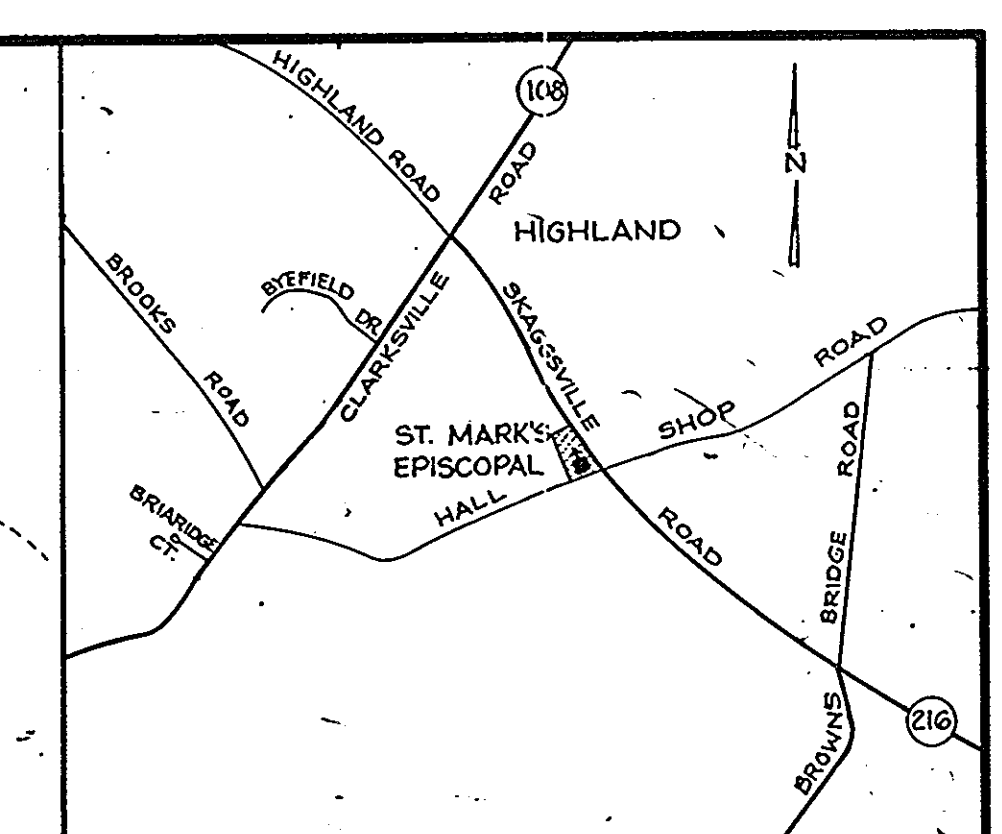


APPROVED: DEPARTMENT OF PLANNING & ZONING  
 Chief, Division of Comprehensive Planning & Land Development  
 APPROVED: For private Water and private Sewer  
 Health Officer  
 APPROVED: Howard County Dept. of Planning & Zoning  
 Director  
 APPROVED: For Public Roads and Storm Drainage  
 Howard County Department of Public Works  
 Director

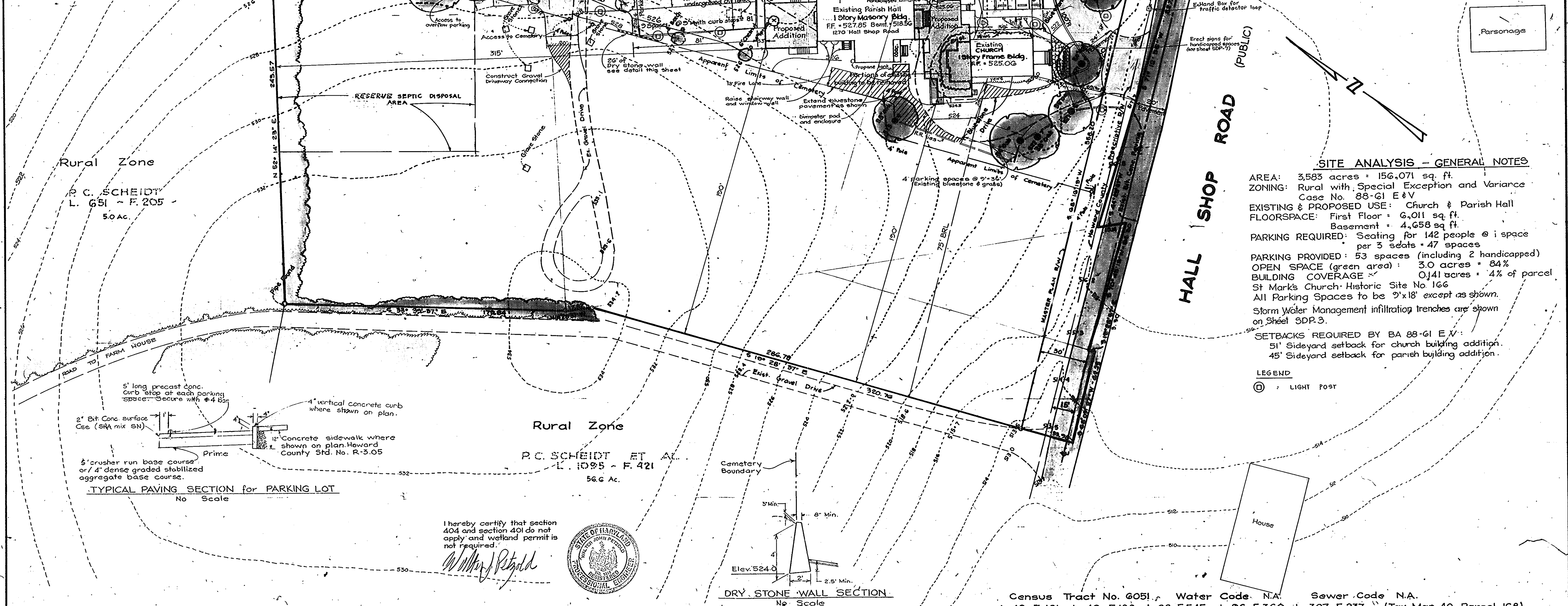
SCAGGSVILLE ROAD MD. RTE. 216 (PUBLIC)  
 (80-100ft. Master Plan Width)



Note #1: Interior handicapped access to Parish Hall level at level 527.85 from the addition and existing church level at 525.06 shall be provided by a chair lift. See architect plans.  
 Note #2: H.C. parking spaces + access aisle paving surface shall not exceed 2% (1:50) in any direction. See 5 sidewalk Elevation Detail, Sheet SDP-7

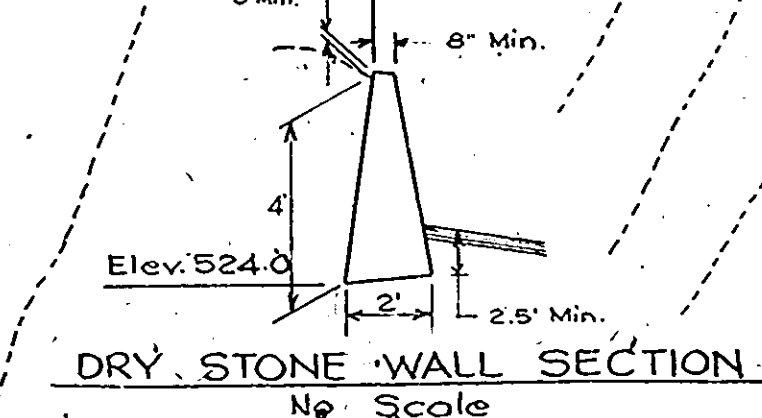
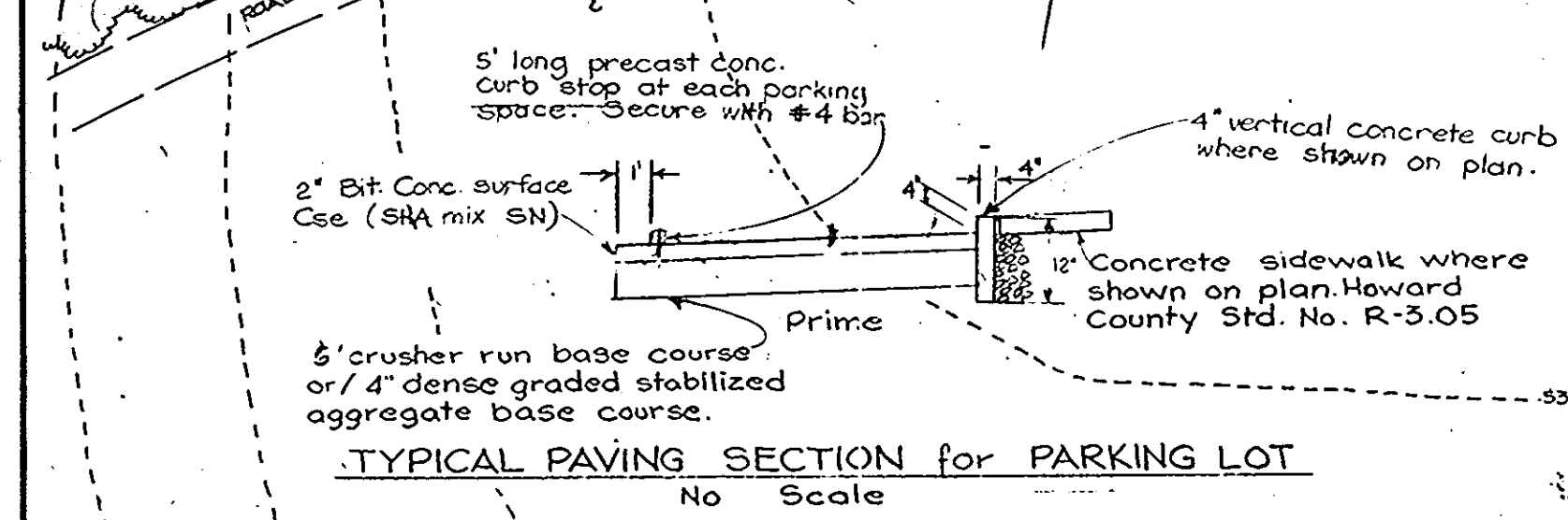
Note: No access to Route 216 due to sight distance restrictions.

ADDRESS CHART  
 Church Parcel 1270 Hall Shop Road  
 Highland, Md. 20777



**SITE ANALYSIS - GENERAL NOTES**  
 AREA: 3,583 acres = 156,071 sq. ft.  
 ZONING: Rural with, Special Exception and Variance Case No. 88-61 E & V  
 EXISTING & PROPOSED USE: Church & Parish Hall  
 FLOORSPACE: First Floor = 6,011 sq. ft.  
 Basement = 4,658 sq. ft.  
 PARKING REQUIRED: Seating for 142 people @ 1 space per 3 seats = 47 spaces  
 PARKING PROVIDED: 53 spaces (including 2 handicapped)  
 OPEN SPACE (green area): 3.0 acres = 84%  
 BUILDING COVERAGE: 0.41 acres = 4% of parcel  
 St Mark's Church Historic Site No. 166  
 All Parking Spaces to be 9'x18' except as shown.  
 Storm Water Management infiltration trenches are shown on Sheet SDP-3.  
 SETBACKS REQUIRED BY BA 88-61 E & V:  
 51' Sideyard setback for church building addition.  
 45' Sideyard setback for parish building addition.

LEGEND  
 (O) LIGHT POST

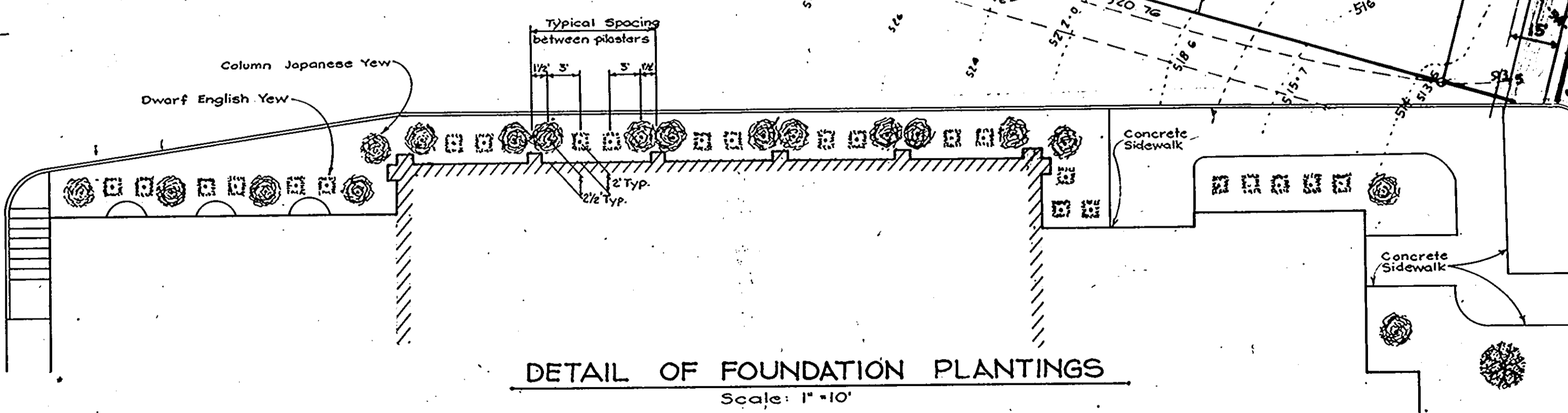
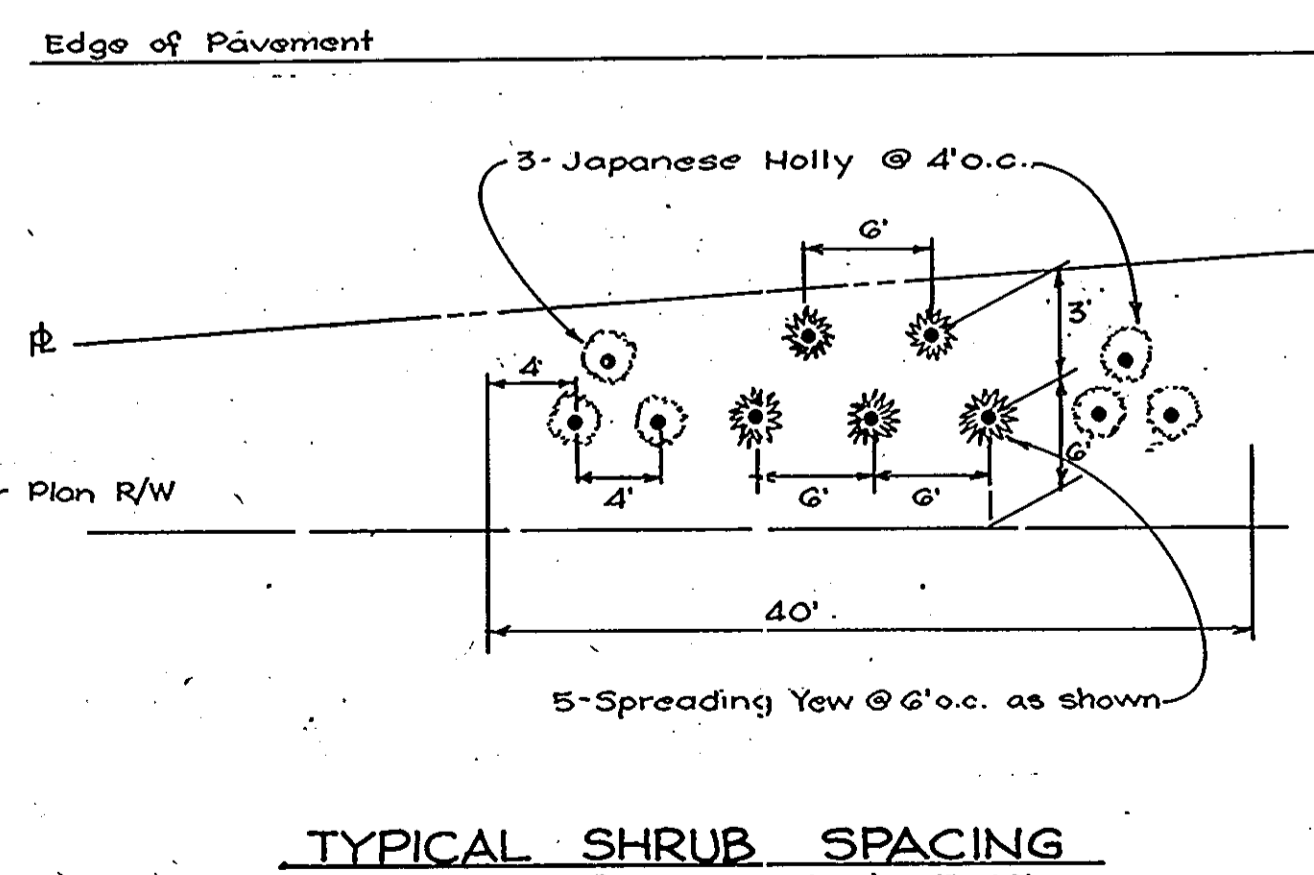
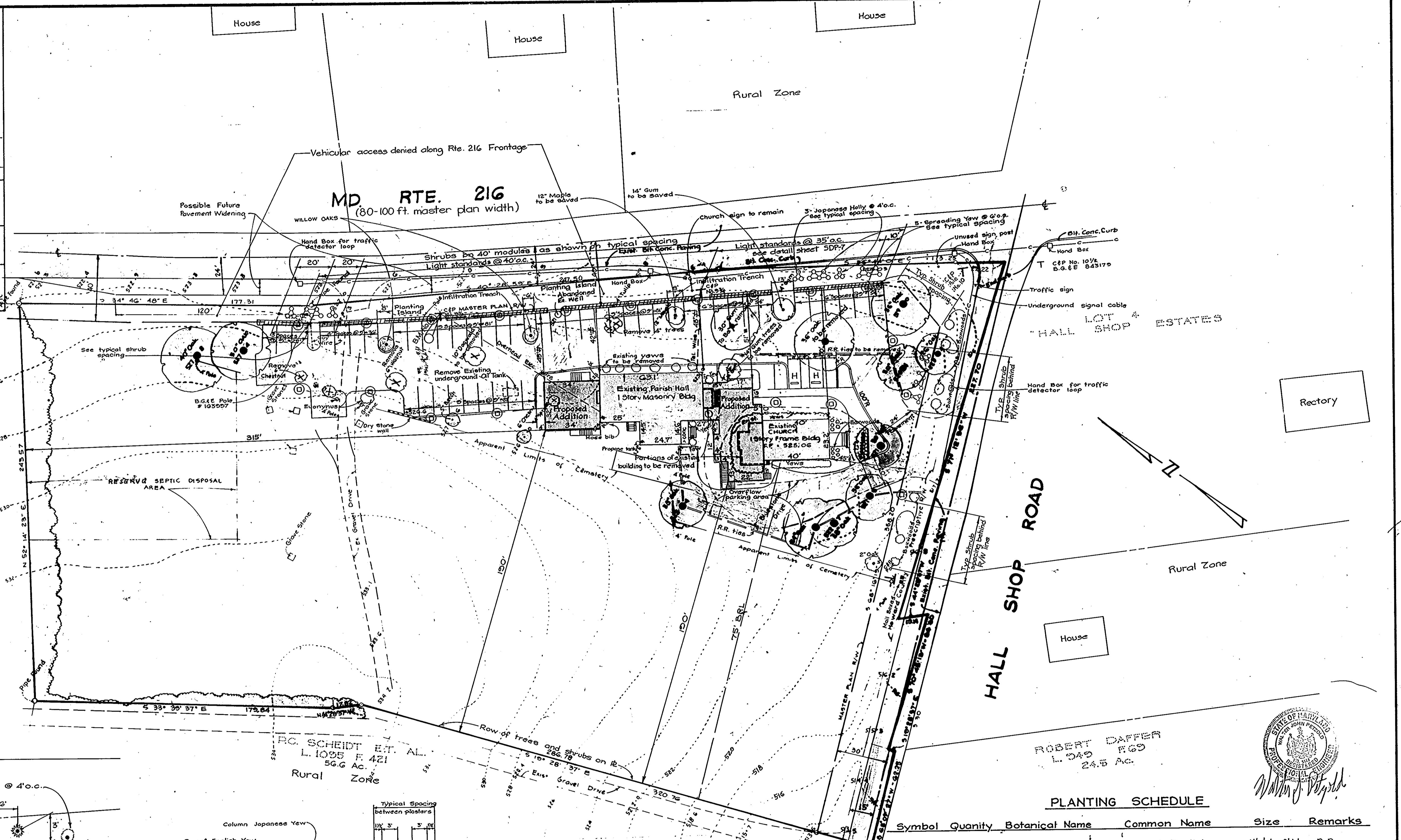


I hereby certify that section 404 and section 401 do not apply and wetland permit is not required.  
 William J. Petzold  
 PROFESSIONAL ENGINEER  
 STATE OF MARYLAND  
 CIVIL ENGINEERING

DATE	REVISION	DRAWING	OWNER/DEVELOPER	CIVIL ENGINEERS	LAND PLANNERS	LAND SURVEYORS	SITE PLAN FOR BUILDING ADDITION		ST. MARK'S EPISCOPAL CHURCH		DATE	JOB NO.
Feb. '90	Revised to match architect's plan.	CHECK	Vestry of ST. MARK'S EPISCOPAL CHURCH 1270 Hall Shop Rd. Highland, Md. 20777 Phone: (301) 654-2304	OYSTER, IMUS AND PETZOLD, INC.			5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND		August 1999		18214-1	
Apr. '90	Typical Paving Section revised	DESIGN							SCALE: 1" = 30'		SHEET NO. SDP-1	
		CHECK									SDP-90-64	

APPROVED: DEPARTMENT OF PLANNING & ZONING  
*Mark J. ...*  
 CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT  
 APPROVED: For private water and private sewer  
*John ...* 6-18-90  
 Health Officer  
 APPROVED: Howard County Dept. of Planning and Zoning  
*...* 7.11.90  
 Director  
 APPROVED: For public roads and storm drainage  
 Howard County Department of Public Works  
*...* 6/26/90  
 Director Chief Bureau of Engineering

# Setback from R/W line reduced to 45' by Case No. BA 88-01 E&V  
 \* Setback from R/W line reduced to 51' by Case No. BA 88-01 E&V  
 † Setback pre-dates Zoning Ordinance



ROBERT DAFER  
 L. 049 F. 69  
 24.5 Ac.

PLANTING SCHEDULE

Symbol	Quantity	Botanical Name	Common Name	Size	Remarks
⊠	24	Taxus baccata	Dwarf English Yew	1 1/2' to 2' ht.	B.B.
⊙	19	Taxus cuspidata fastigiata	Column Japanese Yew	3' to 4' ht.	B.B.
⊛	1	Cornus Kousa	Japanese Dogwood	5' to 6' ht.	B.B. & Staked
⊜	2	Quercus phellos	Willow Oak	2 1/2" to 3" cal.	B.B. & Staked
⊝	65	Taxus cuspidata densiformis	Spreading Yew	2 1/2' to 3' ht.	B.B.
⊞	45	Ilex crenata "Green luster"	Japanese Holly	2 1/2' to 3' ht.	B.B.

Note: Seed and mulch all disturbed areas with "Pennlawn" at a rate of 40 pounds per acre.

⊙ Light Standard (see detail sheet SDP-7)

Tax Map 40, Parcel 168  
 Census Tract No. G051 Water Code N.A. Sewer Code N.A.  
 L.42 FIG. L.42 F.180, L.G8 F.545, L.96 F.360, L.307 F.237

DATE	REVISION

OWNER: ST. MARK'S EPISCOPAL CHURCH  
 1270 Hall Shop Rd.  
 Highland, Md. 20777  
 Phone: (301) 654-2904

CIVIL ENGINEERS • LAND PLANNERS • LAND SURVEYORS  
 OYSTER, IMUS AND PETZOLD, INC.  
 2415 REEDIE DRIVE • WHEATON • MARYLAND • 941-2011

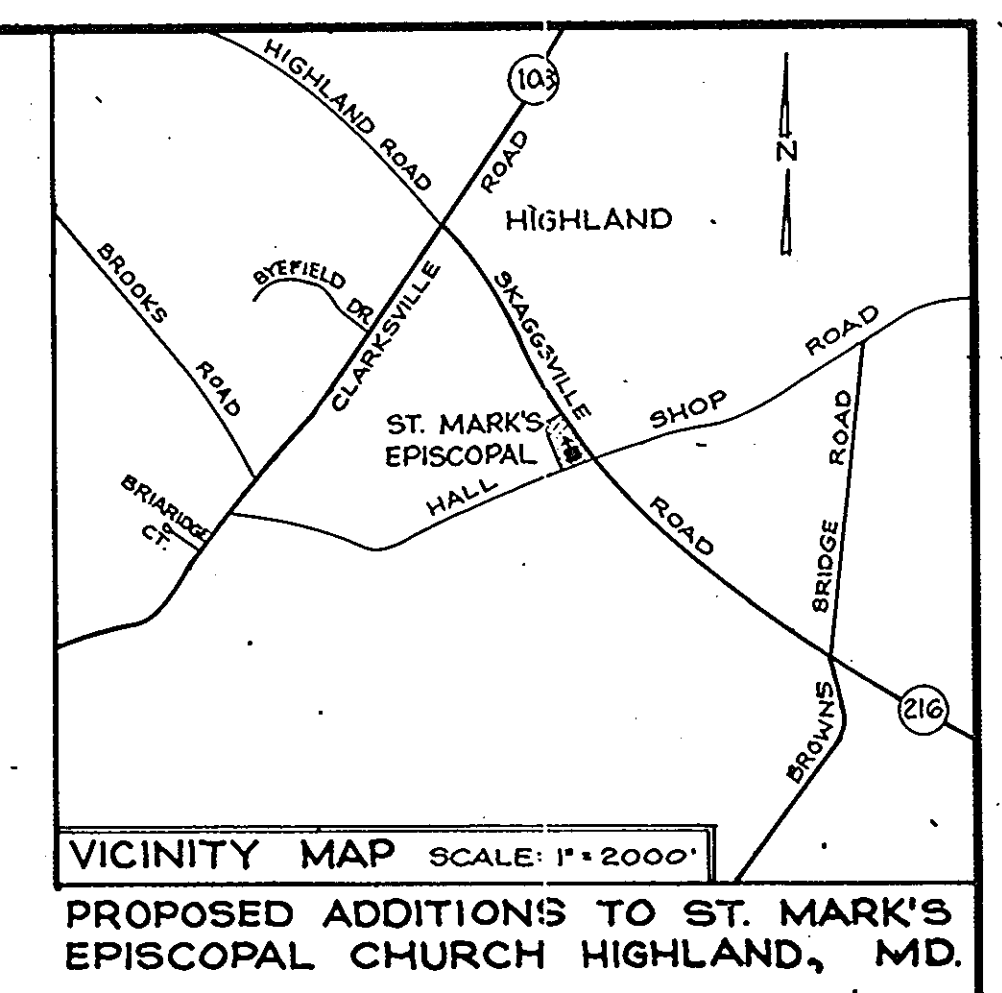
LANDSCAPE PLAN

ST. MARK'S EPISCOPAL CHURCH  
 HIGHLAND, MARYLAND

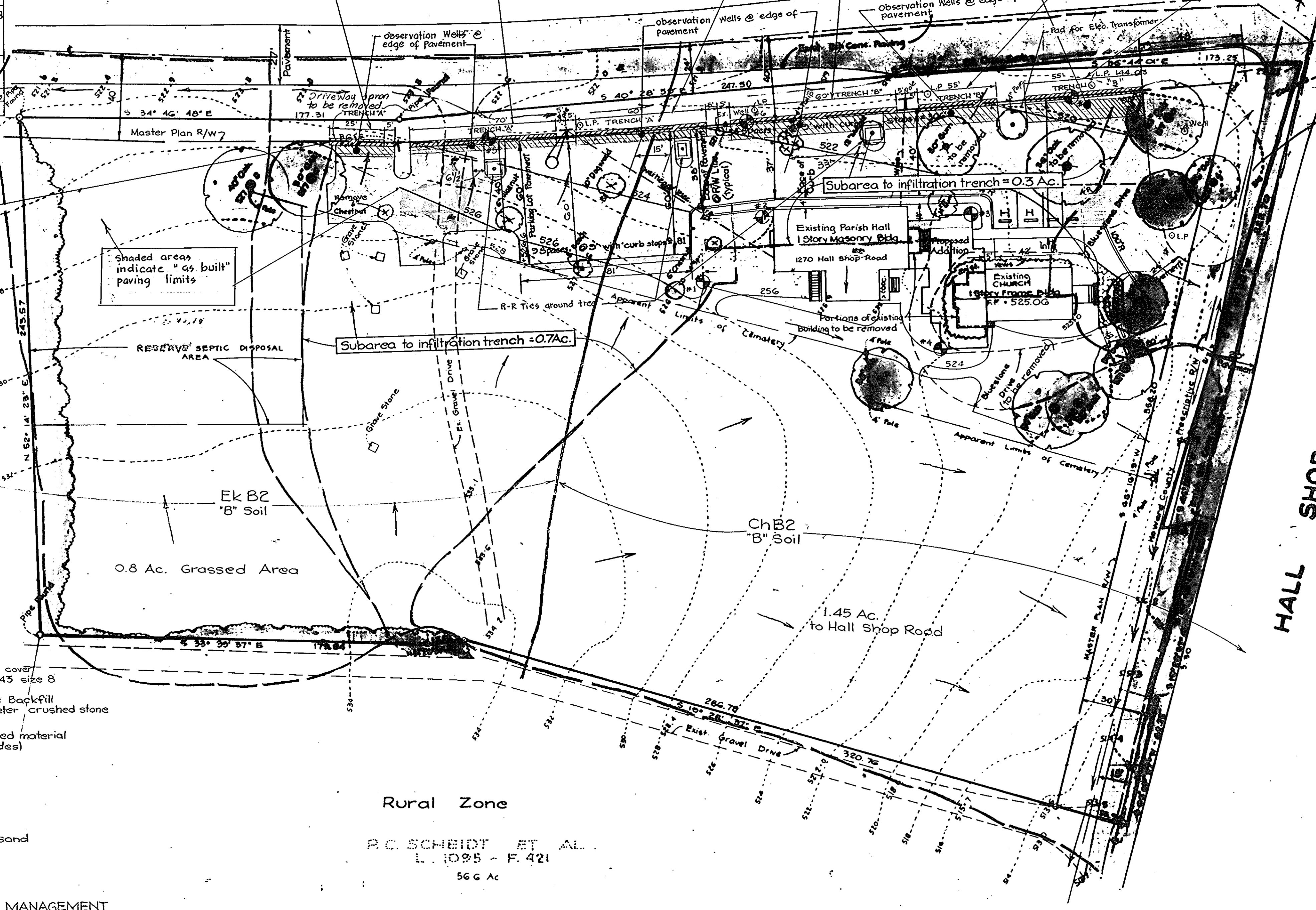
DATE	JOB NO.
August, 1989	1831 H-1
SCALE 1" = 30'	SHEET NO. SDP-2

SDP-90-64

APPROVED: DEPARTMENT OF PLANNING & ZONING  
 [Signature] 7/15/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT  
 APPROVED: For private Water and private Sewer  
 [Signature] 6-18-89  
 Health Officer  
 APPROVED: Howard County Dept. of Planning & Zoning  
 [Signature] 7-11-90  
 Director  
 APPROVED: For public roads and storm drainage  
 Howard County Department of Public Works  
 [Signature] 11/19/90  
 Chief Bureau of Engineering



SCAGGSVILLE ROAD - MD. RTE. 216 (PUBLIC)

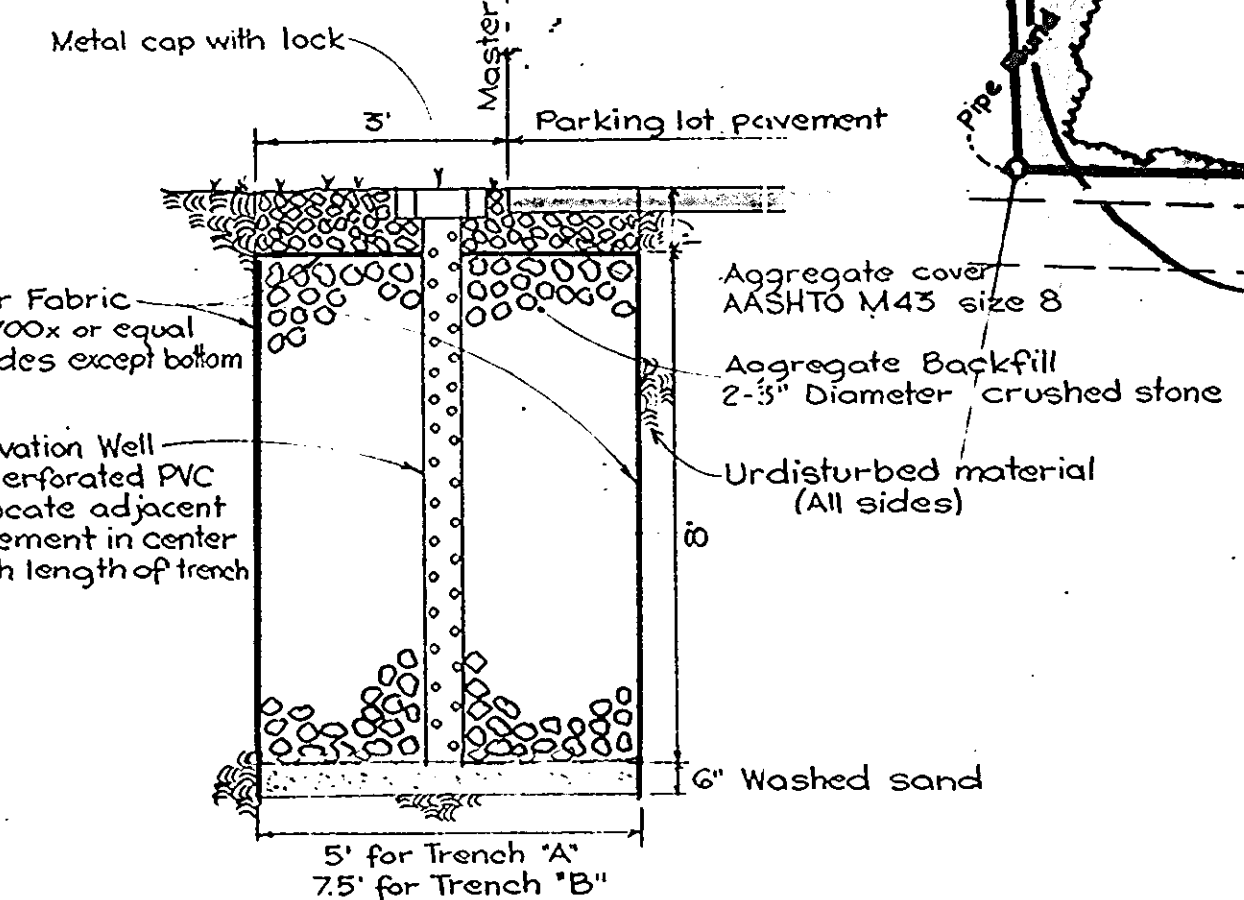


INFILTRATION TRENCH FOR STORMWATER MANAGEMENT along edge of parking lot as shown. See section this sheet.

Shaded areas indicate "as built" paving limits

Rural Zone

P.C. SCHEIDT L. 651 - F. 205 50 Ac.



TYPICAL SECTION INFILTRATION TRENCH FOR STORMWATER MANAGEMENT No Scale

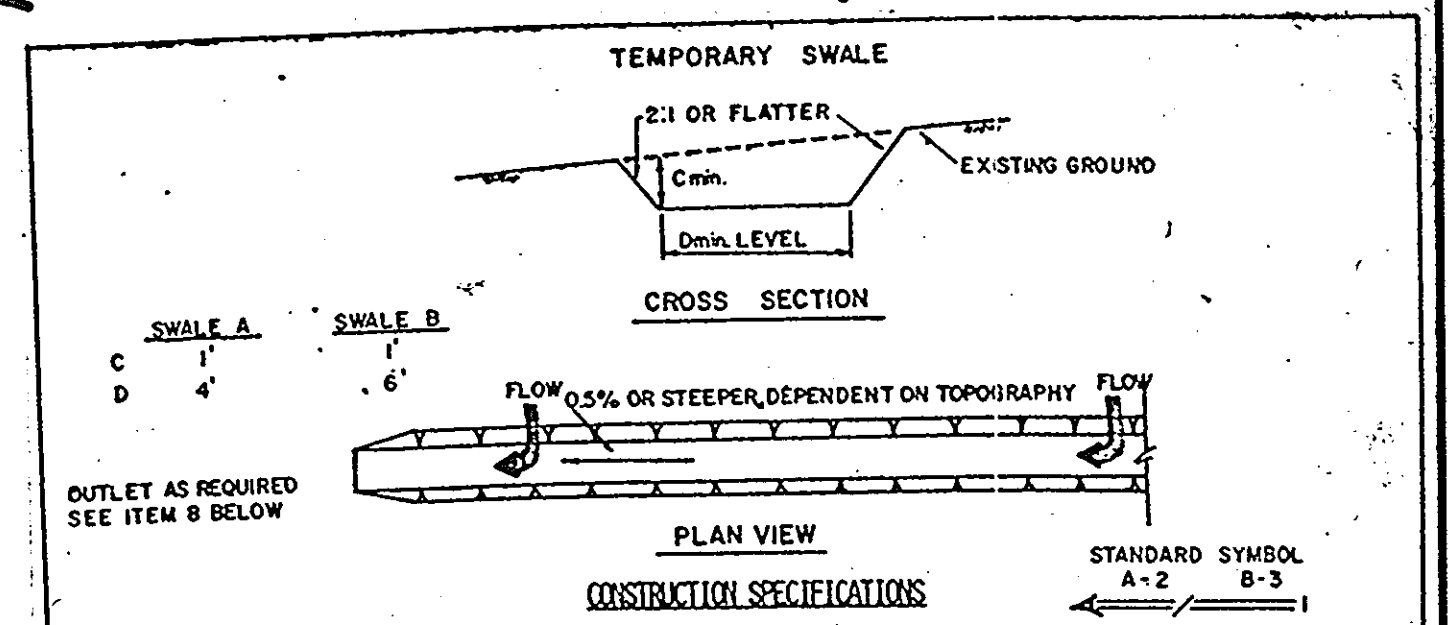
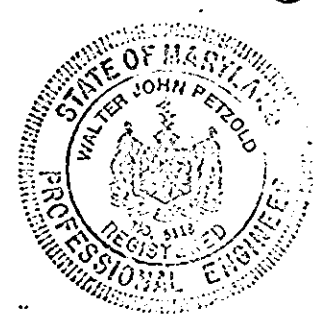
Rural Zone

P.C. SCHEIDT ET AL. L. 1095 - F. 421 56 G Ac.

As Built Certification

The infiltration trenches shown on this drawing were built to the dimensions indicated above. I hereby certify that they were constructed in accordance with the plans and specifications.

[Signature] Walter J. Petzold, P.E.



1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. 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 SWALE.
5. THE SWALE 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 IMPED EARTH FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE CHART BELOW:

TYPE OF CHANNEL	CHANNEL CROSS SECTION	FLOW CHANNEL STABILIZATION	
		A (5 ac or less)	B (5 ac - 10 ac)
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSTOR
3	5.1-8.0%	SEED WITH JUTE OR EXCELSTOR 300	LINED RIP-RAP 4-8" RECYCLED CONCRETE EQUIVALENT
4	8.1-20%	Lined 4-8" RIP-RAP	ENGINEERED DESIGN

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND  
 STANDARD DRAWING TS-1

Census Tract No. 6051 Water Code N.A. Sewer Code N.A.  
 L. 42 F. 161, L. 42 F. 180, L. 68 F. 545, L. 96 F. 360, L. 307 F. 237 (Tax Map 40, Parcel 168)

DATE: Nov. 1987	REVISION: Stormwater Management and drainage subareas added	DRAWING: CHECKED: [Signature] DESIGNED: [Signature] CHECKED: [Signature]	Owner/Developer: Vestry of ST. MARK'S EPISCOPAL CHURCH 1270 Hall Shop Rd. Highland, Md. 20777 Phone: (301) 654-2304	CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS OYSTER, IMUS AND PETZOLD, INC. 3415 NEEDLE DRIVE WHEATON MARYLAND 20881	SOILS & DRAINAGE MAP STORMWATER MANAGEMENT	ST. MARK'S EPISCOPAL CHURCH 5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND	DATE: August, 1989	JOB NO.: 1331 H-1
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AS-BUILT SDP-90-64

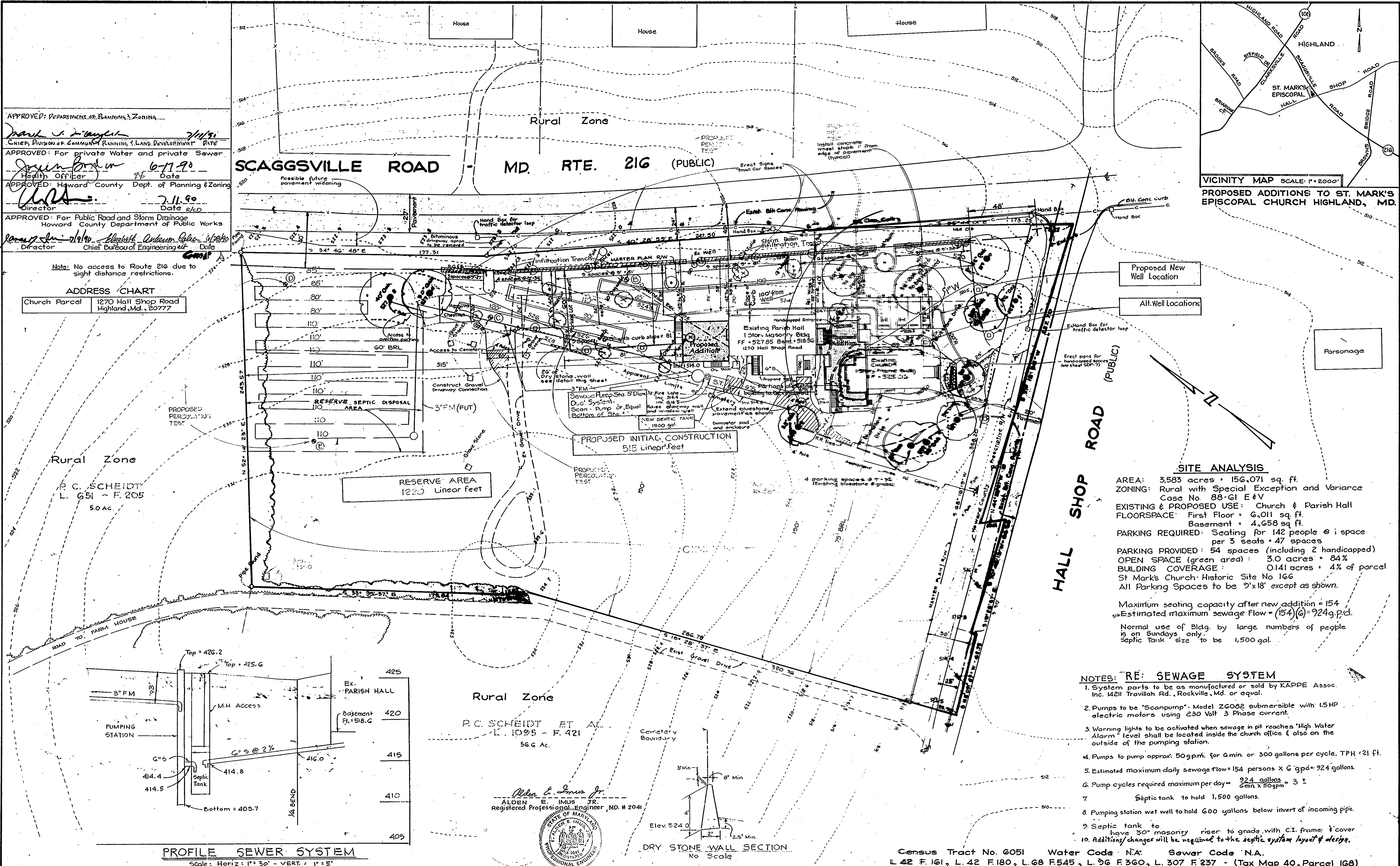
APPROVED: DEPARTMENT OF PLANNING & ZONING  
*[Signature]* 7/11/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE  
 APPROVED: For private Water and private Sewer  
*[Signature]* 6-17-90  
 Health Officer Date  
 APPROVED: Howard County Dept. of Planning & Zoning  
*[Signature]* 7-11-90  
 Director Date R/LD  
 APPROVED: For Public Road and Storm Drainage  
 Howard County Department of Public Works  
*[Signature]* 7/11/90 *[Signature]* 7/11/90  
 Director Chief Bureau of Engineering Date

VICINITY MAP SCALE: 1" = 2000'  
 PROPOSED ADDITIONS TO ST. MARK'S EPISCOPAL CHURCH HIGHLAND, MD.

Note: No access to Route 216 due to sight distance restrictions.

ADDRESS CHART

Church Parcel	1270 Hall Shop Road Highland, Md., 20777
---------------	---

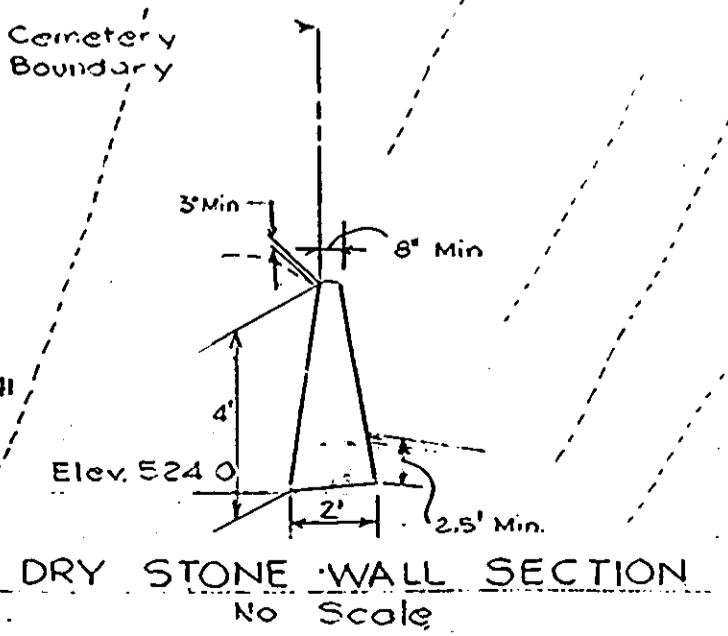
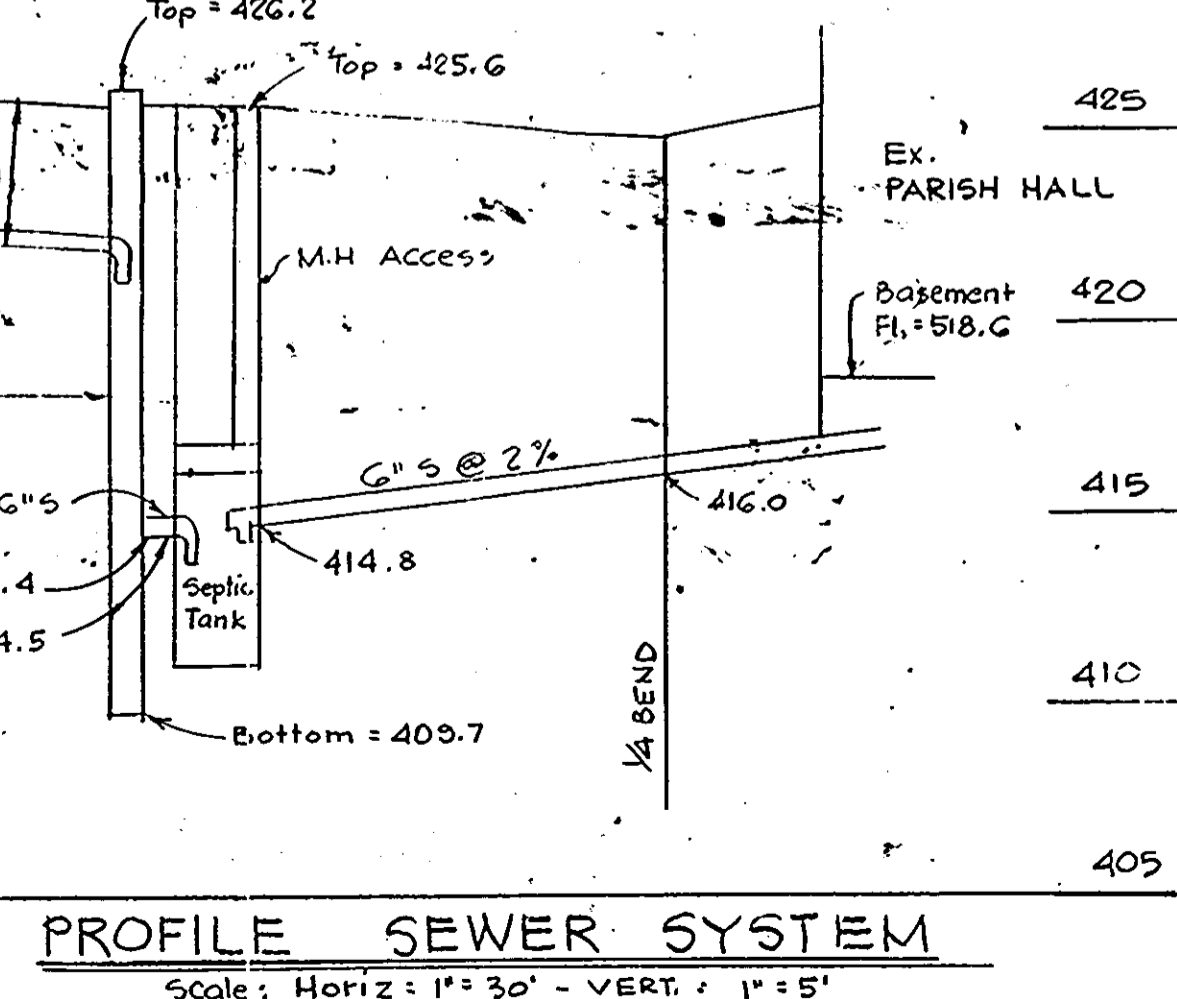


**SITE ANALYSIS**

AREA: 3.583 acres = 156,071 sq. ft.  
 ZONING: Rural with Special Exception and Variance  
 Case No. 88-G1 E&V  
 EXISTING & PROPOSED USE: Church & Parish Hall  
 FLOORSPACE: First Floor = 6,011 sq. ft.  
 Basement = 4,658 sq. ft.  
 PARKING REQUIRED: Seating for 142 people @ 1 space per 3 seats = 47 spaces  
 PARKING PROVIDED: 54 spaces (including 2 handicapped)  
 OPEN SPACE (green area): 3.0 acres = 84%  
 BUILDING COVERAGE: 0.141 acres = 4% of parcel  
 St Mark's Church - Historic Site No 166  
 All Parking Spaces to be 9'x18' except as shown.

Maximum seating capacity after new addition = 154  
 Estimated maximum sewage flow = (154)(6) = 924g.p.d.  
 Normal use of Bldg. by large numbers of people is on Sundays only.  
 Septic Tank size to be 1,500 gal.

- NOTES: RE: SEWAGE SYSTEM**
- System parts to be as manufactured or sold by KAPPE Assoc. Inc. 1421 Travilah Rd., Rockville, Md. or equal.
  - Pumps to be "Scanpump" Model Z6082 submersible with 1/2HP electric motors using 230 Volt 3 Phase current.
  - Warning lights to be activated when sewage in pit reaches "High Water Alarm" level shall be located inside the church office & also on the outside of the pumping station.
  - Pumps to pump approx. 50g.p.m. for G.min. or 300 gallons per cycle. TPH = 21 ft.
  - Estimated maximum daily sewage flow = 154 persons X 6 gpd = 924 gallons
  - Pump cycles required maximum per day =  $\frac{924 \text{ gallons}}{2 \text{ min} \times 50 \text{ gpm}} = 9.24 \approx 3$
  - Septic tank to hold 1,500 gallons.
  - Pumping station wet well to hold 600 gallons below invert of incoming pipe.
  - Septic tank to have 30" masonry riser to grade with C.I. frame & cover
  - Additional changes will be required to the septic system layout & design.



DATE	REVISION	DRAFTING	OWNER (Developer):	CIVIL ENGINEERS	LAND PLANNERS	LAND SURVEYORS	<b>WELL &amp; SEPTIC SYSTEM PLAN</b>		<b>ST. MARK'S EPISCOPAL CHURCH</b>		DATE	JOB NO.
11-20-89	Additional Linear feet of septic trench added to initial construction & reserved access	CHECK	Vestry of ST. MARK'S EPISCOPAL CHURCH 1270 Hall Shop Rd. Highland, Md. 20777 Phone: (301) 854-2304	OYSTER, IMUS AND PETZOLD, INC.					5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND		August 1, 1989	1321 H-1
3-16-90	UPDATED.	DESIGN									SCALE	SHEET NO.
7-9-90	Sump Pump outfall added, & 1" Water Line	CHECK									1" = 31.0'	SDP-4

SDP-90-64



APPROVED: DEPARTMENT OF PLANNING & ZONING  
*Mark J. D'Angelo* 7/1/80  
 CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

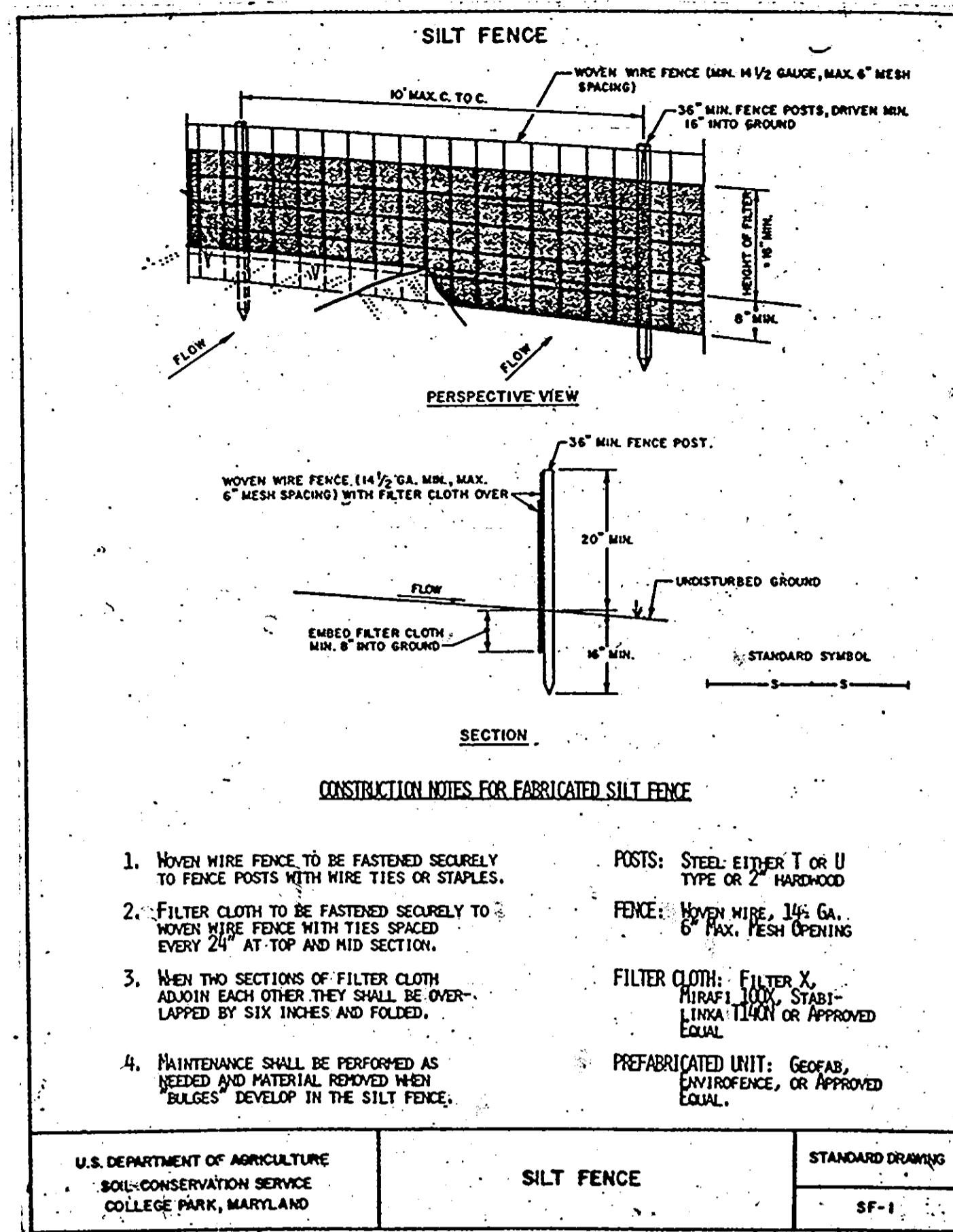
APPROVED: For private Water and private Sewer,  
 Health Officer *James P. ...* 6-18-80  
 Date

APPROVED: Howard County Dept. of Planning & Zoning  
*...* 7-11-80  
 Director Date

APPROVED: For Public Road and Storm Drainage  
 Howard County Department of Public Works  
*James M. ...* 6/25/80  
 Director Chief Bureau Engineering Date

REVIEWED: for Howard County Soil Conservation  
 District and meets Technical Requirements  
*James M. ...* 6/25/80  
 Soil Conservation Service Date

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION  
 AND SEDIMENT CONTROL BY THE HOWARD COUNTY  
 SOIL CONSERVATION DISTRICT.  
*...* 6/25/80  
 Howard County S.C.D. Date



**PERMANENT SEEDING NOTES**

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

**Seedbed Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**Soil Amendments:** In lieu of soil test recommendations, use one of the following schedules:

- Preferred** - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 500 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft.)
- Acceptable** - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft) before seeding. Harrow or disk into upper three inches of soil.

**Seeding** - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Rescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Rescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Rescue and mulch with 2 tons/acre well anchored straw.

**Mulching** - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

**Maintenance** - Inspect all seeded areas and make needed repairs, replacements and reseedings.

**TEMPORARY SEEDING NOTES**

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

**Seedbed preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**Soil Amendments:** - Apply 60 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

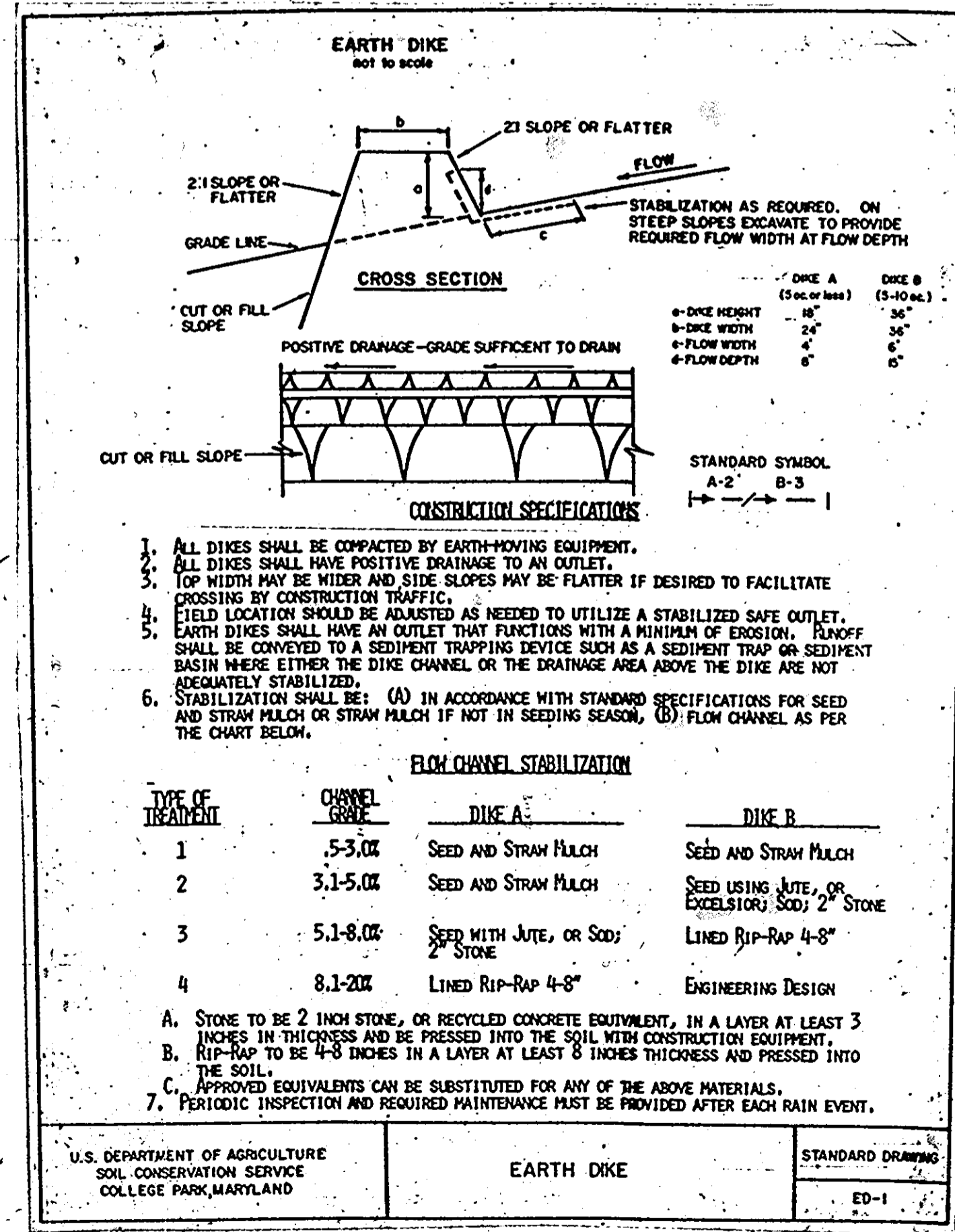
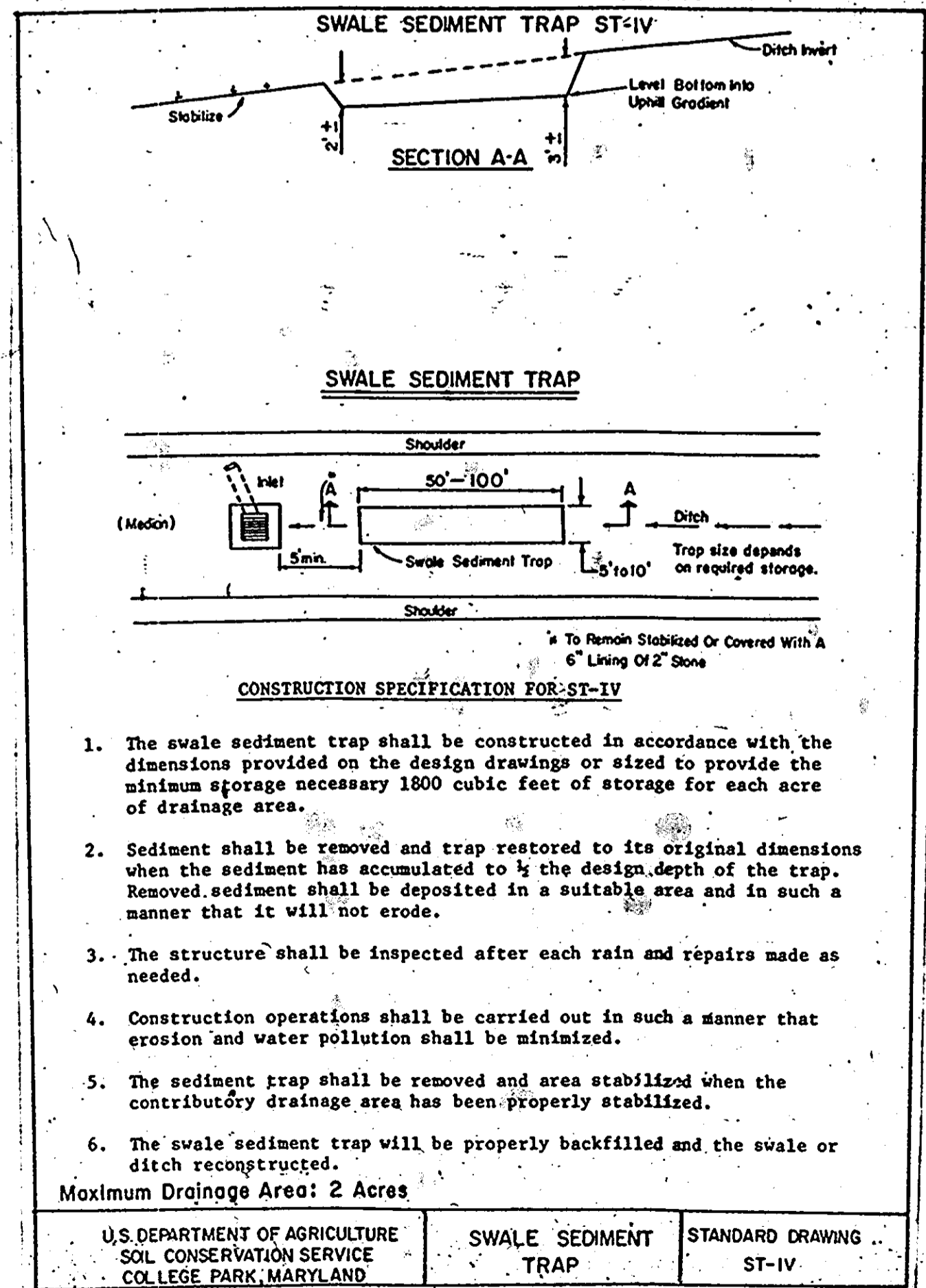
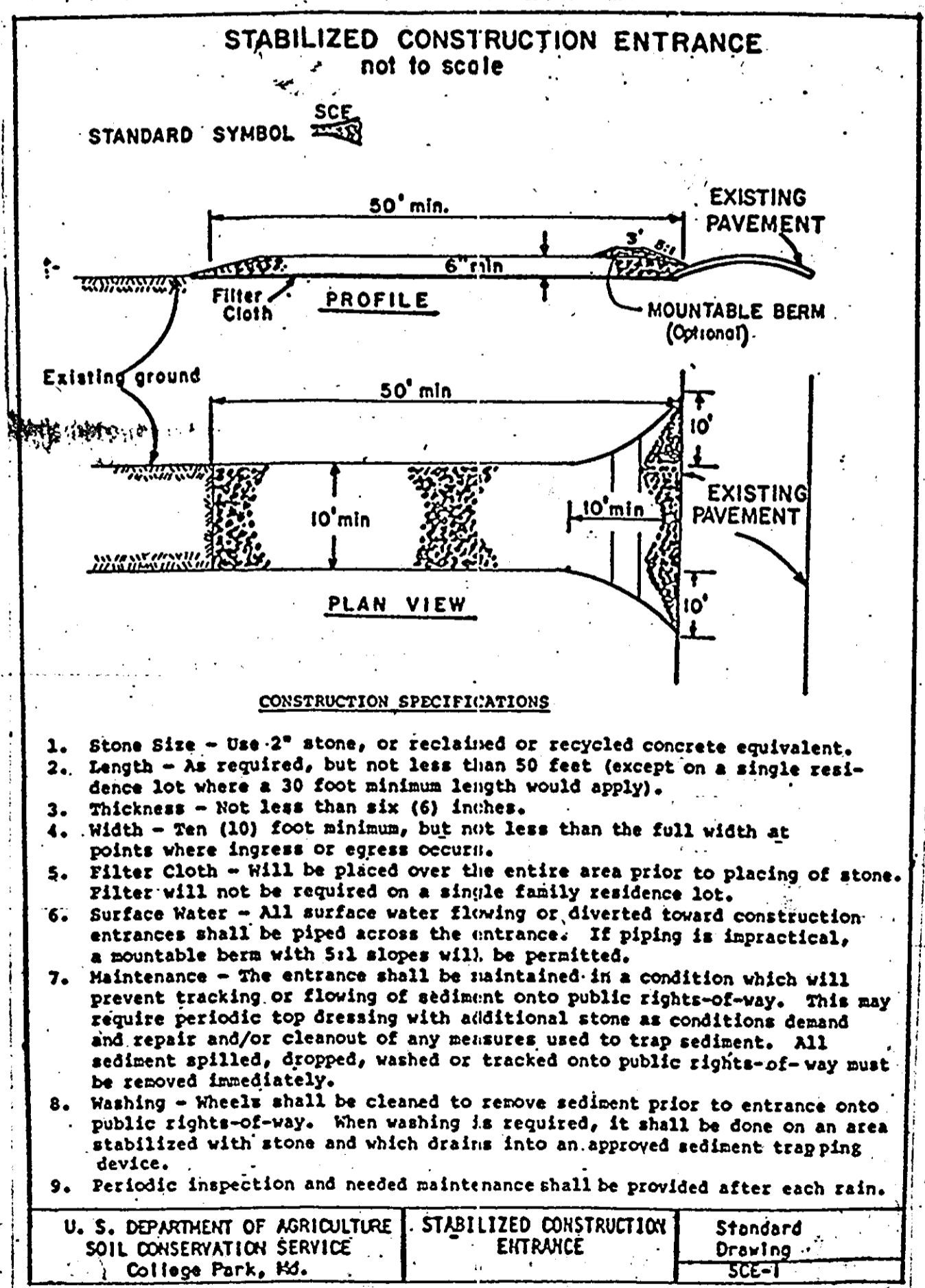
**Seeding:** - For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

**Mulching:** - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

**SEDIMENT CONTROL NOTES**

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (892-2437)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chap. 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:  
 Total Area of Site 1.8 Acres  
 Area Disturbed 1.2 Acres  
 Area to be roofed or paved .06 Acres  
 Area to be vegetatively stabilized .06 Acres  
 Total Cut 1,300 Cu. yds  
 Total Fill 700 Cu. yds  
 Offsite waste/borrow area location to be determined by contractor.
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County DPH sediment control inspector.
- On all sites with disturbed areas in excess of 2-acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.



**LANDGRADING**

Construction Specifications

- All graded or disturbed areas including slopes shall be protected during clearing and construction in accordance with the approved sediment control plan until they are permanently stabilized.
- All sediment control practices and measures shall be constructed, applied and maintained in accordance with the approved sediment control plan and the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas".
- Topsoil required for the establishment of vegetation shall be stockpiled in amount necessary to complete finished grading of all exposed areas.
- Areas to be filled shall be cleared, grubbed and stripped of topsoil to remove trees, vegetation, roots or other objectionable material.
- Areas which are to be topsoiled shall be scarified to a minimum depth of three inches prior to placement of topsoil.
- All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.
- All fill to be placed and compacted in layers not to exceed 8 inches in thickness.
- Except for approved landfills, fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory fills.
- Frozen materials or soft, mucky or highly compressible materials shall not be incorporated into fills.
- Fill shall not be placed on a frozen foundation.
- All benches shall be kept free of sediment during all phases of development.
- Slopes or springs encountered during construction shall be handled in accordance with the Standard and Specifications for Subsurface Drain or other approved method.
- All graded areas shall be permanently stabilized immediately following finished grading.
- Stockpiles, borrow areas shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.

LANDGRADING Standard Drawing LS-1

**DEVELOPER'S CERTIFICATION**

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 the beginning of the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

*James P. ...* 11-27-89  
 Date

**ENGINEER'S CERTIFICATION**

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.

*Walter M. Petzold* 11-27-89  
 Date

Walter M. Petzold, P.E. Md. No. 5118

NOTE: For detail of Temporary Swale (TS-1), See Sheet 3.

DATE	REVISION	DRAFTING	CHECK	DESIGN	CHECK

Owner & Developer: the Vestry of ST. MARK'S EPISCOPAL CHURCH  
 1270 Hall Shop Road  
 Highland, Maryland 20777  
 Phone: (301) 854-2304

CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS  
**OYSTER, IMUS AND PETZOLD, INC.**  
 3115 REEDS DRIVE WHEATON MARYLAND 20781

**SEDIMENT CONTROL DETAILS & NOTES**

L. 42 F.161, L. 42 F.180, L. 68 F.545, L. 96 F.360, L. 307 F.237  
**ST. MARK'S EPISCOPAL CHURCH**  
 5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

DATE August, 1989 JOB NO. 1331/H-1  
 SCALE No Scale SHEET NO. SDP-G

Census Tract No. 6051 Water Code N.A. Sewer Code N.A. (Tax Map 40, Parcel 168)

APPROVED: DEPARTMENT OF PLANNING & ZONING

*Frank J. ...* 7/11/90  
CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT PERM.

APPROVED: FOR PRIVATE WATER & PRIVATE SEWER

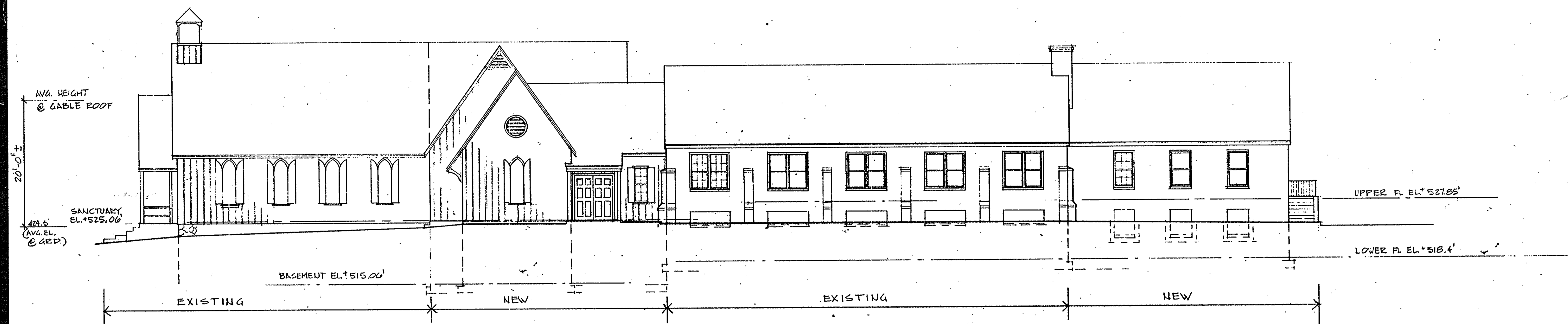
*James ...* 6-18-90  
HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*...* 7-11-90  
DIRECTOR DATE

APPROVED: FOR PUBLIC ROADS AND STORM DRAINS  
HOWARD COUNTY DEPT. OF PUBLIC WORKS

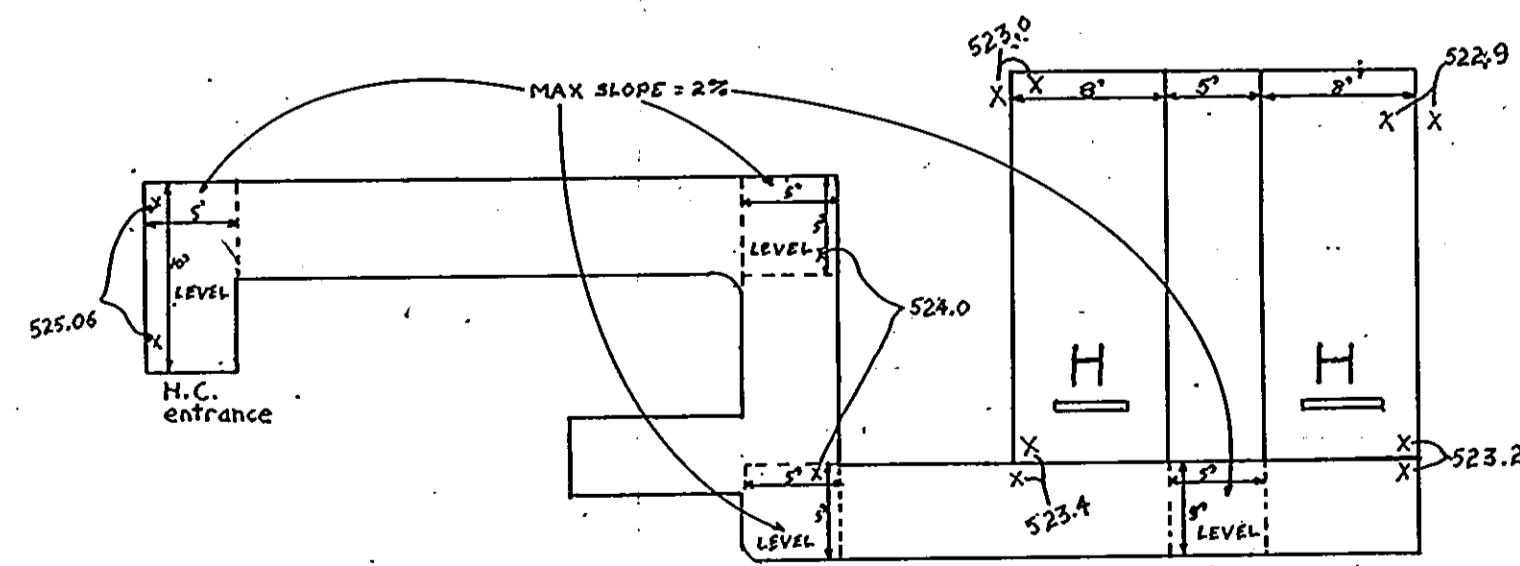
*James ...* 7/11/90 *Elizabeth ...* 7/22/90  
DIRECTOR CHIEF BUREAU OF ENGINEERING DATE



PRELIMINARY ELEVATION - SANCTUARY & PARISH HALL FROM MD. RTE, 216

**SPECIFICATIONS AND SEQUENCE OF CONSTRUCTION FOR INFILTRATION TRENCH**

- Trench Preparation** - Excavate the trench to the design dimensions. Excavated materials shall be placed away from the trench sides to enhance trench wall stability. Large tree roots must be trimmed flush with the trench sides in order to prevent fabric puncturing or tearing during subsequent installation procedures. The side walls of the trench shall be roughened where sheared and sealed by heavy equipment.
- Fabric Laydown** - The filter fabric roll must be cut to the proper width prior to installation. The cut width must include sufficient material to conform to trench perimeter irregularities and for a 6-inch minimum top overlap. Place the fabric roll over the trench and unroll a sufficient length to allow placement of the fabric down into the trench. Stones or other anchoring objects should be placed on the fabric at the edge of the trench to keep the lined trench open during windy periods. When overlaps are required between rolls, the upstream roll should lap a minimum of 2 feet over the downstream roll in order to provide a shingle effect. The overlap ensures fabric continuity or ensures that the fabric conforms to the excavation surface during aggregate placement and compaction.
- Backfill Material** - The aggregate material for the infiltration trench shall consist of a clean aggregate with a maximum diameter of 3" and a minimum diameter of 1 1/2". The aggregate should be graded such that there will be few aggregates smaller than the selected size. Void space for these aggregates are assumed to be between the range of 18 to 48 percent.
- Stone Aggregate Placement and Compaction** - The stone aggregate should be placed in lifts and compacted, using plate compactors. As a rule of thumb, a maximum loose lift thickness of 12 inches is recommended. The compaction process ensures fabric conformity to the excavation sides, thereby reducing the potential for soil piping, fabric clogging, and settlement problems. Following the stone aggregate placement, the filter fabric shall be folded over the stone aggregate to form a 6" minimum longitudinal lap. The desired fill soil or stone aggregate shall be placed over the lap at sufficient intervals to maintain the lap during subsequent backfilling. Care should be exercised to prevent natural or fill soils from intermingling with the stone aggregate. All contaminated stone aggregate shall be removed and replaced with uncontaminated stone aggregate. Voids can be created between the fabric and excavation sides and shall be avoided. Removing boulders or other obstacles from the trench walls is one source of such voids. Natural soils should be placed in these voids at the most convenient time during construction to ensure fabric conformity to the excavation sides. Soil piping, fabric clogging, and possible surface subsidence will be avoided by this remedial procedure.
- Unstable Excavation Sides** - Vertically excavated walls may be difficult to maintain in areas where the soil moisture is high or where soft cohesive or cohesionless soils predominate. These conditions may require laying back of the side slopes to maintain stability; trapezoidal rather than rectangular cross-sections may result.
- Traffic Control** - Heavy equipment and traffic shall be restricted from traveling over the infiltration area to minimize compaction of the soil.
- Observation Well** - The observation well shall consist of perforated PVC pipe, 4 to 6 inches in diameter. It shall be constructed flush with the ground elevation of the trench. The top of the well shall be capped and marked with the depth of the well.
- Finishing** - The infiltration trench shall not be placed in service until all of the contributing drainage area has been stabilized and approved by the responsible inspector.



SIDEWALK ELEVATION DETAIL

**HANDICAPPED PARKING SIGN SPECIFICATIONS**

**I. Fine Sign:**

Pursuant to Howard County Council Bill #58-84, which established a \$50.00 fine for violating provisions for handicapped parking and provided for posting notifications of that fine, this specification describes the sign authorized for posting and the associated mounting detail.



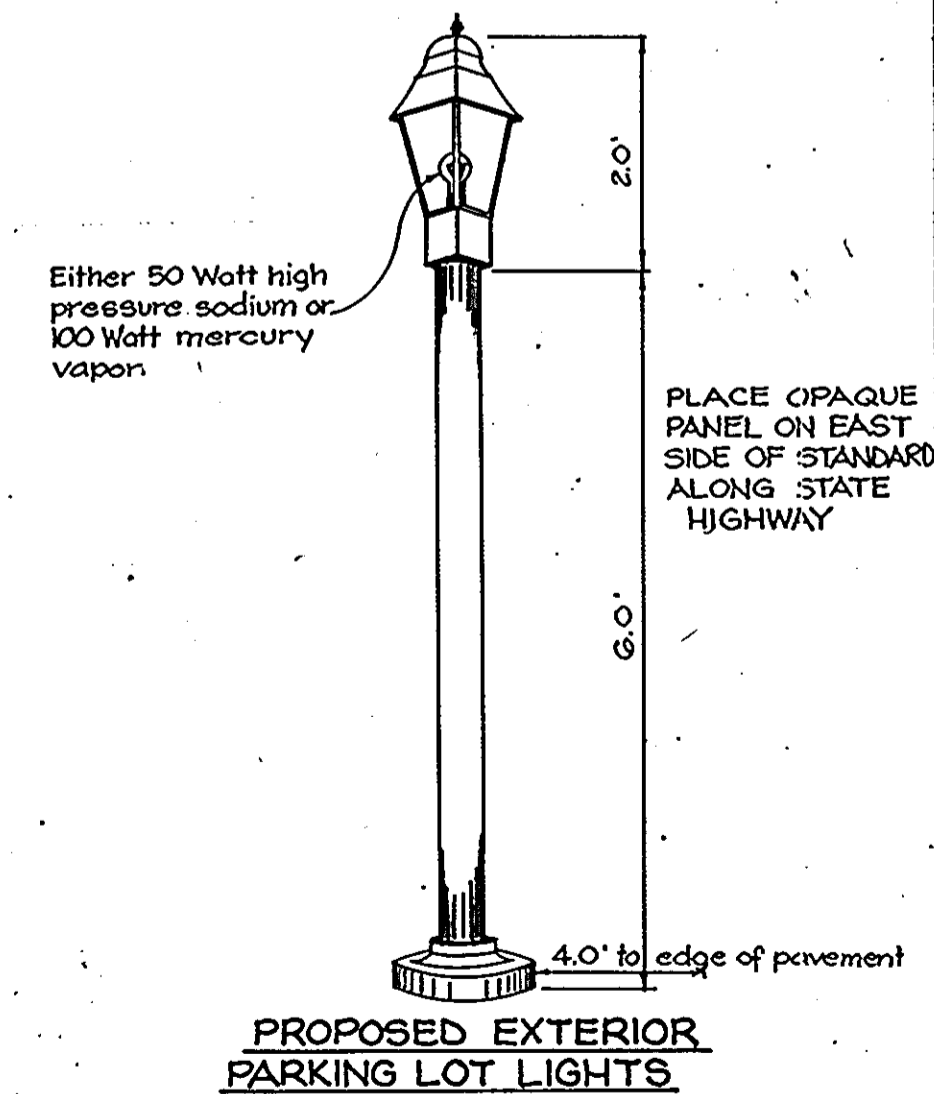
Sign to utilize an aluminum blank 6" x 12" x 0.080 inch thick with two (2) single post mounting holes. The text and border shall be standard green to match the R7-8 reserved parking sign and the background shall be reflective white. The text shall be 3" characters.

**II. Mounting:**

The above fine sign shall be mounted underneath the below R7-8 reserved parking sign. The bottom edge shall be no less than 7 feet above ground. If the sign is placed against a building, structure or other location where vehicle or pedestrian traffic is not obstructed, the bottom edge of the sign shall be at least 6 feet, but no more than 10 feet above ground. Because this is in addition to existing sign installations, some adjustment in height will be necessary.



COLORS  
LEGEND AND BORDER - GREEN  
WHITE SYMBOL OF BLUE BACKGROUND  
BACKGROUND - WHITE



PROPOSED EXTERIOR PARKING LOT LIGHTS

OWNER & DEVELOPER:  
VESTRY OF ST. MARK'S EPISCOPAL CHURCH  
1270 HALL SHOP RD.  
HIGHLAND, MD 20777  
PHONE: 301-854-2304

Census Tract No. 6051 Water Code N.A. Sewer Code N.A.  
L.42 F.161, L.42 F.180, L.68 F.545, L.96 F.360, L.307 F.237 - (Tax Map 40, Parcel 168)

**DECMM**  
Duane, Elliott, Cahill,  
Mullineaux & Mullineaux PA  
Architects, Planners, Consultants  
Rockville, Md. 301-424-1680, Leves, Dc. 302-645-5566, Ocean City, Md. 301-624-1887

**ST. MARK'S EPISCOPAL CHURCH**  
HIGHLAND, MARYLAND

proj. no. 87-01  
date 8-28-89

revisions

drawing title  
PRELIMINARY ELEVATIONS

drawing number  
SDP-7

sht. 7 of 7