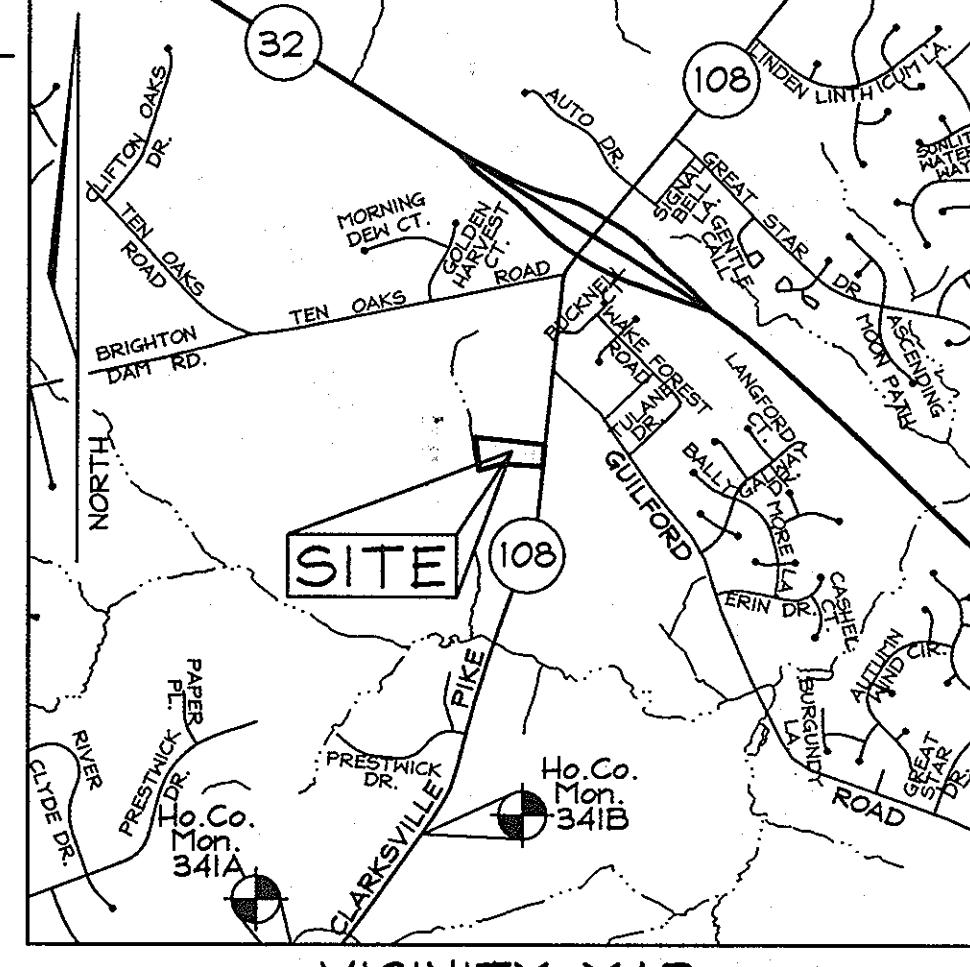
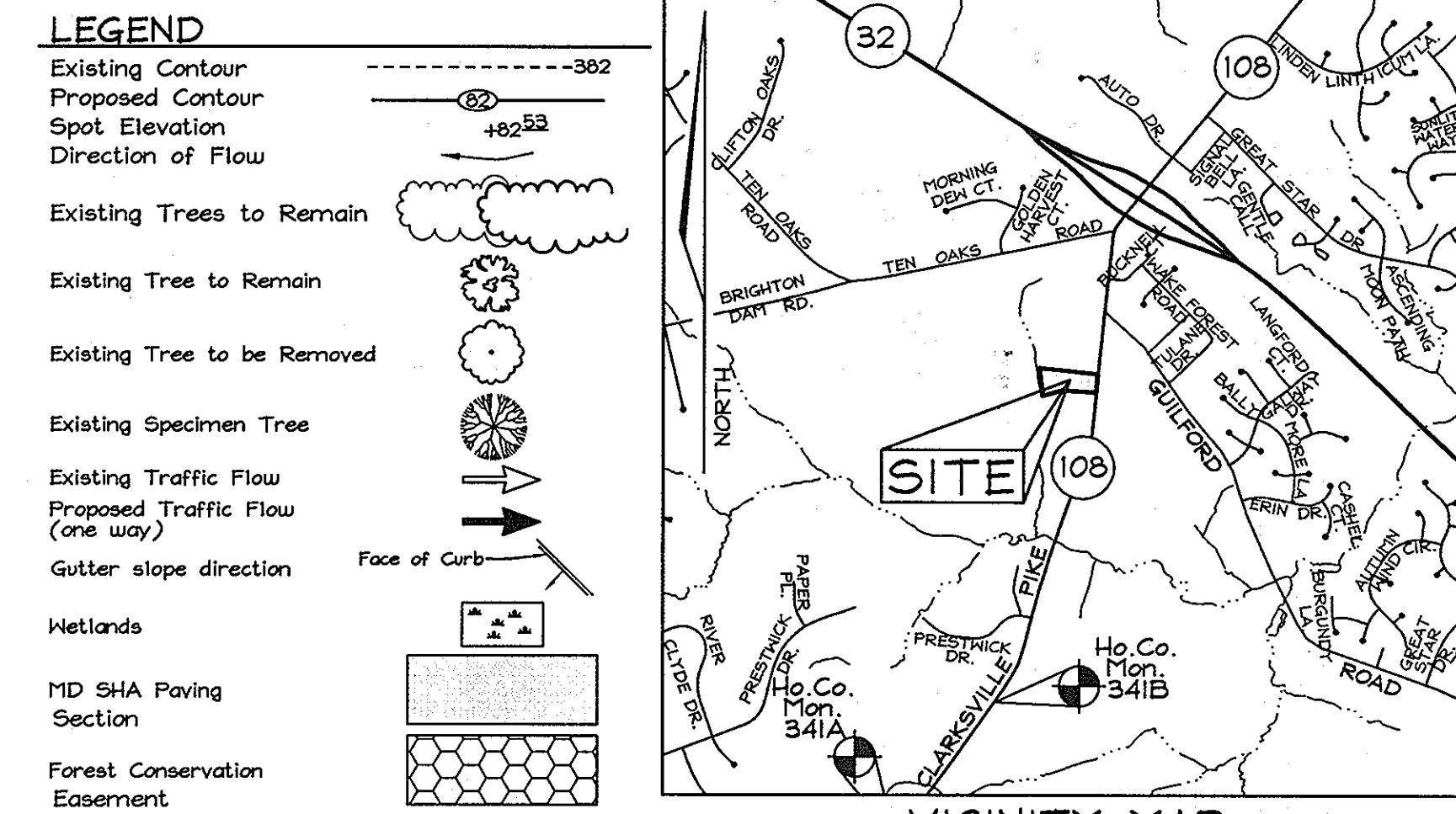


SITE DEVELOPMENT PLAN CHRIST LUTHERAN CHURCH HOWARD COUNTY, MARYLAND

GENERAL NOTES

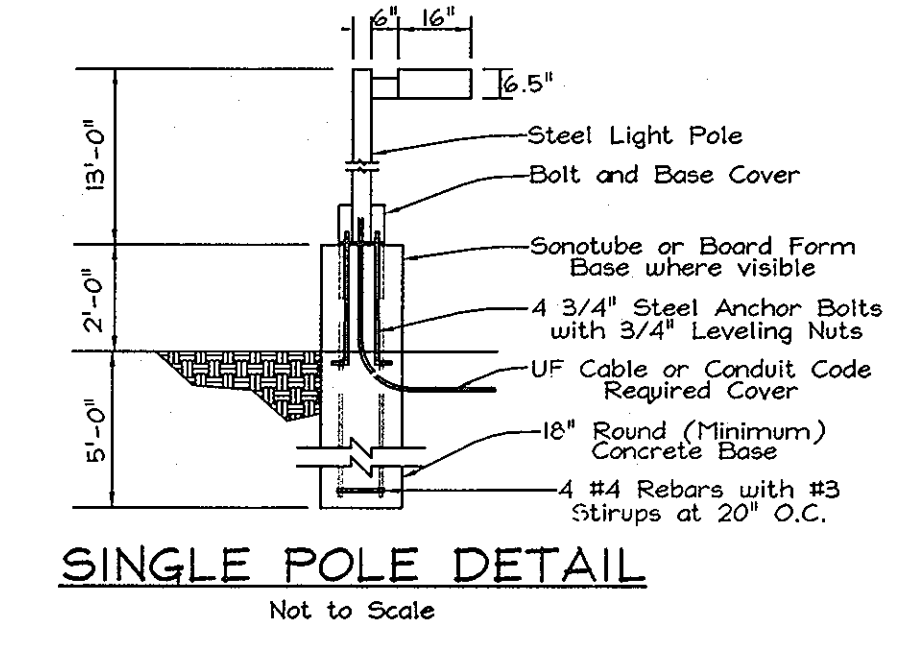
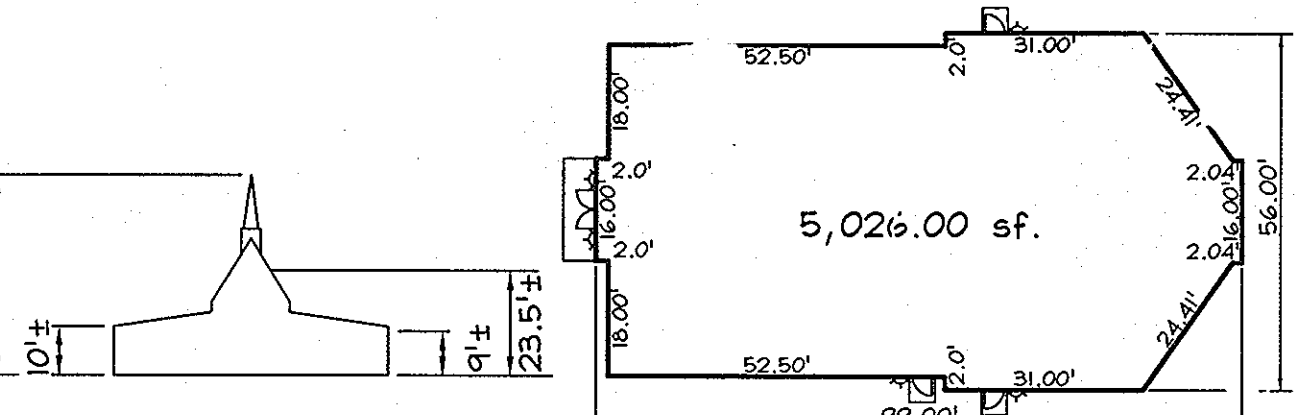
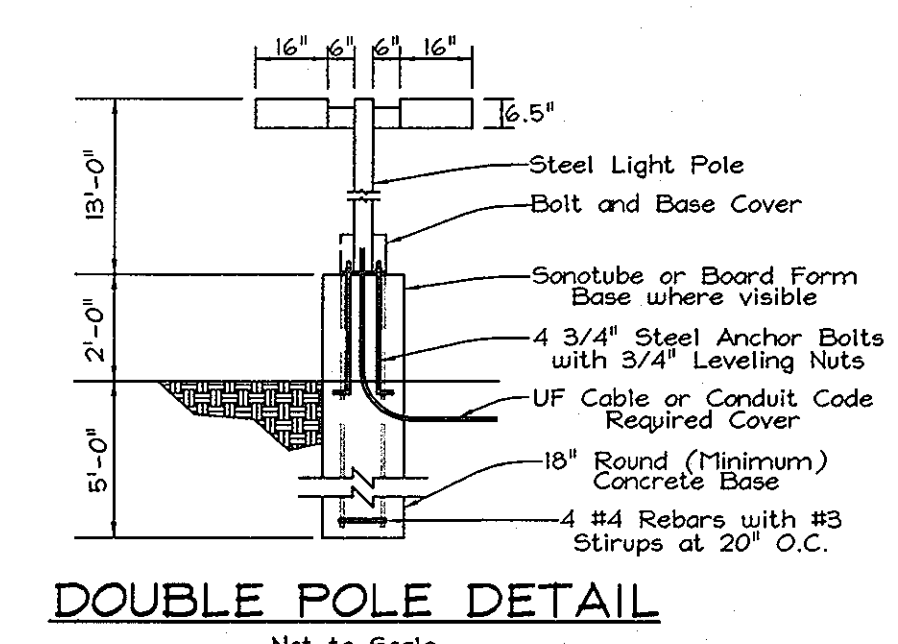
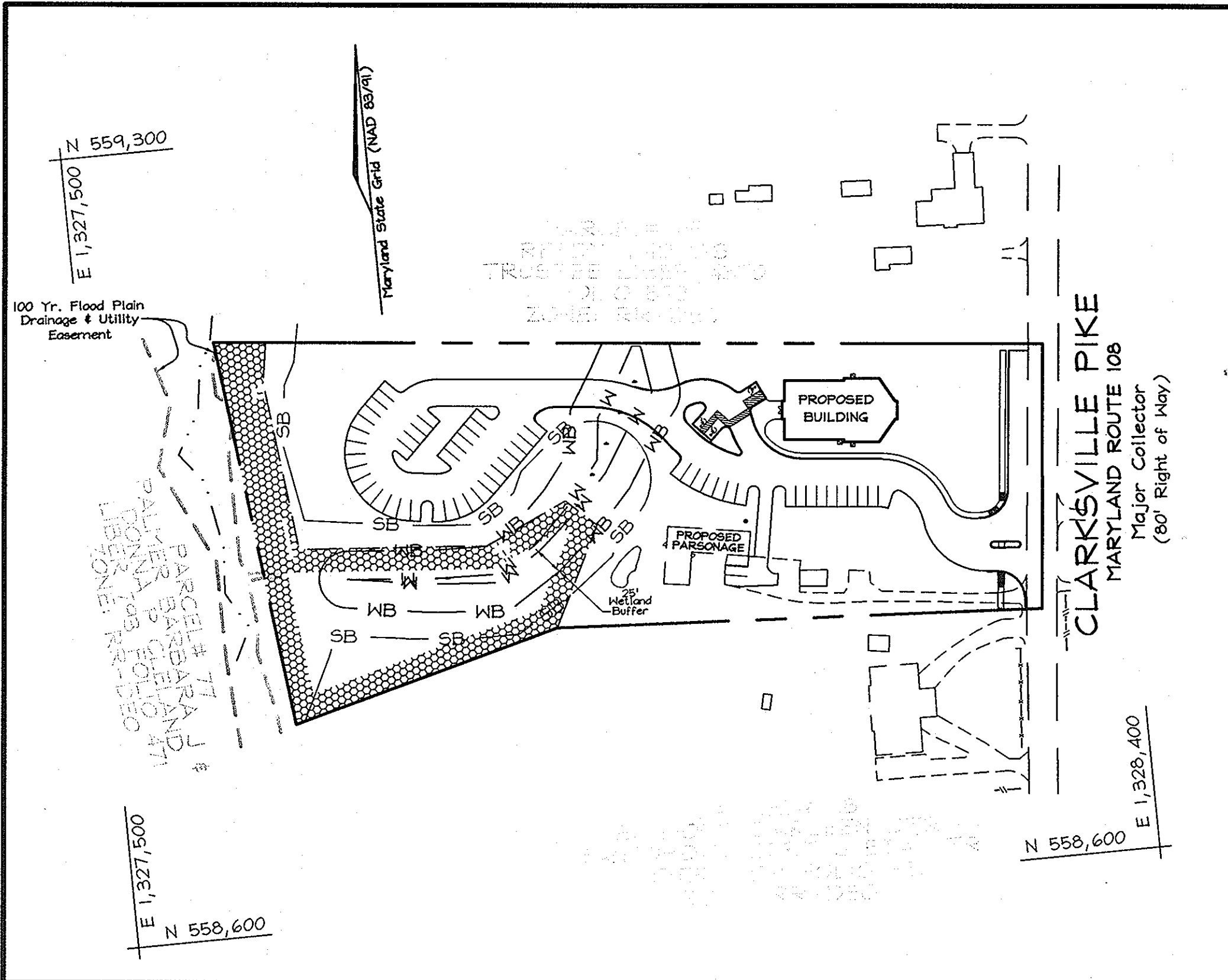
- Subject property zoned "RR-DEO" per 2/2/04 Comprehensive Zoning Plan.
- Gross area of property = 4.194 Acres
- Property is not within the Metropolitan District.
- Private water and sewer will be used within this site.
- The Contractor shall notify the following utility companies or agencies at least five(5) working days before starting work shown on these plans:

State Highway Administration	410.531.5533
BGE(Contractor Services)	410.550.4620
BGE(Underground Damage Control)	410.787.9028
Miles Utility	1.800.257.7777
Colonial Pipeline Company	410.745.1390
Howard County, Dept. of Public Works, Bureau of Utilities	410.313.1390
Howard County Health Department	410.313.2640
AT&T	1.800.252.1133
Verizon	1.800.252.0233/410.224.9210
- The contractor shall notify Miles Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 313-1830 at least five (5) working days prior to the start of work.
- The lot shown herein complies with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- This project is in conformance with the latest Howard County Standards unless waivers have been approved.
- No clearing, grading or construction is permitted within wetlands, streams or their required buffers. The disturbance of the Wetland and Buffer shown on this plan is considered essential by the Department of Planning and Zoning and is in accordance with Section 16.116(c) of the Subdivision and Land Development Regulations since the design minimizes the disturbance, there is no other reasonable alternative and it is necessary for the reasonable development of this property.
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and Landscape Manual. Financial surety for the required landscaping will be posted as part of the Developer's Agreement in the amount of \$11,000.00 (16 shade trees @ \$500.00 each and 46 evergreens @ \$150.00 each).
- All curb and gutter to be Howard County Standard R-3.01 Curb and Gutter unless otherwise noted. See detail sheet 2.
- All paving to be P-1 unless otherwise noted, see detail sheet 2.
- All proposed spot elevations along curb and gutter are to the finished unless otherwise noted.
- This site meets the requirements of Section 16.1200 Forest Conservation obligations, by retention of 0.88 Ac. (Break even point) on site. Surety in the amount of \$7,666.60 (38,333 sq.ft. x \$0.2/sf.) will be posted with the Developer's Agreement.
- All construction shall be in accordance with the latest standards and specifications of Howard County in addition to MSHA standards and specifications if applicable.
- Contractor is responsible to construct all handicap ramps and handicap access in accordance with current ADA requirements.
- Any damage to public right-of-ways, paving or existing utilities will be corrected at the contractor's expense.
- Existing utilities are located by the use of any or all of the following: Field Surveys, Public Water and Sewer Plans and other available record drawings. Approximate location of the existing utilities are shown for the contractor's information. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense.
- Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test, prior to construction.
- Project Geotechnical Report prepared by Herbst/Benson & Associates on May 19, 2005.
- All traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- Estimates of Earthwork quantities are provided solely for the purpose of calculating fees.
- The coordinates shown herein are based on the Howard County Geodetic Control, which is based upon the Maryland State Plane Coordinate System. Howard County monument numbers 341A and 341B were used for this project.
- The topography shown herein is based on a field run topographic survey performed by FSH Associates, Inc. in August 2005. The project boundary is based on a field run boundary survey performed by Daft, McCune, Walker, Inc.
- Traffic study provided by The Traffic Group on July 7, 2005.
- A noise study is not required for this project due to non-residential use.
- There are no known cemeteries or burial grounds located on this site.
- Stormwater Management is provided as follows: Water Quality and Recharge are provided for by grass channels and the use of the sheet flow to buffer credit. The site is exempt from providing Channel Protection since each proposed drainage area produces less than 2.0 cfs of runoff.
- All outdoor lighting shall be directed to direct light inward and downward on-site away from all adjoining residential properties and public roads and comply with all other requirements of Section 134 of the Howard County Zoning Regulations and light fixtures comply with the 0.1 foot candle trespass regulation.
- This area designates a private sewage easement, of at least 10,000 SF as required by the Maryland State Department of the Environment for individual sewage disposal (COMAR 26.04.03). Improvements of any nature in this area are restricted until public sewerage is available. These easements shall become null and void upon connection to a public sewerage system. The County Health Officer shall have the authority to grant adjustments to the private sewage easement. Recardation of a modified sewage easement shall not be necessary.
- Wetlands Analysis and Forest Conservation Analysis prepared by Exploration Research Inc.
- This plan is prepared in accordance with the approved Conditional Use Plan BA case No. 03-30C in which on the 22nd of September 2003 the hearing examiner granted the petition of Conditional Use for a structure used primarily for religious activities and for a private academic school. Provided that the conditional use will apply only to the uses and structures as described in the petition and conditional use plan submitted. Also, that the academic school is operational within 5 years from the date of the Decision and Order, or by September 22, 2008. The Hearing Examiner also approved the reduction of the use restriction setback from 50' to 30' for the northern and southern side lot lines. The conditional use for the religious facility was granted a time extension by the hearing examiner on 10/03/05 to apply for building permit until 04/22/08.
- This SDP is subject to the Amended Fifth Edition of the Subdivision and Land Development Regulations per Council Bill No. 45-2003 and the Amended Zoning Regulations per Council Bill No. 75-2003. Development or construction on this property must comply with setback and buffer regulations in effect at the time of submission of the site development plan, waiver petition application or building/grading permit applications.
- The forest conservation easement has been established to fulfill the requirements of Section 16.1200 of the Howard County Code and the Forest Conservation Act. No clearing, grading or construction is permitted within the forest conservation easement, however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.
- The existing house to remain will serve as a proposed parsonage only.
- A Wetland Permit is required for this project. MDE tracking/permit number: 200663410/06-NT-3138. Letter of Authorization was issued on 6/23/06.
- Wheelstops to be provided for the seven parking spaces along the dry swale.
- Sewer lines from proposed building to gravity feed to a Zoeller or equivalent pump (location shown on plan). Pump to be designed by others. Existing House to use a Zoeller or equivalent pump and tie into proposed jump tank located at church.
- This facility has a Proposed Academic School per BA-03-30C and will operate M-F 9:00 Am-12:00 noon and 1:00 Pm to 3:00 P.m. and hold no more than 33 students. Before and after school Day Care will be provided to students between 6:30 Am and 6:00 P.m.
- The Parking Spaces are allowed to be shared between uses since the Major Religious Activities, the Day Care and Private Academic School uses occur at different times. The maximum required spaces at any one time is 62(60 for the Church use and 2 for the parsonage use).
- There will be no outside trash dumpsters.
- Entrance sign to be internally lit. Church to have one uplight (175W MH on 2' High Pole) on East wall.
- On April 10, 2006, the Planning Director of Planning and Zoning approved waiver petition WP-06-94 from sections 16.154 and 16.155(2)(1) requiring the submission of a Site Development Plan to allow the stockpiling of fill dirt material on the subject property prior to issuance of a Grading Permit for institutional and utility development with the following conditions:
 - Protection of the existing Septic Easement from disturbance associated with establishing the stockpile.
 - Approval from Howard Soil Conservation District.
 - The Limit of Disturbance is restricted to that shown on the WP-06-94 exhibit.
- The kitchen in the proposed church is light-duty and non-commercial. A grease trap is not necessary.
- Previous Howard County file numbers:
 - BA-03-300, WP-06-94.



SHEET INDEX

DESCRIPTION	SHEET No.
Cover Sheet	1 of 7
Site Development and Grading Plan	2 of 7
Soils, Sediment and Erosion Control Plan	3 of 7
Sediment and Erosion Control and Miscellaneous Details	4 of 7
Pump-Around and Sewer Details	5 of 7
Landscape Plan	6 of 7
Forest Conservation Plan	7 of 7



ADDRESS CHART

PARCEL	STREET
47	12580 CLARKSVILLE PIKE (MD 108)

WETLAND TABLE

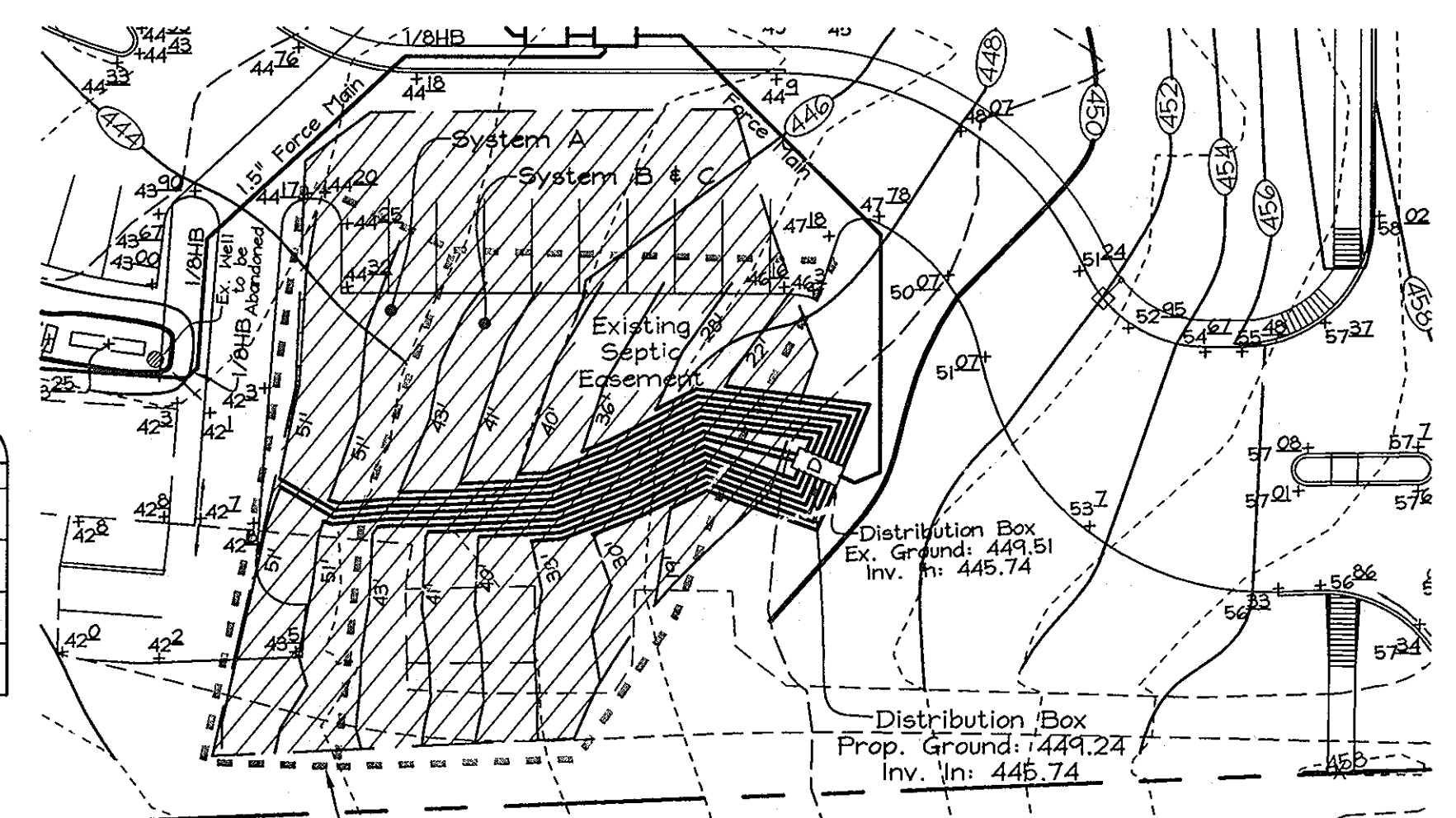
LINE	LENGTH	BEARING
L1	73.72	S84°56'56"E
L2	67.54	S88°10'44"E
L3	42.76	N57°41'56"E
L4	42.66	N45°32'01"E
L5	44.26	N38°25'43"E
L6	37.27	N06°36'49"E
L7	35.12	N82°13'28"E
L8	34.81	N24°18'17"E
L9	7.51	S84°30'28"E
L10	3.51	S08°12'10"E
L11	73.27	S81°22'16"E
L12	54.30	S85°14'26"E
L13	45.42	N57°28'24"E
L14	46.81	N48°17'05"E
L15	42.86	N42°24'47"E
L16	38.83	N32°06'17"E
L17	43.10	N38°05'38"E
L18	38.24	N68°12'10"W

SEWAGE DESIGN FLOW CALCULATIONS

	TOTAL PREDICTED POPULATION	MAX. DAILY DESIGN FLOW
Religious Facility Sunday	179 Seats x 3 Gallons per Seat	537 Gallons per Day
Private School Mon-Fri	33 students x 15 GPD	495 Gallons per Day
Parsonage Every Day	5 Bedrooms x 150 Gallons per Bedroom	750 Gallons per Day

TRENCH DESIGN CHART

MAX DAILY DESIGN FLOW	AVG. DAILY DESIGN FLOW	TRENCH LENGTH
1287 GALLONS	644 GALLONS	644 + 0.8 + 4' = 202 LF



PARKING LOT LIGHT TABLE

FIXTURE / HOUSING TYPE	MOUNTING TYPE	POLE TYPE	LOCATION
250 watt High Pressure Sodium AC250W-H, AC2-16 Series	6" Extended Pole Mount	1 1/2" smooth aluminum	N 559,007.4 E 1,327,749.1
250 watt High Pressure Sodium AC250W-H, AC2-16 Series	6" Extended Pole Mount	1 1/2" smooth aluminum	N 554,040.7 E 1,327,853.5
250 watt High Pressure Sodium AC250W-H, AC2-16 Series	6" Extended Pole Mount	1 1/2" smooth aluminum	N 554,061.6 E 1,327,457.5
250 watt High Pressure Sodium AC250W-H, AC2-16 Series	6" Extended Pole Mount	1 1/2" smooth aluminum	N 558,919.9 E 1,328,249.9

WALLPACK LIGHT TABLE

FIXTURE TYPE	MOUNTING/OPTICAL	LOCATION
Small Wallpack Architectural	To be specified by the Architect	N 554,022.4 E 1,328,108.7
Small Wallpack Architectural	To be specified by the Architect	N 554,016.6 E 1,328,107.7
150 watt, 12" Square Security, High Pressure Sodium	Full Cutoff	N 558,986.3 E 1,328,152.8
150 watt, 12" Square Security, High Pressure Sodium	Full Cutoff	N 558,982.5 E 1,328,170.6
150 watt, 12" Square Security, High Pressure Sodium	Full Cutoff	N 559,025.1 E 1,328,176.8

SITE ANALYSIS DATA CHART

- Total project area: 4.194 Acres
- Area of plan submission: 4.194 Acres
- Limit of disturbed area: 2.13 Acres
- Present zoning: "RR-DEO" per 02/02/04 Comprehensive Zoning Plan.
- Total Area of Parcel: 4.194 Acres
- Total Area of Right of Way Dedication: 0.216 Acres
- Total Area of Remaining Parcel: 3.978 Acres
- Proposed uses for site & structures: Religious Facility & Private Academic School
- Floor space on each level of building(s) per use:
 - Existing Building to remain: 2,204.6 sq. ft., each level, 3 levels
 - Proposed Building: 5,026.00 sq. ft., one level
- Building coverage of site:
 - Total: 0.166 Acres or 4% of gross area.
 - Use for Existing house to remain: Parsonage
- Parking Tabulation:
 - Number of parking spaces required: Church use - 1 space for every 3 seats (179 seats) = 60 spaces; Day Care use - 3 spaces per 1,000 sq. ft. (180 sq. ft.) = 1 space; Private Academic School use - 1 space per 6 students (33 students) = 6 spaces; Parsonage use - 2 spaces.
 - Total number of parking spaces required: See General Note No. 41 this sheet.
 - Total number of parking spaces provided: 62
 - Total required Handicap parking spaces: 3 spaces; including 1 van accessible spaces
 - Total provided Handicap parking spaces: 3 spaces; including 1 van accessible spaces

PERMIT INFORMATION CHART

Subdivision Name:	Section/Area	Parcel No.
Christ Lutheran Church	N/A	47
Liber/Folio	Grid	Zoning
7623/248	12	RR-DEO
18352		
Water Code	Sewer Code	Census Tract
N/A	N/A	6051.01

AS-BUILT FOR STORMWATER MANAGEMENT AND LANDSCAPING

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
MICHAEL L. TAYLOR
PE# 34689

OWNER/DEVELOPER
CHRIST LUTHERAN CHURCH
C/O JOHN HUEBNER
8615 Open Meadows Way
Columbia, Maryland 21029
410.203.2020

COVER SHEET
CHRIST LUTHERAN CHURCH
PROPOSED RELIGIOUS FACILITY AND ACADEMIC SCHOOL

TAX MAP 34 GRID 12
5TH ELECTION DISTRICT

PARCEL 47
HOWARD COUNTY, MARYLAND

FSH Associates
Engineers Planners Surveyors
6338 Howard Lane, Ellicott City, MD 21075
Tel: 410-967-5200 Fax: 410-796-1562
E-mail: info@fshnet.com

DESIGN BY: PS
DRAWN BY: HK
CHECKED BY: ZYT
SCALE: As Shown
DATE: Sept. 07, 2006
N.O. No.: 3207
SHEET No.: 1 OF 7

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

Robert W. ... 10/20/06 DATE

HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

... 9/29/06 DATE

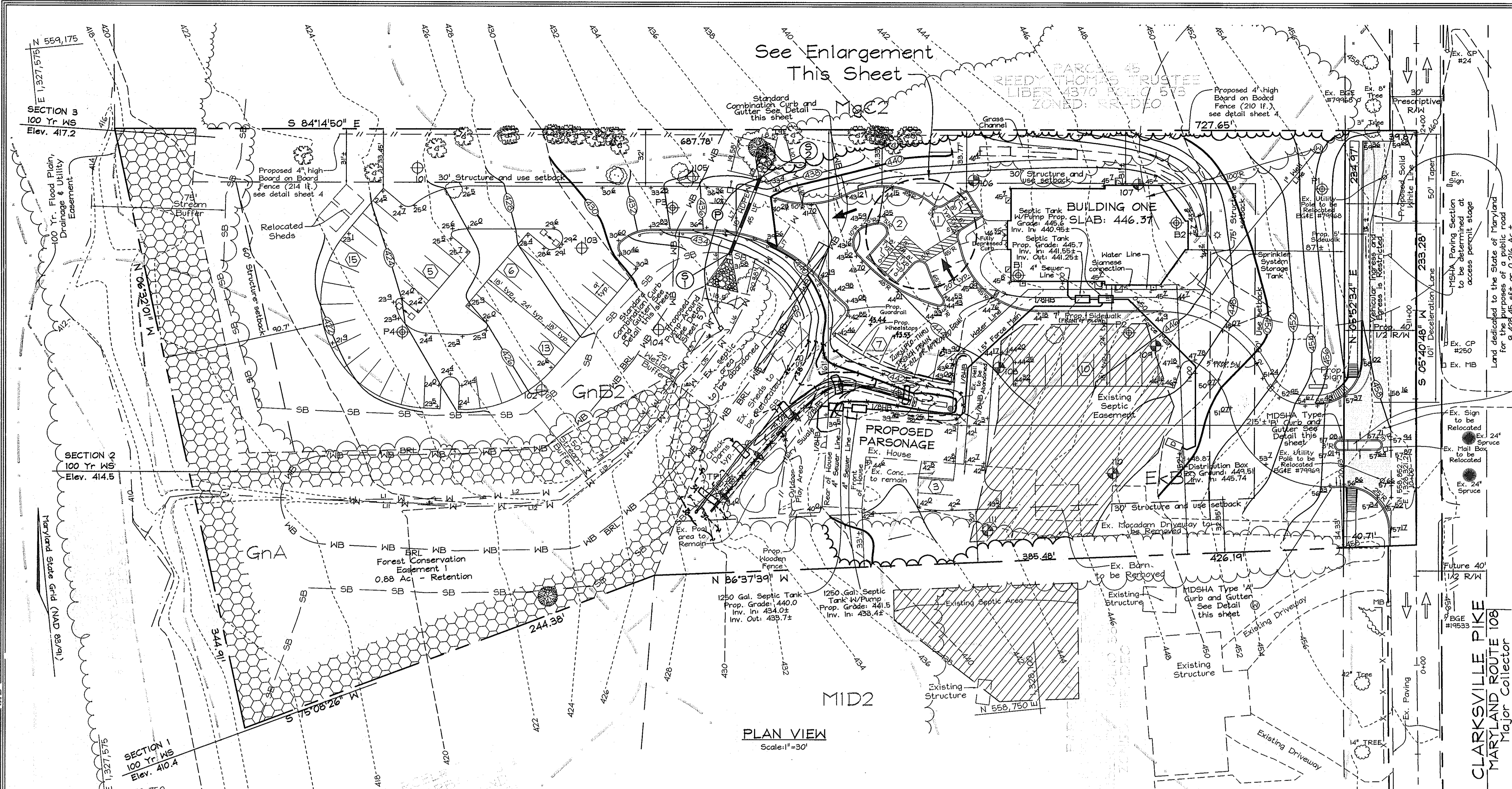
CHIEF, DEVELOPMENT ENGINEERING DIVISION

... 10/23/06 DATE

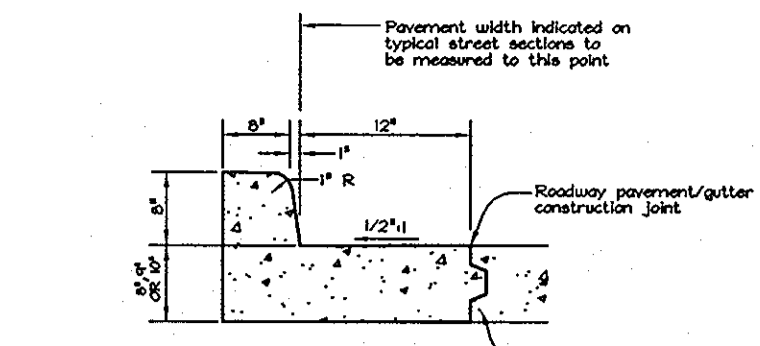
CHIEF, DIVISION OF LAND DEVELOPMENT

... 10/23/06 DATE

DIRECTOR

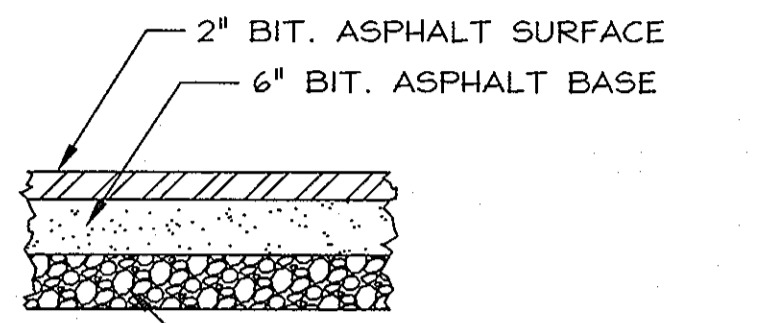


See Enlargement This Sheet

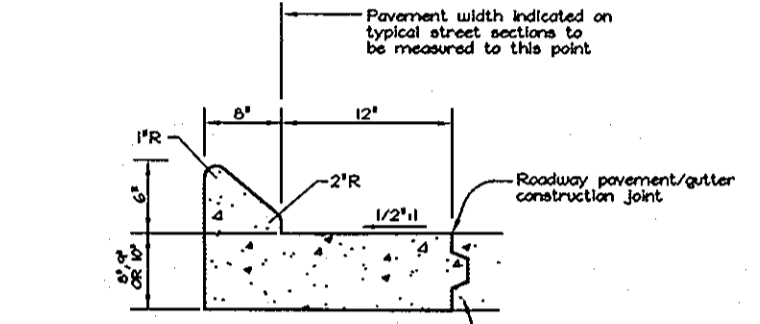


MSHA TYPE 'A' CONCRETE COMBINATION CURB AND GUTTER
MD. NO. 620.02
NOT TO SCALE

NOTES:
1. Slope gutter per 1/2" per foot toward flow line on all roadways including non-paved areas. Exact interchange curves.
2. Provide key and longitudinal tie for tie rebar.
3. Maximum joint spacing for concrete curb and gutter is 10'.

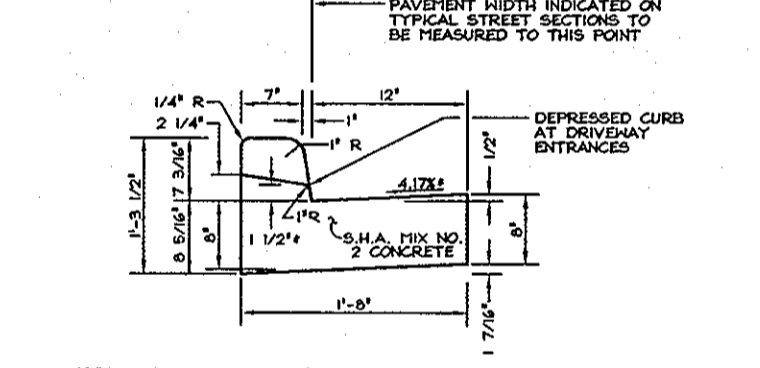


M.S.H.A. PAVING SECTION
Not to Scale



MSHA TYPE 'B' CONCRETE COMBINATION CURB AND GUTTER
MD. NO. 620.02
NOT TO SCALE

NOTES:
1. Slope gutter per 1/2" per foot toward flow line on all roadways including non-paved areas. Exact interchange curves.
2. Provide key and longitudinal tie for tie rebar.
3. Maximum joint spacing for concrete curb and gutter is 10'.

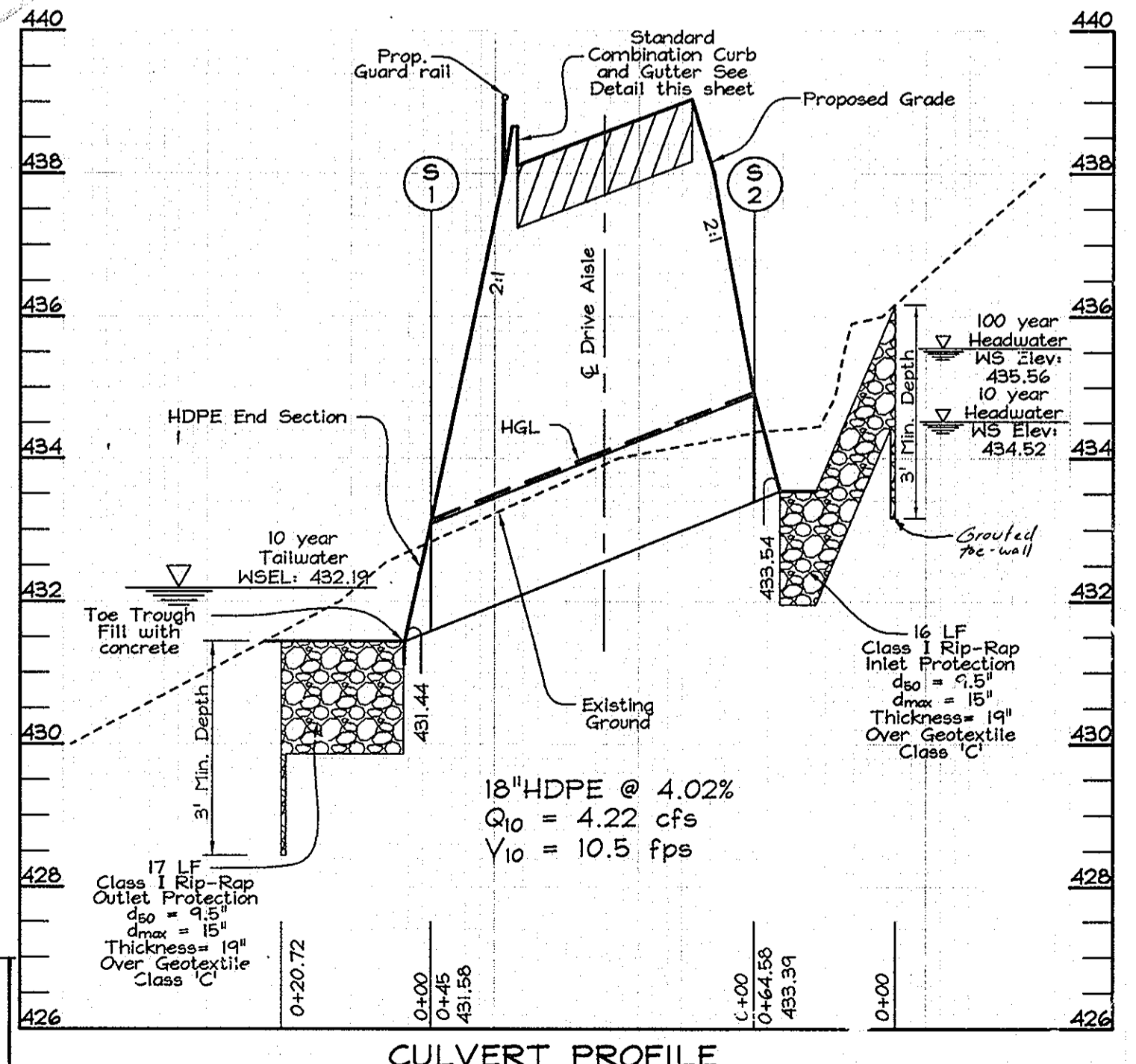


STANDARD COMBINATION CURB AND GUTTER
HOWARD COUNTY STANDARD R-3.01
NOT TO SCALE

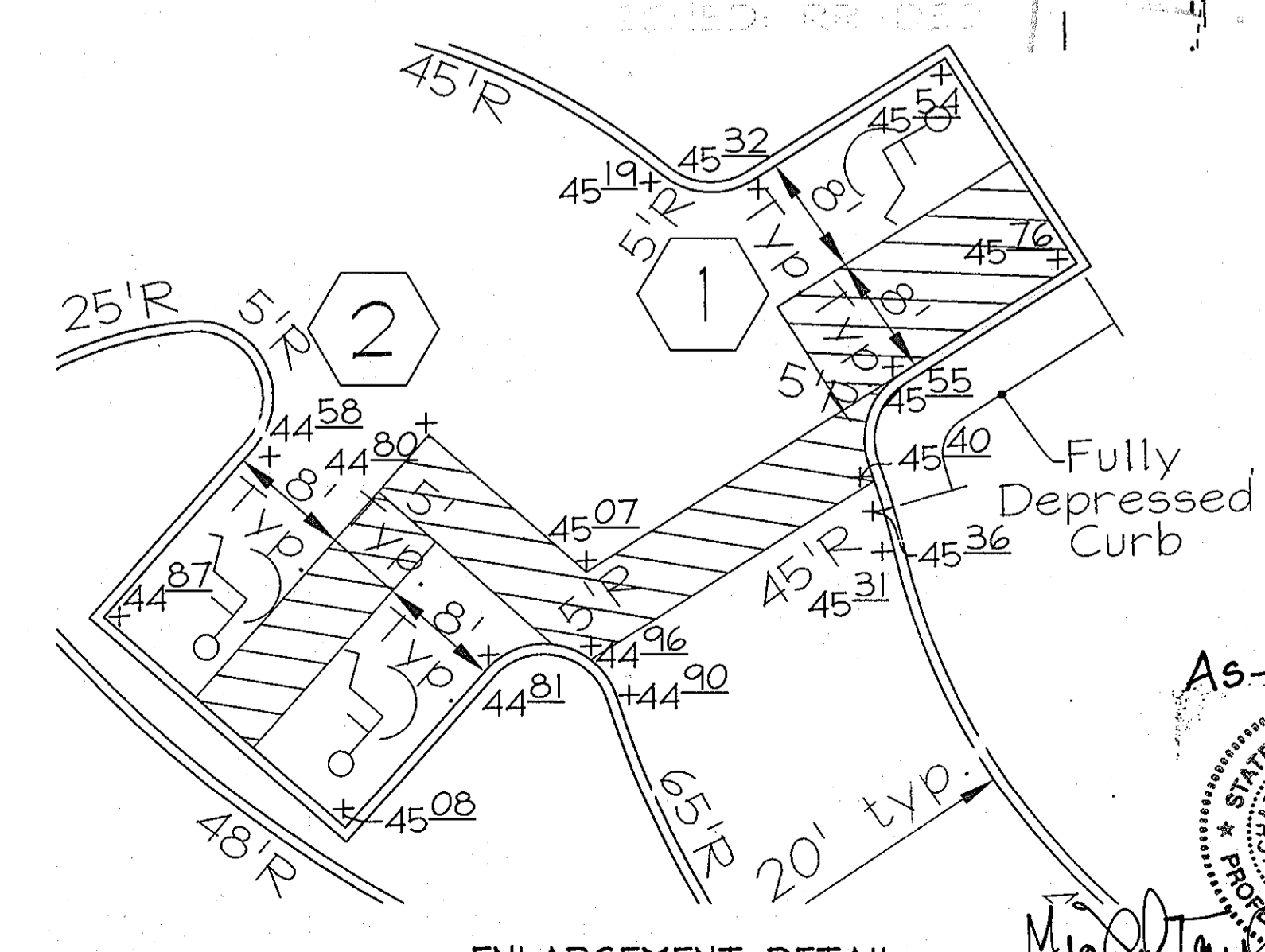
PIPE SCHEDULE		
SIZE	TYPE	LENGTH
18"	HDPE	45 LF

STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	TOP ELEV.	INV. IN.	INV. OUT.	REMARKS
S-1	18" HDPE End Section	N 559,022.38 E 1,327,961.47	433.08	431.58	431.44	Manor or equivalent
S-2	18" HDPE End Section	N 559,062.42 E 1,327,953.09	434.89	433.54	433.39	Manor or equivalent

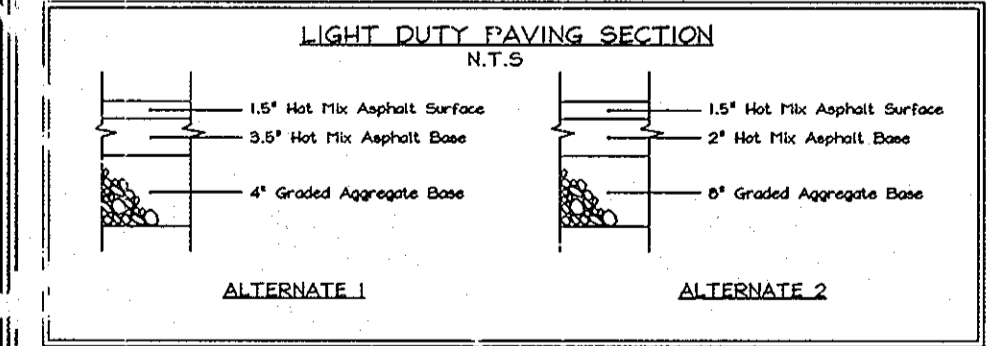
OWNER/DEVELOPER
CHRIST LUTHERAN CHURCH
C/O JOHN HUEBNER
8415 Open Meadows Way
Columbia, Maryland 21024
410.203.2020



CULVERT PROFILE
Scale: Hor.: 1"=20'
Vert.: 1"=2'



ENLARGEMENT DETAIL
Scale: 1"=10'



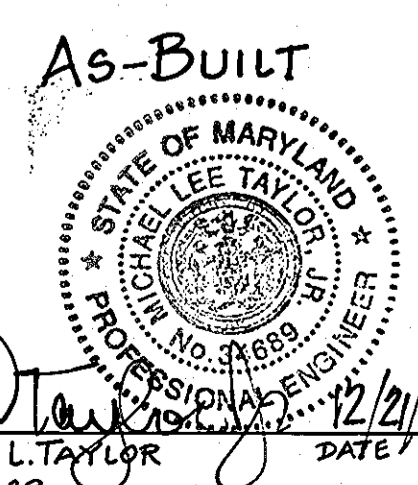
NOTE: Paving sections shown relates to a CBR value of 7. Actual CBR test results may cause modification of these paving sections. See Geotechnical Report for more information.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

10/25/06 DATE
10/25/06 DATE
10/25/06 DATE

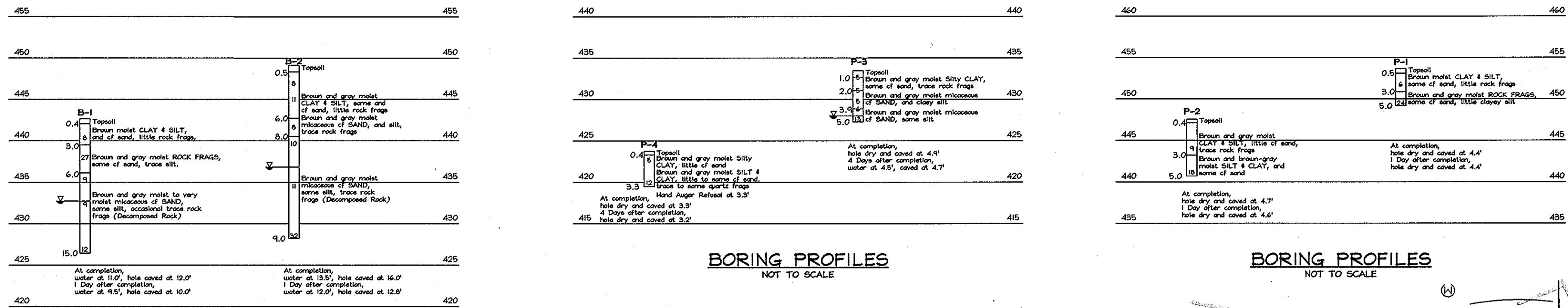
NO.	REVISION	DATE
1	INCREASED SIDEWALK WIDTH FROM 5' TO 7' IN FRONT OF BUILDING; RAISED 1st FLOOR ELEVATION; REVISED GRADING AROUND CURB & ADDED TRENCH DRAIN IN SIDEWALK.	4/25/08



SITE DEVELOPMENT AND GRADING PLAN
CHRIST LUTHERAN CHURCH
PROPOSED RELIGIOUS FACILITY AND ACADEMIC SCHOOL
TAX MAP 34 GRID 12
5TH ELECTION DISTRICT
PARCEL 47
HOWARD COUNTY, MARYLAND

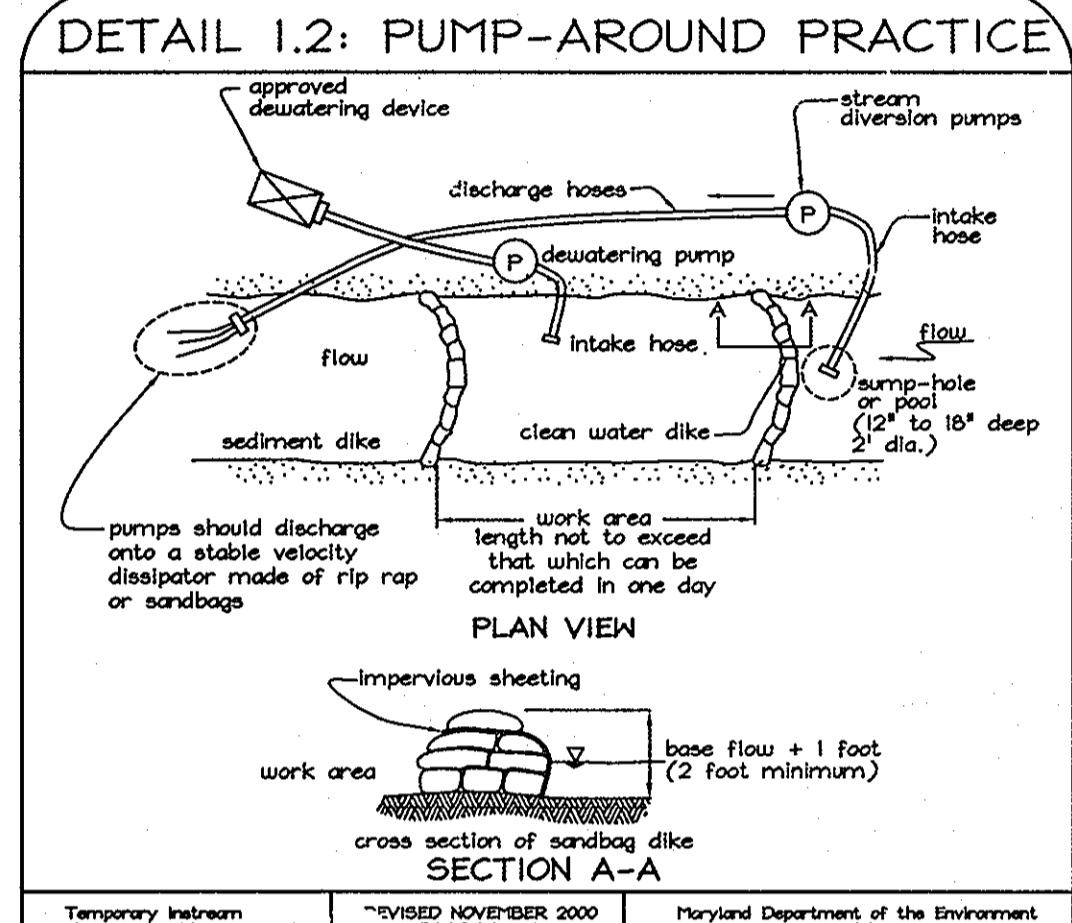
DESIGN BY: PS
DRAWN BY: HK & CD
CHECKED BY: ZYF
SCALE: As Shown
DATE: 07, 2006
I.D. No.: 3207
SHEET No.: 2 OF 7

FSH Associates
Engineers Planners Surveyors
6338 Howard Lane, Elkridge, MD 21075
Tel: 410-567-5200 Fax: 410-567-5656
E-mail: info@fsh.com

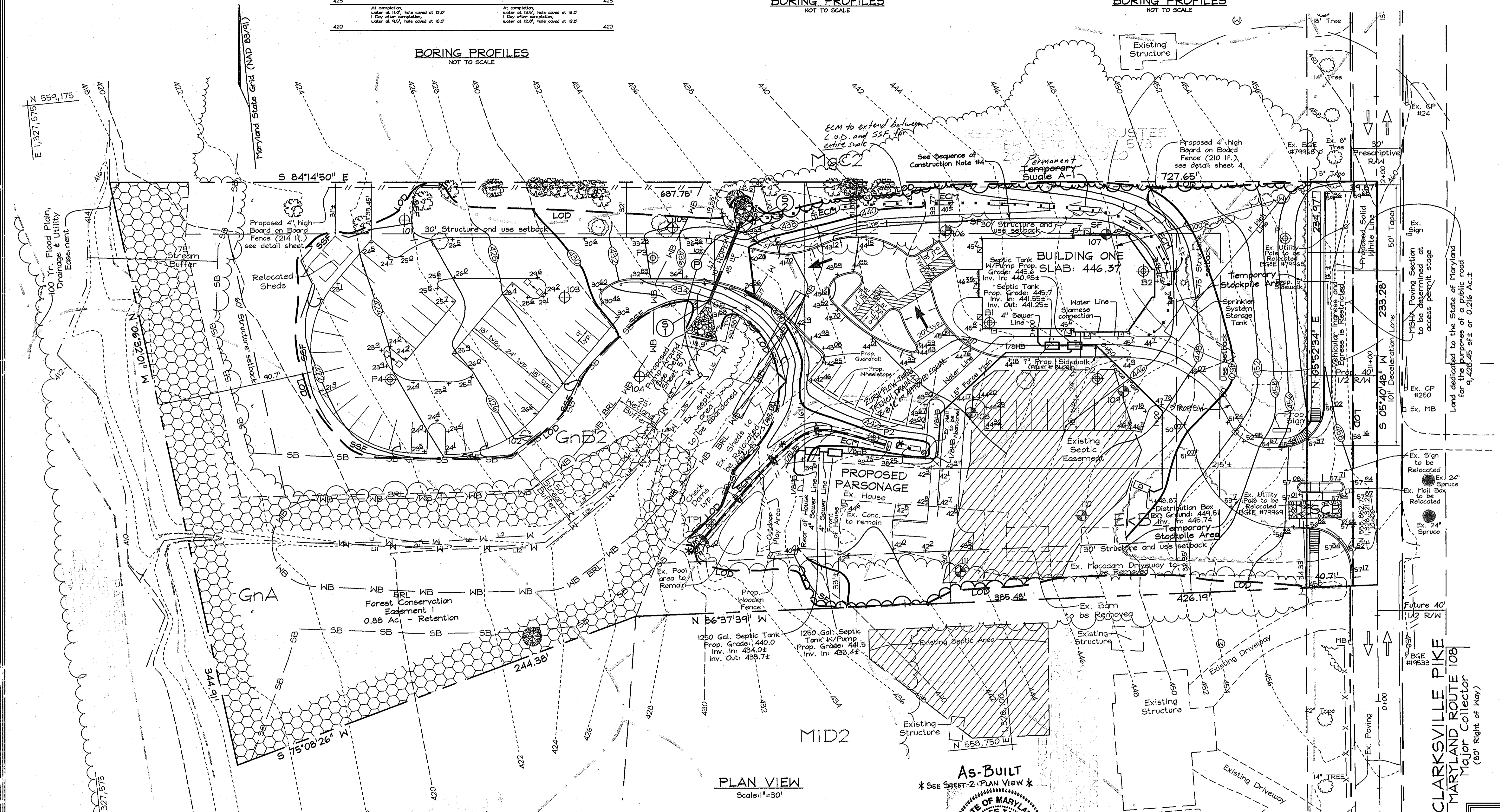


LEGEND

- Existing Contour
- Proposed Contour
- Spot Elevation
- Direction of Flow
- Existing Trees to Remain
- Existing Tree to be Removed
- Existing Specimen Tree
- Proposed Light Poles
- Stabilized Construction Entrance
- Silt Fence
- Super Silt Fence
- Limit of Disturbance
- Erosion Control Matting
- Soil Boundary
- Proposed Number of Parking Space per Bay
- Proposed Handicap Parking Space Symbol



- MGMC 2: Pump-Around Practice**
- Description:**
The work shall consist of installing a temporary pump around and supporting means to divert flow around in-stream construction sites.
- Implementation/Sequence:**
Sediment control measures, pump around, and associated channel and bank construction shall be completed prior to the beginning of construction.
- Construction activities including the installation of erosion and sediment control measures shall not begin until all necessary easements and/or right-of-ways have been acquired. All existing utilities shall be marked prior to construction. The contractor shall be responsible for any damage to existing utilities that may result from construction and shall repair the damage at his/her own expense to the satisfaction of the local authority.
 - The contractor shall notify the Maryland Department of the Environment or MDEA sediment control inspector at least 48 hours before beginning construction of the pump-around. The contractor shall inform the local environmental protection and resource management inspection and enforcement division and the provider of local utilities a minimum of 48 hours before starting construction.
 - The contractor shall conduct a pre-construction meeting on site with the MDEA sediment control inspector, the county project manager, and the engineer to review limits of disturbance, erosion and sediment control requirements, and the sequence of construction. The contractor shall stake out all limits of disturbance prior to the pre-construction meeting. The participants will also designate the contractor's sloping areas and flag all trees within the limit of disturbance which will be removed for construction access. Trees shall not be removed within the limit of disturbance without approval from the MDEA or local authority.
 - Construction shall not begin until all sediment and erosion control measures have been installed and approved by the engineer and sediment control inspector. The contractor shall stay within the limits of the disturbance as shown on the plans and minimize disturbance within the work area whenever possible.
 - Upon installation of all sediment control measures and approval by the sediment control inspector and the local environmental protection and resource management inspection and enforcement division, the contractor shall begin work at the upstream section and proceed downstream beginning with the establishment of stabilized construction entrances. The sequence of construction must be followed unless the contractor gets written approval for deviation from the MDEA or local authority. The contractor shall only begin work in an area which can be completed by the end of the day (including grading subject to the channel). At the end of each work day, the work area must be stabilized and the pump around removed from the channel. Work shall not be conducted in the channel during rainy weather.
 - Sediment traps shall be installed at the upstream and downstream ends of the work area as shown on the plans, and silt and stream flow shall be trapped around the work area. The pump shall discharge onto a stable velocity dissipator made of rip rap or sandbags.
 - Water from the work area shall be pumped to sediment filtering measures such as a sediment bag. The measures shall be located such that the water drains back into the channel below the downstream sediment trap.
 - Traveling a channel reach with equipment where no work is proposed should be avoided. If equipment has to traverse such a reach for access to another area, then timber mats or similar measures shall be used to minimize disturbance to the channel. Temporary stream crossings shall be used only when necessary and only where noted on the plans or specified by the engineer.
 - All stream restoration measures shall be installed as indicated by the plans and all banks graded in accordance with the grading plans and typical cross-sections. All grading must be permanently stabilized at the end of each day with seed and mulch as specified on the plans.
 - After an area is completed and stabilized, sandbag diversions, the water pump, and sediment filtering measures shall be moved to the next work area. This shall be accomplished by first moving the downstream sandbag diversion to the new upstream pump around location and then by relocating the upstream sandbag diversion and sediment filter to the next downstream location.
 - A pump around must be installed on any tributary or storm drain outlet which contributes base-flow to the work area. This should be accomplished by locating sandbag diversions at the downstream end of the tributary or storm drain outlet and pumping the storm flow around the work area. This water should discharge onto the same velocity dissipator used for the main stream pump area.
 - If a tributary is to be restored, construction should take place on the tributary before work on the main stem reaches the tributary confluence. Construction in the tributary, including pump around practices, shall follow the same sequence as for the main stem of the river or stream. When construction on the tributary is completed, work on the main stem shall resume. Water from the tributary shall continue to be pumped around the work area in the main stem.
 - The contractor is responsible for providing access to and maintaining all erosion and sediment control devices until the sediment control inspector approved their removal.
 - After construction, all disturbed areas shall be regraded and revegetated as per the planting plan.



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
CgB2	Chester gravelly silt loam, 3 to 8 percent slopes, moderately eroded	B
EkB2	Elloak silt loam, 3 to 8 percent slopes, moderately eroded	B
GnA	Glenville silt loam, 0 to 3 percent slopes	C
GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C
MgC2	Manor gravelly loam, 8 to 15 percent slopes, moderately eroded	B
MID2	Manor loam, 15 to 25 percent slopes, moderately eroded	B

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF DEVELOPMENT ENGINEERING DIVISION
DATE: 9/28/06

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 11/23/06

DIRECTOR
DATE: 11/28/06

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA-NATURAL RESOURCES CONSERVATION SERVICE
DATE: 9/28/06

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
DATE: 9/28/06

HOWARD SCD

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 SOIL CONSERVATION DISTRICT.

Zacharia Y. Fisch
SIGNATURE OF ENGINEER
DATE: 9/17/06

DEVELOPER'S CERTIFICATE

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

Michael L. Taylor
SIGNATURE OF DEVELOPER
DATE: 12/21/09

INCREASED SIDEWALK WIDTH FROM 5' TO 7' IN FRONT OF BUILDING, RAISED 1ST FLOOR ELEVATION, REVISED GRADING AROUND BUILDING AND ADDED TRENCH DRAIN WITHIN SIDEWALK.

REVISION
DATE: 4/25/08

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

Robert J. Weller
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 10/20/06

SOILS, SEDIMENT AND EROSION CONTROL PLAN

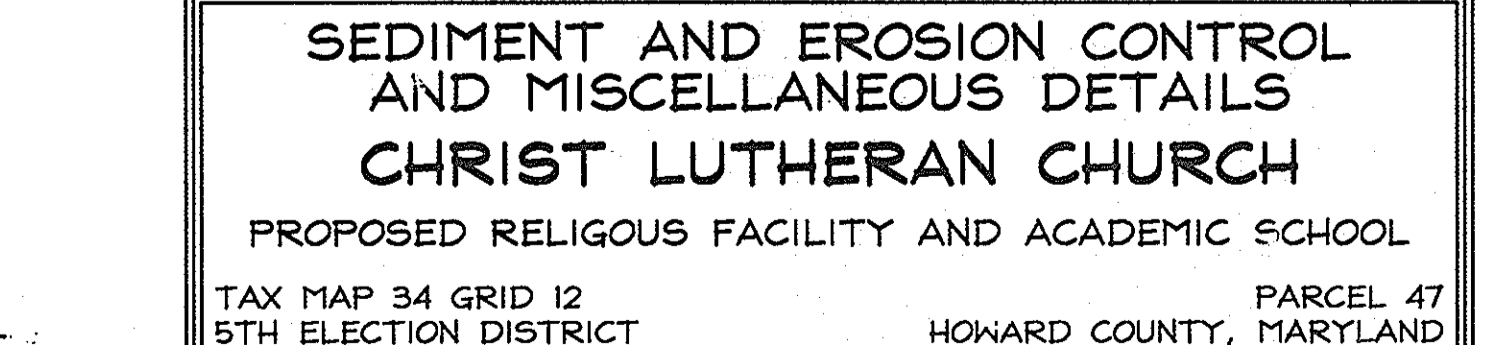
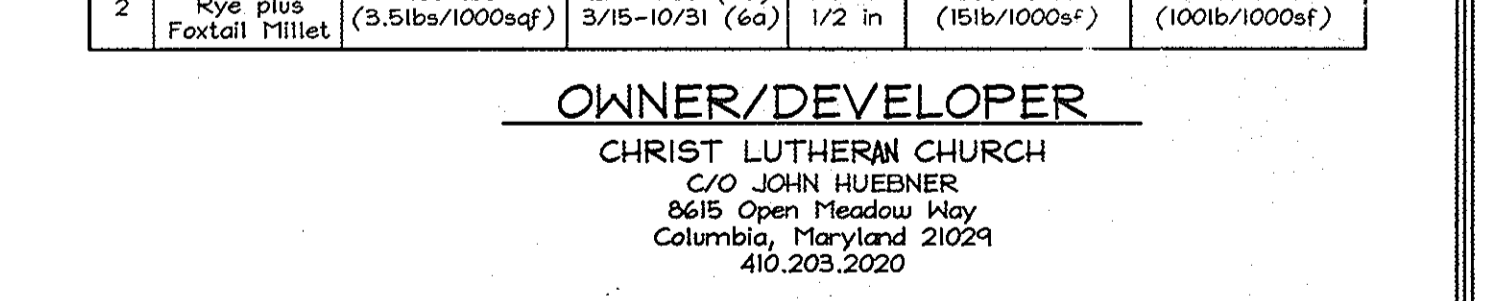
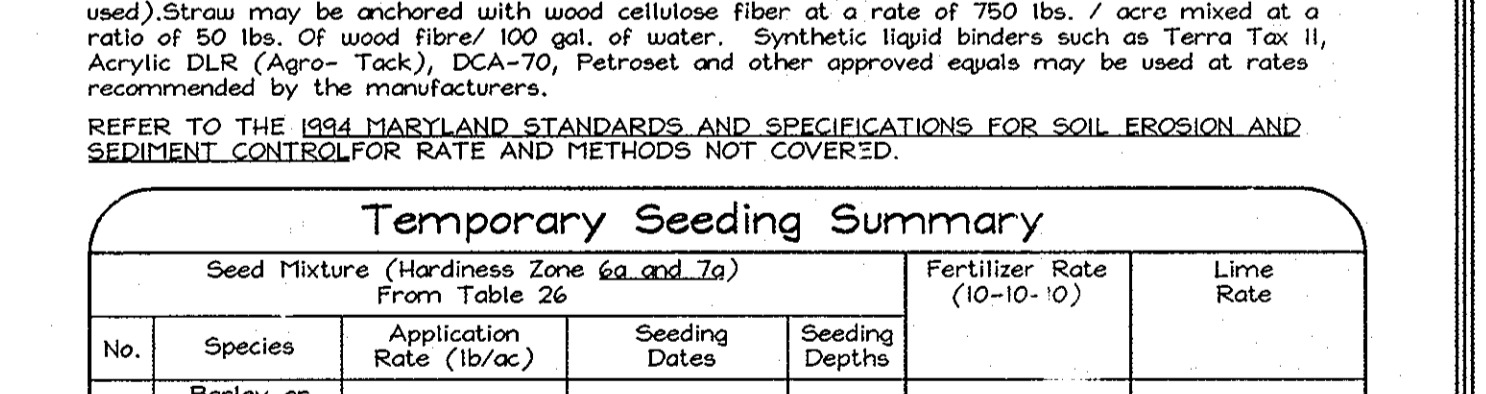
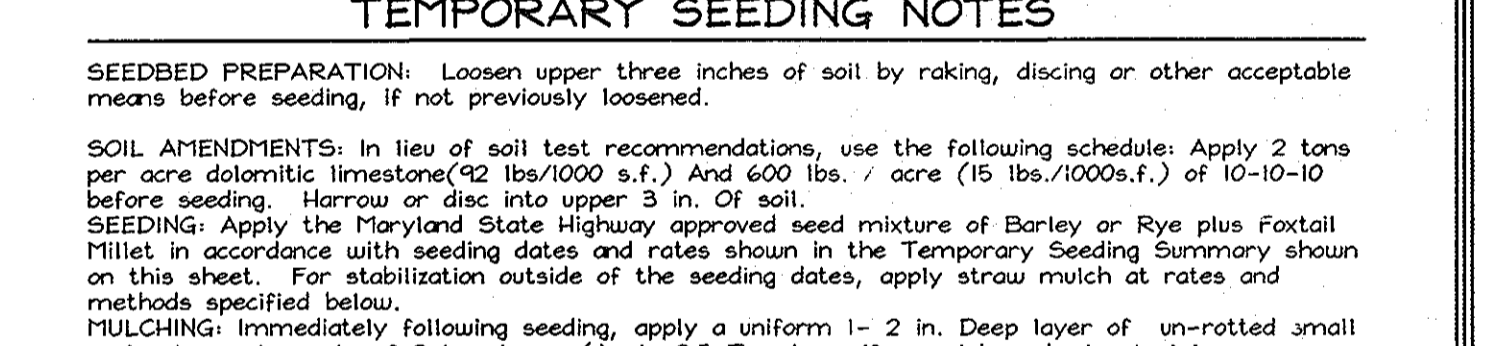
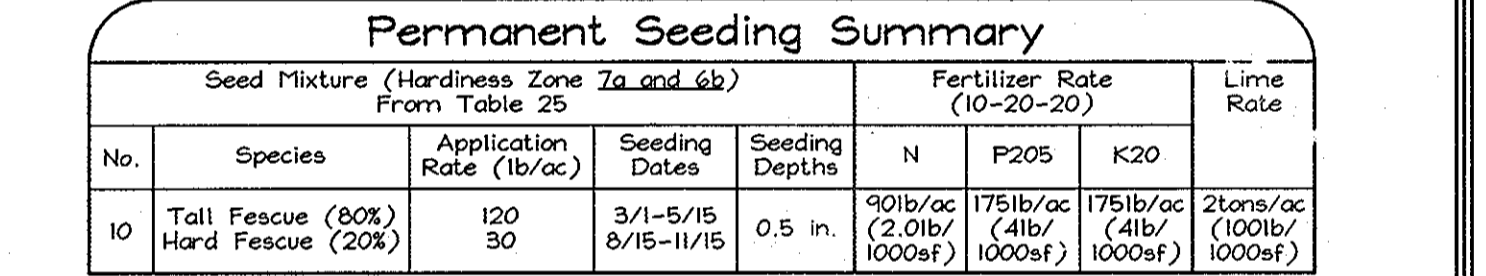
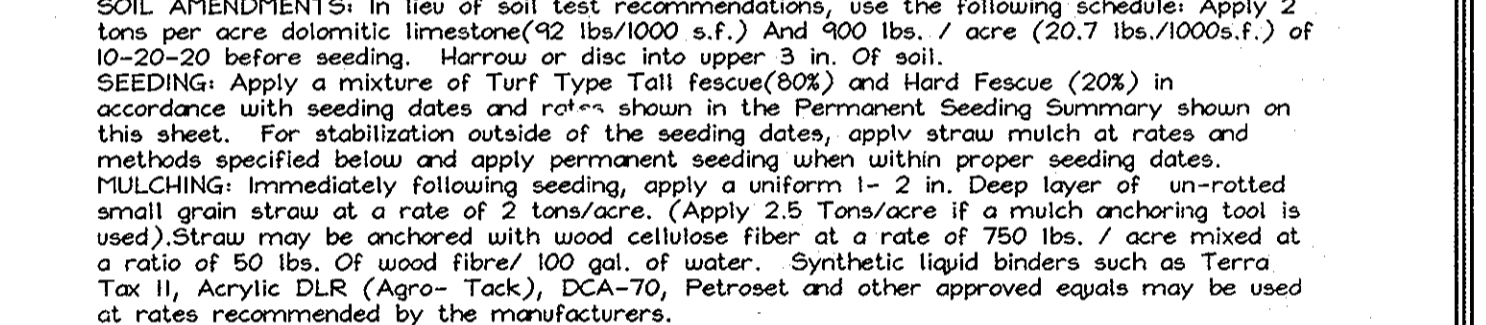
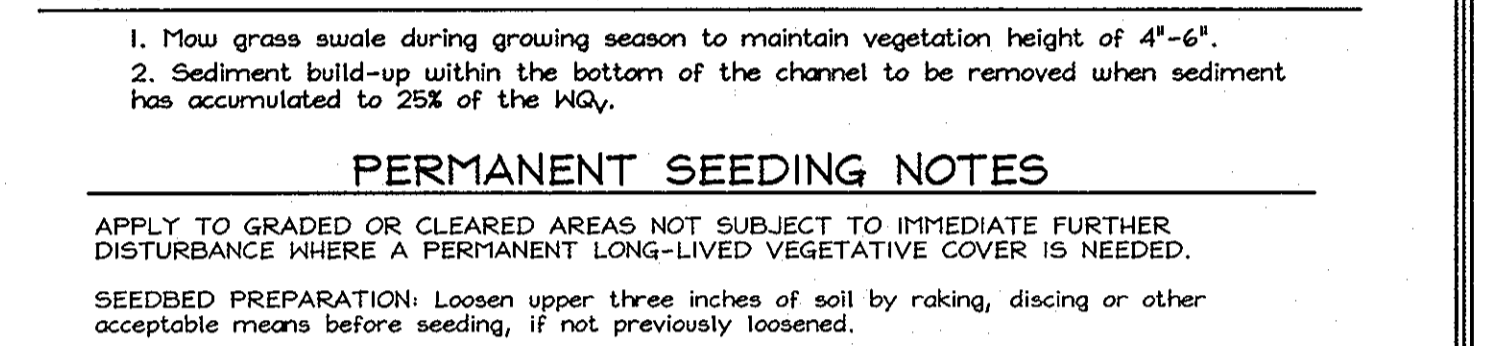
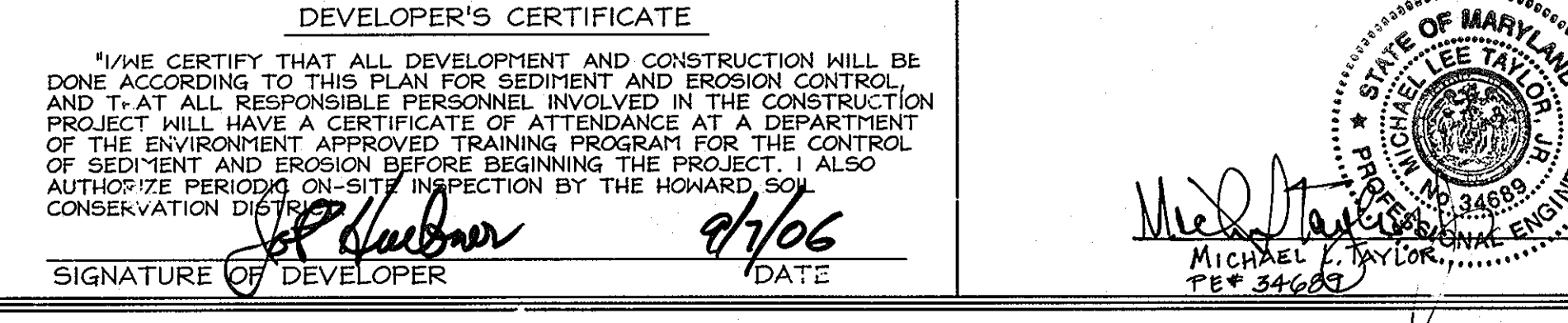
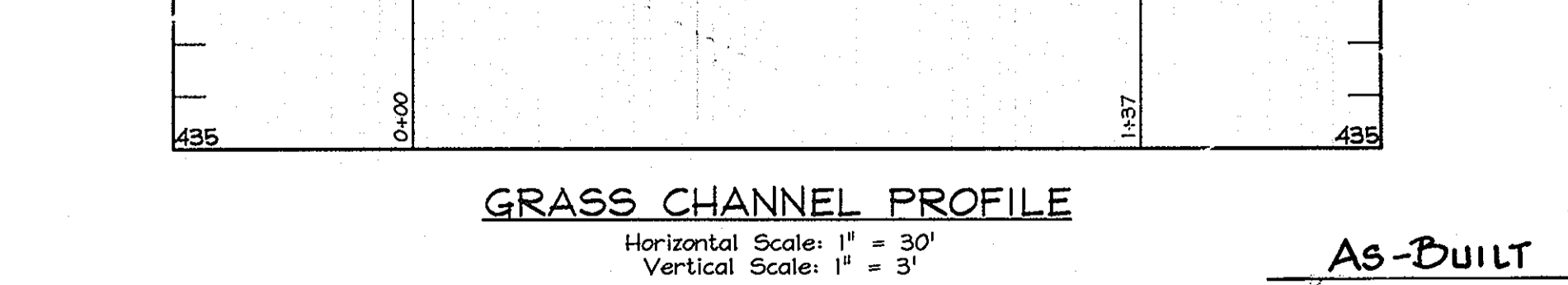
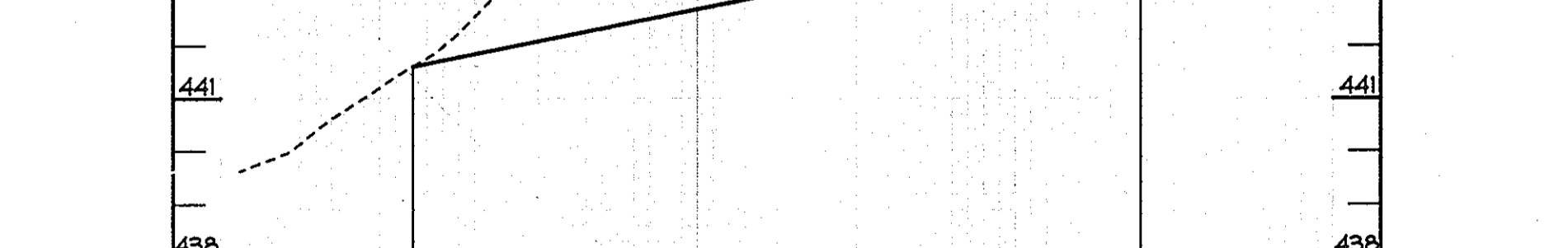
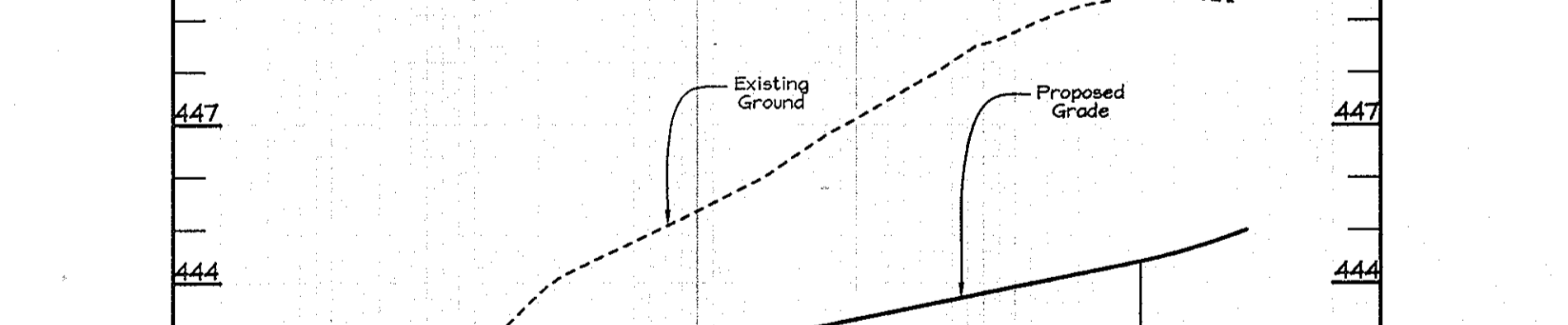
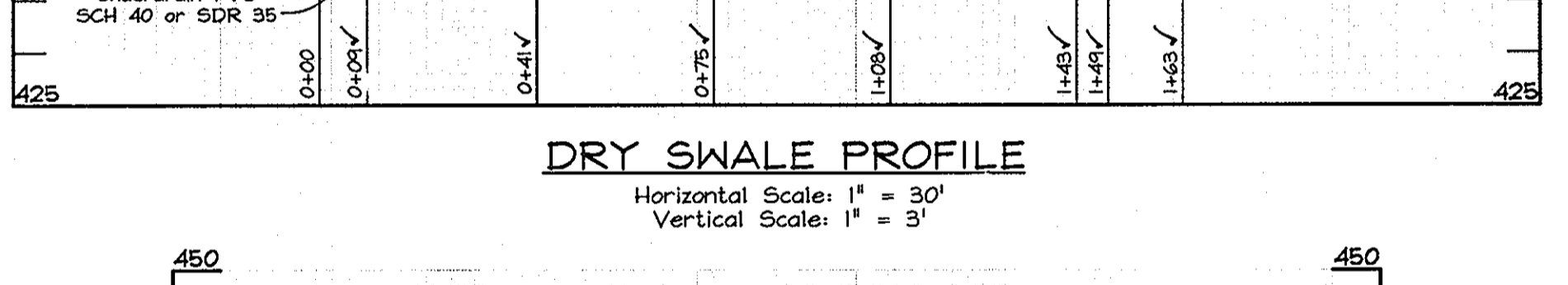
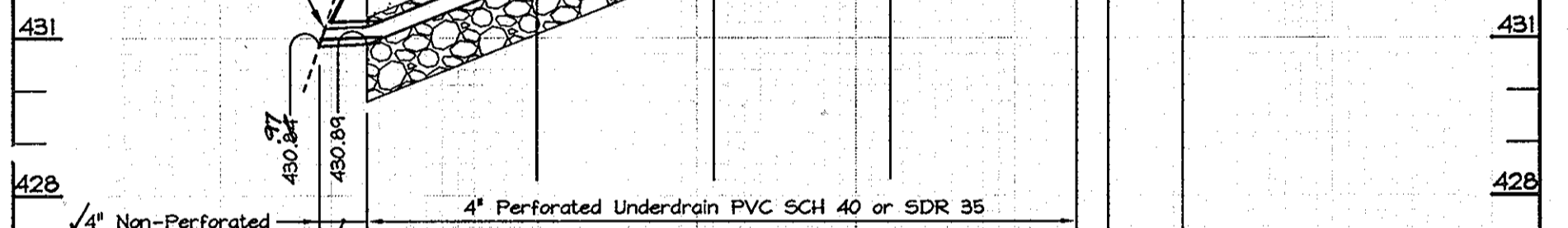
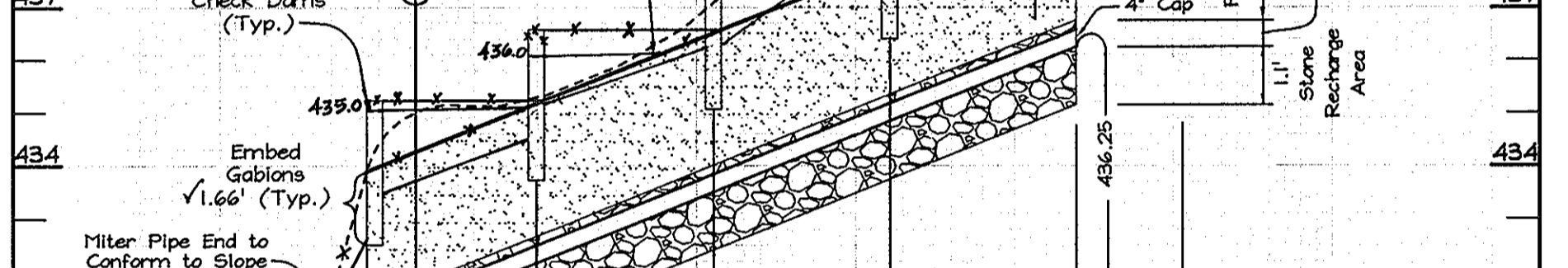
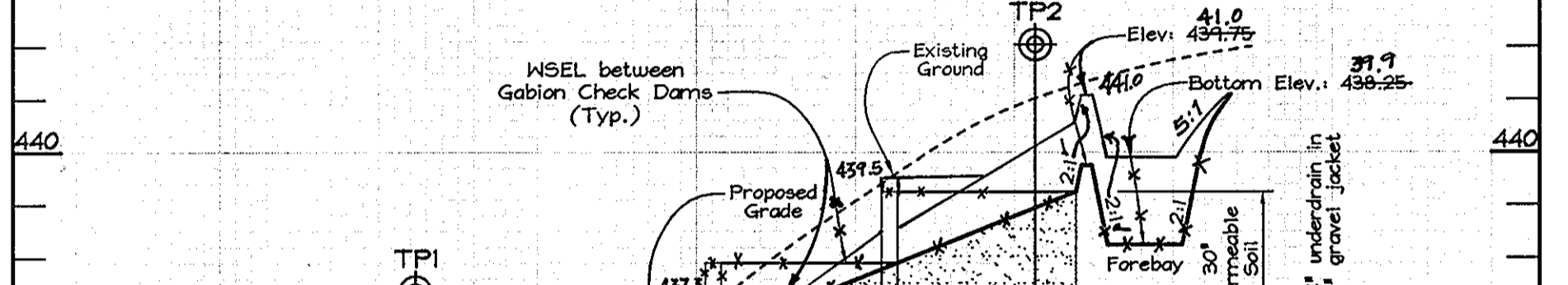
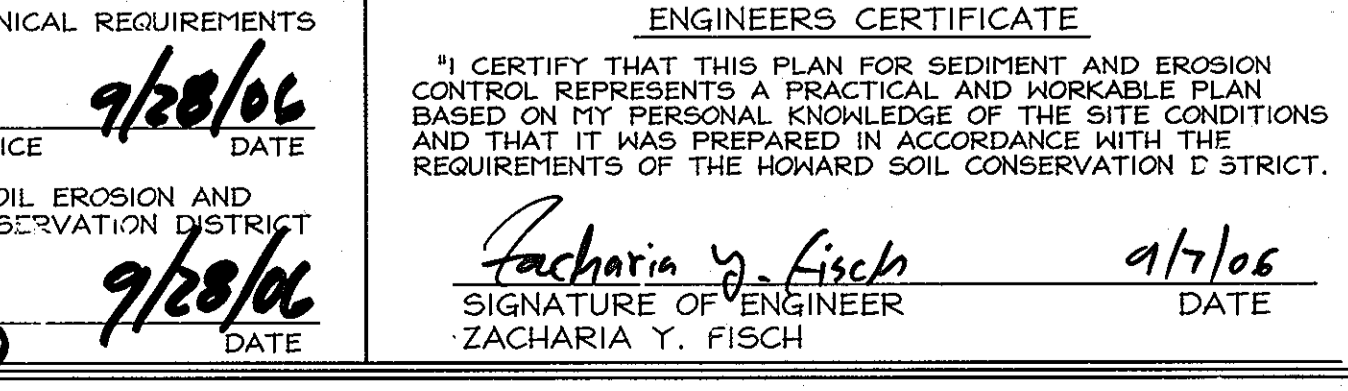
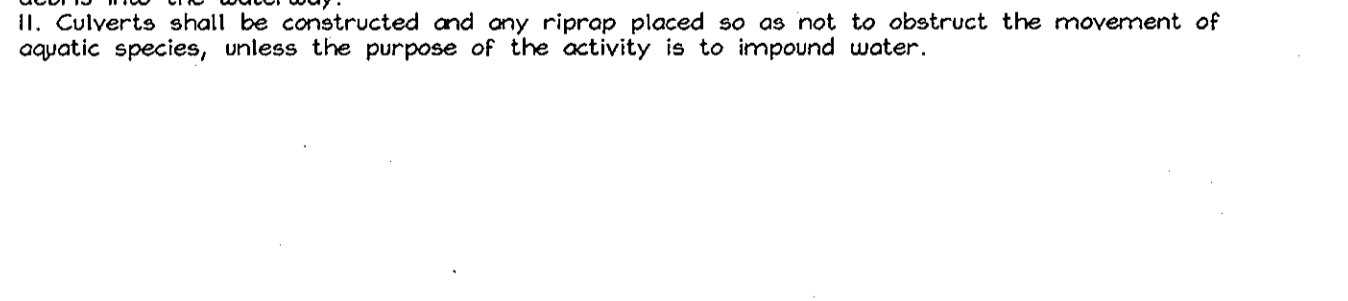
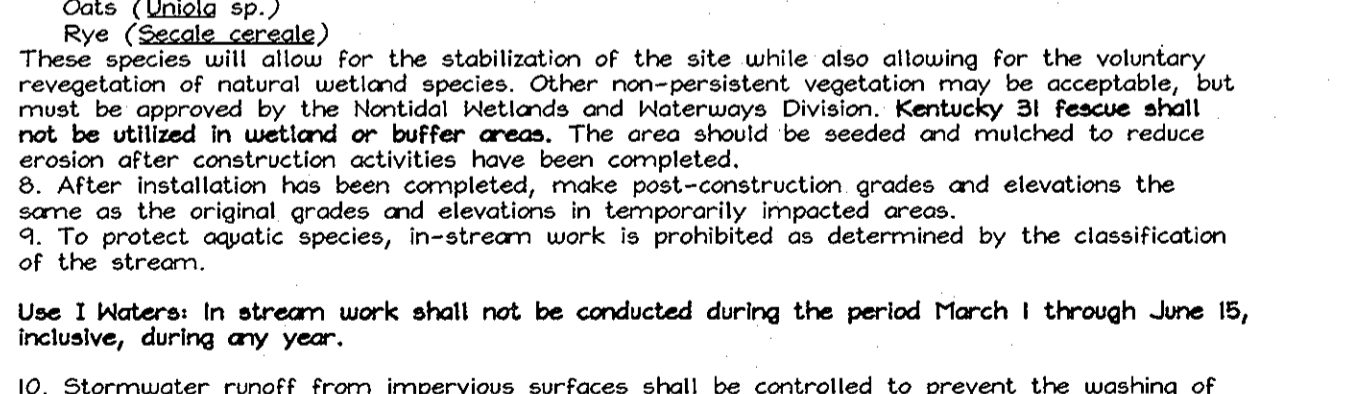
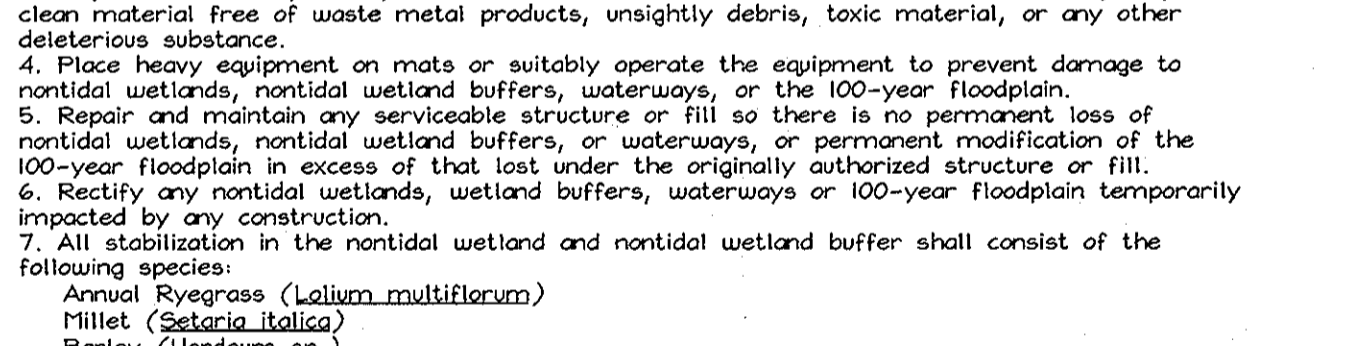
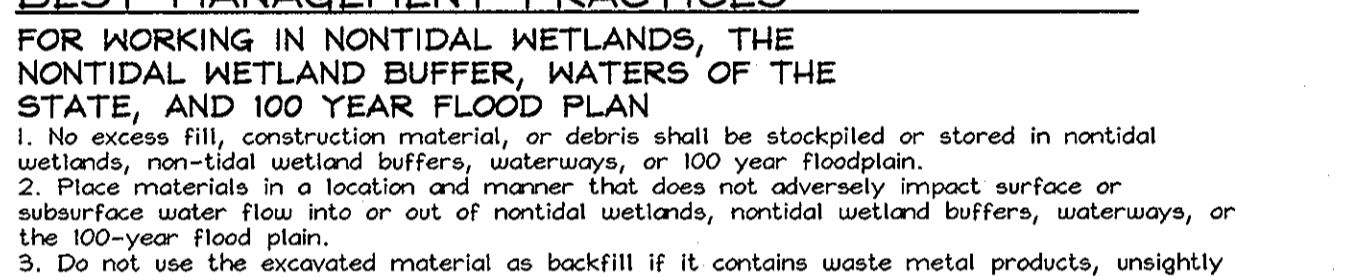
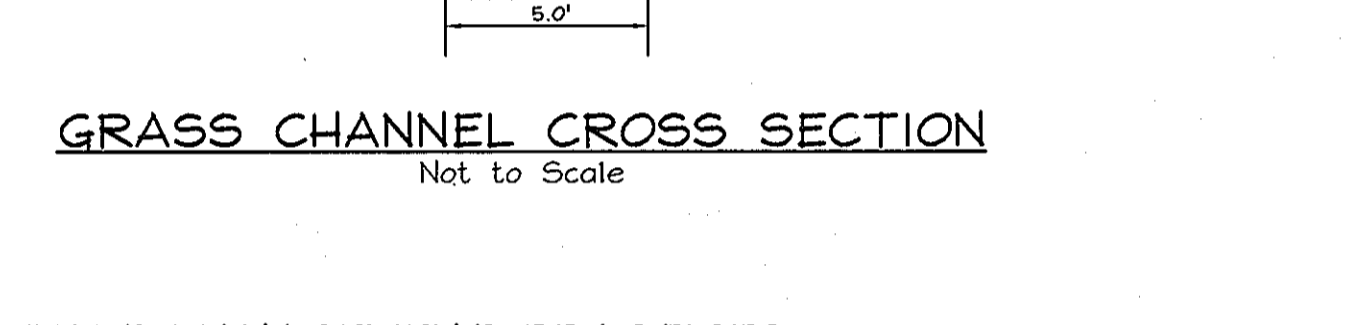
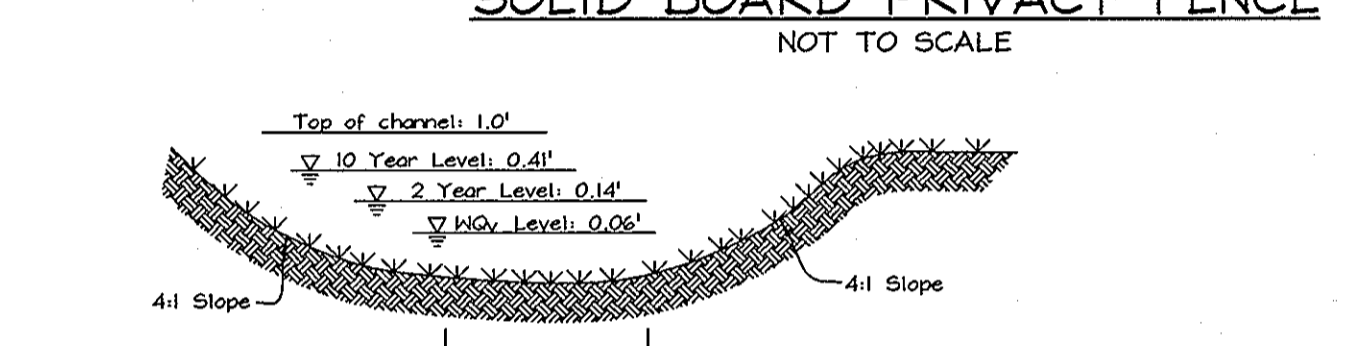
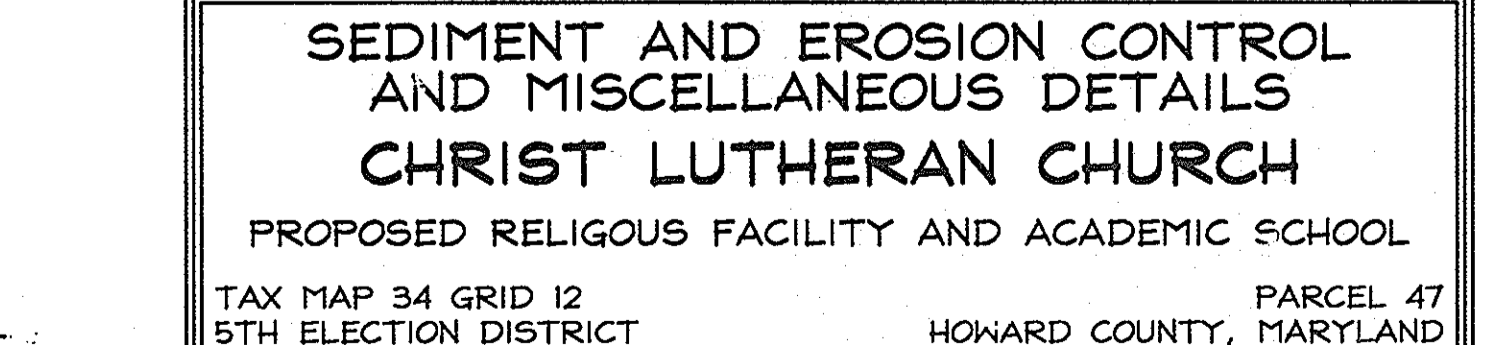
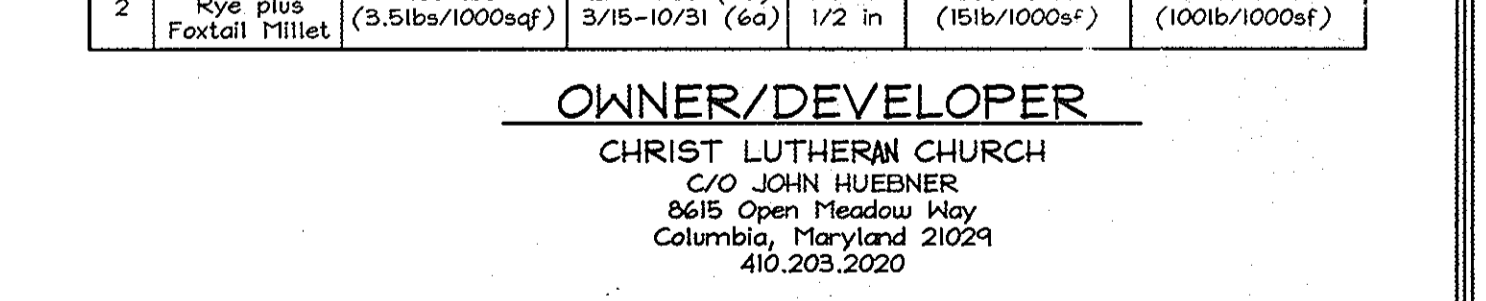
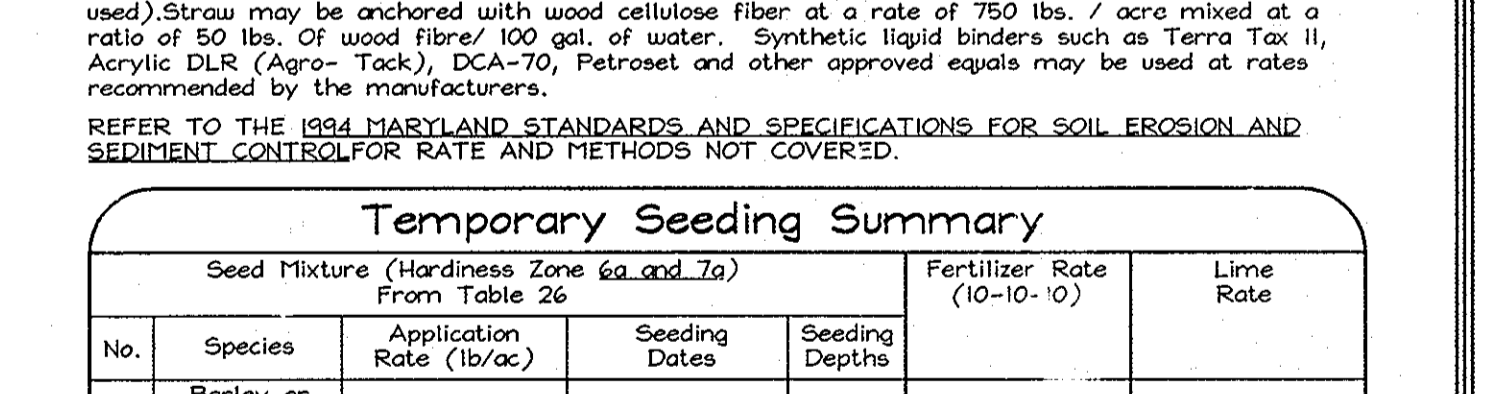
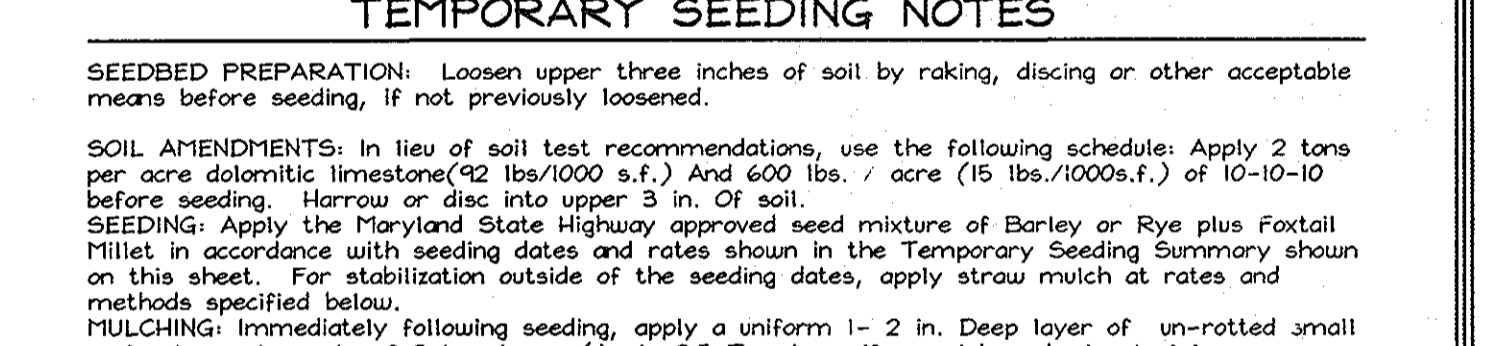
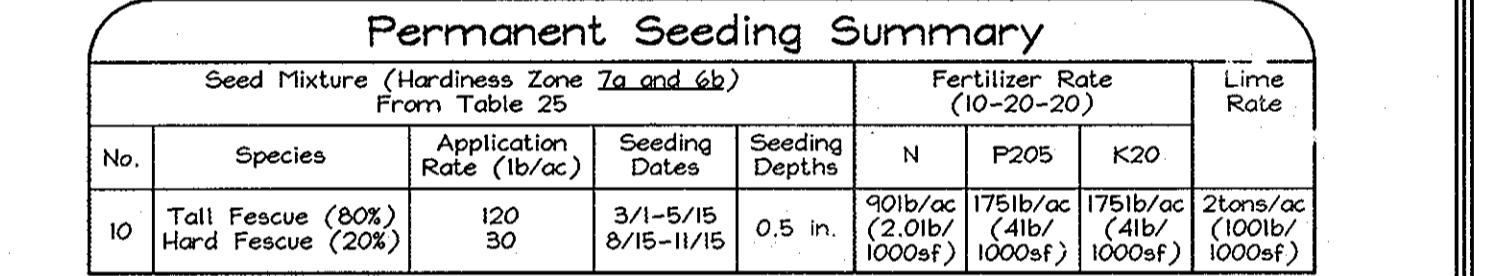
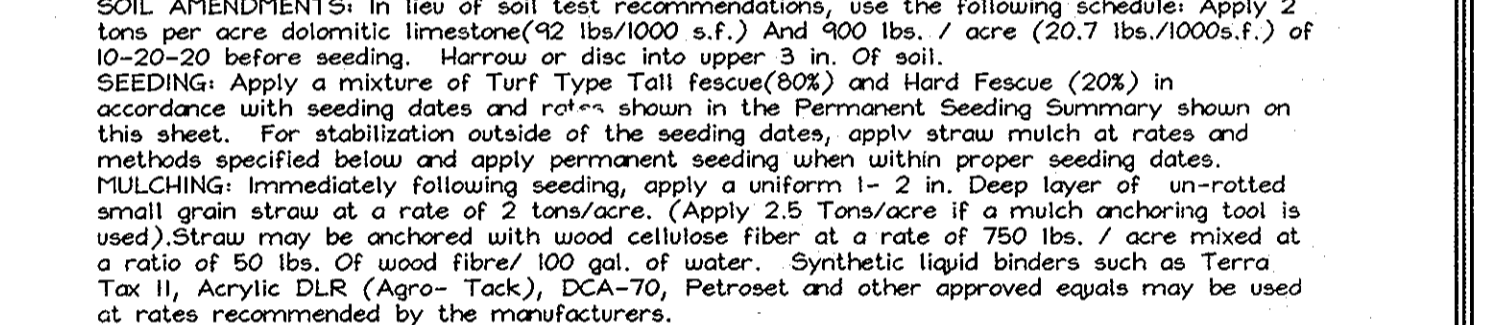
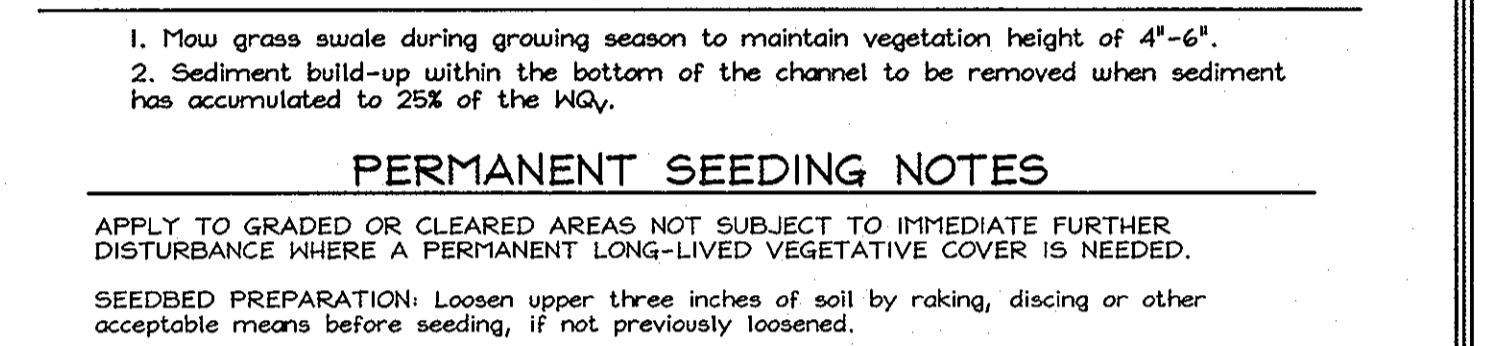
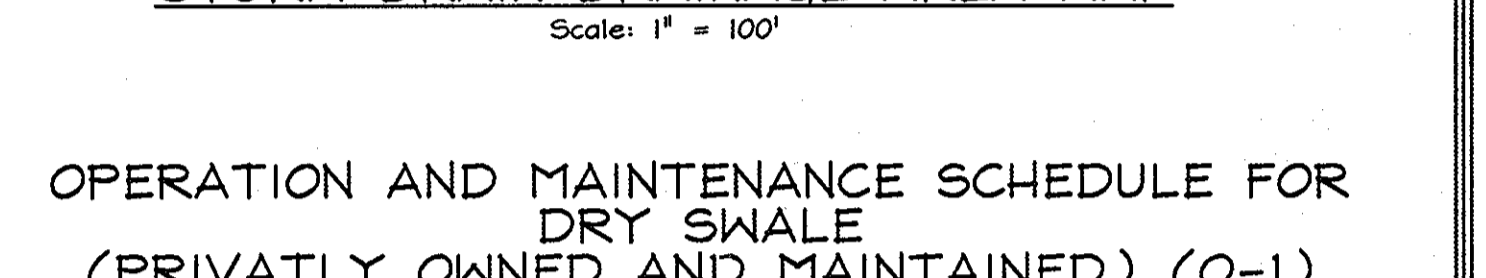
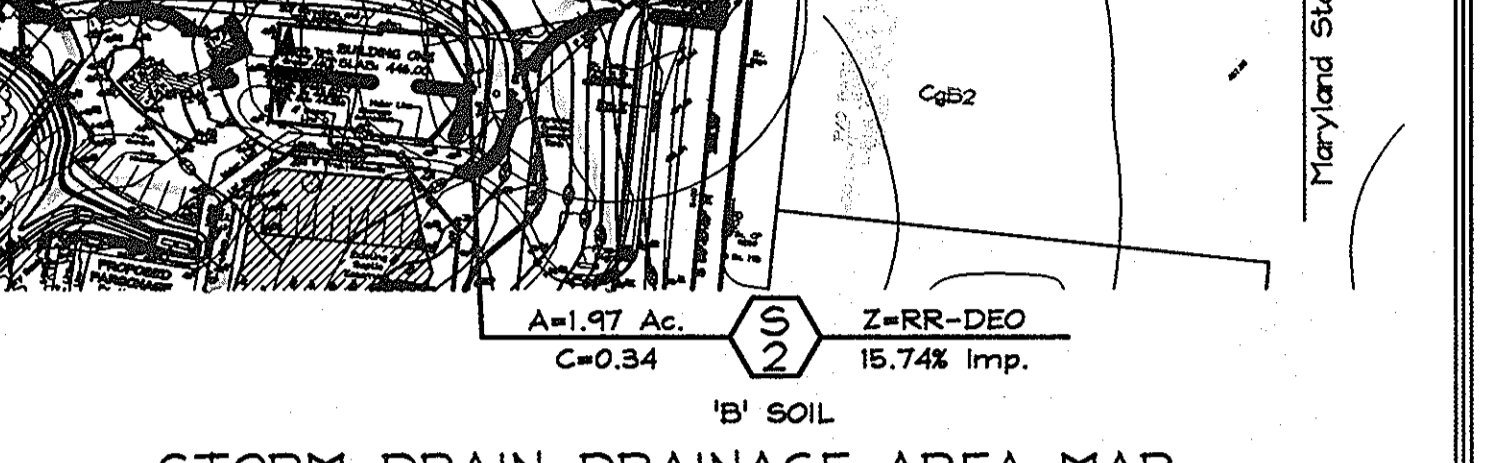
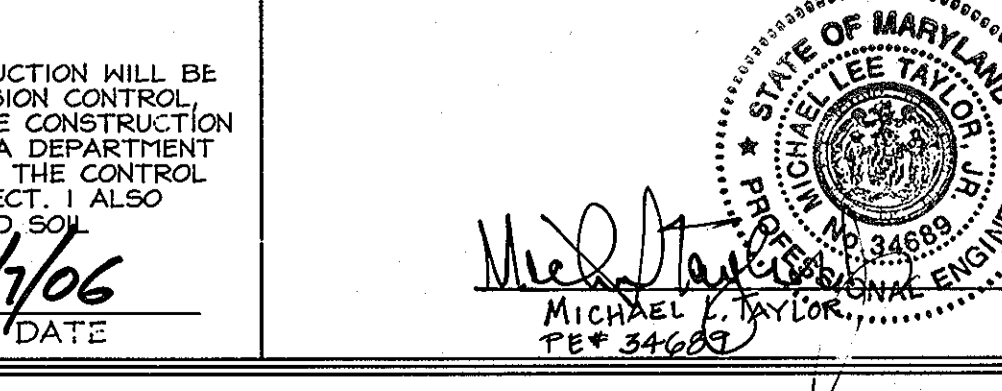
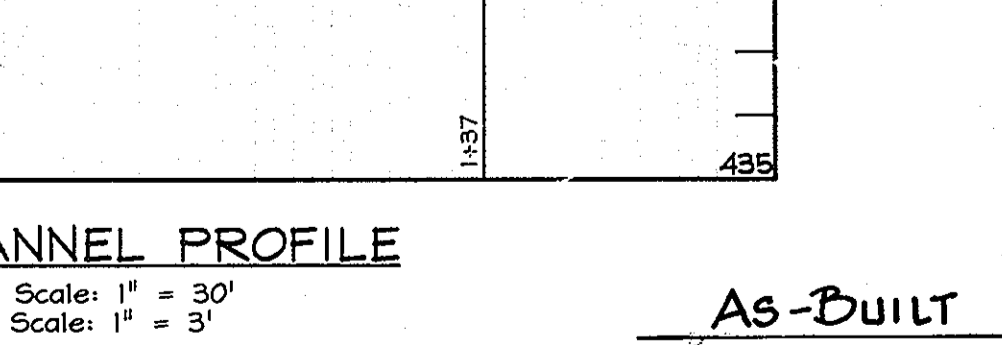
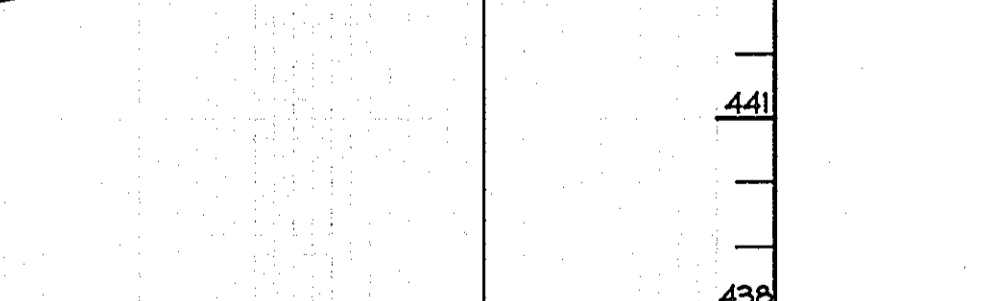
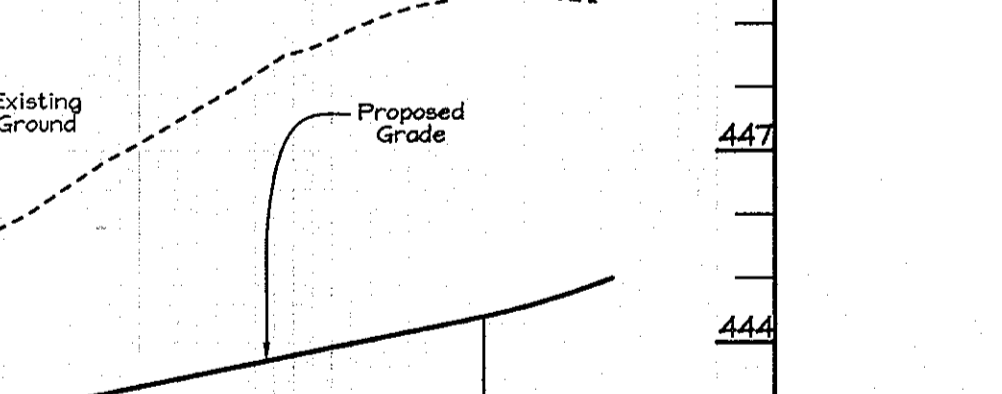
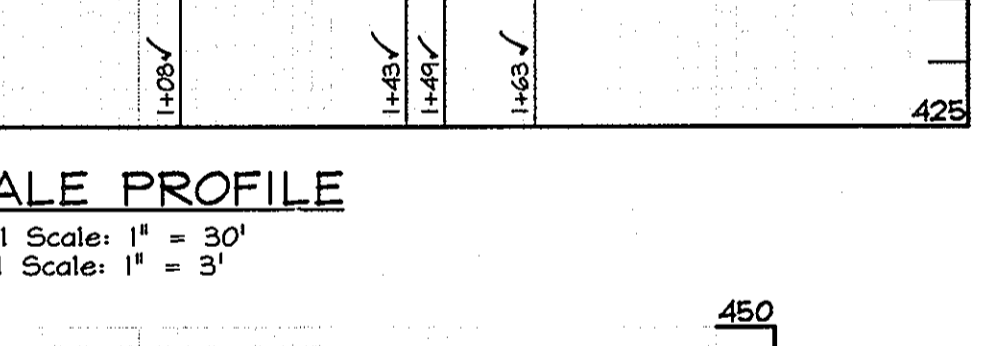
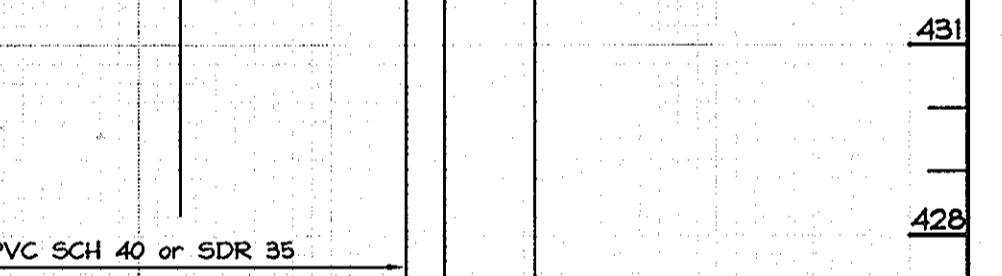
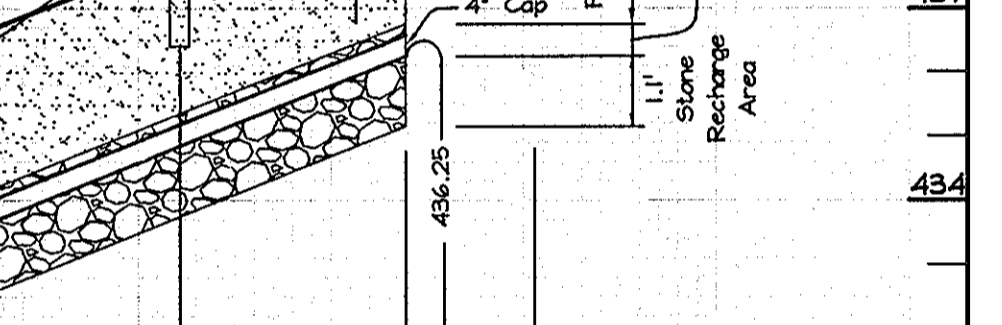
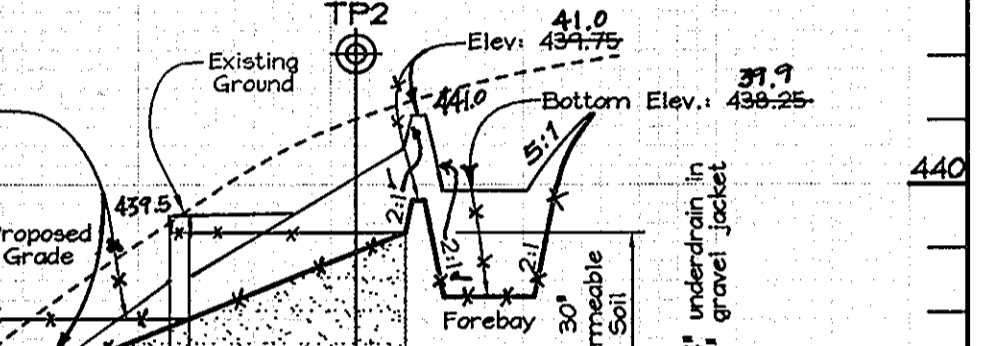
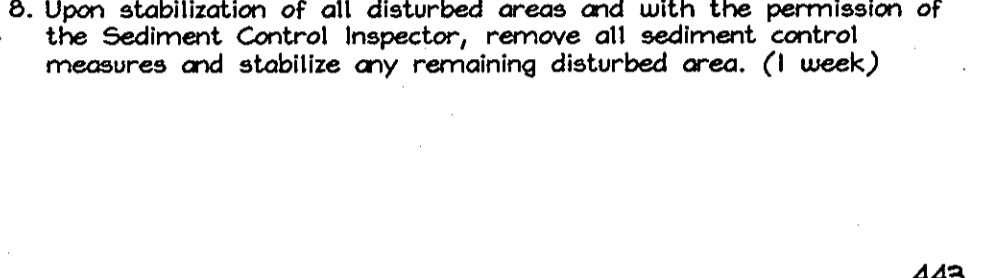
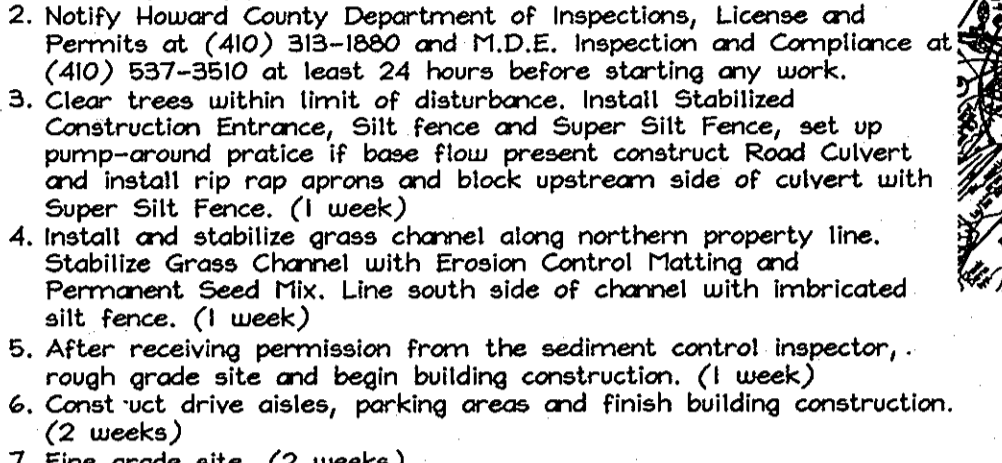
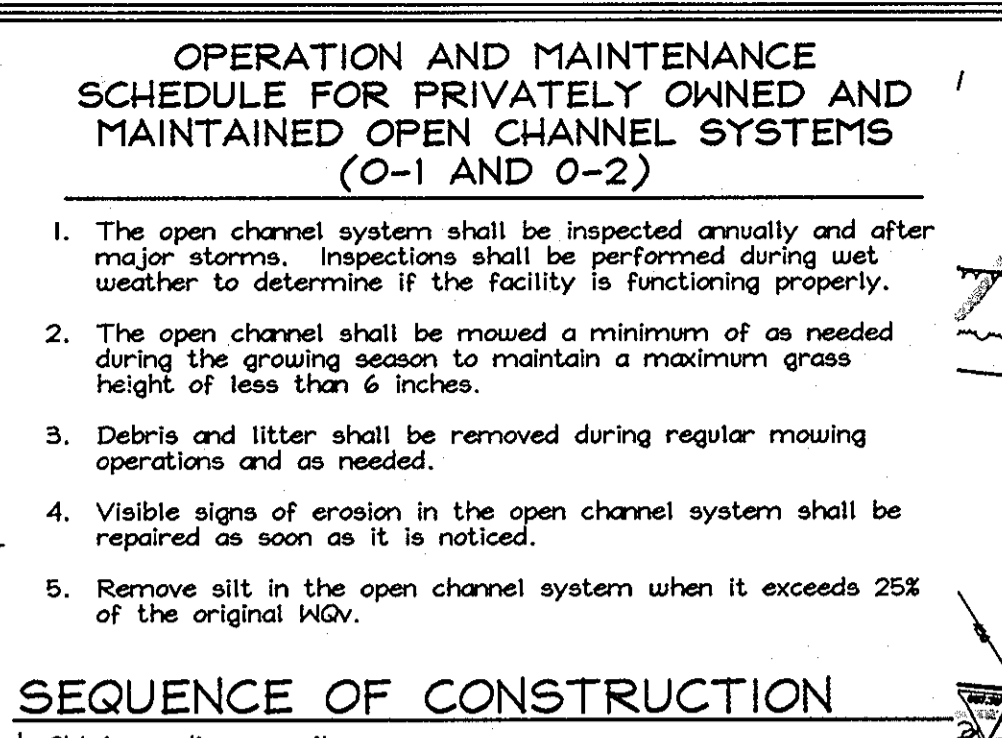
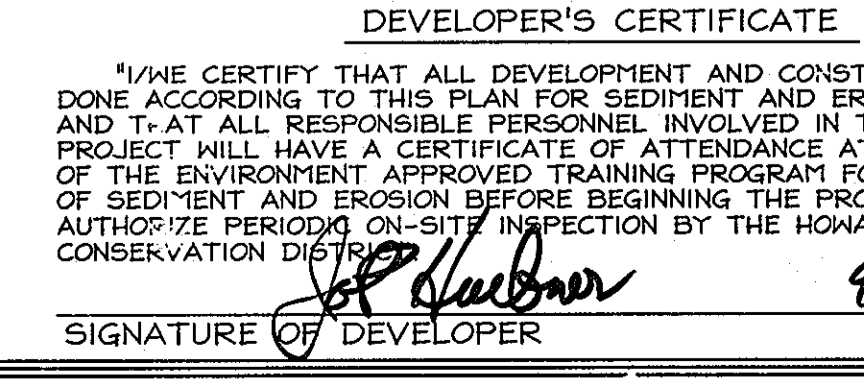
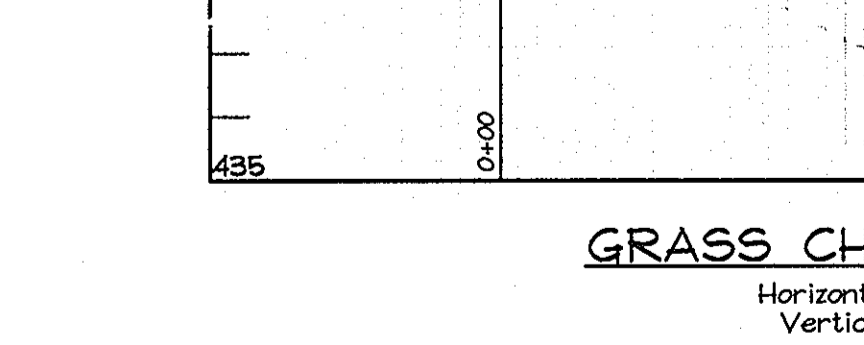
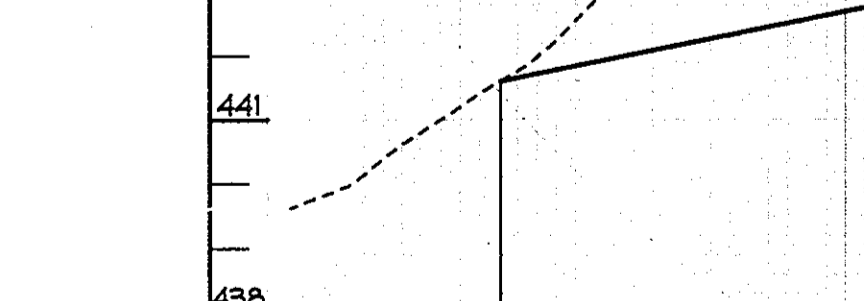
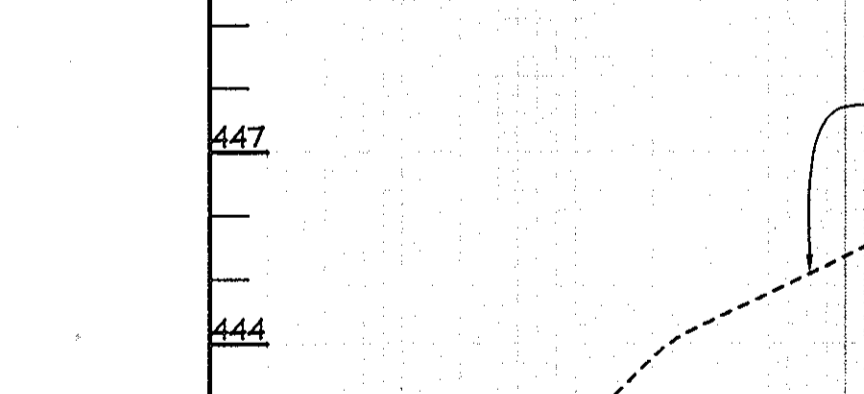
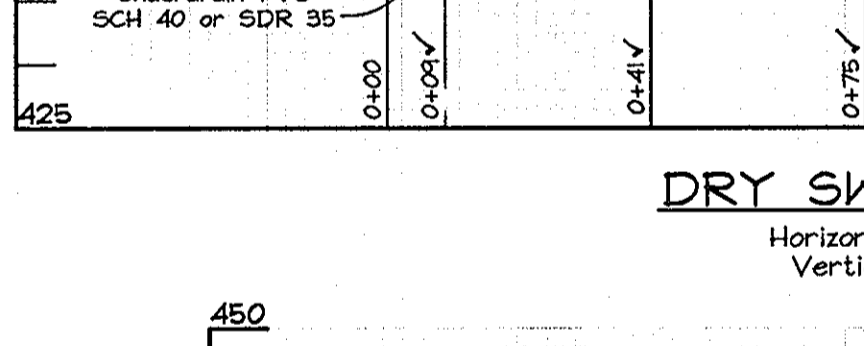
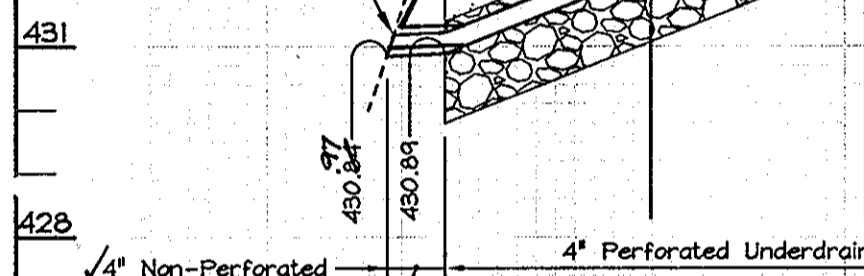
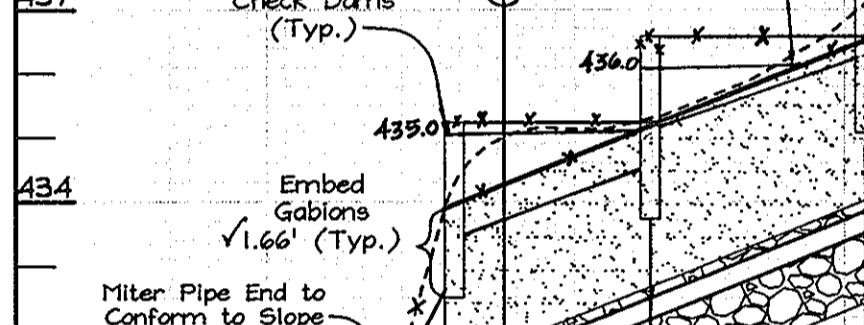
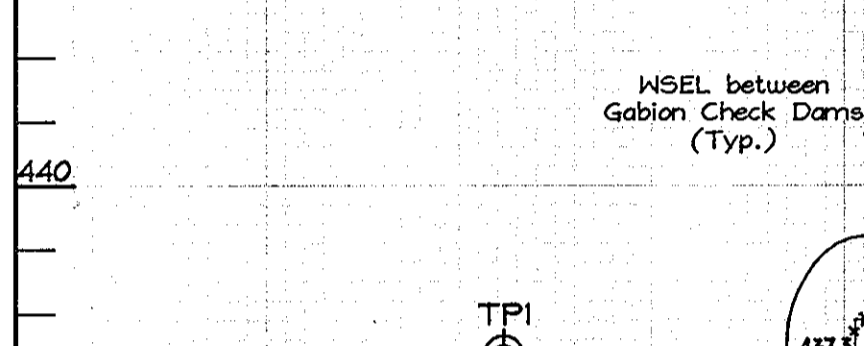
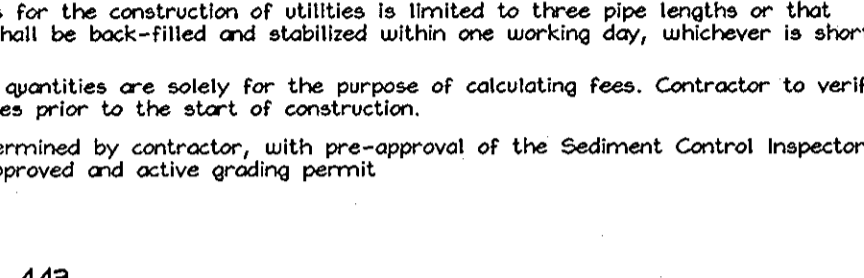
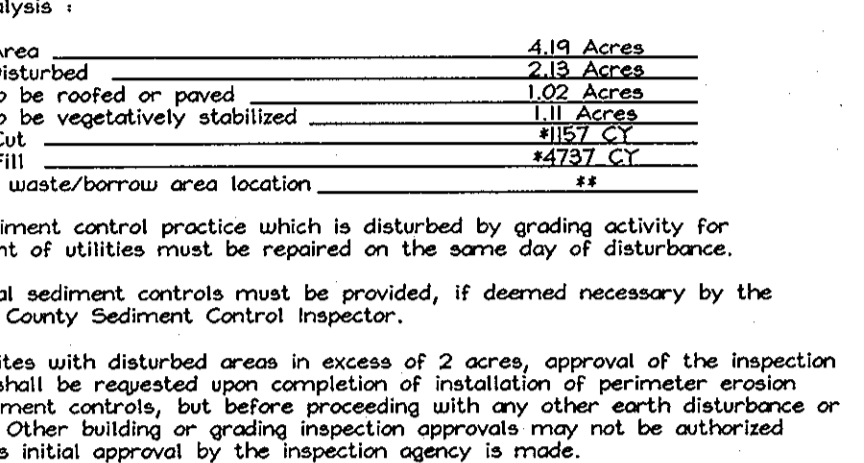
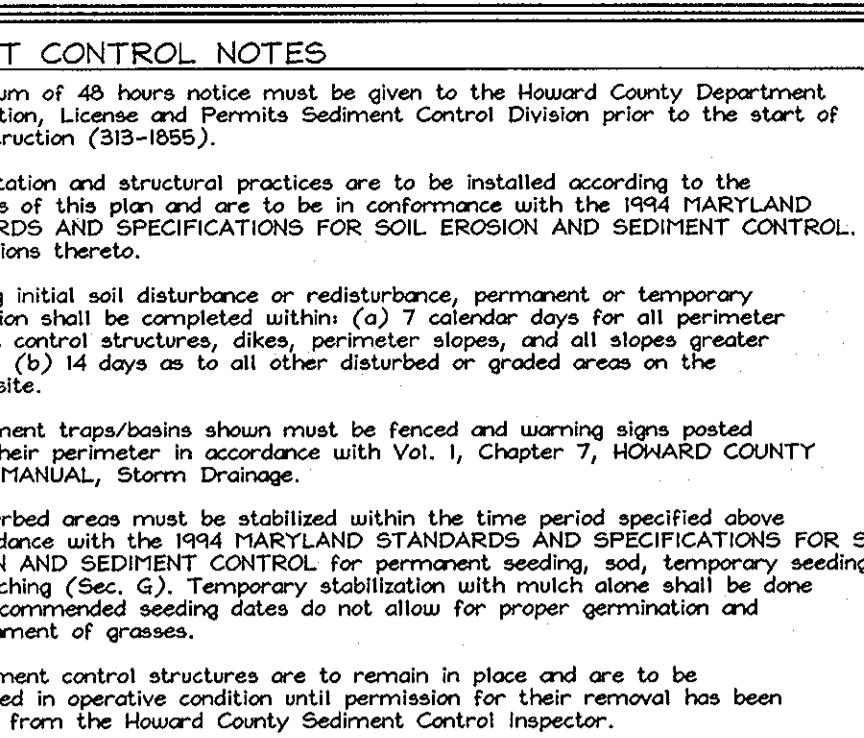
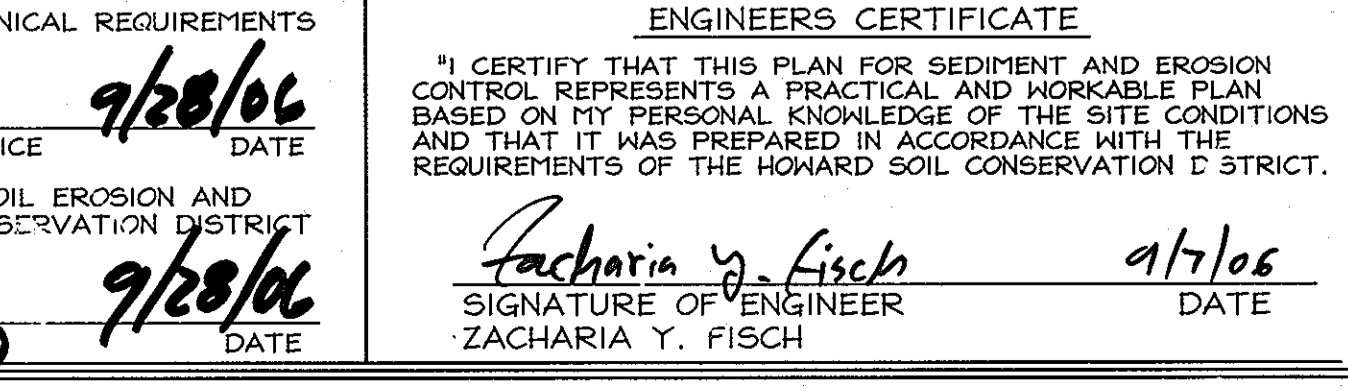
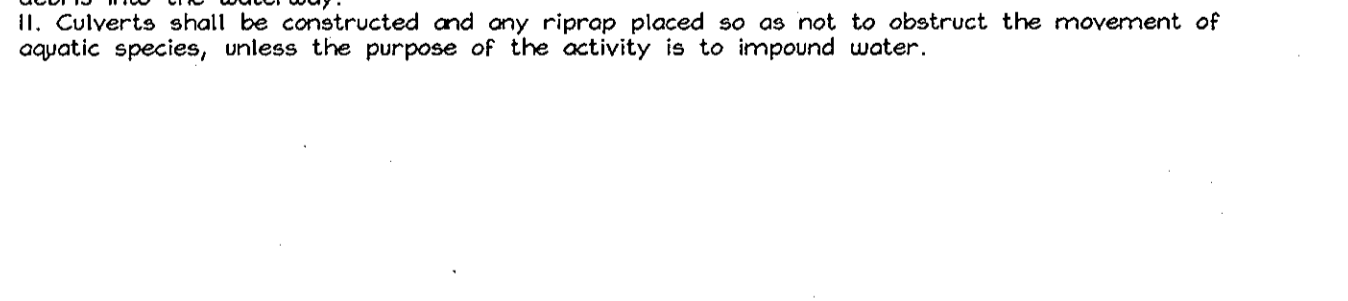
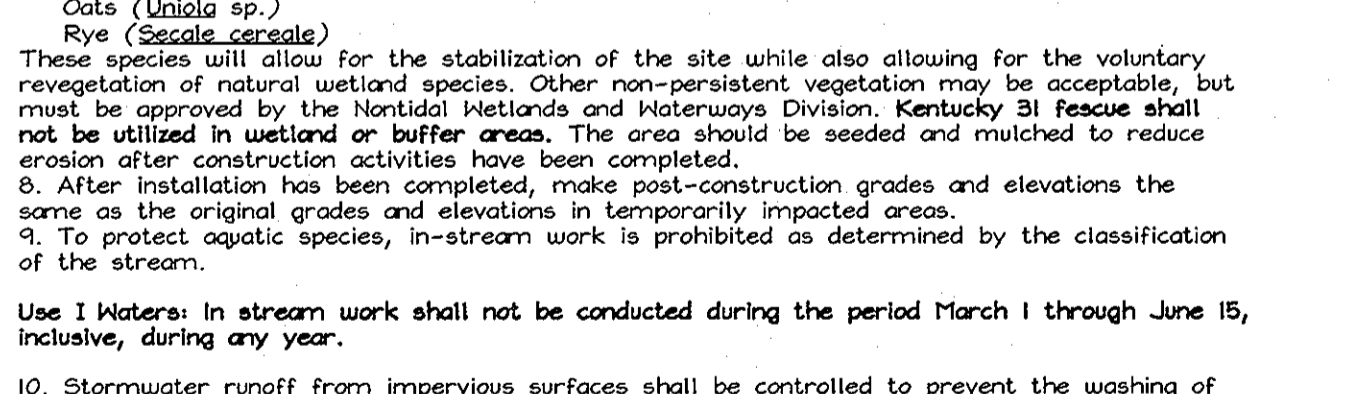
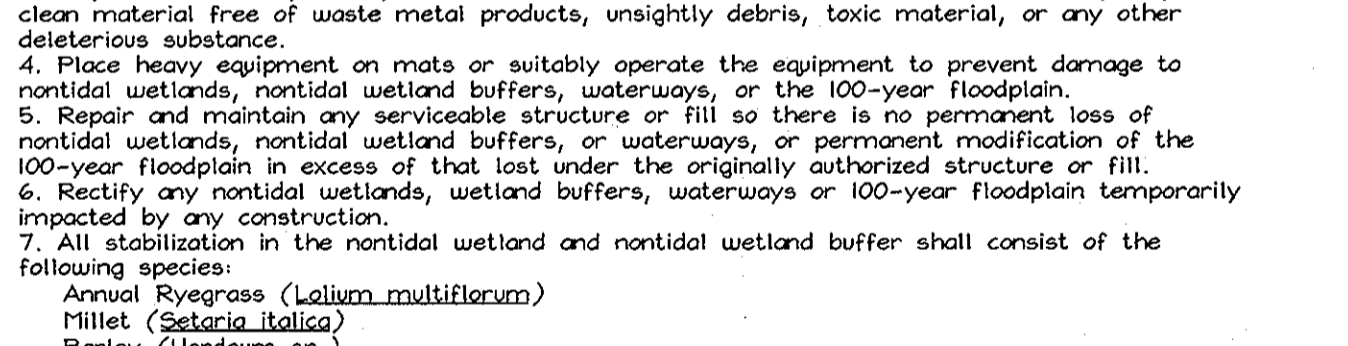
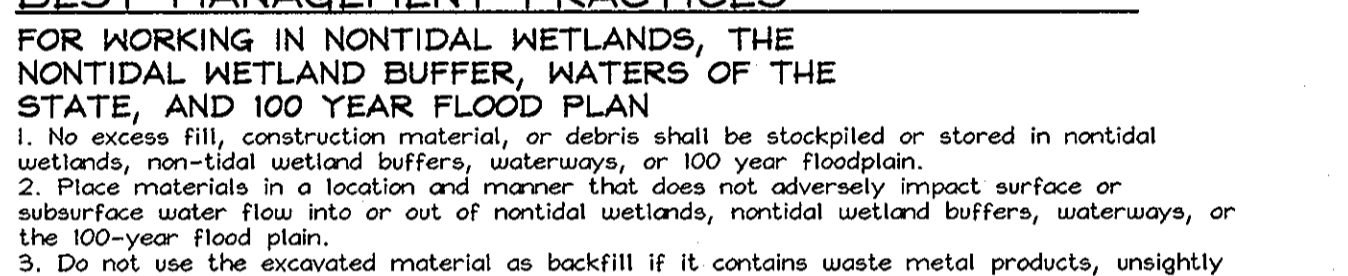
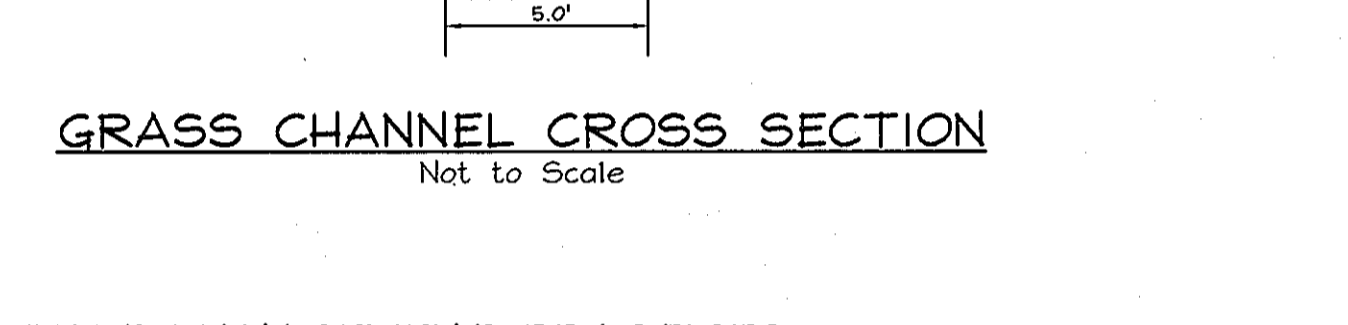
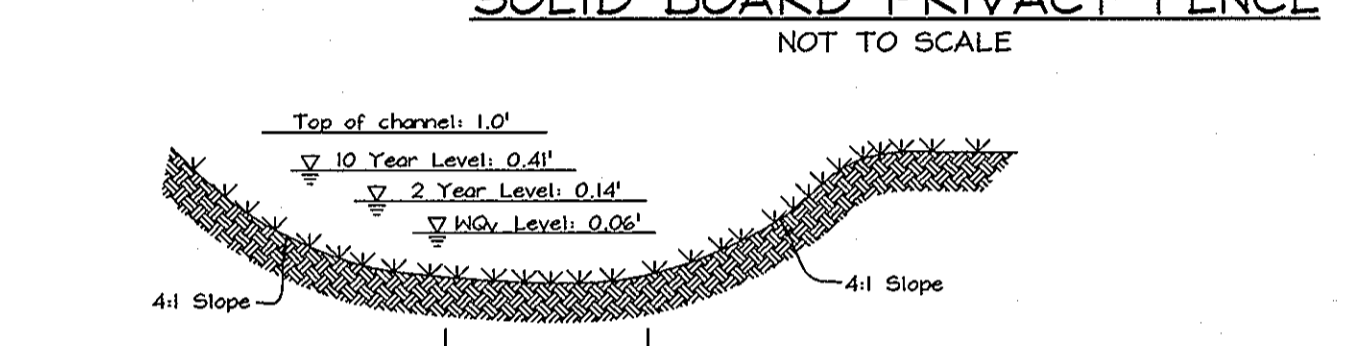
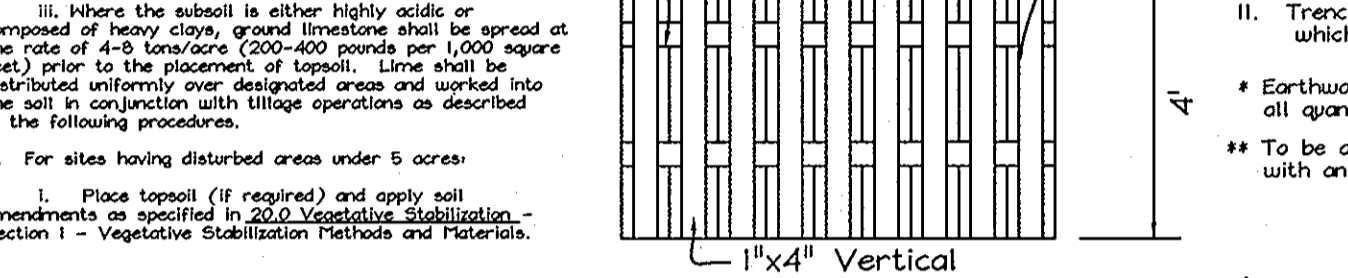
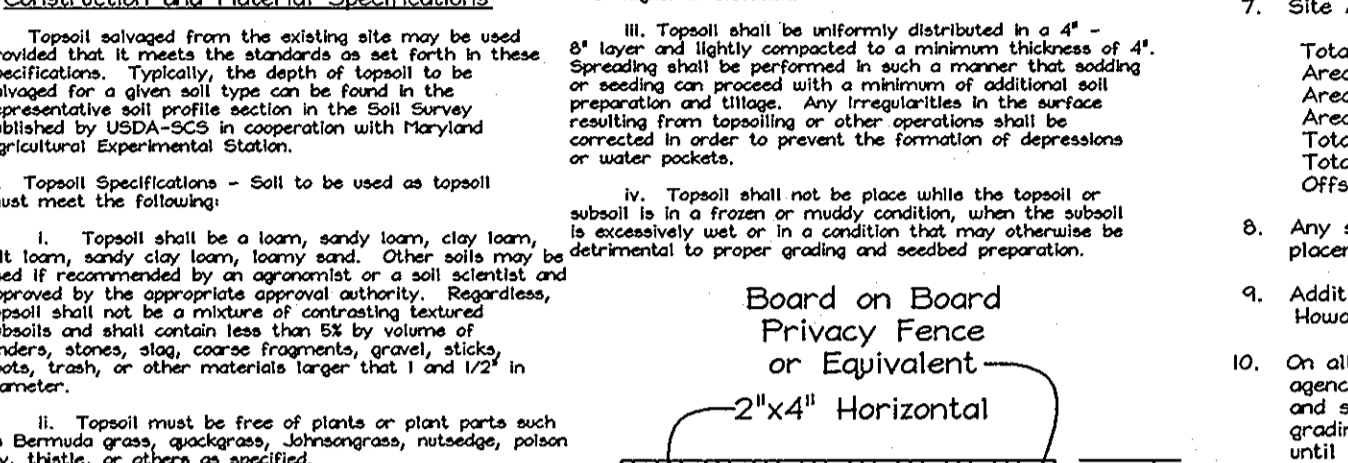
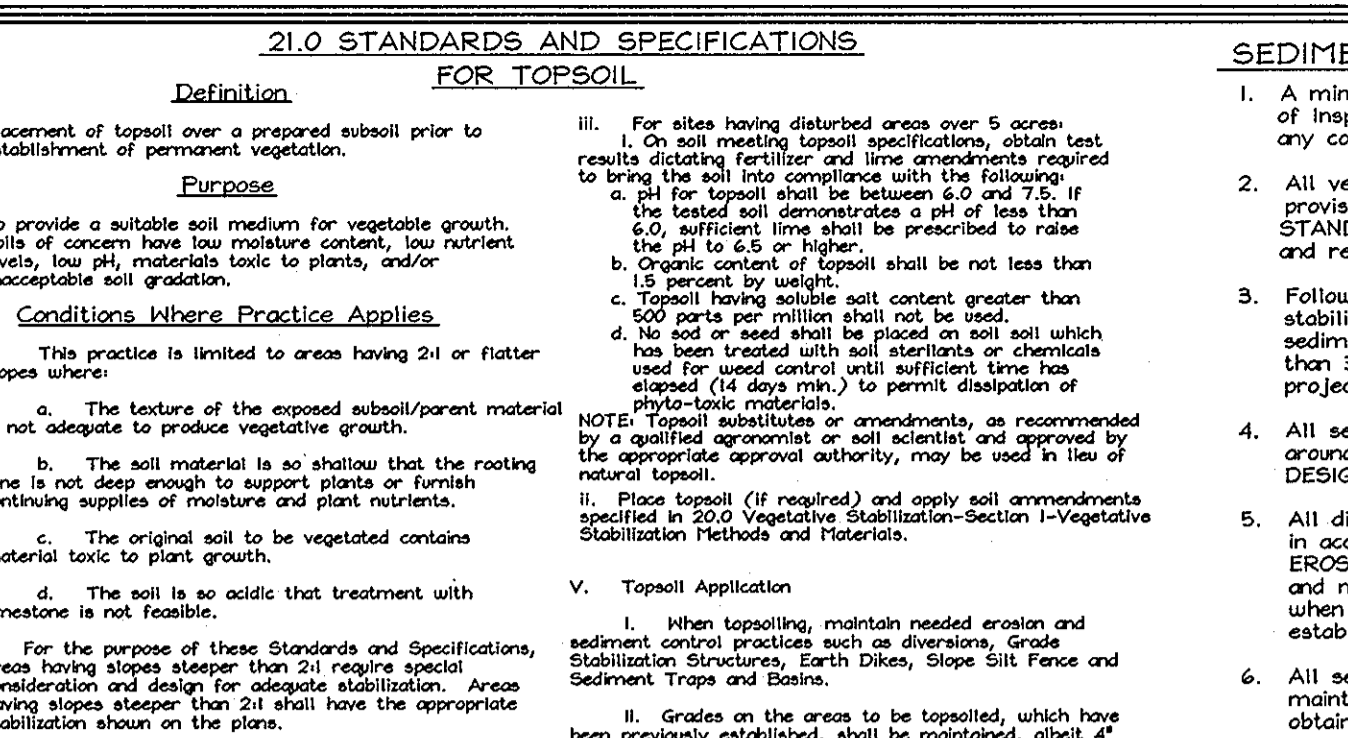
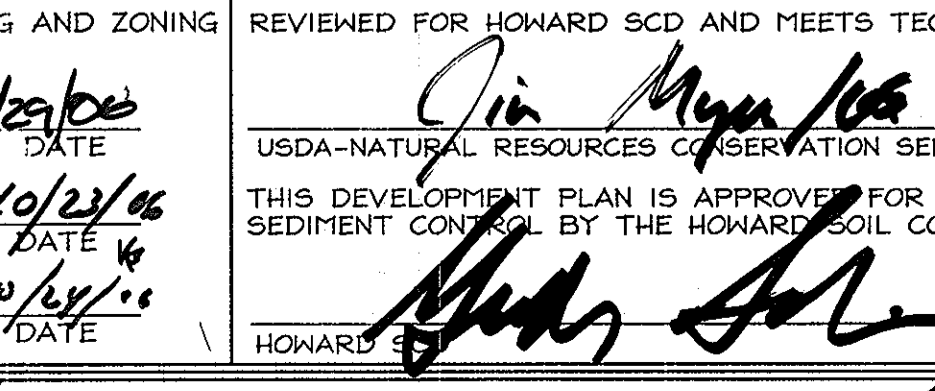
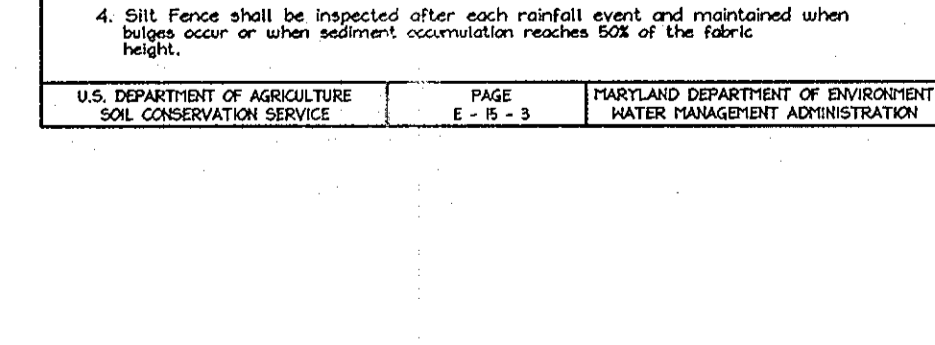
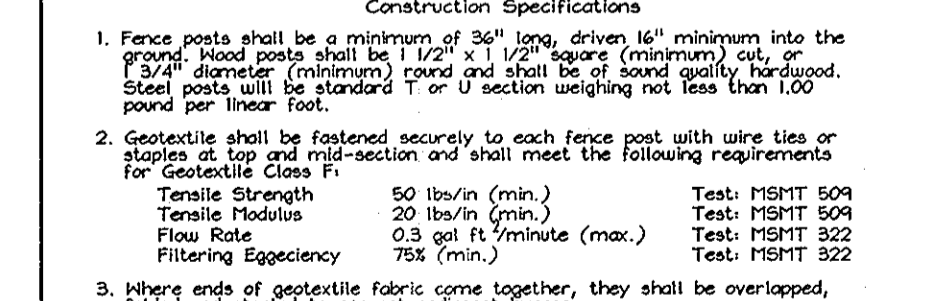
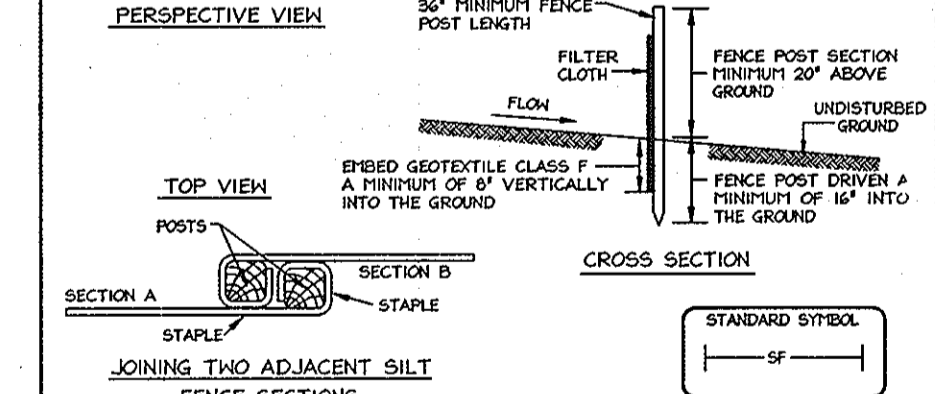
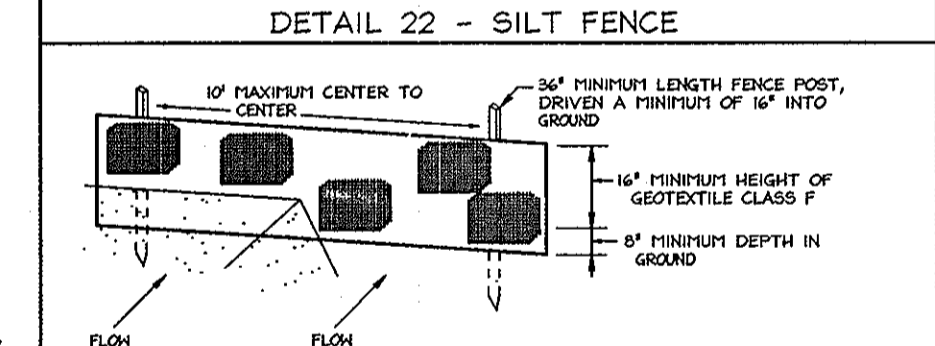
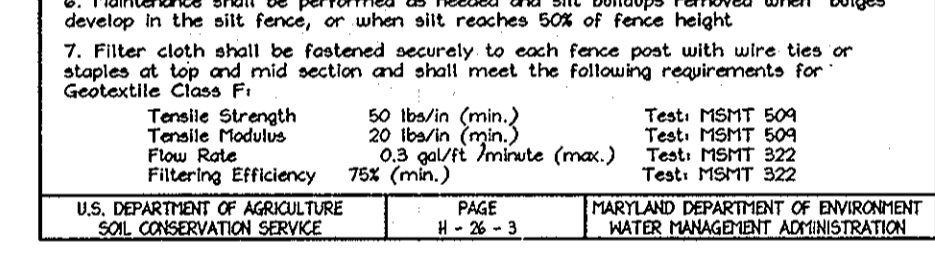
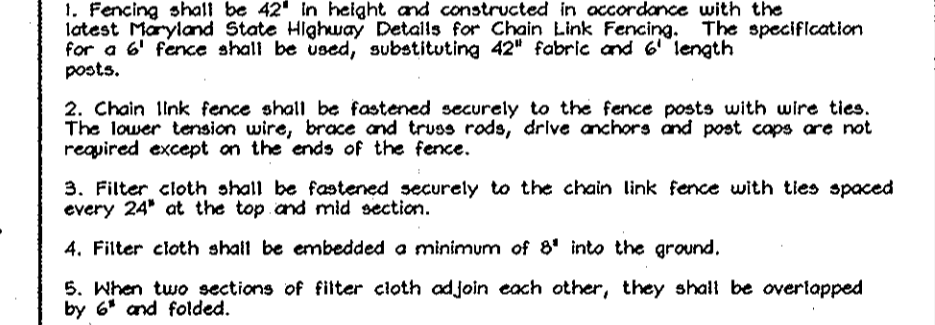
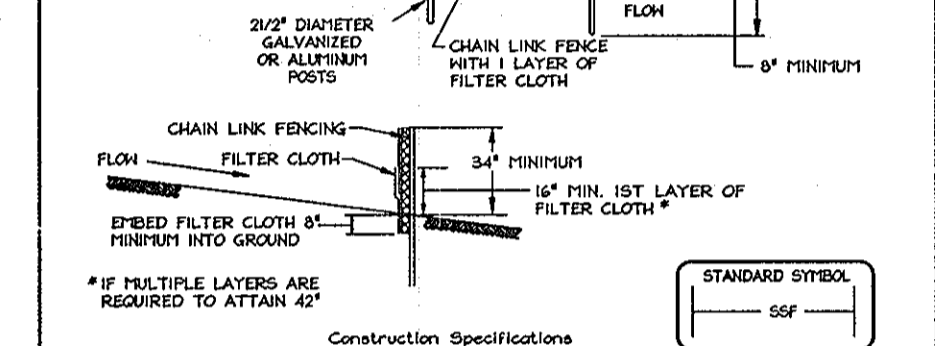
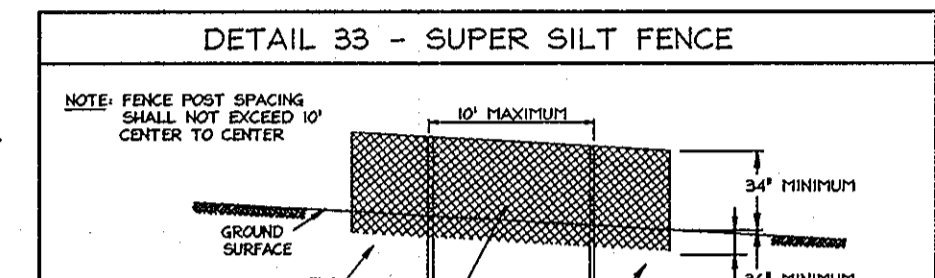
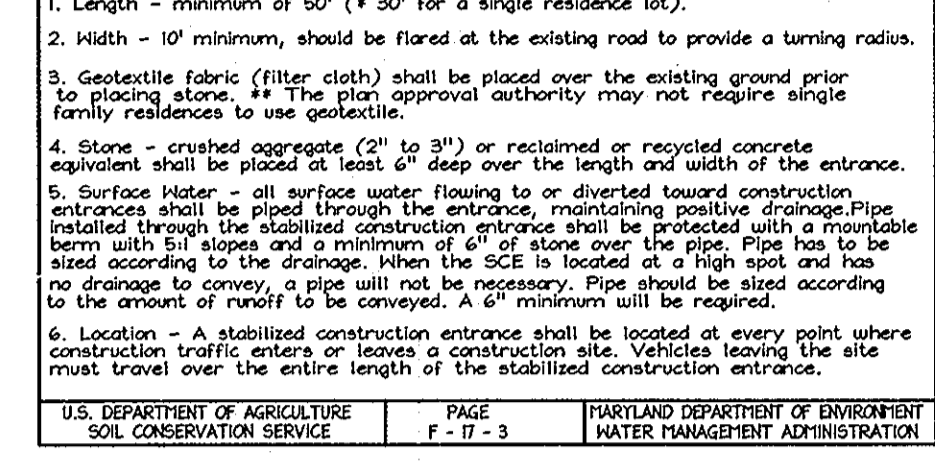
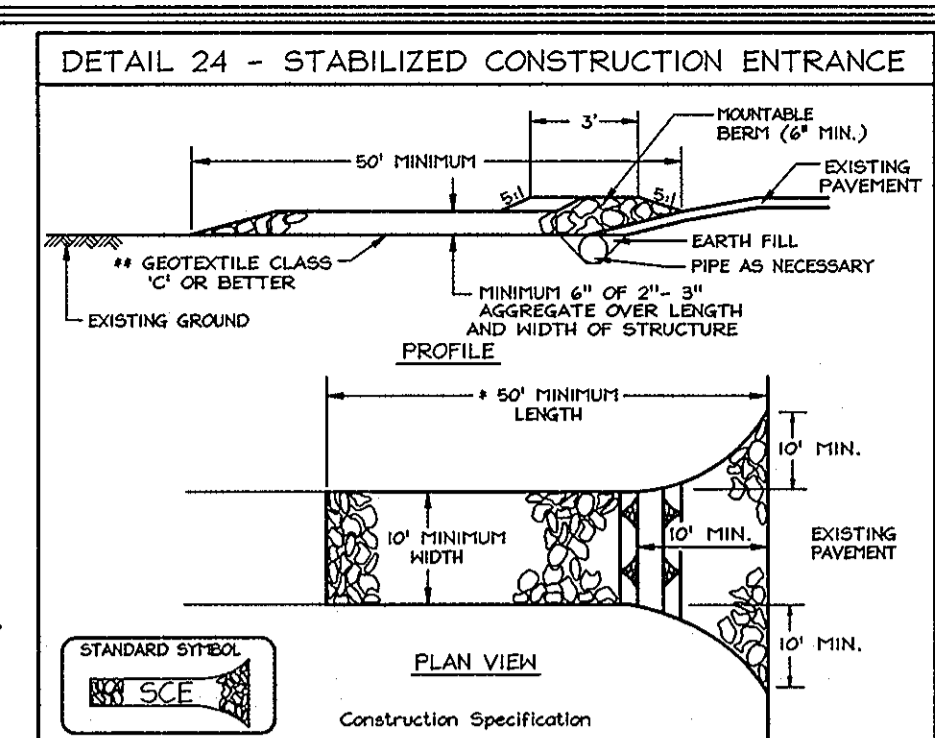
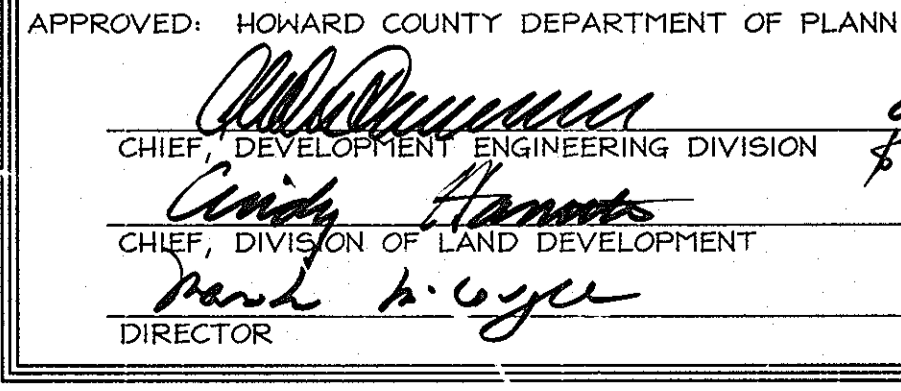
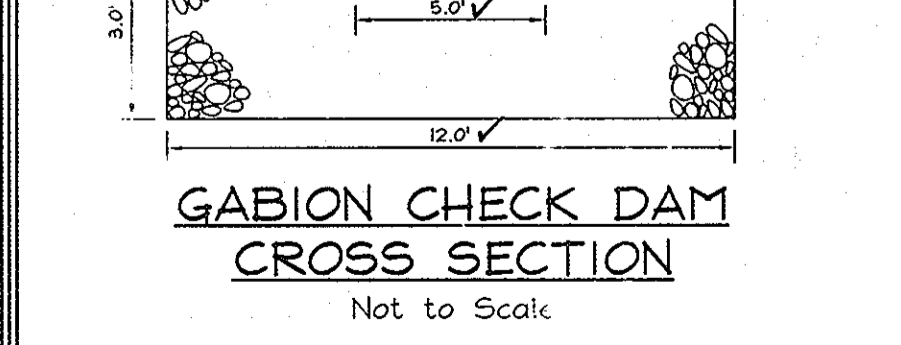
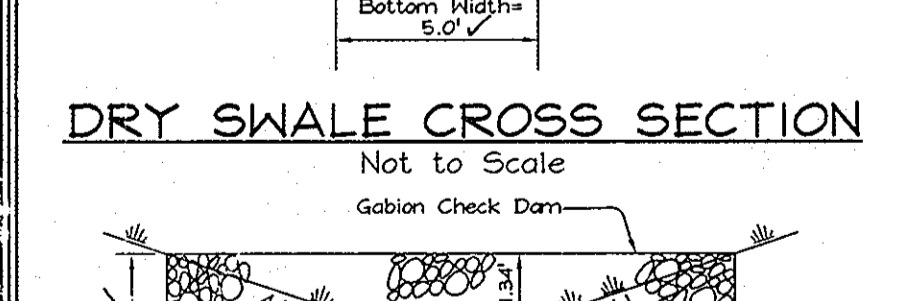
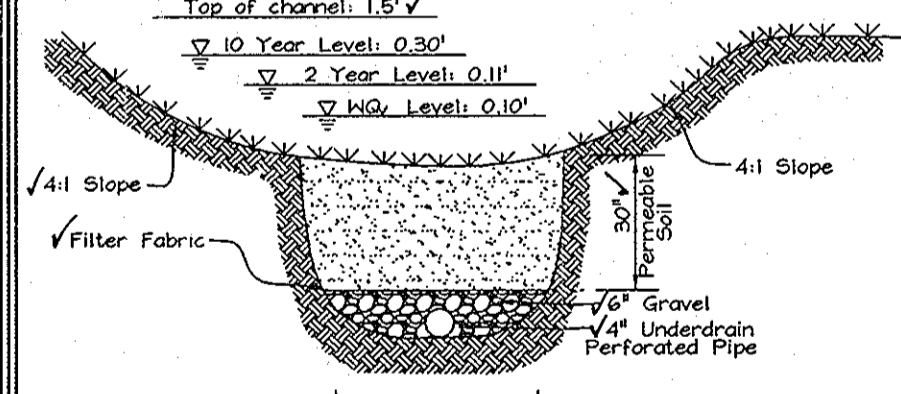
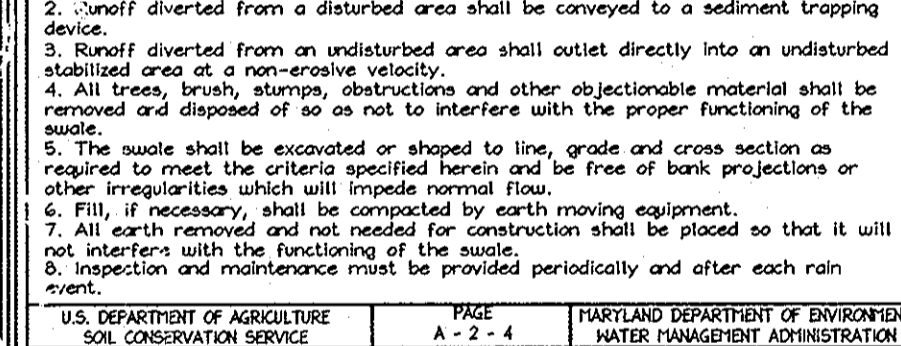
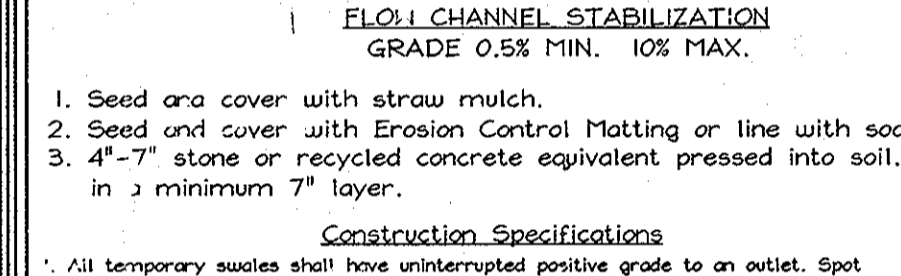
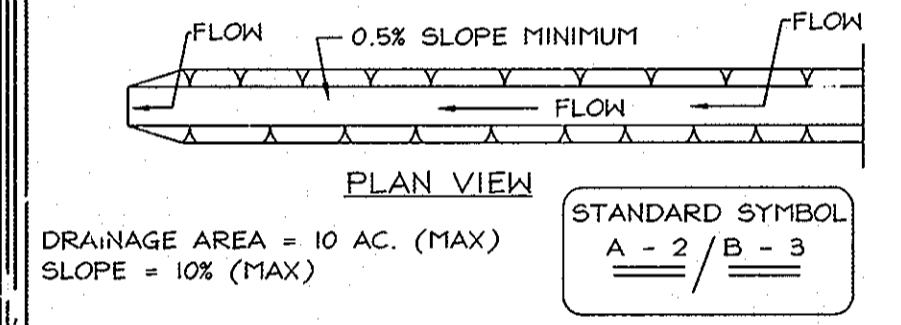
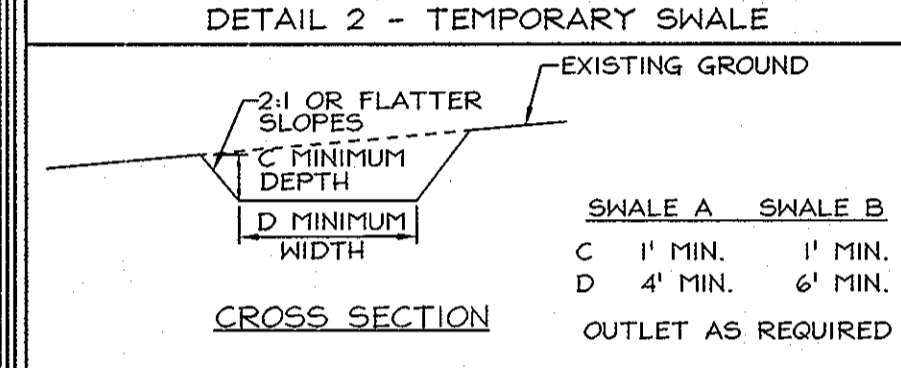
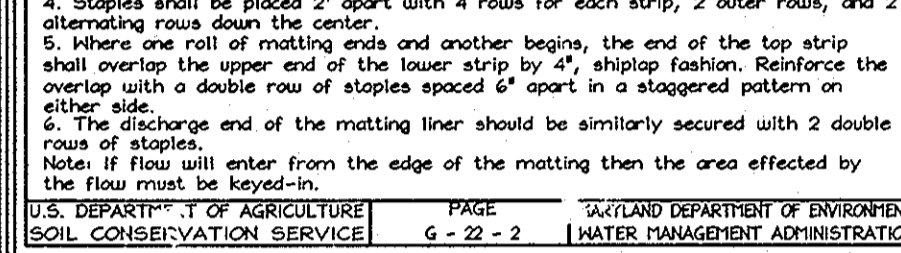
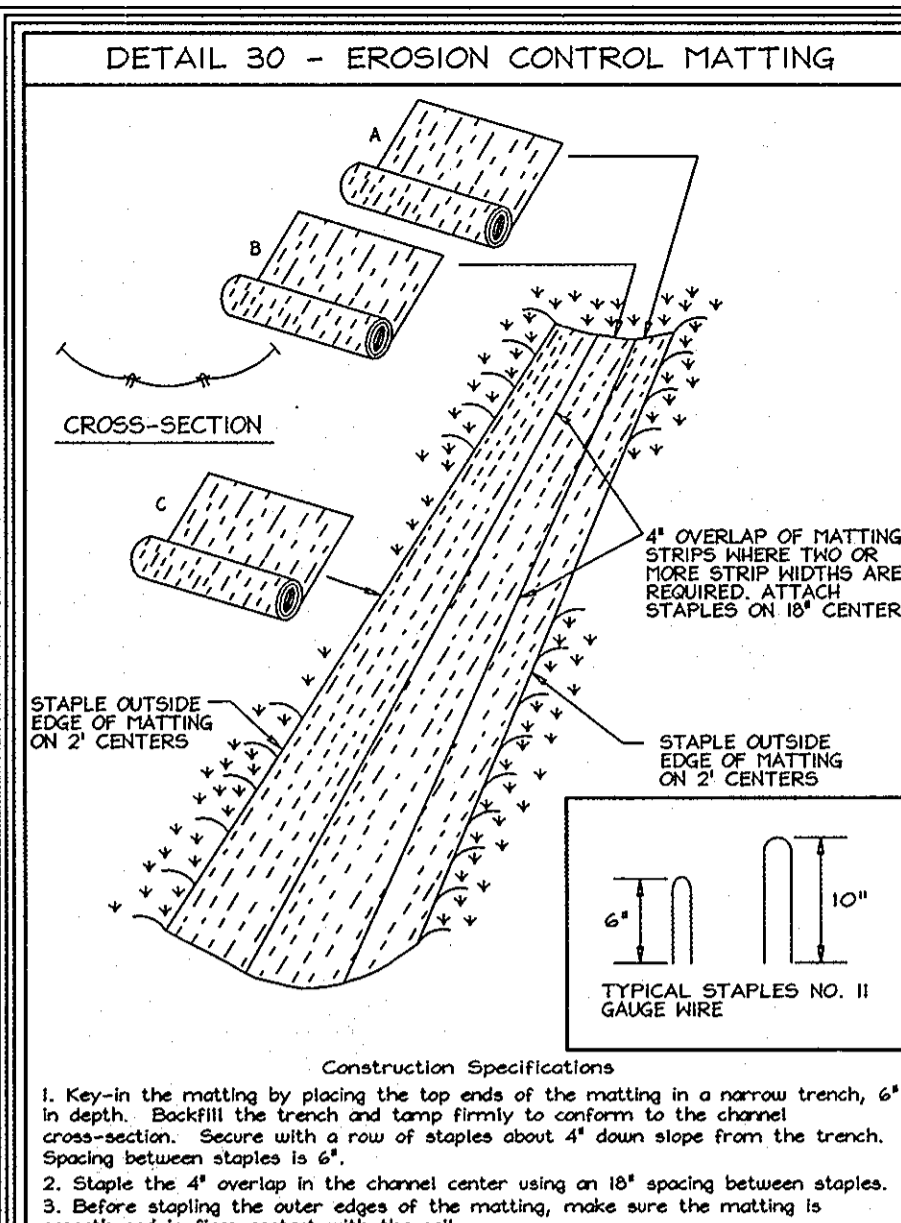
CHRIST LUTHERAN CHURCH

PROPOSED RELIGIOUS FACILITY AND ACADEMIC SCHOOL

TAX MAP 34 GRID 12 PARCEL 47
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: PS
DRAWN BY: HK
CHECKED BY: ZYF
SCALE: As Shown
DATE: Sept. 07, 2006
P. No.: 3207
SHEET No.: 3 OF 7

FSH Associates
Engineers Planners Surveyors
6339 Howard Lane, Elkridge MD 21075
Tel: 410-527-5200 Fax: 411 98-1562
Email: info@fsh.com



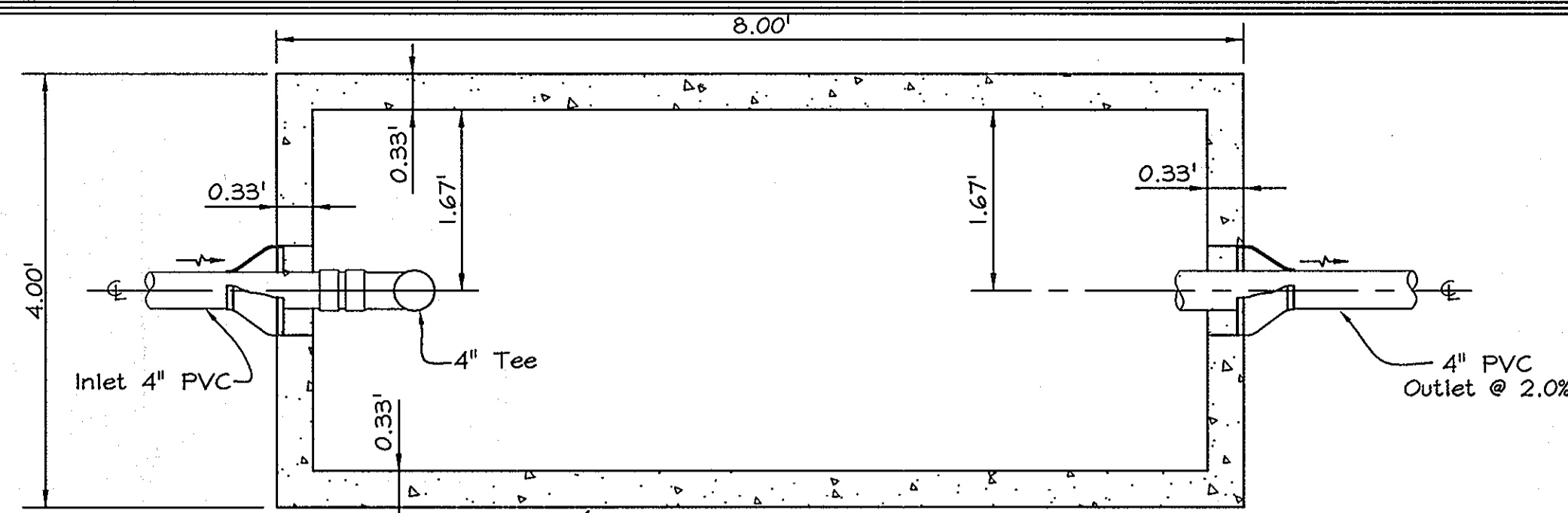
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Chief Development Engineering Division, Date 9/28/06.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS. USDA-NATURAL RESOURCES CONSERVATION SERVICE, Date 9/28/06.

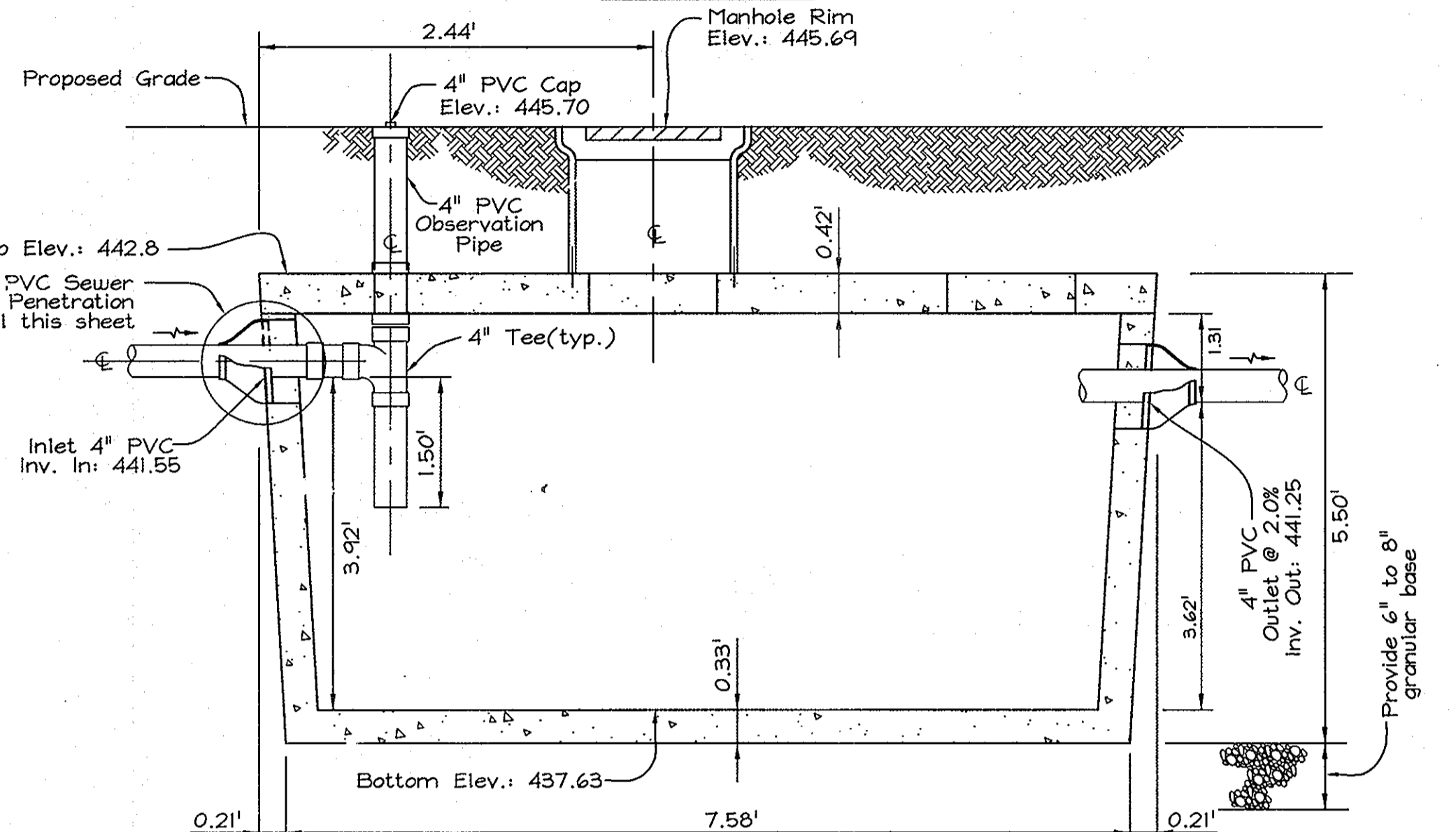
ENGINEER'S CERTIFICATE. I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN.

DEVELOPER'S CERTIFICATE. I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL.

SEDIMENT AND EROSION CONTROL AND MISCELLANEOUS DETAILS. CHRIST LUTHERAN CHURCH. PROPOSED RELIGIOUS FACILITY AND ACADEMIC SCHOOL. Includes project information and contact details for FSH Associates.

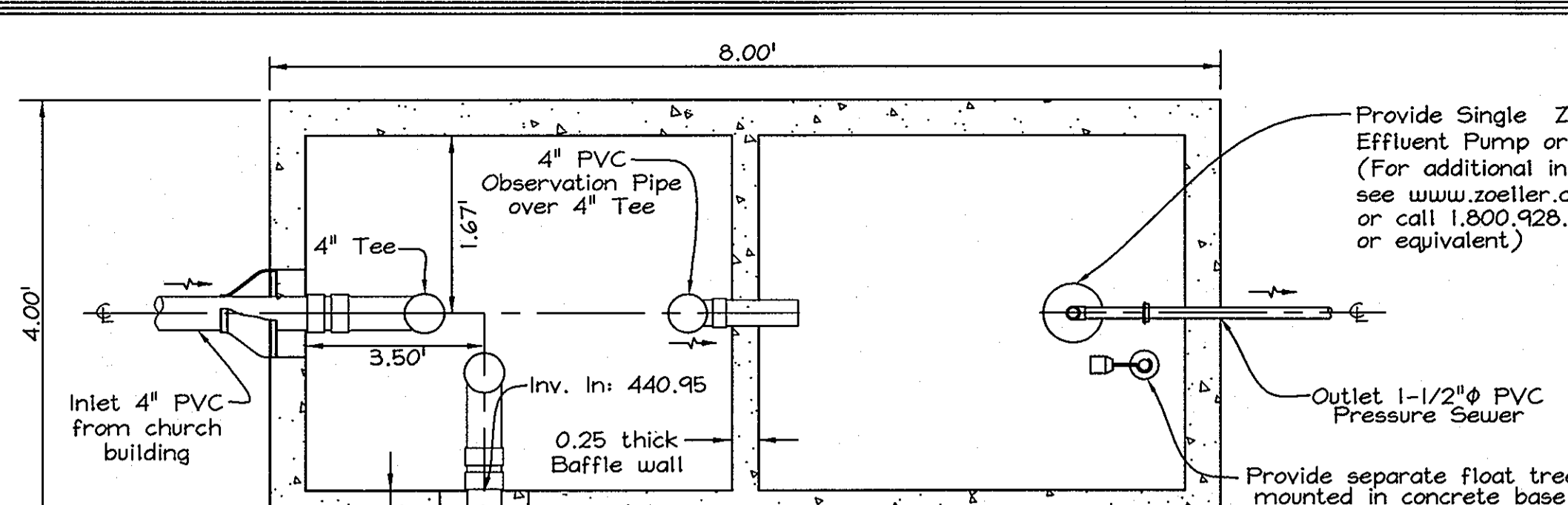


PLAN VIEW

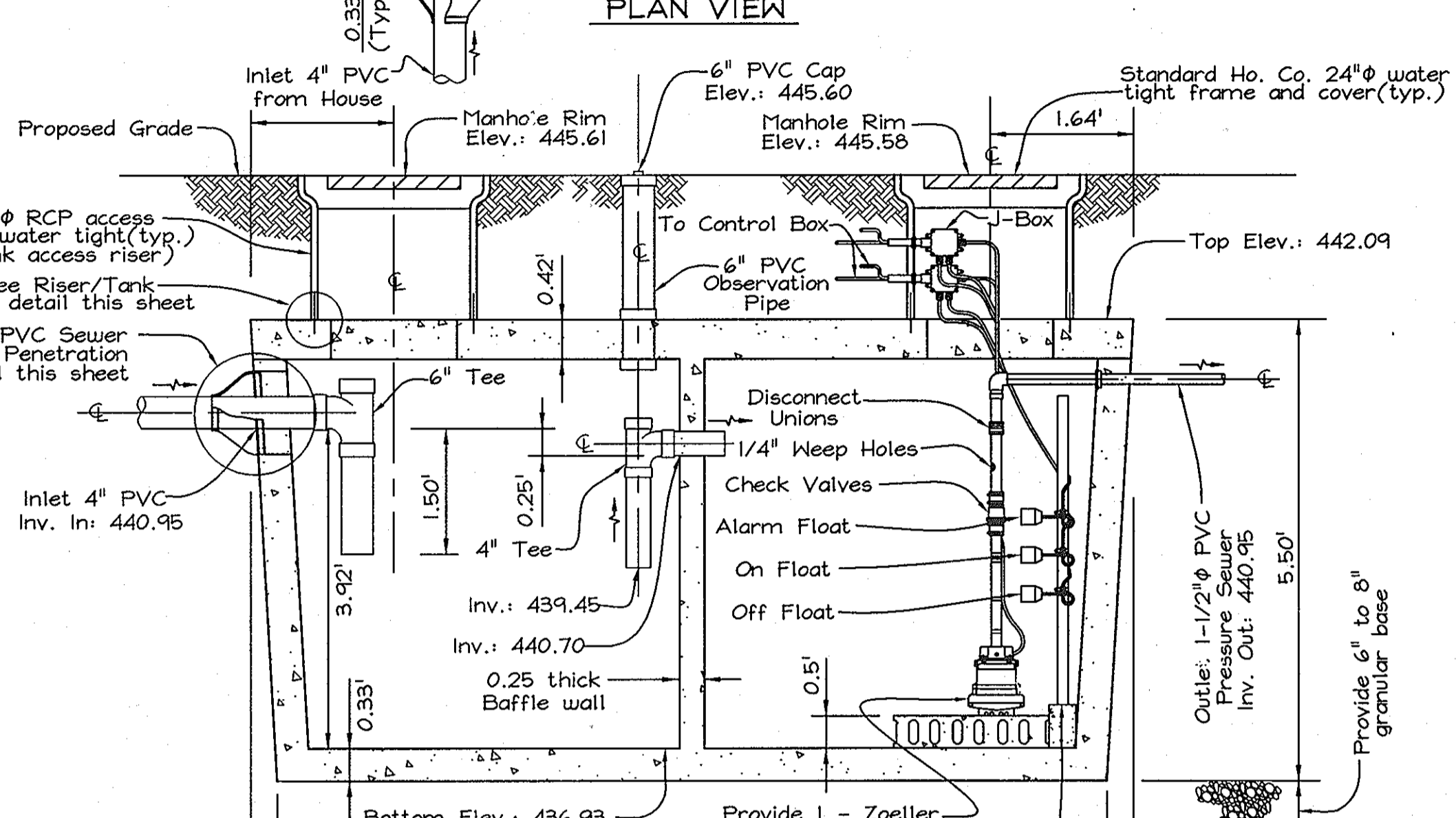


SECTION VIEW

1250 GALLON CONCRETE SEPTIC TANK ST-1
Not to Scale

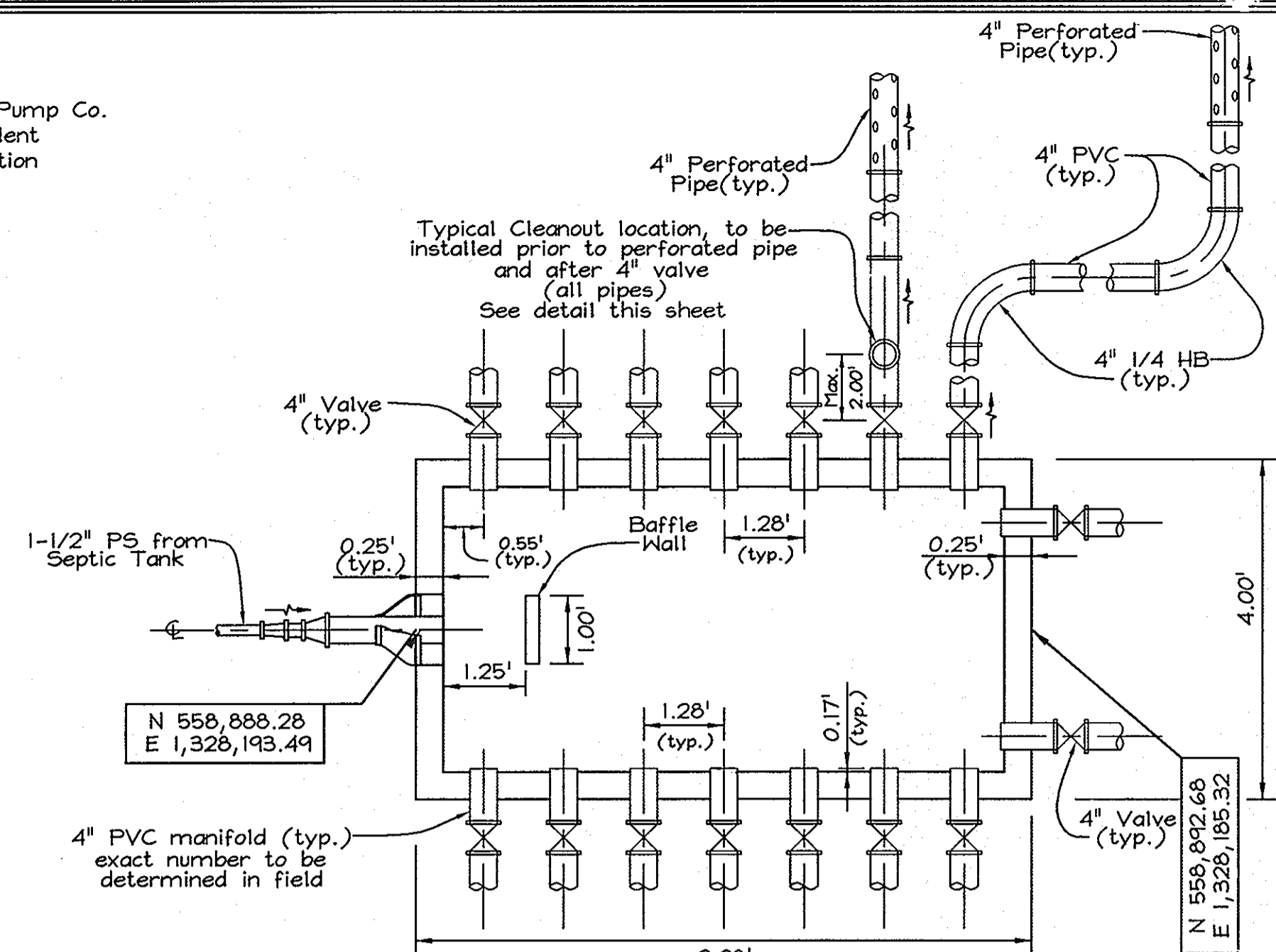


PLAN VIEW

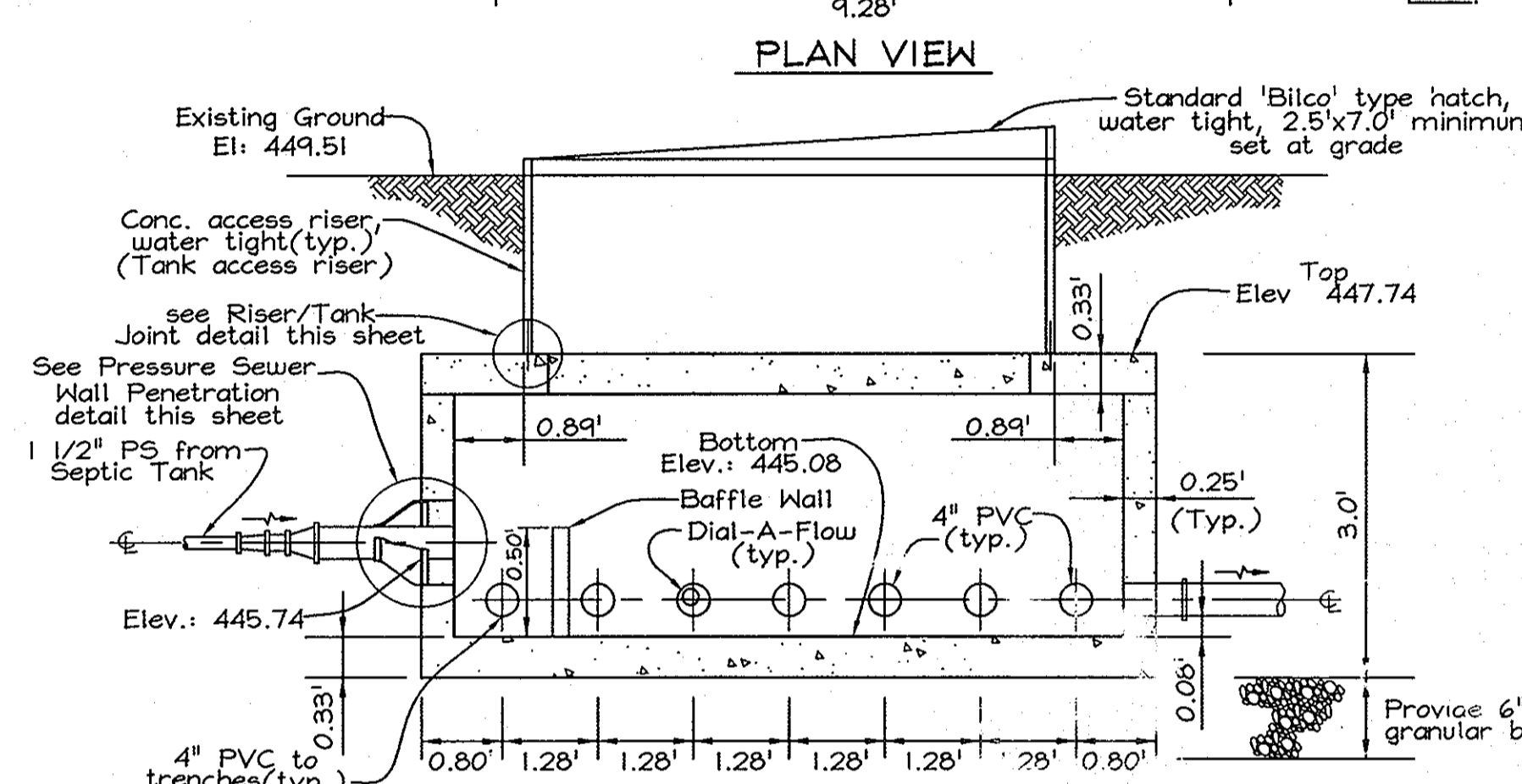


SECTION VIEW

1250 GALLON CONCRETE SEPTIC TANK WITH PUMP CHAMBER ST-2
Not to Scale



PLAN VIEW



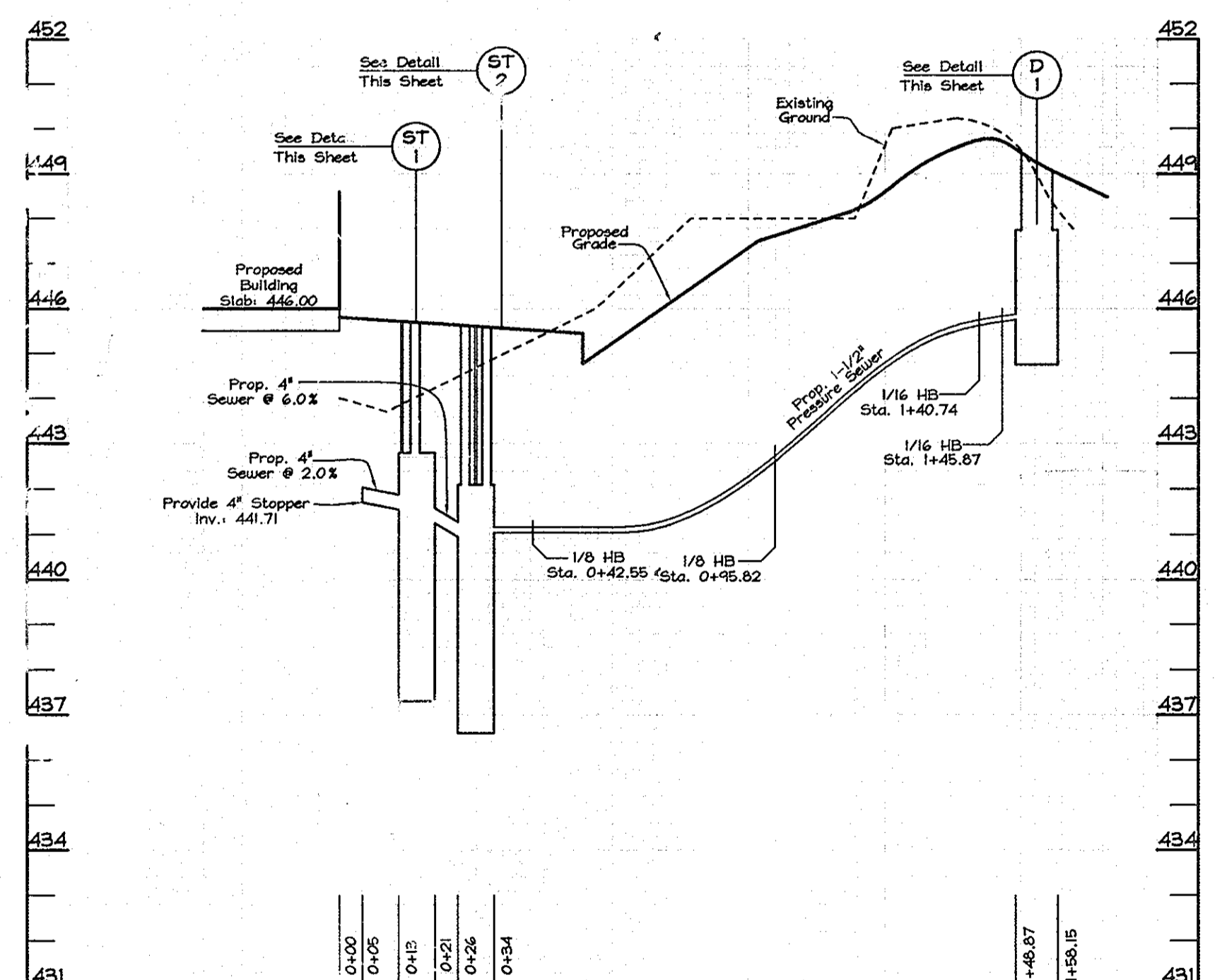
SECTION VIEW

TYPICAL CONCRETE DISTRIBUTION BOX
Not to Scale

NOTE: To insure equal distribution to each manifold, provide 'Dial-a-Flow' levelers from American Manufacturing Company, Inc. (or equivalent)

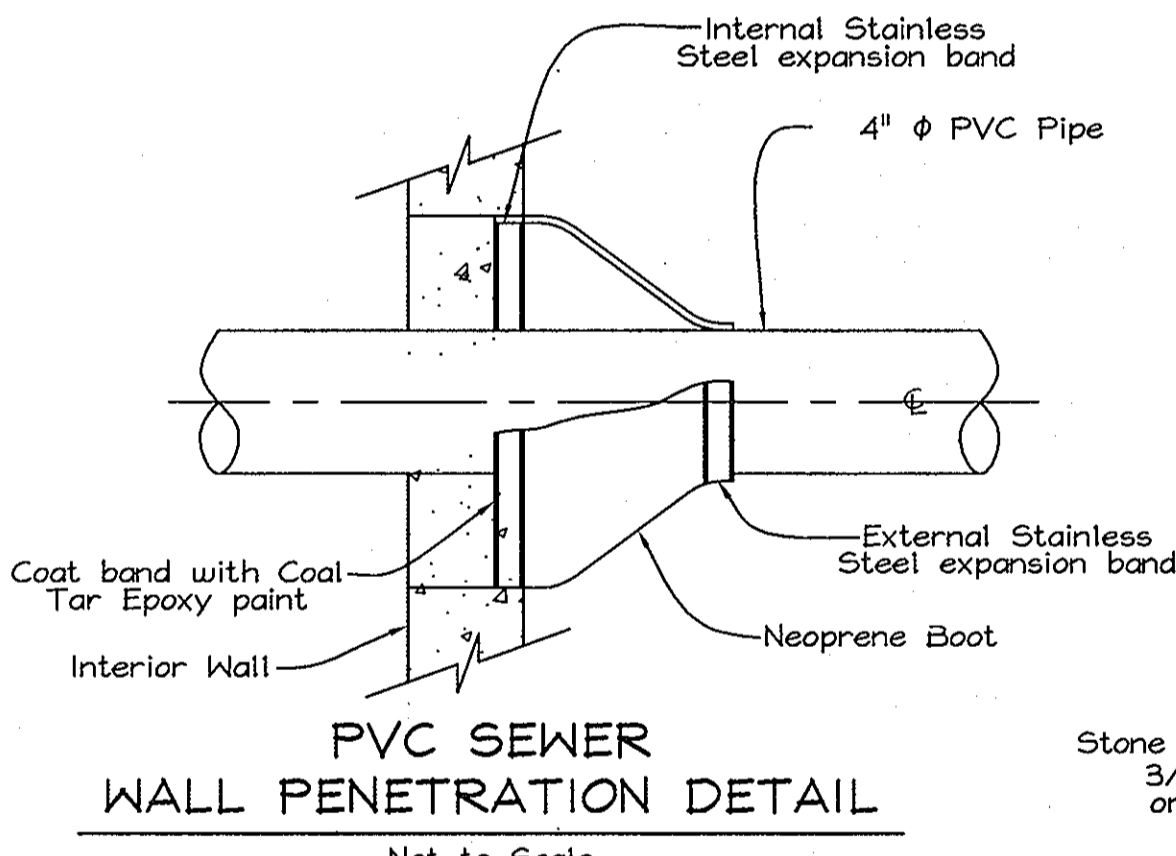
Part #	Size	Color
170-0038	Nominal - 4" ID & above	Green
170-0039	Nominal - Under 4" ID	Grey

(for additional information see www.americansite.com or call 1-300-345-3132)

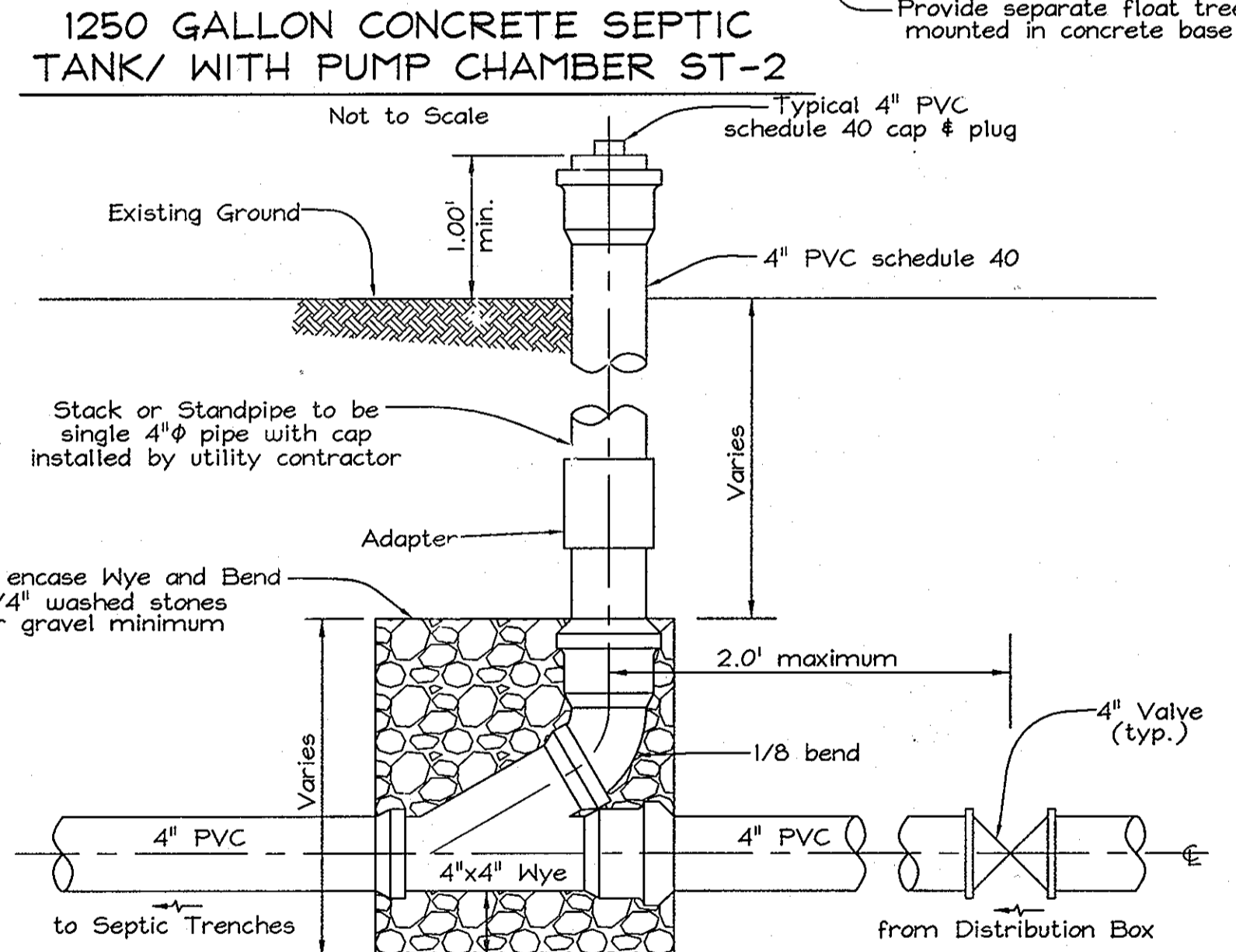


SEWER PROFILE

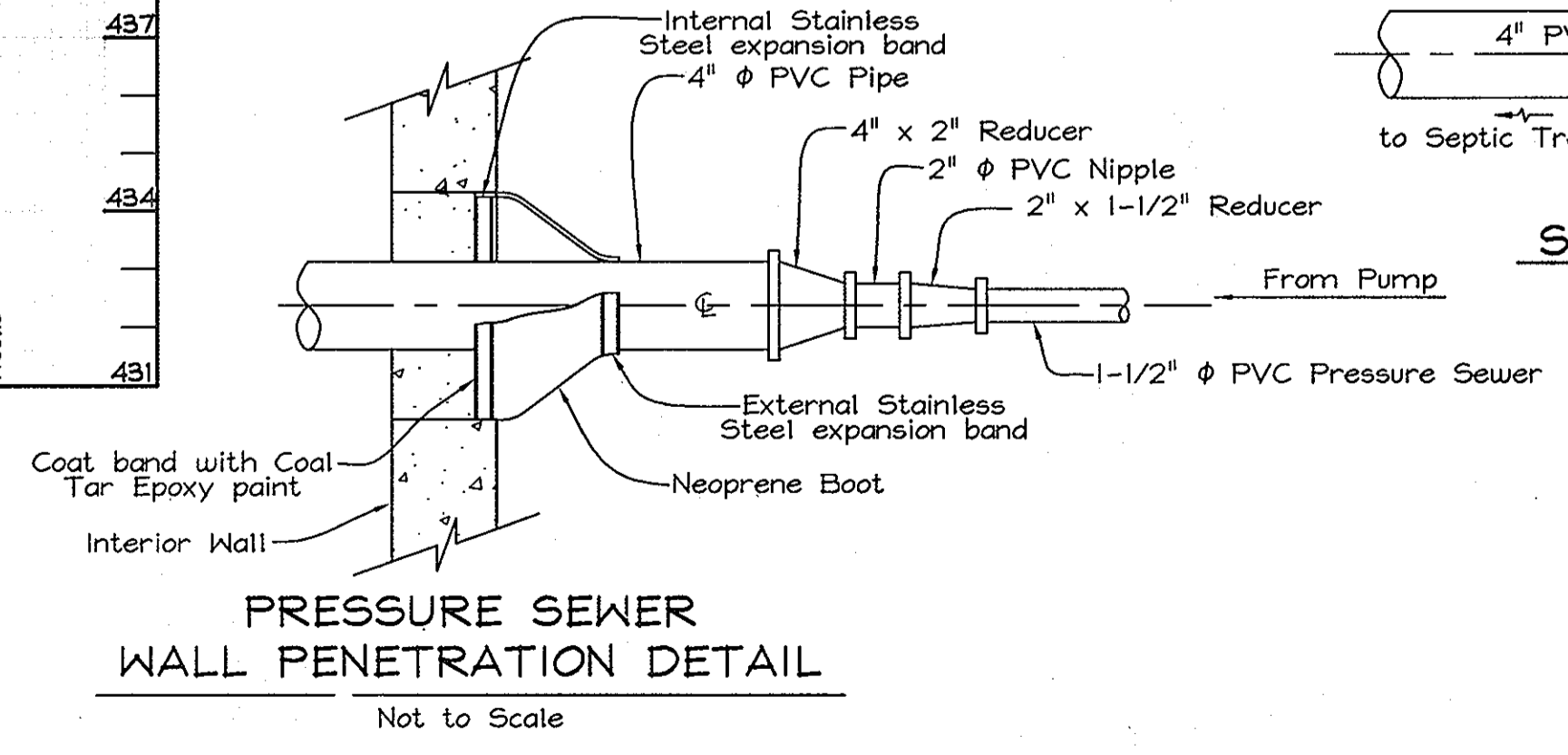
Horizontal Scale: 1" = 30'
Vertical Scale: 1" = 3'



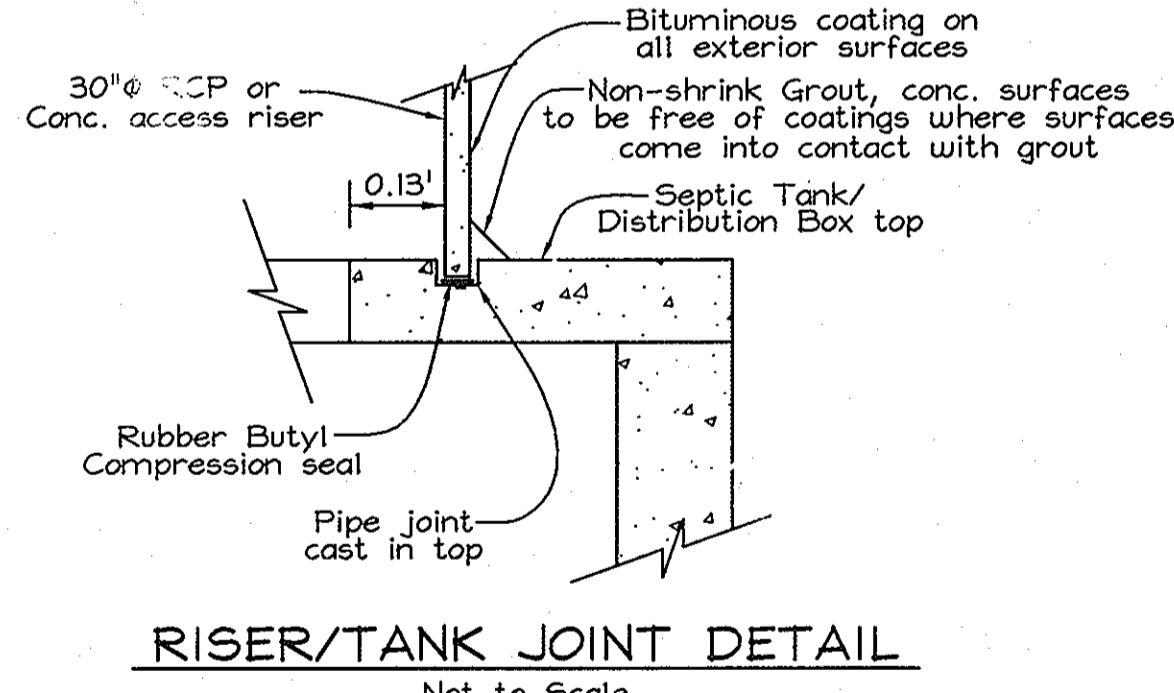
PVC SEWER WALL PENETRATION DETAIL
Not to Scale



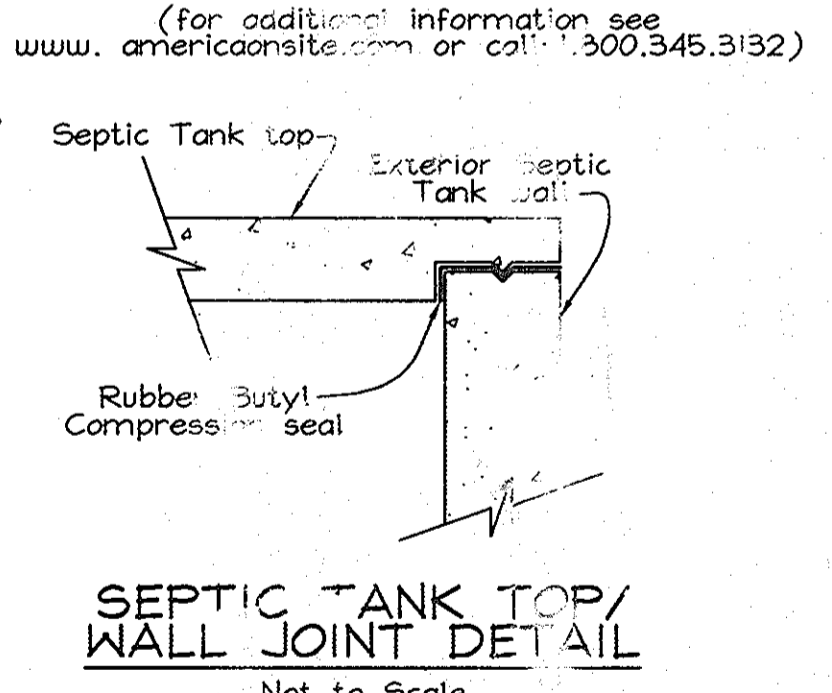
SEWER CLEANOUT @ DISTRIBUTION BOX
Modified Ho. Co. Std. Detail S-2.22
Not to Scale



PRESSURE SEWER WALL PENETRATION DETAIL
Not to Scale



RISER/TANK JOINT DETAIL
Not to Scale



SEPTIC TANK TOP/WALL JOINT DETAIL
Not to Scale

OWNER/DEVELOPER
CHRIST LUTHERAN CHURCH
C/O JOHN HUEBNER
8615 Open Meadows Way
Columbia, Maryland 21029
410.293.2020

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
CHIEF DEVELOPMENT ENGINEERING DIVISION
DATE 9/26/06
CHIEF DIVISION OF LAND DEVELOPMENT
DATE 10/20/06
DIRECTOR
DATE 10/27/06

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY
COUNTY HEALTH OFFICER
DATE 10/26/06

PUMP-AROUND AND SEWER DETAILS
CHRIST LUTHERAN CHURCH
PROPOSED RELIGIOUS FACILITY AND ACADEMIC SCHOOL
TAX MAP 34 GRID I2 PARCEL 47
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

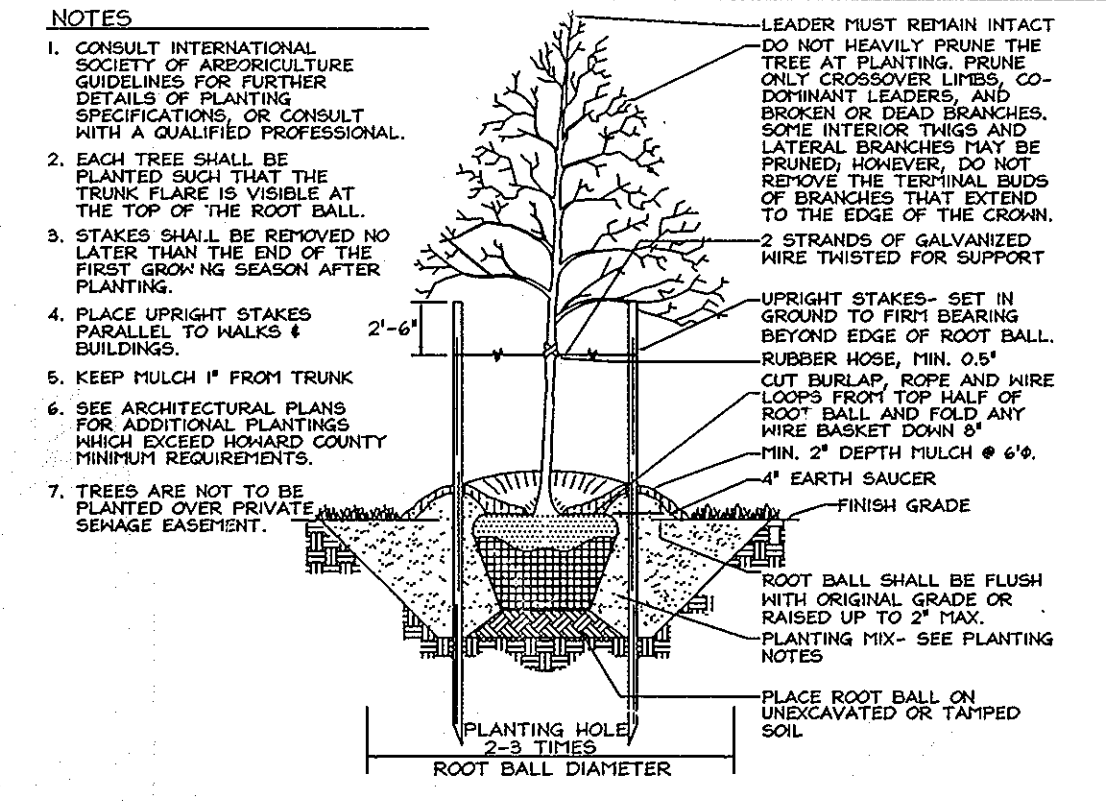
DESIGN BY: PS
DRAWN BY: CD
CHECKED BY: ZYF
SCALE: As Shown
DATE: 10/20/06
SHEET No. 5 OF 7

FSH Associates
Engineers Planners Surveyors
8239 Howard Lane, Elkridge MD 21075
Tel: 410-567-5200 Fax: 410-756-1562
E-mail: info@fsh.com

LANDSCAPE SCHEDULE				
KEY	QUAN.	BOTANICAL NAME	SIZE	NOTE
(*)	2	Acer rubrum (Shade Trees) October Glory Red Maple	2 1/2"-3" Cal.	B 4 B
(+)	8	Quercus rubra Red Oak	2 1/2"-3" Cal.	B 4 B
(O)	6	Gleditsia triacanthos inermis 'Imperial' Imperial Thornless Honeylocust	2 1/2"-3" Cal.	B 4 B
(Y)	24	Thuja occidentalis 'Tectony' Tectony Eastern Arborvitae	6'-8' HT.	B 4 B
(C)	17	Cupressocyparis leylandii Leyland Cypress	5'-6' HT.	B 4 B

A) Trees with mature heights greater than 25' shall not be planted within 20' of either side of the final siting of the utility pole line. Additionally, if these trees are to be planted on berms the mature tree heights shall be reduced by the height of the berm as measured above mean ground elevation of the utility pole line. Trees with mature heights greater than 40' (Leyland Cypress, Red Oak, Imperial Thornless Honeylocust, etc.) shall not be planted within 40' of the final location of the utility pole line and shall have the same berm limitations noted above.

B) Any trees retained or planted to comply with FCA requirements shall meet the conditions prescribed above for mature tree heights and planting distances from the lines. Any trees within FCA areas that do not comply with these requirements shall be pruned or removed at the sole discretion of BGE.



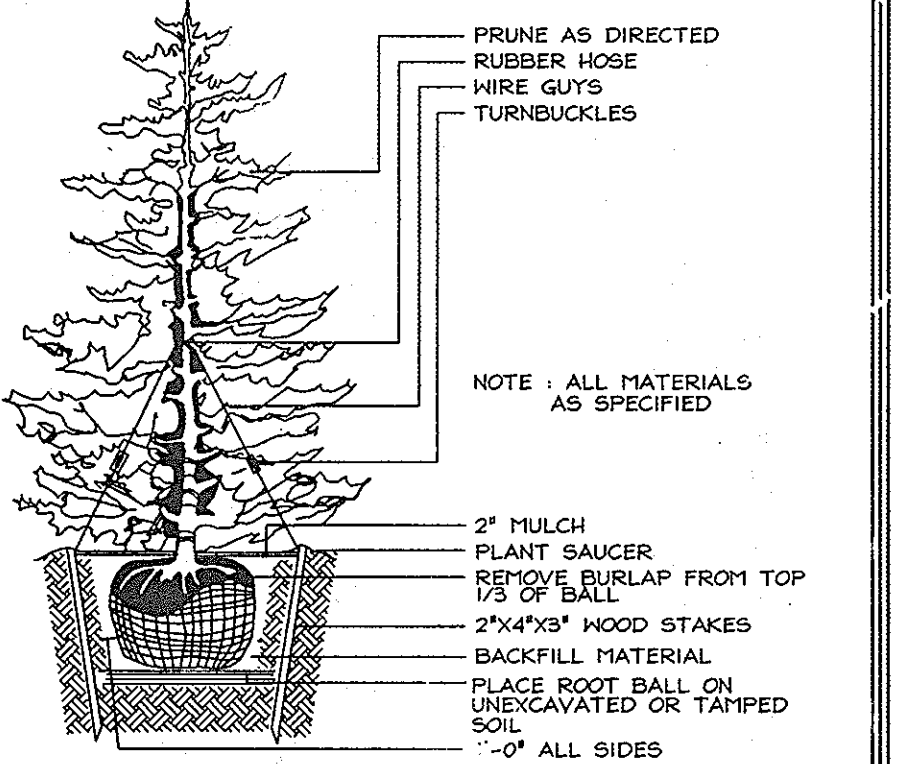
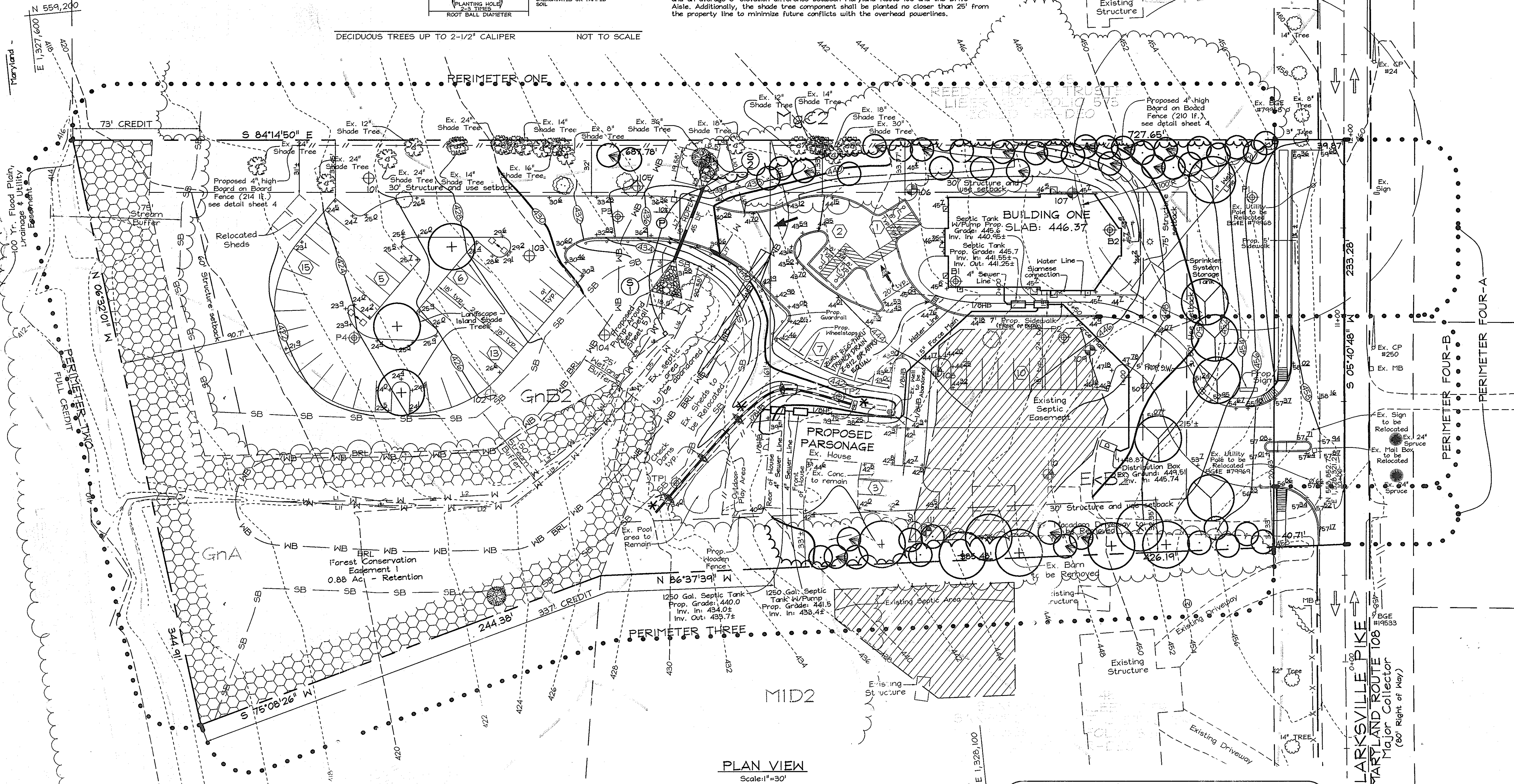
LANDSCAPE NOTES

- At the time of installation, all shrubs and other plantings hereunder listed and approved for this site, shall be of the proper height and requirements in accordance with the Howard County Landscaping Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.
- The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both 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. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.
- Financial surety for the required landscaping will be posted as part of the Developer's Agreement in the amount of \$11,900.00 (16 shade trees @ \$300.00 each and 46 evergreens @ \$150.00 each).
- The developer is claiming Alternative Compliance for Perimeter 4-A and 4-B. The elevation difference between Maryland Route 108 and the site substitutes for the required evergreen and shrub components along Maryland Route 108. There is a 14' elevation difference between Maryland Route 108 and the front of the proposed church and an average 8' elevation difference between Maryland Route 108 and the Drive Aisle. Additionally, the shade tree component shall be planted no closer than 25' from the property line to minimize future conflicts with the overhead powerlines.

LEGEND

- Existing Contour
- Proposed Contour
- Proposed Spot Elevation
- Existing Spot Elevation
- Direction of Flow
- Existing Trees to Remain
- Existing Tree to be Removed
- Existing Specimen Tree
- Landscape Trees
- Proposed Number of Parking Space per Bay
- Proposed Handicap Parking Space Symbol

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of Parking Spaces	62
Number of Trees Required	3
Number of Trees Provided	3
Shade Trees	3
Other Trees (2:1 Substitution)	-
Number of Landscaped Islands Required	3
Number of Landscaped Islands Provided	3



OWNER/DEVELOPER
CHRIST LUTHERAN CHURCH
C/O JOHN HUEBNER
8615 Open Meadow Way
Columbia, Maryland 21024
410.203.2020

SCHEDULE A PERIMETER LANDSCAPE EDGE					
CATEGORY	ADJACENT TO PERIMETER PROPERTIES			ADJACENT TO ROADWAYS	
	1	2	3	4-B	4-A
Perimeter/Frontage Designation	C	C	C	E	E
Landscape Type	C	C	C	E	E
Linear Feet of Roadway Frontage/Perimeter	688	345	630	98	135
Credit for Existing Vegetation (Yes, No, Near Feet)	Yes*	Yes*	Yes*	No	No
Remaining Perimeter Length	615	345	385	-	-
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)	-	-	-	Yes	Yes
Remaining Perimeter Length	No	No	-	26	135
Number of Plants Required	Shade Trees: 140 Evergreen Trees: 15	Shade Trees: 140 Evergreen Trees: 31	Shade Trees: 140 Evergreen Trees: 15	40	150
Number of Plants Provided	Shade Trees: 0 Evergreen Trees: 31	Shade Trees: 0 Evergreen Trees: 0	Shade Trees: 0 Evergreen Trees: 7	3	3

* Existing trees to remain.
** Credit taken for 15 existing shade trees.
*** Alternative compliance for these perimeters see landscape No.

NO.	REVISION	DATE
1	INCREASED SIDEWALK WIDTH FROM 5' TO 7' IN FRONT OF BLDG, RAISED 1" FLOOR ELEV, REVISED GRADING AROUND BLDG, AND ADDED TRENCH DRAIN WITHIN SIDEWALK.	4/23/10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
Condy Handt
DATE: 9/2/06

CHIEF, DIVISION OF LAND DEVELOPMENT
Mark A. Unger
DATE: 9/2/06

DEVELOPER'S BUILDER'S CERTIFICATE
"THE LANDSCAPING SHOWN ON THIS PLAN ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY "CODE AND THE HOWARD COUNTY" LANDSCAPE MANUAL, CERTIFY THAT UPON COMPLETION, A LETTER OF INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) SET OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING."
John Huebner
DATE: 9/1/06

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY
Richard W. Webb
DATE: 10/24/06

AS-BUILT
SEE SHEET 2 PLAN VIEW

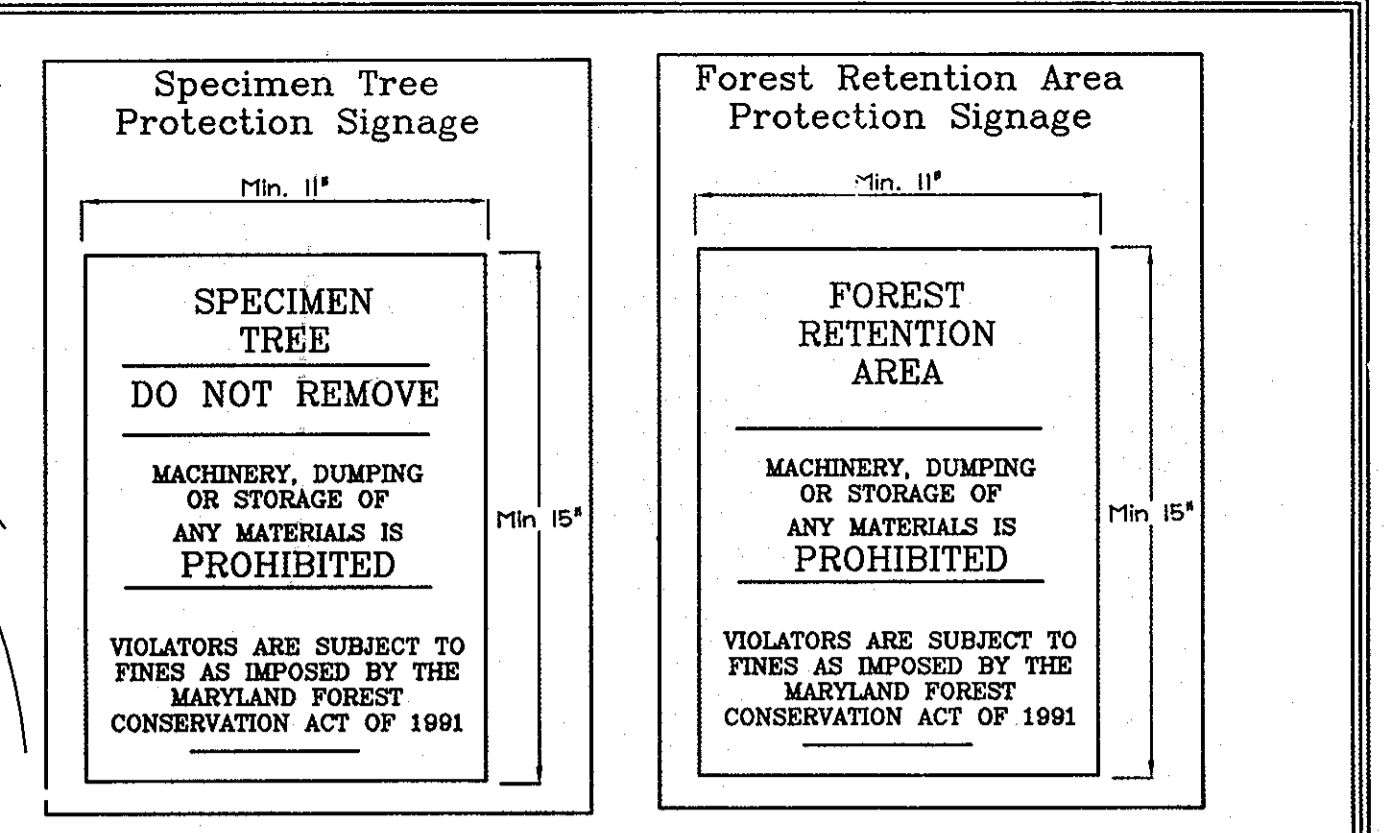
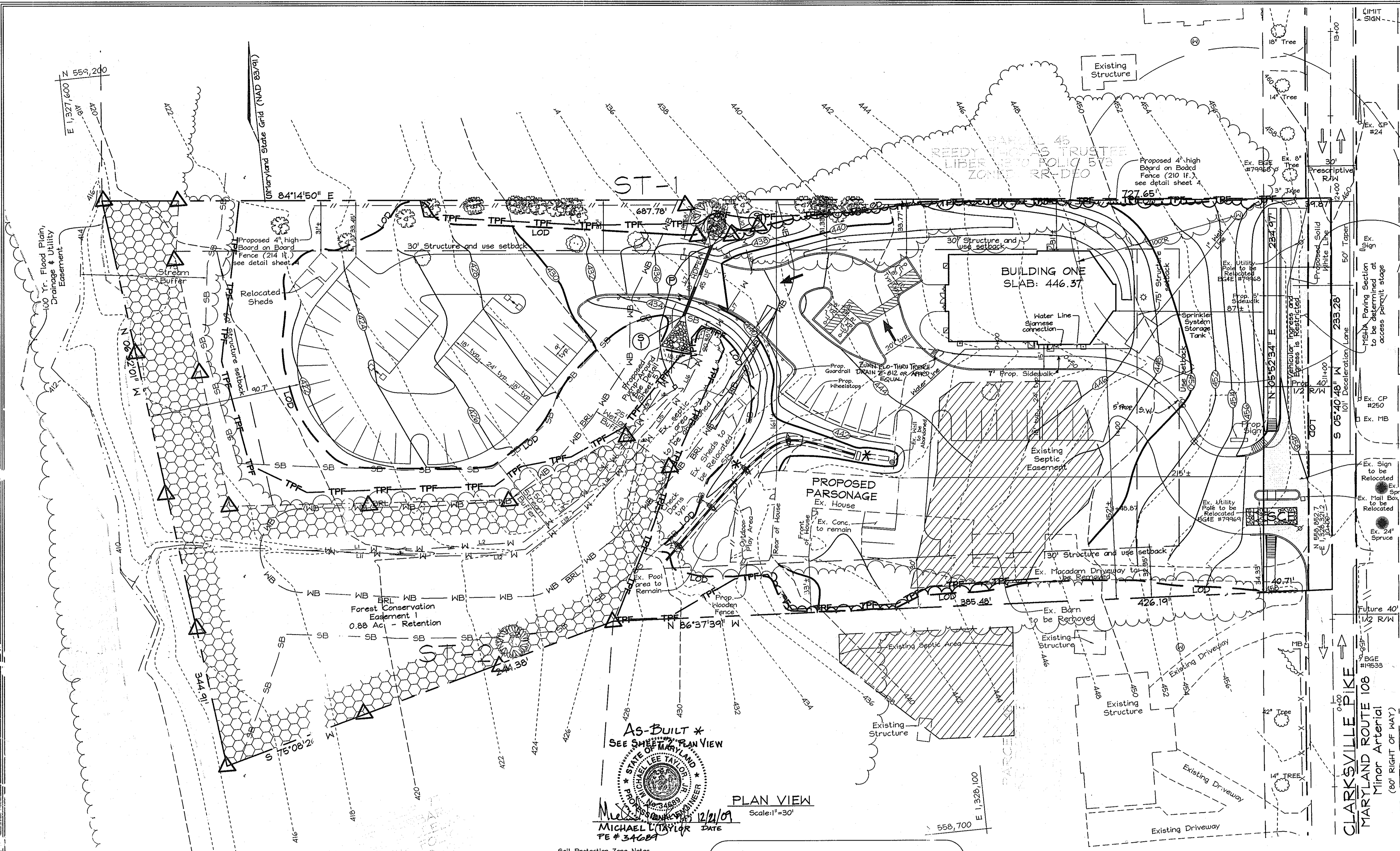
STATE OF MARYLAND
PROFESSIONAL ENGINEER
MICHAEL TAYLOR
PE#34689

LANDSCAPING PLAN
CHRIST LUTHERAN CHURCH
PROPOSED RELIGIOUS FACILITY AND ACADEMIC SCHOOL

TAX MAP 34 GRID 12 PARCEL 47
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: PS
DRAWN BY: HK
CHECKED BY: ZYE
SCALE: As Shown
DATE: Sept. 07, 2006
I.C. No.: 3207
SHEET No.: 6 OF 7

FSH Associates
Engineers Planners Surveyors
8339 Howard Lane, Elmdge, MD 21075
Tel: 410-567-3290 Fax: 410-796-1562
E-mail: info@fsher.com



FOREST CONSERVATION WORKSHEET

Net Tract Area	Acres
A. Total Tract Area	4.19
B. Area Within 100 Year Floodplain	0#
C. Other deductions	--
D. Net Tract Area	4.19
Zoning Use Category: INSTITUTIONAL	
Land Use Category	
E. Afforestation Minimum (20 % x D)	0.84
F. Conservation Threshold (20 % x D)	0.84
Existing Forest Cover	
G. Existing Forest on Net Tract Area	1.05
H. Forest Area Above Conservation Threshold	0.21
Break-even Point	
I. Forest Retention Above Threshold with no Mitigation	0.88
J. Clearing Permitted without Mitigation	0.77
Proposed Forest Clearing	
K. Forest Areas to be Cleared	.17
L. Forest Areas to be Retained	0.88
Planting Requirements	
M. Reforestation for Clearing Above Threshold	2.0025
N. Reforestation for Clearing Below the Threshold	0
P. Credit for Retention Above Conservation Threshold	0.20
Q. Total Reforestation Required	0
R. Total Afforestation Required	0
S. Total Reforestation and Afforestation Requirement	0

* There is approx. 113 s.f. of floodplain or 0.003 Ac and was not included in the calculations due to its negligible size.

Forest Conservation Narrative

This Forest Conservation Plan was prepared in accordance with Howard County Forest Conservation Manual.

The subject property has a gross and net tract area of 4.19 acres. The floodplain area, 0.003 Ac or 113 s.f. is too small to have an effect on the forest conservation calculations, and has not been included. There is 1.05 Ac. of forest on site. There are two specimen trees on this site, which will be preserved. Forest will be retained to the greatest extent possible, including all forest in sensitive environments. Although the actual clearing is less than 0.17 Ac. (for stormwater management) which exceeds the break-even point for forest conservation, for development purposes 0.17 Ac. of clearing will be permitted and the forest will be retained in one easement. 0.88 Ac. of forest has no mitigation requirement.

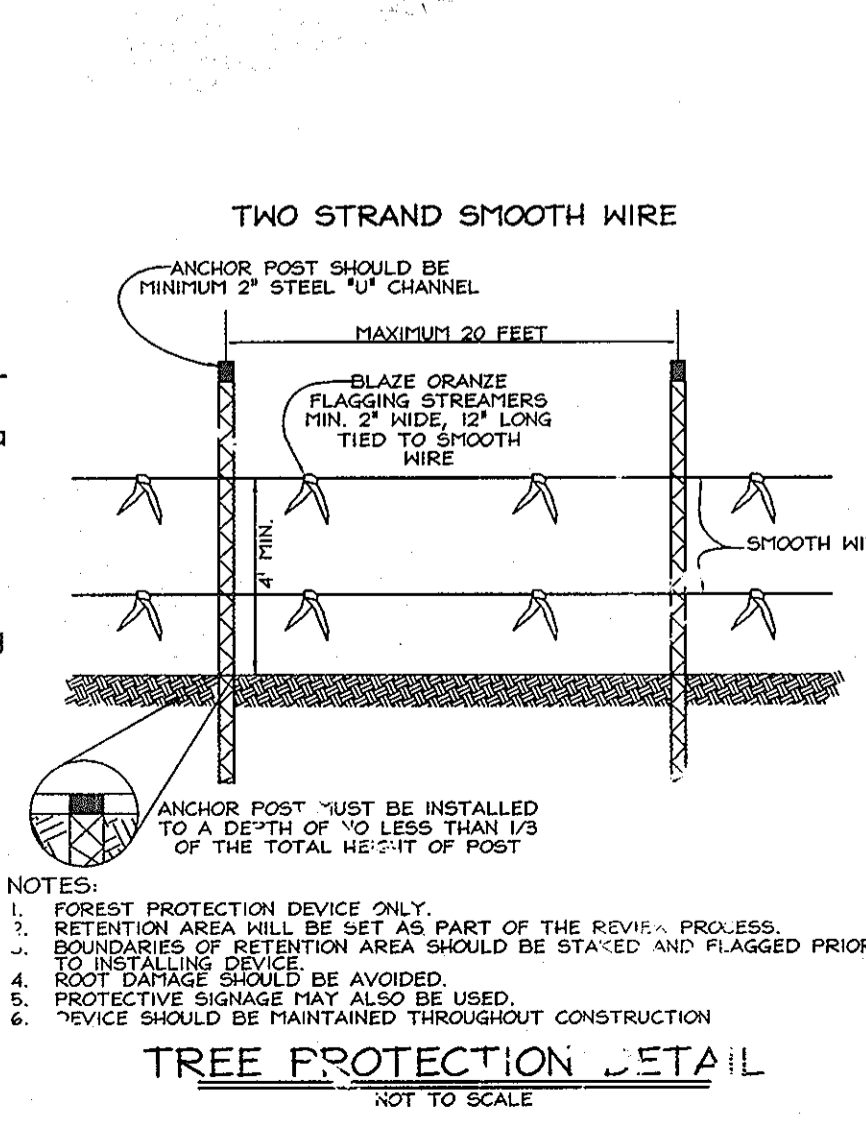
Surety in the amount of \$7,666.60 will be posted with the developer's agreement.

0.88 Ac retention = 38,333 s.f. @ \$0.20 s.f. = \$7,666.60

Key	Name	Scientific Name	DBH	Condition	Retained
ST-1	Red Maple	Acer rubrum	30"	Fair	Yes
ST-2	Red Maple	Acer rubrum	20"	Fair	Yes

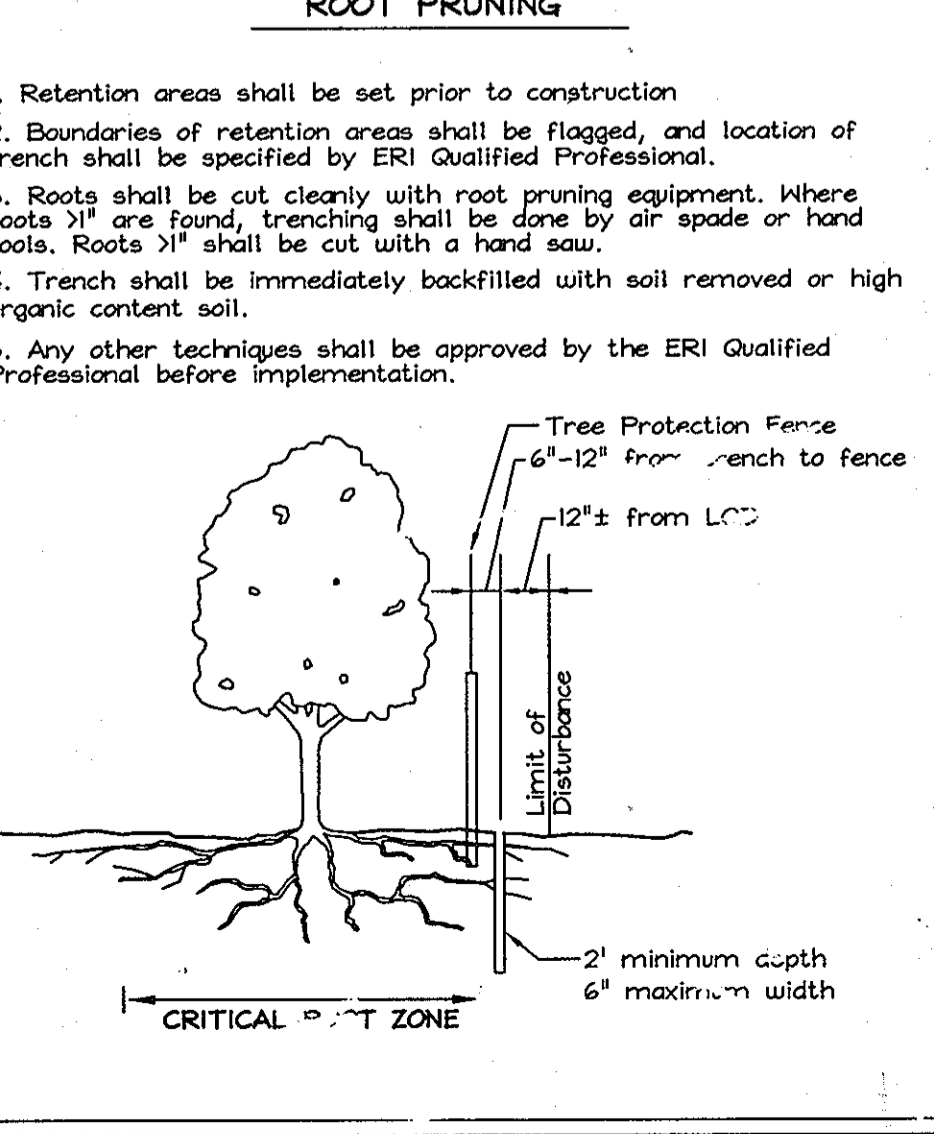
GENERAL NOTES

- This project complies with the requirements of Section 16.1200 of the Howard County Code and the Forest Conservation Manual with a forest conservation obligation for a break-even point of 0.88 acres providing 0.88 acres of forest retention easement. Forest conservation surty in the amount of \$7,666.60 is provided for the retention easement area with the DPW Developer's Agreement.
- See the record Forest Conservation Plat of Easement for bearing and distance definition of the Forest Conservation Easement. File # SDP-06-10-C, Plat #18352.



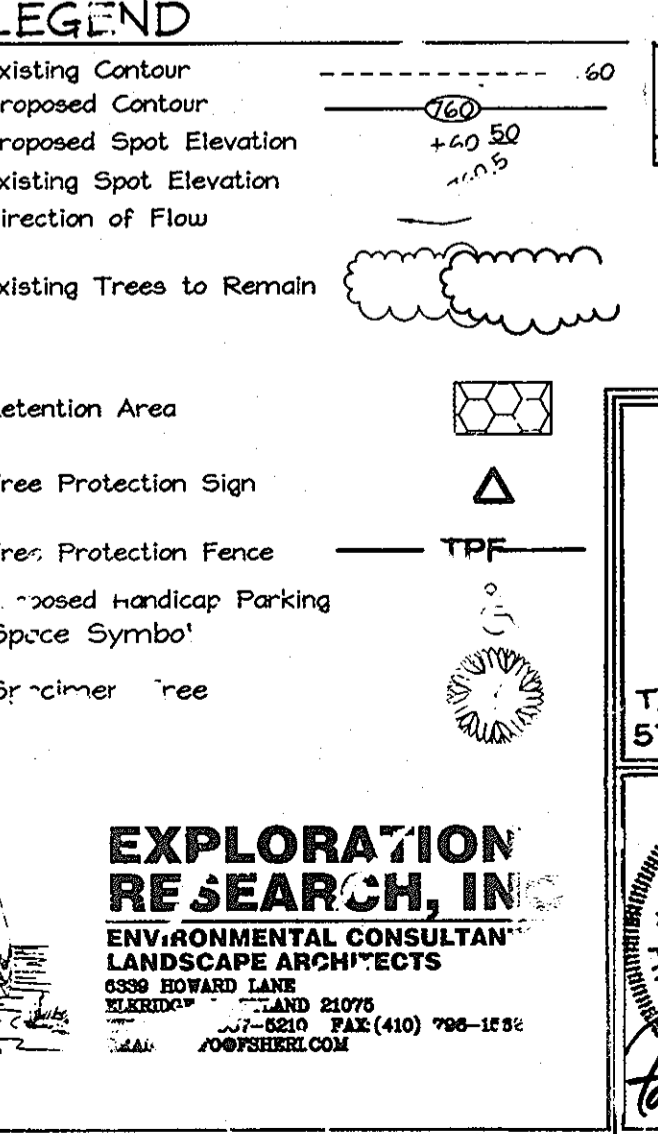
Soil Protection Zone Notes

- The Soil Protection Zone shall include all areas contained inside the Limit of Disturbance.
- Where possible, the Soil Protection Zone shall extend to the drip line of specimen trees. For other groups of trees, the zone shall be the drip line or 40% of the height of the tree, whichever is greater.
- No construction activity is permitted within the Soil Protection Zone.
- If soil has been compacted or grading has taken place in the vicinity of the Soil Protection Zone, root pruning shall be implemented per Root Pruning detail, shown on this plan.
- Root pruning shall occur prior to the beginning of construction.
- Where the Soil Protection Zone must encroach inside the Critical Root Zone of a tree, soil disturbance shall be mitigated with vertical mulching, radial trenching, or another method approved by the ERI Forest Conservation Professional.
- Prior to construction, the Limits of Disturbance shall be marked and the ERI Professional shall determine which trees will need preventative treatment or removal.
- Tree maintenance and removal shall be undertaken by a qualified MID Tree Expert to ensure damage to surrounding trees is minimized.
- Brush and limbs removed for construction shall be chipped and spread at the edge of the Soil Protection Zone to a depth of 6 inches. This shall occur outside the Soil Protection Zone where compaction could impact otherwise unprotected Critical Root Zone.



Forest Tree Protection and Management Notes

- Tree protection devices shall be installed prior to any grading or land clearing.
- After the boundaries of the retention areas have been staked and flagged and before any disturbance has taken place a pre-construction meeting with the Howard County Inspector is required.
- Provide maintenance to tree protection devices to maintain their integrity throughout the duration of the project.
- Attachment of signs to tree protection devices to maintain their integrity throughout the duration of the project.
- Any significant changes made to the Forest Conservation Plan shall be made with the prior approval of the Howard County Dept. Of Planning and Zoning.
- No burial of discarded material is permitted within the Forest Conservation and Planting areas.
- No open burning within 100 feet of wooded areas is permitted.
- Post construction phase.
 - Inspect existing trees around the perimeter of the site for signs of rot or trunk damage and excessive soil compaction.
 - Remove dead or dying trees and evaluate for hazard tree removal.
 - All temporary forest protection devices will be removed after construction.
- Following completion of construction, prior to use, the county inspector shall inspect the entire site for compliance with this Forest Conservation Plan.
 - * A licensed Maryland Tree Expert should be retained for this service as needed.



APPROVE: [Signature] DATE: 10/20/08
 CHIEF DEVELOPER ENGINEERING DIVISION
 [Signature] DATE: 10/20/08
 CHIEF DEVELOPER LAND DEVELOPMENT
 [Signature] DATE: 10/20/08
 DIRECTOR

EXPLORATION RESEARCH, INC.
 ENVIRONMENTAL CONSULTANTS
 LANDSCAPE ARCHITECTS
 6338 HOWARD LANE
 COLUMBIA, MARYLAND 21046
 TEL: 410-567-5200 FAX: 410-796-1582
 E-MAIL: INFO@ESHRI.COM

FOREST CONSERVATION PLAN
CHRIST LUTHERAN CHURCH
 PROPOSED RELIGIOUS FACILITY AND ACADEMIC SCHOOL
 TAX MAP 34 GRID 12 PARCEL 47
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: PS
 DRAWN BY: HK
 CHECKED BY: ZYF
 SCALE: As Shown
 DATE: 27, 2008
 SHEET No. 7 OF 7

FSH Associates
 Engineers Planners Surveyors
 6338 Howard Lane, Ellicott City, MD 21075
 Tel: 410-567-5200 Fax: 410-796-1582
 E-mail: info@fsh.com