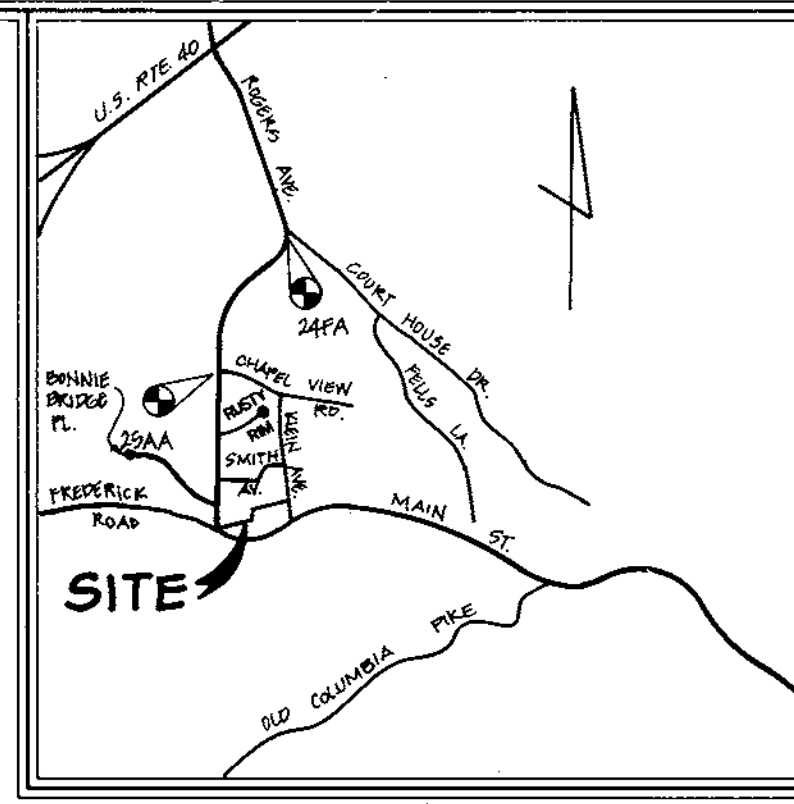
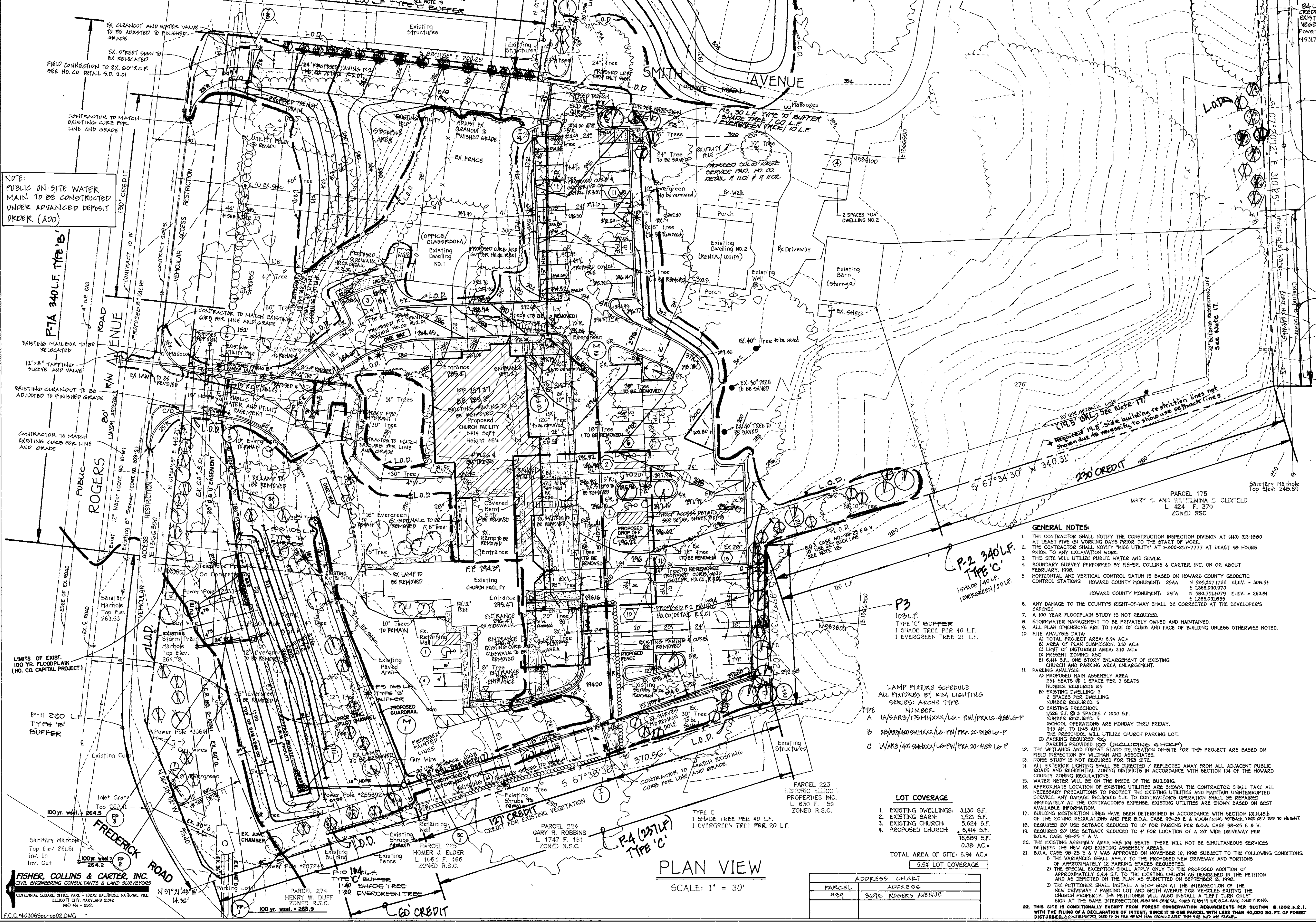


LEGEND	
SYMBOL	DESCRIPTION
---	EX. 2' CONTOURS
---	EX. 10' CONTOURS
---	PROP. 2' CONTOURS
---	PROP. 10' CONTOURS
+624	SPOT ELEVATIONS
F.F.	FIRST FLOOR ELEVATION
B.E.	BASEMENT ELEVATION
---	EX. TREE LINE
---	EX. TREES
---	LIMIT OF DISTURBANCE
---	PROP. CHURCH ADDITION



VICINITY MAP  
SCALE: 1" = 2000'

SHEET INDEX	
1 OF 8	SITE DEVELOPMENT PLAN & LANDSCAPE PLAN
2 OF 8	DRAINAGE AREA MAP
3 OF 8	DETAIL SHEET
4 OF 8	DETAIL SHEET
5 OF 8	DETAIL SHEET & LANDSCAPE DETAILS
6 OF 8	S.W.M. NOTES AND DETAILS
7 OF 8	S.W.M. NOTES AND DETAILS
8 OF 8	SEDIMENT CONTROL PLAN

**ENGINEER'S CERTIFICATE**  
I certify that this plan, specification 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 of Engineer: *[Signature]* Date: 12/3/98

**DEVELOPER'S CERTIFICATE**  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (Print name below signature): *K. E. K. K. K.* Date: 10/14/99

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

Howard SCD Date: 10/26/99

**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELICOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Director: *[Signature]* Date: 11/10/99  
Chief, Division of Land Development: *[Signature]* Date: 11/10/99  
Chief, Department Engineering Division: *[Signature]* Date: 10/26/99

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
P88P	BLOCK NO. A-2 A-B	
L.4787	F.76 GRID 12	RSC
	TAX/ZONE 24 & 25B	ELEC. DIST. 2nd
		CENSUS TR. 602B
WATER CODE	F-04	SEWER CODE 1402100

**SITE DEVELOPMENT PLAN PLAN VIEW**

**ST. PETER'S EPISCOPAL CHURCH**

ZONING: RSC  
TAX MAP No: 24 & 25 GRID: 12 PARCEL: 939  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999

SHEET 1 OF 8

- GENERAL NOTES:**
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1000 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
  - THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS AT (410) 257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
  - THIS SITE WILL UTILIZE PUBLIC WATER AND SEWER.
  - BOUNDARY SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT FEBRUARY, 1998.
  - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS: HOWARD COUNTY MONUMENT: 25A N 565.071222 ELEV. = 309.54 E 1266.090797 HOWARD COUNTY MONUMENT: 24FA N 583.7514079 ELEV. = 263.81 E 1266.090795
  - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
  - A 100 YEAR FLOODPLAIN STUDY IS NOT REQUIRED.
  - STORMWATER MANAGEMENT TO BE PRIVATELY OWNED AND MAINTAINED.
  - ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
  - SITE ANALYSIS DATA:  
A) TOTAL PROJECT AREA: 6.94 AC.  
B) AREA OF PLAN SUBMISSION: 3.10 AC.  
C) LIMIT OF DISTURBANCE AREA: 3.10 AC.  
D) PRESENT ZONING: RSC  
E) 6.94 SF. ONE STORY ENLARGEMENT OF EXISTING CHURCH AND PARKING AREA ENLARGEMENT.
  - PARKING ANALYSIS:  
A) PROPOSED MAIN ASSEMBLY AREA: 234 SEATS @ 1 SPACE PER 3 SEATS NUMBER REQUIRED: 85  
B) EXISTING DWELLING: 3 2 SPACES PER DWELLING NUMBER REQUIRED: 6  
C) EXISTING PRESCHOOL: 1200 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 5  
D) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
E) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
F) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
G) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
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K) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
L) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
M) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
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W) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
X) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
Y) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1  
Z) EXISTING CHURCH: 1000 SF @ 1 SPACE PER 1000 SF. NUMBER REQUIRED: 1

**LOT COVERAGE**

1. EXISTING DWELLINGS:	3,130 S.F.
2. EXISTING BARN:	1,521 S.F.
3. EXISTING CHURCH:	5,624 S.F.
4. PROPOSED CHURCH:	6,414 S.F.
	16,689 S.F.
	0.39 AC.
TOTAL AREA OF SITE:	6.94 AC.
	5.5X LOT COVERAGE

**PLAN VIEW**  
SCALE: 1" = 30'

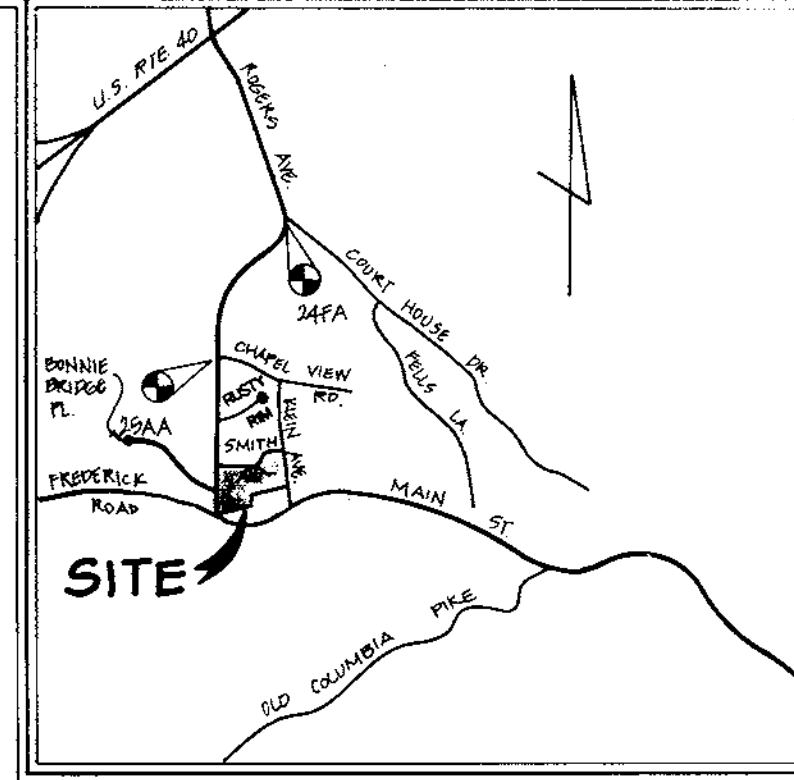
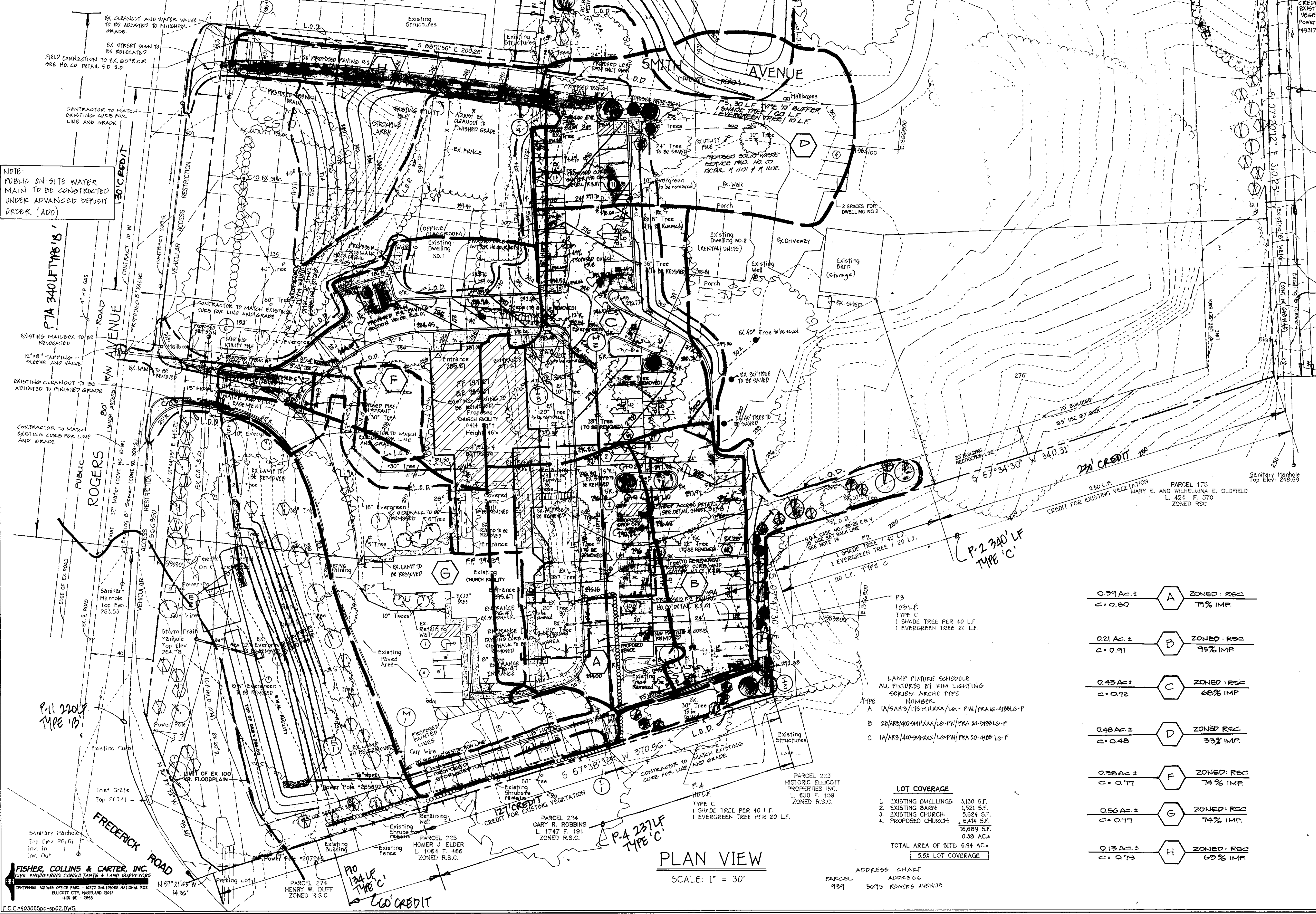
**ADDRESS CHART**

PARCEL	ADDRESS
939	3695 ROGERS AVENUE

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK 10722 BALDWIN NATIONAL FREE  
ELICOTT CITY, MARYLAND 21042  
410-289-1000



LEGEND	
SYMBOL	DESCRIPTION
---	EX. 2" CONTOURS
---	EX. 10" CONTOURS
---	PROP. 2" CONTOURS
---	PROP. 10" CONTOURS
+624	SPOT ELEVATIONS
F.F.	FIRST FLOOR ELEVATION
B.E.	BASEMENT ELEVATION
---	EX. TREE LINE
○	EX. TREES
○	L.O.D.
---	LIMIT OF DISTURBANCE
---	PROP. CHURCH ADDITION



VICINITY MAP  
SCALE: 1" = 2000'

NOTE:  
PUBLIC ON-SITE WATER MAIN TO BE CONSTRUCTED UNDER ADVANCED DEPOSIT ORDER (ADO)

**ENGINEER'S CERTIFICATE**  
I certify that this site soil 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 of Engineer (Print name below signature) *[Signature]* Date 12/3/99

**DEVELOPER'S CERTIFICATE**  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (Print name below signature) *[Signature]* Date 10/14/99

Reviewed for HOWARD SCD and meets requirements of 10-26-99  
U.S.D. Natural Resources Conservation Service  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
Howard SCD Date 10/26/99

**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELLCOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Director - Department of Planning and Zoning *[Signature]* Date 11/10/99  
Chief, Division of Land Development *[Signature]* Date 11/10/99  
Chief, Development Engineering Division *[Signature]* Date 10/28/99

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
DEED	BLOCK NO.	ZONE
L. 4787 F. 76	A-2 B-A-3	RSC
TAX/ZONE	ELEC. DIST.	CENSUS TR.
24 B 25 B	2nd	602B
WATER CODE	SEWER CODE	
P.04	1402100	

**SITE DEVELOPMENT PLAN**  
STORM DRAIN DRAINAGE AREA MAP

**ST. PETER'S EPISCOPAL CHURCH**  
ZONING: RSC  
TAX MAP No: 24 B 25 GRID: 12 PARCEL: 939  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999  
SHEET 2 OF 8

0.39 Ac ±	A	ZONED: RSC
C = 0.80		7% IMP.
0.21 Ac ±	B	ZONED: RSC
C = 0.91		9% IMP.
0.43 Ac ±	C	ZONED: RSC
C = 0.72		68% IMP.
0.48 Ac ±	D	ZONED: REC
C = 0.48		33% IMP.
0.38 Ac ±	F	ZONED: RSC
C = 0.77		74% IMP.
0.56 Ac ±	G	ZONED: RSC
C = 0.77		74% IMP.
0.13 Ac ±	H	ZONED: RSC
C = 0.73		69% IMP.

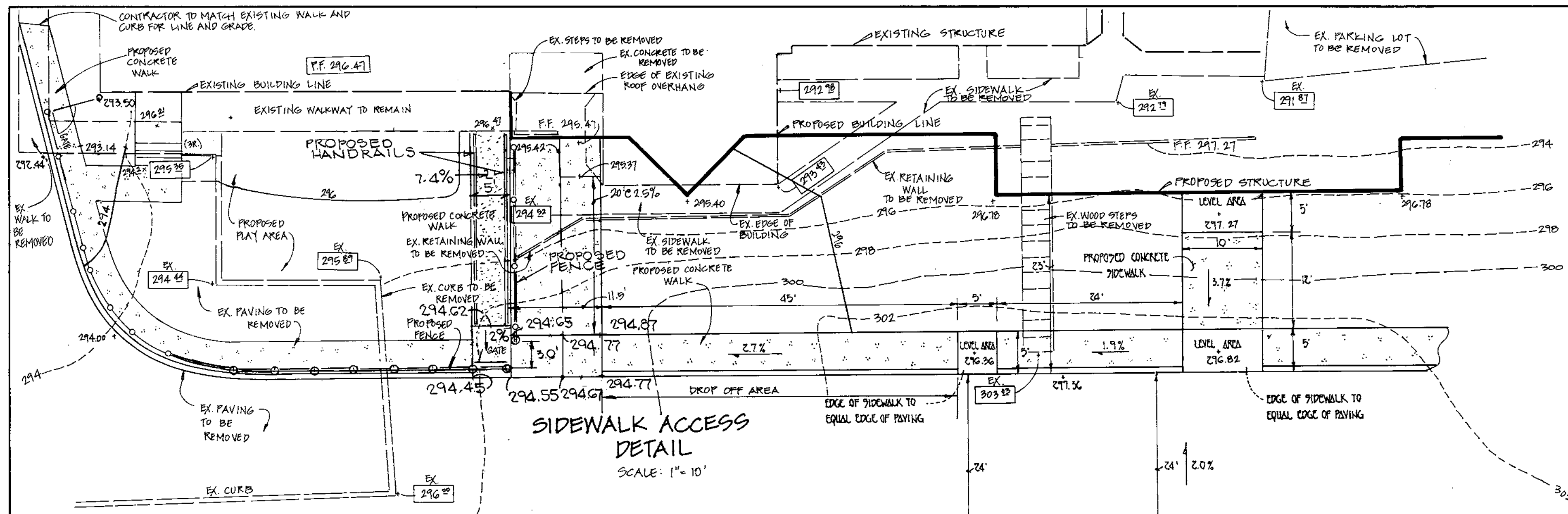
LAMP FIXTURE SCHEDULE  
ALL FIXTURES BY KIM LIGHTING  
SERIES: ARCHE TYPE NUMBER  
TYPE A 1A/SAR3/179MHXX/LG-PN/PKAIG-4000LP  
TYPE B 2B/AR3/179MHXX/LG-PN/PKA 20-9100LP  
TYPE C 1A/AR3/1400MHXX/LG-PN/PKA 20-4100LP

**LOT COVERAGE**  
1. EXISTING DWELLINGS: 3,130 S.F.  
2. EXISTING BARN: 1,521 S.F.  
3. EXISTING CHURCH: 5,624 S.F.  
4. PROPOSED CHURCH: 6,414 S.F.  
16,689 S.F.  
0.89 AC ±  
TOTAL AREA OF SITE: 6.94 AC ±  
5.54 LOT COVERAGE

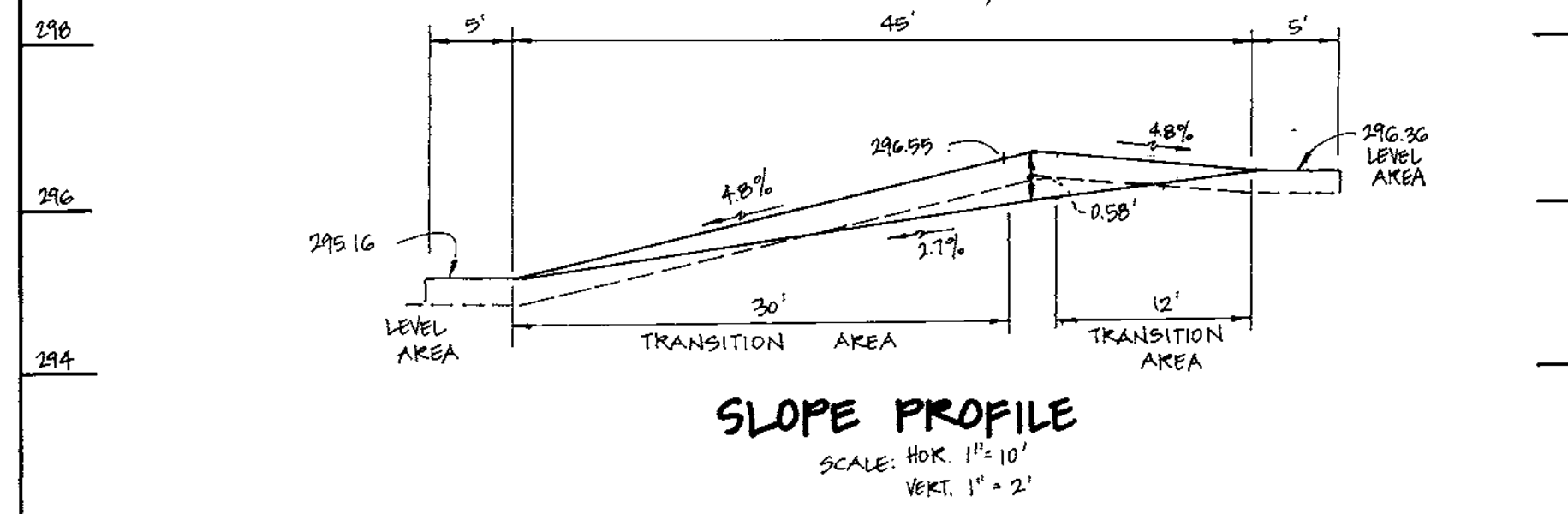
PLAN VIEW  
SCALE: 1" = 30'

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
EXTERNAL SOURCE OFFICE PACE 1072 BALTIMORE NATIONAL PEE  
ELLCOTT CITY, MARYLAND 21042  
410-461-1899

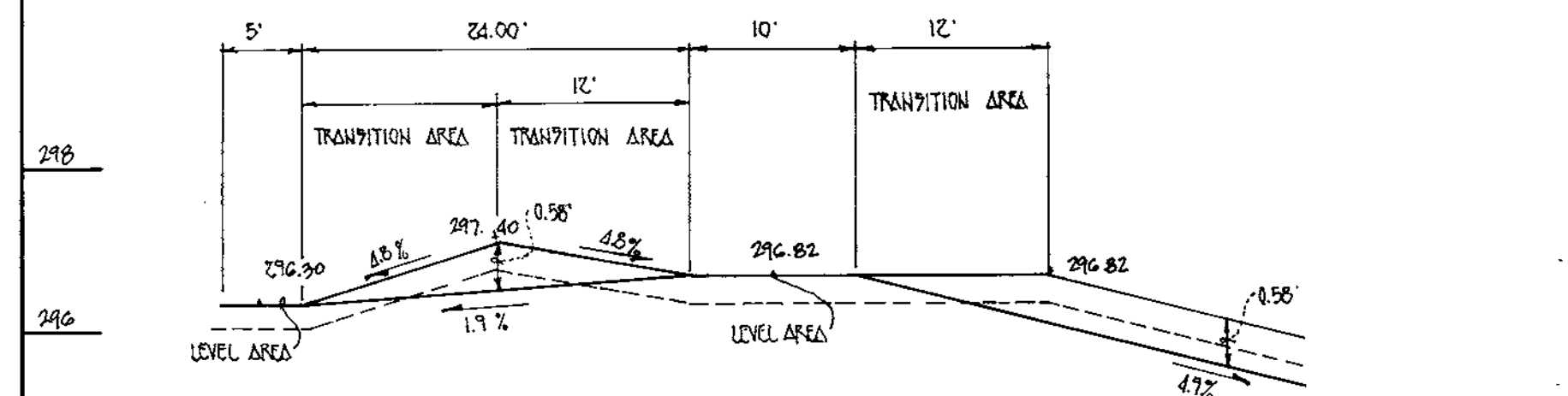




**SIDEWALK ACCESS DETAIL**  
SCALE: 1" = 10'

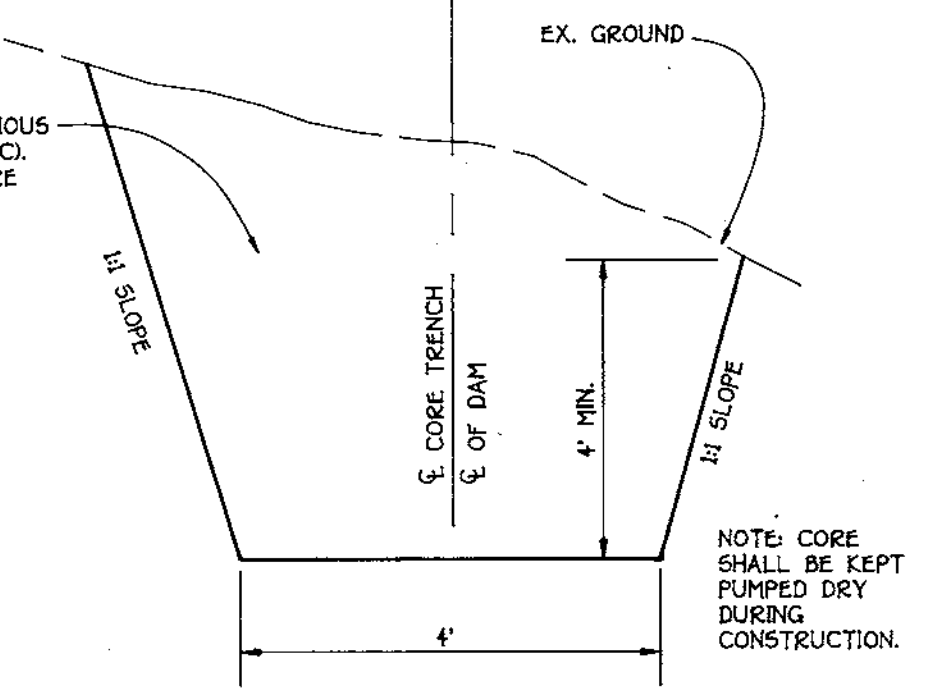


**SLOPE PROFILE**  
SCALE: HOR. 1" = 10'  
VERT. 1" = 2'

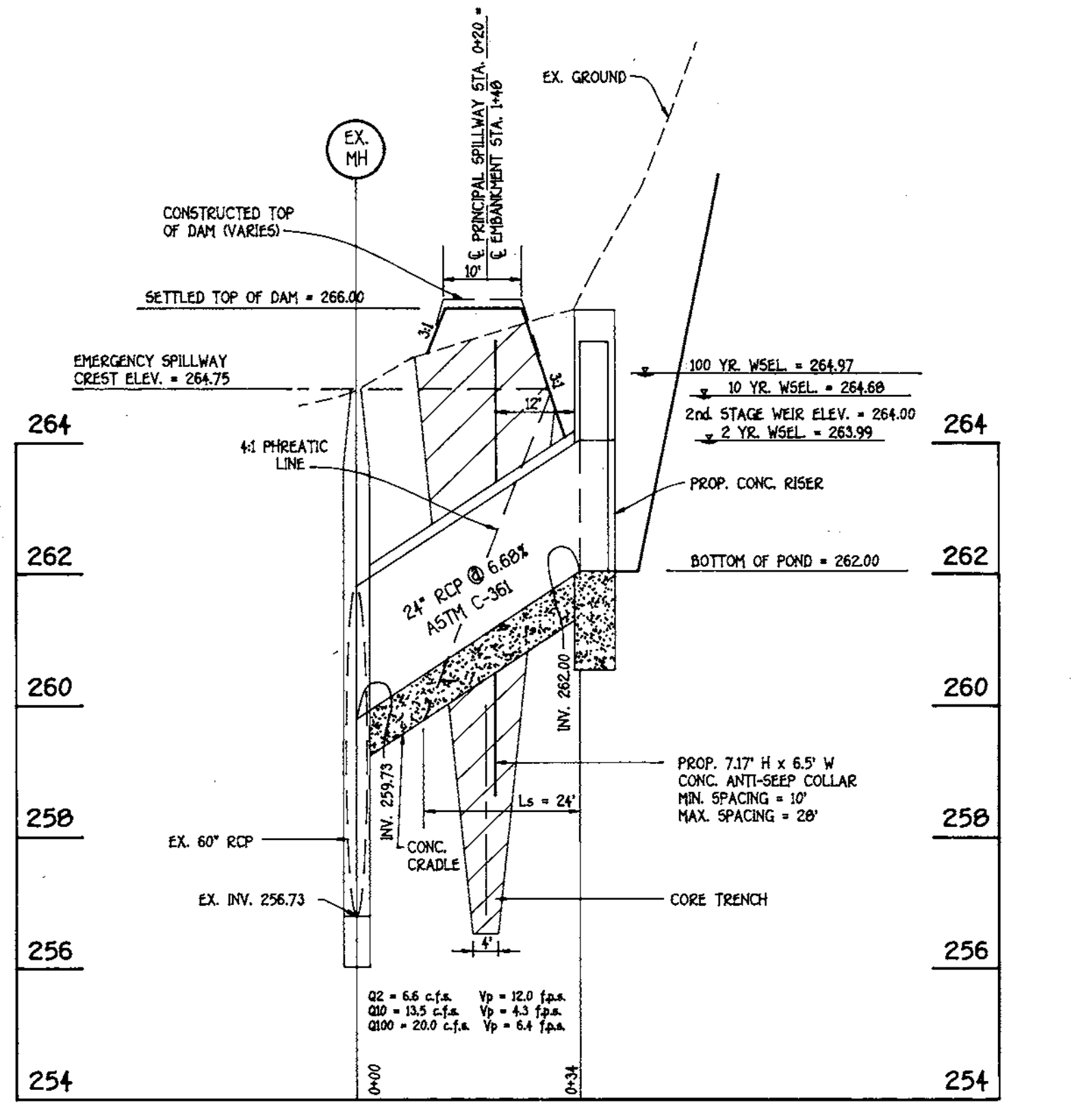
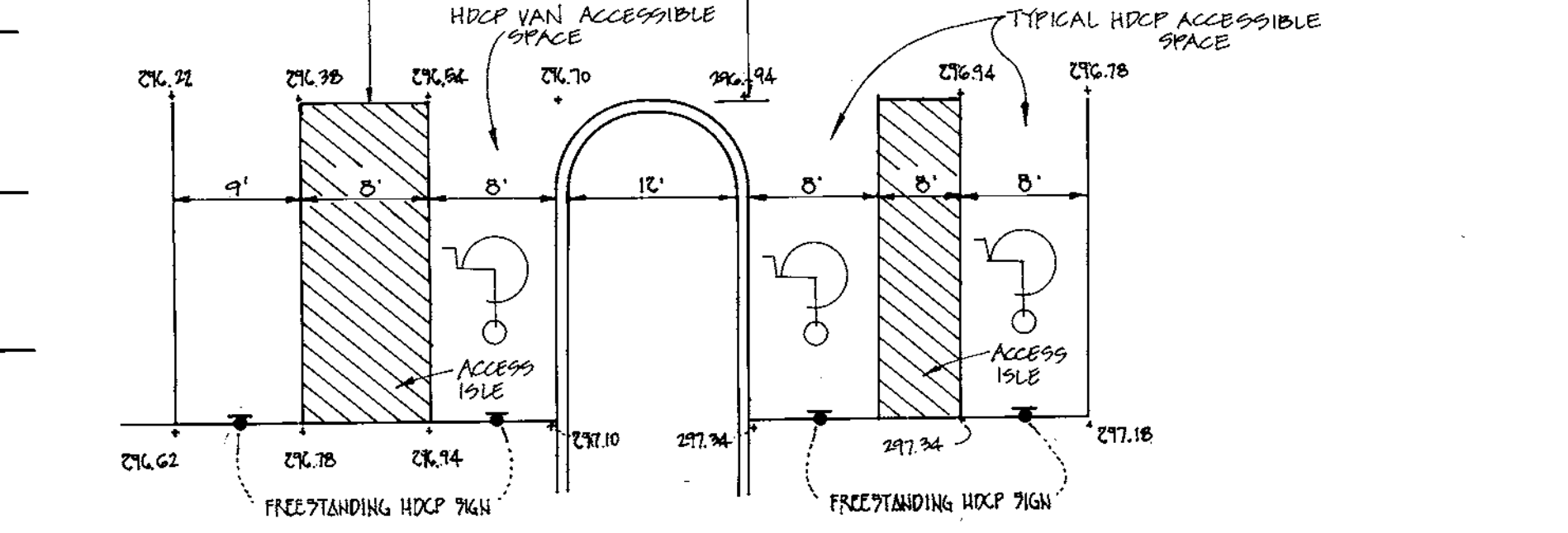


**SLOPE PROFILE**  
SCALE: HOR. 1" = 10'  
VERT. 1" = 2'

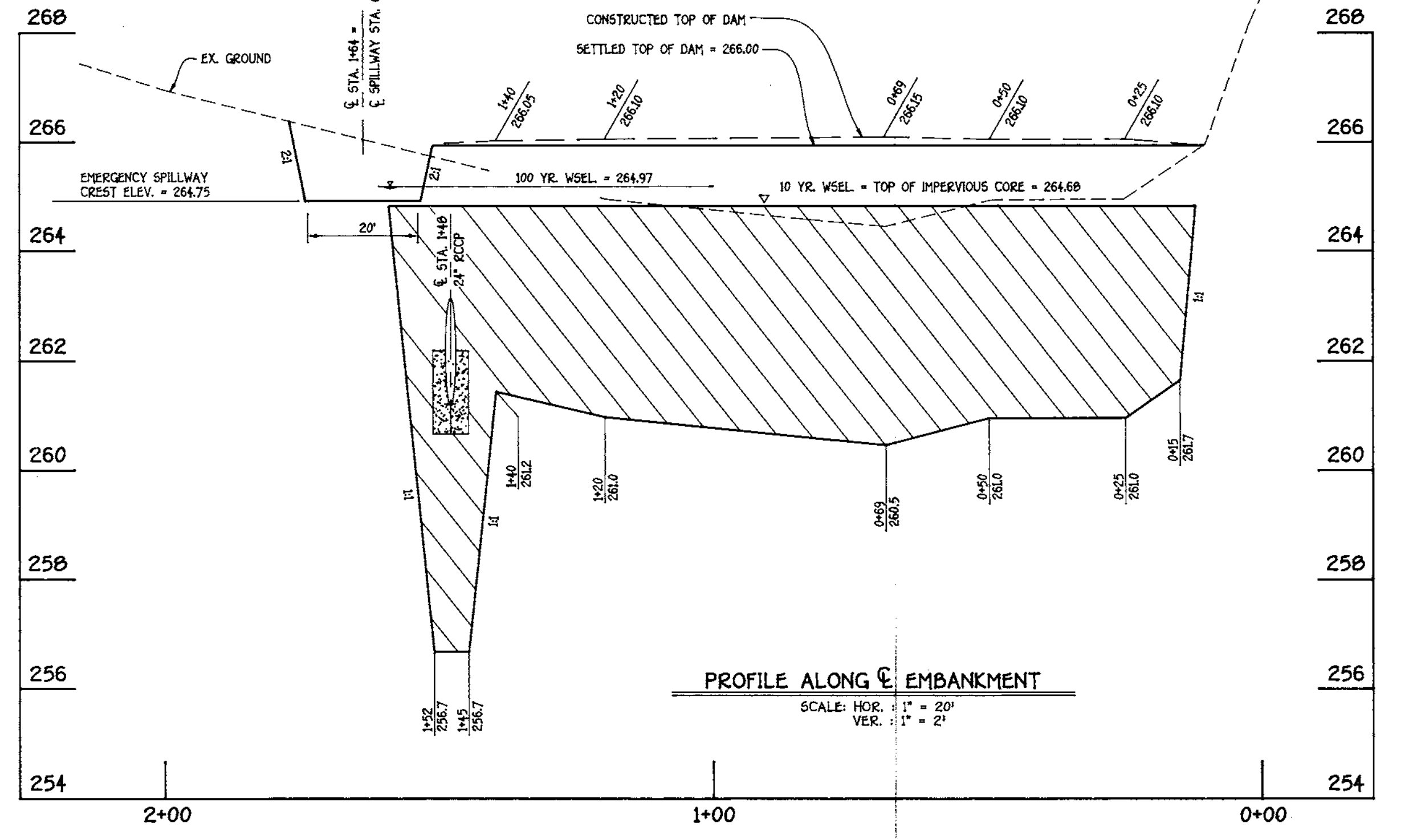
BACKFILL WITH IMPERVIOUS MATERIAL (CL OR SC) COMPACT TO ASSURE 95% DENSITY



**CORE TRENCH DETAIL**  
NOT TO SCALE



**PROFILE ALONG PRINCIPAL SPILLWAY**  
SCALE: HOR. 1" = 20'  
VER. 1" = 2'



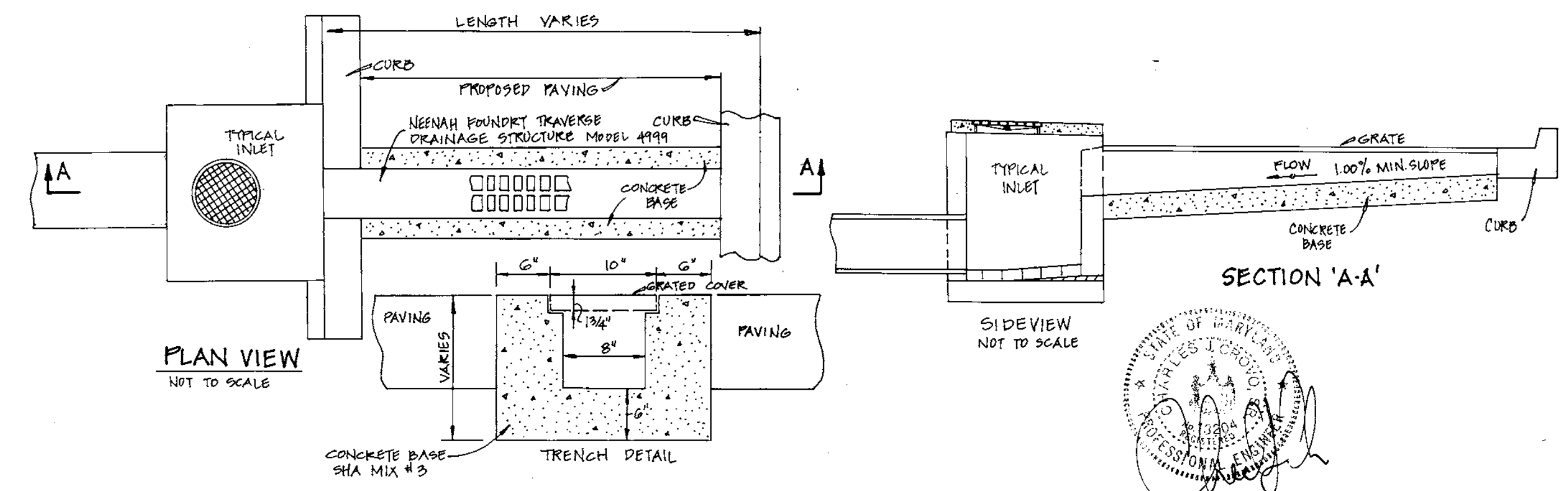
**PROFILE ALONG EMBANKMENT**  
SCALE: HOR. 1" = 20'  
VER. 1" = 2'

**OPERATION AND MAINTENANCE SPECIFICATIONS**

- I HEREBY CERTIFY THAT I WILL OPERATE AND MAINTAIN THE COMPLETED POND IN ACCORDANCE WITH THE FOLLOWING:
- PERIODIC INSPECTIONS OF THE FACILITY WILL BE MADE TO IDENTIFY POTENTIAL PROBLEMS THAT MAY AFFECT ITS SAFETY. THESE INSPECTIONS WILL BE MADE AFTER PERIODS OF HEAVY RAINFALL AND AT LEAST TWICE ANNUALLY. INSPECTION REPORTS SHALL BE KEPT UNTIL THE NEXT SUBSEQUENT INSPECTION. INSPECTION ITEMS TO BE LOOKED AT INCLUDE:
    - A) SPILLWAY AND OUTLET WORKS;
    - B) RIP-RAP;
    - C) VEGETATIVE COVER;
    - D) CRACKS IN THE FILL;
    - E) SLOPE FAILURES; AND
    - F) SEEPAGE AND OTHER SIGNS OF DISTRESS.
  - PROBLEMS IDENTIFIED DURING INSPECTIONS WILL BE PROMPTLY CORRECTED. MAJOR PROBLEMS WILL BE BROUGHT TO THE ATTENTION OF THE SOIL CONSERVATION DISTRICT AND THE DAM SAFETY DIVISION OF THE MARYLAND WATER RESOURCES ADMINISTRATION. AS A VERY MINIMUM, GRASSY VEGETATION WILL BE MAINTAINED IN A DENSE AND HEALTHY STATE, AND WOODY VEGETATION WILL NOT BE PERMITTED TO GROW ON THE EMBANKMENT.

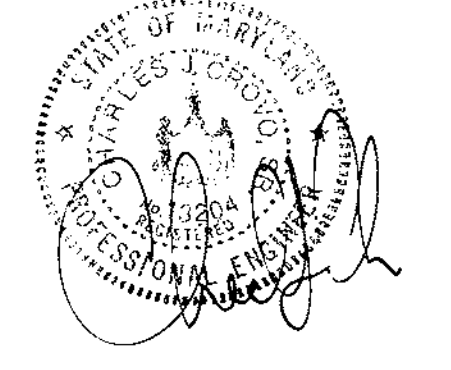
**OPERATION MAINTENANCE AND INSPECTION**

INSPECTION OF PONDS SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SCS "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE. THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.



**PLAN VIEW**  
NOT TO SCALE

**SECTION 'A-A'**



**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10772 BALDOR NATIONAL PIKE  
ELLIOTT CITY, MARYLAND 21042  
4100 461 - 2055

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

Signature of Engineer: *[Signature]* Date: 10/3/99

**DEVELOPER'S CERTIFICATE**  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: *[Signature]* Date: 10/14/99

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* Date: 11/10/99  
Chief, Division of Land Development

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
Signature: Howard SCD Date: 10/26/99

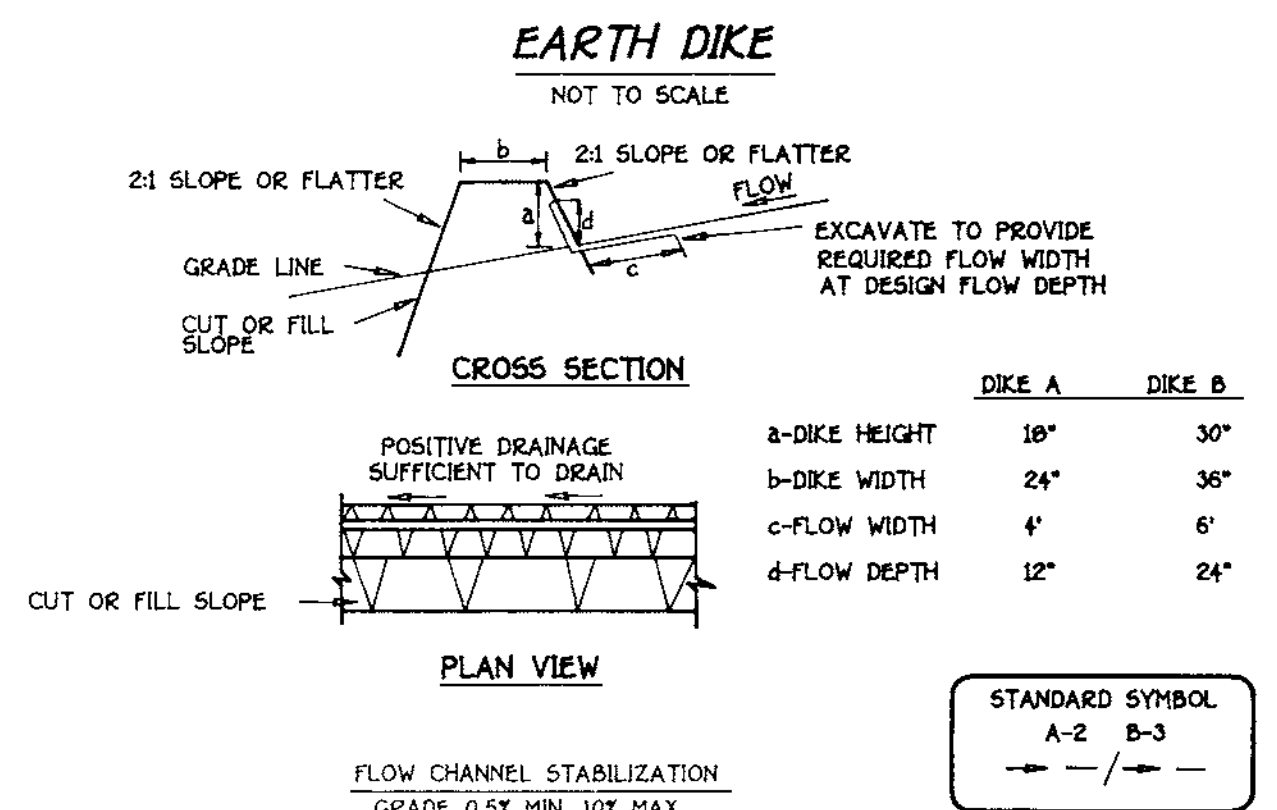
**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3475 NAGES AVENUE  
ELLIOTT CITY, MARYLAND 21043

SUBDIVISION ST. PETER'S EPISCOPAL CHURCH		SECTION/AREA	PARCEL 939
DEED L4787 F.76	BLOCK NO. A-2 4 A-3	TAX/ZONE R5C	ELEC. DIST. 2ND
WATER CODE FD4	GRID 18	SEWER CODE	CENSUS TR. 602B
		1402100	

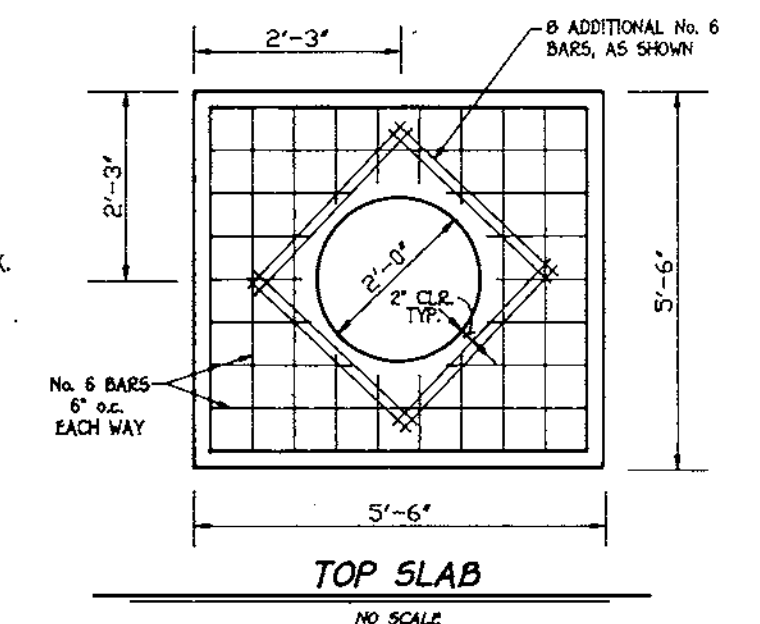
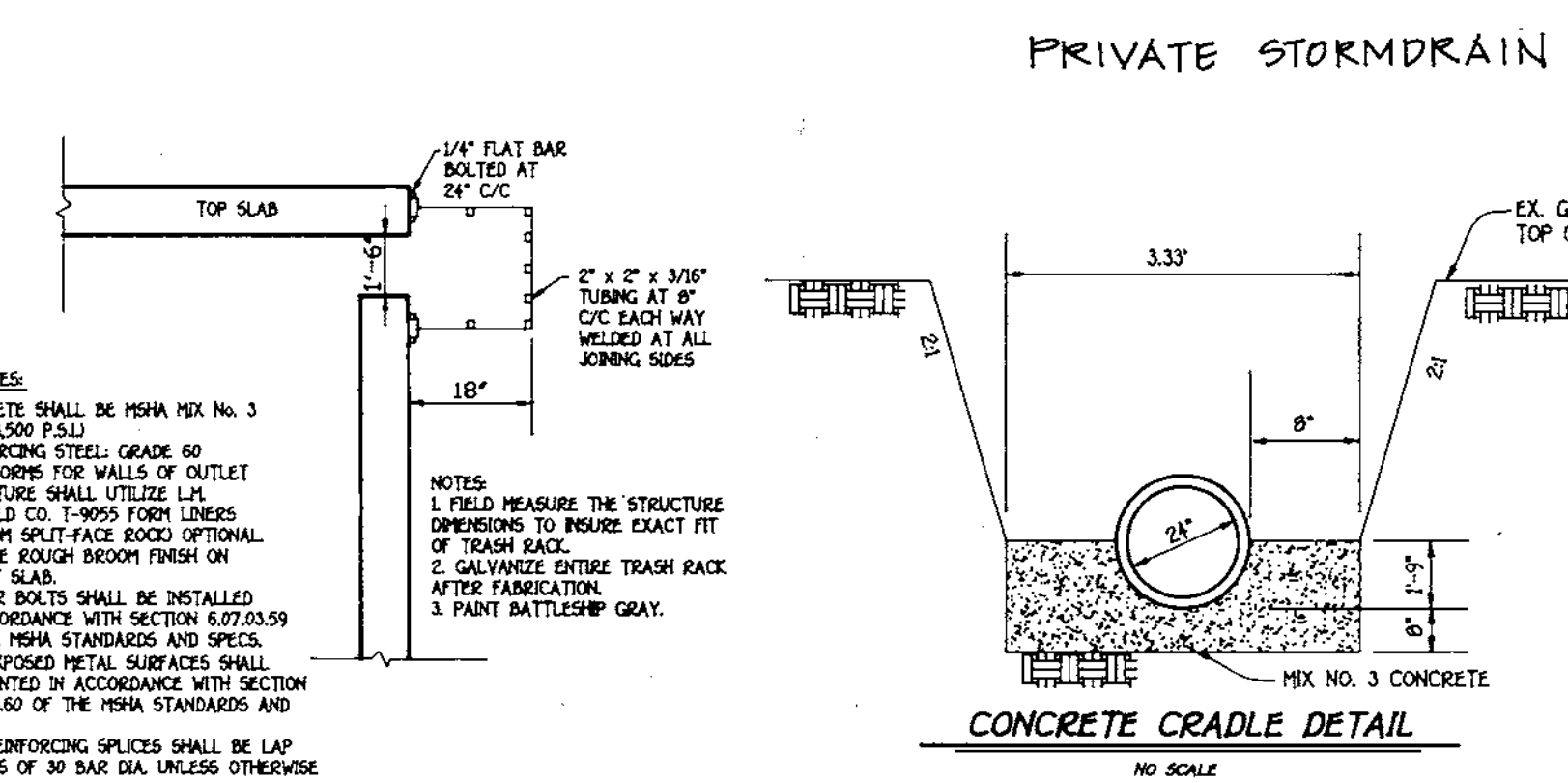
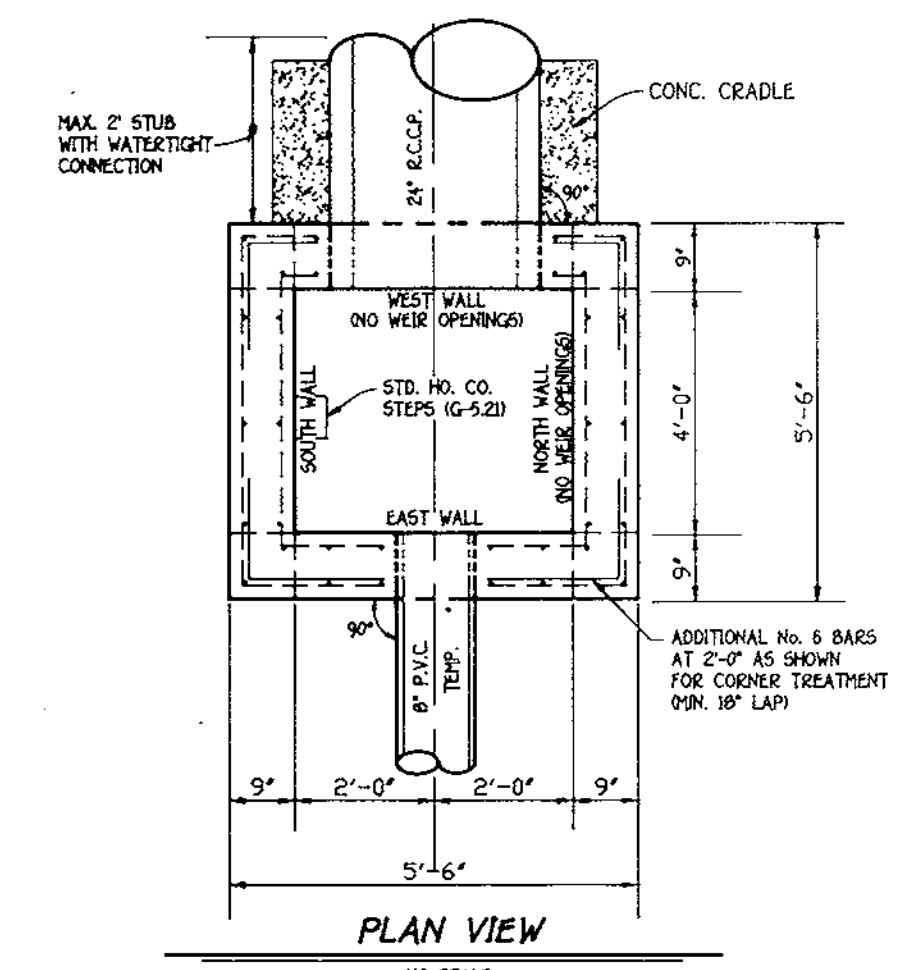
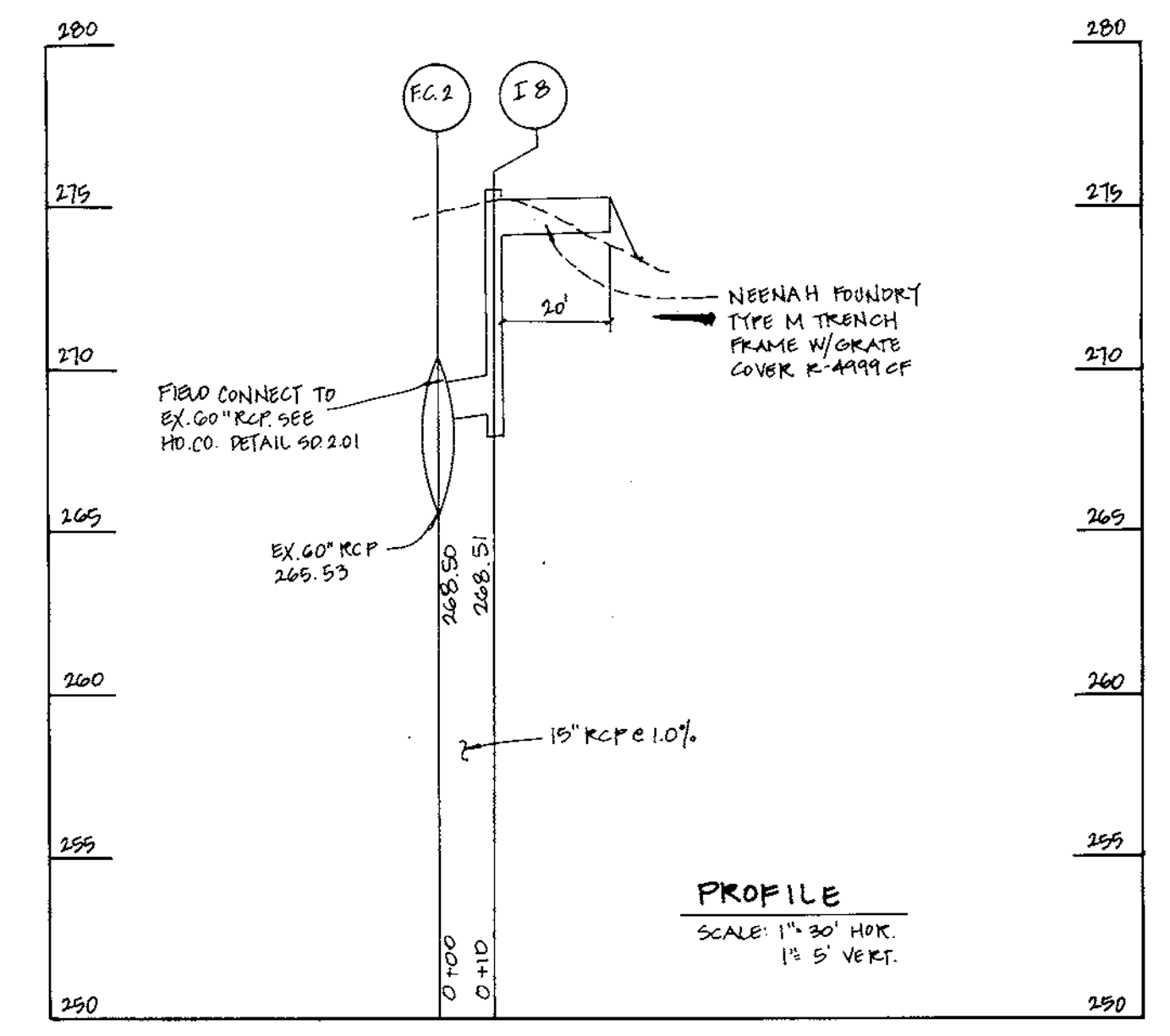
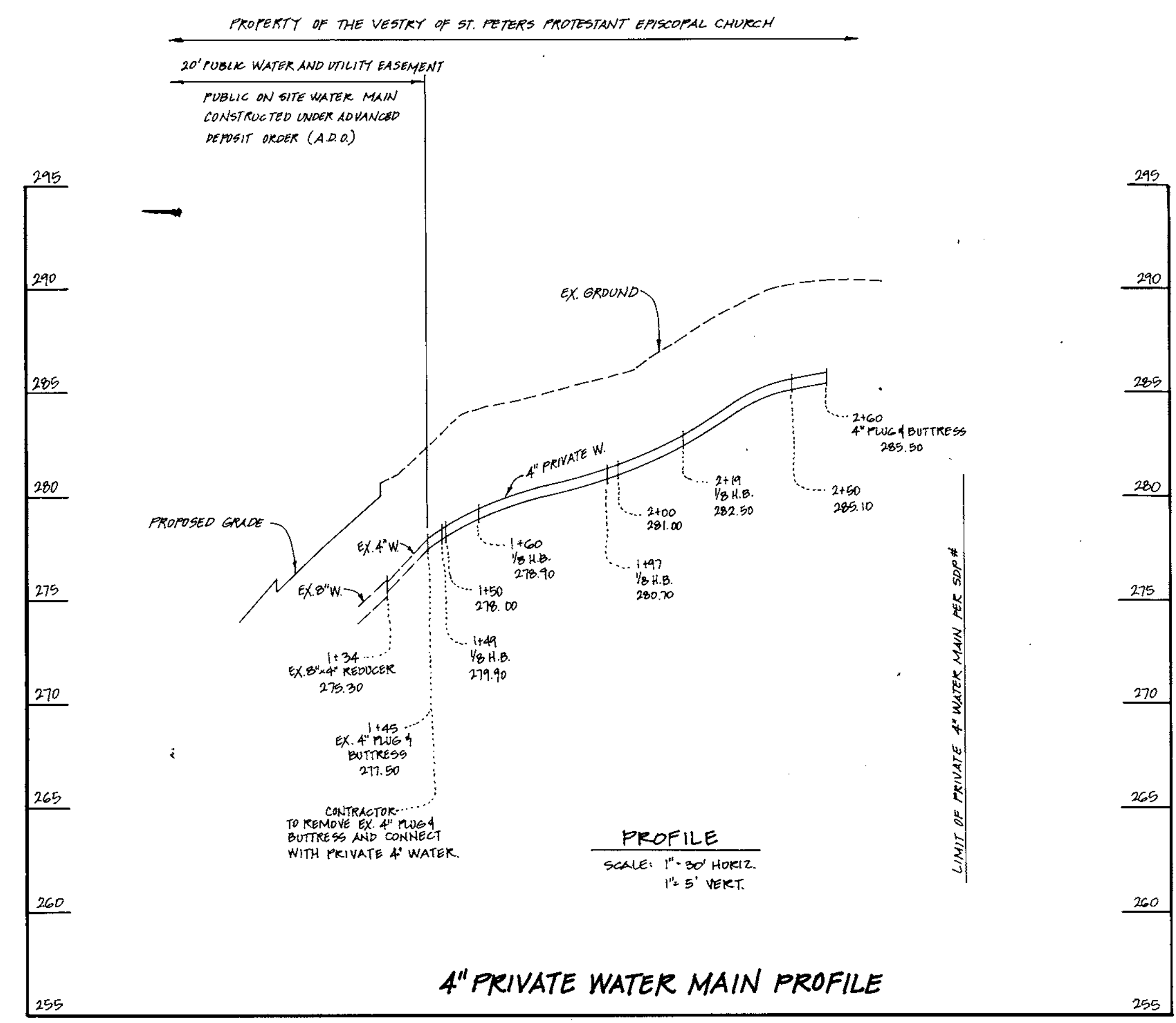
**SITE DEVELOPMENT PLAN  
DETAIL SHEET**

**ST. PETER'S  
EPISCOPAL CHURCH**

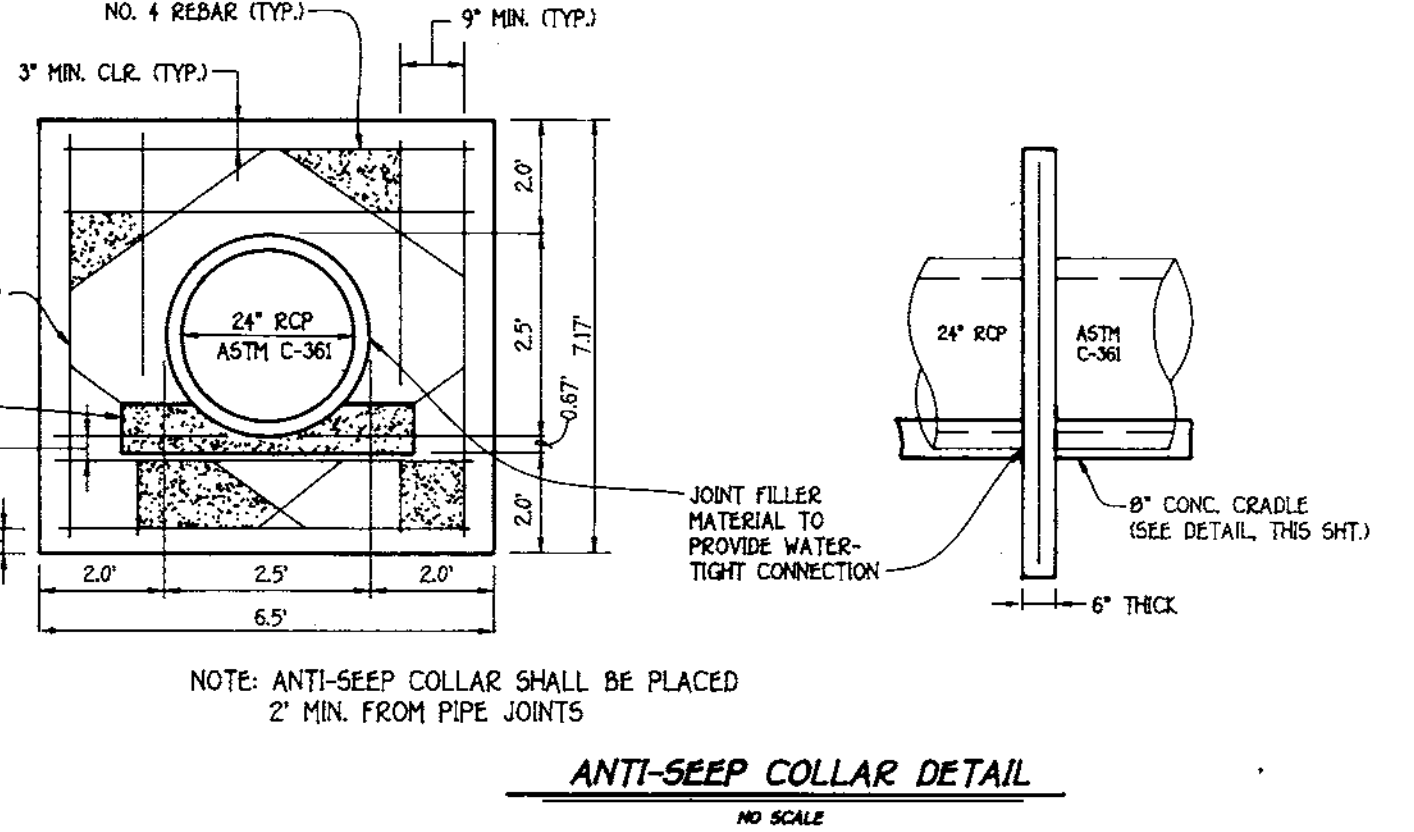
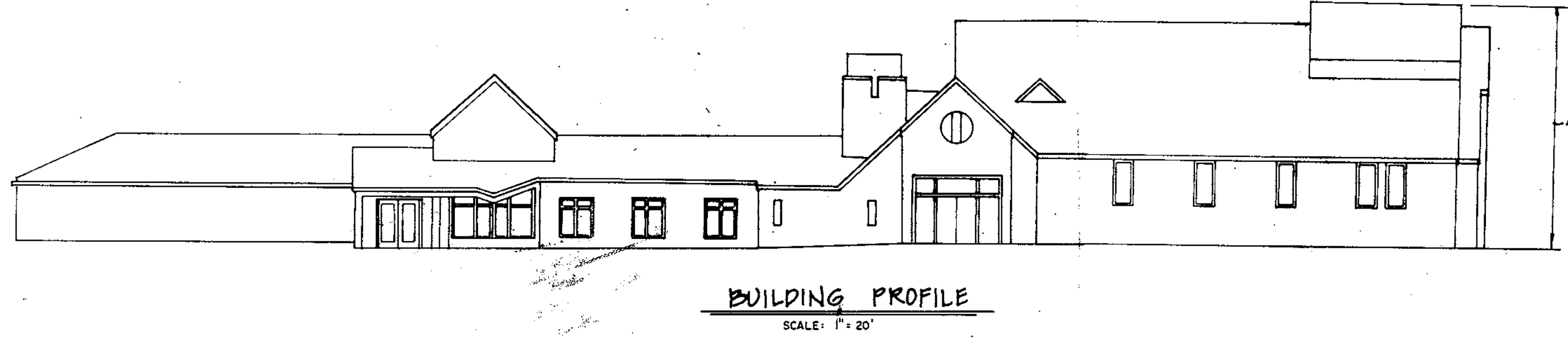
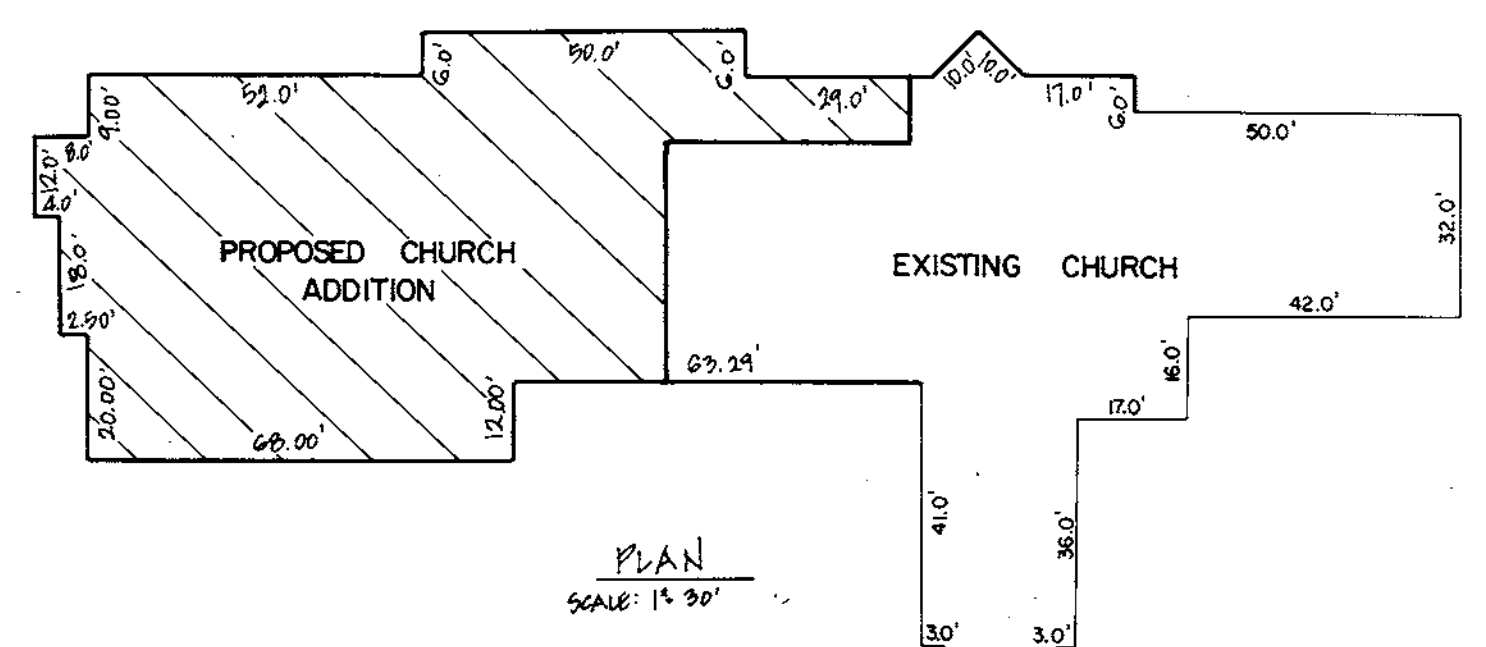
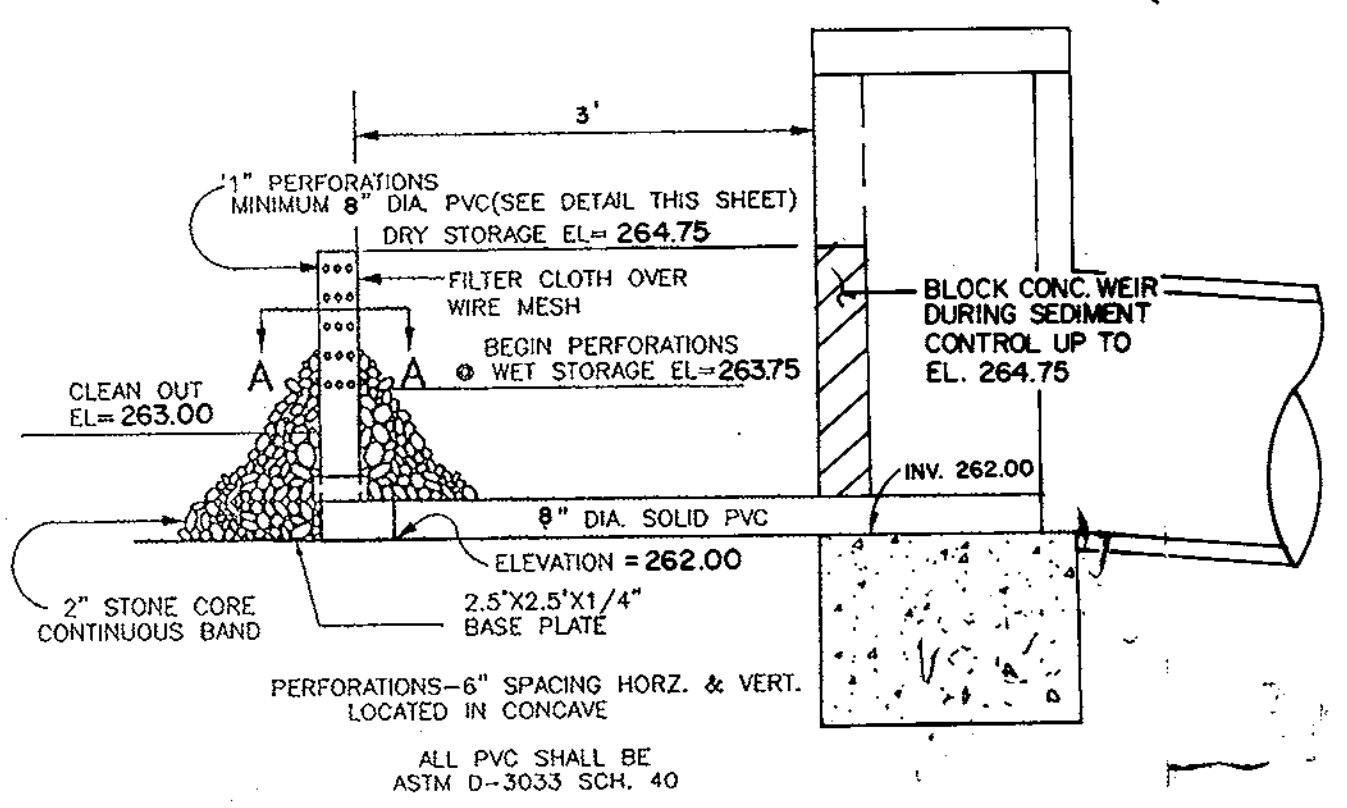
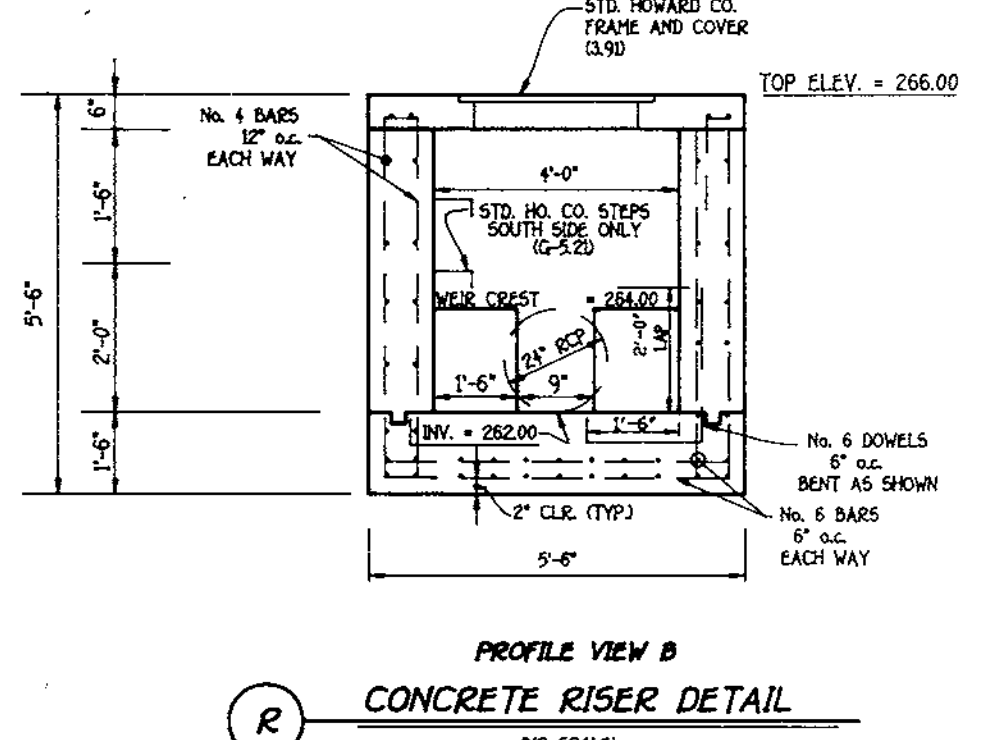
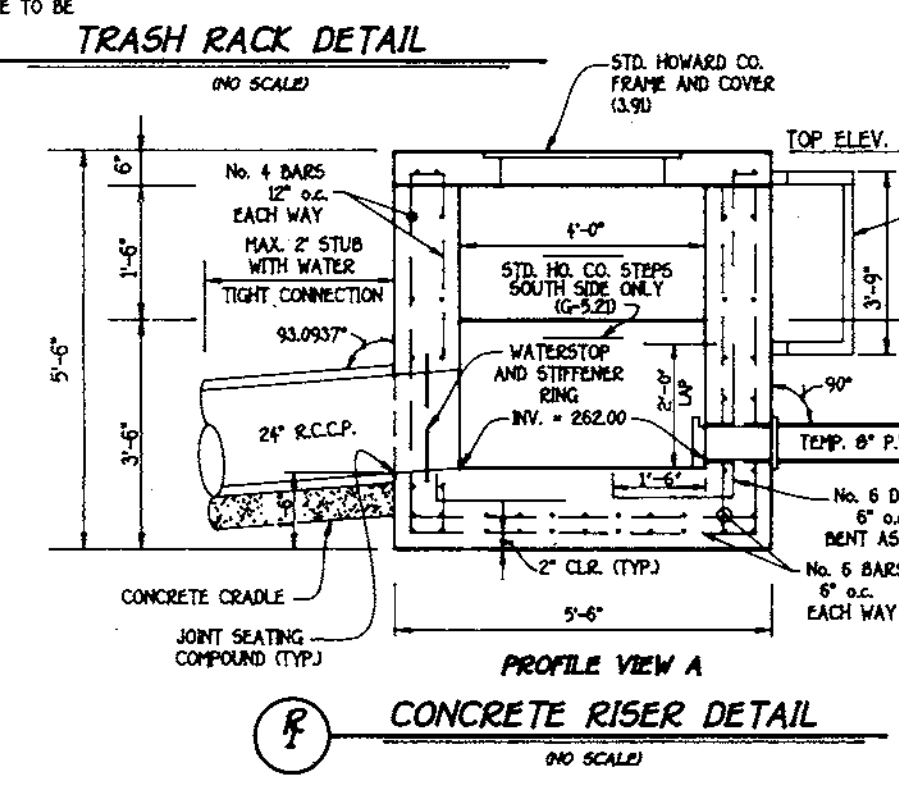
ZONING: R5C  
TAX MAP No: 24825 PARCEL: 939  
ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999  
SHEET 3 OF 8



- Seed and cover with straw mulch.
  - Seed and cover with Erosion Control Matting or lime with sod.
  - 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum.
- Construction Specifications
- All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
  - Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
  - Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
  - All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
  - The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
  - Fill shall be compacted by earth moving equipment.
  - All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
- Inspection and maintenance must be provided periodically and after each rain event.



- REFER NOTES:
- CONCRETE SHALL BE MSHA MIX NO. 3 (FC > 3,000 P.S.I.)
  - REINFORCING STEEL GRADE 60
  - FACE FORMS FOR WALLS OF OUTLET STRUCTURE SHALL UTILIZE LAL SCOFFLED CO. FORMS FROM LINES RANDOM SPLIT-FACE BLOCK OPTIONAL.
  - PROVIDE SMOOTH FINISH ON TOP OF SLAB.
  - ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6.07.03.59 OF THE MSHA STANDARDS AND SPEC.
  - ALL EXPOSED METAL SURFACES SHALL BE PAINTED IN ACCORDANCE WITH SECTION 6.07.03.60 OF THE MSHA STANDARDS AND SPEC.
  - ALL REINFORCING SPLICES SHALL BE LAP SPLICES OF 30 BAR DIA. UNLESS OTHERWISE SHOWN.
  - ALL FILTER FABRIC SHALL BE POLY FILTER-X OR EQUAL.
  - ALL EXPOSED EDGES OF CONCRETE TO BE CHIFFERED 1/2" x 1/2".
- NOTES:
- FIELD MEASURE THE STRUCTURE DIMENSIONS TO INSURE EXACT FIT OF TRASH RACK.
  - GALVANIZE ENTIRE TRASH RACK AFTER FABRICATION.
  - PAIN BATTLESHIP GRAY.



FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
20 NATIONAL SQUARE OFFICE PARK - 1927 BALTIMORE NATIONAL PKWY  
ELICOTT CITY, MARYLAND 21043  
410-761-1999

4\"/>

SHA #2 STONE  
WRAP PIPE IN FILTER CLOTH  
DRILL 1\"/>

4\"/>

REVIEWED FOR: HOWARD S.C.D.  
Name: Howard  
Signature: [Signature]  
Date: 10/14/99  
USDA, NATURAL RESOURCES CONSERVATION SERVICE

ENGINEER'S CERTIFICATE  
I certify that this plan, for erosion and sediment control represents a practical and workable plan based on my personal inspection of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
Signature of Engineer (Print name below signature): [Signature]  
Date: 10-14-99

DEVELOPER'S CERTIFICATE  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
Signature of Developer (Print name below signature): [Signature]  
Date: 10/14/99

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
Signature: [Signature]  
Date: 10/26/99  
Howard SCD

OWNER  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELICOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Division of Land Development: Cindy Houston, 11/10/99  
Chief, Development Engineering Division: [Signature], 10/26/99  
Director - Department of Planning and Zoning: [Signature], 11/10/99

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
DEED: BLOCK NO. A-2 + A-3	TAX/ZONE: RSC 24 & 25B	ELEC. DIST. 2ND
L.4787 F.76	CENSUS TR. 602B	
GRID 12		
WATER CODE: F04	SEWER CODE: 1402100	

SITE DEVELOPMENT PLAN  
DETAIL SHEET

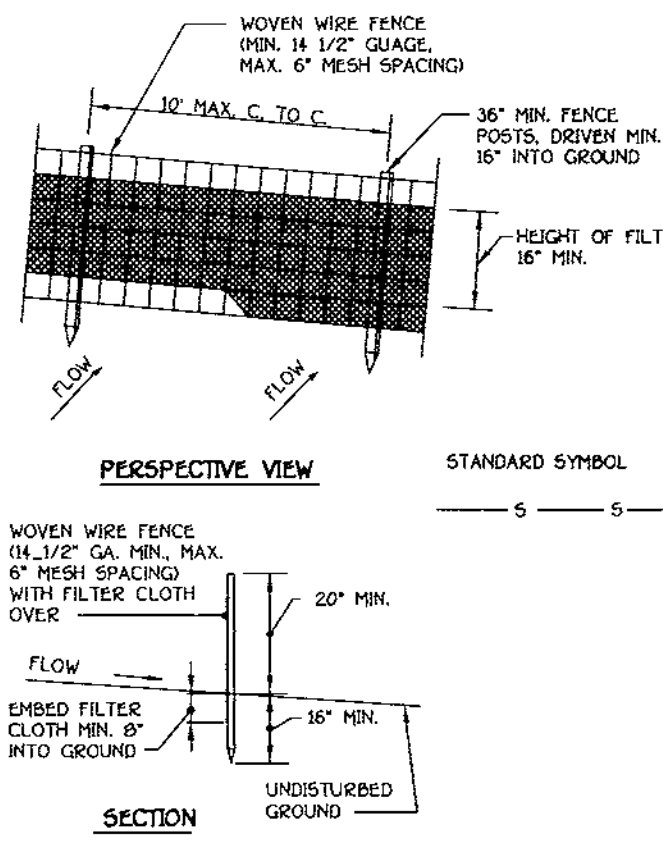
ST. PETER'S  
EPISCOPAL CHURCH

ZONING: R5C

TAX MAP NO: 24825 PARCEL: 939  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999  
SHEET 4 OF 8



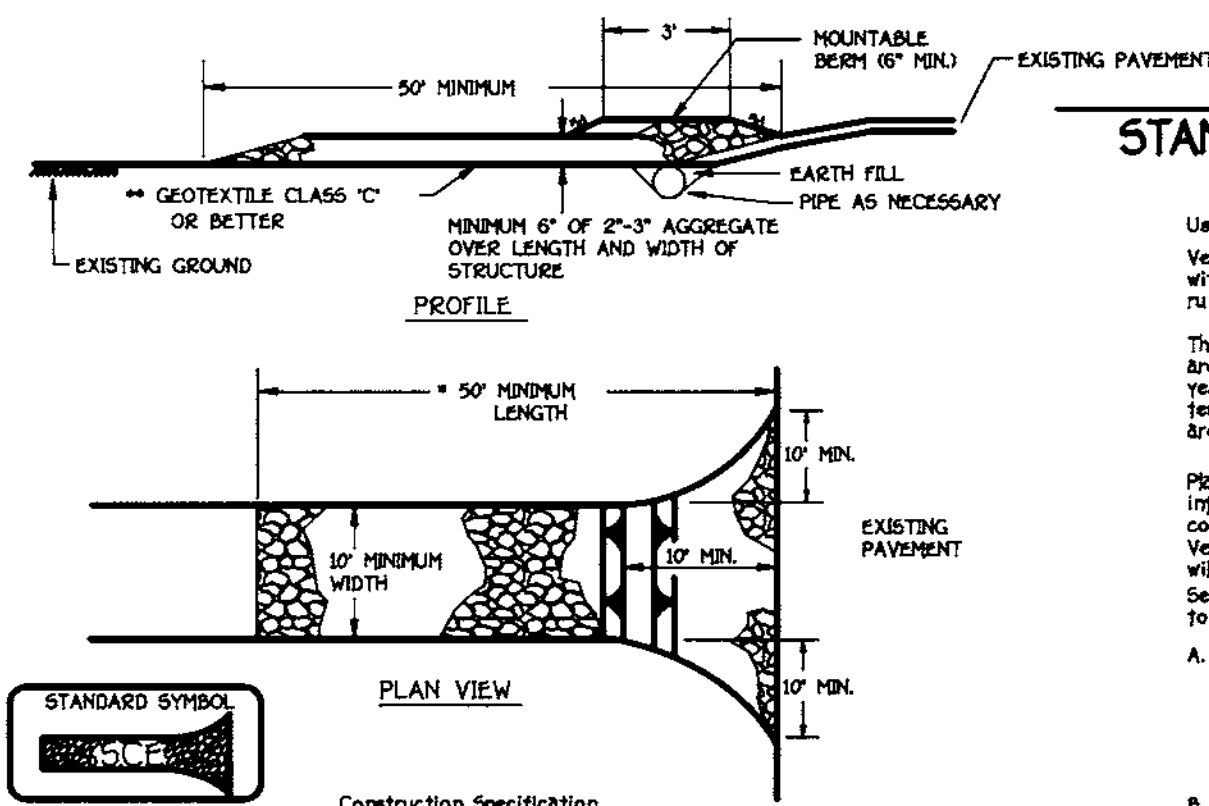
**SILT FENCE**



**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OF STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH STAPLES EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "MUDGEEPS" DEVELOP IN THE SILT FENCE.

**STABILIZED CONSTRUCTION ENTRANCE**



**CONSTRUCTION SPECIFICATION**

1. Length - minimum of 50' (30' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*If the plan approval authority may not require single family residence to use geotextile.
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted through construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable beam with 54 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the pipe is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

**PERMANENT SEEDING NOTES**

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:  
SEEDING PREPARATION:  
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

- SOIL AMENDMENTS:**  
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQFT) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQFT) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 36-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQFT) AND 300 LBS. PER ACRE 0-15-15/1,000 SQFT OF 0-20-20 FERTILIZER.
- SEEDING:**  
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQFT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 80 LBS./ACRE (1.8 LBS./1,000 SQFT) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.09 LBS./1,000 SQFT) OF WINTERHOAR. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 29, PROTECT SITE BY APPLYING 10 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE 500 OPTION (2) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDED.
- MULCHING:**  
APPLY 1 TO 2 TONS PER ACRE (10 TO 20 LBS./1,000 SQFT) OF UNWETTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GALLONS/SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 6 FEET OR HIGHER USE 348 GALLONS PER ACRE (8.7 GALLONS/SQ FT) FOR ANCHORING.
- MAINTENANCE:**  
INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS, REPLACEMENTS AND RESEEDING.  
\* FOR PUBLIC PONDS SUBSTITUTE CHEPPING CROWNWEED AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

**TEMPORARY SEEDING NOTES**

- APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RECONSTRUCTED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
- SEEDING PREPARATION:**  
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS:**  
APPLY 500 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1,000 SQFT).
- SEEDING:**  
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH NOVEMBER 15, SEED WITH 1 BUSHEL PER ACRE OF ANNUAL OYS (3.2 LBS./ACRE) OF MIXING LOWGROWERS (27 LBS./1,000 SQFT) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 29. PROTECT SITE BY APPLYING 10 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOO.
- MULCHING:**  
APPLY 1 TO 2 TONS PER ACRE (10 TO 20 LBS./1,000 SQFT) OF UNWETTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 250 GALLONS PER ACRE (5 GALLONS/SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 6 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8.7 GALLONS/SQ FT) FOR ANCHORING.
- REFER TO THE 1988 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION**

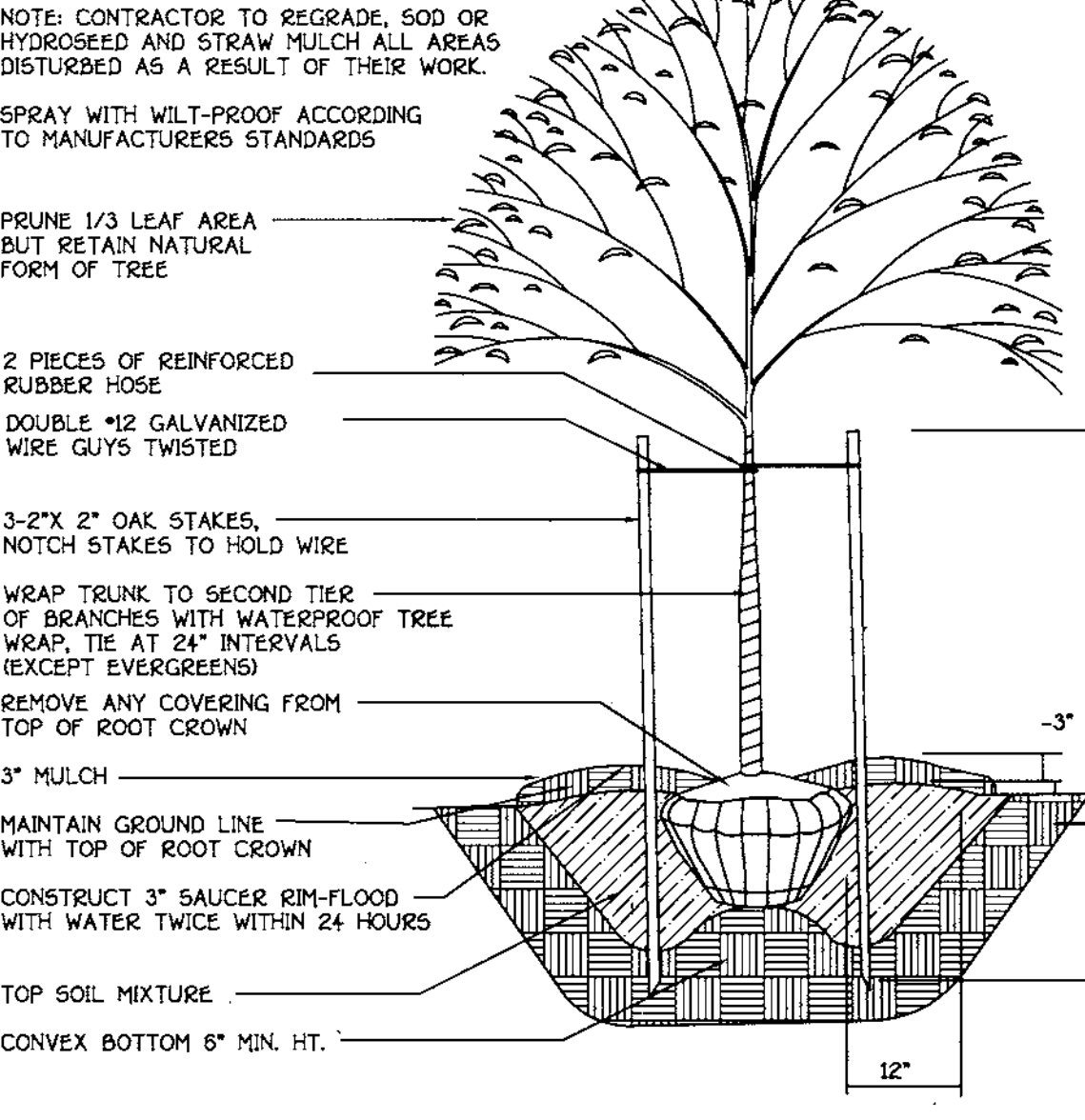
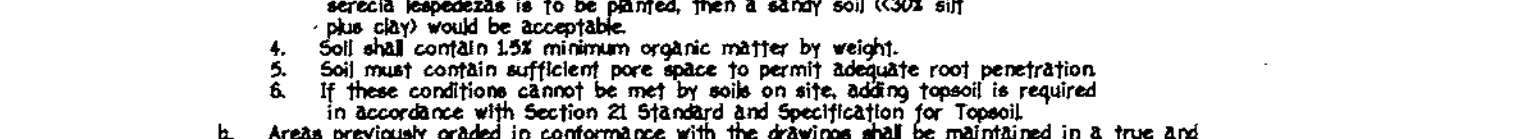
Using vegetation as cover for barren soil to protect it from forces that cause erosion. Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to slow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

**DEFINITION**  
VEGETATIVE STABILIZATION: THE USE OF VEGETATION TO PREVENT OR REDUCE SOIL EROSION.

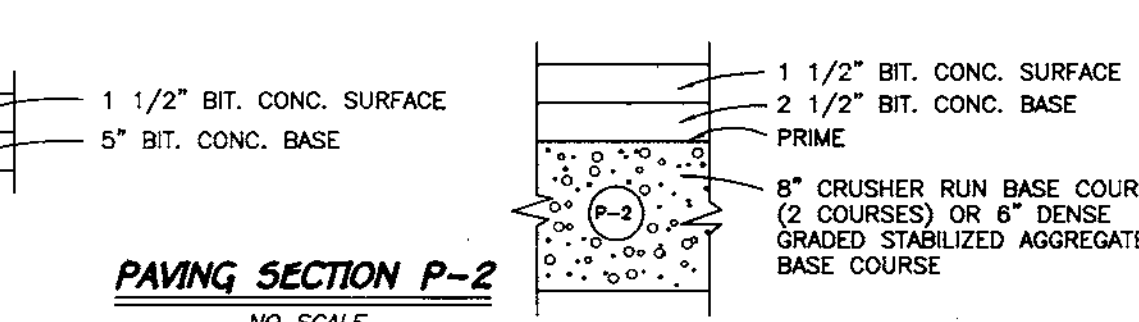
**WHERE THESE PRACTICES APPLY:**  
This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding to quickly establish vegetative cover for short duration (up to one year) and Permanent Seeding for long term vegetative cover. Temporary Seeding and Permanent Seeding are defined as follows: Temporary Seeding is the use of temporary soil stockpiles, cleared areas being left idle between construction phases, earth ditches, etc. and for Permanent Seeding are lawns, dunes, cut and fill slopes and other areas at final grade, former wholesale and retail sites, etc.

**EFFECTS ON WATER QUALITY AND QUANTITY**  
Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, infiltration, infiltration, infiltration and groundwater recharge. Vegetation over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

- A. Site Preparation**
1. Initial erosion and sediment control structures (either temporary or permanent) such as diversion, grade stabilization structures, berms, waterways, or sediment control basins.
  2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
  3. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications)**
1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
  2. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizer may be substituted for fertilizer with prior approval from the appropriate authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
  3. Lime materials shall be ground limestone (hydrated or burnt lime) may be substituted which contains at least 90% lime for agricultural use (minimum oxide). Limestone shall be ground to pass through a 20 mesh sieve and at least 50% will pass through a 100 mesh sieve and 98-100% will pass through a 200 mesh sieve.
- C. Seeded Preparation**
1. Temporary Seeding
    - a. Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be graded to the surface in an irregular condition with ridges running parallel to the contour of the slope.
    - b. Areas previously graded conforming with the drainage shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the fertilizer to the surface and to create horizontal erosion check slots to prevent topsoil from sliding.
    - c. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
  2. Permanent Seeding
    - a. Minimum soil conditions required for permanent vegetative establishment:
      1. Soil shall contain sufficient pore space to permit adequate root penetration.
      2. Soil shall contain less than 40% clay, but enough fine grained material to hold soil in place to provide the capacity to hold a moderate amount of moisture. An exception is if loesslike or siltlike deposits are to be planted, then a sandy soil (USPS #1) plus clay will be acceptable.
      3. Soil shall contain 15% minimum organic matter by weight.
      4. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standards and Specifications for Topsoil.
    - b. Areas previously graded conforming with the drainage shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the fertilizer to the surface and to create horizontal erosion check slots to prevent topsoil from sliding.
    - c. Apply soil amendments as per soil test or as included on the plans.
    - d. Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn rollers shall be used on flat areas to break up clumps and remove any large stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seeded preparation, loosen surface soil by disking with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 3" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.



**TREE PLANTING DETAIL**



**PAVING SECTION P-2**  
NO SCALE

**SCHEDULE B PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PARKING SPACES	96
NUMBER OF TREES REQUIRED	5
NUMBER OF TREES PROVIDED	5
SHADE TREES	5
OTHER TREES (2:1 SUBSTITUTION)	-

**SCHEDULE A PERIMETER LANDSCAPE EDGE**

Category	Perimeter Edge									
	P1	P2	P3	P4	P5	P6	P7	P7-A	P7-B	P7-C
Landscape Type	C	C	C	D	C	C	C	B	B	B
Linear Feet or Roadway Frontage/Perimeter	310'	340'	103'	231'	30'	544'	200'	340'		
Credit For Existing Vegetation (Yes, No Linear Feet) (Describe Below If Needed)	YES 194'	YES 230'	NO	YES 157'	NO	YES 119'	NO	YES 130'		
Credit For Wall, Fence Or Berm (Yes, No Linear Feet) (Describe Below If Needed)	NO	NO	NO	NO	NO	NO	NO	NO		
Number Of Plants Required										
Shade Trees	3	3	3	3	1	11	5	4		
Evergreen Trees	6	5	5	6	3	12	10	6		
Shrubs	-	-	-	-	-	-	-	-		
Number Of Plants Provided										
Shade Trees	3	3	3	3	1	11	5	4		
Evergreen Trees	6	5	5	6	3	12	10	6		
Other Trees (2:1 Substitution)	-	-	-	-	-	-	-	-		
Shrubs (2:1 Substitution) (Describe Plant Substitution Credits Below If Needed)	-	-	-	-	-	-	-	-		

**SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING**

LINEAR FEET OF PERIMETER	P8, 105'	P9, 165'	P10, 194'	P11, 220'
NUMBER OF TREES REQUIRED: (TYPE B)			(TYPE C)	
SHADE TREES 1:50	2	3	4	4
EVERGREEN TREES 1:40	3	4	4	4
CREDIT FOR EXISTING VEGETATION (NO, YES AND X)	NO	NO	YES 60'	NO
CREDIT FOR INTERNAL LANDSCAPING (NO, YES AND X)	NO	NO	NO	NO
NUMBER OF TREES PROVIDED:				
SHADE TREES	2	3	4	4
EVERGREEN TREES	3	4	4	4
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-

**EVERGREEN PLANTING DETAIL**

**PLANTING SPECIFICATIONS**

1. Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein.
2. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (AAN) standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug; no heeled-in plants from cold storage will be accepted.
3. Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas", hereinafter "Landscape Guidelines" approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all addenda.
4. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.
5. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
6. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line.
7. Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction.
8. Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.
9. Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plans and those shown on the plant list, the quantities on the plant list take precedence.
10. All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans.
11. Positive drainage shall be maintained in planting beds 2 percent slope.
12. Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - Two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.
13. Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific ground cover to be treated.
14. All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded.
15. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

**TREE PLANTING DETAIL**

NOT TO SCALE

**LANDSCAPING PLANT LIST**

QTY.	KEY	NAME	SIZE
49	⊙	ACER RUBRUM "OCTOBER GLORY" (OCTOBER RED MAPLE)	2 - 2 1/2" CALIPER FULL CROWN, B&B
79	⊙	PNUS STROBUS (EASTERN WHITE PINE)	6"-8" HT.

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 15.24 OF THE HOWARD COUNTY DEVISIONS OF THE LANDSCAPE MANUAL", FINANCIAL SURETY FOR THE REQUIRED LANDSCAPE TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$21,900.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SOURCE OFFICE: 10772 RAILROAD NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
(410) 421-2555

**ENGINEER'S CERTIFICATE**

"I certify that the erosion and sediment control represents a practical and workable plan and that my knowledge of the site conditions and that was prepared in accordance with the provisions of the Howard Soil Conservation District."

Signature: *[Signature]* Date: 5-26-99

**DEVELOPER'S CERTIFICATE**

"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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer (Print name below signature): *[Signature]* Date: 10/14/99

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

Signature: *[Signature]* Date: 10/26/99

**OWNER**

ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELICOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *[Signature]* Date: 11/10/99  
Chief, Division of Land Development

Signature: *[Signature]* Date: 10/20/99  
Chief, Development Engineering Division

Signature: *[Signature]* Date: 11/10/99  
Director, Department of Planning and Zoning

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
DEED	BLOCK NO.	ZONE
L. 4787 F. 76	24 & 25B	RSC
TAX/ZONE	ELEC. DIST.	CENSUS TR.
24 & 25B	2ND	6028
WATER CODE	SEWER CODE	
F-04	1402100	

**SITE DEVELOPMENT PLAN  
DETAIL SHEET & LANDSCAPE DETAILS**

**ST. PETER'S  
EPISCOPAL CHURCH**

ZONING: RSC

TAX MAP No. 24 & 25 PARCEL: 939 GRID: 12  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999

SHEET 5 OF 8



Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill

Material: The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick before compaction layers which are to be continuous over the entire length of the fill.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller.

Where a minimum required density is specified, it shall not be less than 95% of maximum dry density with a moisture content within +/- 2% of the optimum.

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation.

Structure Backfill - Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining material. The fill shall be placed in horizontal layers not to exceed 4 inches in thickness.

Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges.

2. Coupling bands, anti-seep collars, end sections, etc., must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

3. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the band width.

4. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

5. Backfilling shall conform to "Structure Backfill".

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361.

2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.

3. Laying pipe - bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled.

4. Backfilling shall conform to "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

1. Materials-PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.

2. Joints and connections to anti-seep collars shall be completely watertight.

3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Backfilling shall conform to "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608; Mix No. 3.

Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks.

Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works.

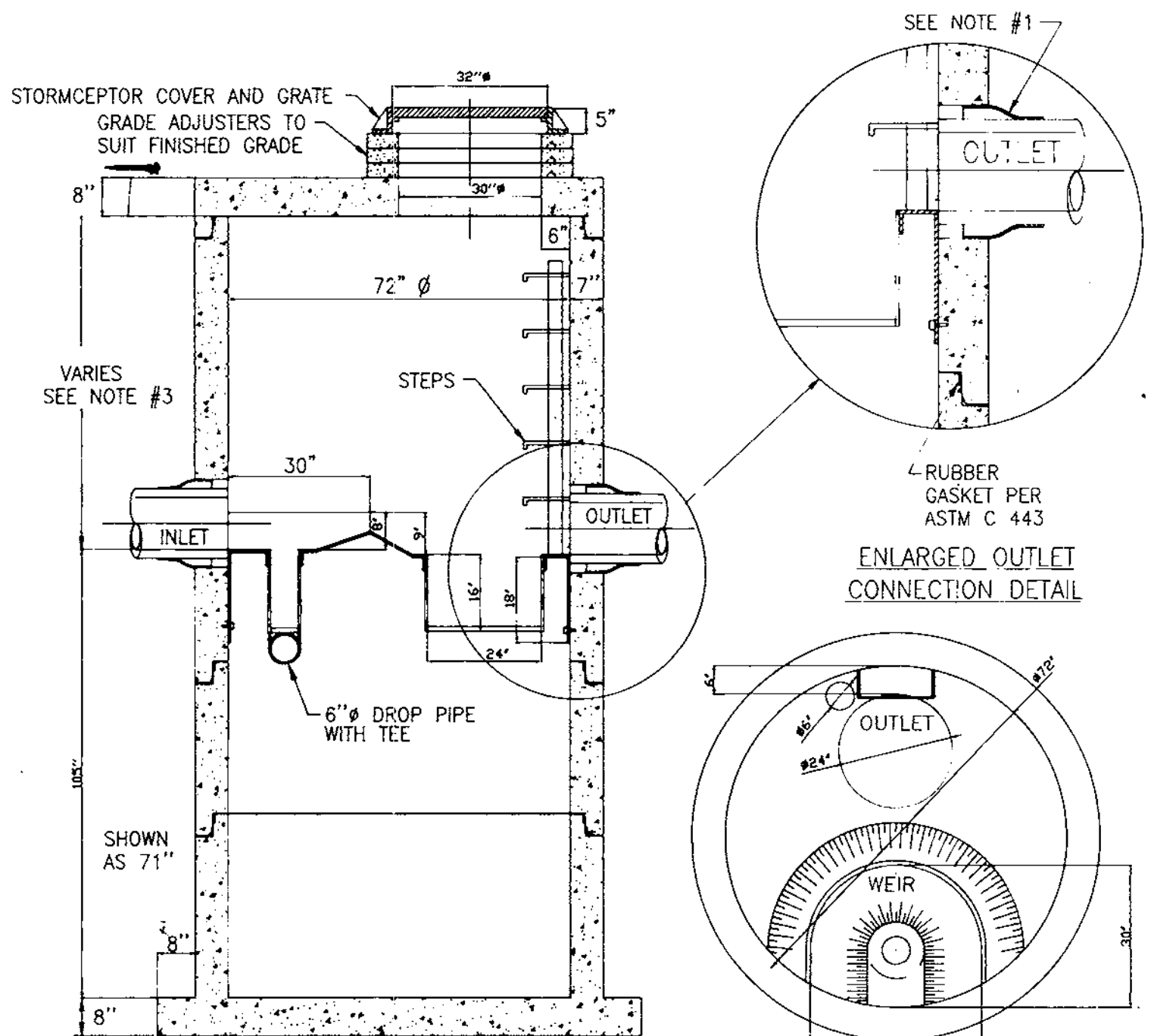
The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution minimized. State and local laws concerning pollution abatement will be followed.

STC 1800 Precast Concrete Stormceptor® (1800 US Gallon Capacity) (Disc Design)



- NOTE: 1. FLEXIBLE CONNECTIONS ARE RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE. 2. COVER TO BE POSITIONED OVER OUTLET AND VENT PIPE. 3. THIS IS A GENERAL ARRANGEMENT DRAWING. CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS. 4. INLET DROP PIPE WILL BE EITHER 6" OR 12" WITH A 6" ORIFICE PLATE. 5. ALL CONCRETE JOINTS HAVE RUBBER GASKETS THAT CONFORM TO ASTM C 443. 6. U.S. PATENT NO. 4,985,148

CONTRACTOR INSTALLATION INSTRUCTIONS PRECAST CONCRETE STORMCEPTOR "DSC" DESIGN

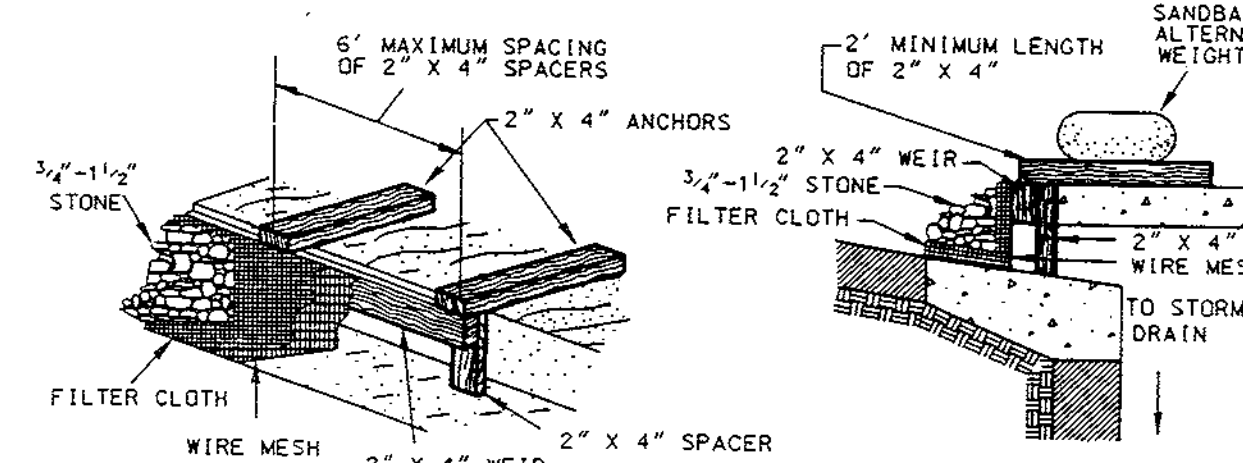
- 1. STAKE-OUT THE LOCATION OF THE STORMCEPTOR AND EXCAVATE HOLE. EXCAVATE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO UNIT. INSTALL A 1/2 INCH DEEP FOR AS REQUIRED LAYER OF COMPACTED AGGREGATE SUBBASE AT THE BOTTOM OF THE EXCAVATION. INSTALL TRENCH BOX OR SHIELDING AS NEEDED. 2. CHECK ELEVATION OF UNIT BY MEASURING ITS SECTIONS FROM BASE OF THE STORAGE CHAMBER (BOTTOM OF UNITS SLAB) TO THE INVERT OF THE STORMCEPTOR INLET. FLUORIDE BOOT INSTALLATION PROCEDURE: CENTER THE PIPE IN THE BOOT GROUT. LUBRICATE THE INSIDE OF THE PIPE AND OUTLET DRAINAGE PIPES. CHECK TO MAKE SURE THE BYPASS CHAMBER IS SET FLUSH LEVEL AND IS AT THE PROPER ELEVATION. THE BYPASS SECTION MUST BE ORIENTED SUCH THAT INLET PIPE DISCHARGES INTO THE V-SHAPED FIBERGLASS WEIR ORIFICE INSET. INSTALL RUBBER GASKET ON TOP OF BYPASS SECTION AND COAT WITH LUBRICATING GREASE. IF NOT PRELUBRICATED. 3. SECURE INSPECTOR APPROVAL OF SUBGRADE AND SUBBASE. ALL LIFTING APPARATUS IS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR. 4. INSTALL STORAGE CHAMBER. INSTALL SCREW LIFTING PINS OR HOOKS INTO BASE OF STORAGE CHAMBER. ATTACH CABLES OR CHAINS TO LIFT LUGS ON THE BASE SLAB. USING LARGE EQUIPMENT OR CRANE, LIFT AND PLACE THE STORAGE CHAMBER IN THE EXCAVATED HOLE ON THE SUBBASE. MAKE SURE THAT THE BASE IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS NOT REQUIRED. 5. INSTALL BYPASS SECTION OF STORMCEPTOR WITH FACTORY INSTALLED STORMCEPTOR ROVER. LIFT BYPASS SECTION AND INSTALL WHILE CHECKING ALIGNMENT AND GRADE OF INLET AND OUTLET DRAINAGE PIPES. CHECK TO MAKE SURE THE BYPASS CHAMBER IS SET FLUSH LEVEL AND IS AT THE PROPER ELEVATION. THE BYPASS SECTION MUST BE ORIENTED SUCH THAT INLET PIPE DISCHARGES INTO THE V-SHAPED FIBERGLASS WEIR ORIFICE INSET. INSTALL RUBBER GASKET ON TOP OF BYPASS SECTION AND COAT WITH LUBRICATING GREASE. IF NOT PRELUBRICATED. 6. INSTALL INLET AND OUTLET STORMCEPTOR PIPES. CONNECT INLET AND OUTLET STORMCEPTOR PIPES WITH FLEXIBLE BOOTS (WHEN PROVIDED) AND WITH NON-SHREK GROUT WHEN NO FLEXIBLE BOOTS ARE PROVIDED. THE INVERT OF THE INLET AND OUTLET PIPE IS TO MATCH WITH THE INVERT OF THE STORMCEPTOR INLET. FLUORIDE BOOT INSTALLATION PROCEDURE: CENTER THE PIPE IN THE BOOT GROUT. LUBRICATE THE INSIDE OF THE PIPE AND OUTLET DRAINAGE PIPES. CHECK TO MAKE SURE THE BYPASS CHAMBER IS SET FLUSH LEVEL AND IS AT THE PROPER ELEVATION. THE BYPASS SECTION MUST BE ORIENTED SUCH THAT INLET PIPE DISCHARGES INTO THE V-SHAPED FIBERGLASS WEIR ORIFICE INSET. INSTALL RUBBER GASKET ON TOP OF BYPASS SECTION AND COAT WITH LUBRICATING GREASE. IF NOT PRELUBRICATED. 7. INSTALL STORMCEPTOR DROP PIPES ACCORDING TO STC PIPE INSTALLATION PROCEDURE. 8. INSTALL ROVER SECTION. LIFT ROVER SECTION AND INSTALL WHILE CHECKING THAT SECTION IS SET FLUSH AND IS AT PROPER ELEVATION AND THAT UNIT IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS NOT REQUIRED. ALIGN STEPS PROPERLY FOR ACCESS FROM MANHOLE OPENING AND ADJUST TO VENT PIPE. NOTE: FOR SHALLOW INSTALLATIONS THIS SECTION MAY NOT BE REQUIRED. 9. INSTALL TOP SLAB (CAP) WITH MANHOLE OPENING FOR STORMCEPTOR FRAME AND COVER. MANHOLE OPENING OFFSET NOT CENTERED. SHOULD BE ORIENTED SO OPENING IS ABOVE STEPS AND ADJACENT TO VENT PIPE. SUCH THAT IF VENT PIPE CAN BE CUT IN BELOW TOP OF SLAB AND SECURELY ATTACHED TO INSIDE EDGE OF MANHOLE ACCESS OPENING. TOP SLAB OPENING SHOULD BE ORIENTED ABOVE THE STORMCEPTOR OUTLET ON HIGH DROP PIPE AND ABOVE THE 6 INCH VENT PIPE. 10. BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL. ON GRADING OR TOPSOIL, IS TO BE USED FOR BACKFILL. BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL SHOULD BE COMPACTED TO LOCAL/STATE REQUIREMENTS. 11. INSTALL AND SET GRADE ADJUSTING RINGS OR LEVELING MATERIALS, AS NEEDED. PLUG ALL LIFT HOLES WITH TAMPED FLEXIBLE PLUG PROVIDED AND KNOCK IN TO PLACE. PLUGS IN STORAGE CHAMBER MUST ALSO BE GROUTED INSIDE AND OUTSIDE WITH GROUT. GROUT ALL OTHER LIFT HOLES. 12. INSTALL AND SET STORMCEPTOR FRAME AND COVER. 13. THE STORMCEPTOR SHOULD BE PUMPED OUT AND SEDIMENT AND DEBRIS MATERIALS DISPOSED OF PROPERLY, WHEN THE PROJECTS SEDIMENT CONTROL MEASURES ARE REMOVED (SEE PREPARATIONLY STABILIZED). 14. FILL UNIT WITH CLEAN WATER AFTER UNIT IS CLEARED OUT IF REQUIRED BY LOCAL INSPECTION PERSONNEL. 15. FINAL INSPECTION.

MAINTENANCE NOTES WATER QUALITY STRUCTURE WASTE

- 1. Water quality structures will require periodic cleaning. Owners of these facilities will have to clean them as needed. 2. Maintenance of these facilities will consist of cleaning out the stormceptor and disposal of the waste and repair of the facility as needed. Periodic inspections of these facilities will be made by the owner. 3. The disposal of the liquid and solid matter shall be as follows: A. All liquid material in the stormceptor shall be pumped into a suitable tank truck and disposed of at an approved sanitary district discharge manhole or be taken to an approved sewage treatment plant for discharge. B. The solid material shall be landfilled in an approved sanitary landfill. 4. The inlet pipes and structural parts shall be repaired as needed. 5. Stormceptor inlet and outlet assembly shall be periodically inspected. Blockages shall be removed and disposed of as required in 3B above.

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

- 1. Stormceptor water quality structures will require periodic inspection and cleaning to maintain operation and function. Owners will have the Stormceptor unit inspected yearly or as required by Howard County, utilizing the Stormceptor Inspection/Monitoring Form. Inspections can be done by using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When sediment depths exceed the specified level (Table 9 of Technical Manual) then cleaning of the unit is required. 2. Stormceptor water quality structures must be checked and cleaned immediately after petroleum spills, contact appropriate regulatory agencies. 3. Maintenance of Stormceptor units should be done by a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in unit. The proper cleaning and disposal of the removed materials and liquid must be followed. 4. Inlet and outlet pipes must be checked for any obstructions and if any obstructions are found they must be removed. Structural parts of the Stormceptor will be repaired as needed. 5. Owner shall retain and make Stormceptor Inspection/Monitoring Forms available to Howard County officials upon their request.

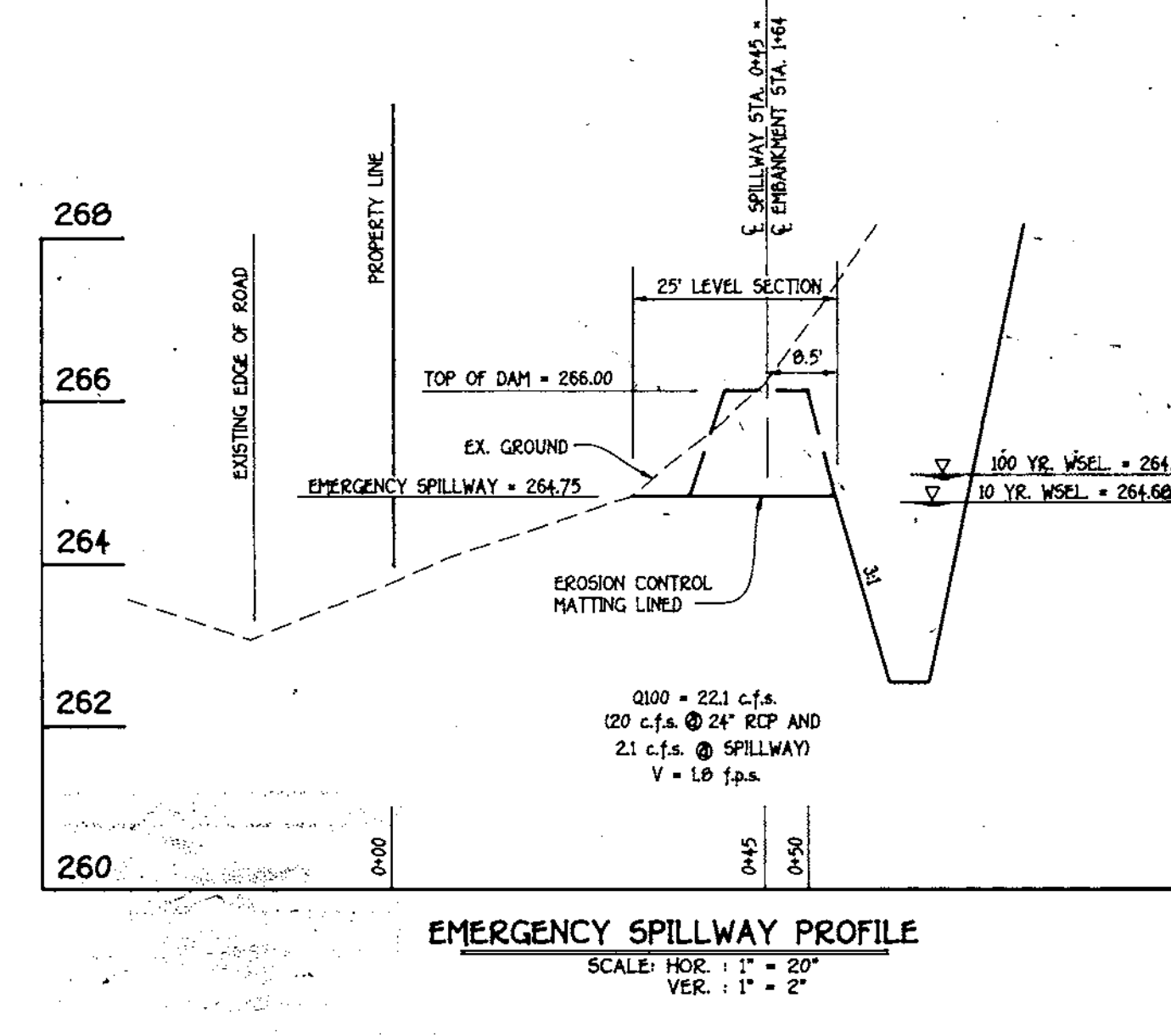


- 1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing. 2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir. 3. Securely nail the 2" x 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4" apart). 4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer 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. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile. 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment. 8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

INLET PROTECTION DETAIL NOT TO SCALE

DESIGN SUMMARY table with columns: DESIGN STORM, ALLOWABLE RELEASE RATE, FACILITY INFLOW, FACILITY DISCHARGE, WATER SURFACE ELEVATION, STORAGE VOLUME (MGD).

STRUCTURE CLASSIFICATION: LOW HAZARD CLASS "A" POND STORAGE - HEIGHT PRODUCT 0.10H x 2.6H = 0.26'



CONCRETE STORMCEPTOR ORDER REQUEST FORM. Includes fields for CONTRACTOR INFORMATION, OWNER INFORMATION, PROJECT NAME, ADDRESS, CITY, STATE, ZIP CODE, and a table for PROJECT INFORMATION.

By The Developer: I/We Certify That All Development And/Or Construction Will Be Done According To These Plans And That Any Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of The Environment Approved Training Program...

Signature Of Developer: [Signature] Date: 10/14/99

Printed Name Of Developer: [Name]

By The Engineer: I Certify That This Plan For Pond Construction, Erosion And Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Conditions. This Plan Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District...

Signature Of Engineer: [Signature] Date: 10-19-99

Printed Name Of Engineer: [Name]

These Plans For Soil Erosion And Sediment Control Meet The Requirements Of The Howard Soil Conservation District.

Signature: [Signature] Date: 10/26/99

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: [Signature] Date: 11/10/99

Signature: [Signature] Date: 11/10/99

Signature: [Signature] Date: 10/26/99

Signature: [Signature] Date: 10/26/99

Signature: [Signature] Date: 10/26/99

Signature: [Signature] Date: 10/26/99

Signature: [Signature] Date: 10/26/99

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Signature: [Signature] Date: 10/26/99

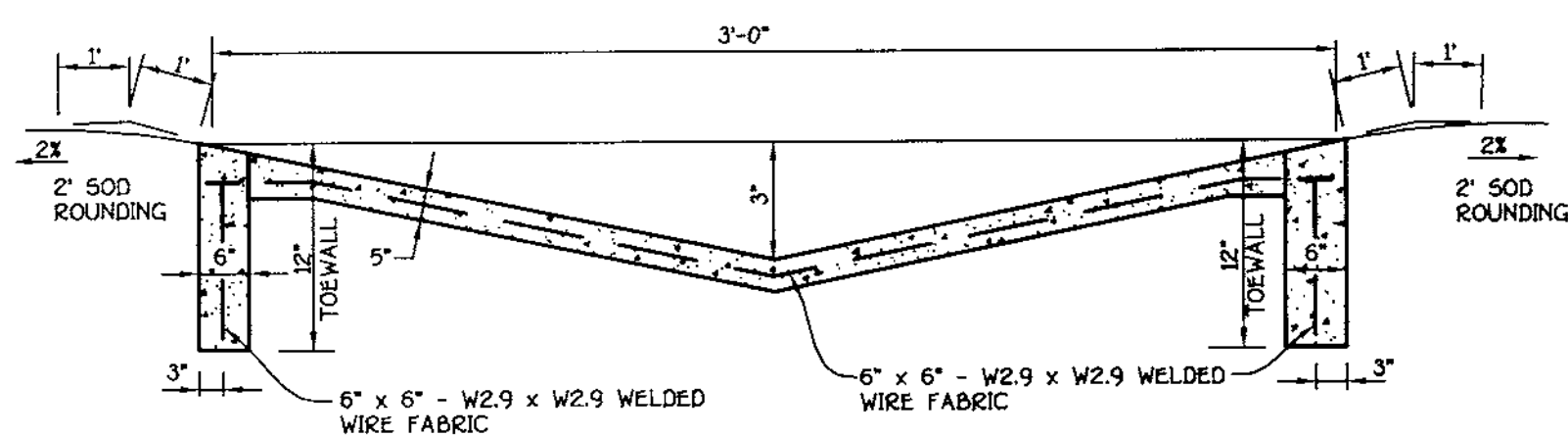
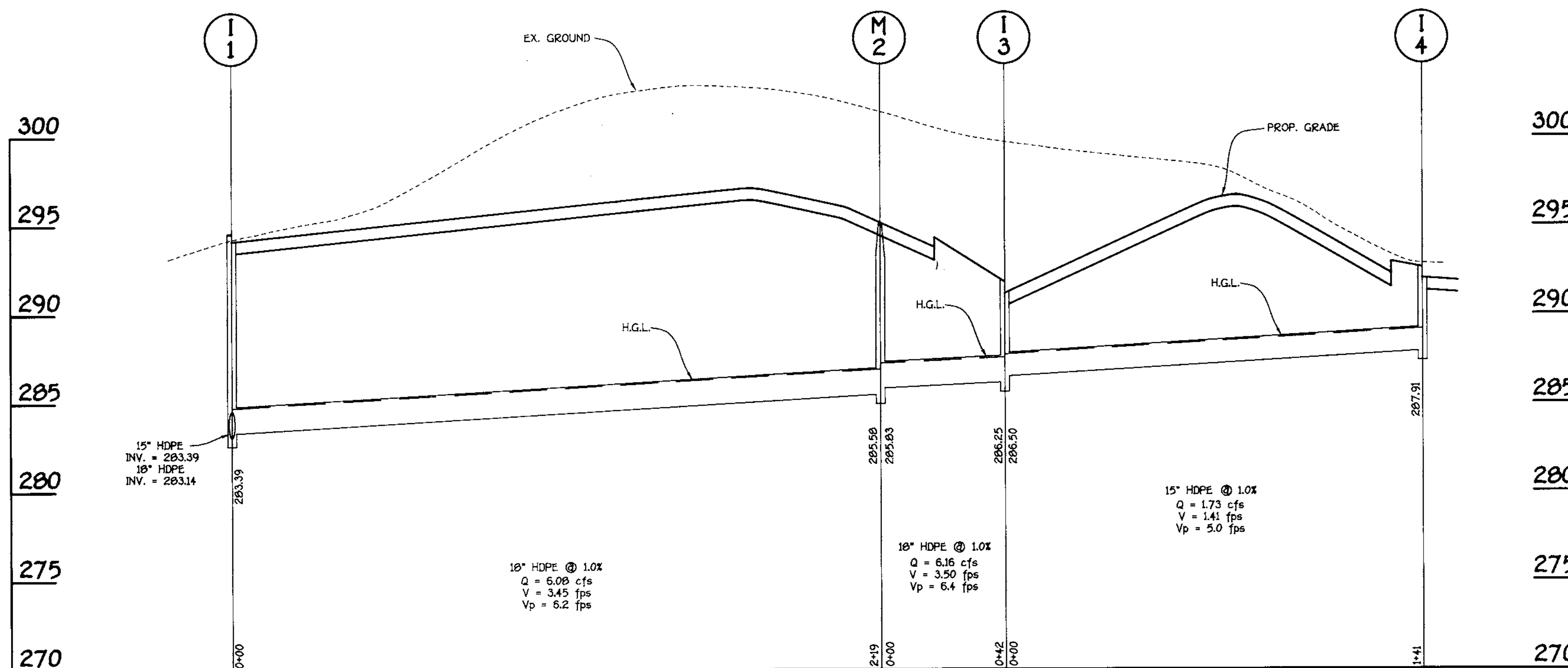
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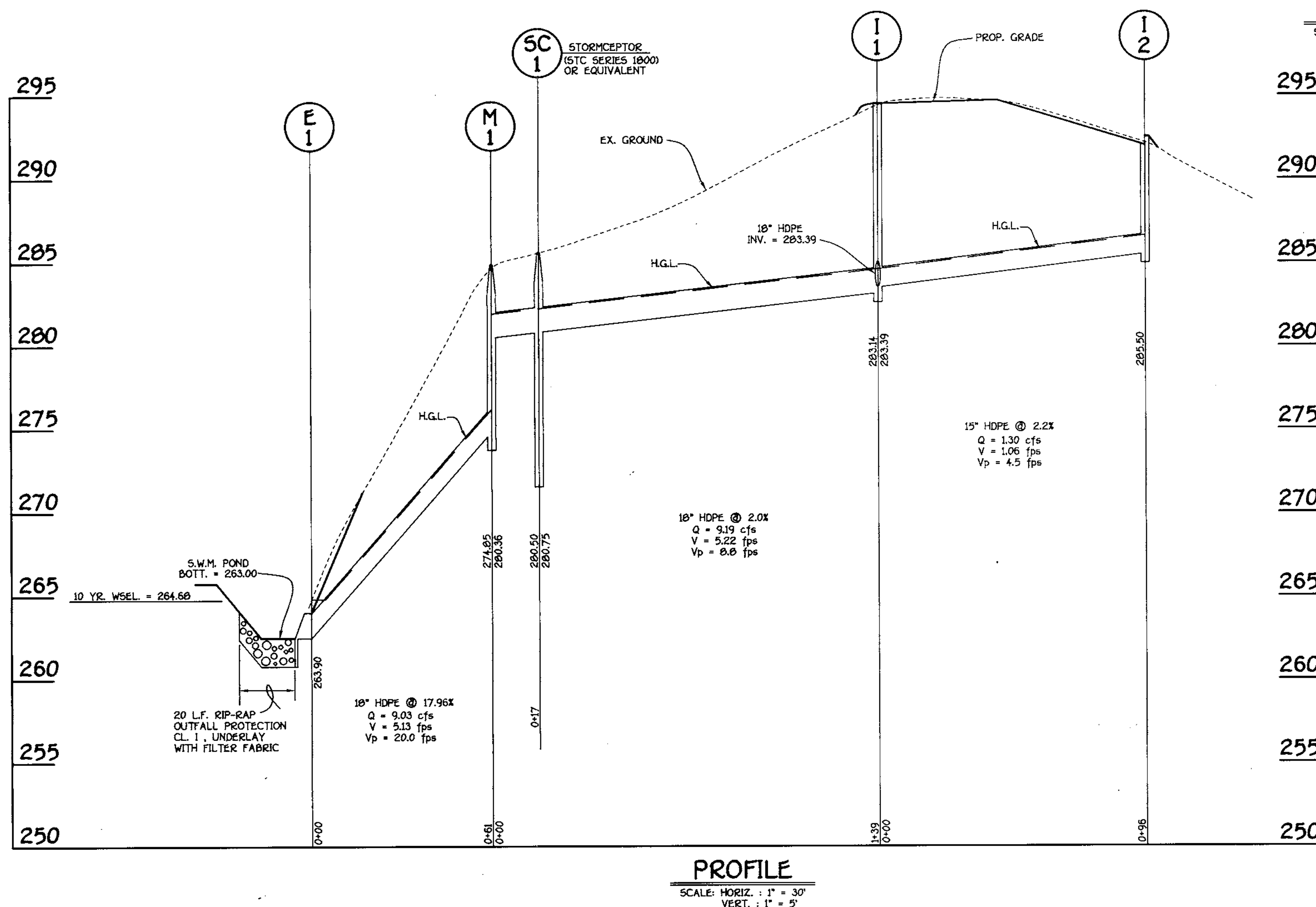
**STRUCTURE SCHEDULE**

STRUCTURE NO.	TOP ELEVATION	INV. IN	INV. OUT	LOCATION	TYPE	REMARKS
I-1	294.50	203.39, 203.39	203.14	N 583,724 E 1,366,351	A-5 INLET	HO. CO. DETAIL S.D. 4.01
I-2	292.00	-----	205.50	N 583,763 E 1,366,432	A-5 INLET	HO. CO. DETAIL S.D. 4.01
I-3	291.96	206.50	206.25	N 583,967 E 1,366,207	A-5 INLET	HO. CO. DETAIL S.D. 4.01
I-4	293.03	-----	207.91	N 584,100 E 1,366,275	A-5 INLET	HO. CO. DETAIL S.D. 4.01
I-5	271.91	207.72	207.22	N 583,896 E 1,366,305	A-5 INLET	HO. CO. DETAIL S.D. 4.01
I-6	271.69	-----	208.00	N 583,923 E 1,366,307	A-5 INLET	HO. CO. DETAIL S.D. 4.01
I-7	276.25	-----	208.51	N 584,135 E 1,366,306	A-5 INLET	HO. CO. DETAIL S.D. 4.01
M-1	204.00	200.36	274.05	N 583,609 E 1,366,259	STD. MANHOLE	HO. CO. DETAIL G. 5.13
M-2	205.10	205.03	205.50	N 583,955 E 1,366,356	STD. MANHOLE	HO. CO. DETAIL G. 5.13
SC-1	205.60	200.75	200.50	N 583,895 E 1,366,274	STORMCEPTOR *1800	
SC-2	270.51	205.66	205.41	N 583,854 E 1,366,092	STORMCEPTOR *1200	
E-1	-----	-----	203.90	N 583,603 E 1,366,192	CONC. END SECTION	HO. CO. DETAIL S.D. 5.51
E-2	-----	-----	203.20	N 583,815 E 1,366,141	CONC. END SECTION	HO. CO. DETAIL S.D. 5.51



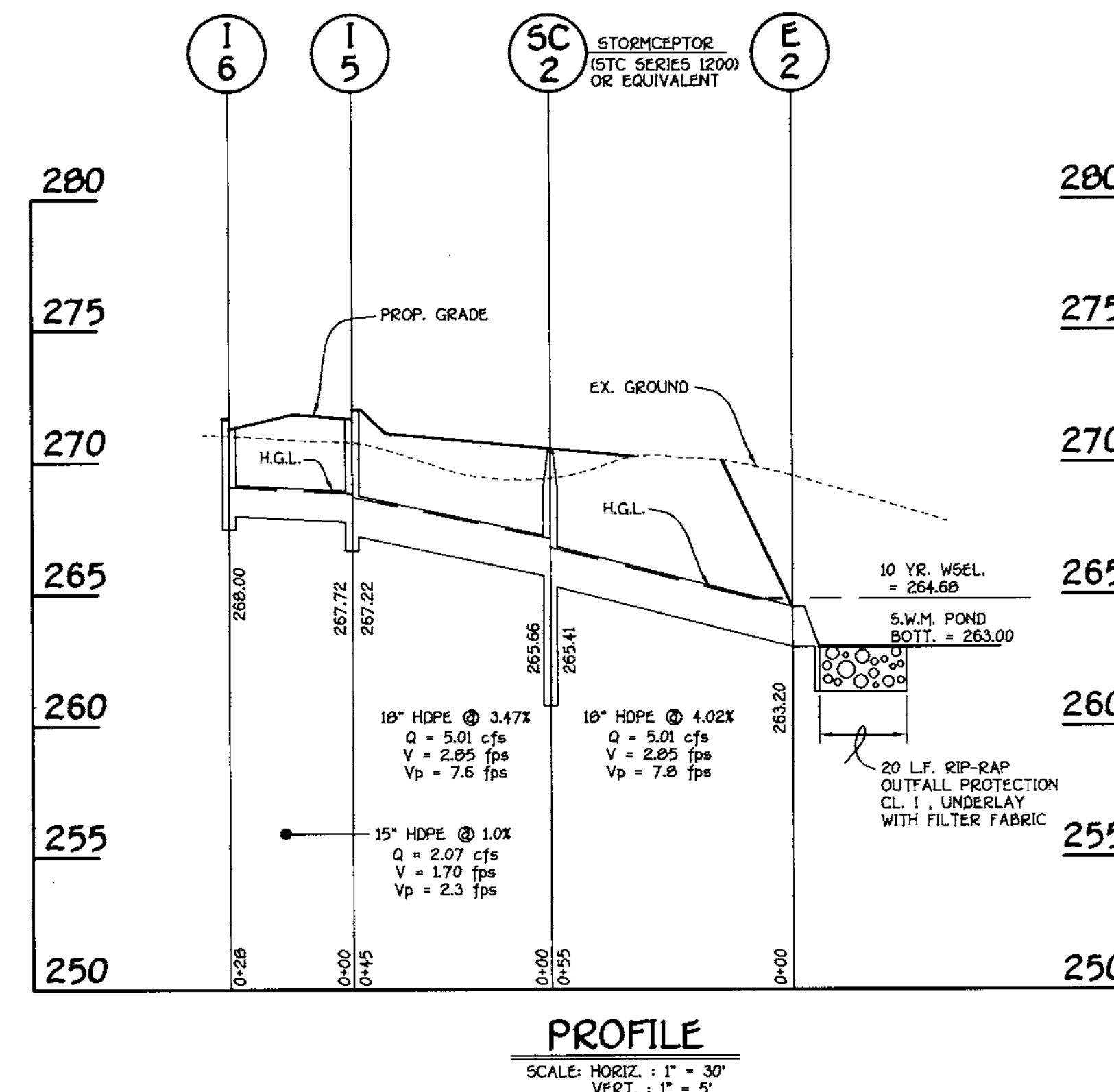
**PILOT CHANNEL SECTION**  
NO SCALE

PIPE SCHEDULE		
PIPE SIZE	MATERIAL	LENGTH
15"	R.C.P.	10'
15"	H.D.P.E.	265'
18"	H.D.P.E.	559'



**PROFILE**  
SCALE: HORIZ. : 1" = 30'  
VERT. : 1" = 5'

**PROFILE**  
SCALE: HORIZ. : 1" = 30'  
VERT. : 1" = 5'



**PROFILE**  
SCALE: HORIZ. : 1" = 30'  
VERT. : 1" = 5'

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

Reviewed by: *[Signature]*  
and made technical improvements  
10/26/99  
USDA, NATURAL RESOURCES CONSERVATION SERVICE

**ENGINEER'S CERTIFICATE**  
"I certify that this storm drain and sediment control represents a practical and workable plan based on the best professional knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."  
*[Signature]* 10-14-99  
Signature of Engineer (Print name below signature) Date

**DEVELOPER'S CERTIFICATE**  
"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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."  
*[Signature]* 10/14/99  
Signature of Developer (Print name below signature) Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*[Signature]* 10-26-99  
Howard SCD Date

**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELLICOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/10/99  
Chief, Division of Land Development Date

*[Signature]* 10/26/99  
Chief, Development Engineering Division Date

*[Signature]* 11/10/99  
Director - Department of Planning and Zoning Date

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
DEED L. 4707 F. 76	GRID NO. BLOCK NO. TAX/ZONE	ELEC. DIST. CENSUS TR.
12 A-2 & A-3 RSC	24 & 25B 2ND	602B
WATER CODE F-04	SEWER CODE 1402100	

**SITE DEVELOPMENT PLAN**  
**STORM DRAIN PROFILES**

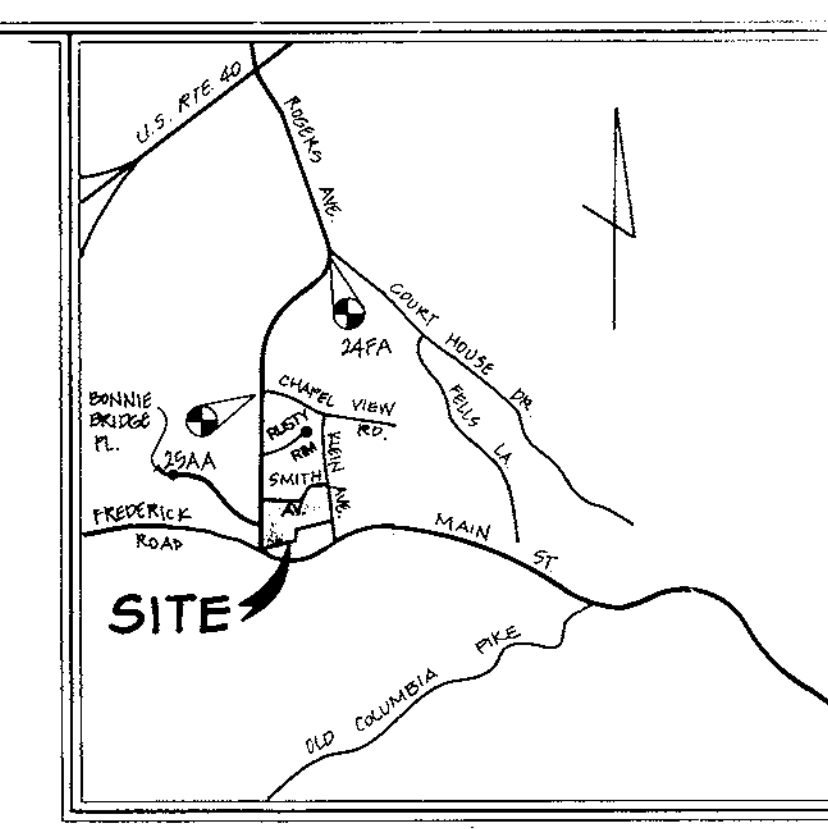
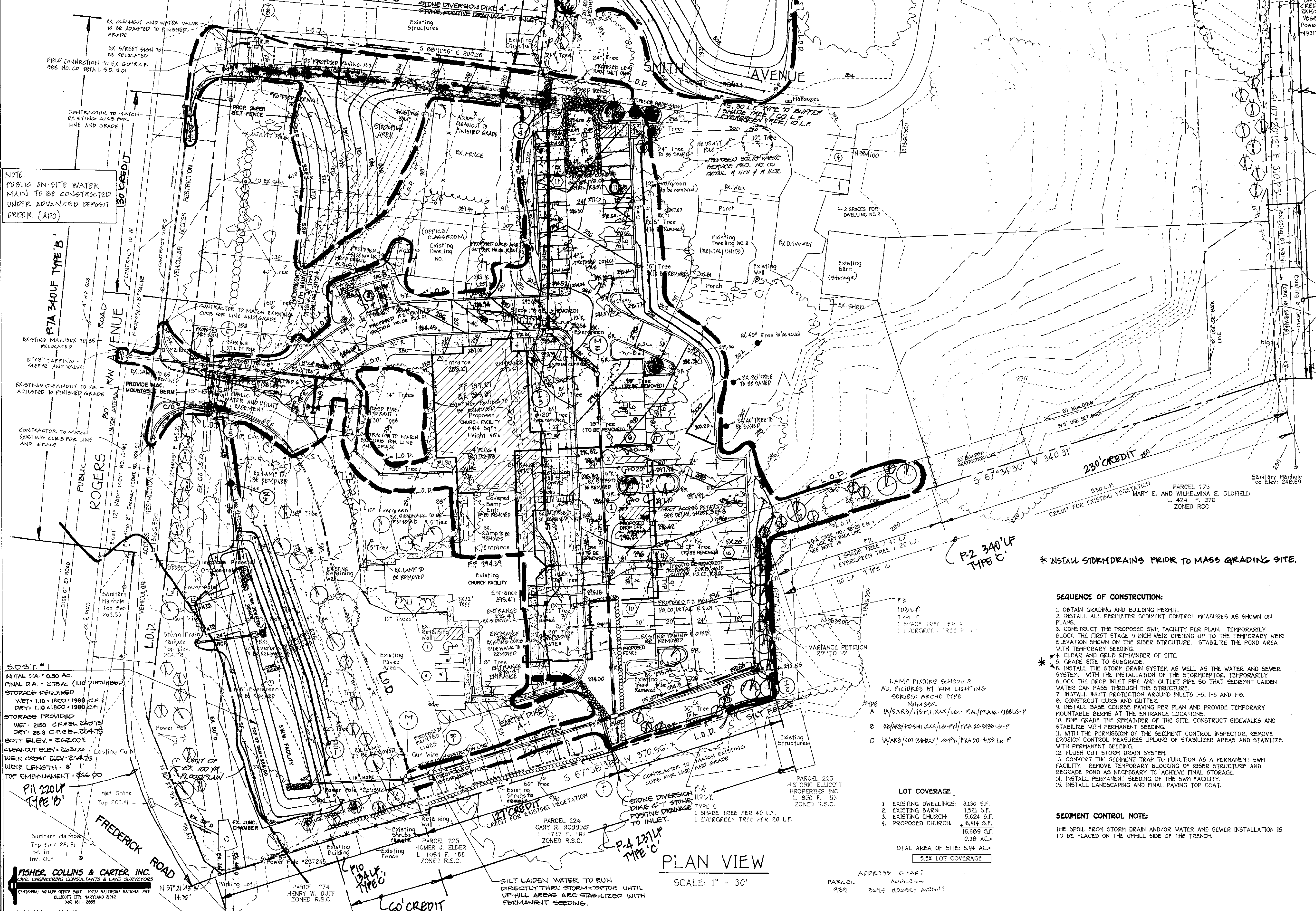
**ST. PETER'S EPISCOPAL CHURCH**

ZONING: R5C  
TAX MAP No: 24 & 25 PARCEL: 939 GRID: 12  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999

SHEET 7 OF 8



SYMBOL	DESCRIPTION
---	EX. 2' CONTOURS
---	EX. 10' CONTOURS
---	PROP. 2' CONTOURS
---	PROP. 10' CONTOURS
+624	SPOT ELEVATIONS
F.F.	FIRST FLOOR ELEVATION
B.E.	BASEMENT ELEVATION
---	EX. TREE LINE
---	EX. TREES
L.O.D.	LIMIT OF DISTURBANCE
---	PROP. CHURCH ADDITION



VICINITY MAP  
SCALE: 1" = 2000'

NOTE: PUBLIC ON-SITE WATER MAIN TO BE CONSTRUCTED UNDER ADVANCED DEPOSIT ORDER (ADO)

3.03T.#1  
INITIAL D.A. = 0.50 AC.  
FINAL D.A. = 2.75 AC. (110 DISTURBED)  
STORAGE REQUIRED  
WET: 1.10 x 1800' x 1800' C.F.  
DRY: 1.10 x 1800' x 1800' C.F.  
STORAGE PROVIDED  
WET: 2150 C.F. @ 2.2475  
DRY: 2618 C.F. @ 2.2475  
BOTT. ELEV. = 262.00'  
CLEANOUT ELEV. = 263.00'  
WEIR CREST ELEV. = 264.75'  
WEIR LENGTH = 8'  
TOP EMBANKMENT = 266.00'

- SEQUENCE OF CONSTRUCTION:**
- OBTAIN GRADING AND BUILDING PERMIT.
  - INSTALL ALL PERIMETER SEDIMENT CONTROL MEASURES AS SHOWN ON PLANS.
  - CONSTRUCT THE PROPOSED SWM FACILITY PER PLAN. TEMPORARILY BLOCK THE FIRST STAGE 9-INCH WEIR OPENING UP TO THE TEMPORARY WEIR ELEVATION SHOWN ON THE RISER STRUCTURE. STABILIZE THE POND AREA WITH TEMPORARY SEEDING.
  - CLEAR AND GRUB REMAINDER OF SITE.
  - GRADE SITE TO SUBGRADE.
  - INSTALL THE STORM DRAIN SYSTEM AS WELL AS THE WATER AND SEWER SYSTEM, WITH THE INSTALLATION OF THE STORMCEPTOR, TEMPORARILY BLOCK THE DROP INLET PIPE AND OUTLET PIPE SO THAT SEDIMENT LAIDEN WATER CAN PASS THROUGH THE STRUCTURE.
  - INSTALL INLET PROTECTION AROUND INLETS 1-5, 1-6 AND 1-8.
  - CONSTRUCT CURBS AND GUTTERS.
  - INSTALL BASE COURSE PAVING PER PLAN AND PROVIDE TEMPORARY MOUNTABLE BERMS AT THE ENTRANCE LOCATIONS.
  - FINE GRADE THE REMAINDER OF THE SITE, CONSTRUCT SIDEWALKS AND STABILIZE WITH PERMANENT SEEDING.
  - WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE EROSION CONTROL MEASURES UPLAND OF STABILIZED AREAS AND STABILIZE WITH PERMANENT SEEDING.
  - FLUSH OUT STORM DRAIN SYSTEM.
  - CONVERT THE SEDIMENT TRAP TO FUNCTION AS A PERMANENT SWM FACILITY. REMOVE TEMPORARY BLOCKING OF RISER STRUCTURE AND REGRADE POND AS NECESSARY TO ACHIEVE FINAL STORAGE.
  - INSTALL PERMANENT SEEDING OF THE SWM FACILITY.
  - INSTALL LANDSCAPING AND FINAL PAVING TOP COAT.
- SEDIMENT CONTROL NOTE:**  
THE SPOIL FROM STORM DRAIN AND/OR WATER AND SEWER INSTALLATION IS TO BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

PLAN VIEW  
SCALE: 1" = 30'

Reviewed for: HOWARD S.C.D.  
Name: *Howard S.C.D.*  
Date: 10/26/99  
USDA, NATURAL RESOURCES CONSV. SERVICE

**ENGINEER'S CERTIFICATE**  
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 of Engineer (Print name below signature) *Howard S.C.D.* Date: 10/23/99

**DEVELOPER'S CERTIFICATE**  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
Signature of Developer (Print name below signature) *Howard S.C.D.* Date: 10/14/99

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
Signature of Engineer *Howard S.C.D.* Date: 10/26/99

**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELLCOTT CITY, MARYLAND 21043

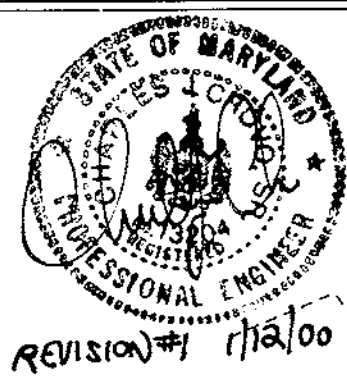
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Director - Department of Planning and Zoning *Howard S.C.D.* Date: 11/10/99  
Chief, Department of Land Development *Howard S.C.D.* Date: 11/10/99  
Chief, Department Engineering Division *Howard S.C.D.* Date: 10/20/99

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
DEP	BLOCK NO. 2-27-A-3	
L. 4787	GRID 12	RSC
	TAX/ZONE 24 + 25B	ELEC. DIST. 2nd
		CENSUS TR. 602B
WATER CODE P-04	SEWER CODE	1402100

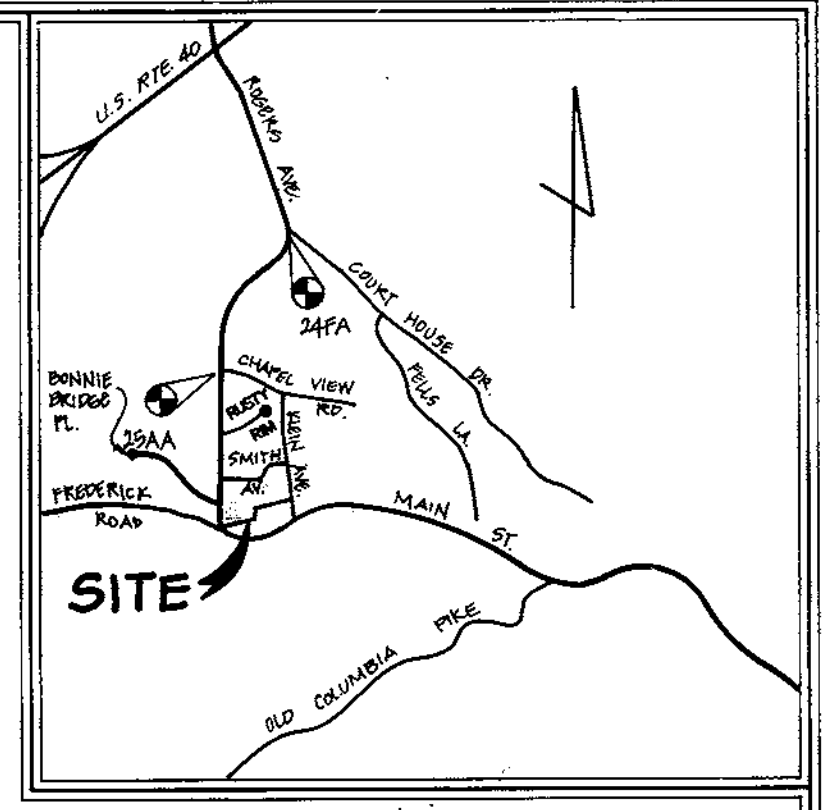
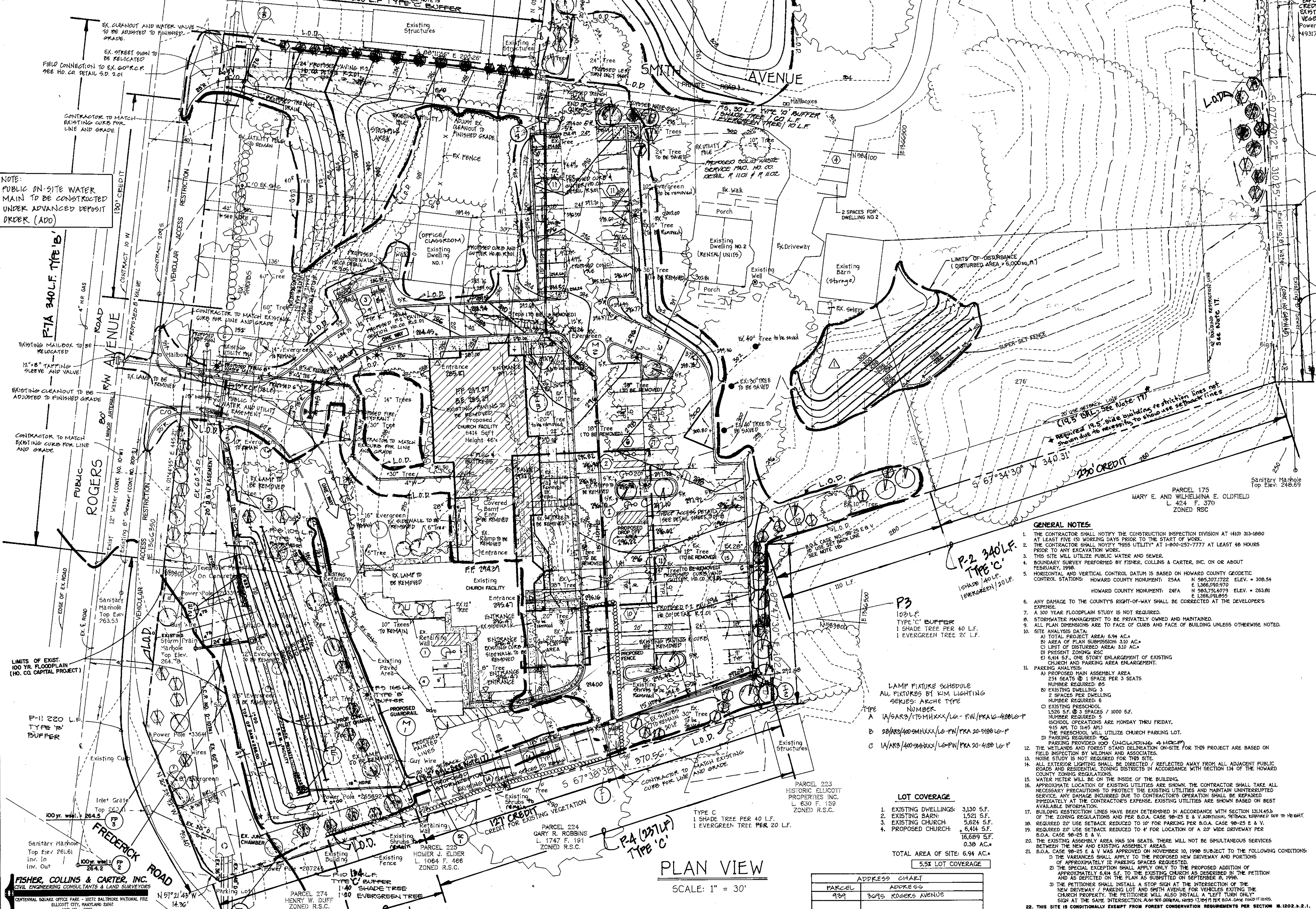
**SITE DEVELOPMENT PLAN  
SEDIMENT CONTROL PLAN**  
**ST. PETER'S  
EPISCOPAL CHURCH**  
ZONING: RSC  
TAX MAP No: 24 825 GRID: 12 PARCEL: 939  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999  
SHEET 3 OF 8



LEGEND	
SYMBOL	DESCRIPTION
---	EX. 2' CONTOURS
---	EX. 10' CONTOURS
---	PROP. 2' CONTOURS
---	PROP. 10' CONTOURS
+	SPOT ELEVATIONS
F.F.	FIRST FLOOR ELEVATION
B.E.	BASEMENT ELEVATION
---	EX. TREE LINE
○	EX. TREES
L.O.D.	LIMIT OF DISTURBANCE
---	PROP. CHURCH ADDITION



NO.	DESCRIPTION	REVISION	DATE
1	ADDED 6,000 sq. ft. OF FILL AREA		1/12/00



VICINITY MAP  
SCALE: 1" = 2000'

SHEET INDEX	
1 OF 8	SITE DEVELOPMENT PLAN & LANDSCAPE PLAN
2 OF 8	DRAINAGE AREA MAP
3 OF 8	DETAIL SHEET
4 OF 8	DETAIL SHEET
5 OF 8	DETAIL SHEET & LANDSCAPE DETAILS
6 OF 8	S.W.M. NOTES AND DETAILS
7 OF 8	S.W.M. NOTES AND DETAILS
8 OF 8	SEDIMENT CONTROL PLAN

**ENGINEER'S CERTIFICATE**  
I certify that this plan 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 regulations of the Howard Soil Conservation District.

Signature of Engineer: *[Signature]* Date: 12/3/98

**DEVELOPER'S CERTIFICATE**  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: *[Signature]* Date: 10/14/99

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

Howard Seal \_\_\_\_\_ Date \_\_\_\_\_

**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELLCOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning: *[Signature]* Date: 11/10/99  
Chief, Division of Land Development: *[Signature]* Date: 11/10/99  
Chief, Development Engineering Division: *[Signature]* Date: 10/26/99

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
DEED	BLOCK NO.	ZONE
L.4787	F.76	R5C
GRID 12	TAX/ZONE	ELEC. DIST.
	24 & 25B	2nd
WATER CODE	SEWER CODE	CENSUS TR.
F.04	1402100	6028

**SITE DEVELOPMENT PLAN  
PLAN VIEW**

**ST. PETER'S  
EPISCOPAL CHURCH**

ZONING: R5C  
TAX MAP NO: 24 825 GRID: 12 PARCEL: 939  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999

SHEET 1 OF 8

PLAN VIEW  
SCALE: 1" = 30'

**LOT COVERAGE**

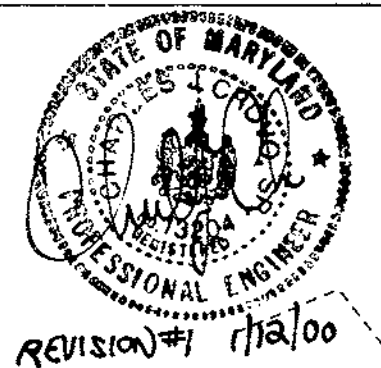
1. EXISTING DWELLINGS:	3,130 S.F.
2. EXISTING BARN:	1,521 S.F.
3. EXISTING CHURCH:	5,624 S.F.
4. PROPOSED CHURCH:	6,414 S.F.
	16,689 S.F.
	0.39 AC.
TOTAL AREA OF SITE:	6.94 AC.
	5.9% LOT COVERAGE

**ADDRESS CHART**

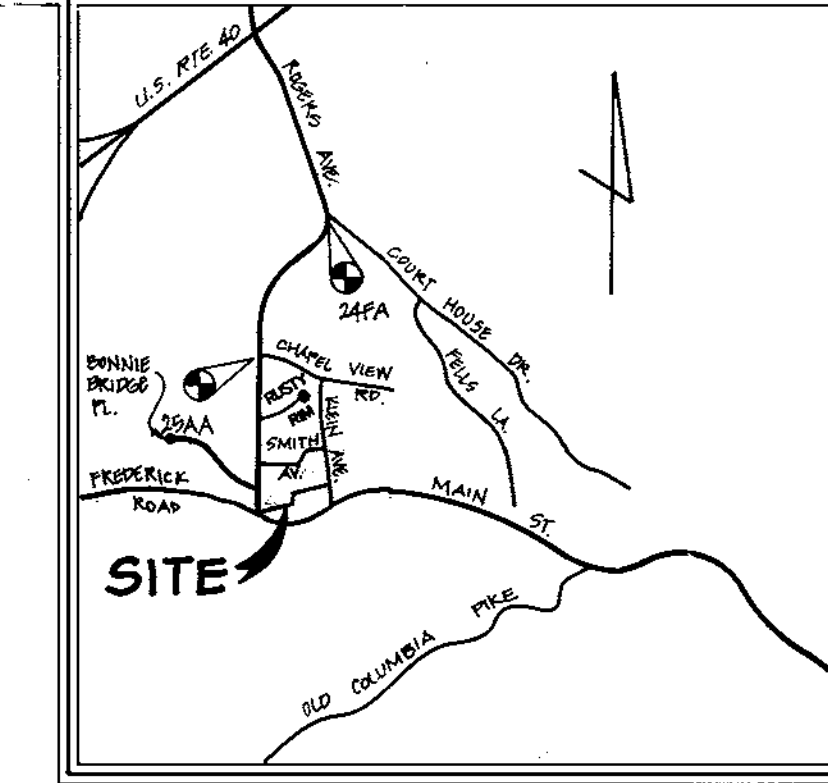
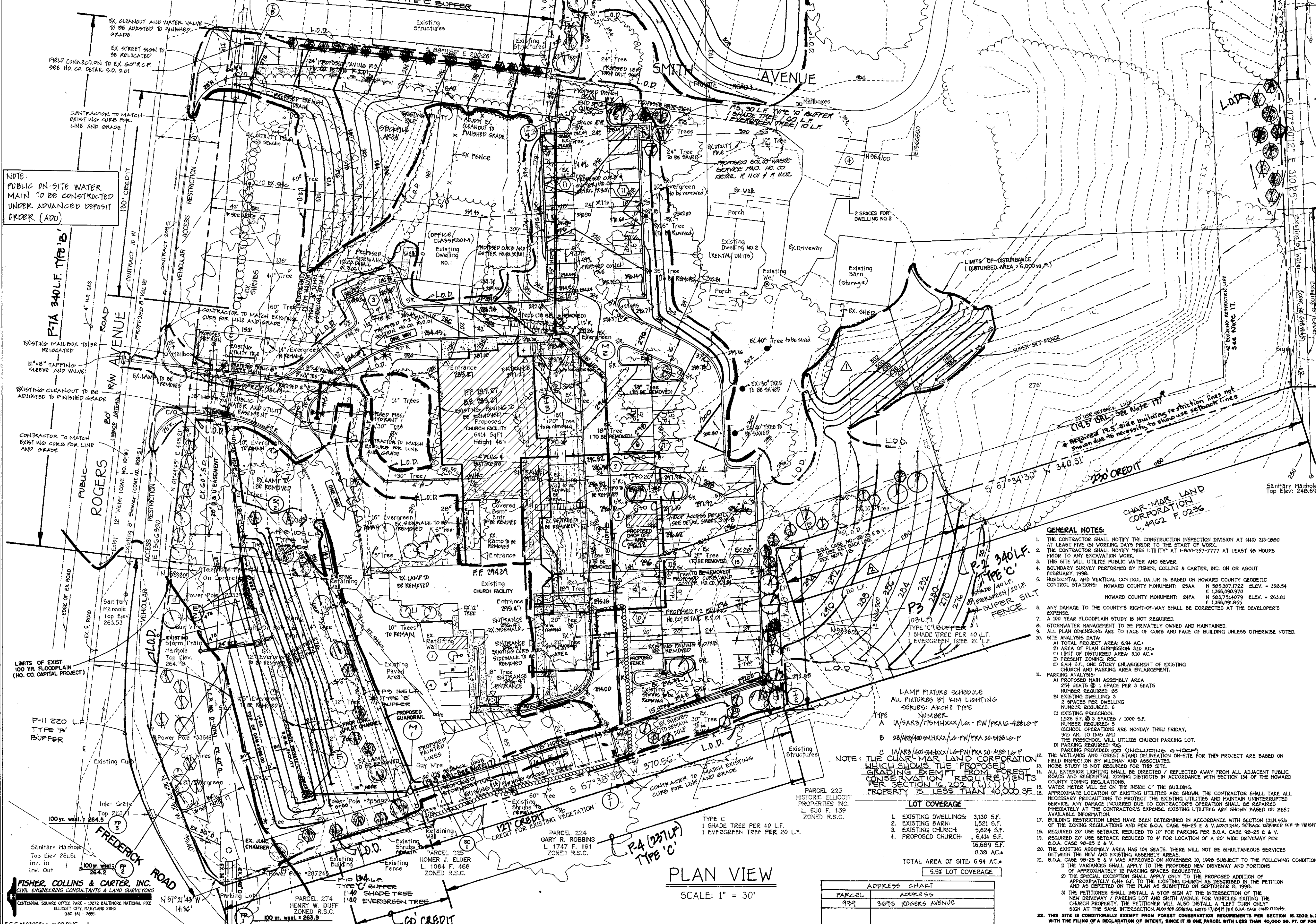
PARCEL	ADDRESS
939	3695 ROGERS AVENUE



LEGEND	
SYMBOL	DESCRIPTION
---	EX. 2" CONTOURS
---	EX. 10' CONTOURS
---	PROP. 2" CONTOURS
---	PROP. 10' CONTOURS
+	SPOT ELEVATIONS
F.F.	FIRST FLOOR ELEVATION
B.E.	BASEMENT ELEVATION
○	EX. TREE LINE
○	EX. TREES
○	L.O.D. LIMIT OF DISTURBANCE
▨	PROP. CHURCH ADDITION



NO.	DESCRIPTION	DATE
1	ADDED 13,200 S.F. OF FILL AREA	4-11-00
2	ADDED 6,000 sq. ft. OF FILL AREA	1/12/00



VICINITY MAP  
SCALE: 1" = 2000'

SHEET INDEX	
1 OF 8	SITE DEVELOPMENT PLAN & LANDSCAPE PLAN
2 OF 8	DRAINAGE AREA MAP
3 OF 8	DETAIL SHEET
4 OF 8	DETAIL SHEET
5 OF 8	DETAIL SHEET & LANDSCAPE DETAILS
6 OF 8	S.W.M. NOTES AND DETAILS
7 OF 8	S.W.M. NOTES AND DETAILS
8 OF 8	SEDIMENT CONTROL PLAN

**ENGINEER'S CERTIFICATE**  
I certify that this plan, specification 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 regulations of the Howard Soil Conservation District.

Signature of Engineer: *[Signature]* Date: 12/3/98

**DEVELOPER'S CERTIFICATE**  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: *[Signature]* Date: 10/14/99

**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELLCOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Director: *[Signature]* Date: 11/10/99  
Chief, Department of Planning and Zoning: *[Signature]* Date: 11/10/99  
Chief, Department of Engineering Division: *[Signature]* Date: 11/26/99

PROJECT	SECTION/AREA	PARCEL
ST. PETER'S EPISCOPAL CHURCH		939
787	BLOCK NO. 24	ZONE RSC
1.4787	F.76 GRID 12	TAX/ZONE 24 & 25B
		ELEC. DIST. 2nd
		CENSUS TR. 602B
WATER CODE	SEWER CODE	
P-04	1402100	

**SITE DEVELOPMENT PLAN PLAN VIEW**

**ST. PETER'S EPISCOPAL CHURCH**

ZONING: RSC  
TAX MAP No: 24 & 25 GRID: 12 PARCEL: 939  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999

SHEET 1 OF 8

**GENERAL NOTES:**

- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-8600 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THIS SITE WILL UTILIZE PUBLIC WATER AND SEWER.
- BOUNDARY SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT FEBRUARY, 1998.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS: HOWARD COUNTY MONUMENT: 25AA N 565,507.1722 ELEV. = 308.54 E 1366,69070 HOWARD COUNTY MONUMENT: 24FA N 583,754.079 ELEV. = 263.01 E 1366,69070
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- A 100 YEAR FLOODPLAIN STUDY IS NOT REQUIRED.
- STORMWATER MANAGEMENT TO BE PRIVATELY OWNED AND MAINTAINED.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- SITE ANALYSIS DATA:
  - A) TOTAL PROJECT AREA: 6.94 AC.
  - B) AREA OF PLAN SUBMISSION: 310 AC.
  - C) LIMIT OF DISTURBED AREA: 310 AC.
  - D) PRESENT ZONING: RSC
  - E) 644 S.F. ONE STORY ENLARGEMENT OF EXISTING CHURCH AND PARKING AREA ENLARGEMENT.
- PARKING ANALYSIS:
  - A) PROPOSED MAIN ASSEMBLY AREA: 254 SEATS @ 3 SPACES PER 3 SEATS NUMBER REQUIRED: 95
  - B) EXISTING DWELLING: 3
  - C) 2 SPACES PER DWELLING NUMBER REQUIRED: 6
  - D) EXISTING PRESCHOOL: 1258 S.F. @ 3 SPACES / 1000 S.F. 915 AM TO 1:45 PM THE PRESCHOOL WILL UTILIZE CHURCH PARKING LOT. PARKING PROVIDED: 100 (INCLUDING 4 HOCP)
  - E) THE WETLANDS AND FOREST STAND DELINEATION ON-SITE FOR THIS PROJECT ARE BASED ON THE SPECIAL EXEMPTION AREA: 310 AC.
  - F) SCHOOL OPERATIONS ARE MONDAY THRU FRIDAY, 9:05 AM TO 1:45 PM.
  - G) ALL EXTERIOR LIGHTING SHALL BE DIRECTED / REFLECTED AWAY FROM ALL ADJACENT PUBLIC ROADS AND RESIDENTIAL ZONING DISTRICTS IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
  - H) WATER UTILITIES SHALL BE ON THE INSIDE OF THE BUILDING.
  - I) APPROPRIATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON BEST AVAILABLE INFORMATION.
  - J) BUILDING RESTRICTION LINES HAVE BEEN DETERMINED IN ACCORDANCE WITH SECTION 131A.4.5.6 OF THE ZONING REGULATIONS AND PER B.O.A. CASE 98-25 E & V. A VARIATION: SETBACK: APPROX 9' TO HEIGHT.
  - K) REQUIRED 20' USE SETBACK REDUCED TO 10' FOR PARKING PER B.O.A. CASE 98-25 E & V.
  - L) REQUIRED 20' USE SETBACK REDUCED TO 4' FOR LOCATION OF A 20' WIDE DRIVEWAY PER B.O.A. CASE 98-25 E & V.
  - M) THE EXISTING ASSEMBLY AREA HAS 104 SEATS. THERE WILL NOT BE SIMULTANEOUS SERVICES BETWEEN THE NEW AND EXISTING ASSEMBLY AREAS.
  - N) B.O.A. CASE 98-25 E & V WAS APPROVED ON NOVEMBER 10, 1998 SUBJECT TO THE FOLLOWING CONDITIONS:
    - D) THE VARIANCES SHALL APPLY TO THE PROPOSED NEW DRIVEWAY AND PORTIONS OF APPROXIMATELY 12 PARKING SPACES REQUESTED.
    - E) THE SPECIAL EXEMPTION SHALL APPLY ONLY TO THE PROPOSED ADDITION OF APPROXIMATELY 644 S.F. TO THE EXISTING CHURCH AS DESCRIBED IN THE PETITION AND AS DEFINED ON THE PLAN AS SUBMITTED ON SEPTEMBER 8, 1998.
    - F) THE PETITIONER SHALL INSTALL A STOP SIGN AT THE INTERSECTION OF THE NEW DRIVEWAY / PARKING LOT AND SMITH AVENUE FOR VEHICLES EXITING THE CHURCH PROPERTY. THE PETITIONER WILL ALSO INSTALL A "LEFT TURN ONLY" SIGN AT THE SAME INTERSECTION ALSO SEE GENERAL NOTES 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

**LOT COVERAGE**

1. EXISTING DWELLINGS:	3130 S.F.
2. EXISTING BARN:	1521 S.F.
3. EXISTING CHURCH:	5,624 S.F.
4. PROPOSED CHURCH:	6,414 S.F.
	16,889 S.F.
	0.39 AC.
TOTAL AREA OF SITE:	6.94 AC.
	5.53 LOT COVERAGE

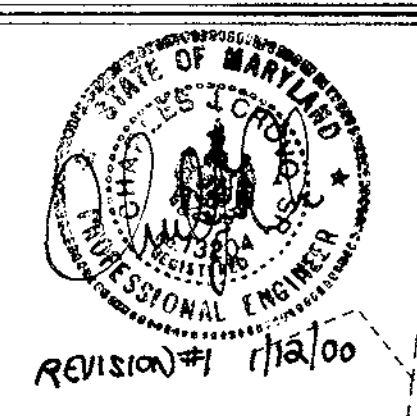
**PLAN VIEW**  
SCALE: 1" = 30'

**ADDRESS CHART**

PARCEL	ADDRESS
939	3695 ROGERS AVENUE

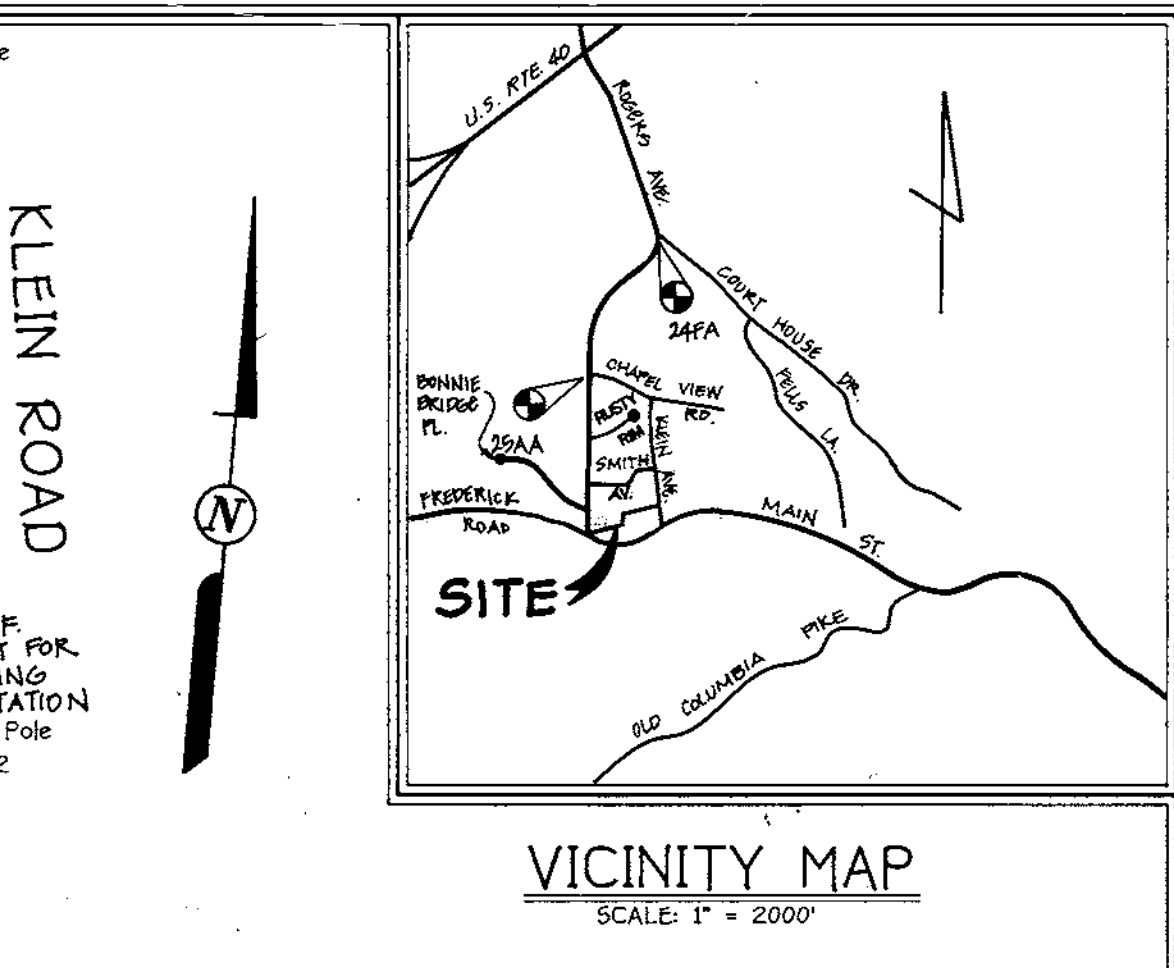
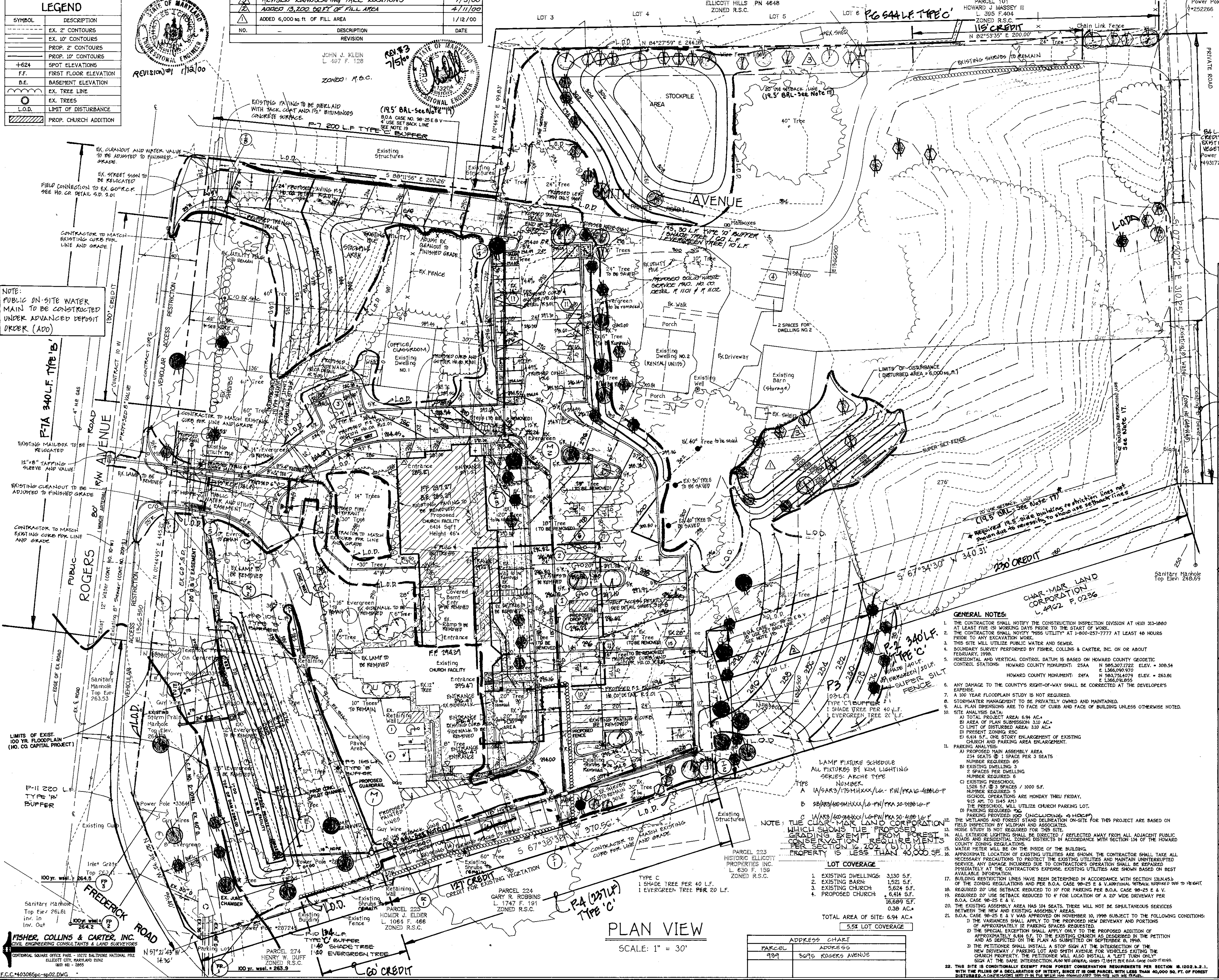


LEGEND	
SYMBOL	DESCRIPTION
---	EX. 2" CONTOURS
---	EX. 10' CONTOURS
---	PROP. 2" CONTOURS
---	PROP. 10' CONTOURS
+624	SPOT ELEVATIONS
F.F.	FIRST FLOOR ELEVATION
B.E.	BASEMENT ELEVATION
---	EX. TREE LINE
---	EX. TREES
---	LIMIT OF DISTURBANCE
---	PROP. CHURCH ADDITION



NO.	DESCRIPTION	REVISION	DATE
1	REVISED LANDSCAPING TREE LOCATIONS		7/9/00
2	ADDED 13,200 SQ. FT. OF FILL AREA		4/11/00
3	ADDED 6,000 SQ. FT. OF FILL AREA		1/12/00

NOTE: PUBLIC ON-SITE WATER MAIN TO BE CONSTRUCTED UNDER ADVANCED DEPOSIT ORDER (ADO)



SHEET INDEX	
1 OF 8	SITE DEVELOPMENT PLAN & LANDSCAPE PLAN
2 OF 8	DRAINAGE AREA MAP
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**ENGINEER'S CERTIFICATE**  
I certify that this plan 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 of Engineer: *John J. Klein* Date: 12/3/99

**DEVELOPER'S CERTIFICATE**  
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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: *Charles Mar* Date: 10/14/99

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

Howard SCD Date: \_\_\_\_\_

**OWNER**  
ST. PETER'S EPISCOPAL CHURCH  
3695 ROGERS AVENUE  
ELLCOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING			
Director - Department of Planning and Zoning	12/10/99	Date	
Chief, Division of Land Development	11/10/99	Date	
Chief, Department Engineering Division	10/26/99	Date	
PROJECT: ST. PETER'S EPISCOPAL CHURCH	SECTION/AREA: 939	PARCEL: 939	
BLOCK NO. 24A	ZONE RSC	TAX/ZONE 24 & 25B	ELEC. DIST. 2nd
CENSUS TR. 602B			
WATER CODE P-04	SEWER CODE 1402100		

**SITE DEVELOPMENT PLAN  
PLAN VIEW**

**ST. PETER'S  
EPISCOPAL CHURCH**

ZONING: RSC  
TAX MAP NO: 24 & 25 GRID: 12 PARCEL: 939  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JANUARY, 1999

SHEET 1 OF 8

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL OFFICE: 1072 LANDMARK NATIONAL PKWY  
ELLCOTT CITY, MARYLAND 21042  
PH: 410-261-2642