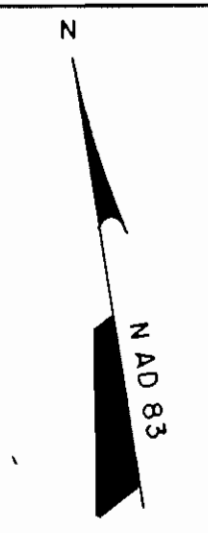
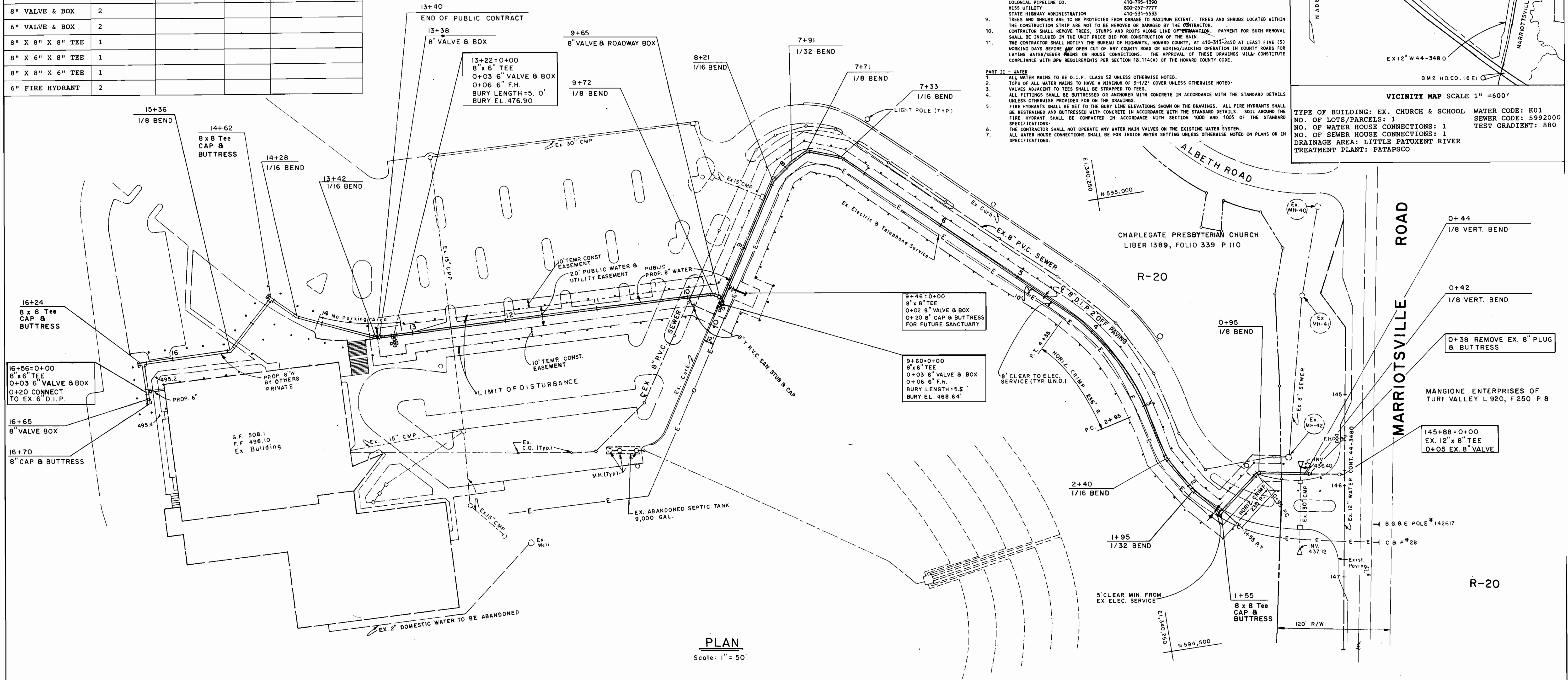
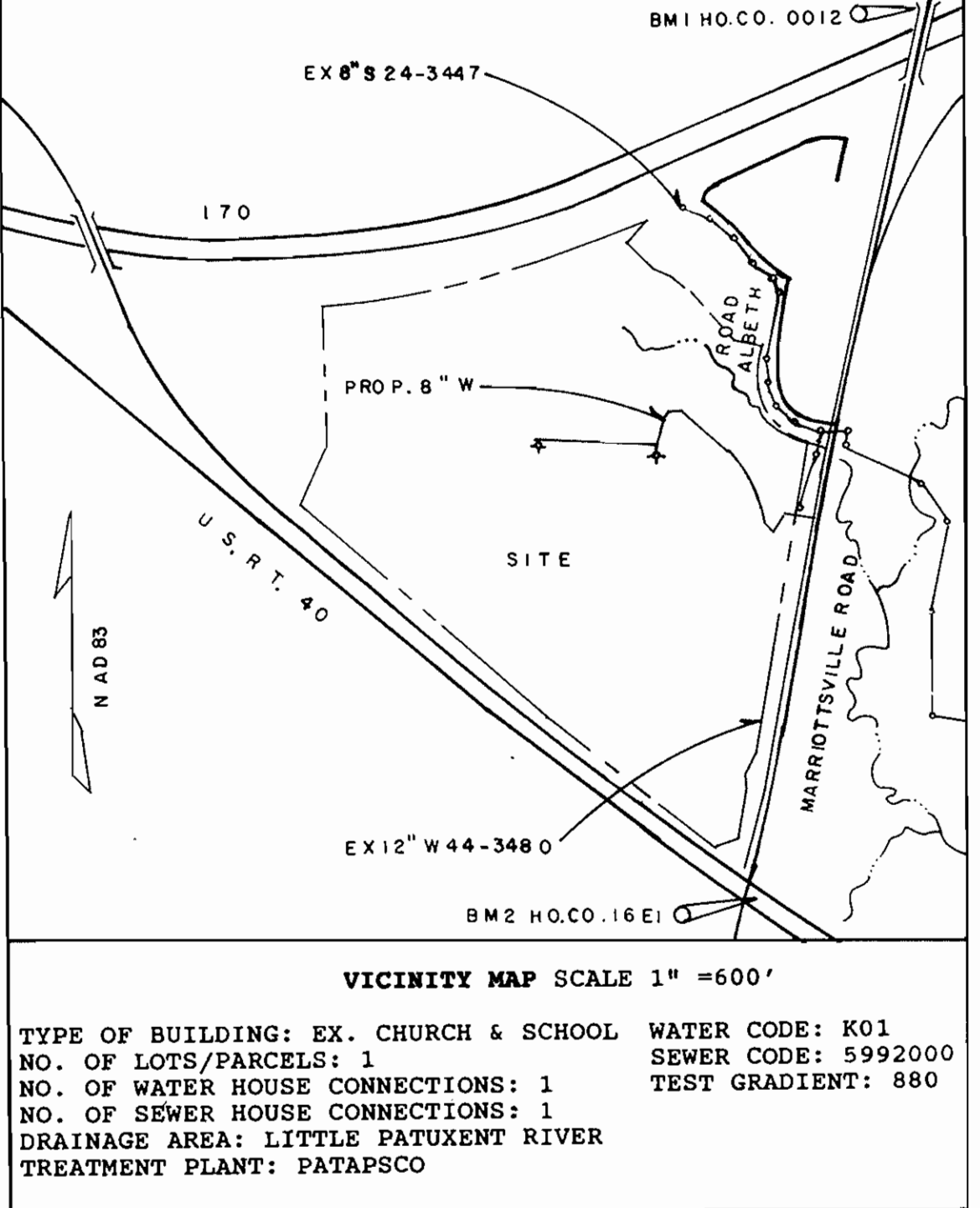


QUANTITIES (public work)		AS BUILT		
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURE SUPPLIER
8" CLDIP	1306 LF			
6" CLDIP	12 LF			
1/4 BEND 8"	1			
1/8 BEND 8"	5			
1/16 BEND 8"	3			
1/32 BEND 8"	2			
8" CAP	1			
8" VALVE & ROADWAY BOX	1			
8" VALVE & BOX	2			
6" VALVE & BOX	2			
8" X 8" X 8" TEE	1			
8" X 6" X 8" TEE	1			
8" X 8" X 6" TEE	1			
6" FIRE HYDRANT	2			



- DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING
GENERAL NOTES
- PART I**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - ALL HORIZONTAL CONTROLS ARE BASED ON MD STATE COORDINATES. (NORTH AMERICAN DATUM OF 1983). BM1 HOWARD COUNTY SURVEY CONTROL STA. NO. 0024 N 596,508.7603, E 1,340,864.365, ELEV. 486.822. BM2 HOWARD COUNTY SURVEY CONTROL STA. NO. 10614 N 593,250.9322, E 1,340,192.711, ELEV. 464.550. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL. AT THE LOCATION OF THE TEST PIT, A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
 - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - AT & T 410-865-3803
 - BG & E - (CONTRACTOR SERVICES) 410-850-6620
 - BG & E - UNDERGROUND DAMAGE CONTROL 410-787-9068
 - BUREAU OF UTILITIES (DPU) 410-513-4000
 - CHESAPEAKE & POTOMAC TELEPHONE CO. 410-597-8585
 - COLONIAL PIPELINE CO. 410-795-1390
 - MESS UTILITY 800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF DEMARCATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT 410-315-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH BPU REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.
- PART II - WATER**
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
 - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
 - CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.



PLAN
Scale: 1" = 50'

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

John P. Platon 3/2/98
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Cheryl Simmon 3/2/98
NATURAL RESOURCES CONSERVATION SERVICE DATE

OWNER/DEVELOPER
CHAPELGATE PRESBYTERIAN CHURCH, INC.
2600 MARIOTTSTVILLE ROAD
MARIOTTSTVILLE, MARYLAND 21104-1628
(410) 442-5800

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert Beiner 3-4-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John Dammann 3/1/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

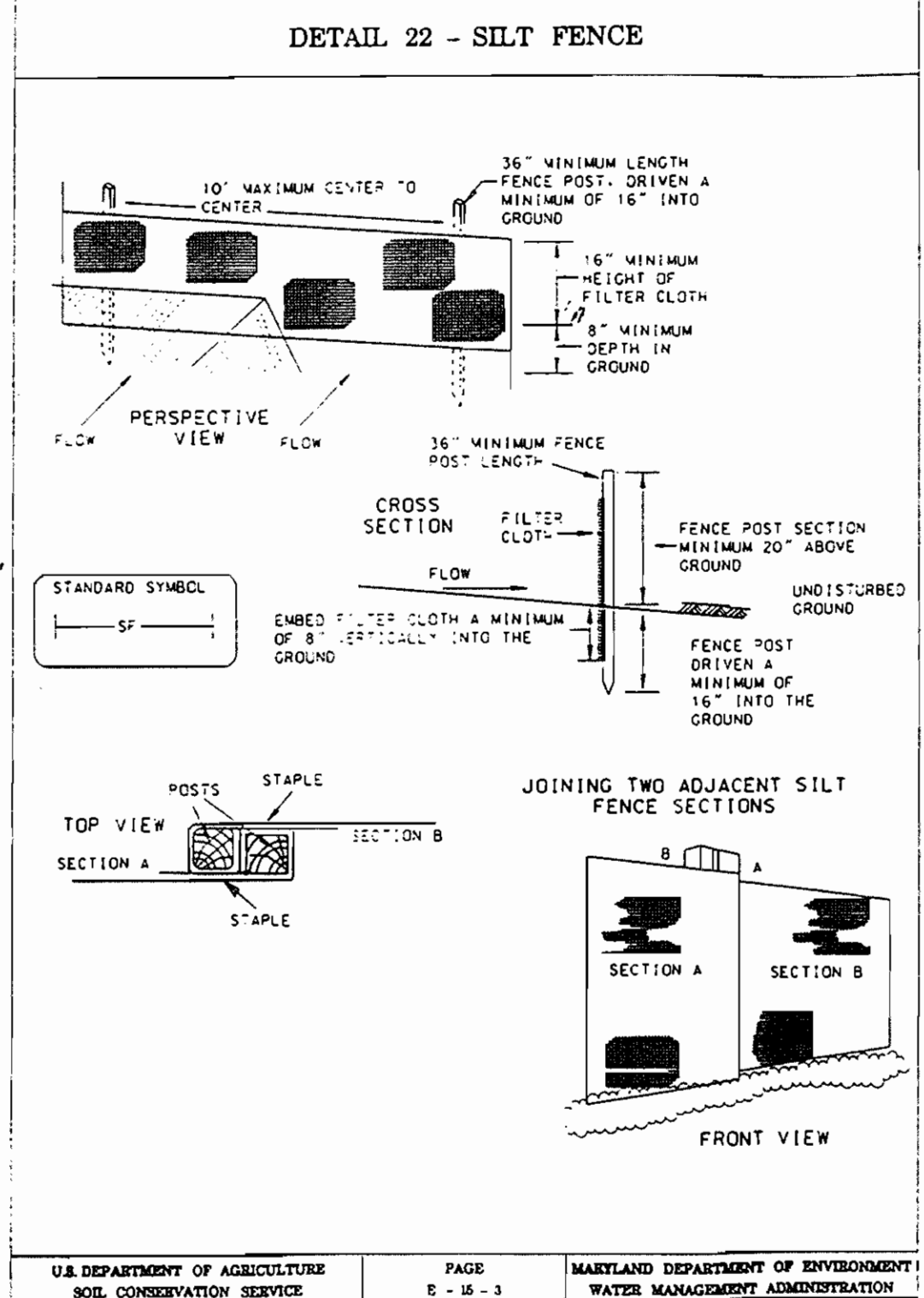
BHA
BROYLES, HAYES AND ASSOCIATES, INC.
Engineers • Land Planners • Surveyors
4972 ILCHESTER ROAD • ELLICOTT CITY, MD 21104-6838
PHONE (410) 747-5500 • FAX (410) 747-2952



DES: S.K.B.					
DRN: R.D.H.					
CHK: S.K.B.					
DATE: 1-27-98	BY: NO.	REVISION	DATE	600' SCALE MAP NO. W-16	BLOCK NO. 10, 9, 15, 16

WATER EXTENSION PLAN

GP-98-112
NAME OF UTILITY CONTRACTOR:
SURVEY AND DRAFTING AS-BUILT DATE:
CHAPELGATE PRESBYTERIAN CHURCH
3RD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 44-3641-D
SCALE AS SHOWN
SHEET 1 OF 2



HOWARD SOIL CONSERVATION DISTRICT
PERMANENT SEEDING NOTES

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

Seeding 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:

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

Seeding: For the periods March 1 -- April 30, and August 1 -- October 15, seed with 60 lbs/acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 -- July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs/acre (.05 lbs/1000 sq. ft.) of seeding lovegrass. During the period of October 16 -- February 28, protect site by: **Option 1** -- Two 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 30 Tall Fescue 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 slope 8 feet or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance: Inspect all seeding areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

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

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

Soil Amendments: Apply 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.).

Seeding: For periods March 1 -- April 30 and from August 15 -- October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 -- August 14, seed with 3 lbs/acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For the period November 16 -- February 28, protect site by applying 2 tons/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/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed-free, 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 slope 8 ft. or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

- SEQUENCE OF CONSTRUCTION**
1. OBTAIN GRADING PERMIT
 2. NOTIFY SEDIMENT CONTROL INSPECTOR 48 HOURS PRIOR TO START OF CONSTRUCTION.
 3. INSTALL SILT FENCE AS DIRECTED BY THE SEDIMENT AND EROSION CONTROL INSPECTOR.
 4. WITH APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR EXCAVATE TRENCH AND INSTALL WATER LINE.
- NOTE: STOCKPILE BORROW FROM TRENCH EXCAVATION ON THE UPHILL SIDE OF TRENCH ADJACENT TO PAVING AND LIMIT DISTURBED AREA TO AREA WHICH CAN BE BACKFILLED AND STABILIZED WITHIN 1 WORKING DAY.
5. BACKFILL TRENCH, COMPLETE FINAL GRADING AND STABILIZE ALL DISTURBED AREAS.
 6. NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL TO REMOVE SEDIMENT AND EROSION CONTROL.

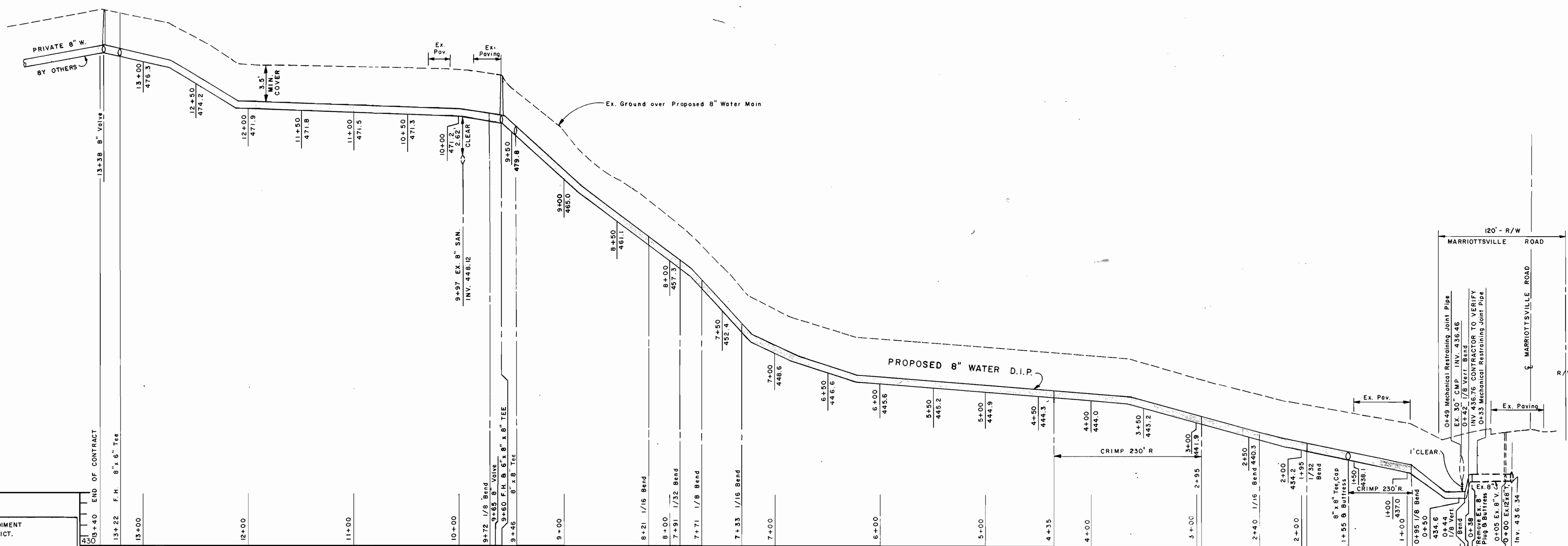
- HOWARD SOIL CONSERVATION DISTRICT**
STANDARD SEDIMENT CONTROL NOTES
1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
 3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter berms and all slopes steeper than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. 6). Temporary stabilization with mulch alone shall only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
 6. 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.
 7. Site Analysis:
Total Area of Site = 63.513 Acres
Area Disturbed = 0.375 Acres
Area to be roofed or paved = 0.090 Acres
Area to be vegetatively stabilized = 0.325 Acres
Total Cut = 660.0 Cu. Yds.
Total Fill = 660.0 Cu. Yds.
 8. Offsite waste/borrow area location: Alpha Ridge Landfill
Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
 10. 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. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter. REV 8/94

"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."

Brian Kelly 2/26/98
Signature of Developer Date
Brian Kelly, Business Administrator

"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."

Steven K. Broyles 2/26/98
Signature of Engineer Date
Steven K. Broyles P.E.



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

John R. Robertson 3/2/98
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND PER F-98-12

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Chief Simmons 3/2/98
NATURAL RESOURCES CONSERVATION SERVICE DATE

OWNER/DEVELOPER
CHAPLEGATE PRESBYTERIAN CHURCH, INC.
2600 MARRIOTTVILLE ROAD
MARRIOTTVILLE, MARYLAND 21104-1628
(410) 442-5800

PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

GP-98-112

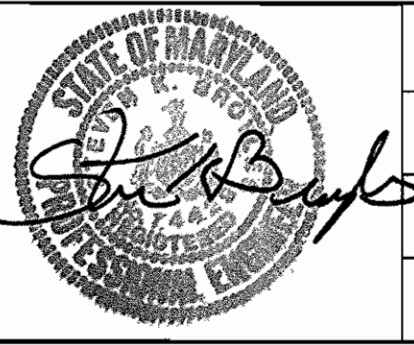
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert D. Switzer 3-4-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Mike Dammann 3/1/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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DES. S.K.B.					
DRN. R.D.H.					
CHK. S.K.B.					
DATE: 1-27-98	BY:	NO.	REVISION	DATE	

WATER EXTENSION PROFILE

600' SCALE MAP NO. W-16 BLOCK NO. 9, 10, 15 & 16

CHAPLEGATE PRESBYTERIAN CHURCH
3RD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 44-3641-D

SCALE AS SHOWN
SHEET 2 OF 2