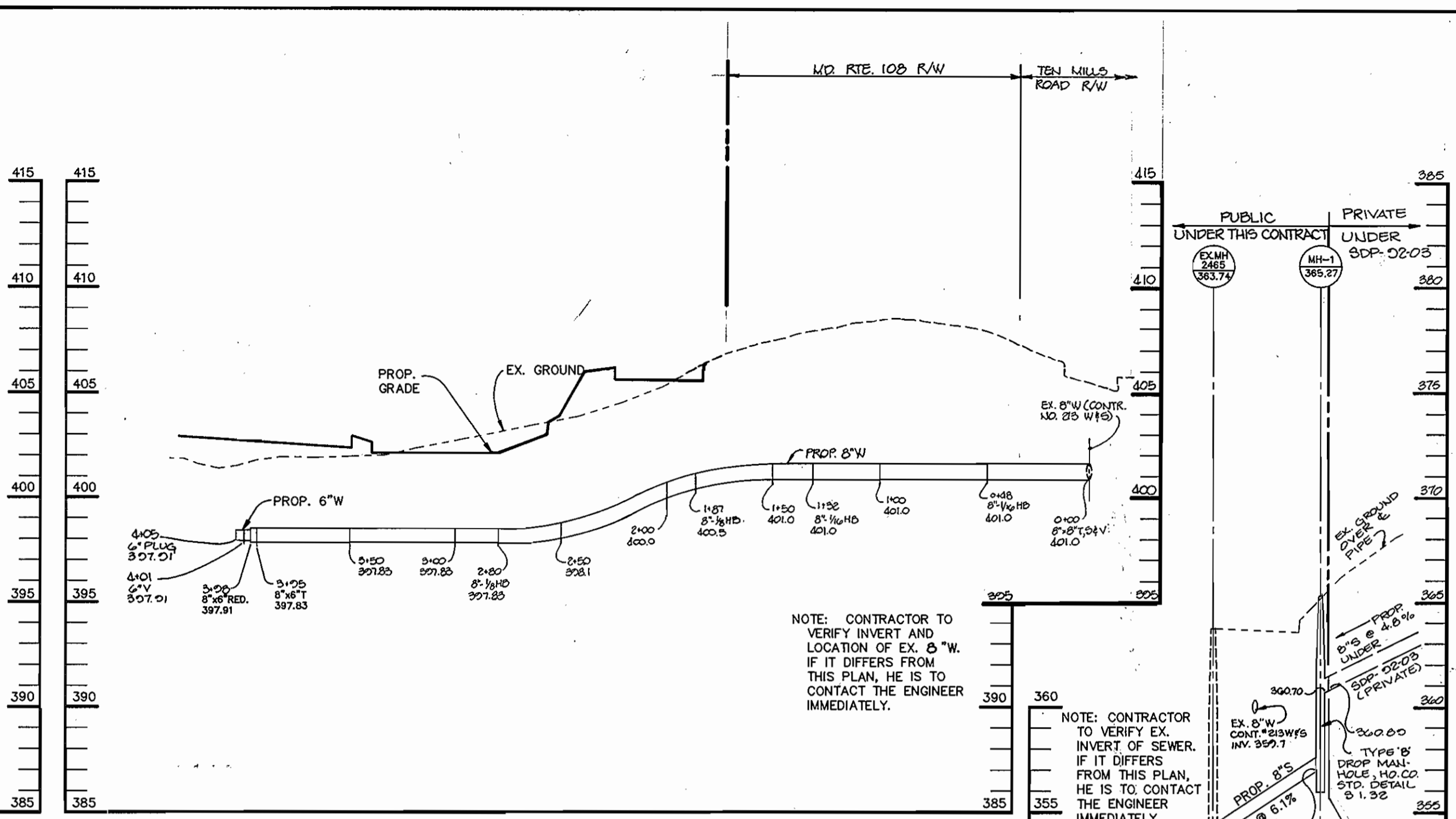
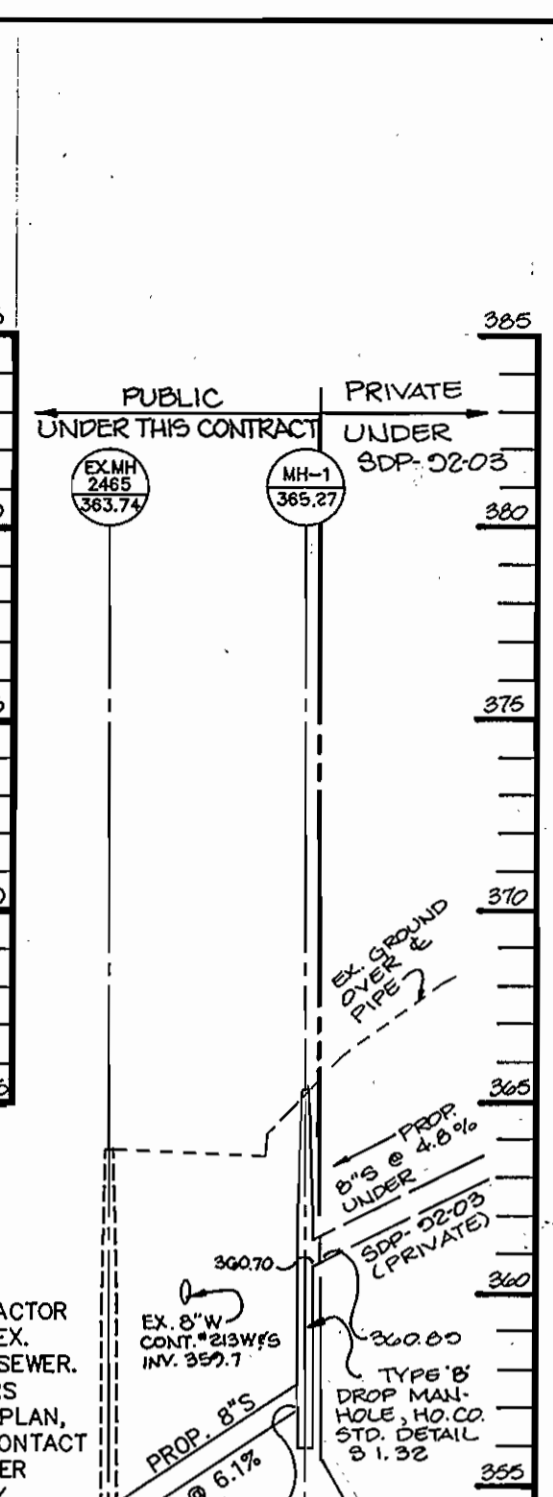


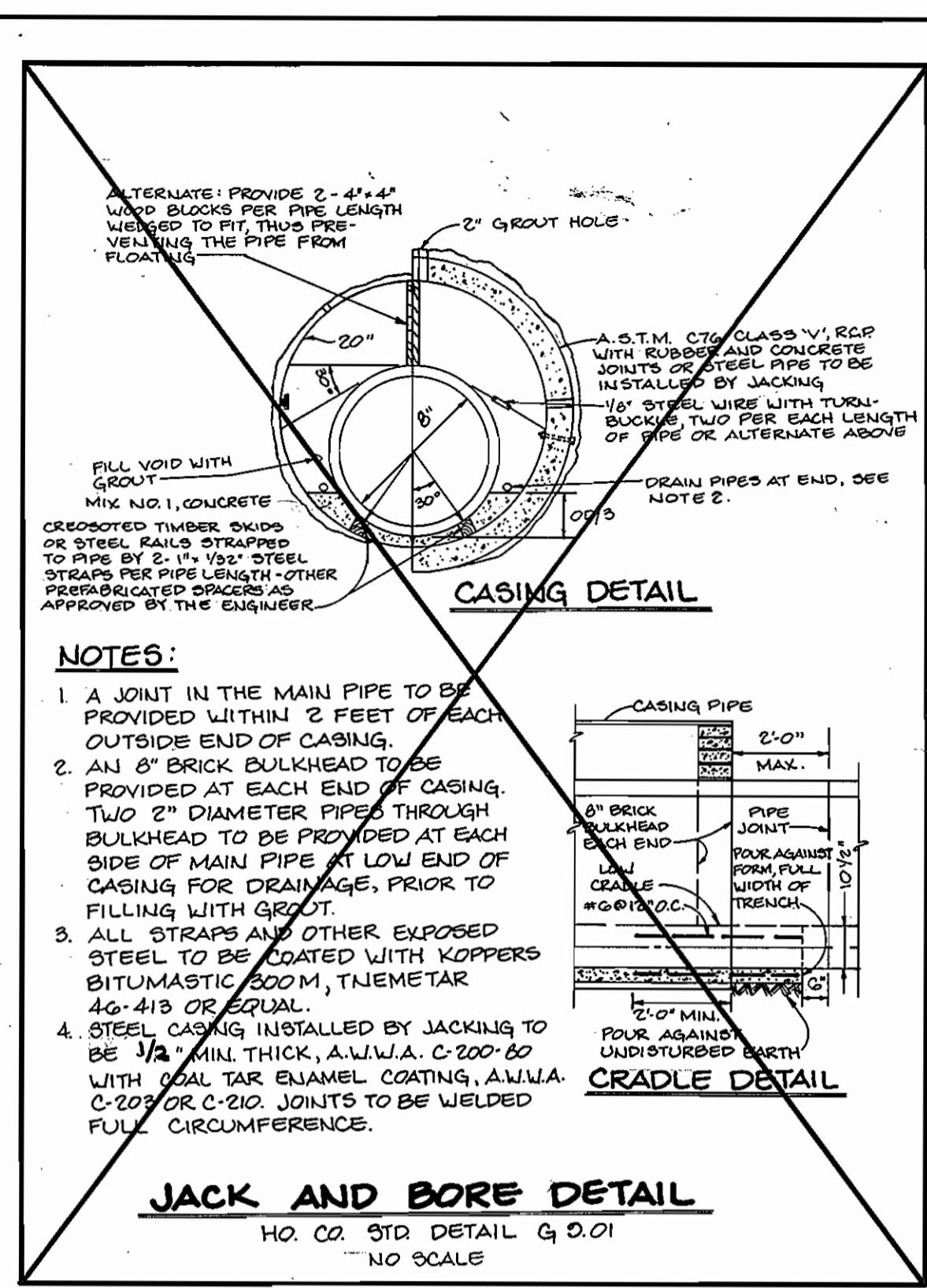
WATER PROFILE
SCALE: HOR.: 1"=50'
VER.: 1"=5'



WATER PROFILE
SCALE: HOR.: 1"=50'
VER.: 1"=5'

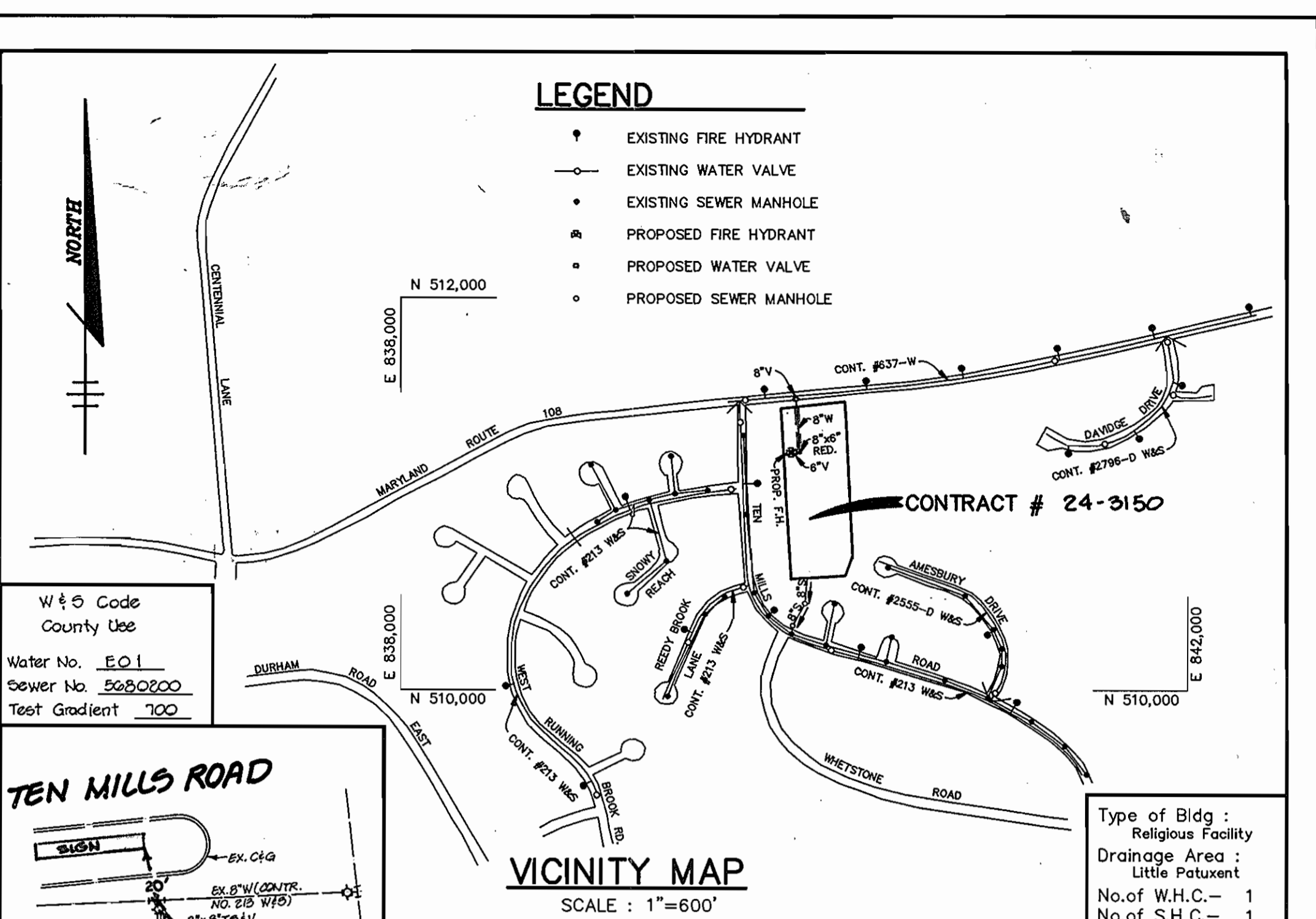


SEWER PROFILE
SCALE: HOR.: 1"=50'
VER.: 1"=5'



NOTES:

1. A JOINT IN THE MAIN PIPE TO BE PROVIDED WITHIN 2 FEET OF EACH OUTSIDE END OF CASING.
2. AN 8" BRICK BULKHEAD TO BE PROVIDED AT EACH END OF CASING. TWO 2" DIAMETER PIPES THROUGH BULKHEAD TO BE PROVIDED AT EACH SIDE OF MAIN PIPE AT LOW END OF CASING FOR DRAINAGE. PRIOR TO FILLING WITH GROUT.
3. ALL STRAPS AND OTHER EXPOSED STEEL TO BE COATED WITH KOPPERS BITUMASTIC 200M, 1/2 INCH THICK, A.W.W.A. C-200-60 WITH COAL TAR ENAMEL COATING, A.W.W.A. C-207 OR C-210. JOINTS TO BE WELDED FULL CIRCUMFERENCE.



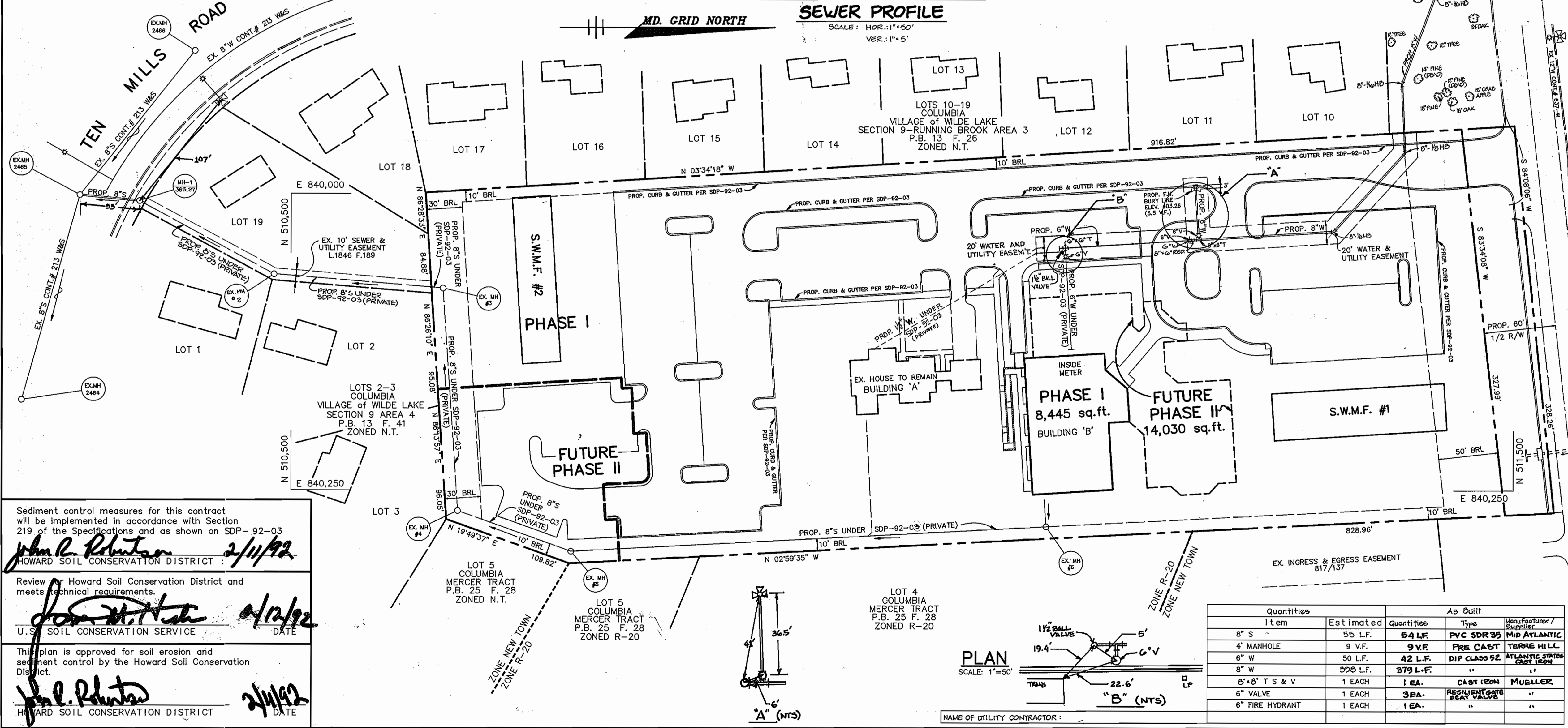
LEGEND

- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SEWER MANHOLE

VICINITY MAP
SCALE: 1"=600'

GENERAL NOTES

1. 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.
2. All horizontal controls are based on Maryland State coordinates.
3. All vertical controls are based on U.S.G.S. data.
4. All pipe elevations shown are invert elevations.
5. Clear all utilities by a minimum of 6".
6. For details not shown on the drawings, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction, 1990 Amendments. The contractor shall have a copy of Volume IV on the job.
7. 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 verified by the contractor to his own personal satisfaction. Any damage to existing facilities due to the contractor's negligence shall be repaired at the contractor's expense.
8. The contractor shall notify the following utilities or agencies at least five working days before starting work on these plans:
 - State Highway Administration 531-5533
 - Baltimore Gas and Electric Co. - Contractor Services 850-4620
 - Baltimore Gas and Electric Co. - Underground Damage Control 859-9004
 - Baltimore Gas and Electric Co. - Trouble Shooting 298-9001
 - Miss Utility 1-559-0100
 - Colonial Pipeline Co. 795-1390
 - Bureau of Utilities, Ho.Co. Department of Public Works 315-4200
 - C & P Telephone Co. 1-800-257-7777
9. 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.
10. The contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
11. All water mains to be D.I.P. Class 52 unless otherwise noted.
12. Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
13. Valves adjacent to tees shall be strapped to tees.
14. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
15. Fire hydrants shall be set to the bury line elevation 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 1005 of the Standard Specifications.
16. The contractor shall not operate any water main valves on the existing water system.
17. All water house connections shall be for inside meter setting, unless otherwise noted on the plans or in the Specifications.
18. All service clamps are to have stainless straps.
19. All D.I.P. fittings shall be in accordance with A.W.W.A. specifications C-153 Ductile Iron Compact Fittings, 3" through 12" for water and other liquids.
20. All sewer mains shall be C.S.P.X., R.C.S.P., V.C.P.X. or P.V.C. unless otherwise noted.
21. The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
22. All manholes shall be 4'-0" inside diameter unless otherwise noted.
23. Manholes shown with 12" and 16" walls are for brick manholes only.
24. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail 65.52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
25. House(s) with the symbol "C.N.S." indicates that the cellar cannot be served.



Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-92-03.

John R. Reuter 2/11/92
HOWARD SOIL CONSERVATION DISTRICT

Review of Howard Soil Conservation District and meets technical requirements.

John R. Reuter 2/12/92
U.S. SOIL CONSERVATION SERVICE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John R. Reuter 2/11/92
HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. Reuter 2/13/92
DIRECTOR OF PUBLIC WORKS

William J. Reuter 2-13-92
CHIEF, BUREAU OF ENGINEERING

Robert J. Reuter 2-10-92
CHIEF, BUREAU OF UTILITIES

Charles J. Reuter 2/12/92
CHIEF, LAND DEVELOPMENT

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive Suite 200 Columbia, Md. 21045
301-997-8900 FAX: 301-997-9282

ARTHUR E. MUEGGE #8707
REGISTERED PROFESSIONAL ENGINEER

DES: CB
DRN: CB
CHK: CJR
DATE: 7-9-91

REVISION

NO.	REVISION	DATE
RJC 3	EXTEND WATER EASEMENT @ BLDG. & ADD 6" x 6" T, 6" V, 1/2" BALL VALVE, 1/2" x PRIVATE W. LINE TO BLDG. A.	2/14/94
MAD 2	REV. LOCATION OF 8" W CONNECTION	7-10-93
MAD 1	CHANGED LH#1 FROM TYPE 'A' TO TYPE 'B' DROP MANHOLE	6-1-92

PLAN & PROFILE OF A WATER MAIN AND A SEWER MAIN

60' SCALE MAP NO. 30 BLOCK NO. 8

COLUMBIA PRESBYTERIAN CHURCH
VILLAGE OF WILDE LAKE PARCEL 223
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3150

SCALE AS SHOWN
SHEET 1 OF 1

AS-BUILT