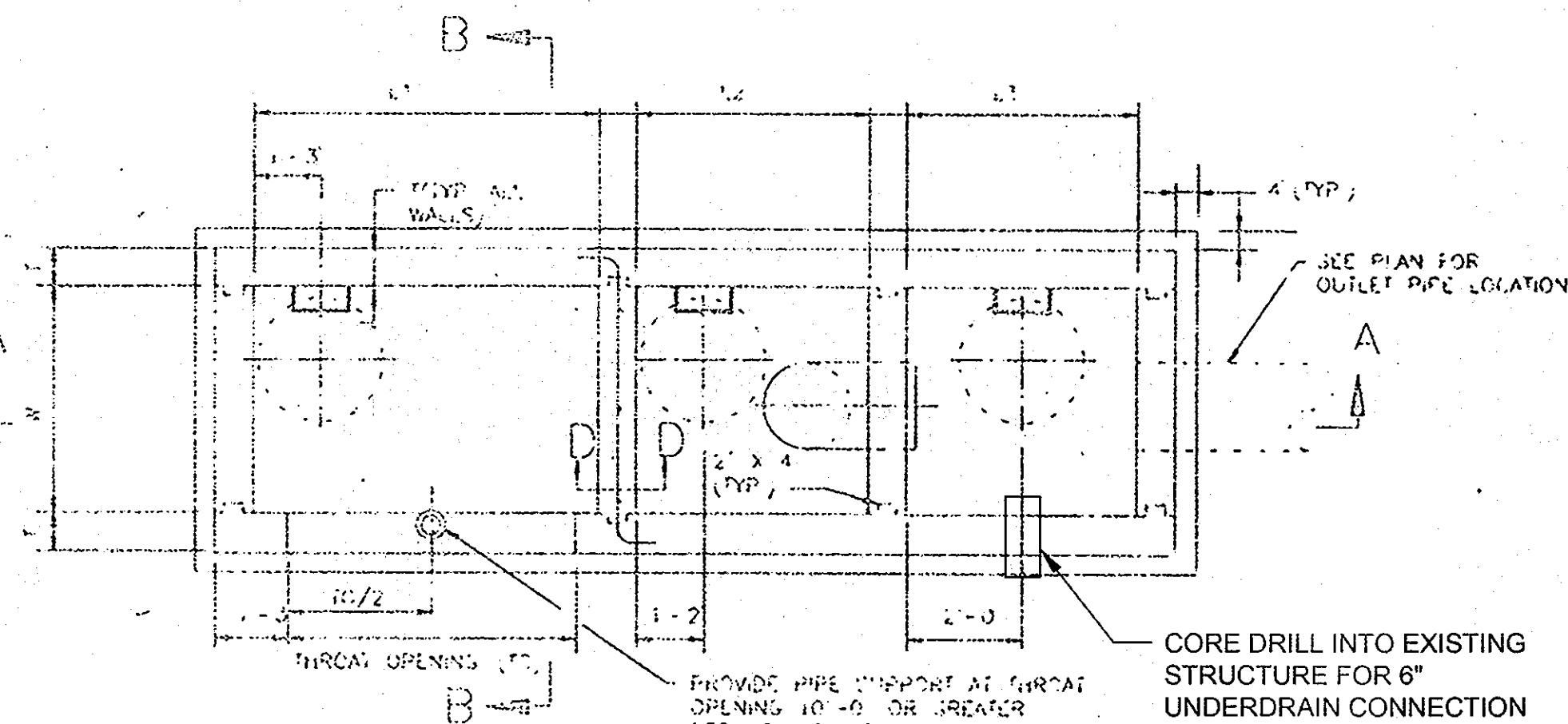
NOT TO SCALE



TRASH RACK SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION

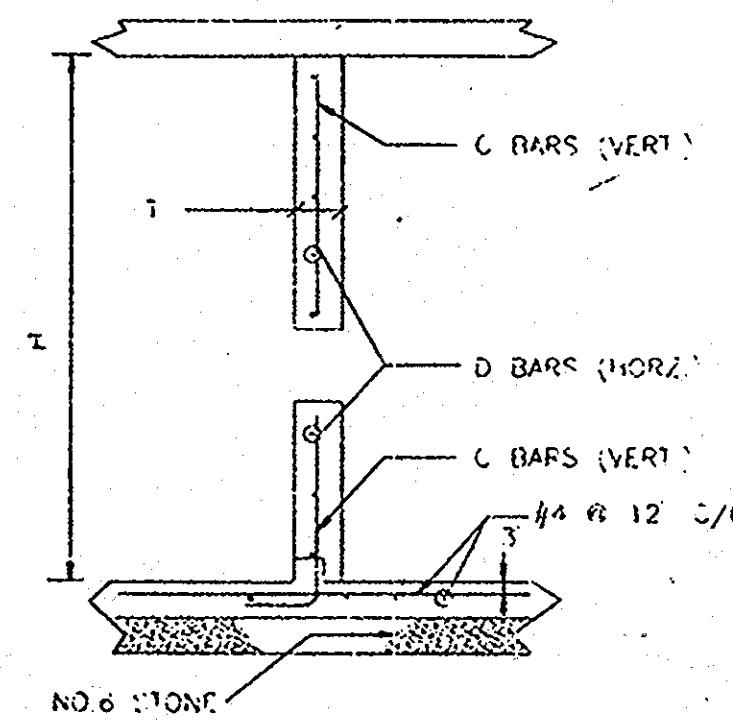
TRASH RACK DETAIL

NO TO SCALE



PLAN VIEW

NOT TO SCALE



INTERIOR WALL REINFORCING DETAIL SECTION D-D

NOT TO SCALE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS:
HOWARD COUNTY HEALTH DEPARTMENT
[Signature] DATE 7-27-09
COUNTY HEALTH OFFICER

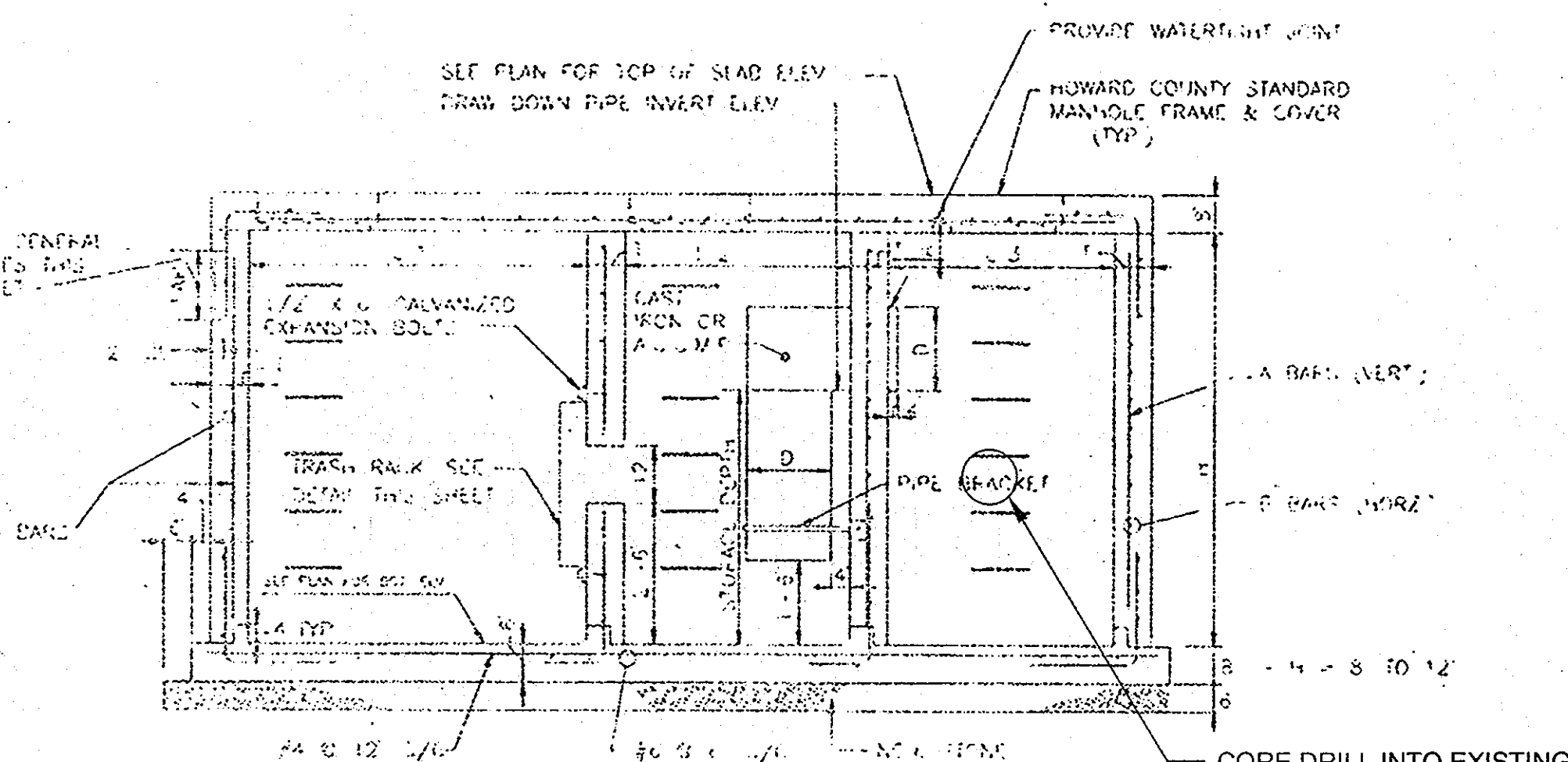
APPROVED FOR HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] DATE 8-20-09
DIRECTOR
Chief, Division of Community Planning and Land Development

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] DATE 8-20-09
DIRECTOR
CHIEF DEPT. OF ENGINEERING

- GENERAL NOTES**
- SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURE UNTIL THE CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED
 - ALL OPENINGS TO THE STRUCTURE SHALL BE PROTECTED BY THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION (SEE EROSION AND SEDIMENT CONTROL PLAN)
- CONSTRUCTION NOTES**
- THE HOWARD COUNTY INSPECTOR MUST BE CALLED 48 HOURS IN ADVANCE OF CONSTRUCTION OF WATER QUALITY CONTROL STRUCTURE
 - THE HOWARD COUNTY INSPECTOR MUST BE NOTIFIED AT EACH OF THE FOLLOWING STAGES:
 - APPROVAL OF SUBGRADE FOR FOOTINGS
 - FOOTING FORMED AND STEEL SET PRIOR TO POURING CONCRETE
 - STRUCTURE SIDES FORMED AND ALL STEEL SET PRIOR TO POURING CONCRETE PAVING
 - PRIOR TO TOP SLAB AND MANHOLES BEING SET, DER INSPECTOR MUST CHECK STRUCTURE AND ALL DEBRIS AND SILT IN STRUCTURE REMOVED
 - WHEN SITE IS PERMANENTLY STABILIZED AND SEDIMENT CONTROL MEASURES TO PROTECT INLET ARE TO BE REMOVED
- MAINTENANCE NOTES (QUALITY-CONTROL STRUCTURES WASTE)**
- WATER QUALITY- STRUCTURES WILL REQUIRE PERIODICAL CLEANING. OWNERS OF THESE FACILITIES WILL HAVE TO CLEAN THEM AS NEEDED OR ON A FREQUENCY THAT THE COUNTY DETERMINES IS APPROPRIATE. OWNERS OF WATER QUALITY STRUCTURE WILL BE NOTIFIED BY THE COUNTY OF THE FREQUENCY OF MAINTENANCE.
 - MAINTENANCE OF THIS FACILITY WILL CONSIST OF CLEANING OUT THE SEPARATOR AND DISPOSAL OF THE WASTE AND THE REPAIR OF THE FACILITY AS NEEDED. PERIODIC INSPECTION OF THIS FACILITY WILL BE MADE BY DER.
 - THE DISPOSAL OF LIQUID AND SOLID MATTER SHOULD BE AS FOLLOWS:
 - ALL LIQUID MATERIAL IN THE SEPARATOR INLET SHALL BE PUMPED INTO SUITABLE TANK TRUCK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISCHARGE.
 - THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED SANITARY LANDFILL.
 - THE INLET PIPES, TRASH RACKS AND STRUCTURAL PARTS SHALL BE REPAIRED AS NEEDED
- STRUCTURE DESIGN NOTES**
- USE CAST IN PLACE CONCRETE FOR ENTIRE STRUCTURE
 - REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR THE MATERIALS AND METHODS OF CONSTRUCTION
 - CONCRETE STRENGTH $f'_c = 4000$ PSI @ 28 DAYS
 - ALL REINFORCING STEEL TO BE ASTM A 615 GRADE 60
 - PROVIDE MINIMUM LAP LENGTH OF 30 BAR DIAMETERS FOR ALL REINFORCEMENT BAR SPICES UNLESS NOTED OTHERWISE
 - PROVIDE 2" MINIMUM CONCRETE COVER FOR ALL REINFORCEMENT BARS UNLESS NOTED OTHERWISE
 - KEYS: ALL KEYS ARE NOMINAL SIZE
 - TOP SLAB IS DESIGNED FOR AN HS 20 LIVE LOAD

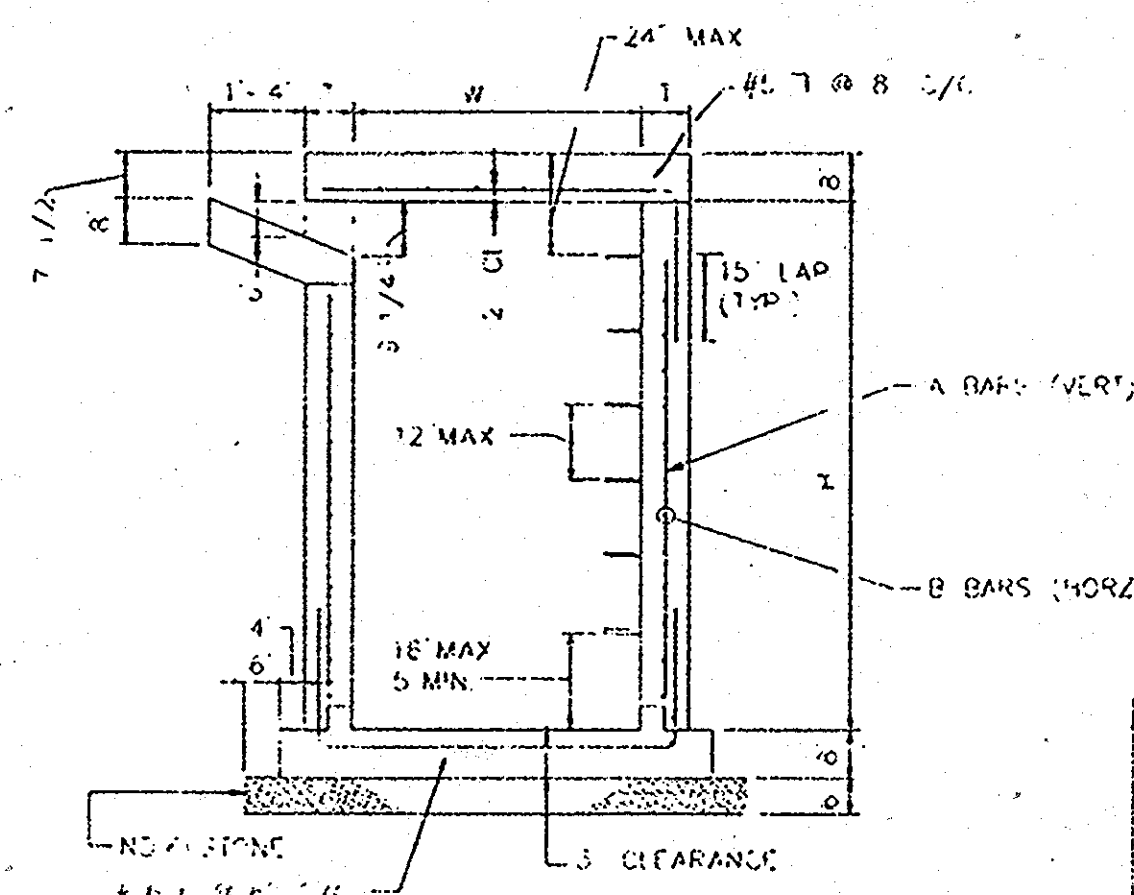
DIMENSION SCHEDULE

STRUCTURE NUMBER	DIMENSIONS							DRAW DOWN PIPE DATA	
	H	W	STORAGE DEPTH	L1	L2	L3	T0	D	INV.
H	8'-10"	4'	5'-6"	10'	5'	4'	10'	18"	259.90



SECTION A-A

NOT TO SCALE



SECTION B-B

NOT TO SCALE

STRUCTURAL SCHEDULE

DEPTH	WALL THICKNESS	BAR SIZES			
		A	B	C	D
0' - 8'	8"	#4@12"	#5@5"	#4@6"	#4@6"
8' - 12'	12"	#4@12"	#5@5"	#4@6"	#6@6"

* INSIDE WALL
** OUTSIDE WALL



DATE 6-8-09
CS

OIL & GRIT SEPARATOR DETAIL

SOUTHEASTERN MULTIPURPOSE CENTER
BOWLING BROOK FARMS PARCEL N
CAPITAL PROJECT C-0191

DRAWING NO. 05-01-001	SCALE AS SHOWN	DATE 8-20-09	SHEET NO. 6 OF 30
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GREENMAN-PEDERSEN, INC.
ENGINEERS/ARCHITECTS/PLANNERS
FREDERICK, MARYLAND

SDP-89-232

15/12

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

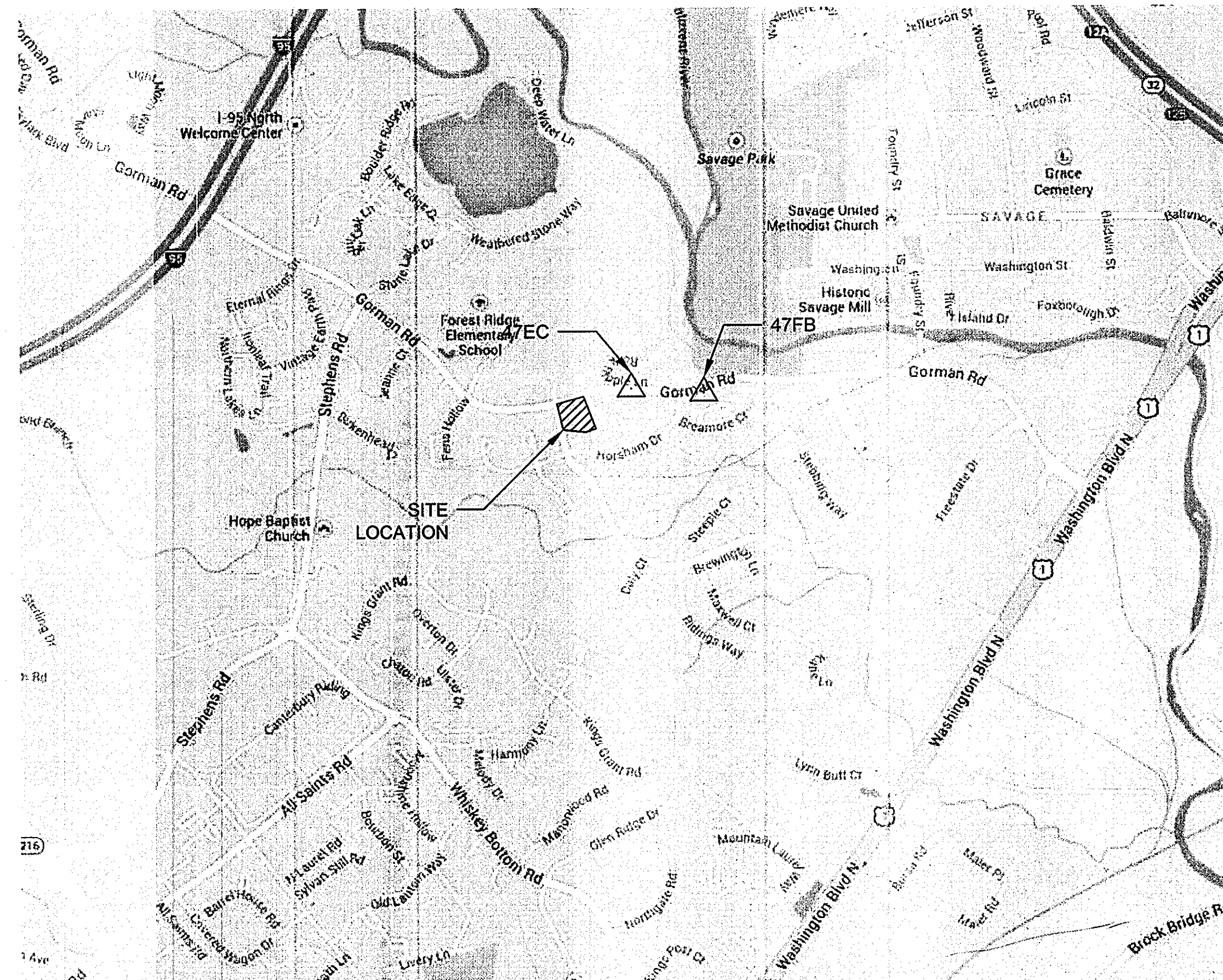
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT No. D1164

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

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25	MATERIALS SPECIFICATIONS
26	EROSION & SEDIMENT CONTROL DETAILS I
27	EROSION & SEDIMENT CONTROL DETAILS II
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29	DRAINAGE DETAILS II
30	STORMWATER PLANTER PLAN & PROFILE



SCALE: 1" = 1,000'

VICINITY MAP

ADC MAP COORD. MAP: 40 GRID: D5

COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM
AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL
STATIONS Nos. BM 47 FB, BM47 EC
THE ELEVATIONS SHOWN HEREON ARE BASED ON NAVD '88.

SITE ANALYSIS DATA CHART

- TOTAL PROJECT AREA: 2.78 ACRES (121,096.8 SF)
- DISTURBED AREA: 2.78 ACRES
- AREA TO BE ROOFED OR PAVED: 1.86 ACRES (81,022 SF)
- AREA TO BE VEGETATIVELY STABILIZED: 0.92 ACRES (40,075 SF)
- TOTAL CUT (CY): 387.0
- TOTAL FILL (CY): 2.0
- ONSITE/OFFSITE BORROW AREA LOCATION: TO BE DETERMINED BY CONTRACTOR AND APPROVED BY ENGINEER/INSPECTOR
- PRESENT ZONING DESIGNATION: R-SC
- PROPOSED USE FOR THE SITE: LIBRARY
- TOTAL FLOOR SPACE: (22,530 SF)
LIBRARY: (15,764 SF)
CLINIC: (6,766 SF)
- TOTAL NUMBER OF EMPLOYEES: 13
- NUMBER OF PARKING SPACES REQUIRED: 104
- TOTAL NUMBER OF PARKING SPACES PROVIDED: 104 (8 HANDICAP ACCESSIBLE)
- OPEN SPACE ON SITE: 0.92 ACRES
- BUILDING COVERAGE OF SITE: 0.52 ACRES (19%)

THE PURPOSE OF THE SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN REDLINE REVISION IS TO DEMONSTRATE INNOVATIVE STORMWATER MANAGEMENT AND TO EXTEND LIBRARY PROGRAMS OUTSIDE OF THE BUILDING ENVELOPE AND INTO THE LANDSCAPE.

LEGEND

EXISTING	PROPOSED
---285---	—425—
---266---	—424—
SD	—LOD—
SS	
W	
UGE	
UGC	
UGT	
G	

○	
▲	
⊙	
⊙	
⊙	
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×	

MAJOR CONTOUR
 MINOR CONTOUR
 STORM DRAIN
 SANITARY SEWER LINE
 POTABLE WATER
 UNDERGROUND ELECTRIC LINE
 UNDERGROUND CABLE TV LINE
 UNDERGROUND TELEPHONE LINE
 GAS LINE
 PROPERTY LINE
 EXISTING EASEMENT
 BUILDING RESTRICTION LINE
 FENCE LINE
 TREE ≥ 12"
 SIGN
 STORM DRAIN MANHOLE
 SANITARY SEWER MANHOLE
 LIGHT POLE
 TRAVERSE POINT
 SPOT ELEVATION

MAJOR CONTOURS
 MINOR CONTOURS
 LIMIT OF DISTURBANCE
 DETAIL # 1
 SHEET # 18
 SPOT ELEVATION 270.58

NOTE: LOD SAME AS ORIGINAL SDP SUBMISSION

PERMIT INFORMATION CHART

SUBDIVISION NAME BOWLING BROOK FARMS RSB 214		SECTION/AREA N/A	LOT/PARCEL# N1008
PLAT# OR L/F 8410	GRID# 0017	ZONING R-SC	TAX MAP NO. / ELEC. DISTR. / CENSUS TRACT 47 / 3 / 6069.02
WATER CODE PUBLIC		SEWER CODE PUBLIC	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

1/17/14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 1/30/14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 1/30/14
 DIRECTOR DATE

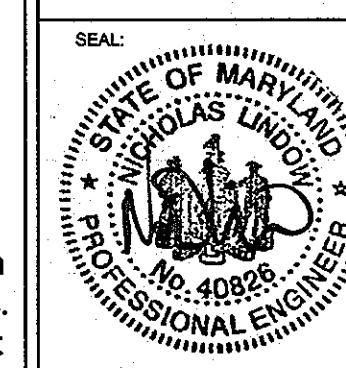


The Stables Building 2081 Clipper Park Road
Baltimore, MD 21211 / ph: 410.554.0156
fx: 410.554.0168 / www.biohabitats.com
Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

COVER SHEET

PROJECT NO.: 13005.02 SCALE: AS SHOWN
 SEAL: BY: AG, NL, TB CHECK: MT, EWB
 DWG. NO.:



7 OF 30

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SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

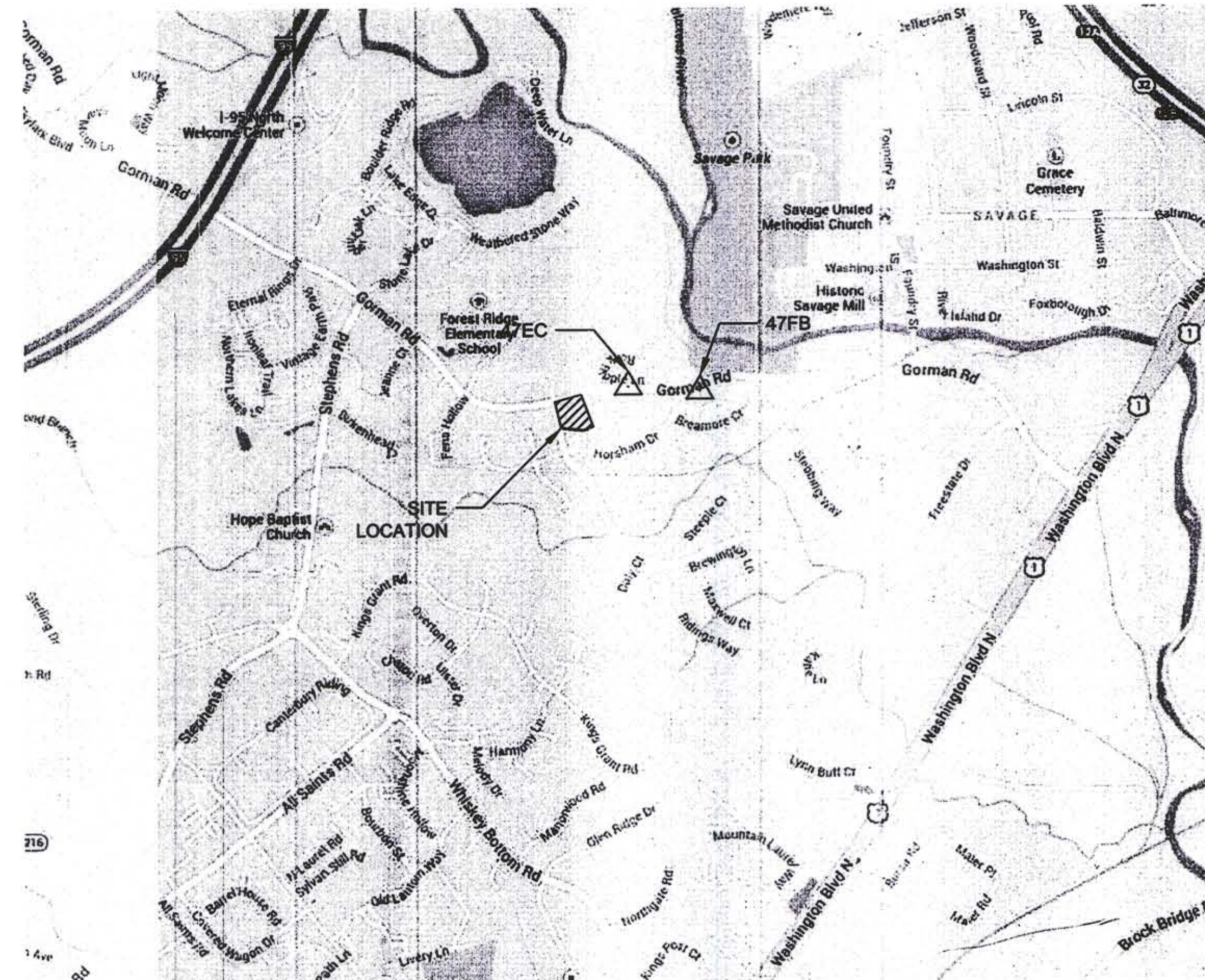
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT No. D1164

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STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
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SCALE: 1" = 1,000'

VICINITY MAP

ADC MAP COORD. MAP: 40 GRID: D5

COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM
AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL
STATIONS Nos. BM 47 FB, BM47 EC
THE ELEVATIONS SHOWN HEREON ARE BASED ON NAVD '88.

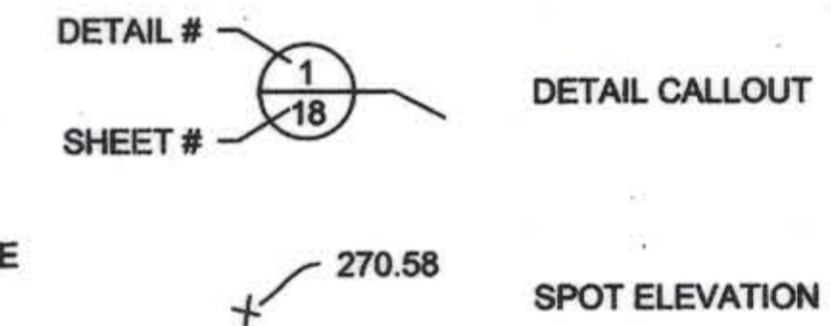
SITE ANALYSIS DATA CHART

- TOTAL PROJECT AREA: 2.78 ACRES (121,096.8 SF)
- DISTURBED AREA: 2.78 ACRES
- AREA TO BE ROOFED OR PAVED: 1.86 ACRES (81,022 SF)
- AREA TO BE VEGETATIVELY STABILIZED: 0.92 ACRES (40,075 SF)
- TOTAL CUT (CY): 387.0
- TOTAL FILL (CY): 2.0
- ONSITE/OFFSITE BORROW AREA LOCATION: TO BE DETERMINED BY CONTRACTOR AND APPROVED BY ENGINEER/INSPECTOR
- PRESENT ZONING DESIGNATION: R-SC
- PROPOSED USE FOR THE SITE: LIBRARY
- TOTAL FLOOR SPACE: (22,530 SF)
LIBRARY: (15,764 SF)
CLINIC: (6,766 SF)
- TOTAL NUMBER OF EMPLOYEES: 13
- NUMBER OF PARKING SPACES REQUIRED: 104
- TOTAL NUMBER OF PARKING SPACES PROVIDED: 104 (8 HAAPICAP ACCESSIBLE)
- OPEN SPACE ON SITE: 0.92 ACRES
- BUILDING COVERAGE OF SITE: 0.52 ACRES (19%)

THE PURPOSE OF THE SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN REDLINE REVISION IS TO DEMONSTRATE INNOVATIVE STORMWATER MANAGEMENT AND TO EXTEND LIBRARY PROGRAMS OUTSIDE OF THE BUILDING ENVELOPE AND INTO THE LANDSCAPE.

LEGEND

EXISTING	PROPOSED		
--- 285 ---	— 425 —	MAJOR CONTOUR	MAJOR CONTOURS
--- 286 ---	— 424 —	MINOR CONTOUR	MINOR CONTOURS
— SD —	— LOD —	STORM DRAIN	LIMIT OF DISTURBANCE
— SS —		SANITARY SEWER LINE	
— W —		POTABLE WATER	
— UGE —		UNDERGROUND ELECTRIC LINE	
— UGC —		UNDERGROUND CABLE TV LINE	
— UGT —		UNDERGROUND TELEPHONE LINE	
— G —		GAS LINE	
---		PROPERTY LINE	
---		EXISTING EASEMENT	
---		BUILDING RESTRICTION LINE	
— o —		FENCE LINE	
—		TREE ≥ 12"	
—		SIGN	
⊙		STORM DRAIN MANHOLE	
⊙		SANITARY SEWER MANHOLE	
⊙		LIGHT POLE	
△ 801.27		TRAVERSE POINT	
x 269.71		SPOT ELEVATION	



NOTE: LOD SAME AS ORIGINAL SDP SUBMISSION

AS BUILT CERTIFICATE

I HEREBY CERTIFY, BY MY KNOWLEDGE AND BELIEF, THAT THE FACILITIES SHOWN ON THIS AS-BUILT PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, P.D., P.E. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad E. Enoch 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Katrina L. Lash 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Frank A. D'Angelo 10-16-14
DIRECTOR DATE

Biohabitats

The Stables Building 2081 Clipper Park Road
Baltimore, MD 21211 / ph: 410.554.0156
fx: 410.554.0168 / www.biohabitats.com

Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

COVER SHEET

PROJECT NO.: 13005.02 SCALE: AS SHOWN

BY: AG, NL, TB CHECK: MT, EWB

DWG. NO.: 7 OF 30

Reuse of Documents:
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NOTE: CONDUCT A PRE-CONSTRUCTION MEETING. NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT LEAST 48 HOURS BEFORE COMMENCING WORK AT (410) 313-1880. WORK MAY NOT COMMENCE UNTIL THE PERMITTEE OR THE RESPONSIBLE PE HAVE MET ON SITE WITH THE SEDIMENT AND EROSION CONTROL INSPECTOR TO REVIEW THE APPROVED PLANS.

A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENCES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).

THE CONTRACTOR SHALL NOTIFY "MISS-UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

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 REVISIONS THERETO.

CONSTRUCTION ACTIVITIES INCLUDING THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES SHALL NOT BEGIN UNTIL ALL REQUIRED EASEMENTS AND RIGHT-OF-WAYS HAVE BEEN OBTAINED. CONSTRUCTION SHALL NOT BEGIN UNTIL ALL SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVED BY THE ENGINEER AND THE SEDIMENT CONTROL INSPECTOR. THE CONTRACTOR SHALL STAY WITHIN THE LIMIT OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORKING AREA WHEREVER POSSIBLE. NO TREES SHALL BE REMOVED WITHIN THE LIMIT OF DISTURBANCE WITHOUT APPROVAL FROM THE ENGINEER. THE CONSTRUCTION SEQUENCE MUST BE FOLLOWED UNLESS THE CONTRACTOR GETS WRITTEN APPROVAL FROM THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THE SEDIMENT CONTROL INSPECTOR.

FOR ALL ASPECTS OF CONSTRUCTION FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
- B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

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.

TRENCHED 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 WORK DAY, WHICHEVER IS SHORTER.

EROSION AND SEDIMENT CONTROL SETUP - 1 WEEK

1. (DAY 1) THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF DISTURBANCE AS SHOWN ON THE GRADING PLAN.
2. (DAY 2) THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING ON SITE WITH SEDIMENT CONTROL INSPECTOR AND THE ENGINEER TO REVIEW THE LIMITS OF DISTURBANCE, STRUCTURE STAKEOUT, EROSION AND SEDIMENT CONTROL REQUIREMENTS, AND THE SEQUENCE OF CONSTRUCTION. THE PARTICIPANTS WILL ALSO VERIFY THE LOCATION OF THE TEMPORARY STOCKPILE AREA AND ANY NECESSARY STAGING AREA, AND FLAG ANY TREES WITHIN THE LIMITS OF DISTURBANCE WHICH WILL BE REMOVED FOR CONSTRUCTION ACCESS AND GRADING.
3. (DAY 3) THE CONTRACTOR SHALL INSTALL THE STABILIZED CONSTRUCTION ENTRANCE AND BLAZE ORANGE FENCE AND TREE PROTECTION AREAS AS SHOWN ON THE GRADING PLANS OR AS DIRECTED BY THE ENGINEER.
4. (DAY 3) THE CONTRACTOR SHALL ESTABLISH THE TEMPORARY STOCKPILE AREA IN THE LOCATION INDICATED ON THE GRADING PLAN (NOTE: INSTALL FILTER LOGS AROUND THE PERIMETER OF THE STOCKPILE AREA).
5. (DAY 4-6) INSTALL REMAINING PERIMETER EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLANS, INCLUDING DIVERSION PIPE AND FENCE, FILTER LOGS, AND TEMPORARY STONE OUTLET.
6. (DAY 7) THE HOWARD COUNTY DEPARTMENT OF INSPECTION AND PERMITS SHALL BE NOTIFIED UPON COMPLETION OF CONTROL INSTALLATION FOR EACH PHASE OF CONSTRUCTION. UPON COMPLETION OF CONTROL INSTALLATION WITH APPROVAL OF SEDIMENT AND EROSION CONTROL INSPECTOR, THE CONTRACTOR MAY BEGIN GRADING OPERATIONS. CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION AND GRADING PLANS AND EROSION AND SEDIMENT CONTROL STANDARD DETAILS AND NOTES. DO NOT CLEAR AND GRUB THE ENTIRE PROJECT AREA. CLEAR AND GRUB ONLY AS DIRECTED BY THE ENGINEER AND ONLY WHERE CONSTRUCTION ACCESS IS NEEDED.

PHASE 1 (PERIMETER GRADING AND INSTALLATION OF MICROBIORETENTION AREA) - 3 WEEKS

1. (DAY 1-3) DEMOLISH AND REMOVE SIDEWALK WITHIN THE LIMITS OF DISTURBANCE LEADING TO LIBRARY FROM GORMAN ROAD. INSTALL CULVERT WITHIN GRASS SWALE AND INSTALL NEW SIDEWALK. STABILIZE WITH BOULDERS, PERMANENT SEED MIX AND STRAW MULCH/CELLULOSE FIBER.
2. (DAY 4-7) ROUGH GRADE PERIMETER SWALE AS SHOWN ON THE PLANS AND STABILIZE THE WESTERN GRASS SWALE WITH TEMPORARY EROSION CONTROL FABRIC, STRAW MULCH/CELLULOSE FIBER, AND SEED.
3. (DAY 8) EXCAVATE TO EXPOSE THE EXISTING ROOFTOP DRAIN FOR DAYLIGHTING. SAWCUT DRAIN AS SHOWN IN PLANS TO DISCONNECT FROM DOWNSTREAM MANHOLE, REMOVE MANHOLE, AND RETAIN DOWNSTREAM 18-INCH RCP FOR PROPOSED OVERFLOW CATCH BASIN.
4. (DAY 9-12) EXCAVATE THE BIORETENTION AREA AND INSTALL OVERFLOW CATCH BASIN WITH DOME GRATE ALONG WITH PERFORATED UNDERDRAIN PIPE.
5. (DAY 13-15) INSTALL DRAINAGE STONE, BIORETENTION MEDIA, AND STABILIZE WITH BOULDERS, HARDWOOD MULCH AND PERMANENT SEED.
6. (DAY 16) DEMOLISH AND REMOVE EXISTING STRUCTURES TO THE SOUTH AND WEST OF LIBRARY BUILDING ACCORDING TO PLANS, INCLUDING DUMPSTER COVE WALLS AND FOUNDATION, AND STONE WALL.
7. (DAY 17-21) INSTALL SEATWALL AMPHITHEATER AND PAVER WALKWAY WITH DRAINAGE PIPES AS SHOWN IN PLANS. STABILIZE WITH PERMANENT SEED MIX AND STRAW MULCH/CELLULOSE FIBER.

PHASE 2 (DEMOLITION OF COURTYARD AND INSTALLATION OF STORMWATER PLANTER) - 4 WEEKS

1. (DAY 1) UPON COMPLETION OF PHASE 1 AND WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR/ENGINEER, BEGIN PHASE 2 FROM STABILIZED CONSTRUCTION ENTRANCE.
2. (DAY 2-5) DEMOLISH AND REMOVE EXISTING CONCRETE WALKWAYS AND FLAGPOLES WITHIN THE FOOTPRINT OF THE PROPOSED STORMWATER PLANTER AS SHOWN IN PLANS.
3. (DAY 6-20) INSTALL ROOF DRAIN GUTTER AND STORMWATER PLANTER WITH CONCRETE RACEWAY. STABILIZE WITH PERMANENT COURTYARD PAVERS. ONCE CONCRETE HAS CURED, INSTALL BIORETENTION MEDIA AND STABILIZE WITH HARDWOOD MULCH AND PERMANENT SEED MIX.
4. (DAY 10-27) EXCAVATE AREA FOR STRUCTURAL SOILS AND INSTALL STRUCTURAL SOILS AND DRAINAGE PIPE AS SHOWN IN PLANS. INSTALL TRENCH DRAIN AND STABILIZE WITH PERMANENT COURTYARD PAVERS. COVER DRAIN BASIN INLETS WITH TEMPORARY COVERS SUCH THAT RUNOFF DRAINS BY SURFACE FLOW ONLY. STABILIZE UNDERDRAIN OUTLET WITH BOULDERS AND PERMANENT SEED MIX AND STRAW MULCH/CELLULOSE FIBER.
5. (DAY 28) UPON STABILIZATION OF THE COURTYARD WITH ESTABLISHED VEGETATION AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR OR ENGINEER, REMOVE TEMPORARY INLET COVERS FROM DRAIN BASIN INLETS.

PHASE 3 (DEMOLITION OF PARKING LOT AND INSTALLATION OF PERMEABLE PAVERS) - 4.5 WEEKS

1. (DAY 1) UPON COMPLETION OF PHASE 2 AND WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR/ENGINEER, BEGIN PHASE 3 FROM STABILIZED CONSTRUCTION ENTRANCE.
2. (DAY 2-3) INSTALL PARKING LOT CURB INLET PROTECTION EROSION AND SEDIMENT CONTROL DEVICES AND SILT FENCE AS SHOWN ON THE PLANS.
3. (DAY 4-12) SAWCUT AND REMOVE CURB, REMOVE ASPHALT TOP, AND COMPLETELY REMOVE ASPHALT WITHIN LIMITS OF THE PROPOSED PERMEABLE PAVERS AS SHOWN IN PLANS. INSTALL TEMPORARY ASPHALT BERMS TO PREVENT RUNOFF FROM ENTERING THE EXPOSED EXCAVATION AREAS. INSTALL SUMP PITS WITH FILTER BAGS TO DEWATER EXCAVATED AREAS DIRECTLY ADJACENT TO EXISTING INLET STRUCTURES.
4. (DAY 13-21) INSTALL STRUCTURAL SOILS, DRAINAGE STONE, AND UNDERDRAIN PIPES AS SHOWN IN PLANS. STABILIZE WITH PERMANENT PERMEABLE PAVER BLOCKS.
5. (DAY 22-29) INSTALL PROPOSED CURBS AND RE-PAVE ASPHALT PARKING LOT.
6. (DAY 30-32) UPON STABILIZATION OF THE SITE WITH ESTABLISHED VEGETATION AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE REMAINING SEDIMENT CONTROL DEVICES. STABILIZE ANY AREAS DISTURBED BY SEDIMENT CONTROL REMOVAL.

SPECIAL CONTRACTOR NOTES

1. UPON COMPLETION OF THE WORK, BUT PRIOR TO DE-MOBILIZATION, THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITIONS.
2. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, PHOTOGRAPHS OF THE PROPOSED WORK AREA AND ACCESS SHALL BE TAKEN.

NOTES

1. THE SUBJECT PROPERTY IS ZONED R-SC PER THE 10/6/2013 COMPREHENSIVE ZONING PLAN.
2. THIS RED-LINE REVISION IS EXEMPT FROM THE LANDSCAPING REQUIREMENTS IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL BECAUSE THE PROJECT RECEIVED SITE DEVELOPMENT PLAN APPROVAL PRIOR TO THE EFFECTIVE DATE OF THE REGULATIONS AND THE PROPOSED RED-LINE REVISION DOES NOT EXPAND THE EXISTING USE. HOWEVER, THE REPLACEMENT LANDSCAPING FOR THE PREVIOUSLY APPROVED PLAN AND ADDITIONAL LANDSCAPING PROVIDED BY THE DEVELOPER SHOULD BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANTING PLAN. THERE IS NO BONDING REQUIRED FOR THE LANDSCAPING.
3. THERE ARE NO BURIAL GROUNDS OR CEMETERY SITES LOCATED ON THE PROJECT SITE.
4. THIS RENOVATION PROJECT FOR SITE IMPROVEMENTS TO THE SAVAGE LIBRARY UNDER CAPITAL PROJECT No. D1164 IS CONSIDERED EXEMPT IN ACCORDANCE WITH APPENDIX 'O' OF THE FOREST CONSERVATION MANUAL BECAUSE THE ACTIVITY DOES NOT RESULT IN THE CUTTING, CLEARING OR GRADING OF MORE THAN 20,000 SQUARE FEET OF FOREST.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY CONTAINED HEREIN PLUS MARYLAND STATE HIGHWAY ADMIN. STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
6. THE COORDINATES SHOWN HEREIN ARE BASED ON HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS BM 47 FB AND BM7 EC WERE USED FOR THIS SITE.
7. WATER IS PUBLIC.
8. SEWER IS PUBLIC.
9. EXISTING UTILITIES ARE BASED ON FIELD SURVEYS AND AVAILABLE RECORD DRAWINGS.
10. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE-FOOT CONTOUR INTERVALS PREPARED BY AB CONSULTANTS, INC. ON 3/2013.
11. NO TRAFFIC STUDY IS REQUIRED SINCE THE PROJECT MAINTAINS THE PARKING AND TRAFFIC PLAN AS THE ORIGINAL APPROVED SDP.
12. OBSTRUCTIONS SHOWN ON THIS DRAWING ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND BIOHABITATS, INC. DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION GIVEN. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
14. SOILS DATA WAS ACQUIRED USING HOWARD COUNTY GIS.
15. BIOHABITATS SHALL CERTIFY IN WRITTEN LETTER THAT THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED IN ACCORDANCE TO THESE PLANS.
16. NO DISTURBANCE TO ENVIRONMENTAL FEATURES IS PROPOSED WITH THIS RED-LINE AS NO ENVIRONMENTAL FEATURES EXIST ON-SITE.
17. ALL PROPOSED EXTERIOR LIGHTING SHALL BE DIRECTED/REFLECTED AWAY FROM ALL ADJACENT PUBLIC ROADS AND RESIDENTIAL ZONING DISTRICTS IN ACCORDANCE WITH SECTION 134.0 OF THE HOWARD COUNTY ZONING REGULATIONS. LIGHT TRESPASS ONTO ANY PROPERTY ZONED OR USED FOR RESIDENTIAL PURPOSES SHALL BE LIMITED TO 0.1 FOOT CANDLES AND LIGHT TRESPASS SHALL NOT APPLY TO LAND WITHIN THE PUBLIC RIGHT-OF-WAY.
18. IN ACCORDANCE WITH DPZ MEETING MINUTES DATED SEPTEMBER 18, 2013, THE DPZ PLANNING DIRECTOR DETERMINED A SETBACK VARIANCE OR COUNCIL RESOLUTION WAS NOT REQUIRED FOR THE RELOCATED PARKING SPACES, DRIVE AISLES OR ANY OTHER USE SETBACK ITEMS SUCH AS RETAINING WALLS OR OTHER LANDSCAPED BOULDER WALLS THAT ENCRROACH WITHIN THE CURRENT USE SETBACK SINCE THE RENOVATION PROJECT IS BEING PROCESSED AS A RED-LINE REVISION AND THE USE SETBACKS WERE NOT ESTABLISHED WHEN THE PLAN WAS ORIGINALLY APPROVED.

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:

REVISIONS TO SEDIMENT CONTROL NOTES & SEQUENCE OF CONSTRUCTION



AS BUILT CERTIFICATE

I HEREBY CERTIFY, BY MY KNOWLEDGE AND BELIEF, THAT THE PROJECTS SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, PH.D., P.E. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Neil Elbert 1/27/14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Walter Ralston 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

James M. King 1/29/14
DIRECTOR DATE



The Stables Building 2081 Clipper Park Road
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fx: 410.554.0168 / www.biohabitats.com
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SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

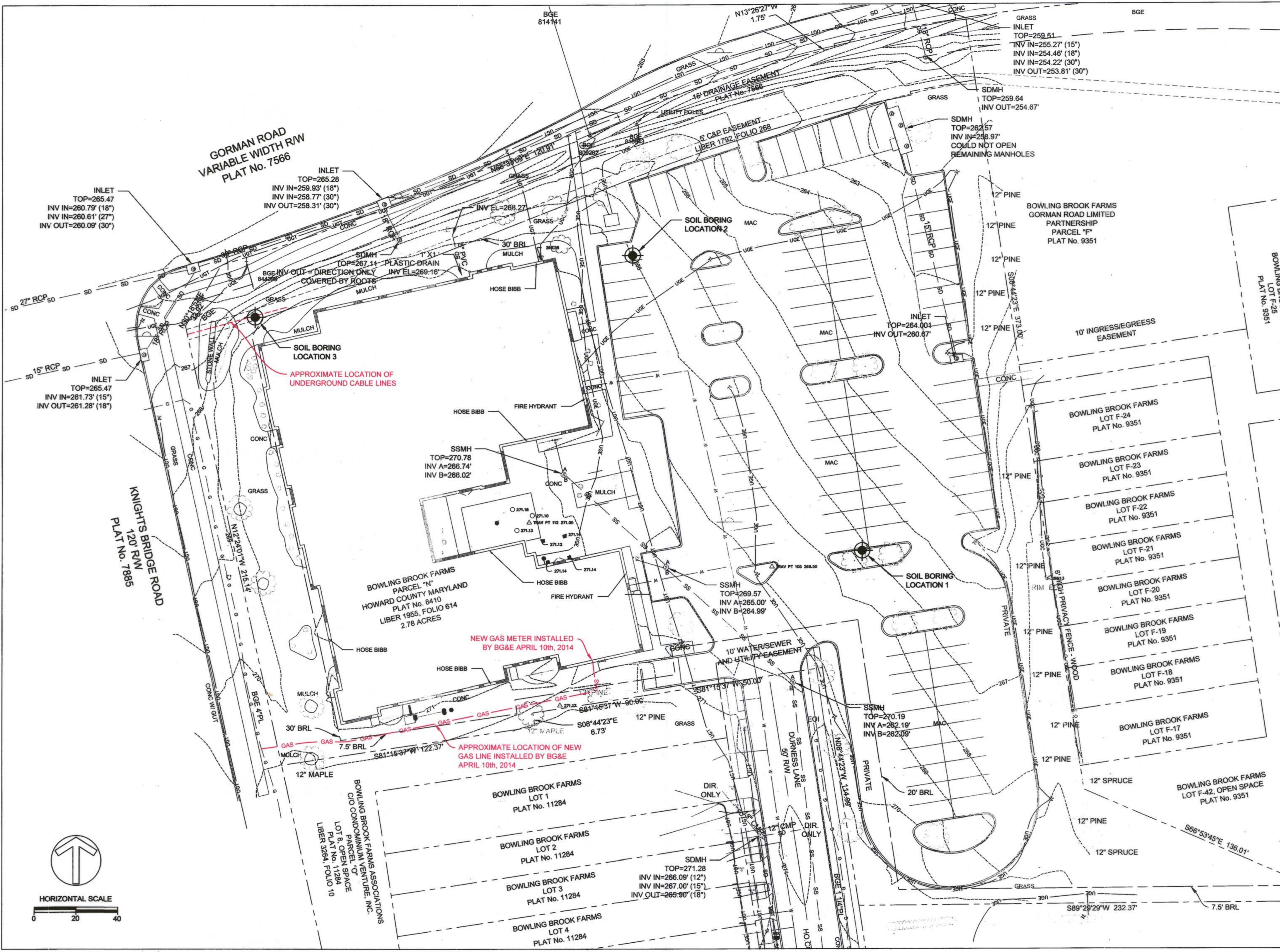
GENERAL NOTES & SEQUENCE OF CONSTRUCTION

PROJECT NO.: 13005.02 SCALE: N/A

SEAL: BY: AG,NL,TB CHECK: MT, EWB
DWG. NO.: 8 OF 30



8 OF 30




CLIENT
 HOWARD COUNTY
 STORMWATER MANAGEMENT DIVISION
 6751 COLUMBIA GATEWAY DRIVE
 SUITE 514
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DATE:	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS


AS-BUILT NOTES:
 NEW BG&E GAS METER AND GAS LINE

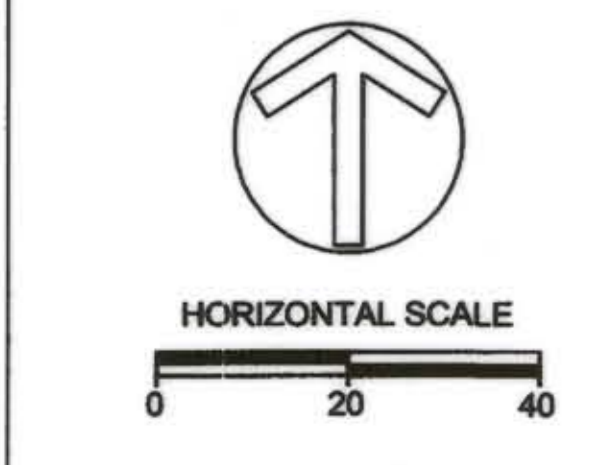

 I HEREBY CERTIFY THAT THE BEST OF MY KNOWLEDGE AND BELIEF THE WORK SHOWN ON THIS PLAN WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
Nick Lindow 10-16-14
 NICK LINDOW, PH.D., PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Paul Phelan 1-17-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Walt Shalash 1-30-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
David J. Long 10-16-14
 DIRECTOR DATE

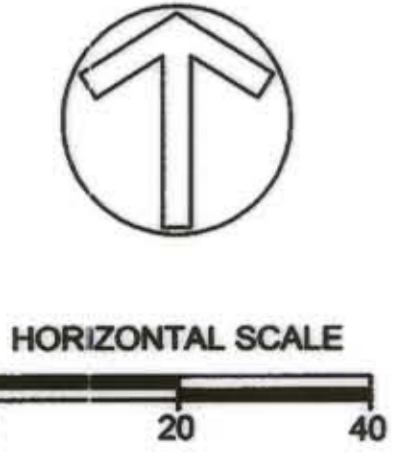
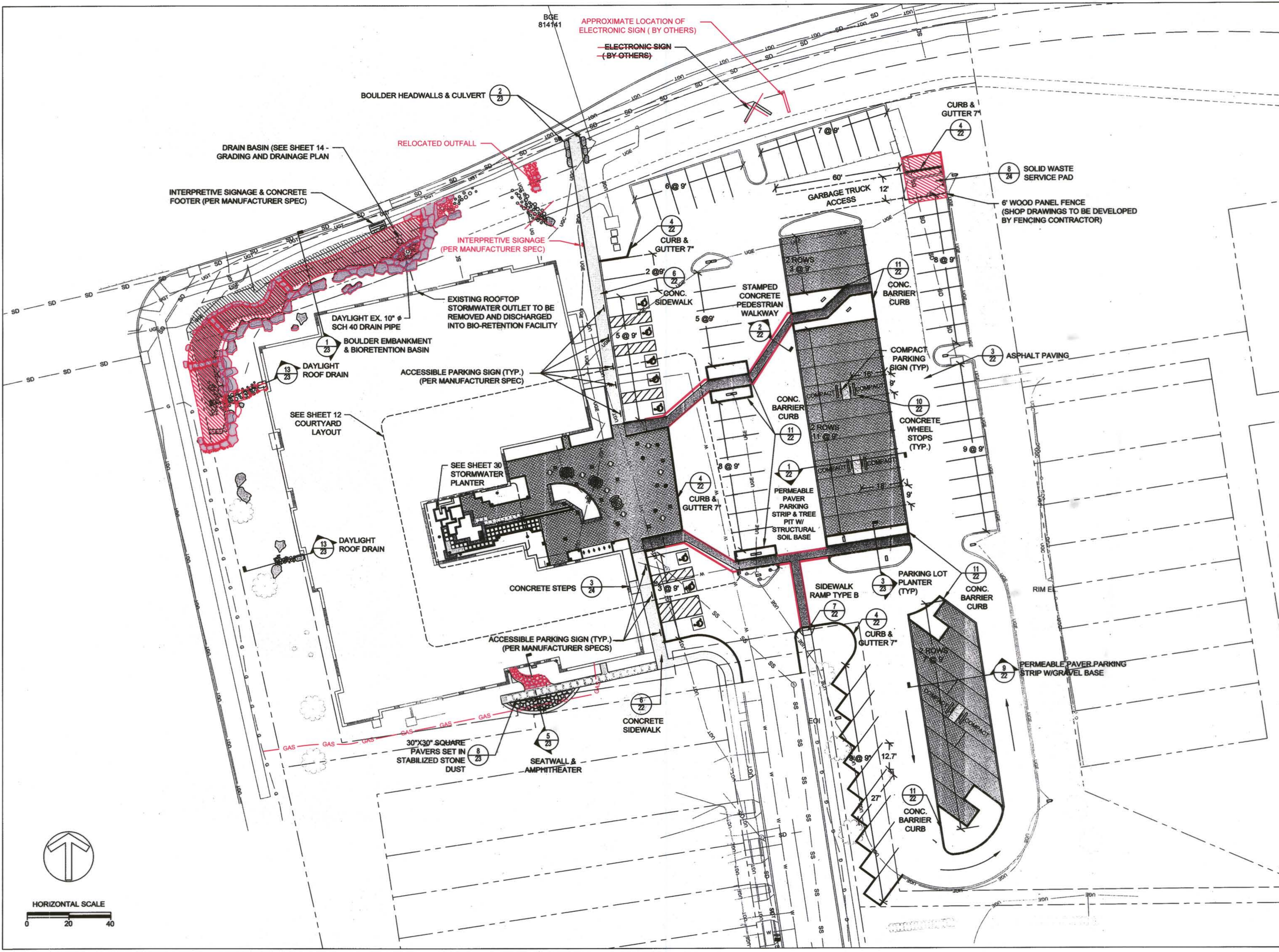

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SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

EXISTING CONDITIONS
 PROJECT NO.: 13005.02 SCALE: 1" = 20'
 SEAL:  BY: AG, ML, TB CHECK: MT, EWB
 DWG. NO.: 9 OF 30



Project: Savage_Library_CAD\Drawings\13005.02\13005.02_14-10-14.dwg, 12/20/2013 1:46:19 PM



CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
SEATWALL & AMPHITHEATER PAVING REVISIONS
BIORETENTION BASIN REVISIONS
SOLID WASTE SERVICE PAD REVISIONS
RELOCATE ELECTRONIC SIGN (BY OTHERS)
STAMPED CONCRETE BORDER REVISIONS



I HEREBY CERTIFY, BY SIGNING THESE PLANS, THAT THE BEST OF MY KNOWLEDGE AND BELIEF, THE WORK SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, P.E., P.E. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Paul Edwards 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kevin Edwards 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David A. Gough 1/30/14
DIRECTOR DATE

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SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

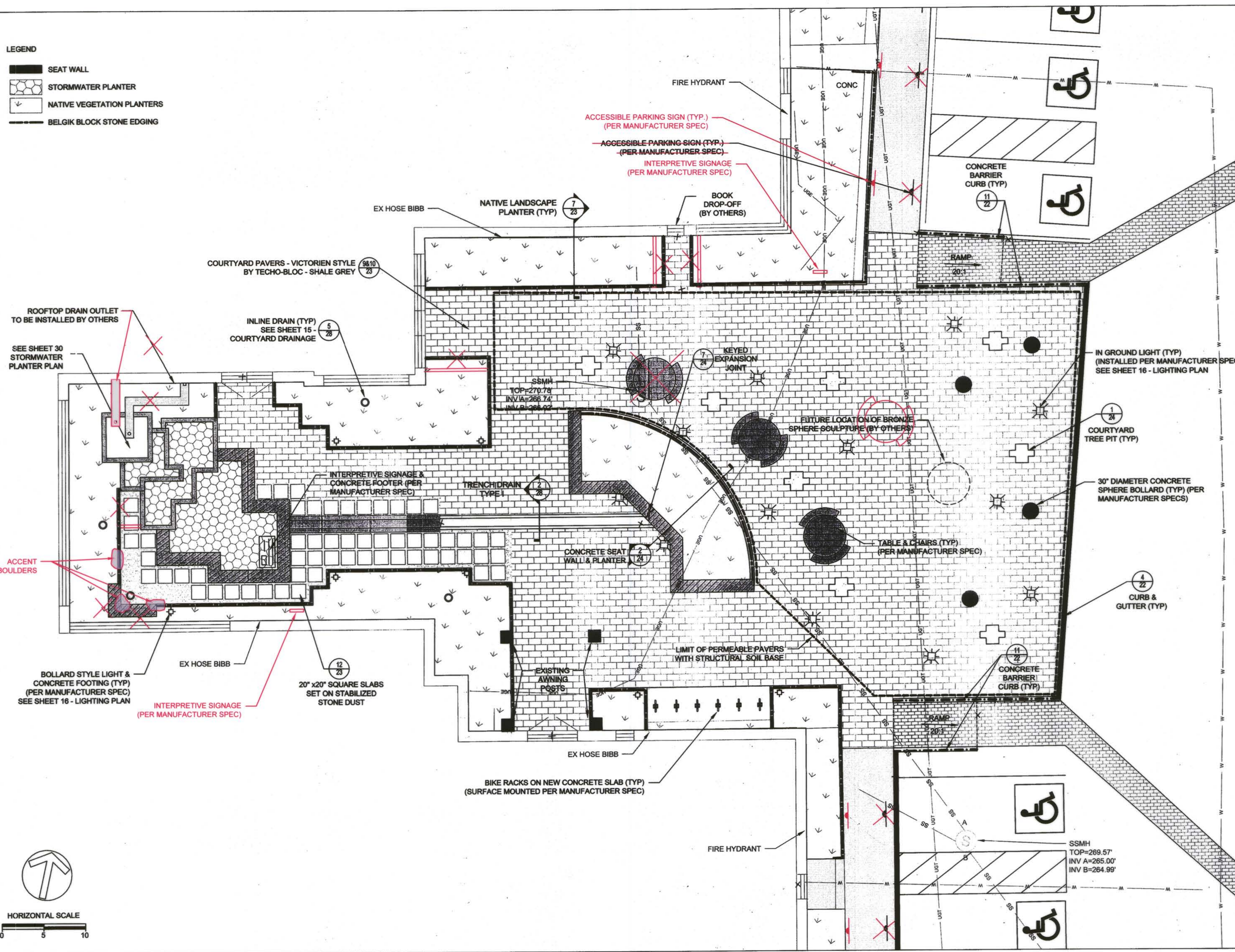
SITE LAYOUT & MATERIALS PLAN

PROJECT NO.:	13005.02	SCALE:	1"=20'
BY:	AG, NLTB	CHECK:	MT, EWB
DWG. NO.:			

11 OF 30

LEGEND

-  SEAT WALL
-  STORMWATER PLANTER
-  NATIVE VEGETATION PLANTERS
-  BELGIK BLOCK STONE EDGING






CLIENT


HOWARD COUNTY
 STORMWATER MANAGEMENT DIVISION
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 COLUMBIA, MD 21046

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09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
 WIDEN BOOK DROPOFF ACCESS AND MAIN ENTRANCE PATH
 REPLACE SEATWALL WITH ACCENT BOULDERS
 SHIFT ADA PARKING SIGNS
 RELOCATE INTERPRETIVE SIGNS
 RECONFIGURE ROOFTOP DRAIN OUTLET
 RECONFIGURE TABLE AND CHAIRS



 I HEREBY CERTIFY THAT THE BEST OF MY KNOWLEDGE AND BELIEF THE PLANS SHOWN ON THIS PLAN WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
 Nick Lindow, P.E. 10-16-14

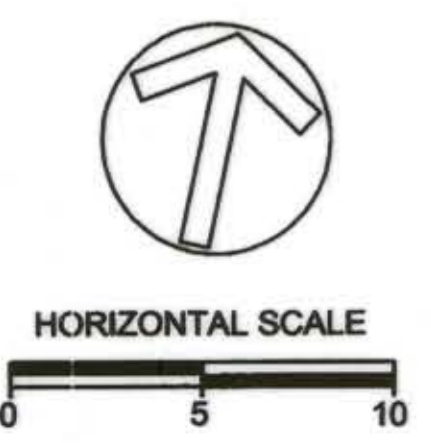
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 1/27/14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 4v DATE
 1-30-14
 CHIEF, DIVISION OF LAND DEVELOPMENT 4p DATE
 1/30/14
 DIRECTOR DATE

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SAVAGE LIBRARY
 ENVIRONMENTAL
 SITE DESIGN

TITLE
**COURTYARD
 LAYOUT &
 MATERIALS**

PROJECT NO.: 13005.02 SCALE: 1"=5'
 SEAL:  BY: AG, NL, TB CHECK: MT, EWB
 DWG. NO.: 12 OF 30



CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
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COLUMBIA, MD 21046

DATE	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
NO AS-BUILT INFORMATION REQUIRED FOR THIS SHEET

STATE OF MARYLAND
NICKOLAS LINDOW
REGISTERED PROFESSIONAL ENGINEER
I HEREBY CERTIFY THAT THE WORK SHOWN ON THIS PLAN
WAS CONSTRUCTED AS SHOWN AND THAT THE PLAN MEETS
THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, PH.D., PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief Clerk 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Mark S. Richmond 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David M. Smith 4/24/14
DIRECTOR DATE

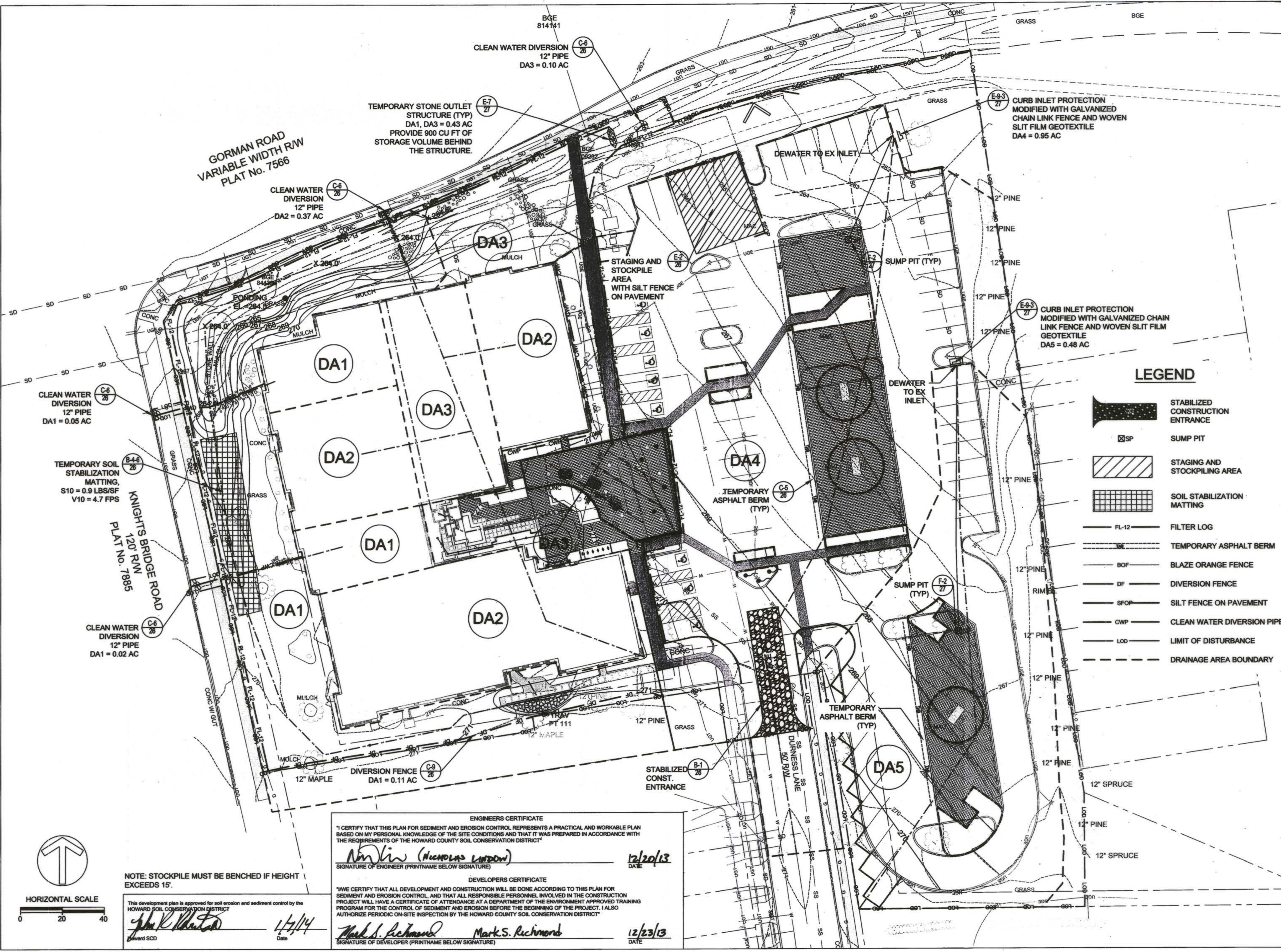
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The Stables Building 2081 Clipper Park Road
Baltimore, MD 21211 / ph: 410.554.0156
fx: 410.554.0168 / www.biohabitats.com
Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

EROSION & SEDIMENT CONTROL PLAN

PROJECT NO.:	13005.02	SCALE:	1" = 20'
BY:	AG, NL, TB	CHECK:	MT, EWB
DWG. NO.:			

13 OF 30



ENGINEERS 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 COUNTY SOIL CONSERVATION DISTRICT

Nick Lindow (NICHOLAS LINDOW) 12/20/13
SIGNATURE OF ENGINEER (PRINTNAME BELOW SIGNATURE) DATE

DEVELOPERS 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 THE BEGINNING OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT

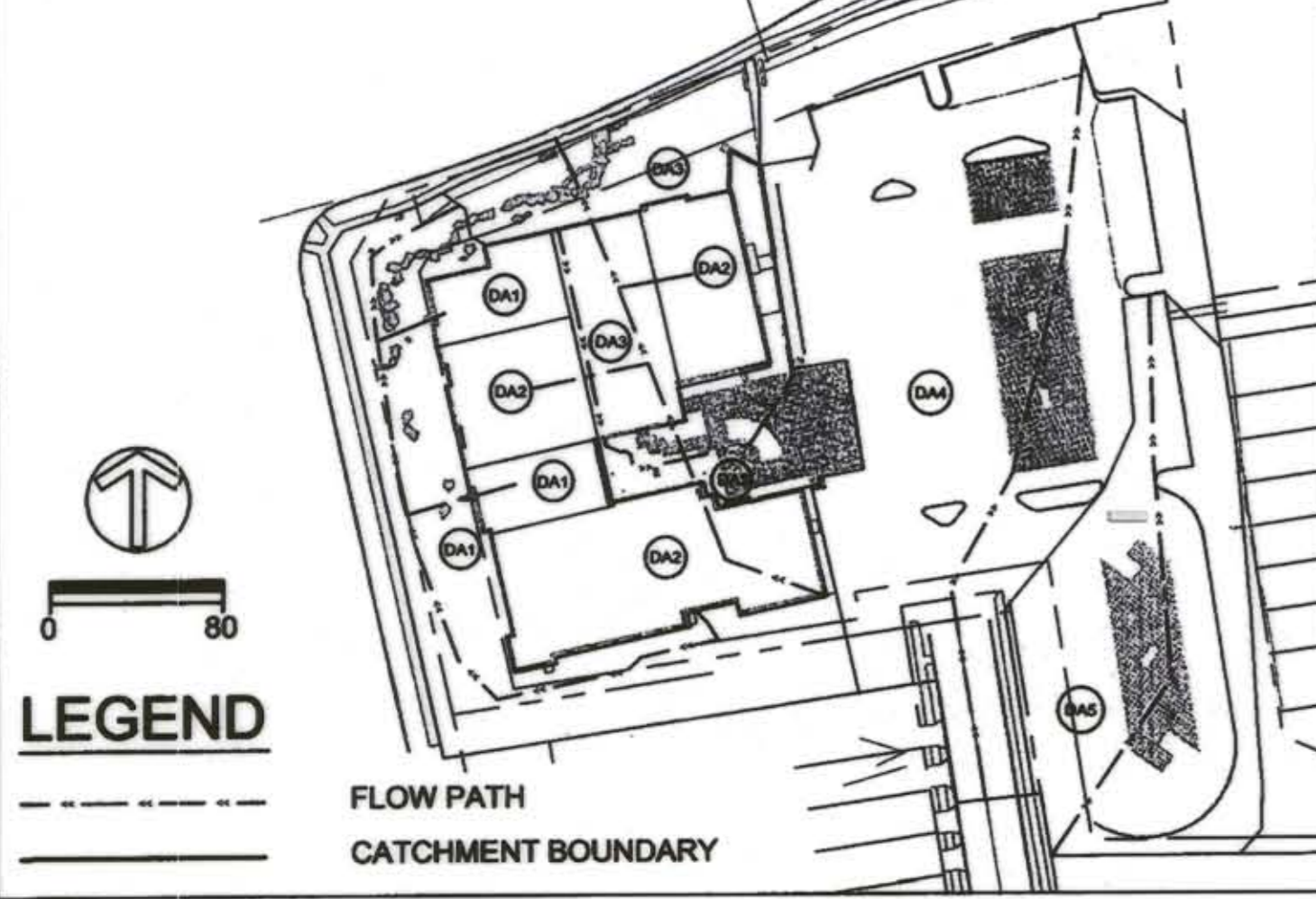
Mark S. Richmond 12/23/13
SIGNATURE OF DEVELOPER (PRINTNAME BELOW SIGNATURE) DATE

NOTE: STOCKPILE MUST BE BENCHED IF HEIGHT EXCEEDS 15'

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

John K. White 1/7/14
HOWARD SCD Date

SITE DRAINAGE MAP



STORMWATER MANAGEMENT TABLE

ID	TYPE	AREA (AC)	RATIONAL C	Tc (MIN)	C10 (CFS)	V10 (FPS)	So (%)
DA1	DAYLIGHT TO GRASS SWALE	0.51	0.33	33	0.6	6.1	5.00%
DA2	EXISTING CATCH BASIN M2	0.5	0.71	2.3	3.1	1.7	0.10%
DA3	8" RCP CULVERT	0.25	0.73	2.7	1.6	4.4	1.60%
DA4	EXISTING CATCH BASIN I1	0.97	0.8	2.4	9.4	5.3	0.80%
DA5	EXISTING CATCH BASIN I2	0.48	0.81	1.9	3.3	2.7	0.30%

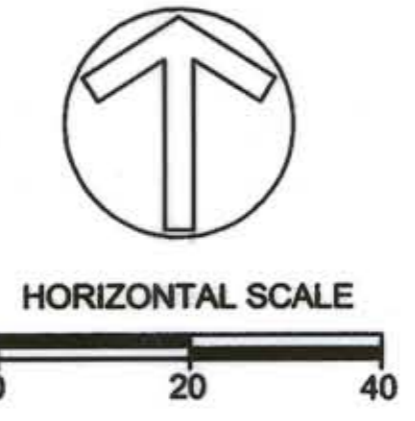
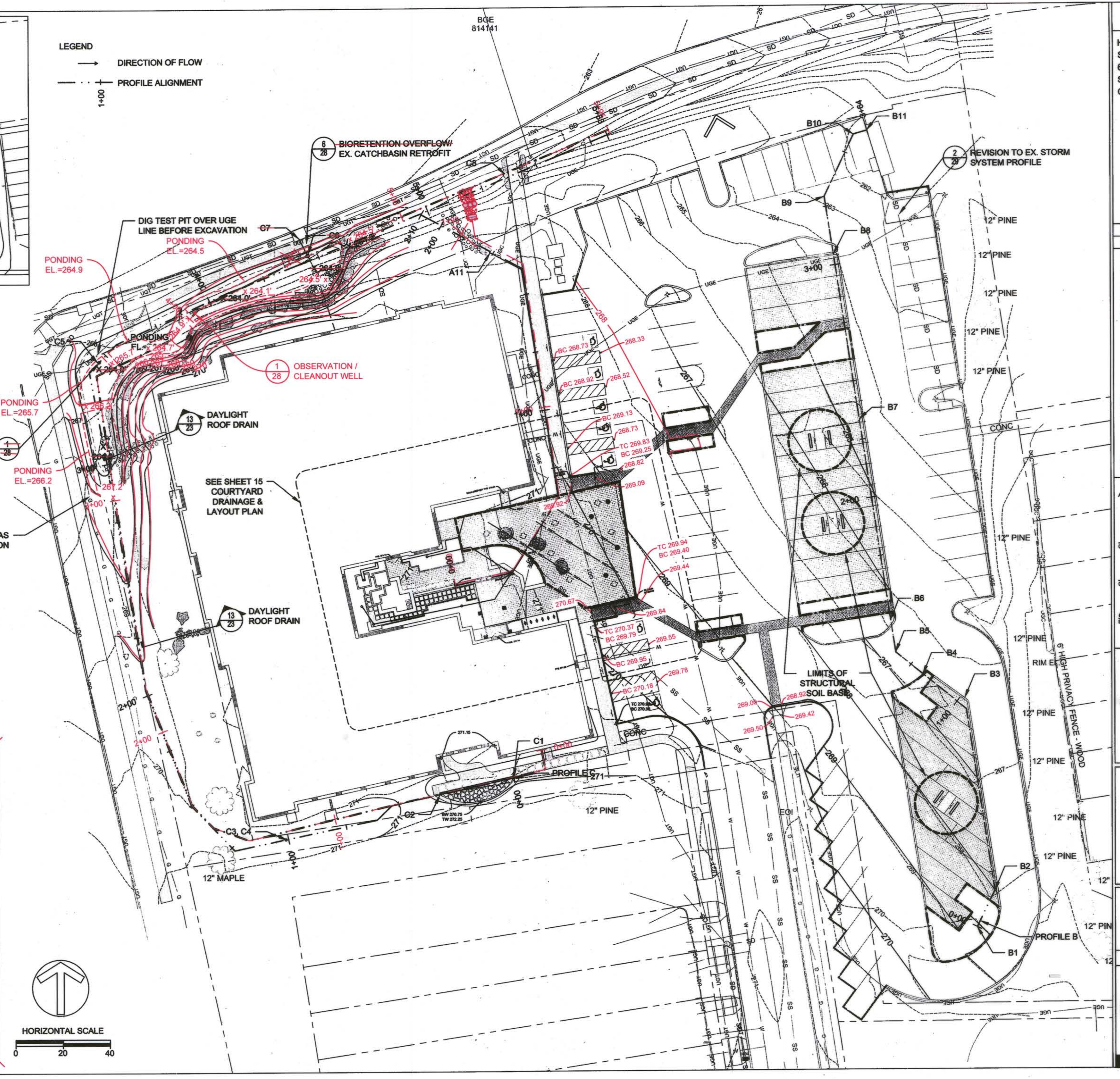
*** INTERNAL BUILDING ROOF DRAIN STRUCTURE TABLE**

ID	TYPE	SURF EL	INV EL	SLOPE	STA
A1	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.65	269.58	N/A	0+00
A2	9" X 7" D TRENCH DRAIN TYPE I, OBLIO DRAIN GRATE	270.65	270.15	1.50%	0+00
A3	6" SOLID PIPE TO RAINWATER TANK	270.65	269.65	0.00%	0+00
A4	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.23	268.3	N/A	0+24
A5	6" SOLID PIPE OUTLET	270.21	269.71	0.80%	0+24
A6	6" PERFORATED PIPE	270.7	269.61	0.00%	0+36
A7	6" PERFORATED PIPE	270.6	269.53	0.00%	0+47
A8	6" PERFORATED PIPE	270.5	269.44	0.00%	0+58
A9	8" DRAIN BASIN W 2" SUMP, SQUARE BRONZE GRATE	270.01	269.20	N/A	0+61
A10	6" SOLID PIPE OUTLET	270.4	269	0.90%	0+61
A11	BOULDER/COBBLE CASCADE	268.3	266.58	33.30%	1+91
B1	CLEAN OUT TO 6" PERF PIPE	269.74	266.59	2.18%	0+00
B2	6" 45° BEND TO PERF PIPE	267.96	266.22	2.18%	0+17
B3	6" 45° BEND TO PERF PIPE	266.4	264.52	2.18%	0+95
B4	6" BELL AND SPIGOT JOINT TO SOLID PIPE	266.3	264.10	2.18%	1+14
B5	6" 45° BEND TO SOLID PIPE	266.4	263.69	2.18%	1+33
B6	CLEAN OUT TO 6" PERF PIPE AT GRADE CHANGE	267.03	263.39	2.18%	1+47
B7	6" BELL AND SPIGOT JOINT AT GRADE CHANGE	264.44	262.51	1.00%	2+31
B8	6" BELL AND SPIGOT JOINT TO SOLID PIPE	264	261.79	3.31%	3+05
B9	6" 45° BEND TO SOLID PIPE	262.86	260.93	3.37%	3+29
B10	6" 45° BEND TO SOLID PIPE	261.91	259.92	3.81%	3+59
B11	6" CORE DRILL INTO EXISTING CATCH BASIN	262.62	259.73	N/A	3+64
C1	6-1/4" X 4" D TRENCH DRAIN TYPE II 4" PERF PIPE	270.7	270.2	0.50%	0+00
C2	4" PERF PIPE	270.7	270	0.50%	0+35
C3	4" POP-UP DRAIN	270.15	269.82	0.50%	1+00
C4	DAYLIGHT TO GRASS SWALE	270.4	270.4	3%	1+00
C5	CLEAN OUT TO 6" PERF PIPE	264.64	262.56	1%	3+46
C6	8" DRAIN BASIN W DOME GRATE	264.5	260.06	N/A	4+50
C7	EXISTING STORMWATER MANHOLE	265.28	258.77	N/A	N/A
C8	6" CORE DRILL INTO EXISTING CATCH BASIN	264.6	263.86	2%	5+33

ELEVATIONS IN BOLD WERE FIELD VERIFIED
ELEVATIONS IN ITALICS WERE ESTIMATED BASED ON AS BUILT INFORMATION

STRUCTURE TABLE

ID	TYPE	SURF EL	INV EL	SLOPE	STA
A1	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.58	269.58	N/A	0+00
A2	12" X 6" D TRENCH DRAIN TYPE I, OBLIO DRAIN GRATE	270.58	270.08	1.50%	0+00
A3	6" SOLID PIPE TO RAINWATER TANK	270.58	270.08	0.00%	0+00
A4	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.08	268.3	N/A	0+24
A5	6" SOLID PIPE OUTLET	270.08	268.8	0.80%	0+24
A6	6" PERFORATED PIPE	270.7	268.7	0.00%	0+36
A7	6" PERFORATED PIPE	270.6	268.6	0.00%	0+47
A8	6" PERFORATED PIPE	270.5	268.5	0.00%	0+58
A9	8" DRAIN BASIN W 2" SUMP, SQUARE BRONZE GRATE	270.4	268	N/A	0+61
A10	6" SOLID PIPE OUTLET	270.4	269	0.90%	0+61
A11	BOULDER/COBBLE CASCADE	268.3	267.8	33.30%	1+91
B1	CLEAN OUT TO 6" PERF PIPE	269.06	266.42	2.45%	0+00
B2	6" 45° BEND TO PERF PIPE	267.96	266.01	2.45%	0+17
B3	6" 45° BEND TO PERF PIPE	266.4	264.1	0.50%	0+95
B4	6" BELL AND SPIGOT JOINT TO SOLID PIPE	266.3	264.07	0.50%	1+14
B5	6" 45° BEND TO SOLID PIPE	266.4	264.03	0.50%	1+33
B6	CLEAN OUT TO 6" PERF PIPE AT GRADE CHANGE	266.64	264.03	1.82%	1+47
B7	6" BELL AND SPIGOT JOINT AT GRADE CHANGE	264.44	262.51	1.00%	2+31
B8	6" BELL AND SPIGOT JOINT TO SOLID PIPE	264	261.79	3.31%	3+05
B9	6" 45° BEND TO SOLID PIPE	262.86	260.93	3.37%	3+29
B10	6" 45° BEND TO SOLID PIPE	261.91	259.92	3.81%	3+59
B11	6" CORE DRILL INTO EXISTING CATCH BASIN	261.72	259.73	N/A	3+64
C1	6-1/4" X 4" D TRENCH DRAIN TYPE II	270.7	270.2	0.50%	0+00
C2	4" PERF PIPE	270.7	270	0.50%	0+35
C3	4" POP-UP DRAIN	270.4	269.83	0.50%	1+00
C4	DAYLIGHT TO GRASS SWALE	270.4	270.4	3%	1+00
C5	CLEAN OUT TO 6" PERF PIPE	264	263	1%	3+46
C6	8" DRAIN BASIN W DOME GRATE	264.5	259.63	N/A	4+50
C7	6" CORE DRILL INTO EXISTING CATCH BASIN	265.28	258.77	N/A	N/A
C8	8" RCP CULVERT	264.6	263.93	2%	5+33



CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 12/23/2013
ISSUES / REVISIONS: REVISION SITE DEVELOPMENT PLAN

09/04/2014
ISSUES / REVISIONS: SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
ADA GRADING REVISIONS
BIORETENTION GRADING & DRAINAGE REVISIONS
SEE SHEET 21 FOR REVISIONS TO PROFILE C
RELOCATE A11

NICK LINDOW, PHD, PE
10-16-14
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
1-17-14
DATE

CHIEF, DIVISION OF LAND DEVELOPMENT
1-30-14
DATE

DIRECTOR
10-16-14
DATE

Biohabitats

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fx: 410.554.0168 / www.biohabitats.com
Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

GRADING & DRAINAGE PLAN

PROJECT NO.: 13005.02 SCALE: AS SHOWN

BY: AG, NLTB CHECK: MT, EWB
DWG. NO.: 14 OF 30

- LEGEND**
- +—+—+ STORMWATER DISTRIBUTION LINE
 - DIRECTION OF FLOW
 - +—+ PROFILE ALIGNMENT

NOTE:
STORMWATER DISTRIBUTION LINE TO BE INSTALLED SO INVERT IS AT BOTTOM GRADE OF STRUCTURAL SOIL STORMWATER RESERVOIR.

CLIENT
HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 12/23/2013
ISSUES / REVISIONS:
12/23/2013 REVISED SITE DEVELOPMENT PLAN
09/04/2014 SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
GRADING REVISIONS
DRAINAGE INVERT REVISIONS

AS BUILT CERTIFICATE
I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THE WORK SHOWN ON THIS PLAN WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, PH.D., PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief Development Engineering Division 1-17-14
DATE

Chief, Division of Land Development 1-30-14
DATE

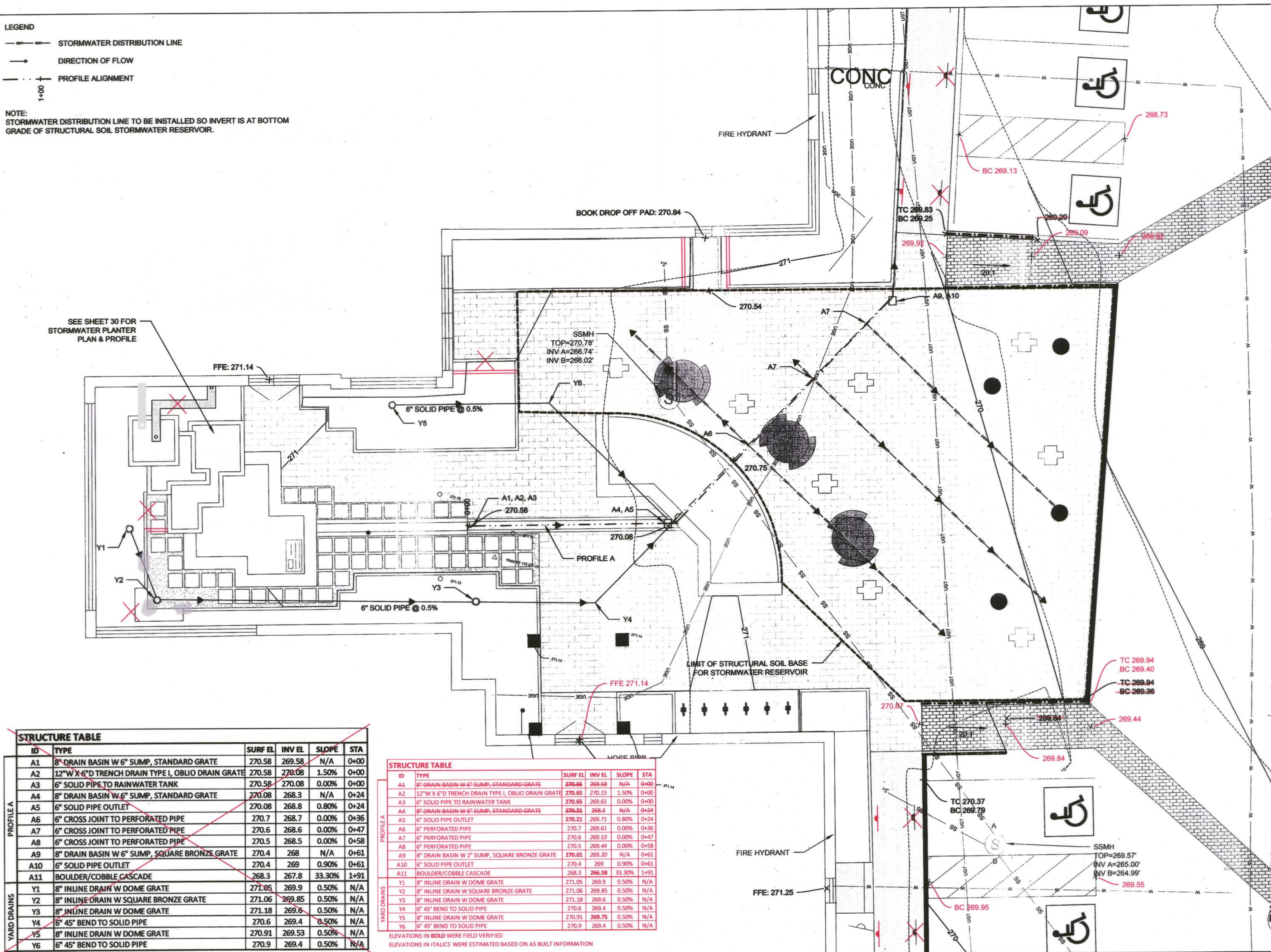
Director 1/29/14
DATE

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fx: 410.554.0168 / www.biohabitats.com
Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

COURTYARD GRADING & DRAINAGE PLAN

PROJECT NO.: 13005.02 **SCALE:** 1" = 5'
BY: AG, NLT, TE **CHECK:** MT, EWB
DWG. NO.: 15 OF 30



STRUCTURE TABLE					
ID	TYPE	SURF EL	INV EL	SLOPE	STA
A1	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.58	269.58	N/A	0+00
A2	12" W X 6" D TRENCH DRAIN TYPE I, OBLIO DRAIN GRATE	270.58	270.08	1.50%	0+00
A3	6" SOLID PIPE TO RAINWATER TANK	270.58	270.08	0.00%	0+00
A4	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.08	268.3	N/A	0+24
A5	6" SOLID PIPE OUTLET	270.08	268.8	0.80%	0+24
A6	6" CROSS JOINT TO PERFORATED PIPE	270.7	268.7	0.00%	0+36
A7	6" CROSS JOINT TO PERFORATED PIPE	270.6	268.6	0.00%	0+47
A8	6" CROSS JOINT TO PERFORATED PIPE	270.5	268.5	0.00%	0+58
A9	8" DRAIN BASIN W 6" SUMP, SQUARE BRONZE GRATE	270.4	268	N/A	0+61
A10	6" SOLID PIPE OUTLET	270.4	269	0.90%	0+61
A11	BOULDER/COBBLE CASCADE	268.3	267.8	33.30%	1+91
Y1	8" INLINE DRAIN W DOME GRATE	271.05	269.9	0.50%	N/A
Y2	8" INLINE DRAIN W SQUARE BRONZE GRATE	271.06	269.85	0.50%	N/A
Y3	8" INLINE DRAIN W DOME GRATE	271.18	269.6	0.50%	N/A
Y4	6" 45° BEND TO SOLID PIPE	270.6	269.4	0.50%	N/A
Y5	8" INLINE DRAIN W DOME GRATE	270.91	269.53	0.50%	N/A
Y6	6" 45° BEND TO SOLID PIPE	270.9	269.4	0.50%	N/A

STRUCTURE TABLE					
ID	TYPE	SURF EL	INV EL	SLOPE	STA
A1	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.58	269.58	N/A	0+00
A2	12" W X 6" D TRENCH DRAIN TYPE I, OBLIO DRAIN GRATE	270.58	270.15	1.50%	0+00
A3	6" SOLID PIPE TO RAINWATER TANK	270.58	269.65	0.00%	0+00
A4	8" DRAIN BASIN W 6" SUMP, STANDARD GRATE	270.08	268.3	N/A	0+24
A5	6" SOLID PIPE OUTLET	270.08	269.71	0.80%	0+24
A6	6" PERFORATED PIPE	270.7	269.61	0.00%	0+36
A7	6" PERFORATED PIPE	270.6	269.53	0.00%	0+47
A8	6" PERFORATED PIPE	270.5	269.44	0.00%	0+58
A9	8" DRAIN BASIN W 2" SUMP, SQUARE BRONZE GRATE	270.01	269.20	N/A	0+61
A10	6" SOLID PIPE OUTLET	270.4	269	0.90%	0+61
A11	BOULDER/COBBLE CASCADE	268.3	266.58	33.30%	1+91
Y1	8" INLINE DRAIN W DOME GRATE	271.05	269.9	0.50%	N/A
Y2	8" INLINE DRAIN W SQUARE BRONZE GRATE	271.06	269.85	0.50%	N/A
Y3	8" INLINE DRAIN W DOME GRATE	271.18	269.6	0.50%	N/A
Y4	6" 45° BEND TO SOLID PIPE	270.6	269.4	0.50%	N/A
Y5	8" INLINE DRAIN W DOME GRATE	270.91	269.75	0.50%	N/A
Y6	6" 45° BEND TO SOLID PIPE	270.9	269.4	0.50%	N/A

ELEVATIONS IN BOLD WERE FIELD VERIFIED
ELEVATIONS IN ITALICS WERE ESTIMATED BASED ON AS BUILT INFORMATION

LIGHTING SCHEDULE					
ID	DESCRIPTION	MANUFACT	CATALOG #	QTY.	VOLT
A	POLE TOP MOUNTED LED LUMINAIRE - DUAL FIXTURE	PRISMA	072264	3	120V
B	POLE TOP MOUNTED LED - SINGLE FIXTURE	PRISMA	072264	5	120V
C	NANO PYROS LED MED WIDE FLOOD LIGHT	TARGETTI	TS12-010	5	120V
D	PROFIL 15 IN-GROUND LED LIGHTING	PRISMA	073605	13	120V
E	Q-LIGHT LED BOLLARD STYLE LIGHTING	PRISMA	076366	7	120V

PARKING LOT & INTERSECTION

REFERENCED NOTES

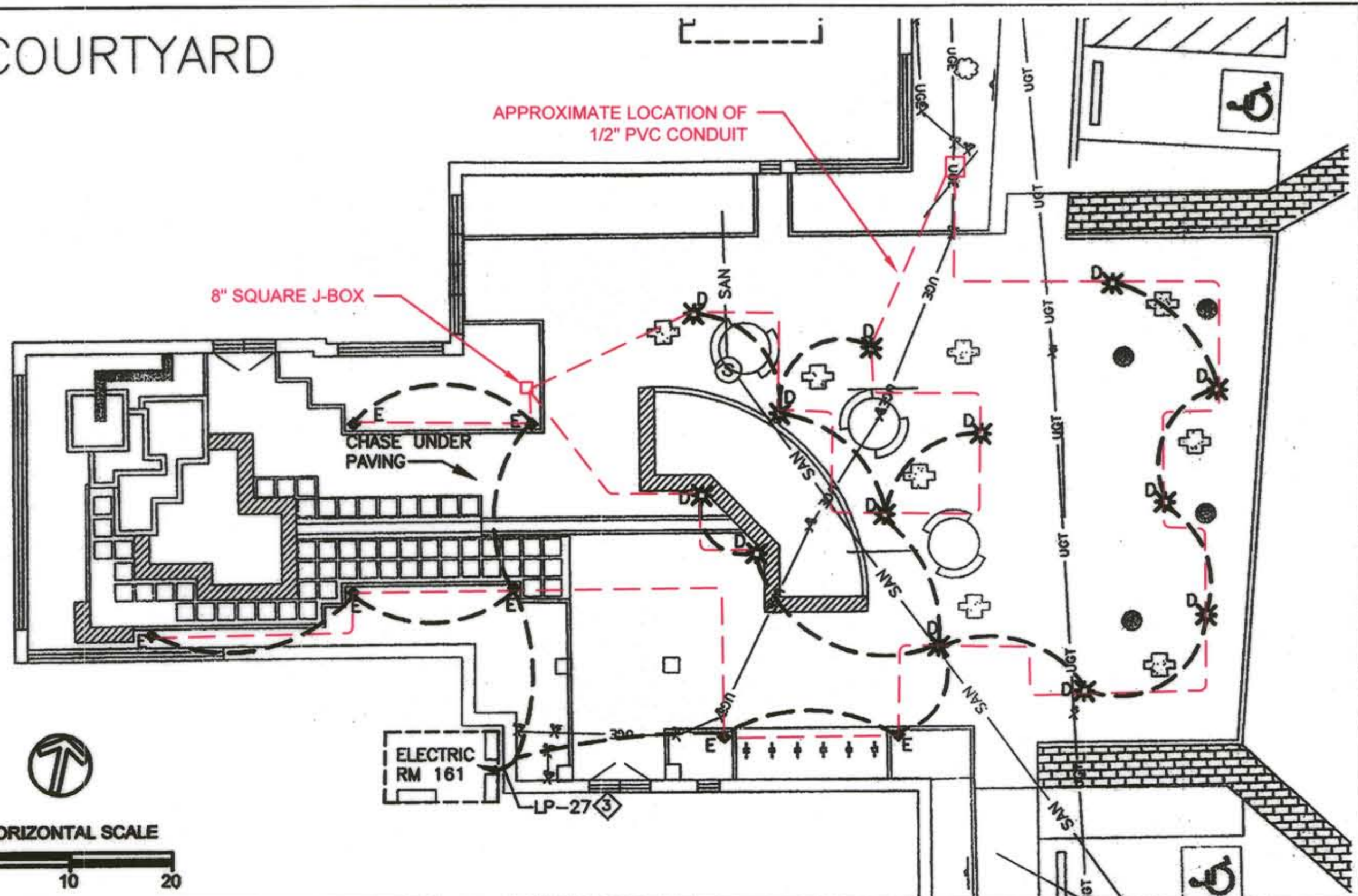
- CONNECT LIGHTING TO CIRCUIT INDICATED OR WHERE SPACE IS AVAILABLE, VIA THE BUILDING LIGHTING CONTROL SYSTEM - GROUP EXT. REMOVE EXISTING 2P,20A CIRCUIT BREAKER AND REPLACE WITH (2) 1P,20A CIRCUIT BREAKERS FOR CIRCUITS LP-28 AND 30.
- PROVIDE AN EXTERIOR IN-GRADE 12"x12" POLYMER JUNCTION BOX TO INTERCEPT EX. 4" CONDUIT ROUTED TO ELECTRIC ROOM 161. LOCATE JUNCTION BOX CLOSE TO BUILDING AND FIELD LOCATE EXISTING CONDUIT. COORDINATE LOCATION WITH SITE ENGINEER.
- CONNECT COURTYARD LIGHTS TO CIRCUIT WITH THE BUILDING MOUNTED EXTERIOR WALL SCONCES. COURTYARD LIGHTING SHALL BE CONTROLLED BY THE BUILDING LIGHTING CONTROL SYSTEM - GROUP EXT.
- EXISTING 4" CONDUIT IS SHOWN FOR REFERENCE AND SHALL BE LOCATED IN FIELD TO DETERMINE THE ACTUAL LOCATION.
- PROVIDE EMPTY 1-1/4" CONDUIT WITH PULLSTRING FOR CIRCUIT TO SIGN LIGHTS. COORDINATE EXISTING ROUTING IN FIELD.

GORMAN ROAD
VARIABLE WIDTH RW
PLAT No. 7566

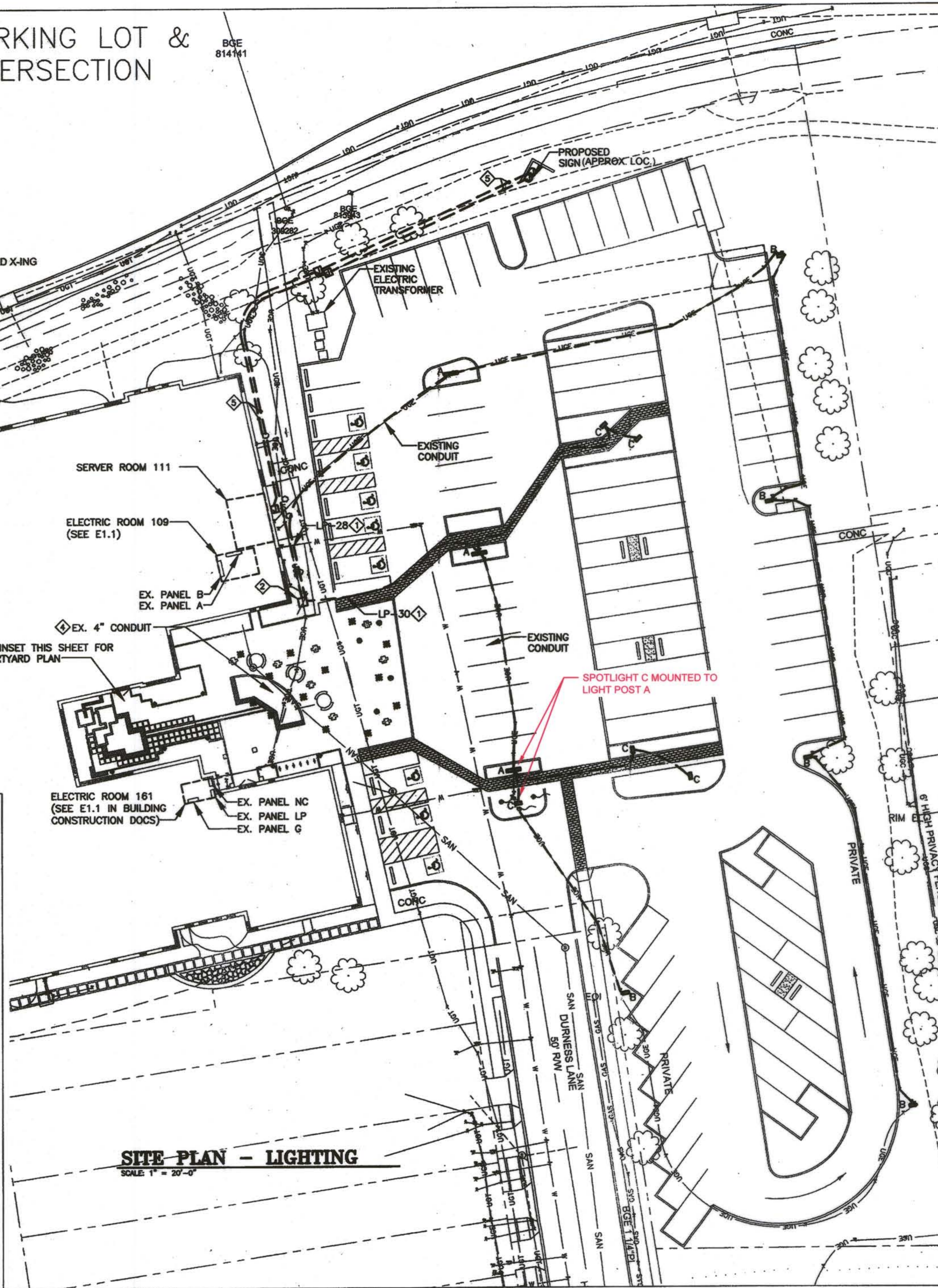


HORIZONTAL SCALE
0 20 40

COURTYARD



HORIZONTAL SCALE
0 10 20



SITE PLAN - LIGHTING

SCALE 1" = 20'-0"

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

12/22/2013 REVISED SITE DEVELOPMENT PLAN
DATE: 11.13.13 ISSUES / REVISIONS

THIRD CENTURY
ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21081
Phone: 443-689-2400 Fax: 443-689-2401

09/04/2014 SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
APPROXIMATE LOCATION OF COURTYARD LIGHTING CONDUIT
RECONFIGURATION OF PARKING LOT SPOTLIGHT

AS BUILT CERTIFICATION

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE UTILITIES SHOWN ON THIS PLAN WERE CORRECTLY LOCATED AND THIS "AS-BUILT" PLAN MEET THE APPLICABLE REGULATIONS.

CHAD E. KUHN
PROFESSIONAL ENGINEER
DATE: 9/29/14

"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. 27414
Expiration Date: 07/18/2014 16:00:00"

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 1-7-14

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 1-30-14

DIRECTOR
DATE: 6/30/14

Biohabitats

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Restore the Earth & Inspire Ecological Stewardship

**SAVAGE LIBRARY
ENVIRONMENTAL
SITE DESIGN**

**LIGHTING &
ELECTRIC PLAN**

PROJECT NO.: 13005.02 SCALE: AS SHOWN

DATE: 11/13/13

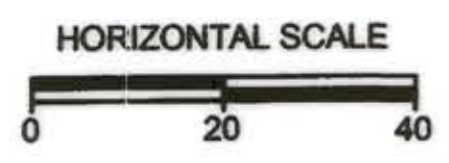
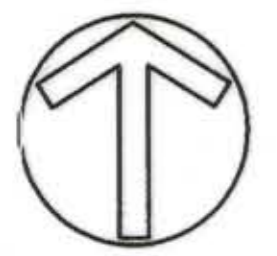
BY: JT CHECK: CEK

DWG. NO.:

DATE:

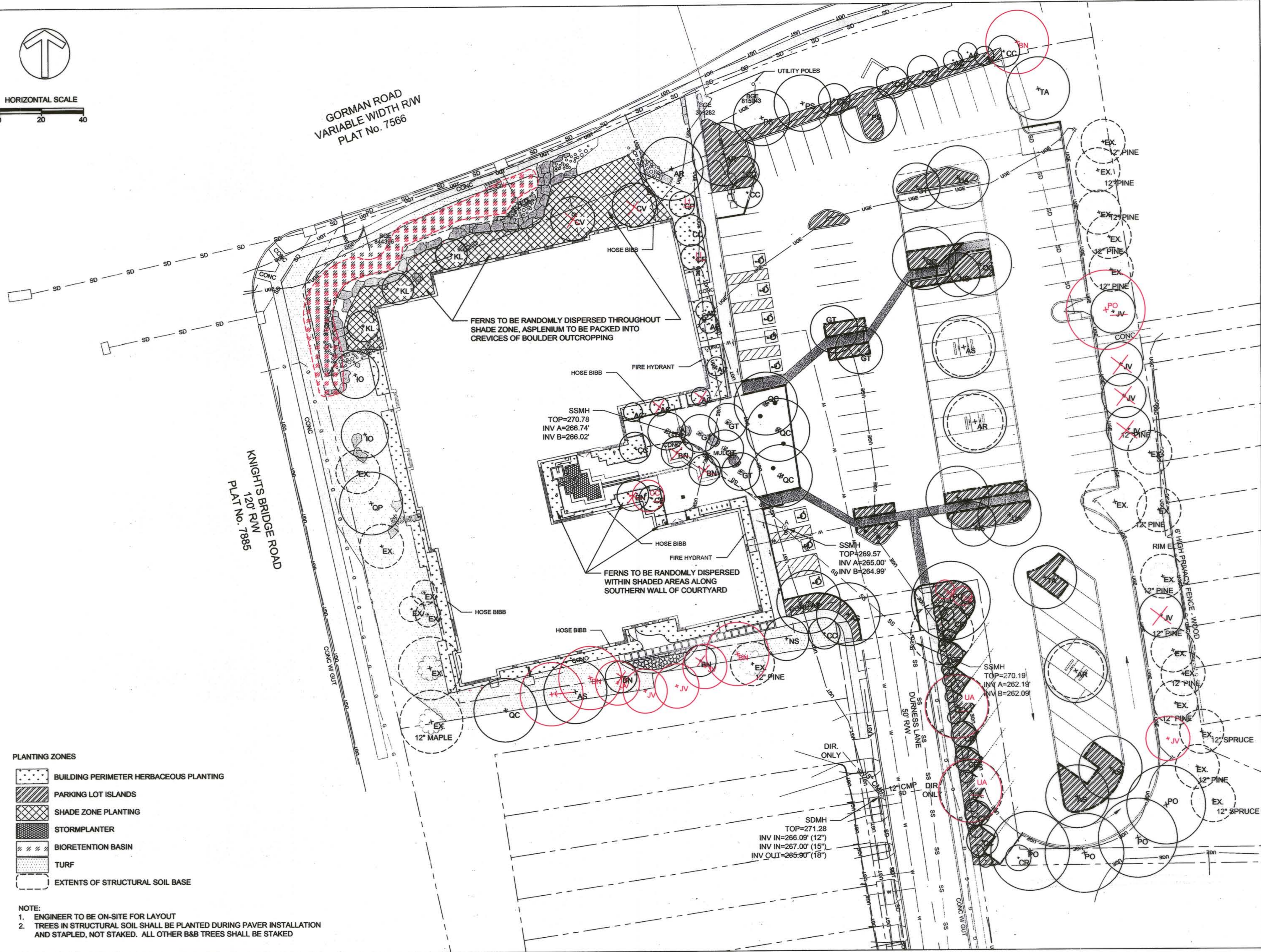
16 OF 30

SDP-89-232



GORMAN ROAD
VARIABLE WIDTH RW
PLAT No. 7566

KNIGHTS BRIDGE ROAD
120' RW
PLAT No. 7885



- PLANTING ZONES**
- BUILDING PERIMETER HERBACEOUS PLANTING
 - PARKING LOT ISLANDS
 - SHADE ZONE PLANTING
 - STORMPLANTER
 - BIORETENTION BASIN
 - TURF
 - EXTENTS OF STRUCTURAL SOIL BASE

- NOTE:**
1. ENGINEER TO BE ON-SITE FOR LAYOUT
 2. TREES IN STRUCTURAL SOIL SHALL BE PLANTED DURING PAVER INSTALLATION AND STAPLED, NOT STAKED. ALL OTHER B&B TREES SHALL BE STAKED

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
REVISIONS TO BIORETENTION PLANTING ZONE AND PLANTING LAYOUT



I HEREBY CERTIFY, BY MY SEAL AND SIGNATURE, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE WORK SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THIS 'AS-BUILT' PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, PH.D., P.E. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Chief 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Director 1/29/14
DIRECTOR DATE

Biohabitats

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Restore the Earth & Inspire Ecological Stewardship

**SAVAGE LIBRARY
ENVIRONMENTAL
SITE DESIGN**

**PLANTING
PLAN**

PROJECT NO.: 13005.02 SCALE: 1" = 20'

SEAL: BY: AG,NL,TB CHECK: MT, EWB
DWC NO.:

17 OF 30

PLANT COMPOSITION SCHEDULE									
TRES + SHRUBS									
Size (acres): n/a									
Overall Minimum Spacing (ft.)	Species Quantity	ID	Vegetation Strata/Species Name	Common Name	Unit	Form	Size	Individual Minimum Spacing (ft.)	
OVERSTORY TREES									
N/A	4	AR	Acer rubrum 'Autumn Flame'	Autumn flame red maple	b + b	single stem	2' cal.	per plan	
	6	AS	Acer saccharum	Sugar maple	b + b	single stem	2' cal.	per plan	
	5	BN	Betula nigra	River birch	b + b	clump form	10 - 12 ft.	per plan	
	8	GT	Gleditsia triacanthos inermis 'Shademaster'	Shademaster thornless honey locust	b + b	single stem	2' cal.	per plan	
	2	IO	Ilex opaca	American holly	b + b	single stem	6 - 7 ft.	per plan	
	5	JV	Juniperus virginiana	Red cedar	b + b	single stem	6 - 8 ft.	per plan	
	3	NS	Nyssa sylvatica	Black gum	b + b	single stem	2' cal.	per plan	
	5	PO	Platanus occidentalis	Sycamore	b + b	single stem	2' cal.	per plan	
	3	PS	Prunus serotina 'Kwanzan'	Kwanzan Japanese flowering cherry	b + b	single stem	2' cal.	per plan	
	5	QC	Quercus coccinea	Scarlet oak	b + b	single stem	2' cal.	per plan	
	1	QP	Quercus palustris - phellos	Pin-oak Willow oak	b + b	single stem	2' cal.	per plan	
	2	TA	Tilia americana 'Redmond'	Redmond American linden	b + b	single stem	2' cal.	per plan	
	3	UA	Ulmus americana 'Valley Forge'	American elm	b + b	single stem	2' cal.	per plan	
	82			= total					
MID-STORY TREES									
	9	AC	Amelanchier canadensis	Serviceberry	CON	clump form	5 - 6 ft.	per plan	
	9	CC	Cercis canadensis	Eastern redbud	CON	clump form	5 - 6 ft.	per plan	
	2	GV	Gonolobus virginiana	Fingertree	CON	single stem	5 - 6 ft.	per plan	
	3	CF	Comus florida	Flowering dogwood	CON	single stem	5 - 6 ft.	per plan	
	23			= total					
SHRUBS									
	5	CA	Callicarpa americana	American beautyberry	CON	N/A	1 - 2 ft.	clusters +/- 3	
	8	CP	Comptonia peregrina	Sweetfern	CON	N/A	1 - 2 ft.	clusters +/- 3	
	6	CR	Comus racemosa	Grey dogwood	CON	N/A	2 - 3 ft.	clusters +/- 3	
	30	CS	Comus stolonifera	Red-Osier dogwood	CON	N/A	2 - 3 ft.	clusters +/- 3	
	10	FG	Fothergilla gardenii	Dwarf fothergilla	CON	N/A	1 - 2 ft.	clusters +/- 3	
	6	HV	Hammamelis virginiana	Witchhazel	CON	N/A	3 - 4 ft.	clusters +/- 3	
	6	H2	Hydrangea quercifolia	Cock-leaved hydrangea	CON	N/A	3 - 4 ft.	clusters +/- 3	
	8	IV	Ilex verticillata	Winterberry	CON	N/A	3 - 4 ft.	clusters +/- 3	
	3	KL	Kalmia latifolia	Mountain laurel	CON	N/A	5 - 6 ft.	clusters +/- 3	
	5	PO	Physocarpus opulifolius 'Roseum Elegans'	Ninebark	CON	N/A	3 - 4 ft.	clusters +/- 3	
	4	PC	Rhododendron catawbiense	Catawba rhododendron	CON	N/A	2 - 3 ft.	clusters +/- 3	
	4	RP	Rhododendron perfoliatum maximum	Pinxterbloom rhododendron	CON	N/A	2 - 3 ft.	clusters +/- 3	
	8	RA	Rhus aromatica	Fragrant sumac	CON	N/A	1 - 2 ft.	clusters +/- 3	
	8	VA	Vaccinium angustifolium	Lowbush blueberry	CON	N/A	1 - 2 ft.	clusters +/- 3	
	5	VR	Viburnum rhytidophyllum	Leatherleaf viburnum	CON	N/A	2 - 3 ft.	clusters +/- 3	
	8	VD	Viburnum dentatum	Southern arrow-wood	CON	N/A	2 - 3 ft.	clusters +/- 3	
	75			= total					

CON=container
2 LN Lagerstroemia indica 'Natches' Craps myrtle 'Natches' CON clump form 5-6 ft. per plan

PLANT COMPOSITION SCHEDULE									
BUILDING PERIMETER HERBACEOUS PLANTINGS									
Size (acres): 0.08									
Overall Minimum Spacing (ft.)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)
HERBACEOUS									
2	10890								
	6	52	Andropogon gerardii	Big bluestem	con	clusters +/- 3-5	QT	N/A	
	5	44	Asclepias tuberosa	Butterfly milkweed	con	random	QT	N/A	
	3	26	Aster laevis	Smooth aster	con	random	QT	N/A	
	4	35	Aster novae-angliae	New England aster	con	random	QT	N/A	
	3	26	Baptisia australis	Blue false indigo	con	random	QT	N/A	
	5	44	Echinacea purpurea	Purple coneflower	con	random	QT	N/A	
	5	44	Eupatorium maculatum	Joe-Pye weed	con	random	QT	N/A	
	5	44	Liatris spicata	Gayfeather	con	clusters +/- 3-5	QT	N/A	
	5	44	Lobelia cardinalis	Cardinal flower	con	random	QT	N/A	
	5	44	Lupinus perennis	Wild blue lupine	con	random	QT	N/A	
	5	44	Monarda fistulosa	Wild bergamot	con	random	QT	N/A	
	5	44	Muhlenbergia capillaris	Pink Muhly grass	con	clusters +/- 3-5	QT	N/A	
	6	52	Penstemon digitalis	Beard tongue	con	random	QT	N/A	
	6	52	Phlox paniculata	Garden phlox	con	clusters +/- 3-5	QT	N/A	
	3	26	Rudbeckia fulgida var. fulgida	Orange coneflower	con	random	QT	N/A	
	4	35	Rudbeckia hirta	Black eyed susan	con	clusters +/- 3-5	QT	N/A	
	8	70	Schizachyrium scoparium	Little bluestem	con	clusters +/- 3-5	QT	N/A	
	5	44	Senecio aureus	Golden groundsel	con	clusters +/- 3-5	QT	N/A	
	5	44	Solidago flexicaulis	Zig-zag goldenrod	con	random	QT	N/A	
	6	52	Sporobolus heterolepis	Prairie dropseed	con	clusters +/- 3-5	QT	N/A	
	1	9	Yucca filamentosa	Adam's needle	con	random	QT	N/A	
	100			= total					

CON=container

PLANT COMPOSITION SCHEDULE									
PARKING LOT ISLANDS									
Size (acres): 0.09									
Overall Minimum Spacing (ft.)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)
HERBACEOUS									
2.5	6970								
	20	126	Andropogon gerardii	Big bluestem	con	random	qt	N/A	
	7	44	Asclepias tuberosa	Butterfly milkweed	con	random	qt	N/A	
	5	31	Aster novae-angliae	New England aster	con	random	qt	N/A	
	5	31	Liatris spicata	Gayfeather	con	random	qt	N/A	
	5	31	Monarda fistulosa	Wild bergamot	con	random	qt	N/A	
	10	63	Penstemon digitalis	Beard tongue	con	random	qt	N/A	
	8	50	Rudbeckia hirta	Black eyed susan	con	random	qt	N/A	
	10	188	Schizachyrium scoparium	Little bluestem	con	random	qt	N/A	
	10	63	Yucca filamentosa	Adam's needle	con	random	qt	N/A	
	100			= total					

TURF AREA = 9500 SQ FT - TURF TYPE TO BE APPROVED

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

Signature of Developer (Print Name Below Signature)
Mark S. Richmond
DATE: 12/13/13

NOTE: THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE LANDSCAPING INCLUDING PLANT MATERIALS AND 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.

PLANT COMPOSITION SCHEDULE									
SHADE ZONE PLANTING									
Size (acres): 0.08									
Overall Minimum Spacing (ft.)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)
HERBACEOUS									
4	2723								
	10	22	Campanula americana - rotundifolia	American bellflower	con	clusters +/- 3-5	QT	N/A	
	5	11	Cimicifuga racemosa	Black snakeroot	con	clusters +/- 3-5	QT	N/A	
	6	13	Claytonia virginica	Spring beauty	con	clusters +/- 3-5	QT	N/A	
	10	22	Diphysa triflora	dwarf larkspur	con	clusters +/- 3-5	QT	N/A	
	8	17	Dioclea eximia	wild bleeding heart	con	clusters +/- 3-5	QT	N/A	
	10	22	Heuchera americana	woodland sunflower	con	clusters +/- 3-5	QT	N/A	
	8	17	Mitchella repens	slumroot	con	clusters +/- 3-5	QT	N/A	
	10	22	Phlox stolonifera	partridgeberry	con	clusters +/- 3-5	QT	N/A	
	10	22	Saxifraga virginiana	creeping phlox	con	clusters +/- 3-5	QT	N/A	
	8	17	Solidago flexicaulis	early saxifrage	con	clusters +/- 3-5	QT	N/A	
	10	22	Tiarella cordifolia	Zig-zag goldenrod	con	clusters +/- 3-5	QT	N/A	
	100			= total					

CON=container

PLANT COMPOSITION SCHEDULE									
FERNS									
Size (acres):									
Overall Minimum Spacing (ft.)	Quantity	Vegetation Strata/Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)		
HERBACEOUS									
	10	Asplenium platyneuron	Ebony spleenwort	con	random	1 - 2 ft.	N/A		
	15	Dennstaedtia punctilobula	Hay-scented fern	con	random	2 - 3 ft.	N/A		
	20	Dryopteris intermedia	Evergreen wood fern	con	random	2 - 3 ft.	N/A		
	15	Osmunda cinnamomea	Cinnamon fern	con	random	2 - 3 ft.	N/A		
	15	Polystichum acrostichoides	Christmas fern	con	random	2 - 3 ft.	N/A		
	75		= total						

CON=container

PLANT COMPOSITION SCHEDULE									
BIORETENTION BASIN									
Size (acres): 0.04									
Overall Minimum Spacing (ft.)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)
HERBACEOUS									
2	10890								
	30	131	Carex stipata	awfluit sedge	con	random	QT	2 ft	
	20	87	Eupatorium perfoliatum	common boneset	con	random	QT	2 ft	
	30	131	Juncus effusus	Soft rush	con	random	QT	2 ft	
	20	87	Lobelia cardinalis	Cardinal flower	con	random	QT	2 ft	
	100			= total					
SHRUBS									
	6	Clethra alnifolia	Summersweet	con	clusters +/- 3	2-3 ft		5 ft	
	4	Vaccinium corymbosum	Highbush blueberry	con	clusters +/- 3	2-3 ft		5 ft	
	4	Viburnum dentatum	Arrowwood viburnum	con	clusters +/- 3	2-3 ft		5 ft	

CON=container

PLANT COMPOSITION SCHEDULE									
STORMPLANTER									
Size (acres): 0.004									
Overall Minimum Spacing (ft.)	Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/Species Name	Common Name	Unit	Spacing Type	Size	Individual Minimum Spacing (ft.)
HERBACEOUS									
1.25	27878								
	10	11	Carex stipata	awfluit sedge	CON	random	QT	2	
	60	67	Equisetum hyemale	scouring rush	CON	random	QT	2	
	30	34	Juncus effusus	soft rush	CON	random	QT	2	
	100			= total					

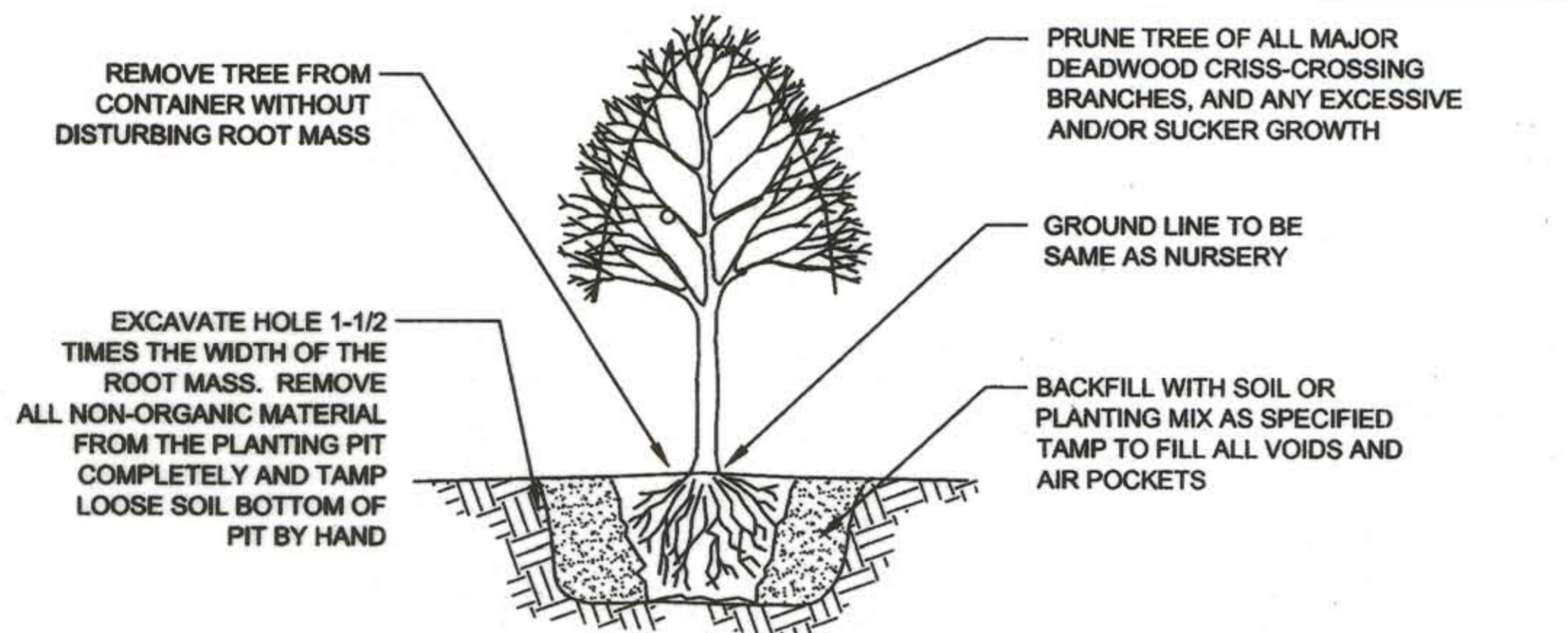
CON=container

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate ^{1/}		Seeding Depth (inches)	Recommended Seeding Dates by Plant Hardiness Zone ^{3/}		
	lb/ac	lb/1000 ft ²		5b and 6a	6b	7a and 7b
Cool-Season Grasses						
Annual Ryegrass (<i>Lolium perenne</i> ssp. <i>multiflorum</i>)	40	1.0	0.5	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Barley (<i>Hordeum vulgare</i>)	96	2.2	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Oats (<i>Avena sativa</i>)	72	1.7	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Wheat (<i>Triticum aestivum</i>)	120	2.8	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Cereal Rye (<i>Secale cereale</i>)	112	2.8	1.0	Mar 15 to May 31; Aug 1 to Oct 31	Mar 1 to May 15; Aug 1 to Nov 15	Feb 15 to Apr 30; Aug 15 to Dec 15
Warm-Season Grasses						
Foxtail Millet (<i>Setaria italica</i>)	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14
Pearl Millet (<i>Pennisetum glaucum</i>)	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14

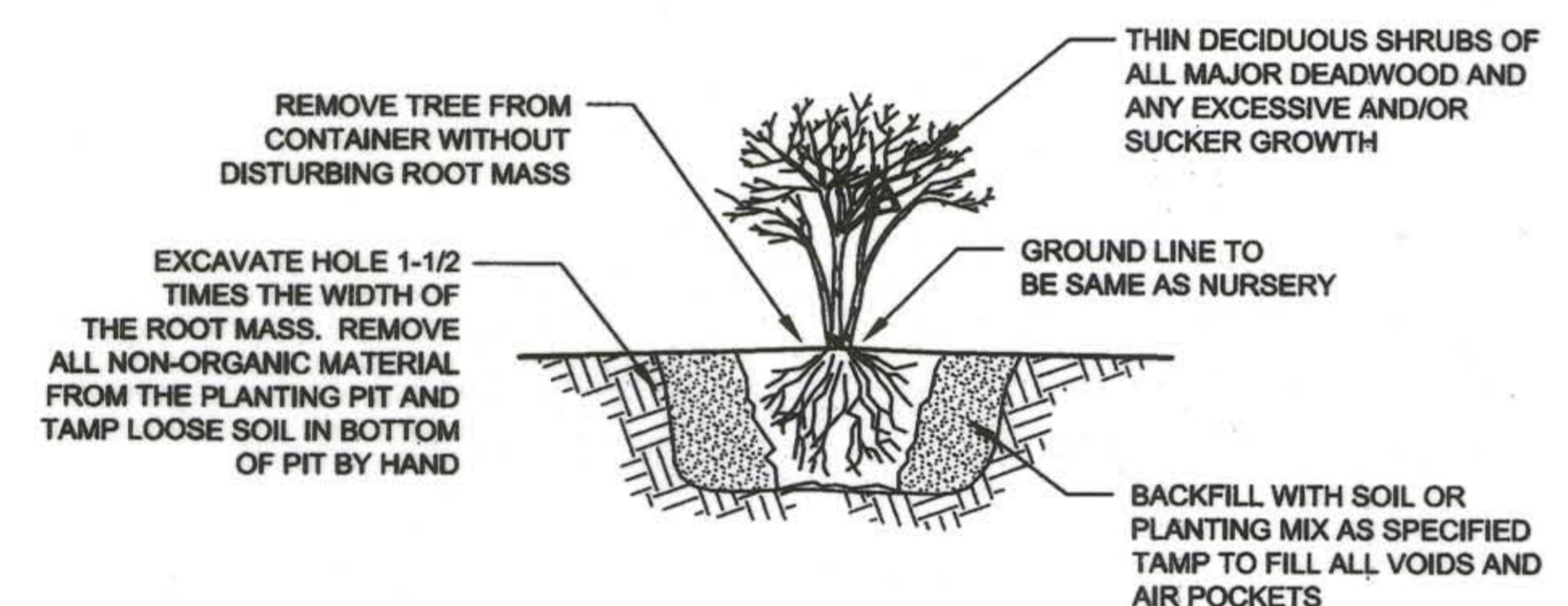
NOTES:

- Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.
- Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other



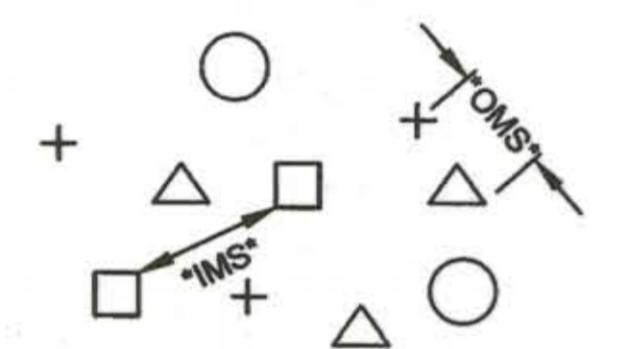
1 TREE PLANTING - CONTAINER GROWN

NOT TO SCALE



2 SHRUB PLANTING - CONTAINER GROWN

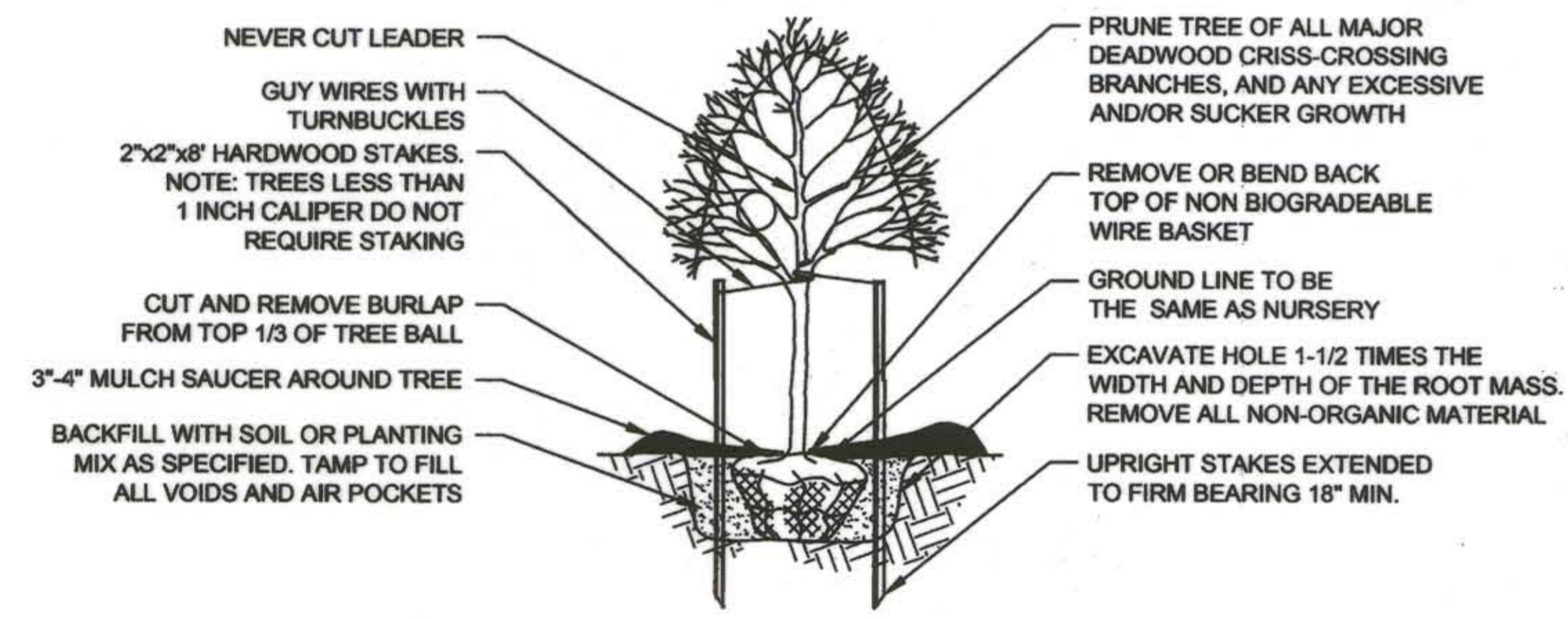
NOT TO SCALE



OMS- AN OVERALL MINIMUM SPACING DISTANCE *OMS* IS ASSIGNED TO THE PLANTING CONFIGURATION *SEE PLANT SCHEDULE*
IMS- AN INDIVIDUAL MINIMUM SPACING DISTANCES *IMS* IS ASSIGNED TO EACH INDIVIDUAL SPECIES *SEE PLANT SCHEDULE*

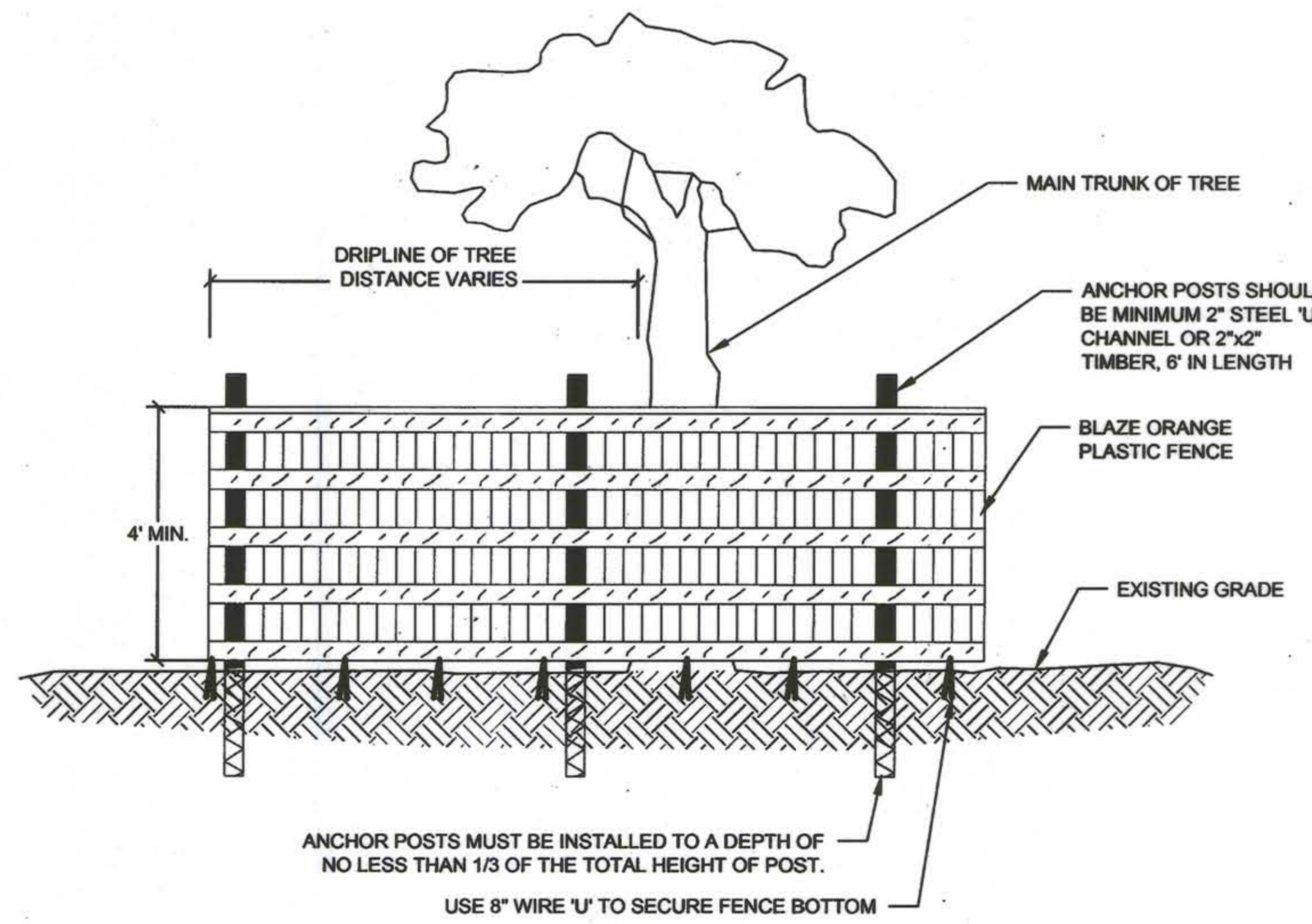
3 PLANT SPACING - RANDOM PLAN VIEW

NOTE: EACH SYMBOL INDICATES A DIFFERENT SPECIES
NOT TO SCALE

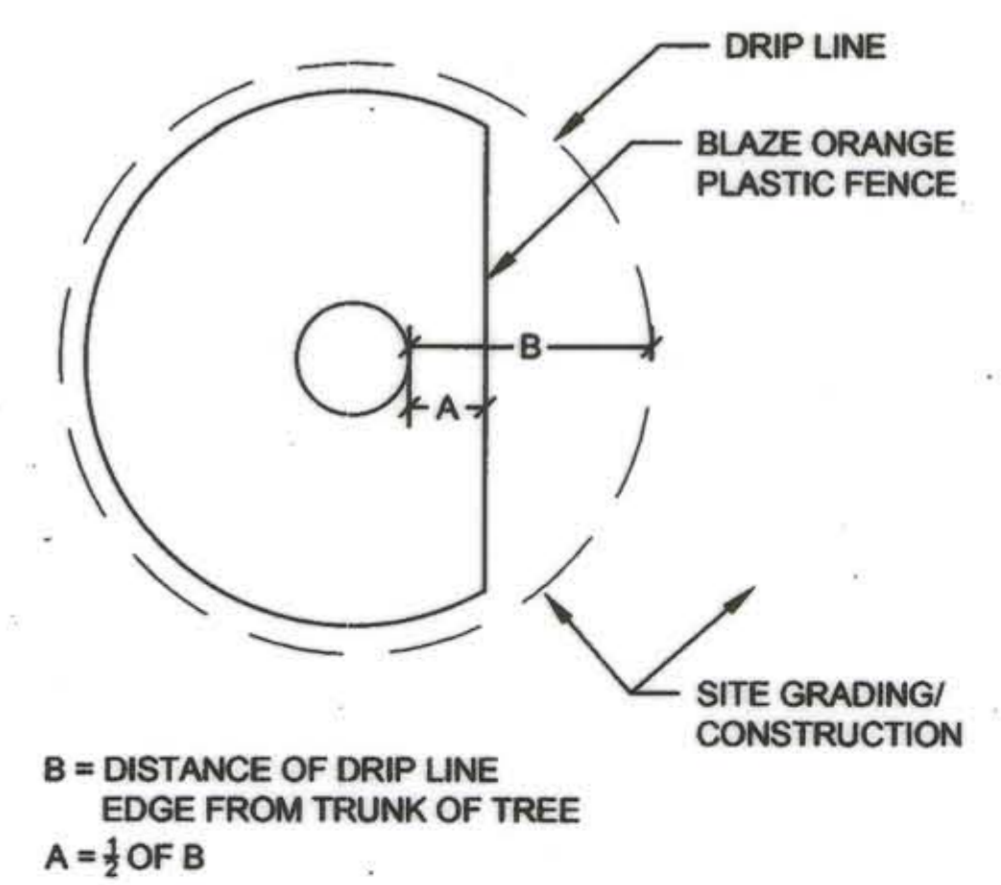


4 TREE PLANTING - BALLED AND BURLAPPED

NOT TO SCALE



TREE PROTECTION FENCE
N.T.S.



TREE PROTECTION FENCE PLAN
N.T.S.

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE:	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
NO AS-BUILT INFORMATION REQUIRED FOR THIS SHEET

STATE OF MARYLAND
NICHOLAS LINDOW
PROFESSIONAL ENGINEER
I HEREBY CERTIFY, BY MY SIGNATURE AND SEAL, THAT THE WORK ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10.16.14
NICK LINDOW, PH.D., PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Shelley Clark 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kevin D. ... 1-20-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Marsha ... 1/20/14
DIRECTOR DATE



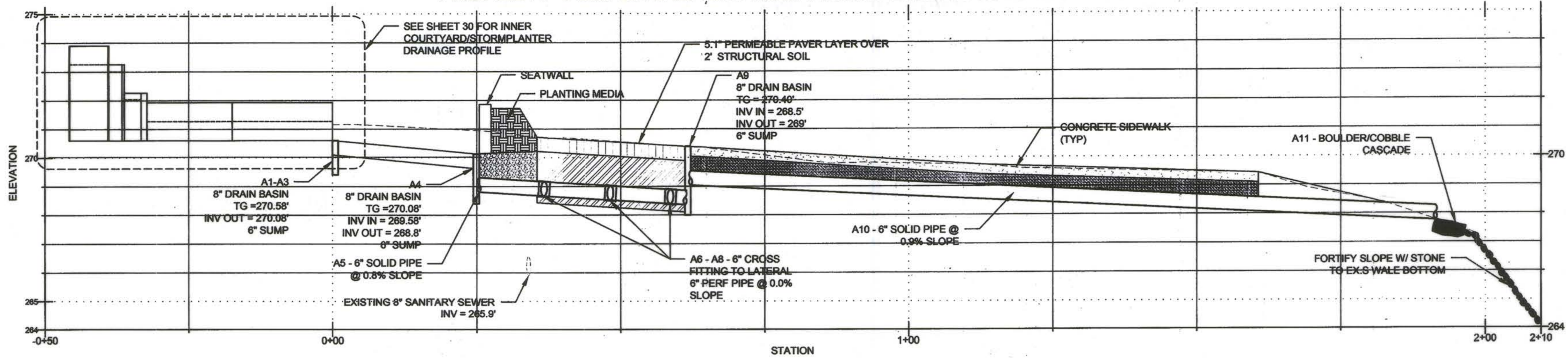
The Stables Building 2081 Clipper Park Road
Baltimore, MD 21211 / ph: 410.554.0156
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SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

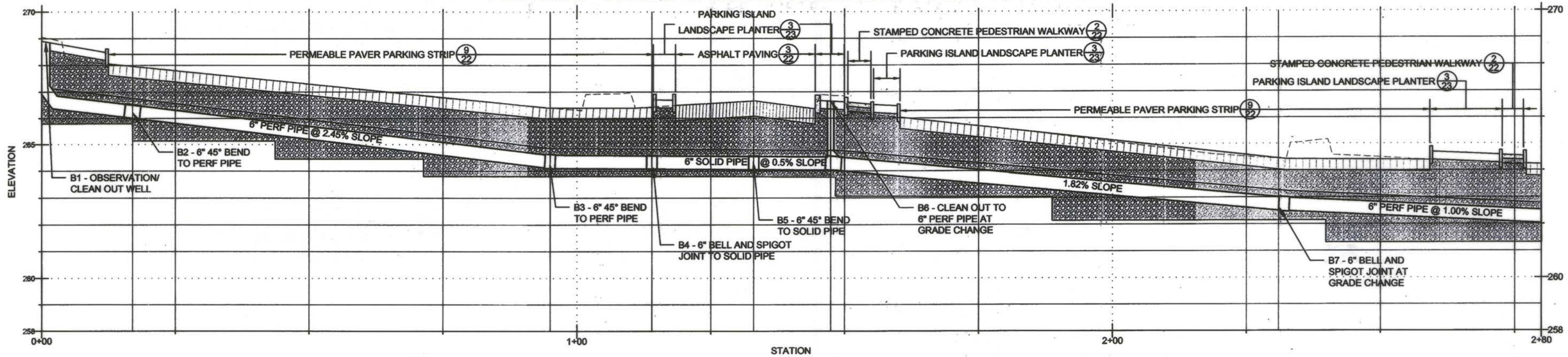
PLANTING DETAILS

PROJECT NO.: 13005.02	SCALE: N/A
SEAL: STATE OF MARYLAND NICHOLAS LINDOW PROFESSIONAL ENGINEER No. 40888	CHECK: AG, NL, TB MT, EW, B
DWG. NO.: 19 OF 30	

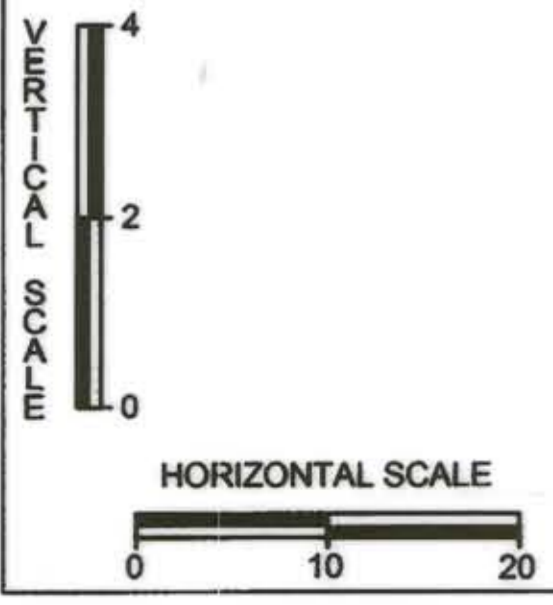
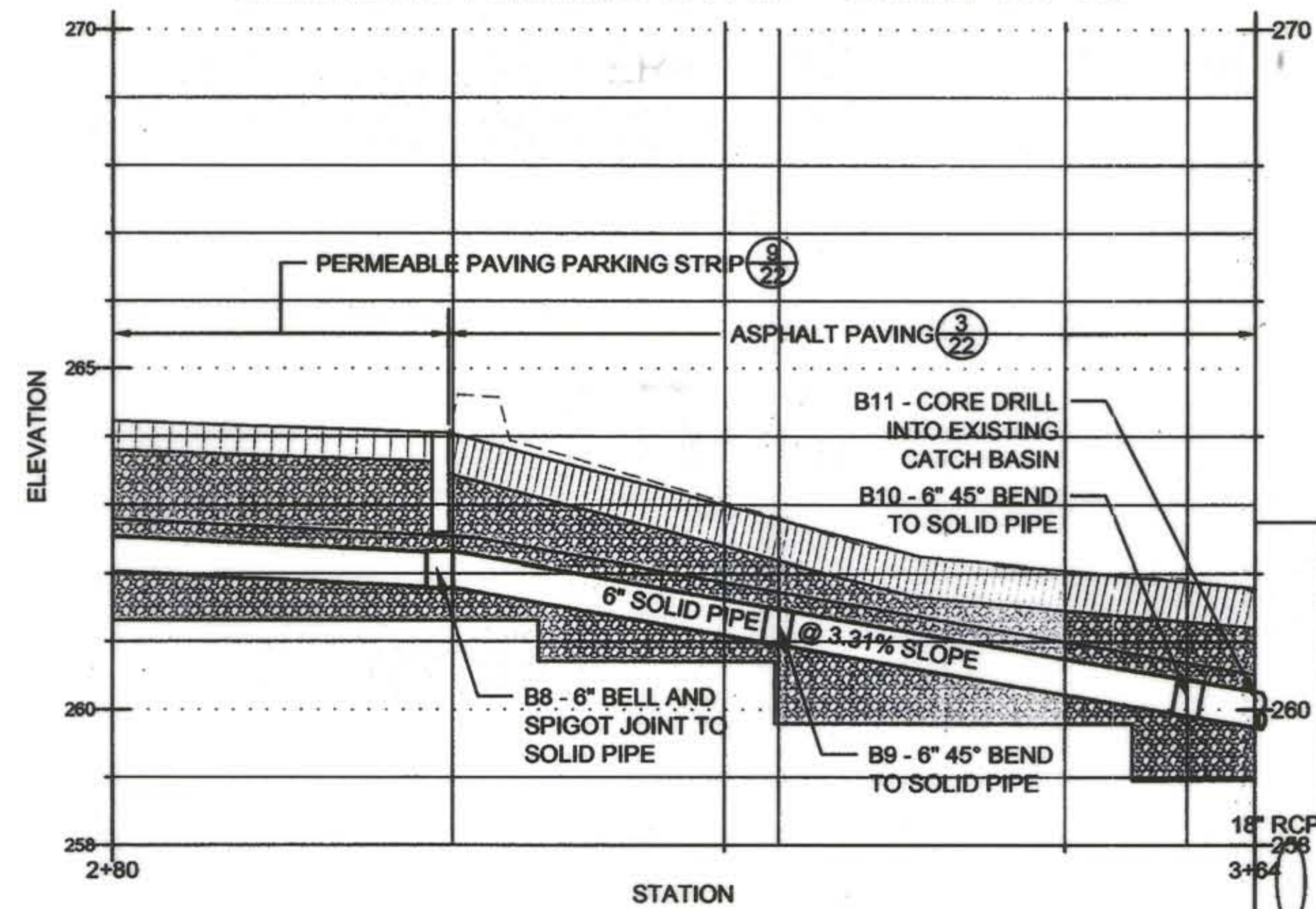
PROFILE A - VIEW OF TRENCH FROM STORMPLANTER TO RAINGARDEN



PROFILE B - VIEW OF CENTER PARKING STRIP - STA 0+00 TO 2+80



PROFILE B - VIEW OF CENTER PARKING STRIP - STA 2+80 TO



CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
SEE STRUCTURE TABLE ON SHEET 14 FOR REVISIONS TO PROFILE C INVERT ELEVATIONS



AS BUILT CERTIFICATE
I HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE AS-BUILT DRAWINGS WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, P.E. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Paul Chubb 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Victor DeLeon 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paula King 1/21/14
DIRECTOR DATE

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DRAINAGE PROFILES I

PROJECT NO.: 13005.02	SCALE: H: 10:1 V: 2:1
BY: AG,ML,TB	CHECK: MT, EWB
DWG. NO.: 20	OF 30



CLIENT

HOWARD COUNTY
 STORMWATER MANAGEMENT DIVISION
 6751 COLUMBIA GATEWAY DRIVE
 SUITE 514
 COLUMBIA, MD 21046

DATE: 09/04/2014 ISSUES / REVISIONS: SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
 MODIFICATIONS TO PROFILE C - FRENCH DRAIN
 REPLACED TRENCH DRAIN & BIORETENTION BASIN
 REVISIONS



AS BUILT CERTIFICATE
 I HEREBY CERTIFY, BY MY KNOWLEDGE AND BELIEF, THAT THE WORK SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE AS-BUILT PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
 NICK LINDOW, P.E. DATE



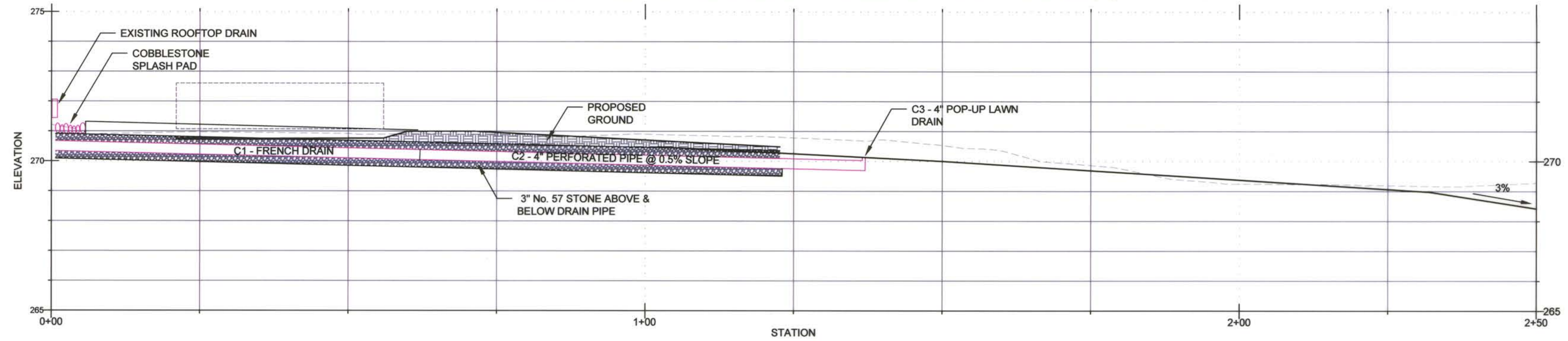
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 SITE DESIGN**

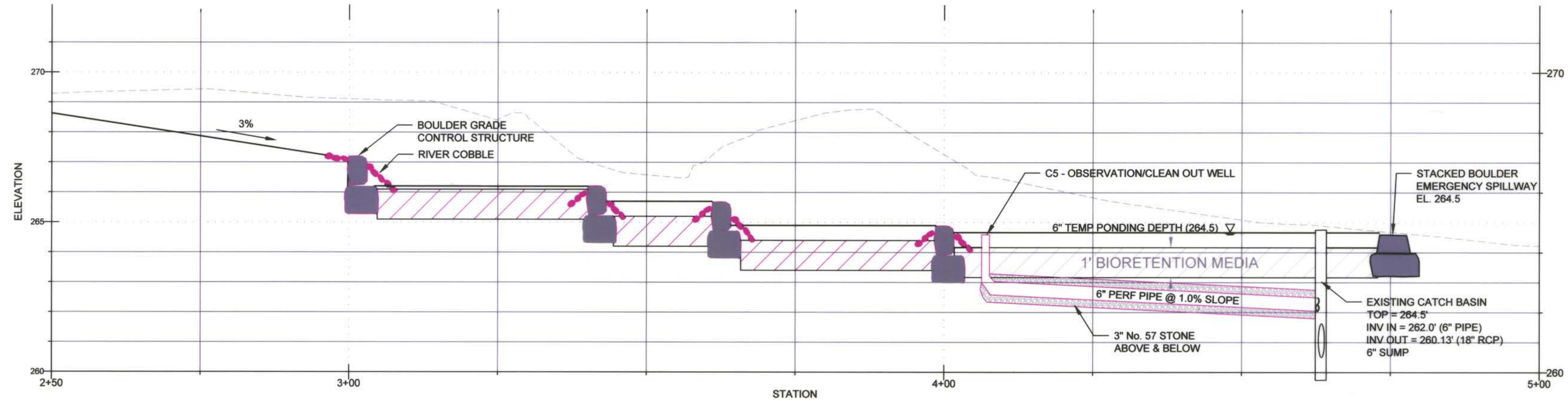
**DRAINAGE
 PROFILES II**

PROJECT NO.:	13005.02	SCALE:	VALUE
SEAL:		BY:	AG, NL, TB
DWG. NO.:		CHECK:	MT, EWB
		21 OF 30	

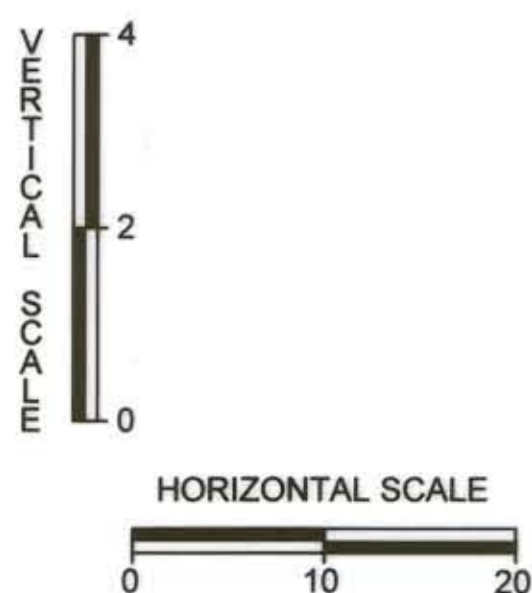
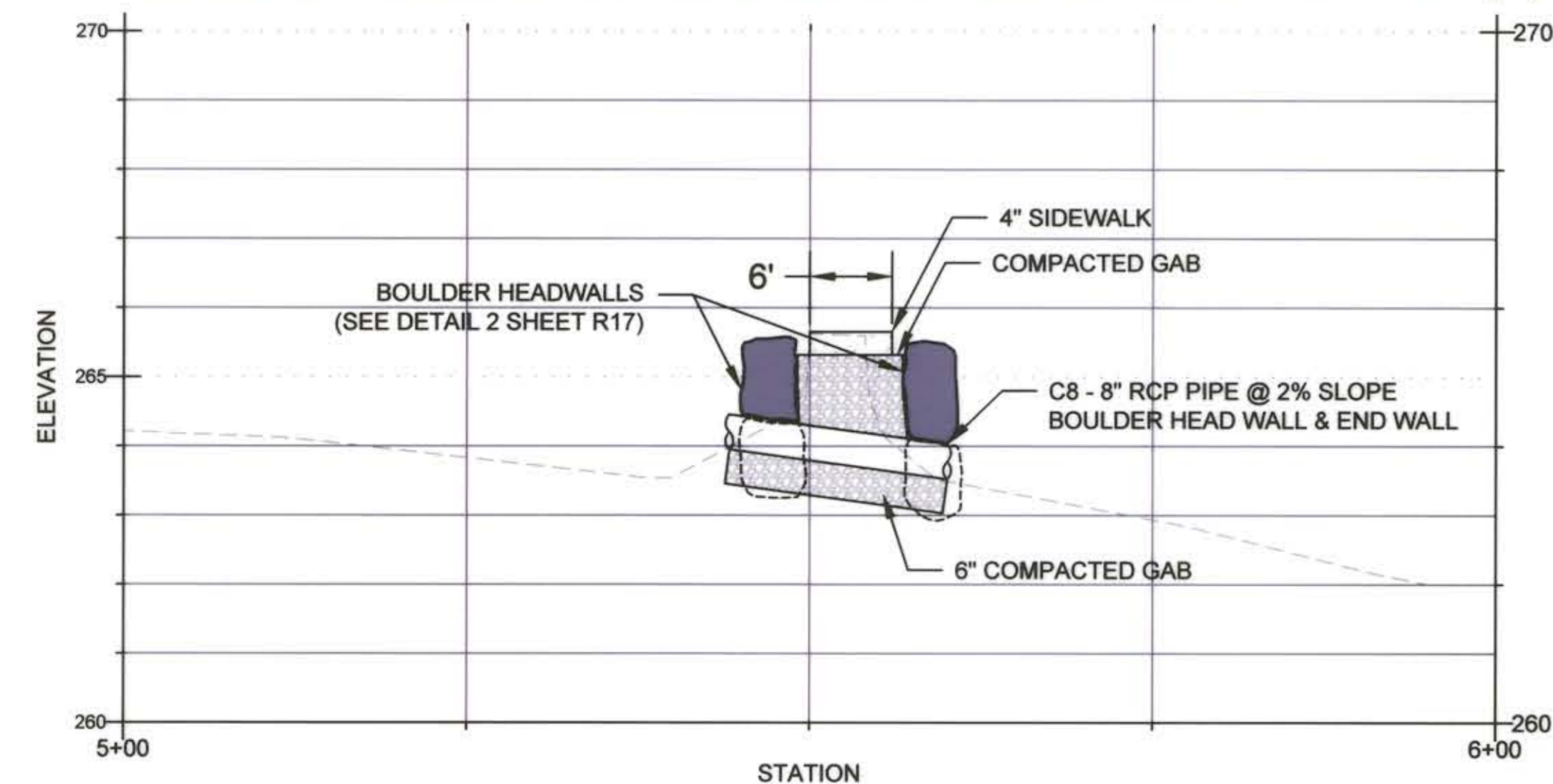
PROFILE C - VIEW OF PERIMETER SWALE - STA 0+00 TO 2+50 (1)

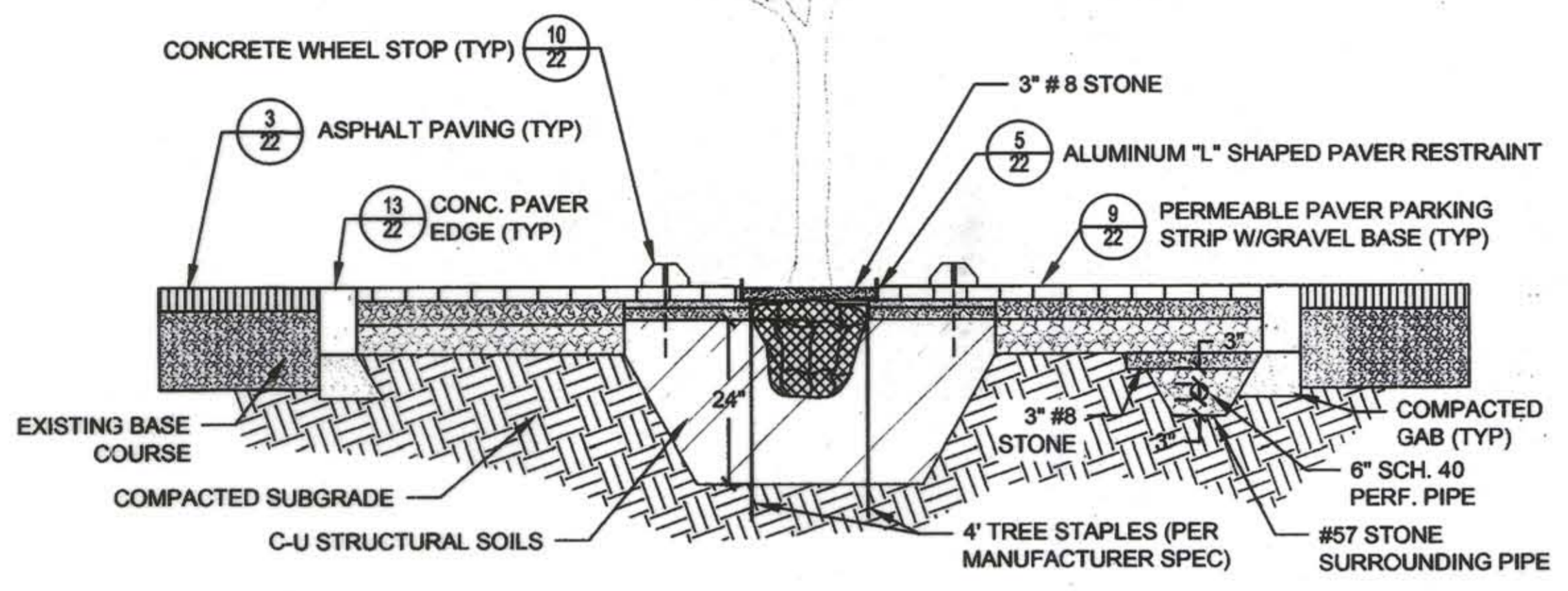


PROFILE C - VIEW OF PERIMETER SWALE STA 2+50 TO 5+00 (1)

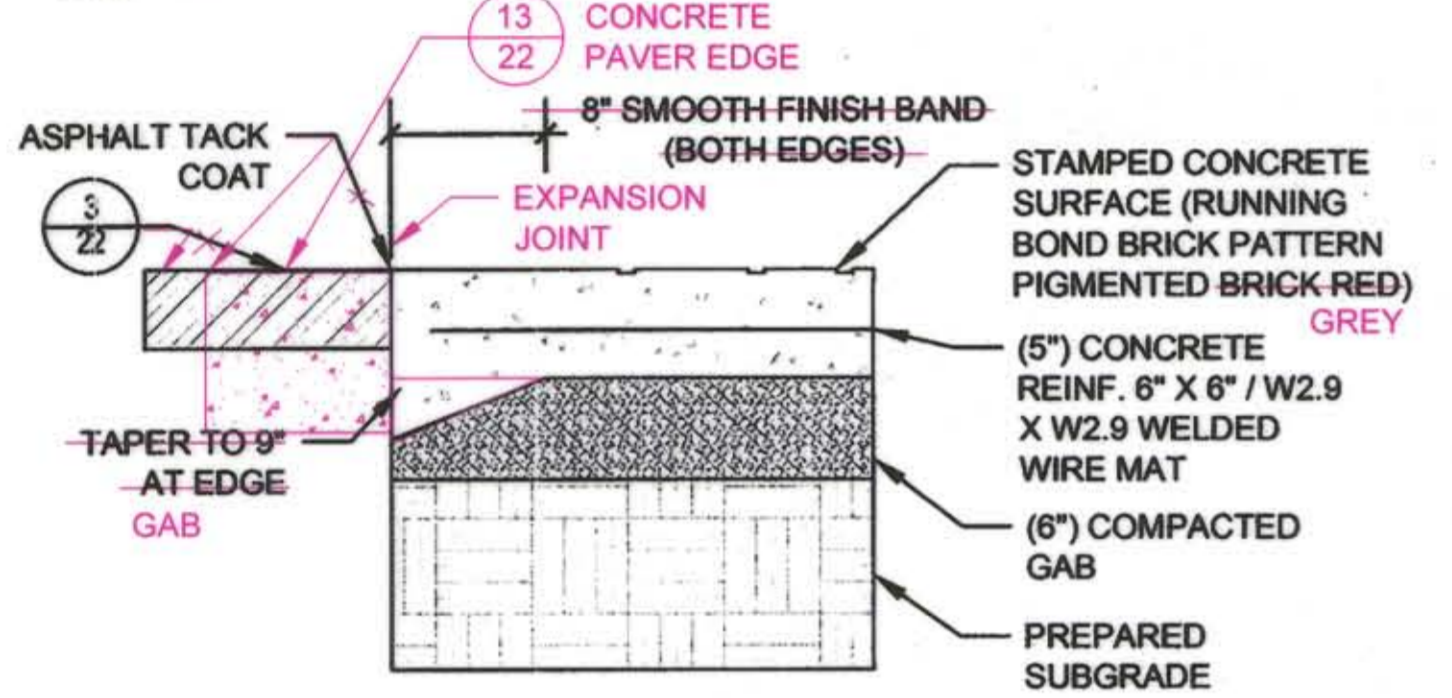


PROFILE C - VIEW OF PERIMETER SWALE STA 5+00 TO 6+00 (1)

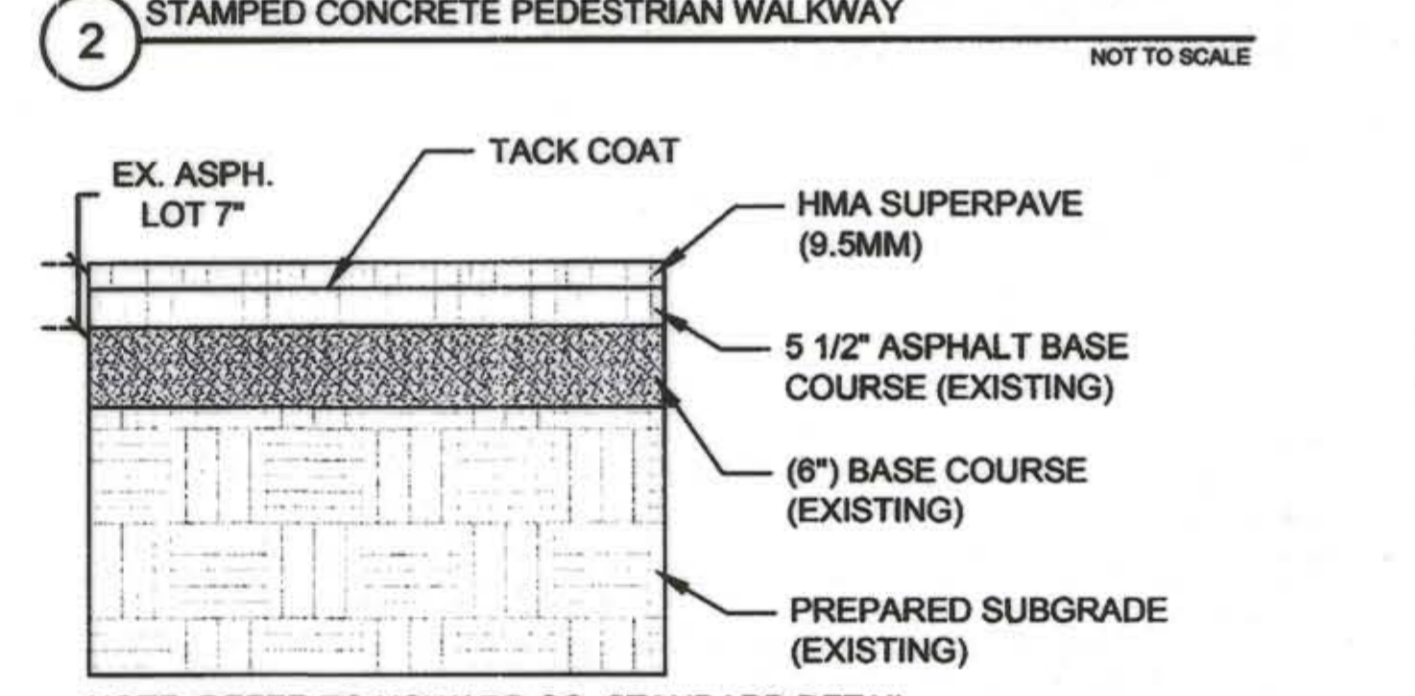




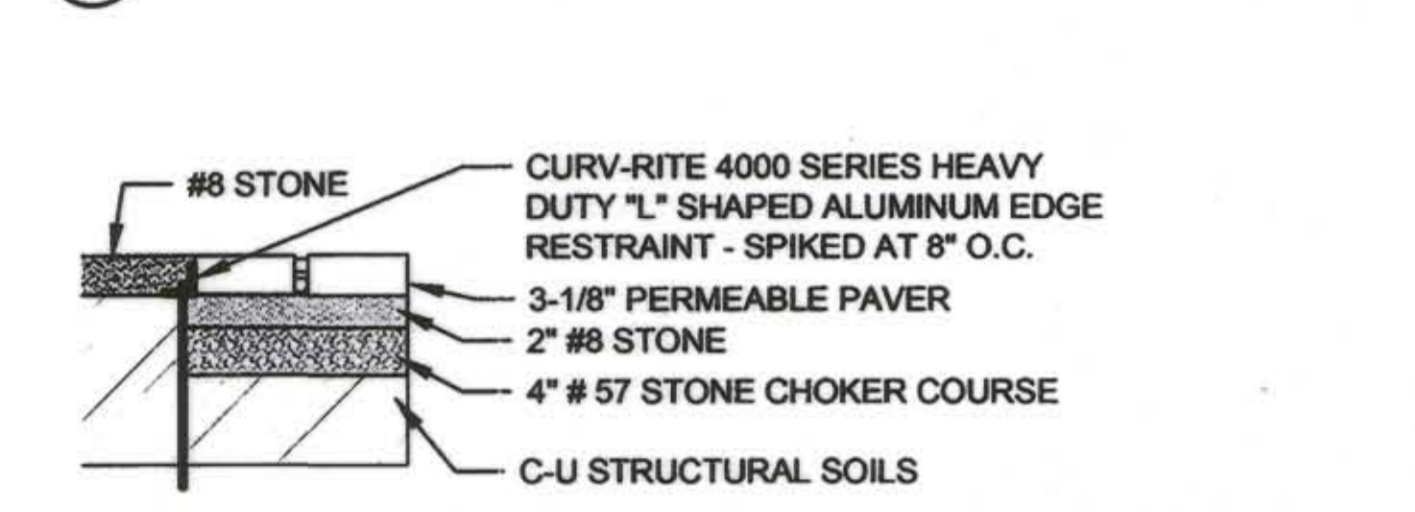
1 PERMEABLE PAVER PARKING STRIP & TREE PIT W/STRUCTURAL SOIL BASE (TYP) CROSS-SECTION NOT TO SCALE



2 STAMPED CONCRETE PEDESTRIAN WALKWAY NOT TO SCALE



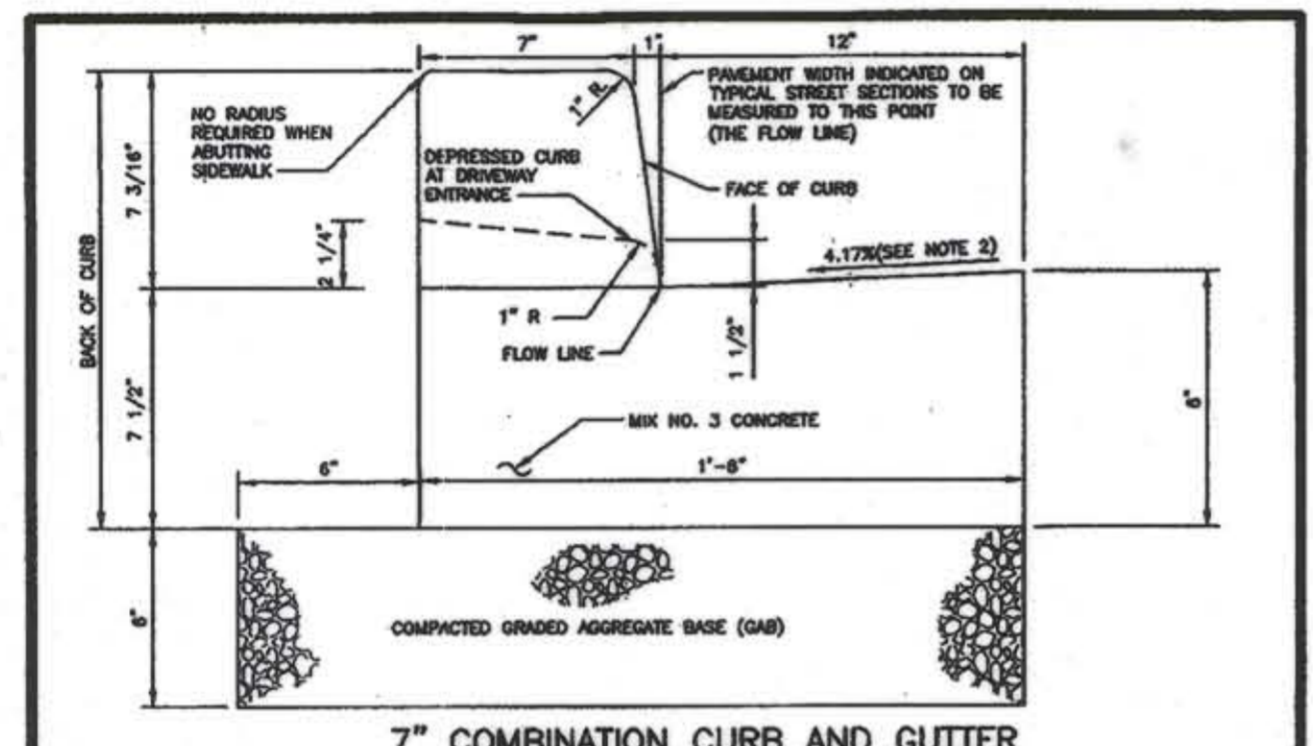
3 ASPHALT PAVING NOT TO SCALE



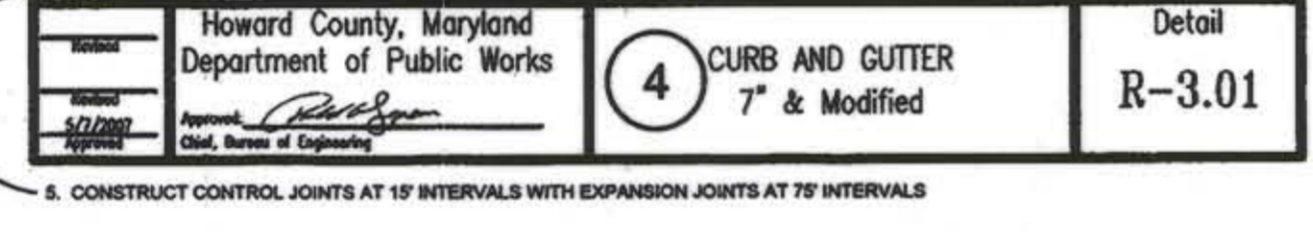
5 ALUMINUM \"L\" SHAPED PAVER RESTRAINT (TYP) NOT TO SCALE



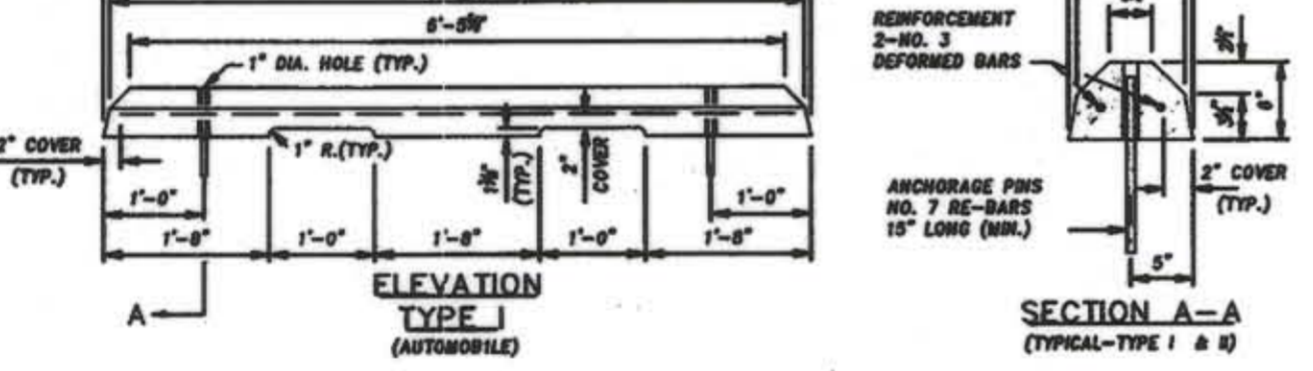
9 PERMEABLE PAVER PARKING STRIP W/ GRAVEL BASE (TYP) NOT TO SCALE



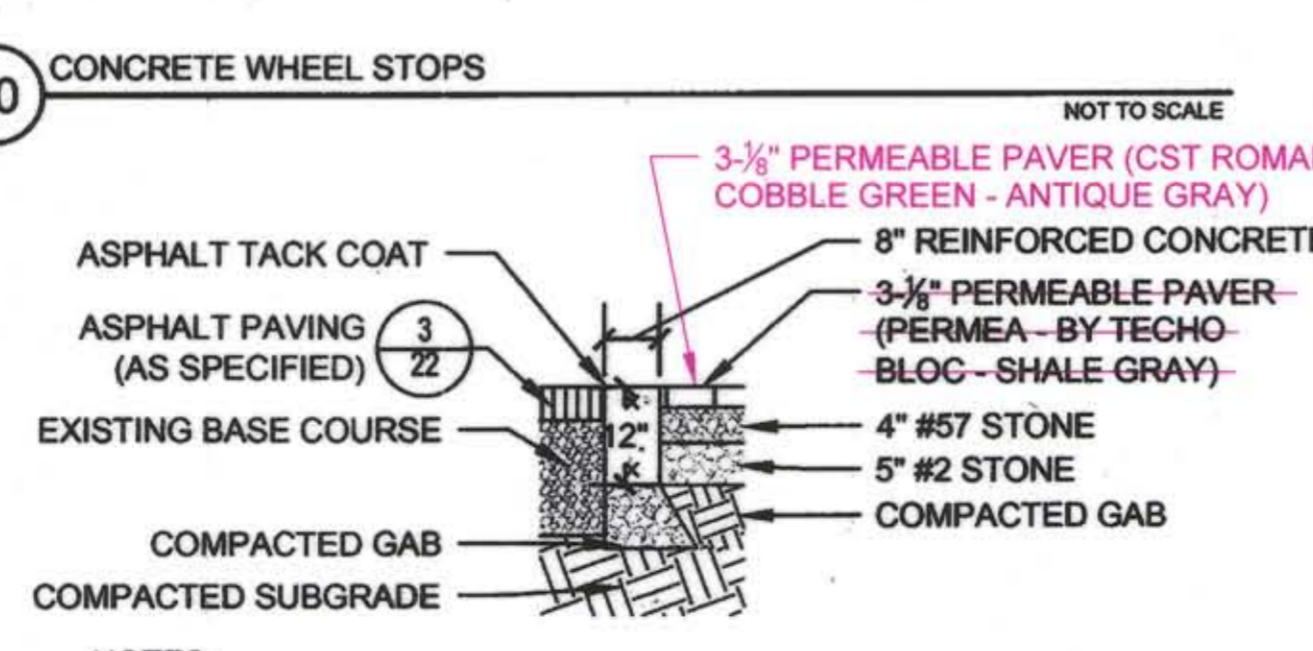
7\"/>



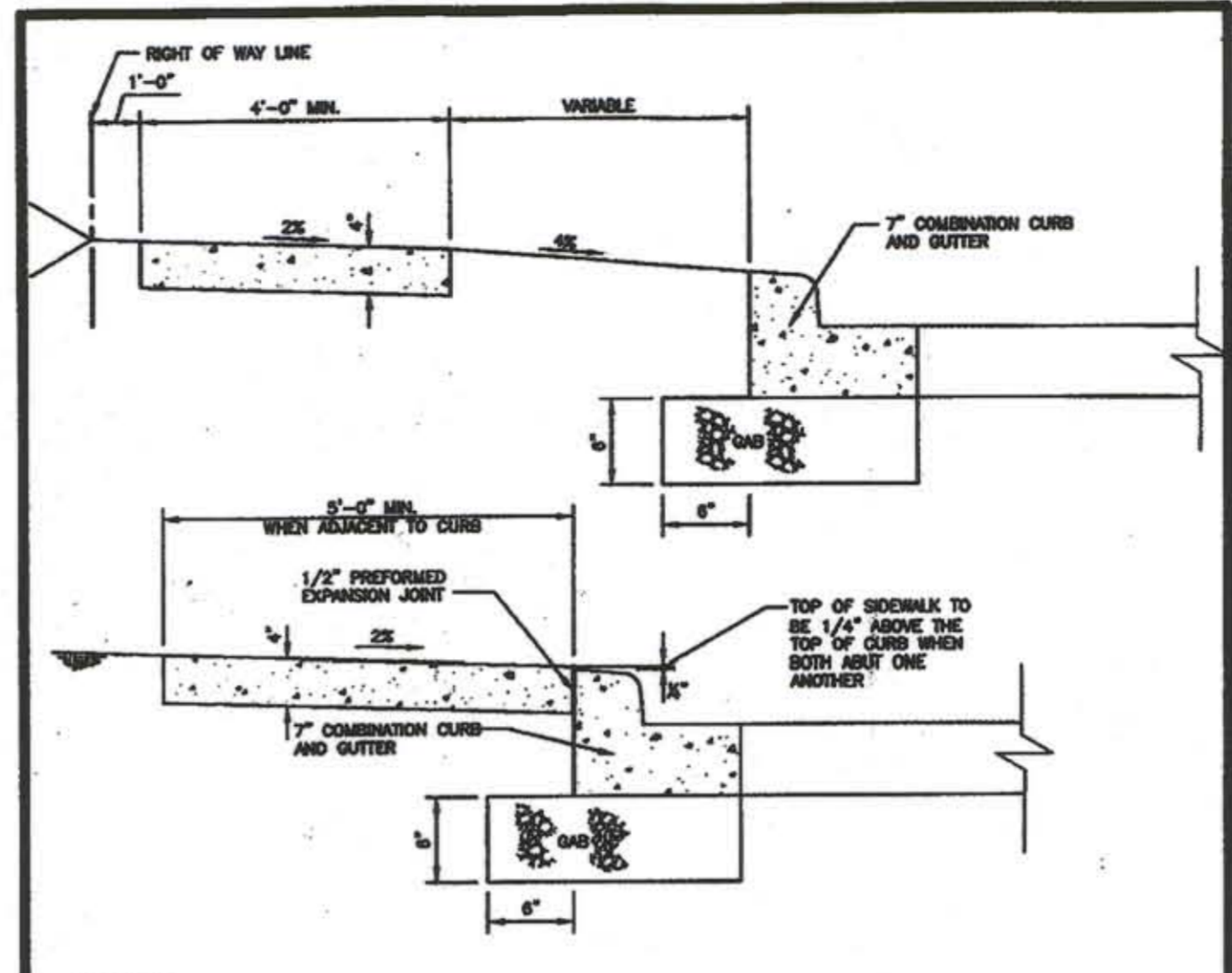
4 CURB AND GUTTER 7\"/>



10 CONCRETE WHEEL STOPS NOT TO SCALE

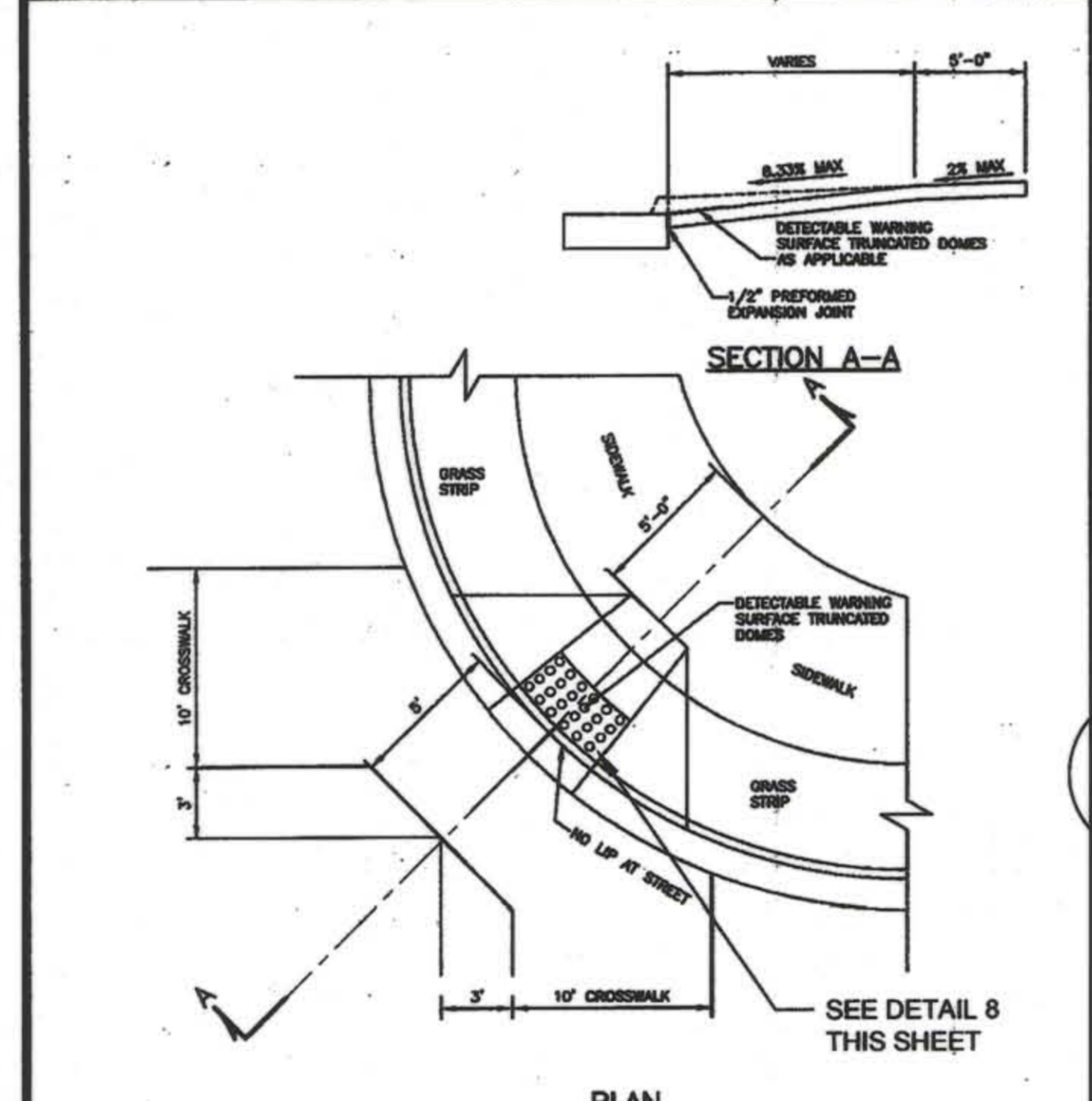


13 CONCRETE PAVER EDGE (TYP) NOT TO SCALE



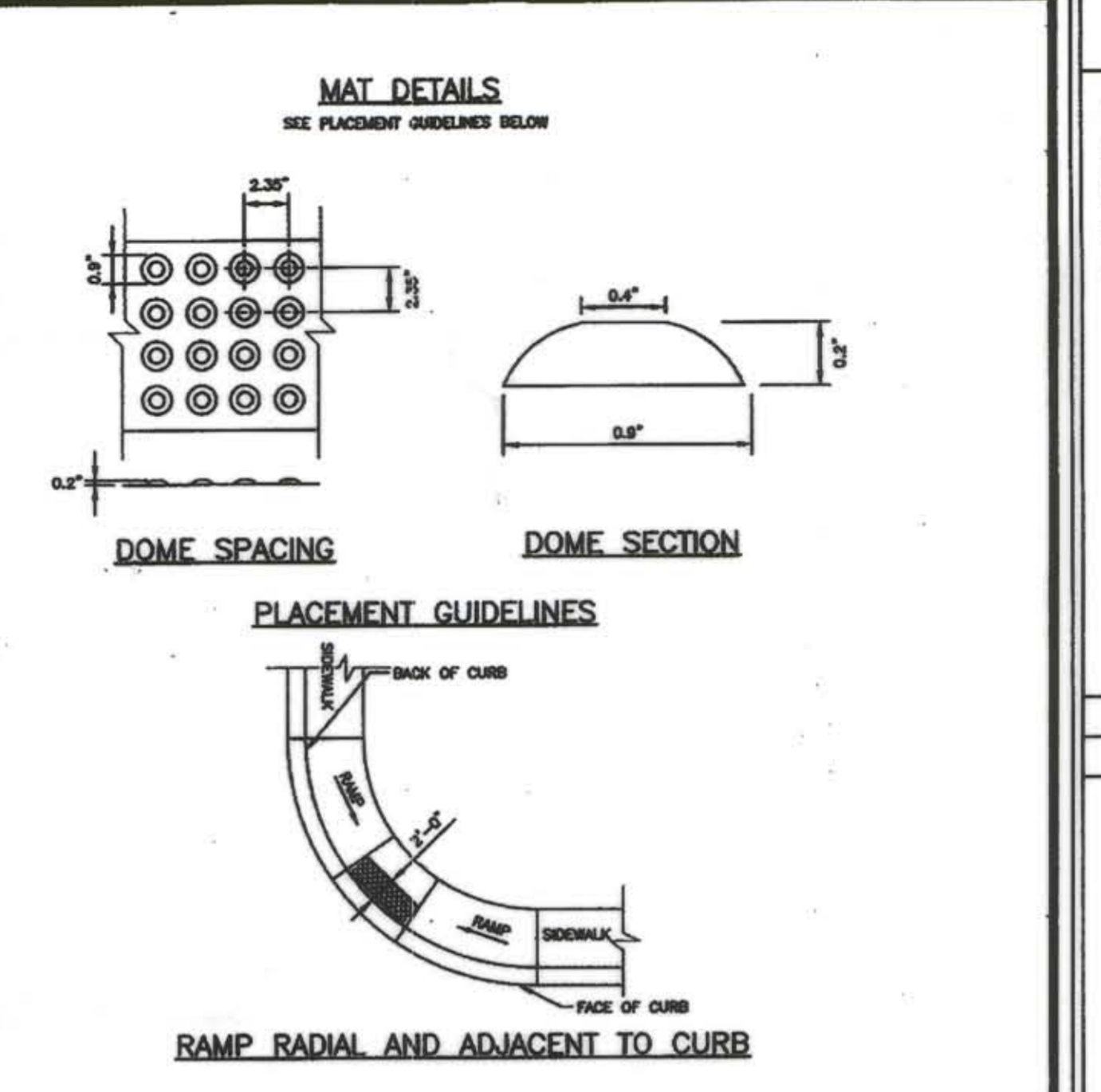
- NOTES:
- SIDEWALK TO BE SLOPED IN 5'-0" MAXIMUM SQUARES.
 - EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO BE MORE THAN 12'-0" APART. EXPANSION JOINTS AT 15' O.C.
 - 1/2" PREFORMED EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.
 - CONCRETE TO BE MIX NO.3.
 - WHEN SIDEWALK ADJACENT TO CURB, SIDEWALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED EXPANSION JOINT BETWEEN SIDEWALK AND CURB.
 - ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT THE EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.
 - SIDEWALK WIDTH ADJACENT TO CURB SHALL BE 5'-0" MINIMUM EXCEPT SIDEWALK ADJACENT TO CURB IN CURB-DE-SAC BULLS MAY BE 4'-0" WIDE.
 - SIDEWALK LOCATED 2' OR MORE FROM CURB MAY BE 4'-0" IN WIDTH WITH A 5'x5' PAVED SECTION PLACED 200' APART.
 - 4'-0" SIDEWALK REQUIRES A PASSING AREA (SEE DETAIL R-4.01).
 - SAW CUT CONTROL JOINTS AT 8' O.C.
 - REINFORCE CONCRETE USING 6\"/>

6 Concrete Sidewalk Detail R-3.05



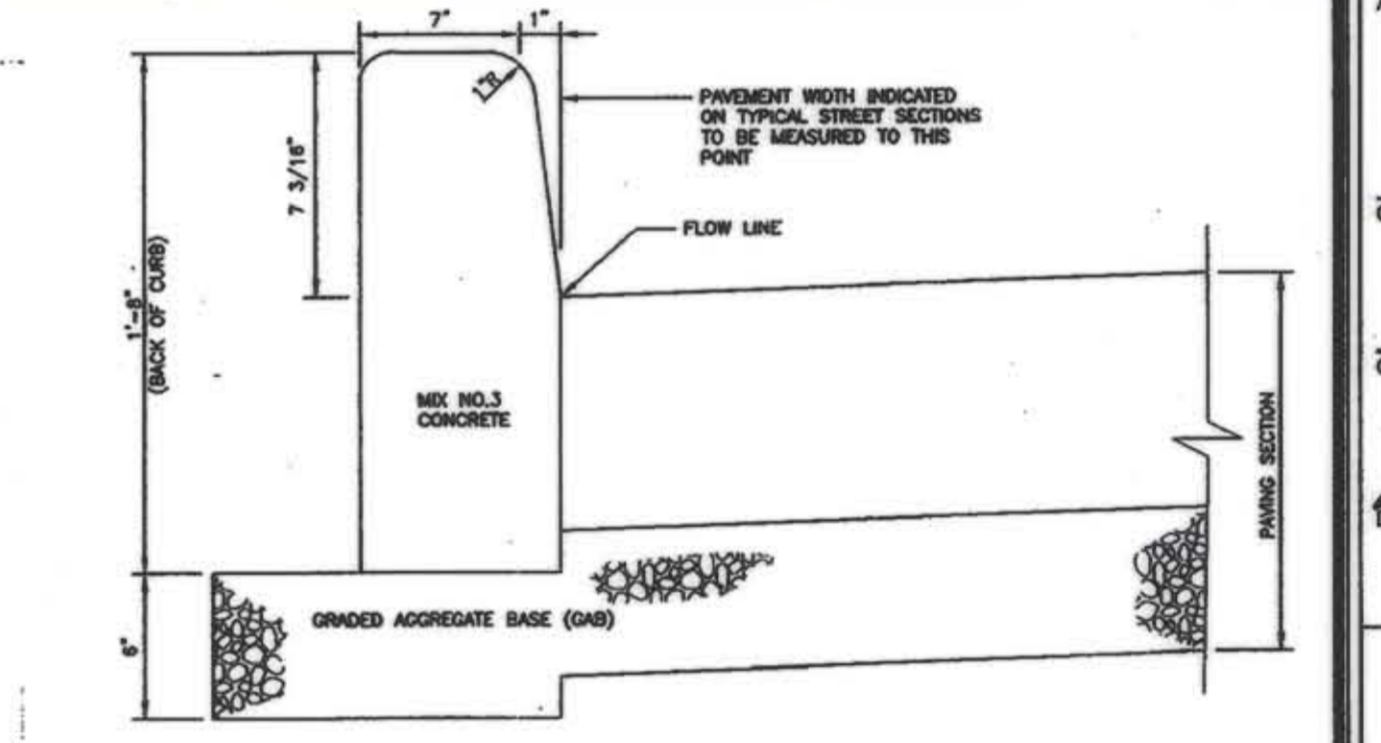
- NOTES:
- ALL RAMP SHALL HAVE DETECTABLE WARNING SURFACE. SEE DETAIL R-4.07
 - GRASS AREA ADJACENT TO SIDEWALK SHALL BE SLOPED TO MEET RAMP.

7 SIDEWALK RAMP Type B Single Ramp Detail R-4.02



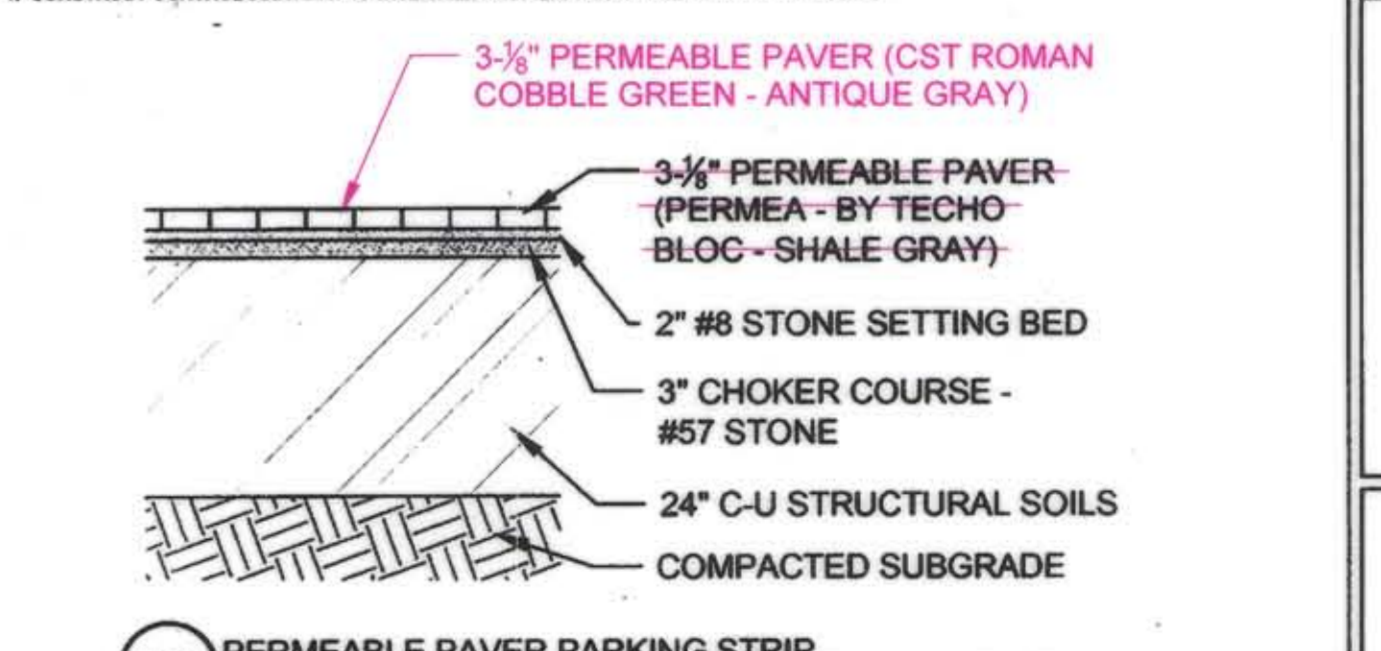
- NOTES:
- THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
 - FOR SHOWED APPLICATIONS DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF THE CURB ARE NO LESS THAN 0.5' AND NO MORE 3.0' FROM THE BACK OF THE CURB. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.

8 SIDEWALK RAMP Detectable Warning Truncated Domes Detail R-4.07



- NOTES:
- A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.
 - POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

11 CURBS Hot Mix Asphalt & Concrete Barrier Detail R-3.03



12 PERMEABLE PAVER PARKING STRIP OVER STRUCTURAL SOIL BASE (TYP) NOT TO SCALE

CLIENT
 HOWARD COUNTY
 STORMWATER MANAGEMENT DIVISION
 6751 COLUMBIA GATEWAY DRIVE
 SUITE 514
 COLUMBIA, MD 21046

DATE:	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS
AS-BUILT NOTES:	
REVISIONS TO DETAILS # 2, 9, 12 & 13	

AS BUILT CERTIFICATION
 I HEREBY CERTIFY, AS A PROFESSIONAL ENGINEER, THAT THE BEST OF MY KNOWLEDGE AND BELIEF, THE AS-BUILT DRAWINGS ON THIS PLAN WERE CONSTRUCTED ACCORDING TO THE AS-BUILT PLAN MEET THE APPROVED PLANS AND REGULATIONS.
 Nick Lindow, P.E. 10-16-14 DATE

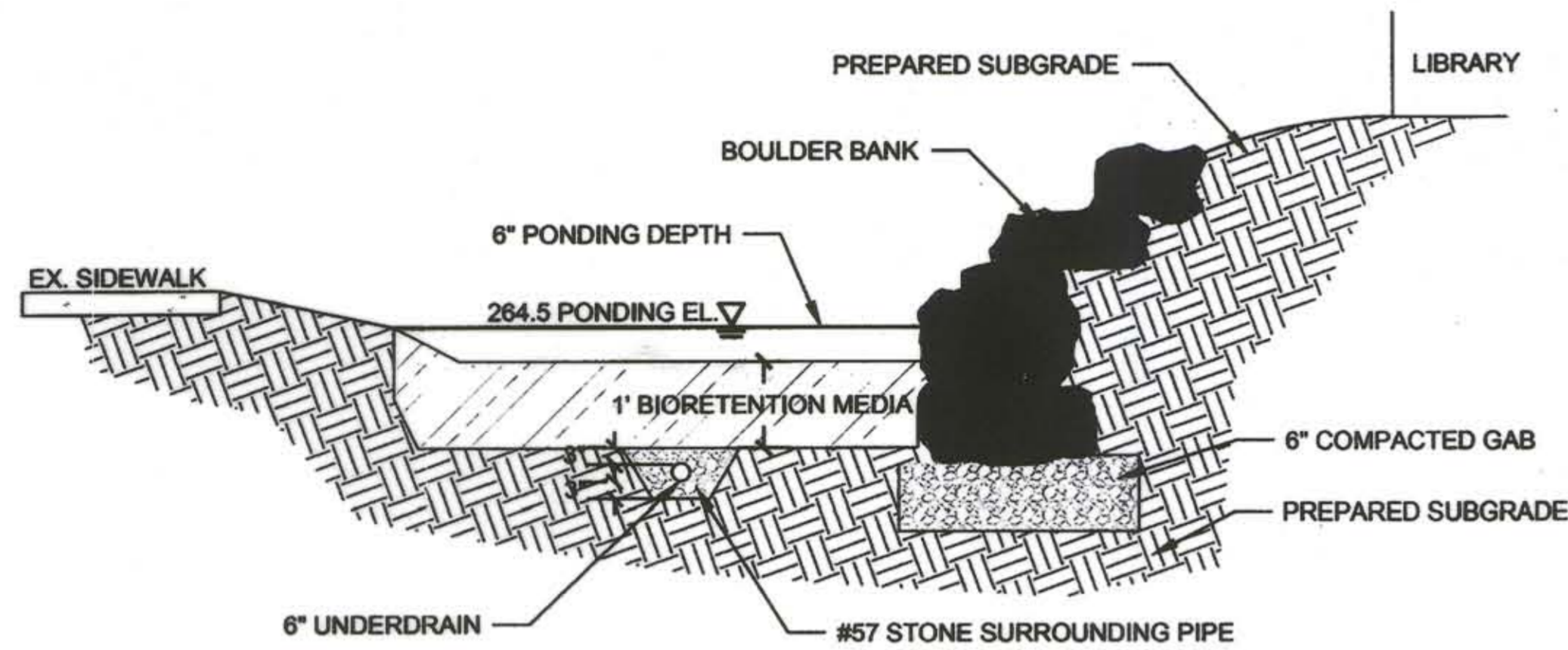
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division 1-17-14 DATE
 Chief, Division of Land Development 1-30-14 DATE
 Director 1-30-14 DATE

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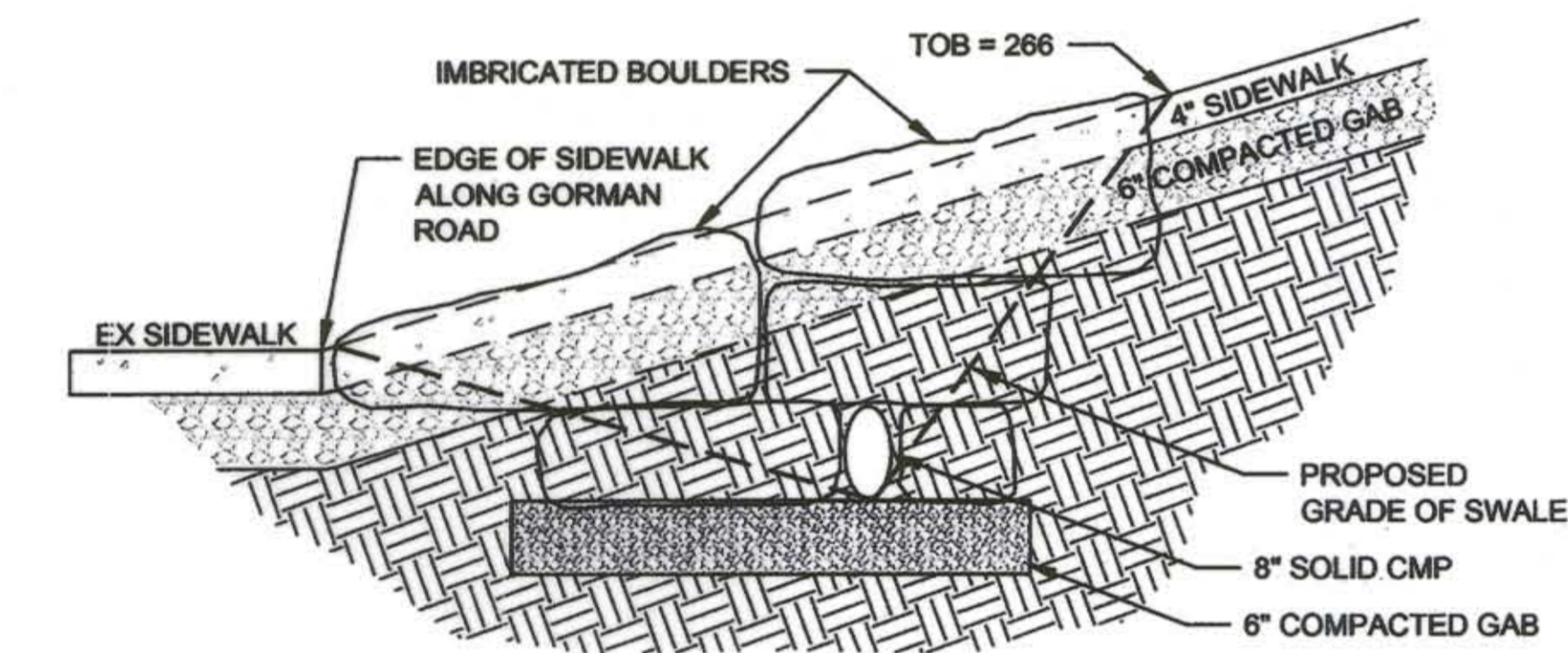
SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

DETAILS

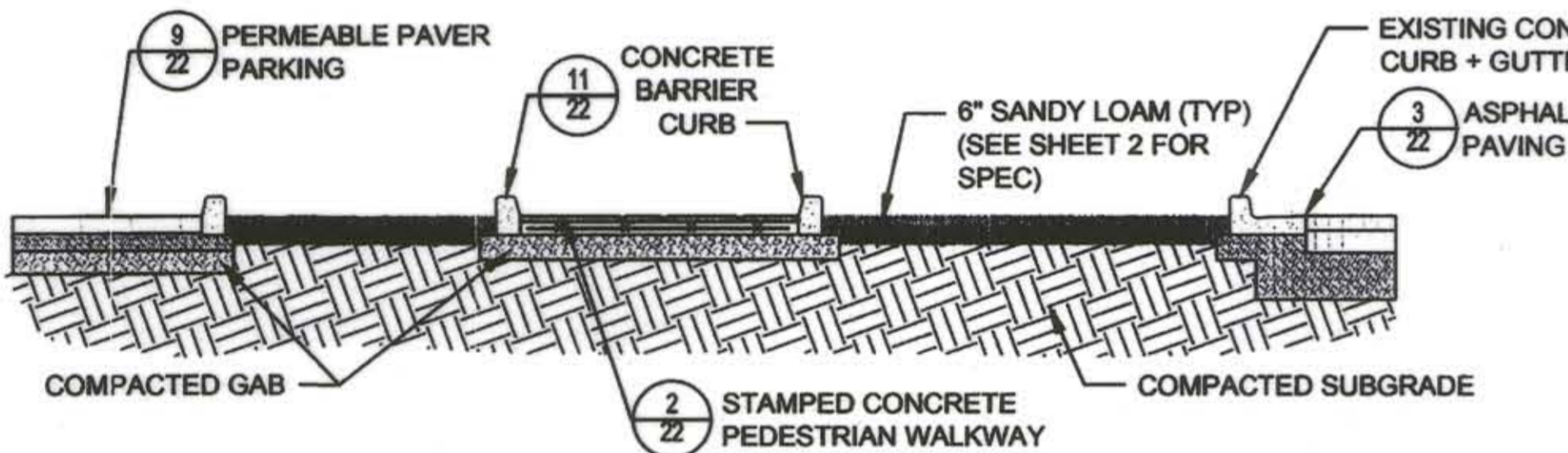
TITLE	DETAILS	
PROJECT NO.:	13005.02	SCALE: N/A
SEAL:	BY: AG, NLTB	CHECK: MT, EWB
DWG. NO.:	22 OF 30	



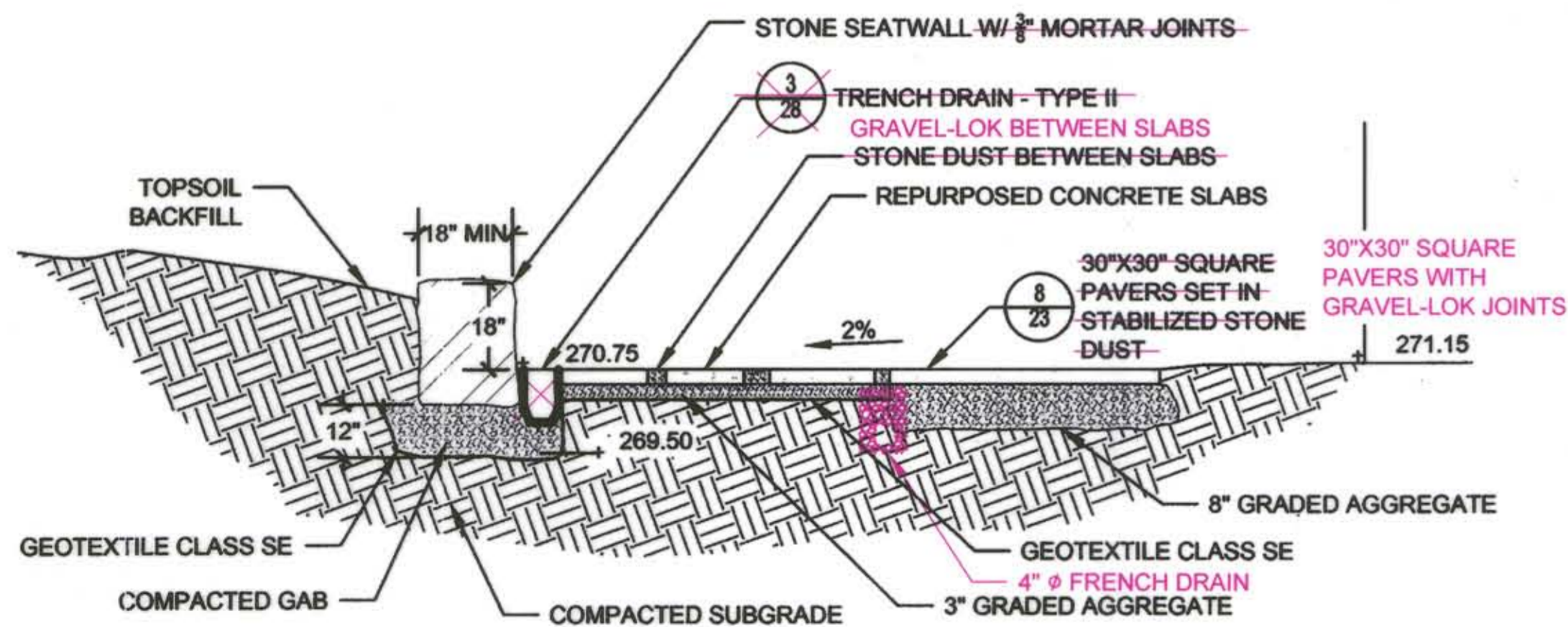
1 BOULDER EMBANKMENT & BIORETENTION BASIN NOT TO SCALE



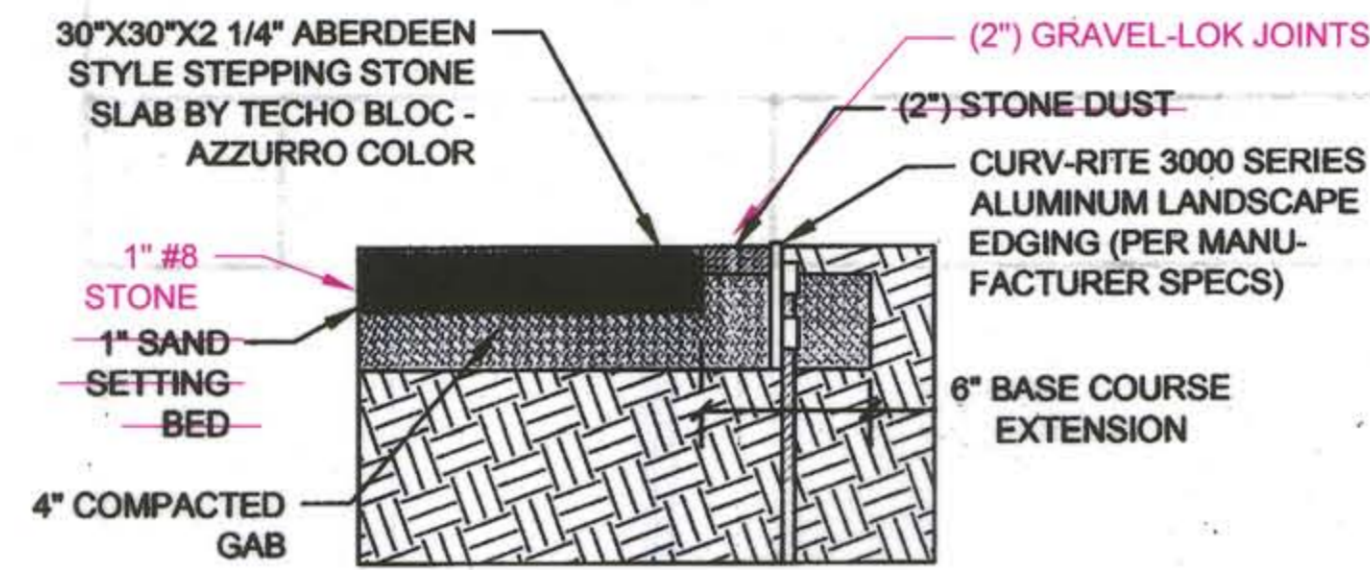
2 BOULDER HEADWALL NOT TO SCALE



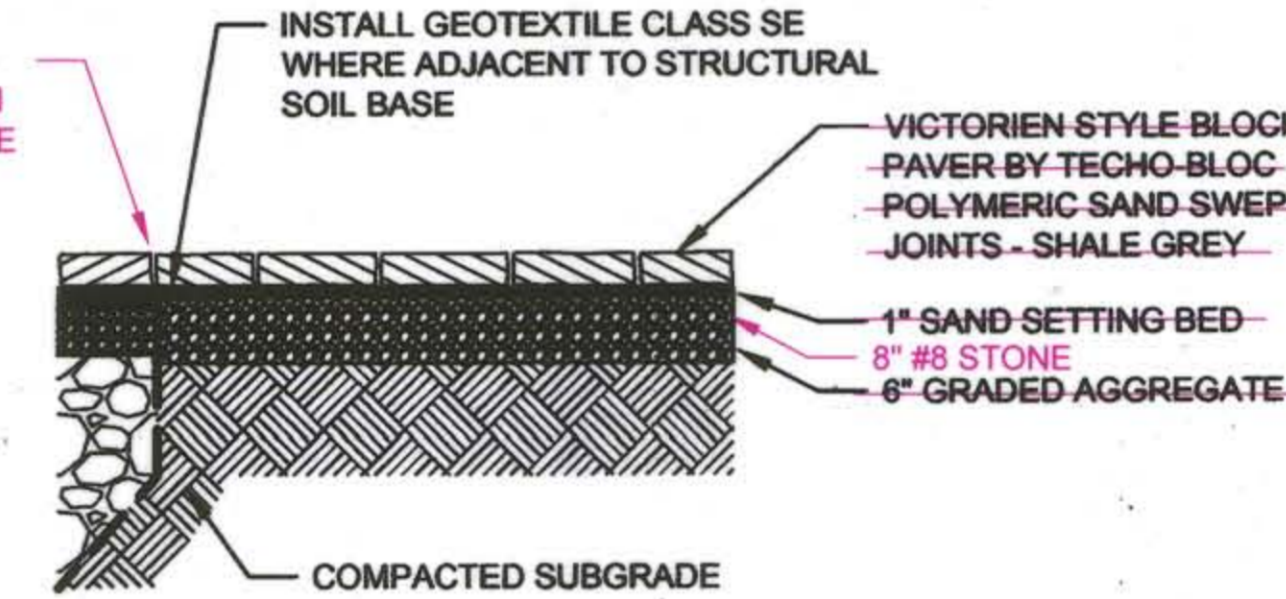
3 PARKING ISLAND LANDSCAPE PLANTER NOT TO SCALE



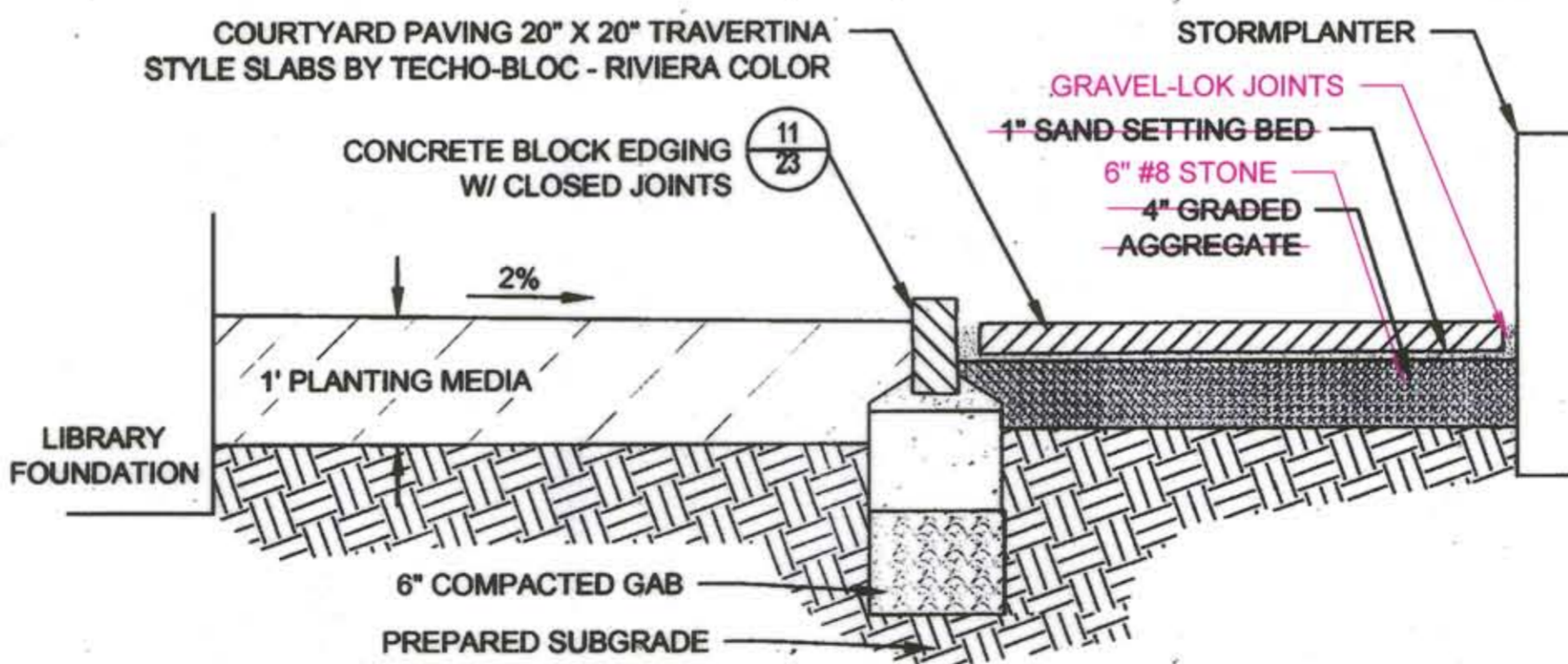
5 SEATWALL & AMPHITHEATER NOT TO SCALE



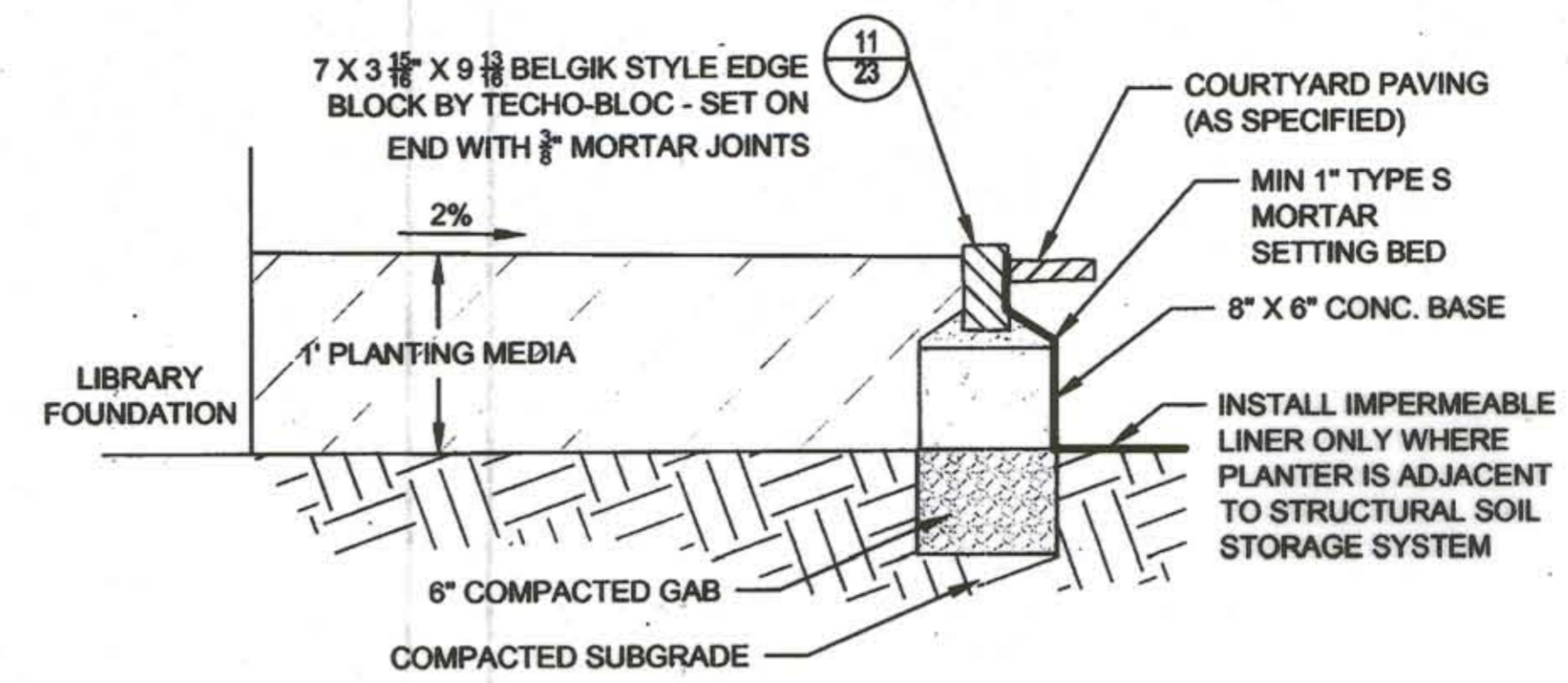
8 30"x30" SQUARE PAVERS SET IN STABILIZED STONE DUST WITH GRAVEL-LOK JOINTS NOT TO SCALE



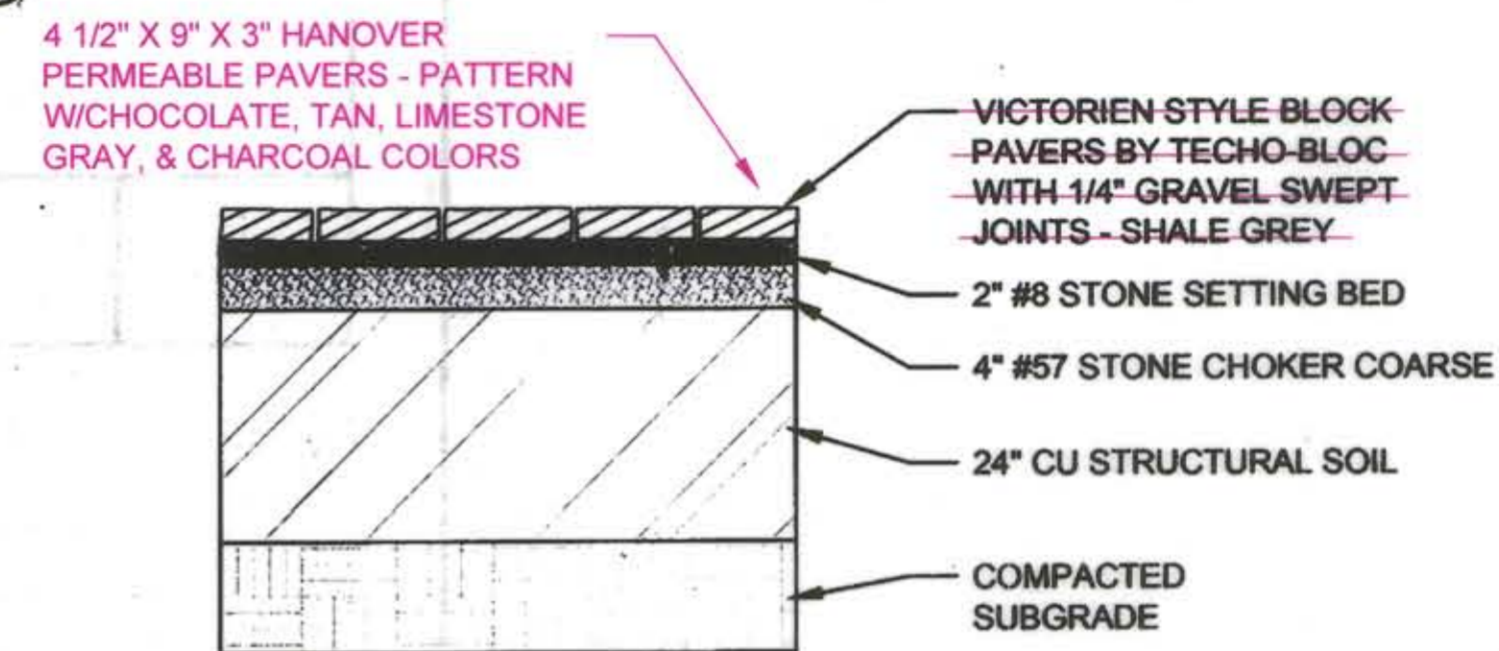
10 COURTYARD PAVERS (TYP) NOT TO SCALE



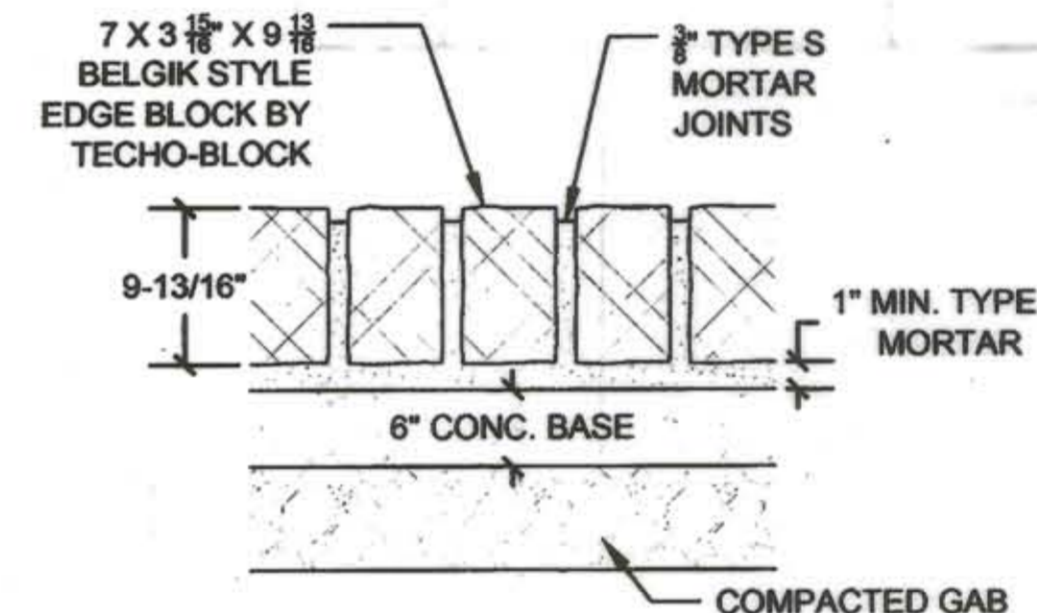
12 20" X 20" SQUARE SLABS SET ON STABILIZED STONE DUST WITH GRAVEL-LOK JOINTS NOT TO SCALE



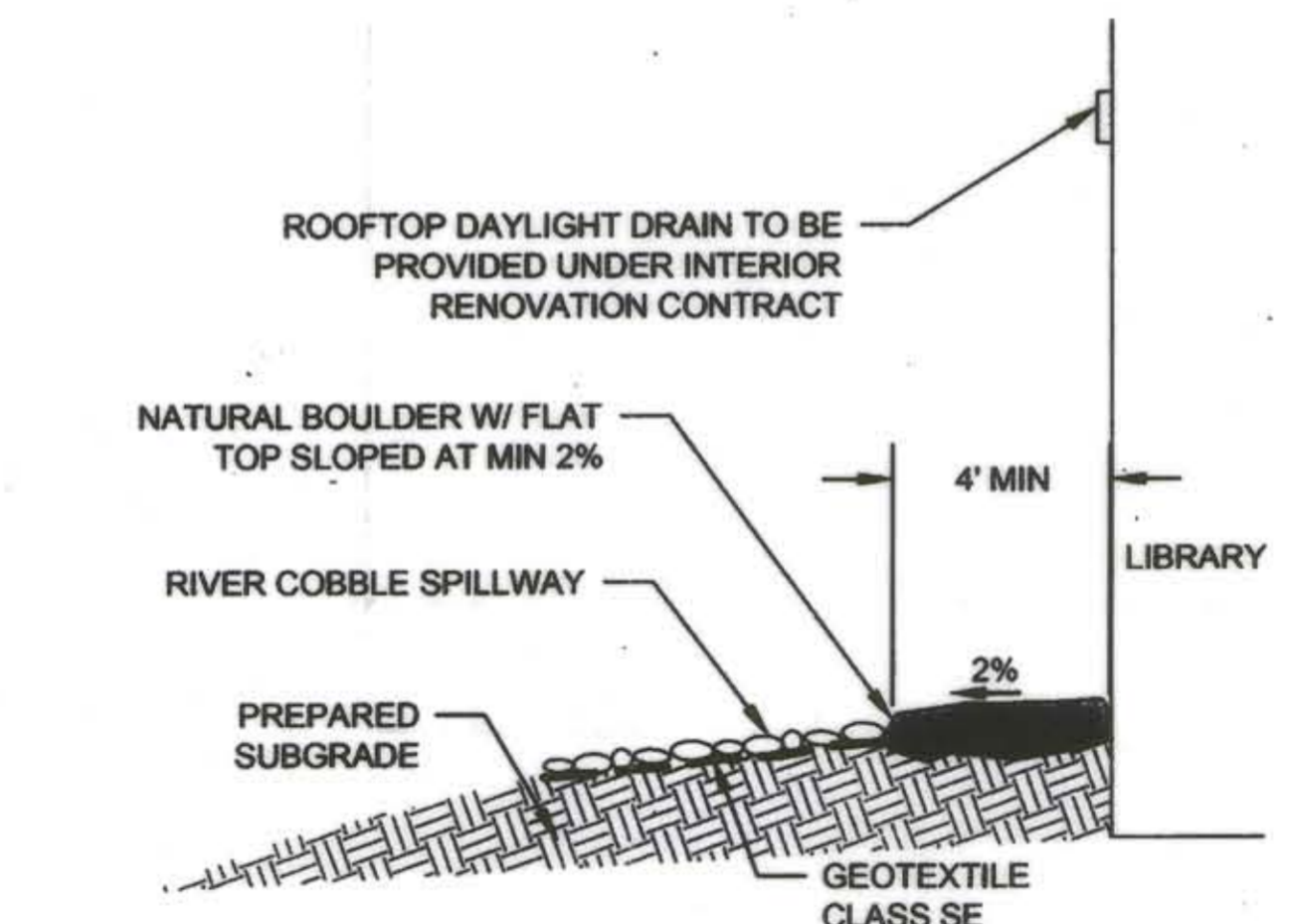
7 NATIVE LANDSCAPE PLANTER NOT TO SCALE



9 PERMEABLE COURTYARD PAVERS WITH STRUCTURAL SOIL BASE NOT TO SCALE



11 CONCRETE BLOCK EDGING W/ CLOSED JOINTS NOT TO SCALE



13 ROOFTOP DAYLIGHT SPLASHPAD NOT TO SCALE

NOTE: GRADED AGGREGATE BASE SHALL MEET REQUIREMENTS OF SECTION 901 OF MSHA STANDARD SPECIFICATIONS.

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE	ISSUES / REVISIONS
12/23/2013	REVISED SITE DEVELOPMENT PLAN
09/04/2014	SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
REVISIONS TO DETAILS # 5, 9, 9, 10 & 12

STATE OF MARYLAND
NICHOLAS LINDOW
PROFESSIONAL ENGINEER
I HEREBY CERTIFY THAT THE WORK SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, PHD, PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Shed Edwards 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

V. Johnson 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David M. Gage 1/30/14
DIRECTOR DATE



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Baltimore, MD 21211 / ph: 410.554.0156
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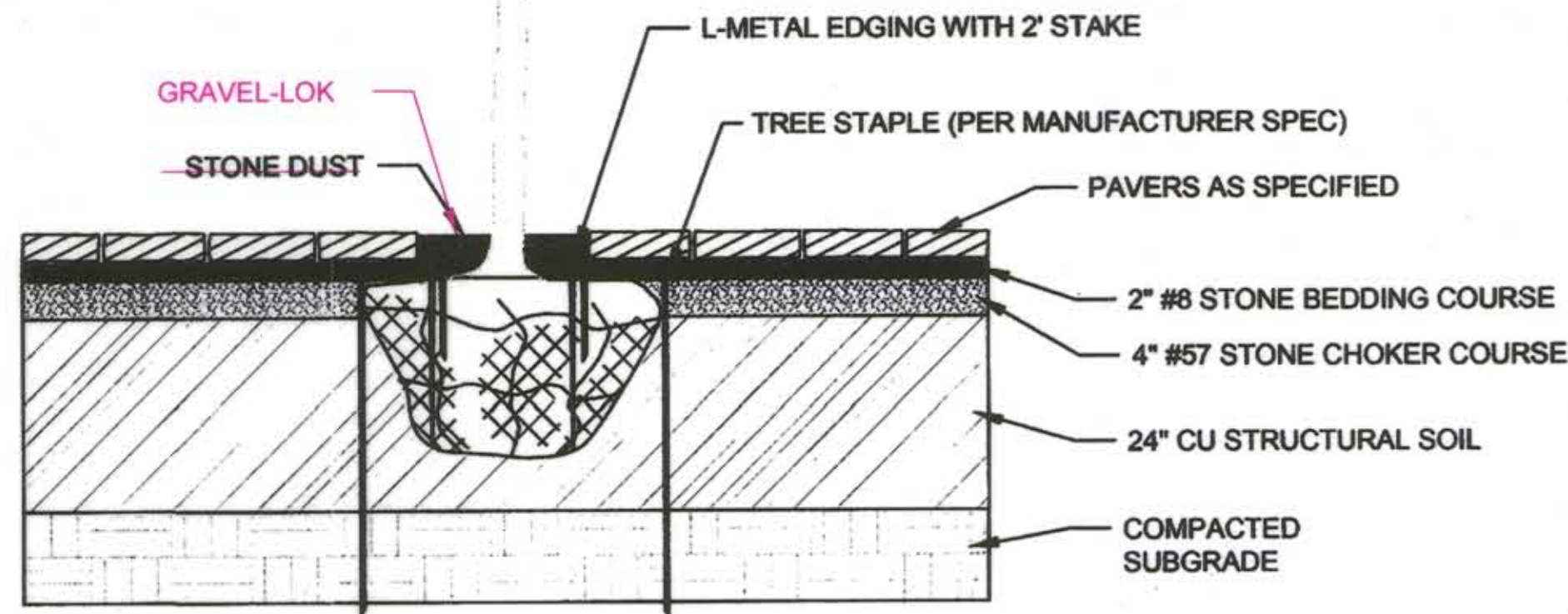
SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

DETAILS II

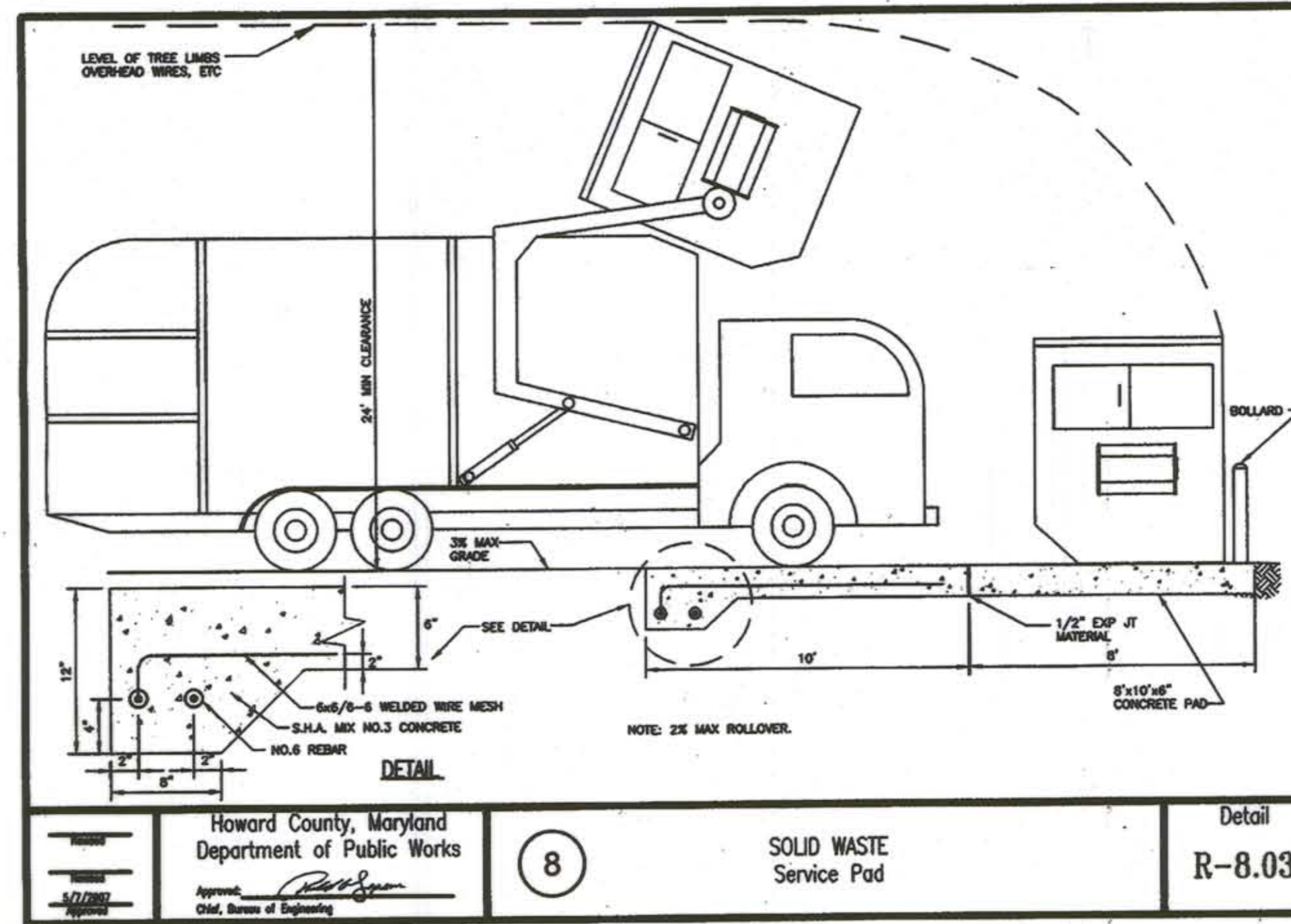
PROJECT NO.: 13005.02 SCALE: N/A

BY: AG, NL, TB CHECK: MT, EWB
DWG. NO.:

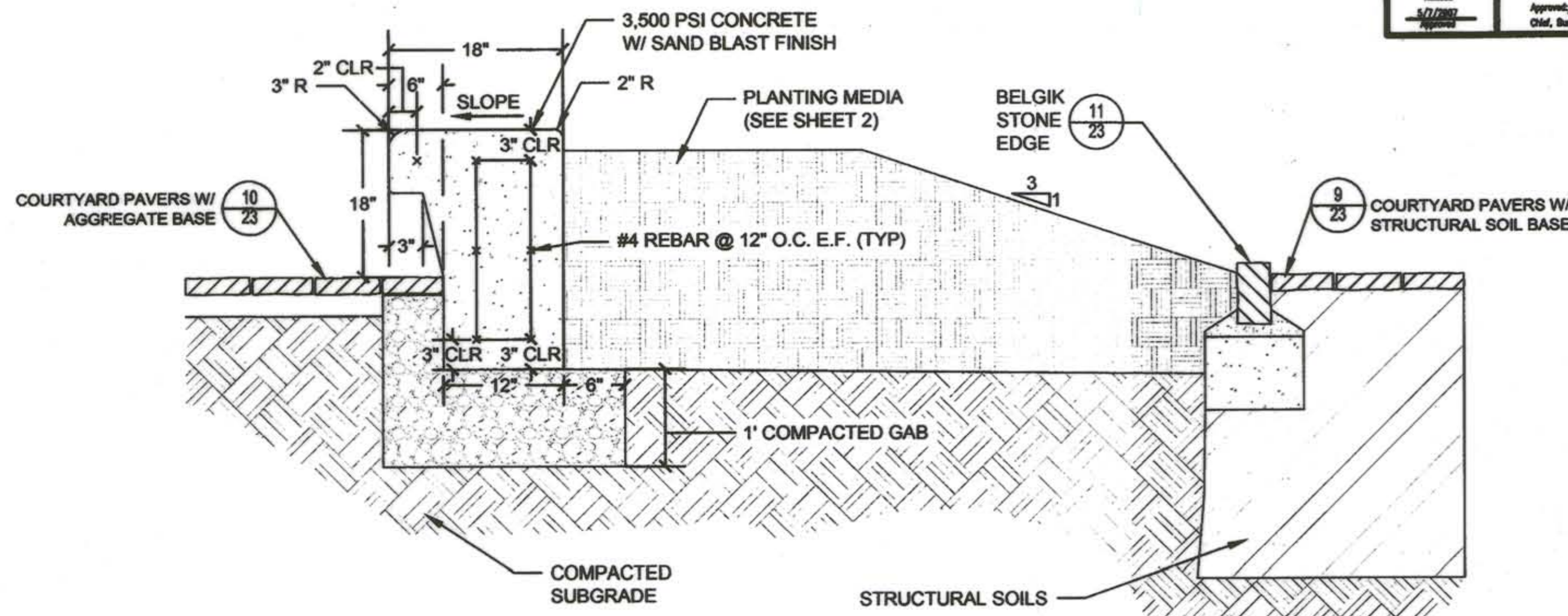




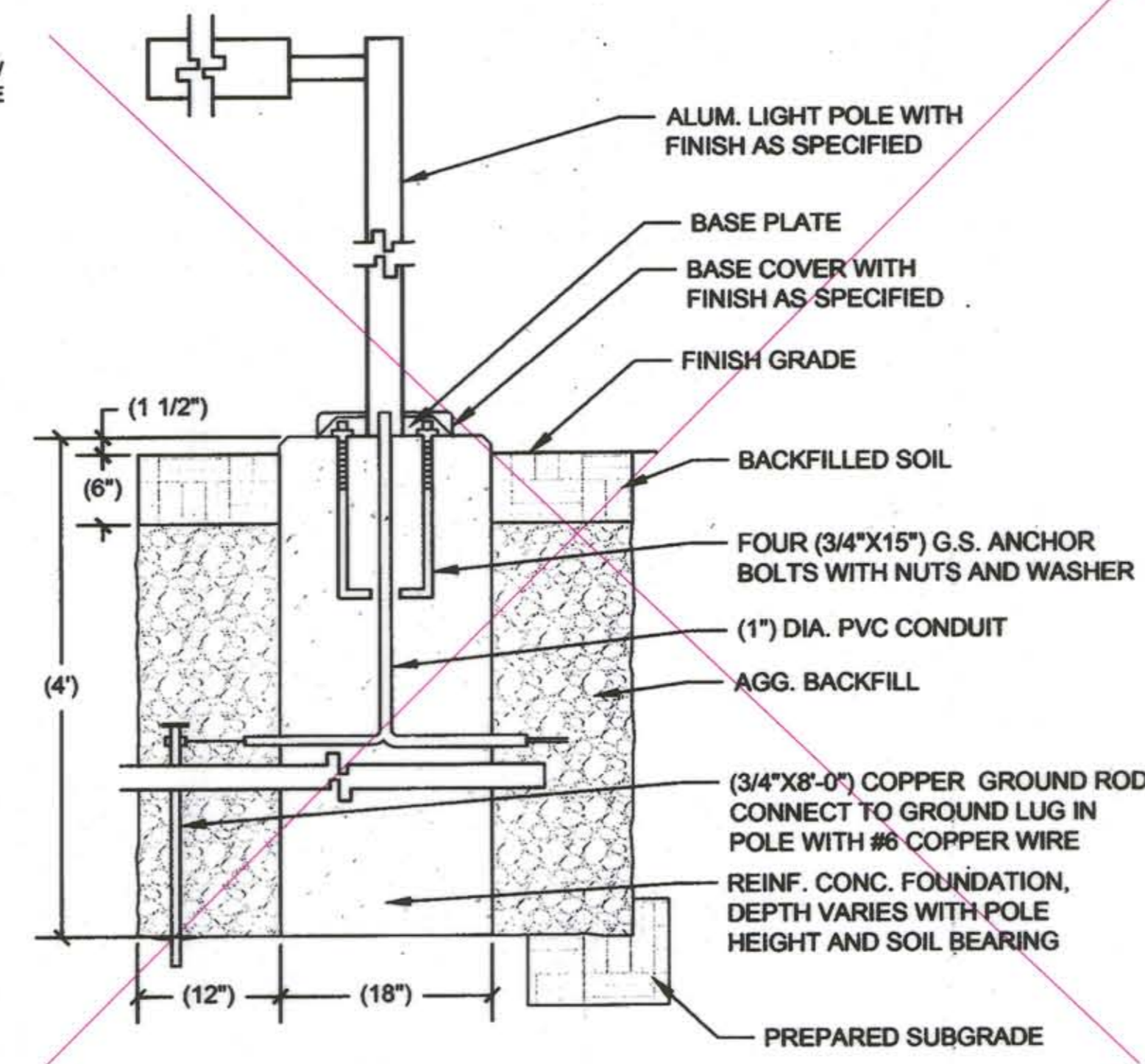
1 COURTYARD TREE PIT NOT TO SCALE



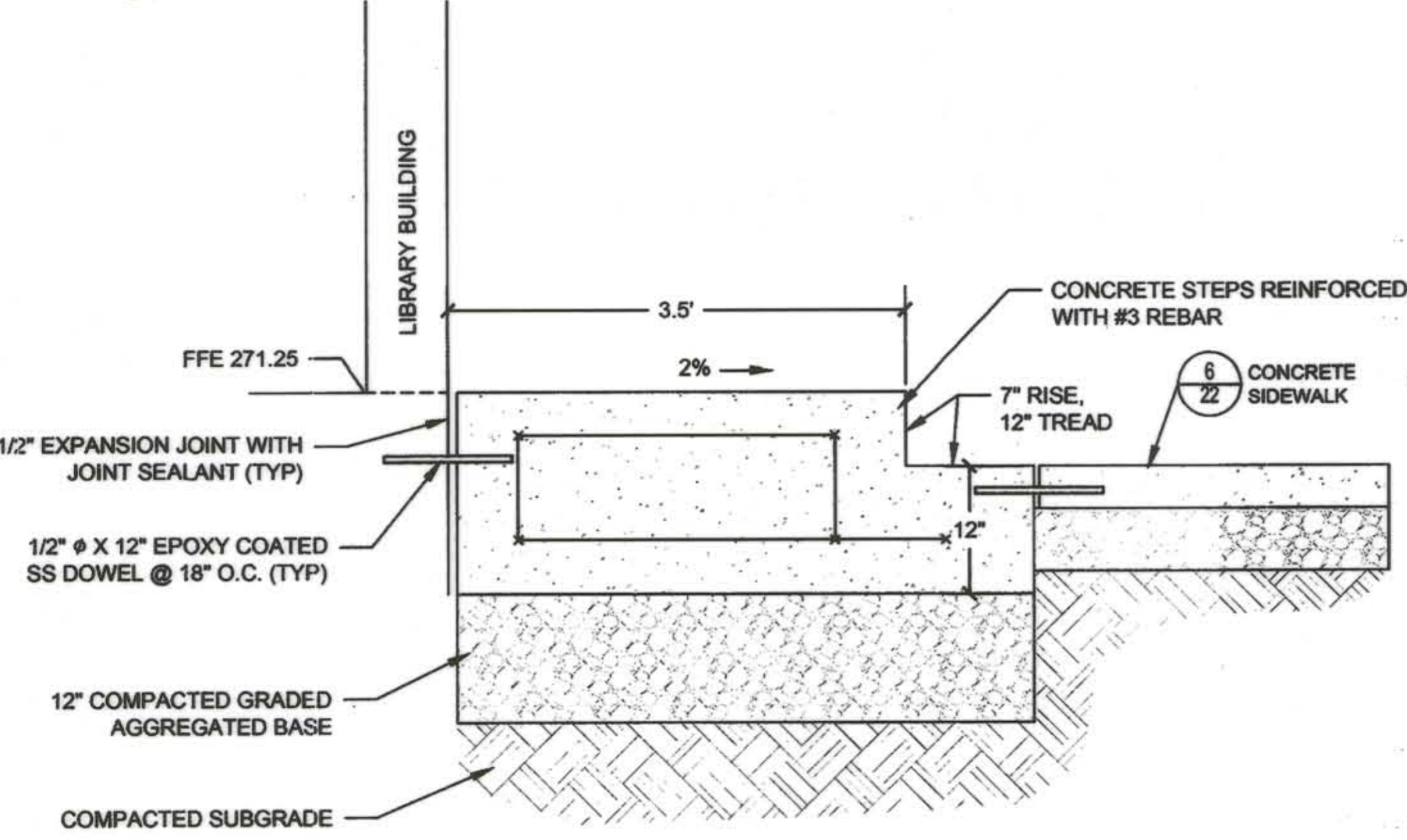
8 SOLID WASTE Service Pad Detail R-8.03



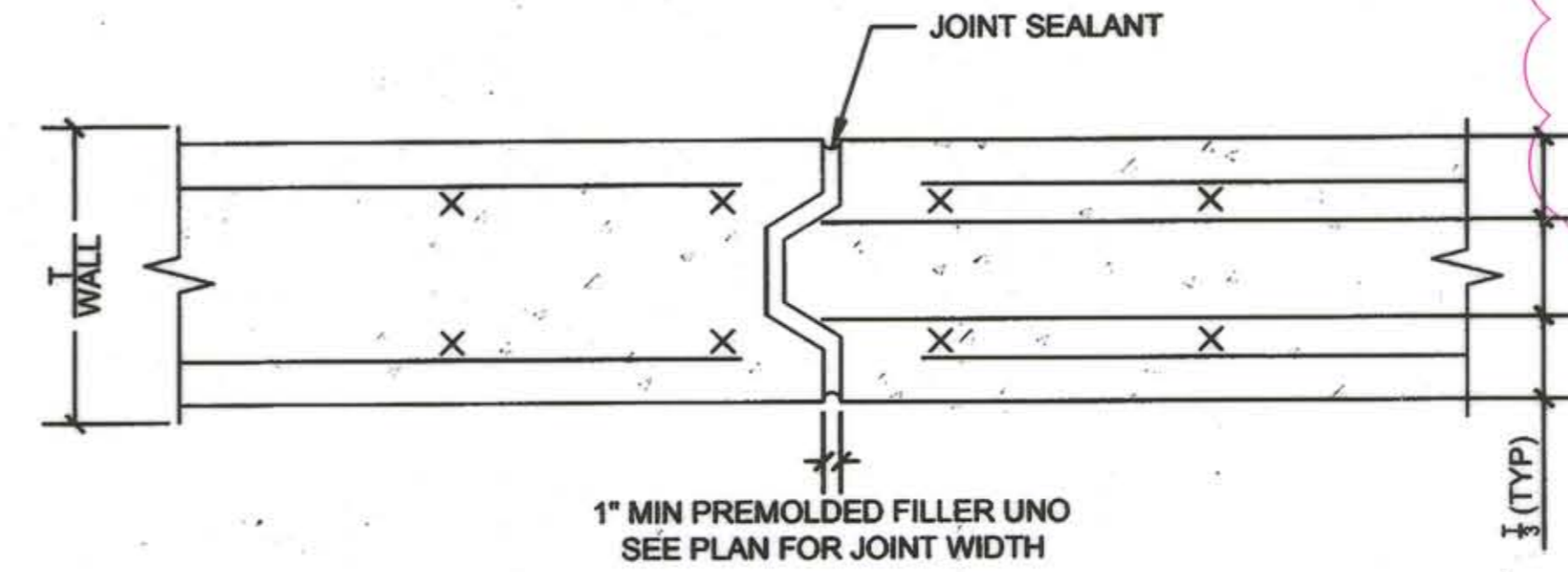
2 CONCRETE SEATWALL & PLANTER NOT TO SCALE



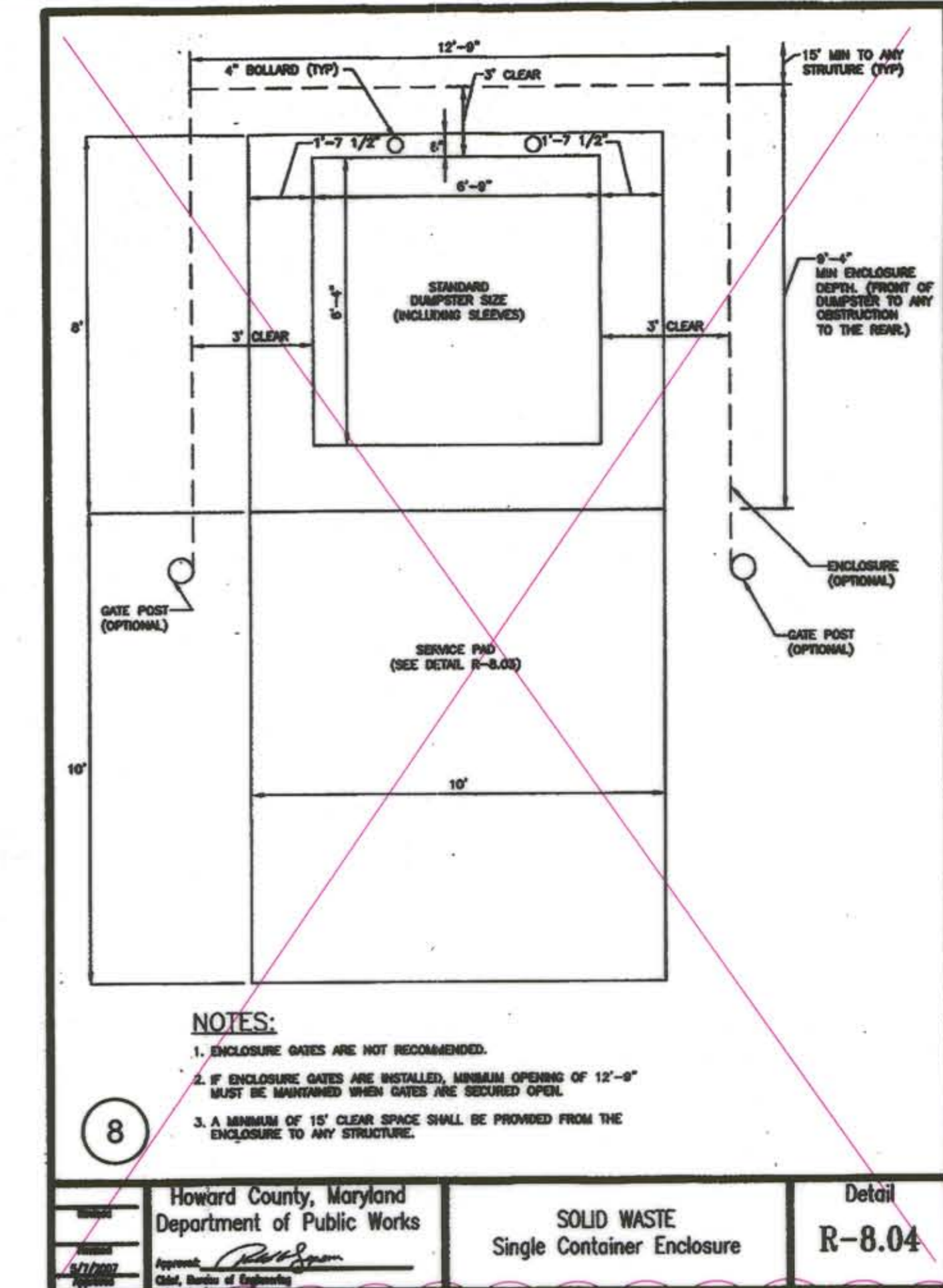
6 POLE TOP MOUNTED LED LUMINAIRE AS BUILT: DIRECT BURIAL PER MANUFACTURER'S SPEC NOT TO SCALE



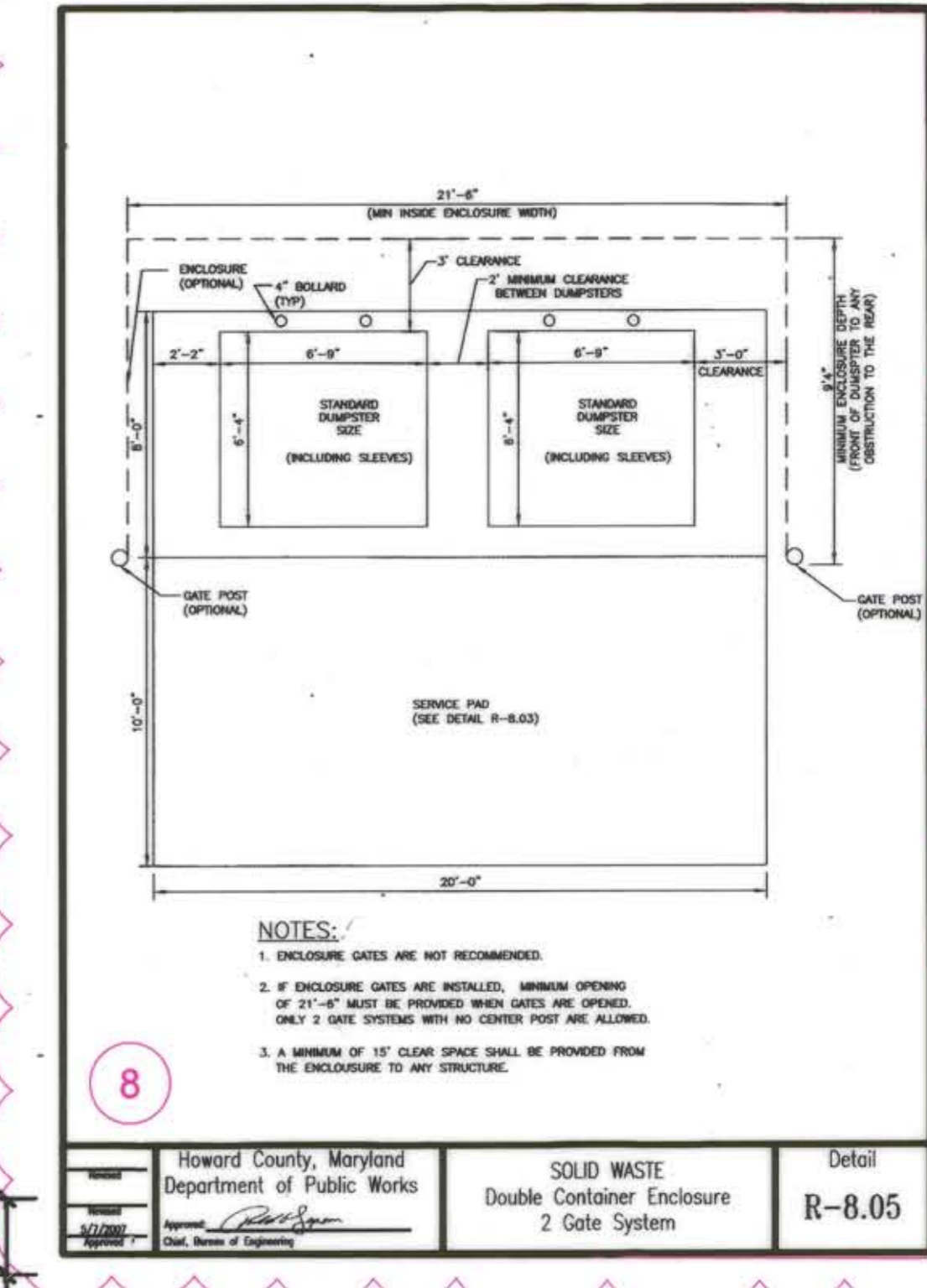
3 CONCRETE STEPS NOT TO SCALE



7 EXPANSION JOINT IN CONCRETE WALL NOT TO SCALE



8 SOLID WASTE Single Container Enclosure Detail R-8.04



8 SOLID WASTE Double Container Enclosure 2 Gate System Detail R-8.05

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 12/23/2013
ISSUES / REVISIONS: REVISED SITE DEVELOPMENT PLAN
09/04/2014 SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS
AS-BUILT NOTES:
REVISIONS TO DETAILS #1, 6 & 8



Nick Lindow 10-16-14
NICK LINDOW, PH.D., PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Shel Clark 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Kat Shindler 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Paul M. Angle 4/30/14
DIRECTOR DATE

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SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

DETAILS III

PROJECT NO.: 13005.02 SCALE: N/A
SEAL: *Nick Lindow* BY: AG, NL, TB CHECK: MT, EWB
DNG. NO.: 24 OF 30

MATERIAL SPECS

Material	Specification	Size	Notes	Reference
Bioretention soil	loamy sand (80-85%), biochar (10%), and woodchips (10%) OR sandy loam (40%), coarse sand (40%), biochar (10%) and woodchips (10%)	N/A	USDA soil types loamy sand or sandy loam; clay content <5%; Min. 10% organic content by dry weight (ASTM D 2974)	2000 Maryland Stormwater Design Manual, Table B.4.1
Mulch	Shredded hardwood	N/A	Aged 6 months, minimum; no pine chips	2000 Maryland Stormwater Design Manual, Table B.4.1
Permeable Pavers	ASTM C 936 or CSA A231.2	3-1/8" thick	None	2000 Maryland Stormwater Design Manual, Table B.4.1
Bedding Stone/Choker Course	Uniformly graded, angular crushed stone	No. 8 stone (1/8" to 3/8")	None	2000 Maryland Stormwater Design Manual, Table B.4.1
Base Course for Pavers	Openly graded, angular crushed stone (80%) and Sand (20%) by weight	No. 2 Aggregate (3/4" to 1-1/2")	See Sand below	
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and graystone (AASHTO) #10 are NOT acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.	2000 Maryland Stormwater Design Manual, Table B.4.1
Structural Soil	Uniformly graded, angular crushed stone (80%), clay loam or loam (20%), and hydrogel (<1%) by weight	No. 2 Aggregate (3/4" to 1-1/2")	USDA soil types clay loam or loam; clay content >20%; organic content 2-5%	US Patent No. 5849069, CU-Structural Soil
Geotextile	PE Type I nonwoven	N/A	None	2000 Maryland Stormwater Design Manual, Table B.4.1
Impermeable Liner	ASTM-D-4833 (thickness); ASTM-D-412 (tensile strength 1,100 lb., elongation 200%); ASTM-D-624 (tear resistance-150 lb/in); ASTM-D-471 (water absorption: +8 to -2% mass)	30 mil thickness	Liner to be ultraviolet resistant. A geotextile fabric should be used to protect the liner from puncture.	2000 Maryland Stormwater Design Manual, Table B.4.1
Underdrain Gravel	AASHTO M-43	No. 57 or No. 6 Aggregate (3/8" to 3/4")	None	2000 Maryland Stormwater Design Manual, Table B.4.1
Underdrain Pipe	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" on gravel over pipes. Perforated pipe shall be wrapped with 1/4" galvanized hardware cloth	2000 Maryland Stormwater Design Manual, Table B.4.1
Graded Aggregate Base (GAB)	D2940	3/4" to 1-1/2" Aggregate	None	2008 Maryland Department of Transportation Standard Specifications of Construction and Materials, Section 901.01
Mortar	Portland Cement Mortar Grout, Type S	N/A	None	2008 Maryland Department of Transportation Standard Specifications of Construction and Materials, Section 901.11
River Cobble	Uniformly graded, rounded stone	1" to 3" Rounded River Jack Stone	None	
Planting Media	pH 4.5 to 7.0 Ph, Organic Matter 3 to 6%, Electrical Conductivity or soluble salts 0.0 mmhos cm-1 to 1.0 mmhos cm-1	20-75% Sand (2.0-0.05 mm), 10-60% Silt (0.05-0.002 mm), and 5-20% Clay (< 0.002 mm)	Soil shall be free of refuse, hard clods, woody vegetation, stiff clay, concrete, construction debris, boulders, stones larger than 1-1/2", chemicals or other deleterious materials toxic to any vegetation used on this project.	USDA Classifications
Concrete	Portland Cement Concrete, Mix 3	N/A	None	2008 Maryland Department of Transportation Standard Specifications of Construction and Materials, Section 902.10.03
All Other	See reference	N/A	None	Howard County Design Manual Volume IV, Standard Specifications and Details for Construction

MATERIAL	MANUFACTURER	CATALOGUE ID	STYLE	FINISH
BIKE RACKS	DERO	N/A	CUSTOM LOGO - HI LOGO DEVELOPED FOR MILLER BRANCH LIBRARY - SPECS PROVIDED TO CONTRACTOR	POWDER COAT: RAL#7030
TABLE & CHAIRS	LANDSCAPE FORMS	MINGLE	MINGLE - BACKED SEAT, PERFORATED METAL - 4 SEAT-UMBRELLA HOLE-SURFACE MOUNT	POWDERCOAT: METALLIC SILVER
PARASOL	LANDSCAPE FORMS	35	35 COLLECTION: SHADE - UMBRELLA - PERFORATED ALUMINUM	POWDERCOAT: OCEAN
LITTER RECEPTACLE	LANDSCAPE FORMS	LAKESIDE	LAKESIDE - GRASS PATTERN-SIDE OPENING	POWDERCOAT: METALLIC SILVER
SPHERE BOLLARDS	FS INDUSTRIES	TF6102	30" DIAMETER SPHERE BOLLARD	B31 - WHITE
ACCESSIBLE PARKING SIGN - STANDARD	MD SHA STANDARD	R7-8	R7-8 RESERVED PARKING SIGN	N/A
ACCESSIBLE PARKING SIGN - VAN ACCESSIBLE	MD SHA STANDARD	R7-8a	R7-8 VAN ACCESSIBLE SIGN	N/A
TRENCH DRAIN - TYPE I	ZURN	Z882	12" WIDE PERMA-TRENCH	N/A
TRENCH DRAIN - TYPE II	ZURN	Z886	6" WIDE PERMA-TRENCH	N/A
TRENCH DRAIN - TYPE I - DECORATIVE GRATE	IRON AGE DESIGNS	0X12-18199	OBLIO 12"x18" TRENCH GRATE	NATURAL
TRENCH DRAIN - TYPE II - DECORATIVE GRATE	ZURN	P6-DWV	DECORATIVE WAVE GRATE	DUCTILE IRON
CUSTOM ROOF DRAIN TROUGH	TBD BY CONTRACTOR	N/A	SHOP DRAWINGS TO BE DEVELOPED BY CONTRACTOR	WELDED CORTEN STEEL
TREE STAPLES	TREE STAPLE	TS48	4" TREE STAPLE	N/A
ALUMINUM PAVER RESTRAINT	CURV-RITE	4000 SERIES	CURV-RITE 4000 SERIES HEAVY DUTY "L" SHAPED ALUMINUM EDGE RESTRAINT - 2" HIGH X 2" BASE - 12 SPIKES PER SECTION (8"	NATURAL ALUMINUM
ALUMINUM LANDSCAPE EDGING	CURV-RITE	300 SERIES	CURV-RITE 3000 SERIES ALUMINUM LANDSCAPE EDGING - 3/16" X 5 1/2" X 16"	BLACK ANODIZED
COURTYARD PAVERS	TECHO-BLOC	VICTORIEN	VICTORIEN STYLE PAVERS - 80mm	SHALE GREY
PARKING STRIP PAVERS	TECHO-BLOC	PERMEA	PERMEA STYLE PAVERS	SHALE GREY
30"x30" SQUARE SLABS	TECHO-BLOC	ABERDEEN	ABERDEEN STYLE SQUARE SLABS - 30"x30"	AZZURRO
20"x20" SQUARE SLABS	TECHO-BLOC	TRAVERTINA	TRAVERTINA STYLE SQUARE SLABS - 20"x20"	RIVIERA
STAMPED CONCRETE PATTERN	SCOFIELD	2010	NEW BRICK - RUNNING BOND PATTERN	LITHOCHROME - BRICK RED
STAMPED CONCRETE COLOR	SCOFIELD	A-26	LITHOCHROME COLOR HARDENER	BRICK RED

MATERIAL	MANUFACTURER	CATALOGUE ID	STYLE	FINISH
BIKE RACKS	DERO	N/A	CUSTOM LOGO - HI LOGO DEVELOPED FOR MILLER BRANCH LIBRARY - SPECS PROVIDED TO CONTRACTOR	POWDER COAT: RAL#7030
TABLE & CHAIRS	LANDSCAPE FORMS	MINGLE	MINGLE - BACKED SEAT, PERFORATED METAL - 4 SEAT-UMBRELLA HOLE-SURFACE MOUNT	POWDERCOAT: METALLIC SILVER
PARASOL	LANDSCAPE FORMS	35	35 COLLECTION: SHADE - UMBRELLA - PERFORATED ALUMINUM	POWDERCOAT: OCEAN
LITTER RECEPTACLE	LANDSCAPE FORMS	LAKESIDE	LAKESIDE - GRASS PATTERN-SIDE OPENING	POWDERCOAT: METALLIC SILVER
SPHERE BOLLARDS	FS INDUSTRIES	TF6102	30" DIAMETER SPHERE BOLLARD	B31 - WHITE
ACCESSIBLE PARKING SIGN - STANDARD	MD SHA STANDARD	R7-8	R7-8 RESERVED PARKING SIGN	N/A
ACCESSIBLE PARKING SIGN - VAN ACCESSIBLE	MD SHA STANDARD	R7-8a	R7-8 VAN ACCESSIBLE SIGN	N/A
TRENCH DRAIN - TYPE I	NORTHSTAR INDUSTRIES	10157533	MEADRAIN SUPREME SYSTEM EN 2000.0 500mm x 280mm	N/A
TRENCH DRAIN - TYPE II	ZURN	Z886	6" WIDE PERMA-TRENCH	N/A
TRENCH DRAIN - TYPE I - DECORATIVE GRATE	IRON AGE DESIGNS	0M9-20122	OBLIO 9"x19" TRENCH GRATE	NATURAL
TRENCH DRAIN - TYPE II - DECORATIVE GRATE	ZURN	P6-DWV	DECORATIVE WAVE GRATE	DUCTILE IRON
CUSTOM ROOF DRAIN TROUGH	TBD BY CONTRACTOR	N/A	SHOP DRAWINGS TO BE DEVELOPED BY CONTRACTOR	WELDED CORTEN STEEL
TREE STAPLES	TREE STAPLE	TS48	4" TREE STAPLE	N/A
ALUMINUM PAVER RESTRAINT	CURV-RITE	4000 SERIES	CURV-RITE 4000 SERIES HEAVY DUTY "L" SHAPED ALUMINUM EDGE RESTRAINT - 2" HIGH X 2" BASE - 12 SPIKES PER SECTION (8"	NATURAL ALUMINUM
ALUMINUM LANDSCAPE EDGING	CURV-RITE	300 SERIES	CURV-RITE 3000 SERIES ALUMINUM LANDSCAPE EDGING - 3/16" X 5 1/2" X 16"	BLACK ANODIZED
COURTYARD PAVERS	TECHO-BLOC	VICTORIEN	VICTORIEN STYLE PAVERS - 80mm	SHALE GREY
PARKING STRIP PAVERS	TECHO-BLOC	PERMEA	PERMEA STYLE PAVERS	SHALE GREY
30"x30" SQUARE SLABS	TECHO-BLOC	ABERDEEN	ABERDEEN STYLE SQUARE SLABS - 30"x30"	AZZURRO
20"x20" SQUARE SLABS	TECHO-BLOC	TRAVERTINA	TRAVERTINA STYLE SQUARE SLABS - 20"x20"	RIVIERA
STAMPED CONCRETE PATTERN	SCOFIELD	2010	NEW BRICK - RUNNING BOND PATTERN	LITHOCHROME - BRICK RED
STAMPED CONCRETE COLOR	DESIGN CRETE	NA	INTEGRAL COLOR	LIGHT GRAY

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 12/23/2013 ISSUES / REVISIONS
REVISOR: REVISOR SITE DEVELOPMENT PLAN
09/04/2014 SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS
AS-BUILT NOTES:
REVISIONS TO MATERIAL SCHEDULE



Nick Lindow 10-16-14
NICK LINDOW, PHD, PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Chief 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Director 1-30-14
DIRECTOR DATE

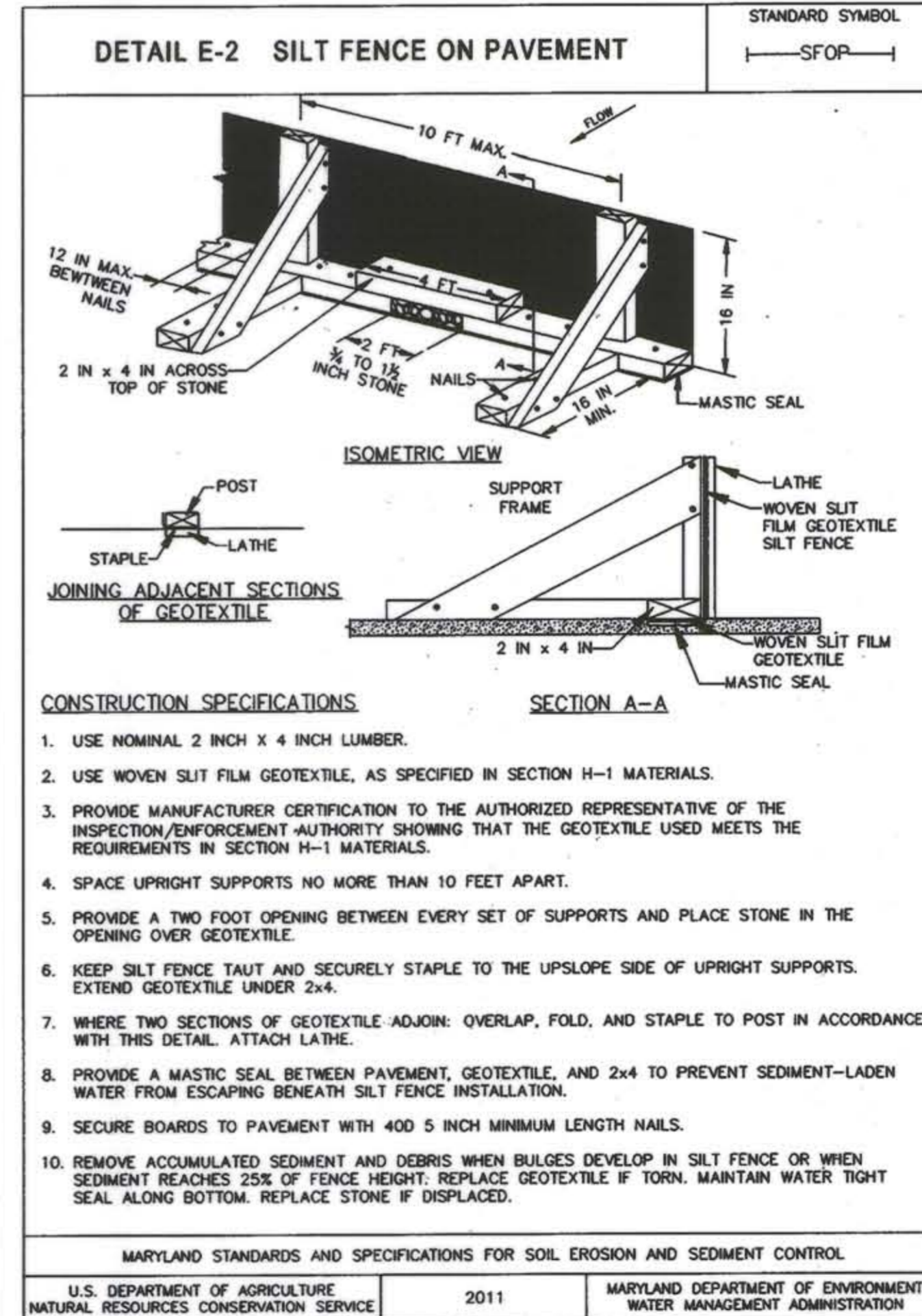
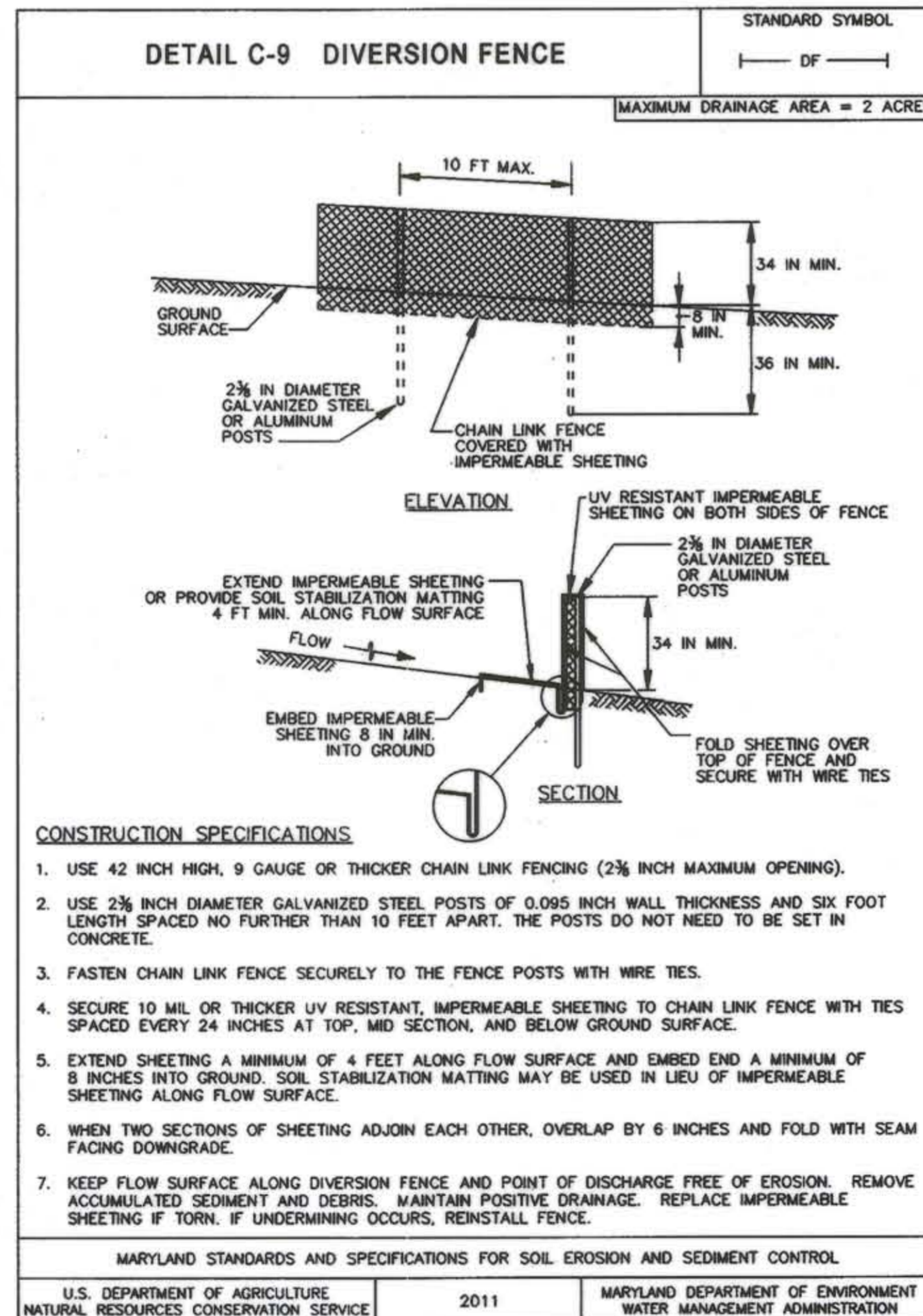
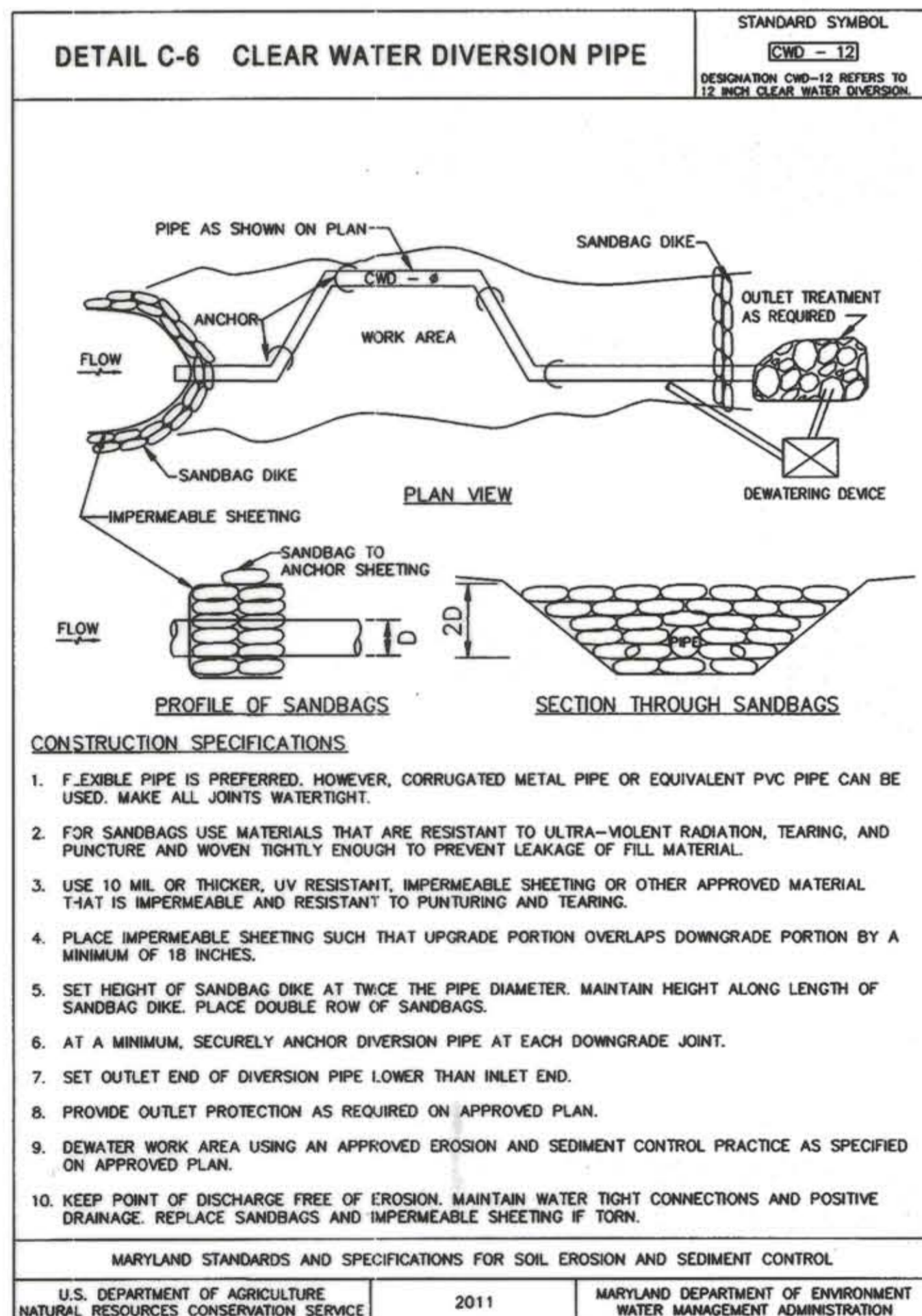
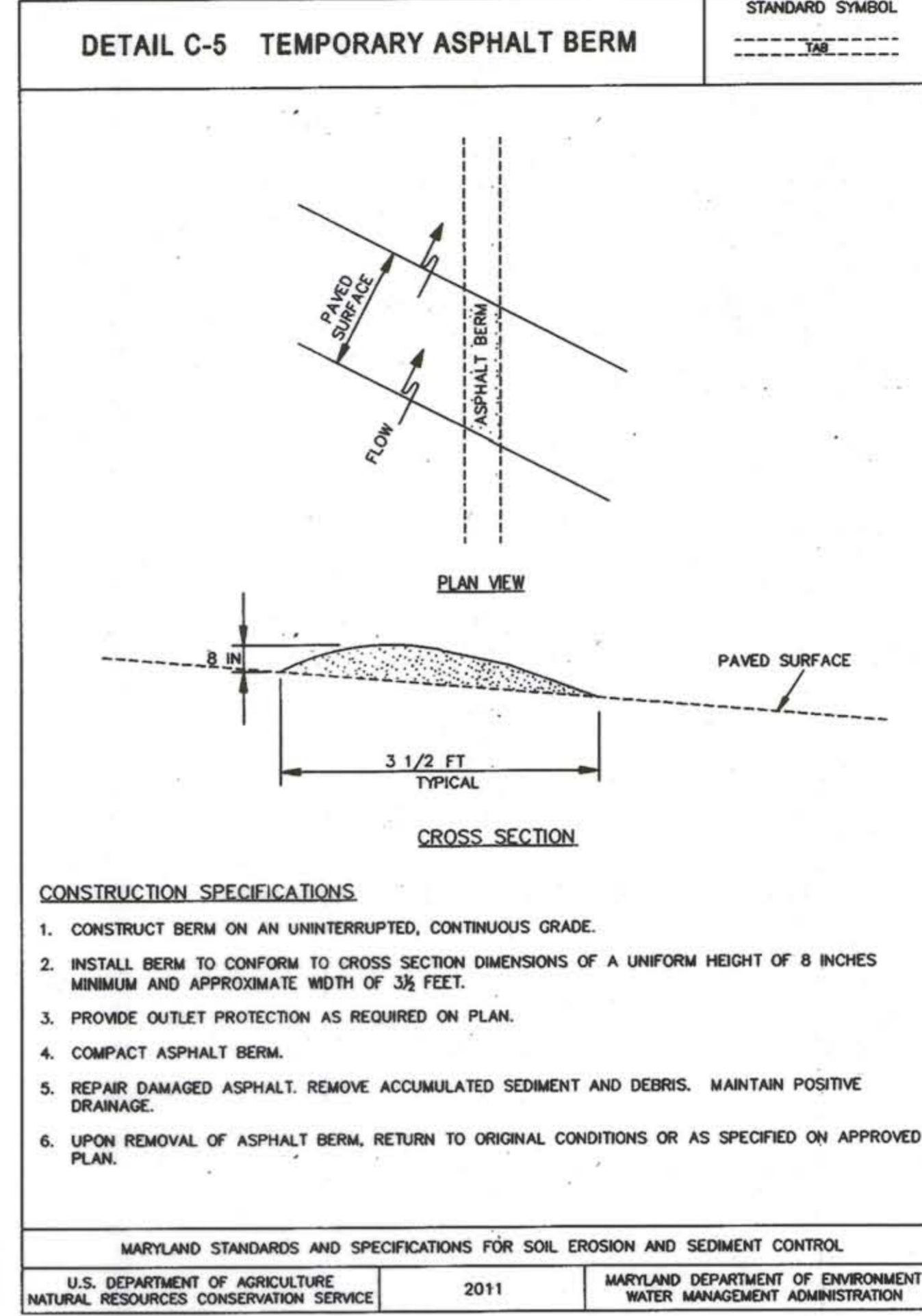
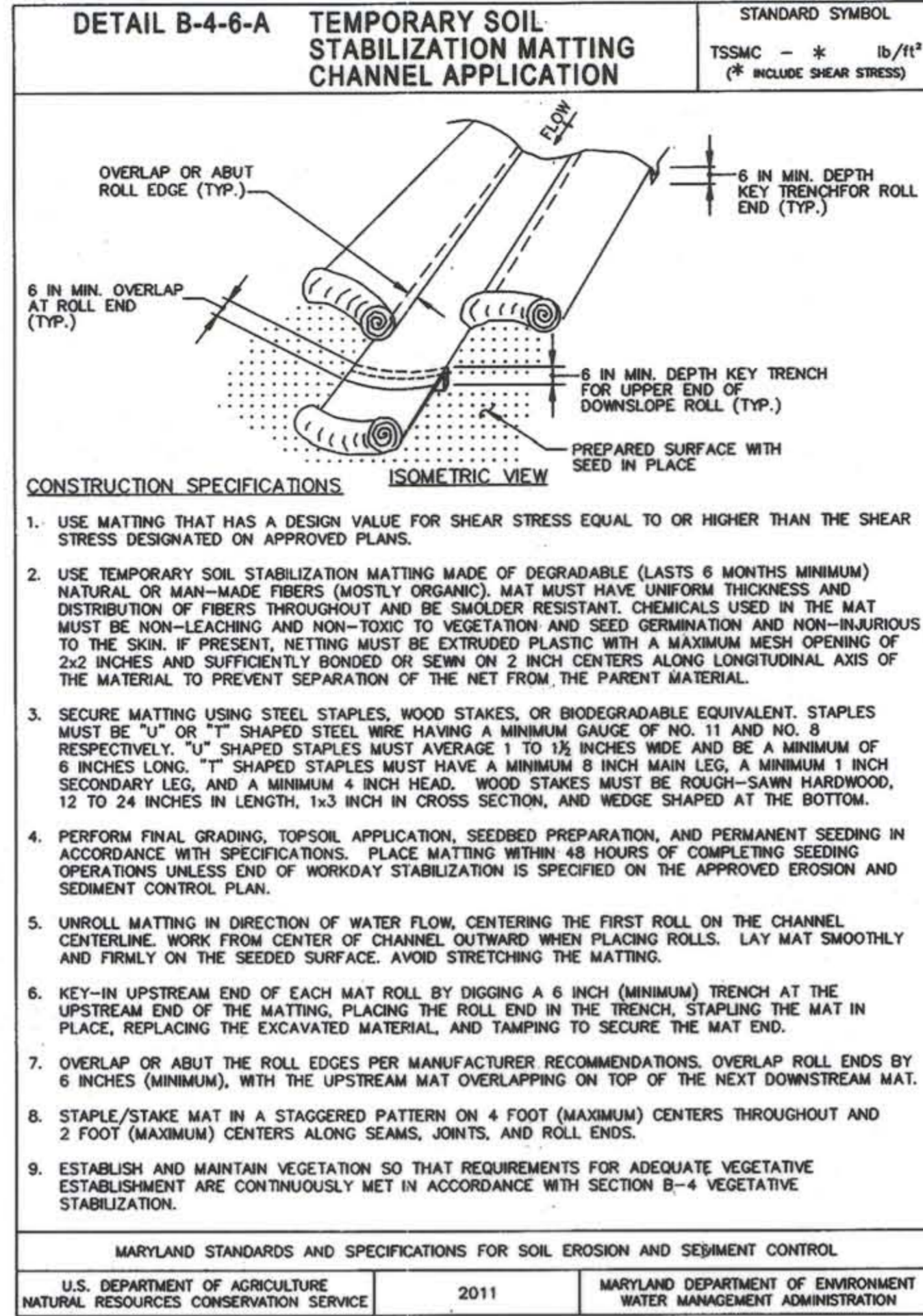
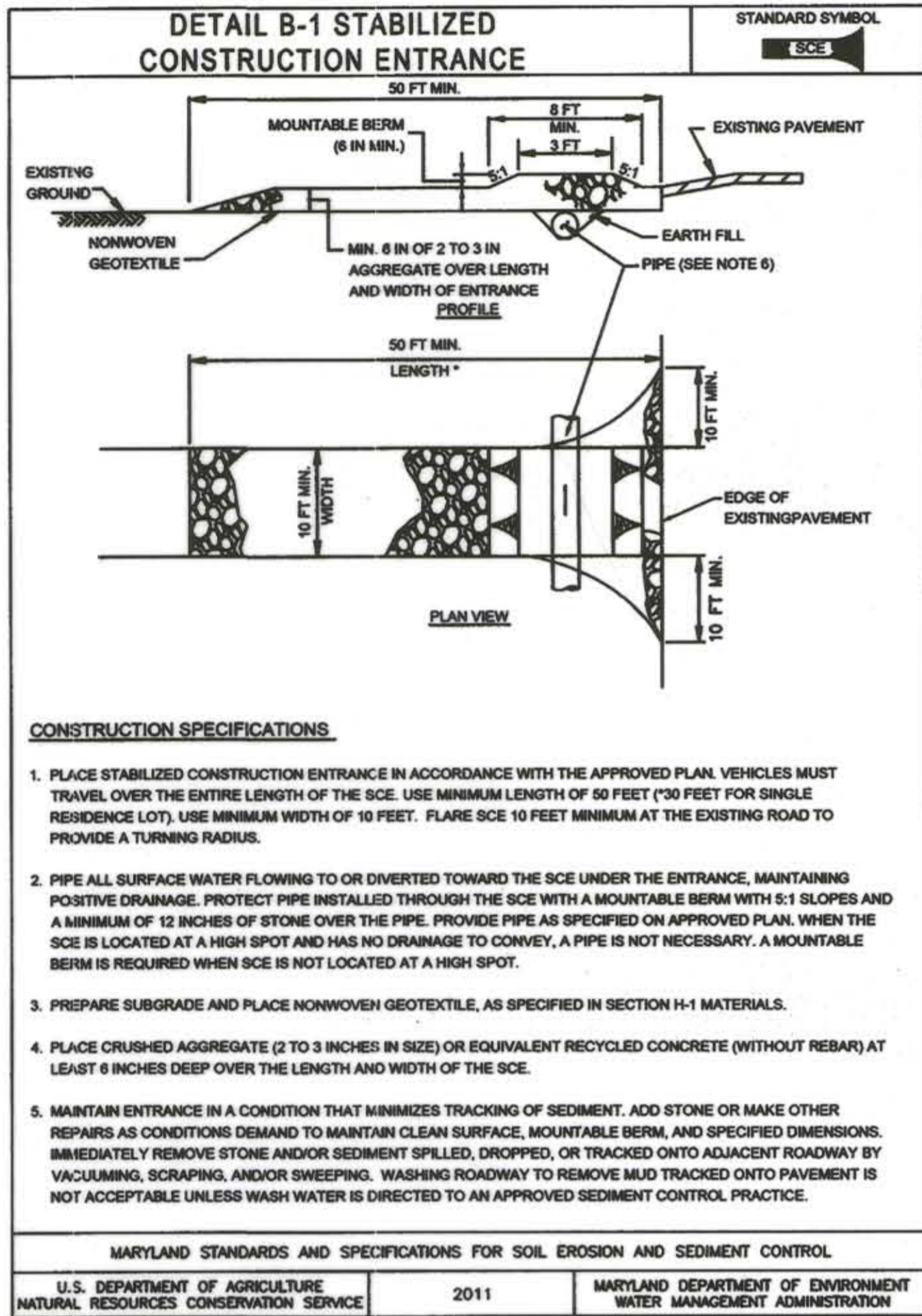
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Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY
ENVIRONMENTAL
SITE DESIGN

MATERIALS
SPECIFICATIONS

PROJECT NO.: 13005.02 SCALE: N/A
SEAL: BY: AG, NLTB CHECK: MT, EWB
DWG. NO.: 25 OF 30





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

John K. Blanton 1/2/14
John K. Blanton
Howard SCD
Date

ENGINEERS 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 COUNTY SOIL CONSERVATION DISTRICT"

Nickolas Lindow 12-20-13
Nickolas Lindow
DATE

DEVELOPERS CERTIFICATE

"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 PROGRAM WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE THE BEGINNING OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT"

Mark S. Richmond 12/23/13
Mark S. Richmond
DATE

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 12/23/2013 ISSUES / REVISIONS
12/23/2013 REVISED SITE DEVELOPMENT PLAN
09/04/2014 SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
NO AS-BUILT INFORMATION REQUIRED FOR THIS SHEET

AS BUILT CERTIFICATION
STATE OF MARYLAND
NICKOLAS LINDOW
Professional Engineer
I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE AS-BUILT DRAWINGS SHOWN ON THIS PLAN WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, PHD, PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John E. Clark 1-17-14
John E. Clark
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Valerie L. ... 1-30-14
Valerie L. ...
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Marsha M. ... 1/20/14
Marsha M. ...
DIRECTOR DATE

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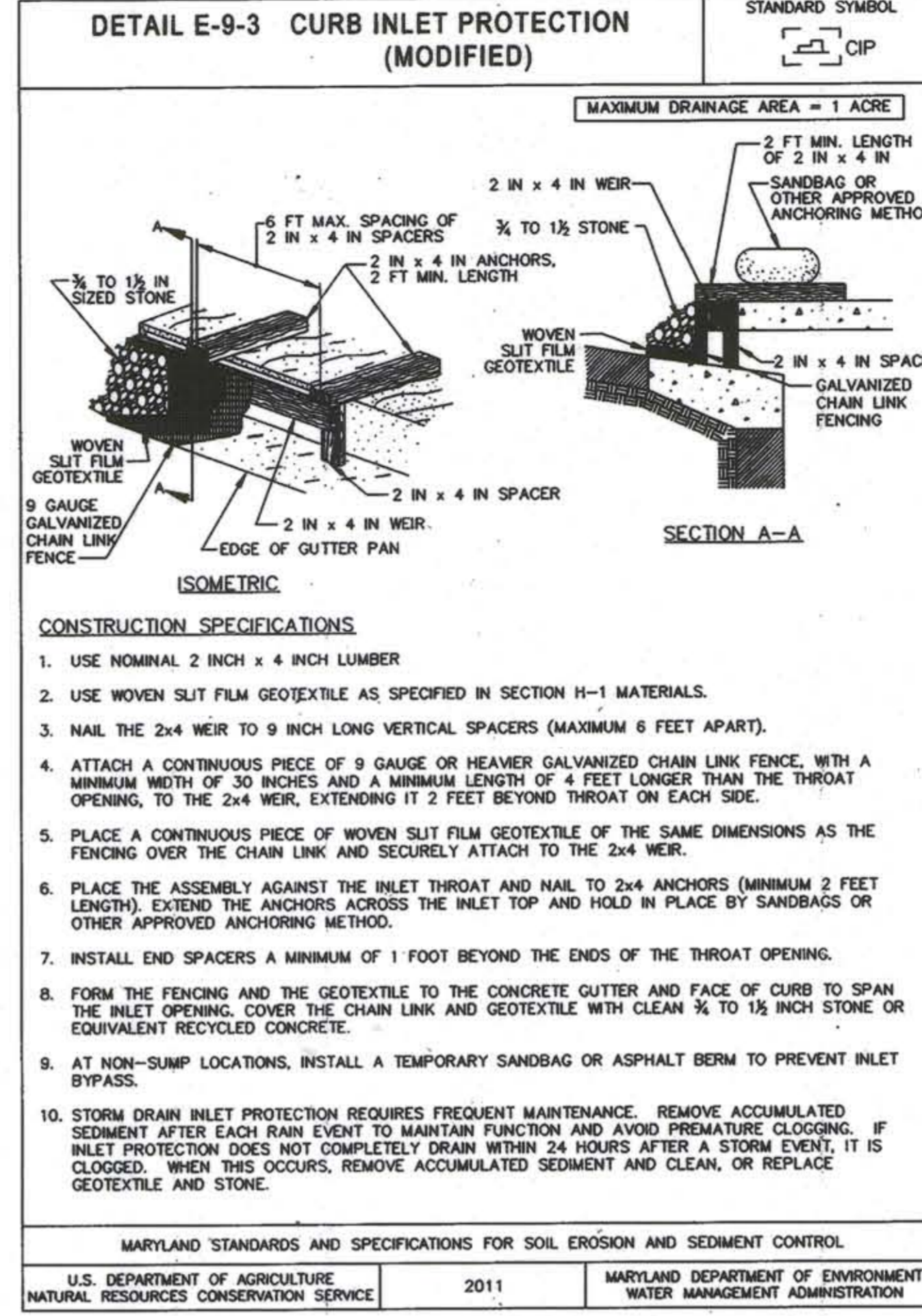
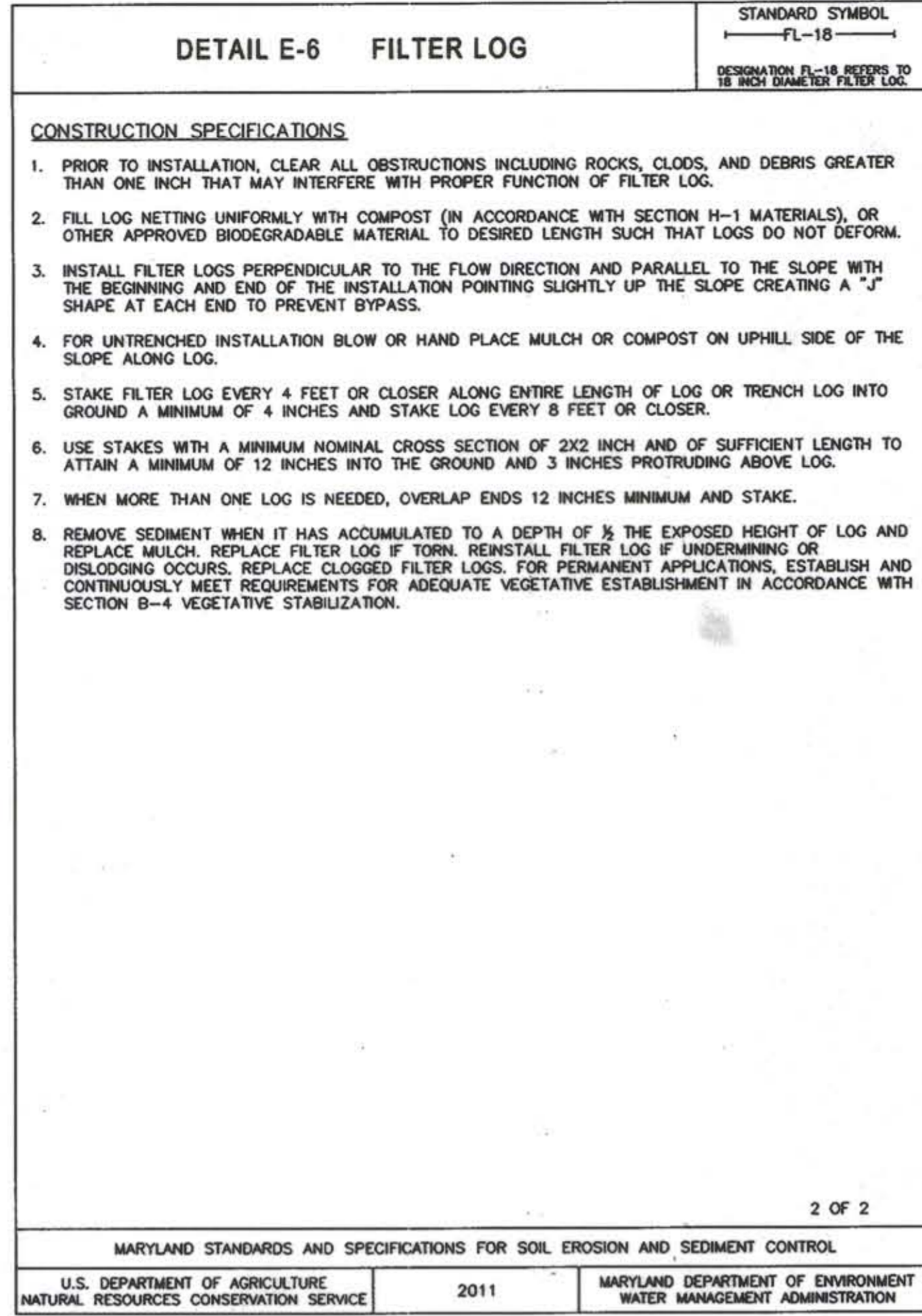
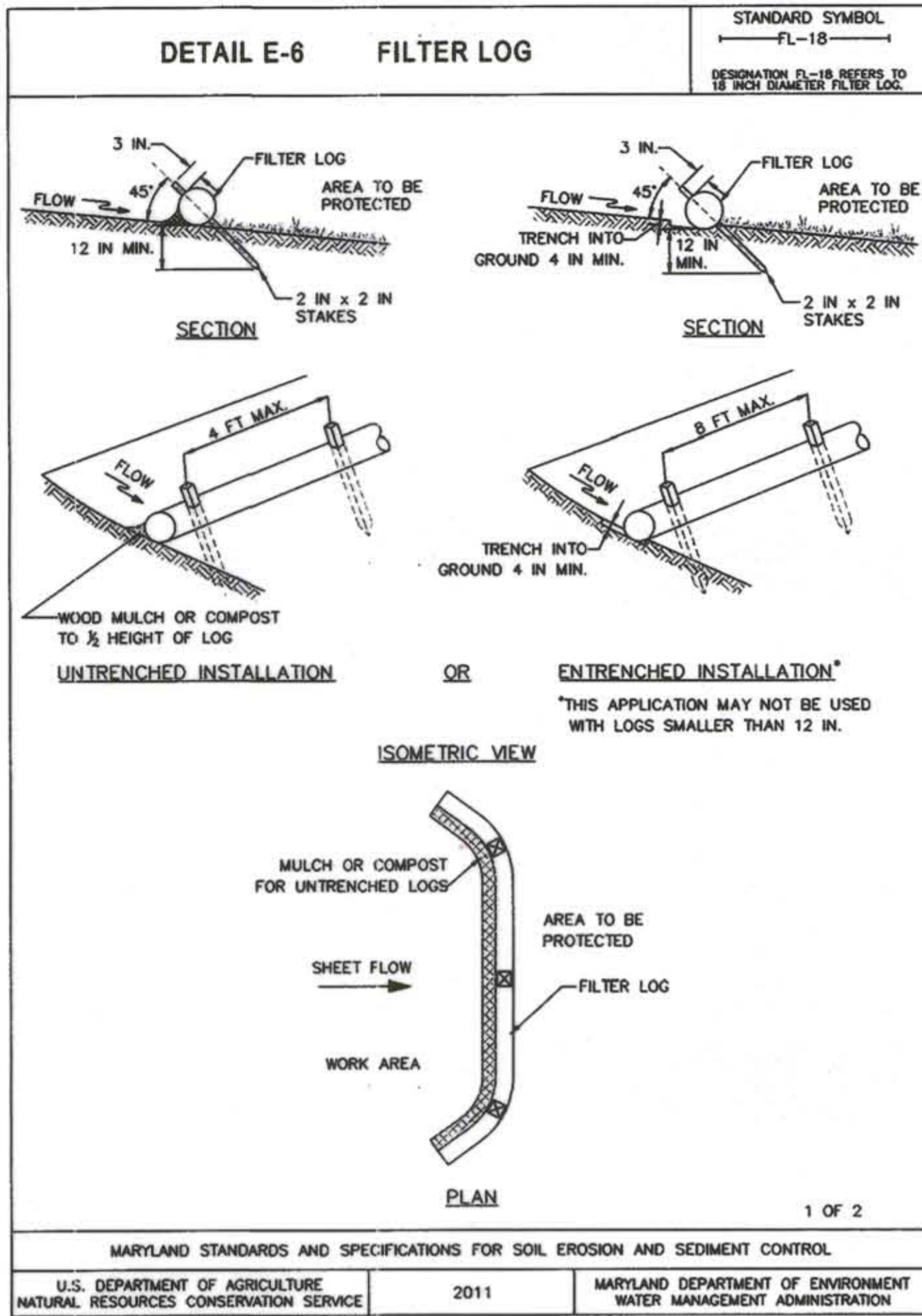
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SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

EROSION & SEDIMENT CONTROL DETAILS I

PROJECT NO.: 13005.02 SCALE: N/A
BY: AG, NL, TB CHECK: MT, EVB
DWG. NO.: 26 OF 30

STATE OF MARYLAND
NICKOLAS LINDOW
Professional Engineer
No. 40888



B-4-8 STANDARDS AND SPECIFICATIONS

FOR STOCKPILE AREA

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

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

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

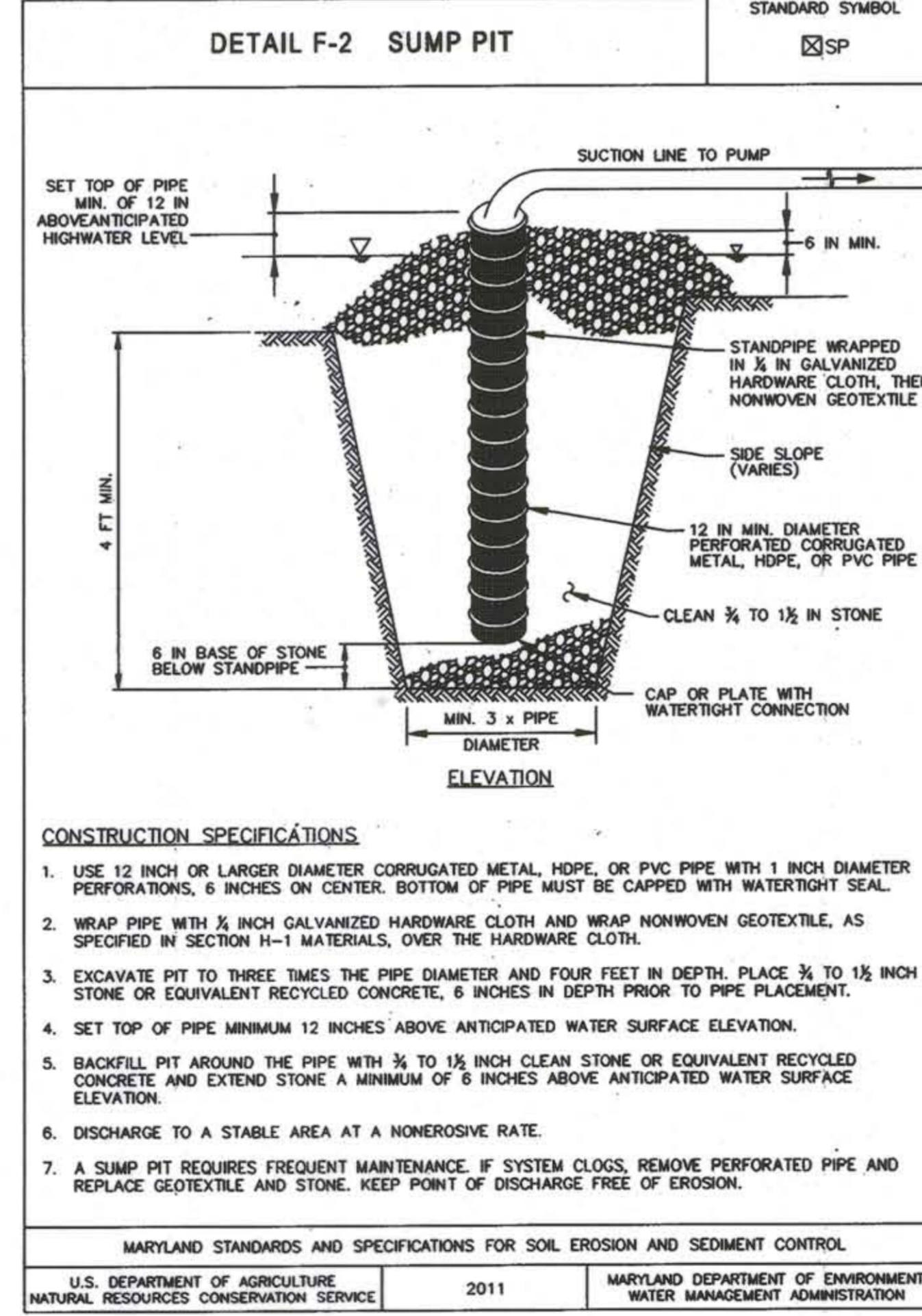
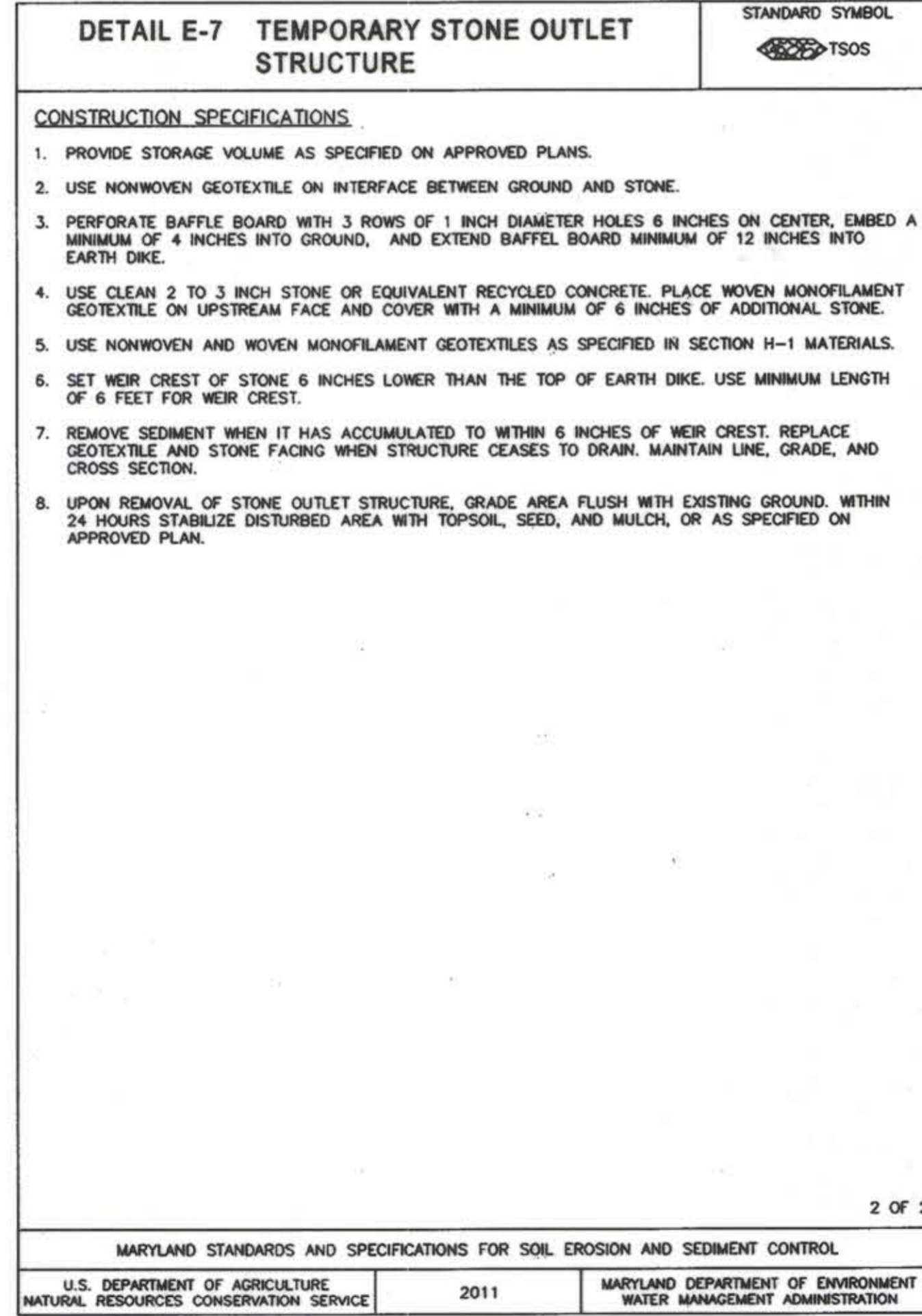
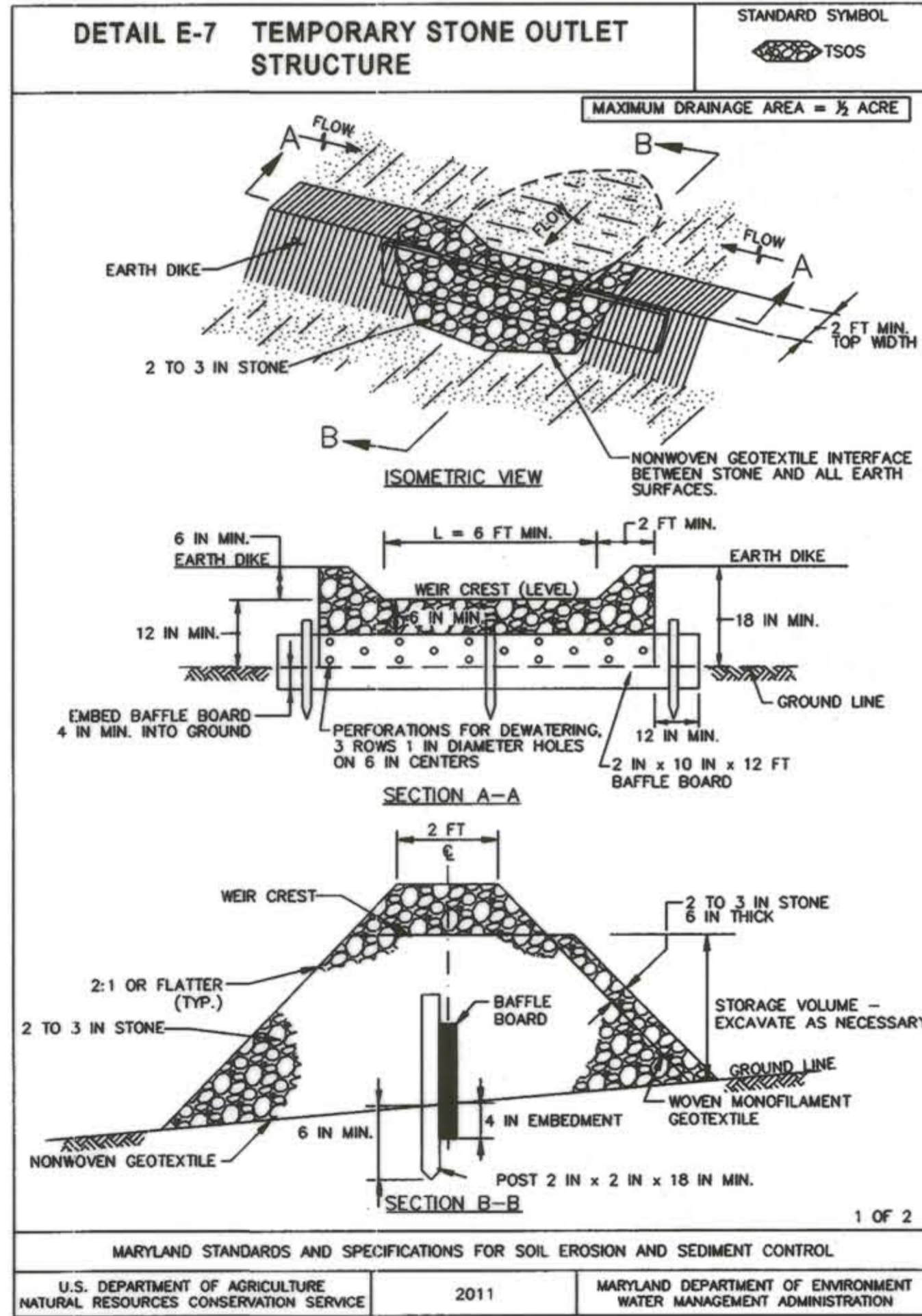
Criteria

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

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.

B.43



ENGINEERS 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 COUNTY SOIL CONSERVATION DISTRICT.

John P. Robertson 1/17/14
Howard SCD Date

DEVELOPERS 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 THE BEGINNING OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

Mark S. Richmond 12/20/13
Mark S. Richmond DATE

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 09/04/2014 ISSUES / REVISIONS: REVISED SITE DEVELOPMENT PLAN

AS-BUILT NOTES:
NO AS-BUILT INFORMATION REQUIRED FOR THIS SHEET

AS BUILT CERTIFICATE
I HEREBY CERTIFY, BY PERSONAL KNOWLEDGE AND BELIEF, THAT THE AS-BUILT INFORMATION ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE AS-BUILT PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Nick Lindow 10-16-14
NICK LINDOW, PH.D., PE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John Clark 1-17-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

W. J. ... 1-30-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Janice ... 1-21-14
DIRECTOR DATE

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Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

EROSION & SEDIMENT CONTROL DETAILS II

PROJECT NO.: 13005.02 SCALE: N/A

DATE: 12/20/13

27 OF 30

SDP-89-232

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 12/23/2013 ISSUES / REVISIONS
REVISED SITE DEVELOPMENT PLAN
09/04/2014 SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS
AS-BUILT NOTES:
REVISIONS TO DETAILS #1, 2, 3, 4, 5, 6 & 7



AS BUILT CERTIFICATION
I HEREBY CERTIFY THAT MY BEST KNOWLEDGE AND BELIEF TO THE BEST OF MY PLAN WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
Nick Lindow 10-16-14
NICK LINDOW, PND, PE DATE

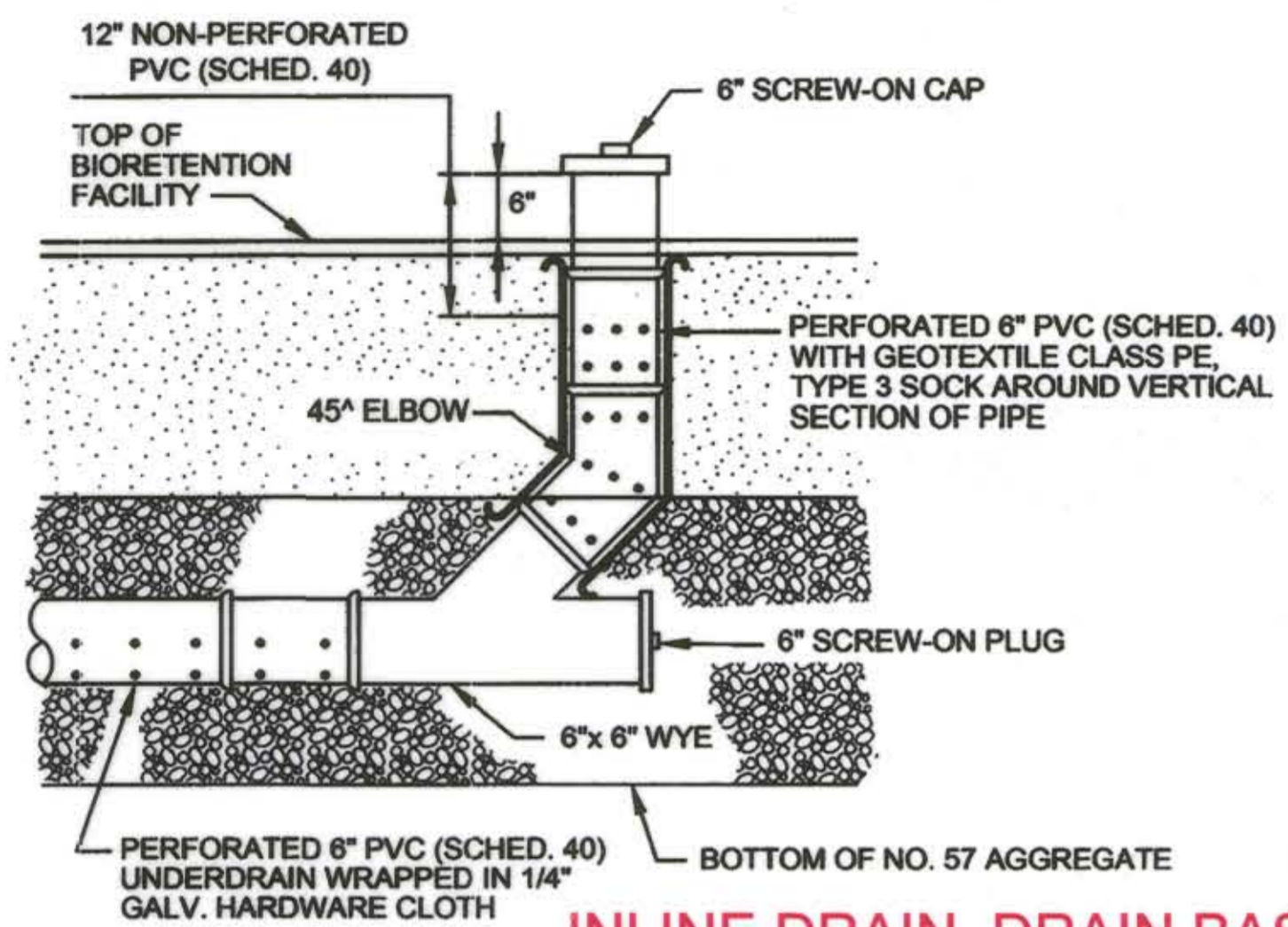
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief Development Engineering Division 1-17-14
Chief, Division of Land Development 1-30-14
Director 1/30/14
DATE

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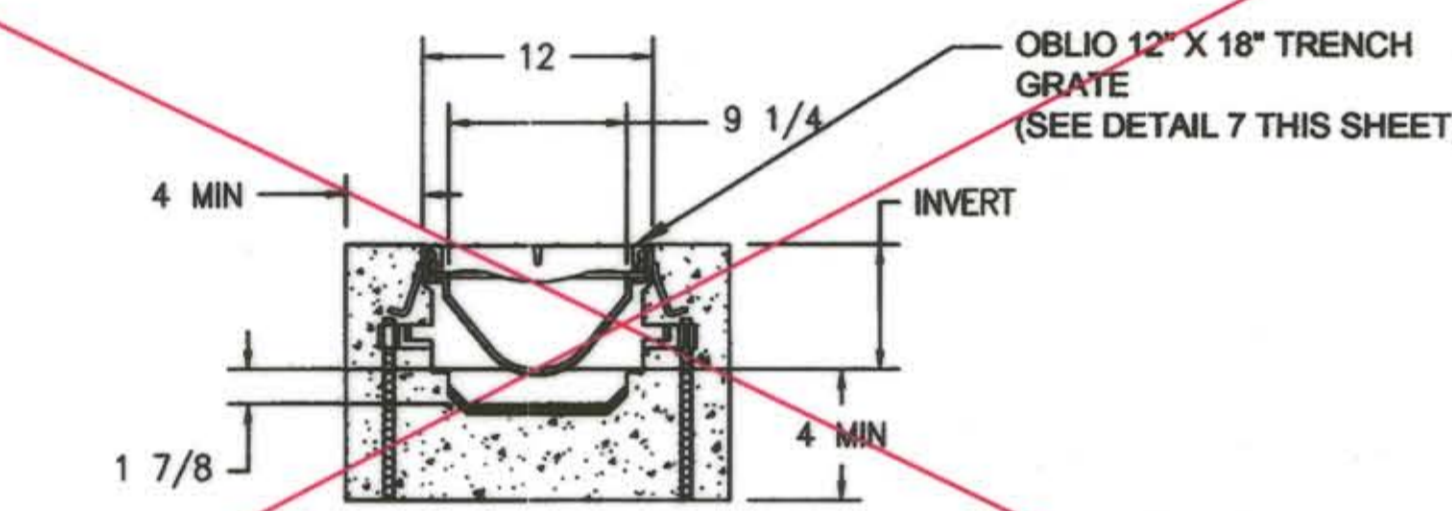
SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

DRAINAGE DETAILS I

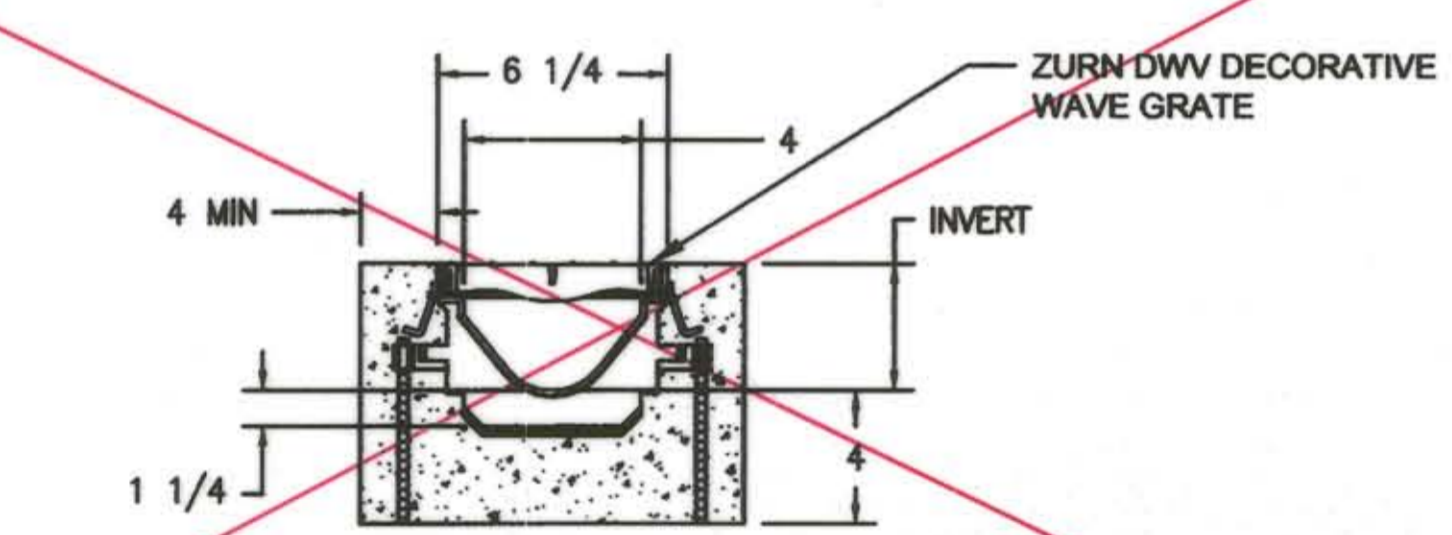
PROJECT NO.: 13005.02 SCALE: N/A
BY: AG, NL, TB CHECK: MT, EWB
DWG. NO.:
28 OF 30



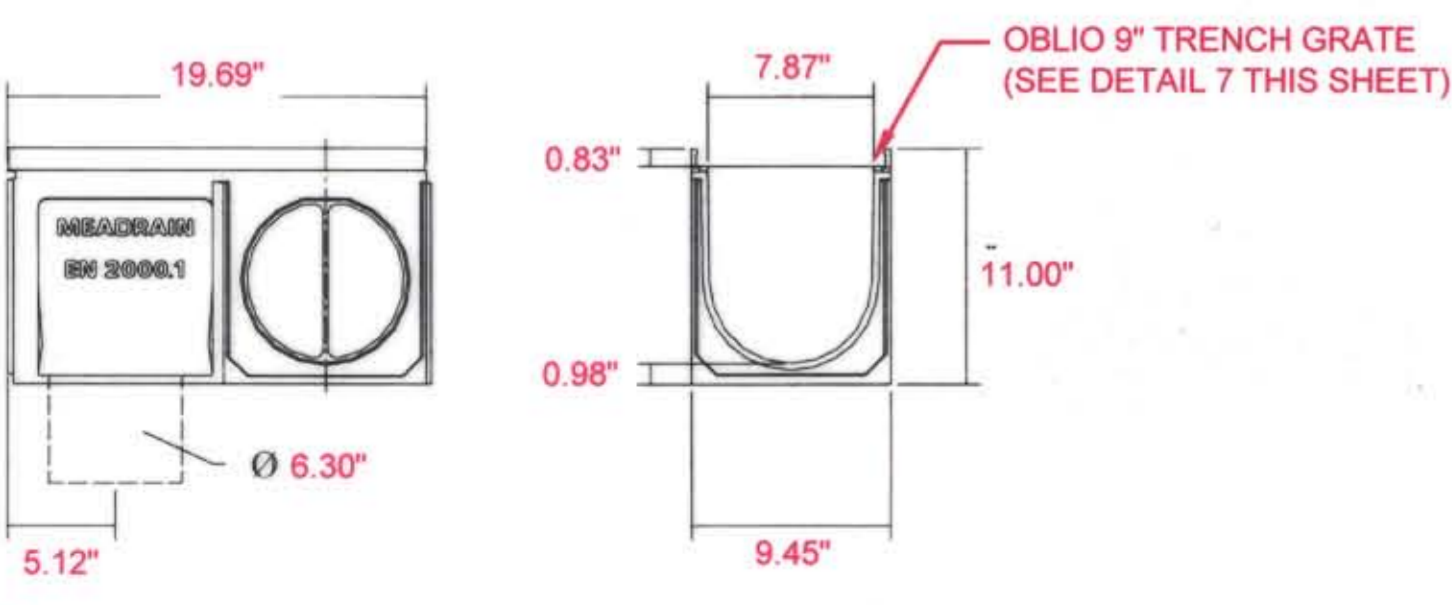
1 COMBINED CLEANOUT AND MONITORING WELL DETAIL
NTS



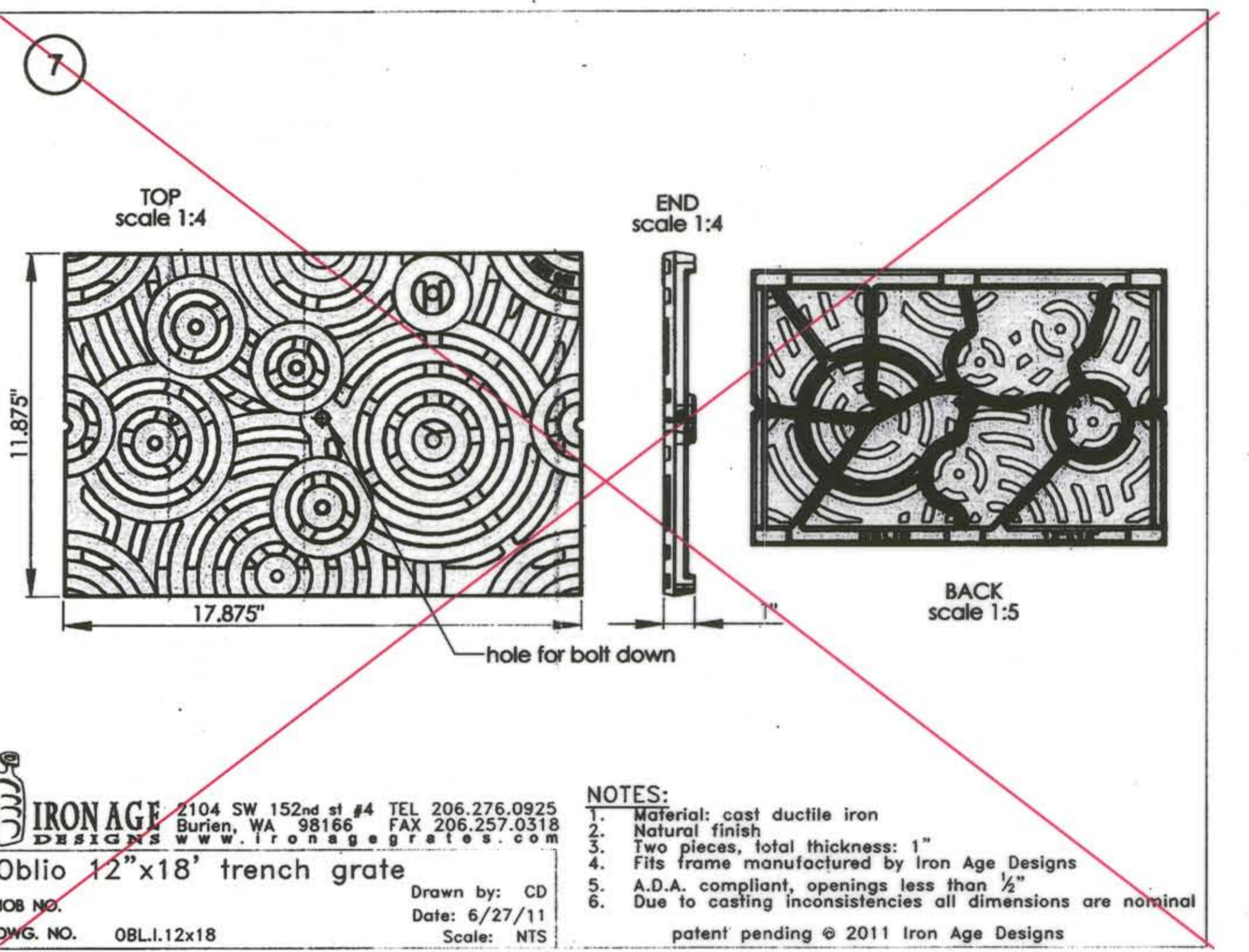
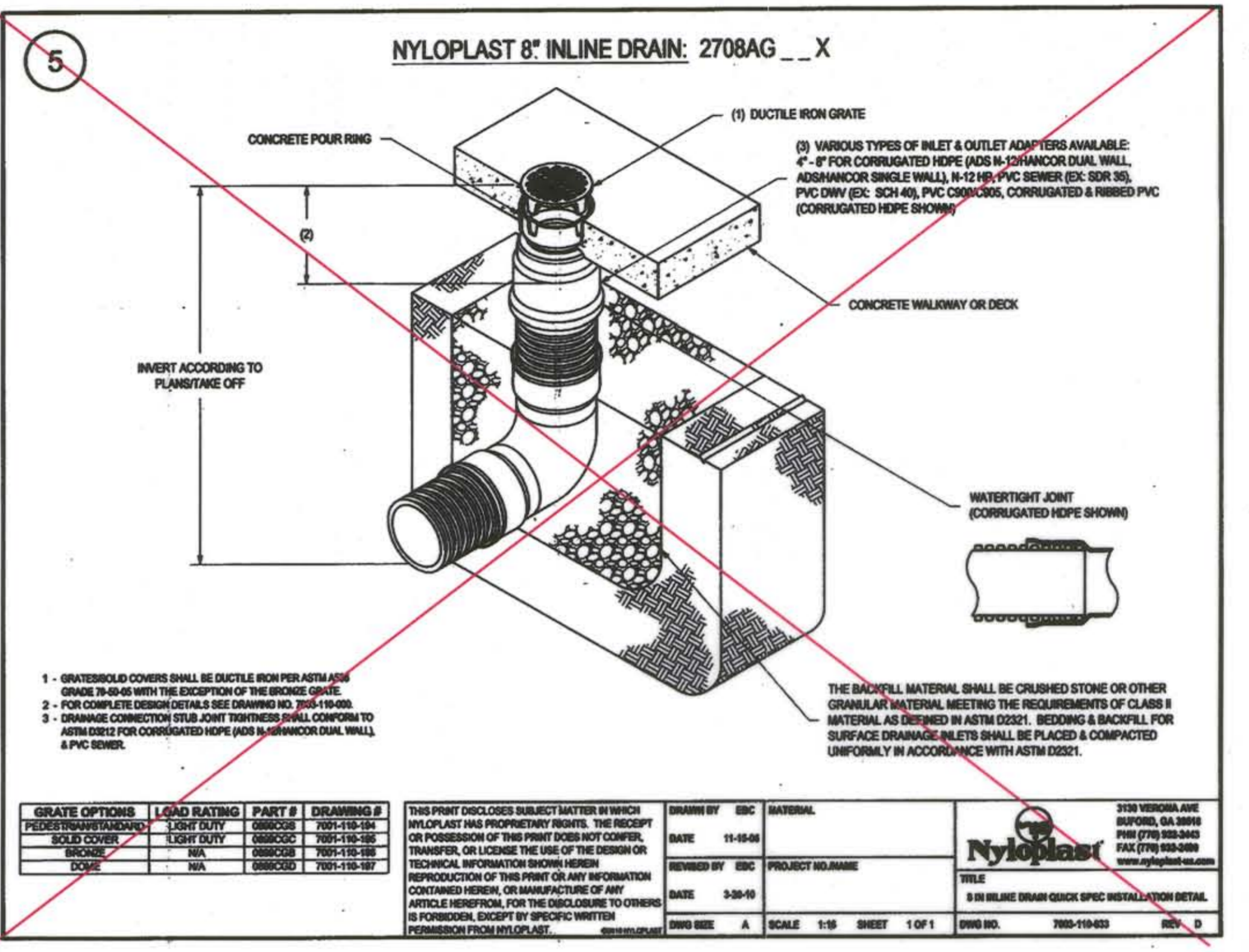
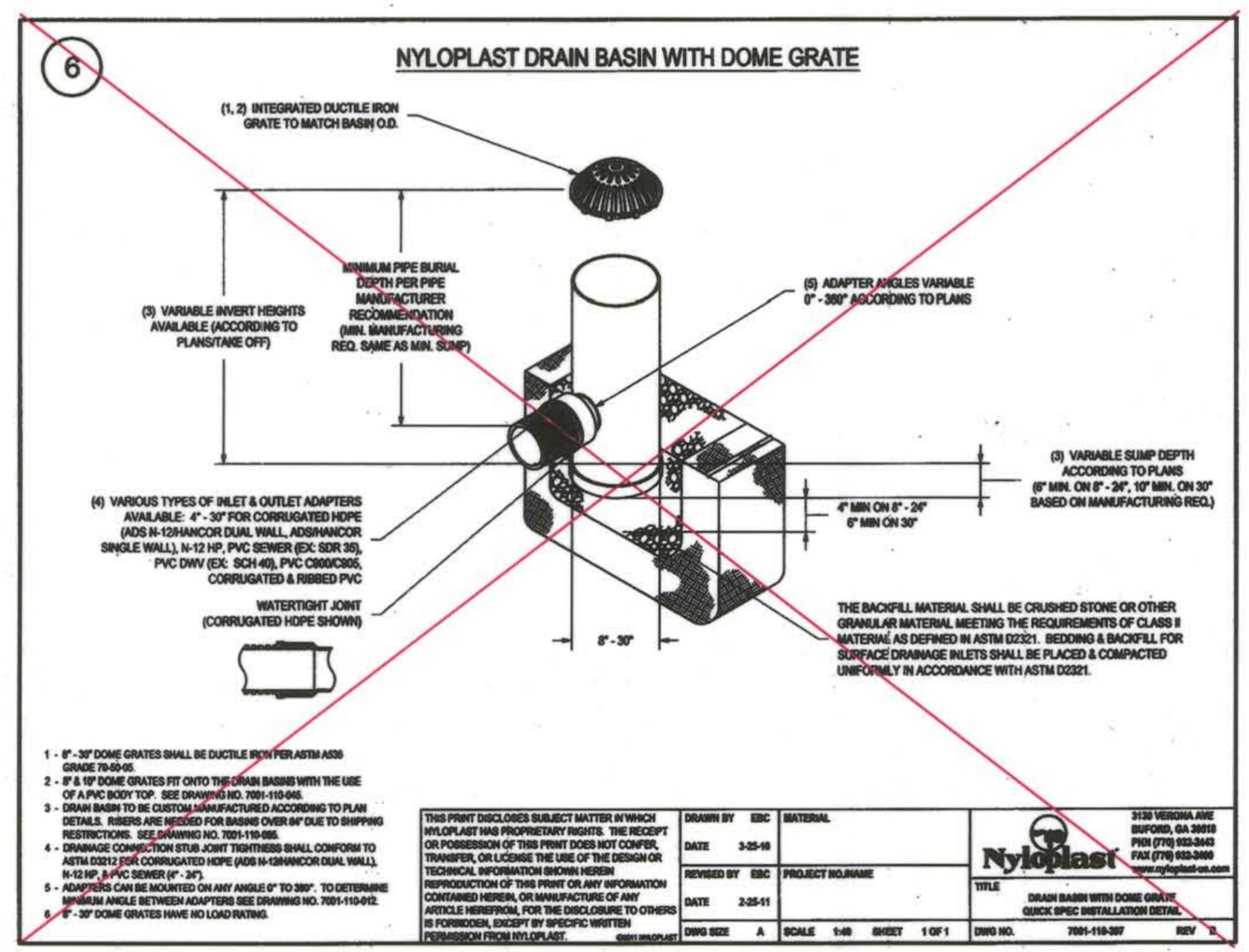
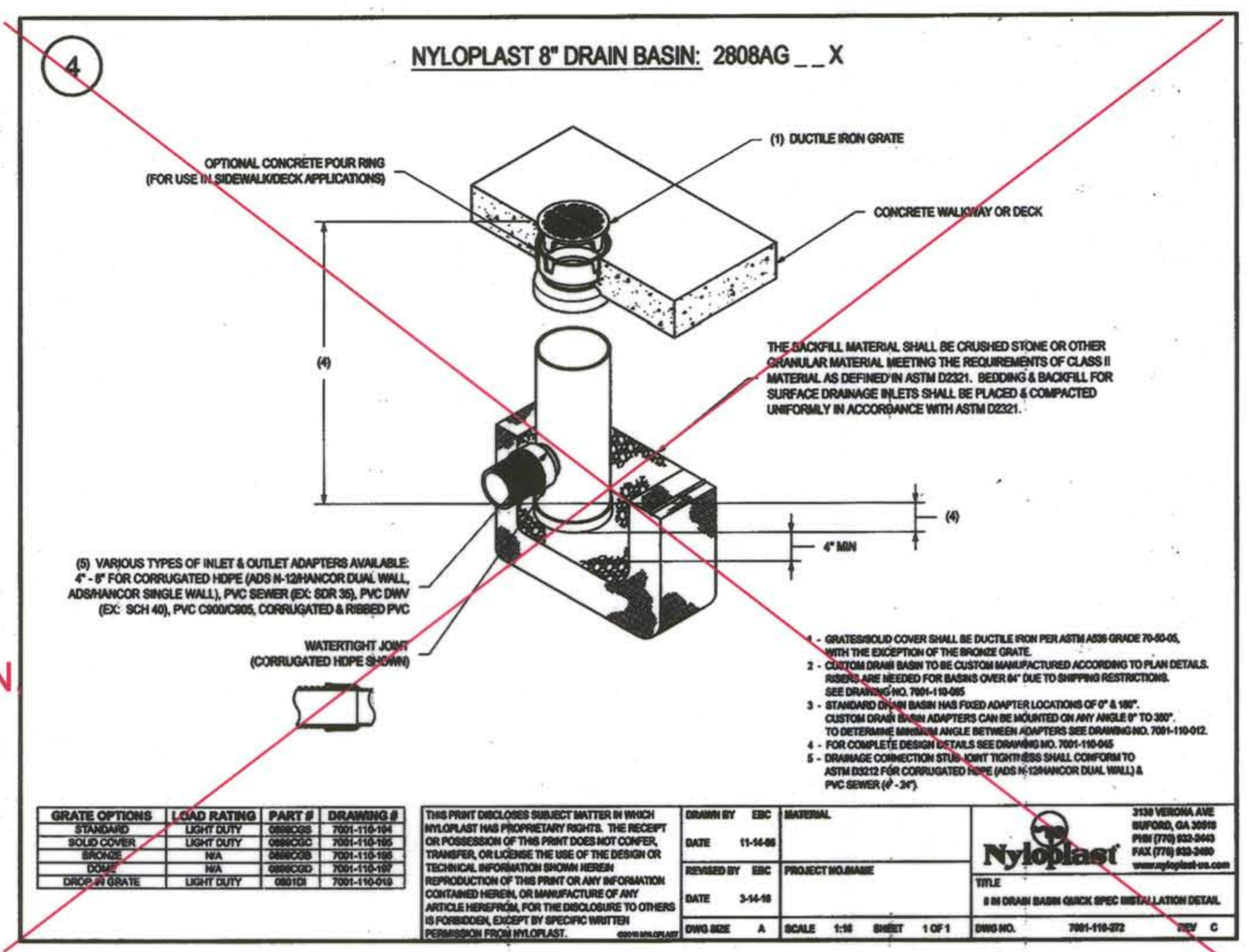
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NOT TO SCALE



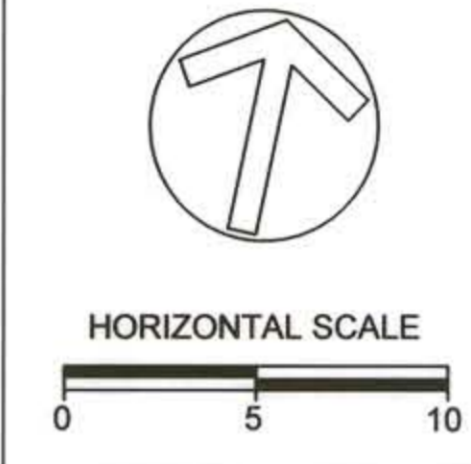
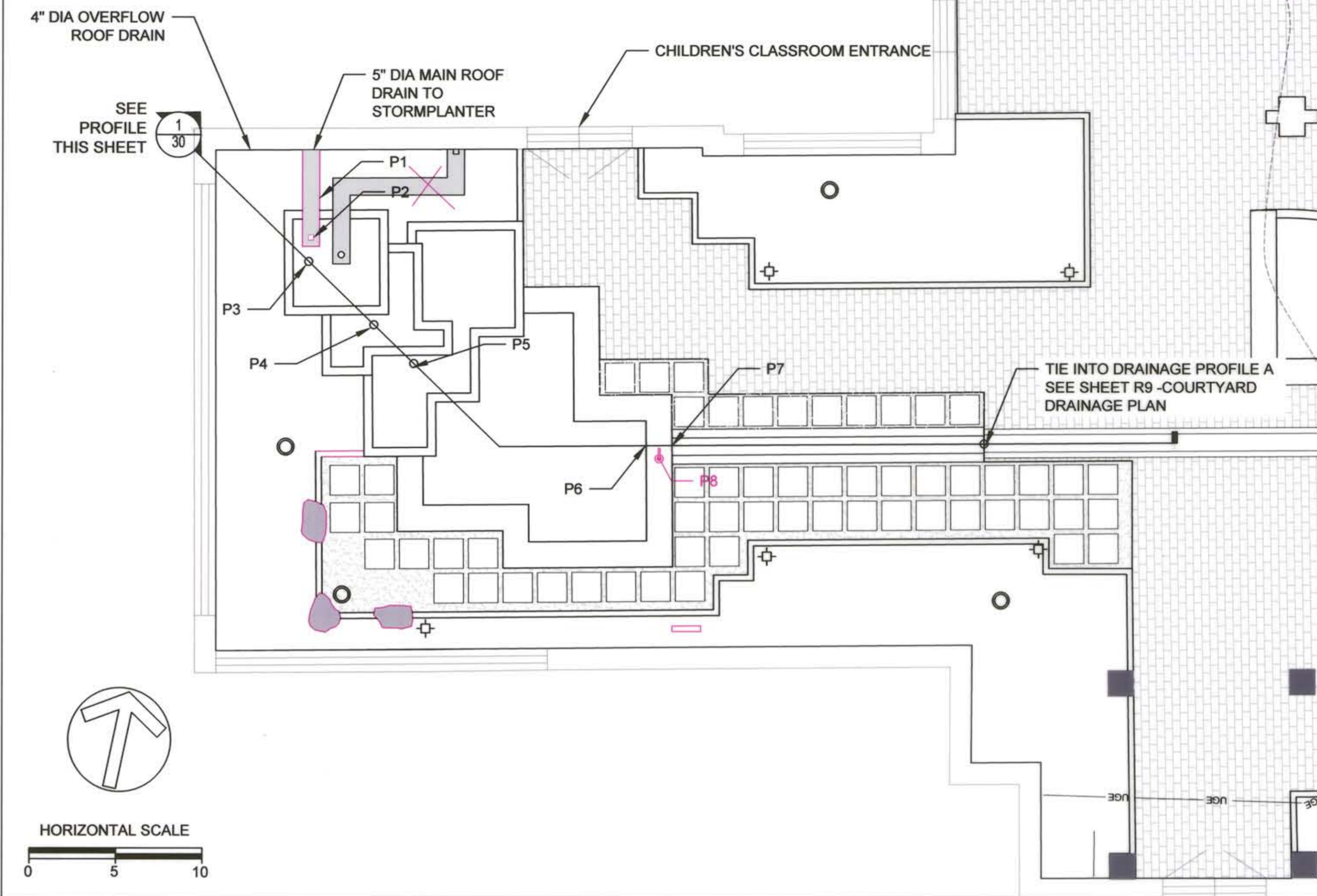
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NOT TO SCALE



2 TRENCH DRAIN - TYPE I - MEADRAIN EN 2000.1
NOT TO SCALE

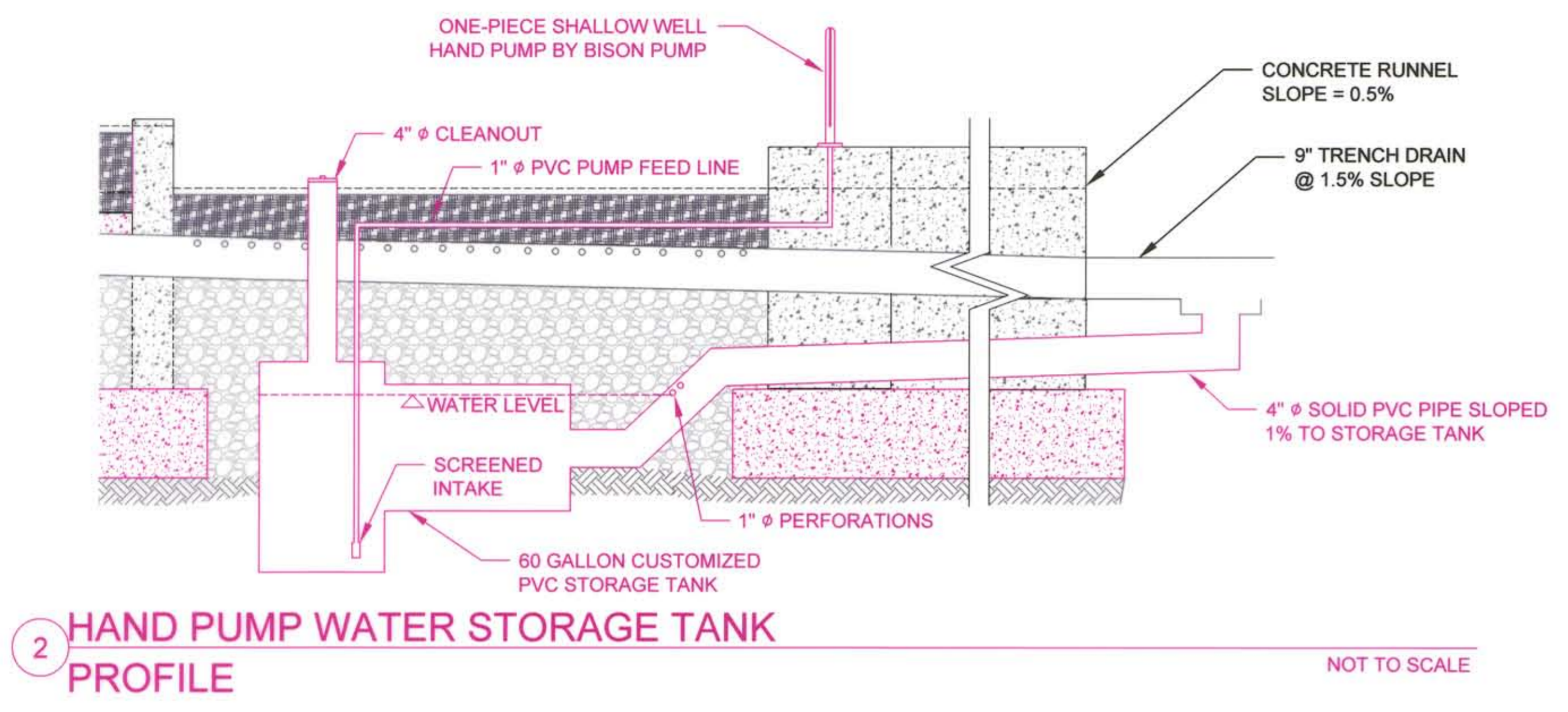


STORMPLANTER PLAN

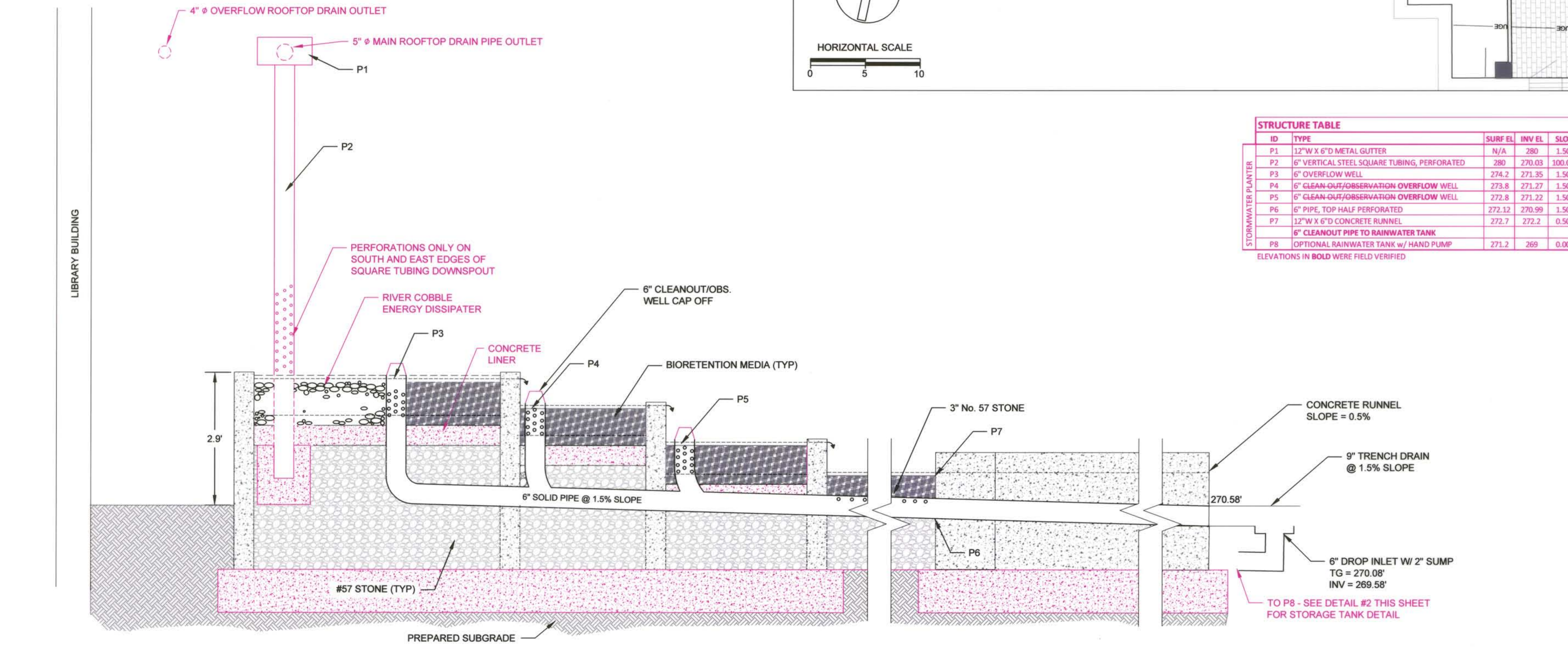


STRUCTURE TABLE					
ID	TYPE	SURF EL	INV EL	SLOPE	STA
P1	12"W X 6"D METAL GUTTER	N/A	280	1.50%	N/A
P2	6" VERTICAL STEEL SQUARE TUBING, PERFORATED	280	270.03	100.00%	N/A
P3	6" OVERFLOW WELL	274.2	271.35	1.50%	N/A
P4	6" CLEAN-OUT/OBSERVATION OVERFLOW WELL	273.8	271.27	1.50%	N/A
P5	6" CLEAN-OUT/OBSERVATION OVERFLOW WELL	272.8	271.22	1.50%	N/A
P6	6" PIPE, TOP HALF PERFORATED	272.12	270.99	1.50%	N/A
P7	12"W X 6"D CONCRETE RUNNEL	272.7	272.2	0.50%	N/A
P8	6" CLEANOUT PIPE TO RAINWATER TANK				
P8	OPTIONAL RAINWATER TANK w/ HAND PUMP	271.2	269	0.00%	N/A

ELEVATIONS IN BOLD WERE FIELD VERIFIED



2 HAND PUMP WATER STORAGE TANK PROFILE NOT TO SCALE



1 STORMPLANTER PROFILE NOT TO SCALE

CLIENT

HOWARD COUNTY
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
SUITE 514
COLUMBIA, MD 21046

DATE: 09/04/2014 ISSUES / REVISIONS: SITE DEVELOPMENT PLAN AS-BUILT DRAWINGS

AS-BUILT NOTES:
REVISIONS TO STORMPLANTER DETAILS #1 & 2
REVISIONS TO STRUCTURE TABLE

AS BUILT CERTIFICATION
I HEREBY CERTIFY THAT THE BEST OF MY KNOWLEDGE AND BELIEF THE WORK SHOWN ON THIS PLAN WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

Michael Lindow 10-16-14
MICHAEL LINDOW, P.D., P.E. DATE

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Restore the Earth & Inspire Ecological Stewardship

SAVAGE LIBRARY ENVIRONMENTAL SITE DESIGN

STORMWATER PLANTER PLAN

PROJECT NO.: 13005.02 SCALE: VALUE
BY: AG, NL, TB CHECK: MT, EWB
DWG. NO.:
30 OF 30