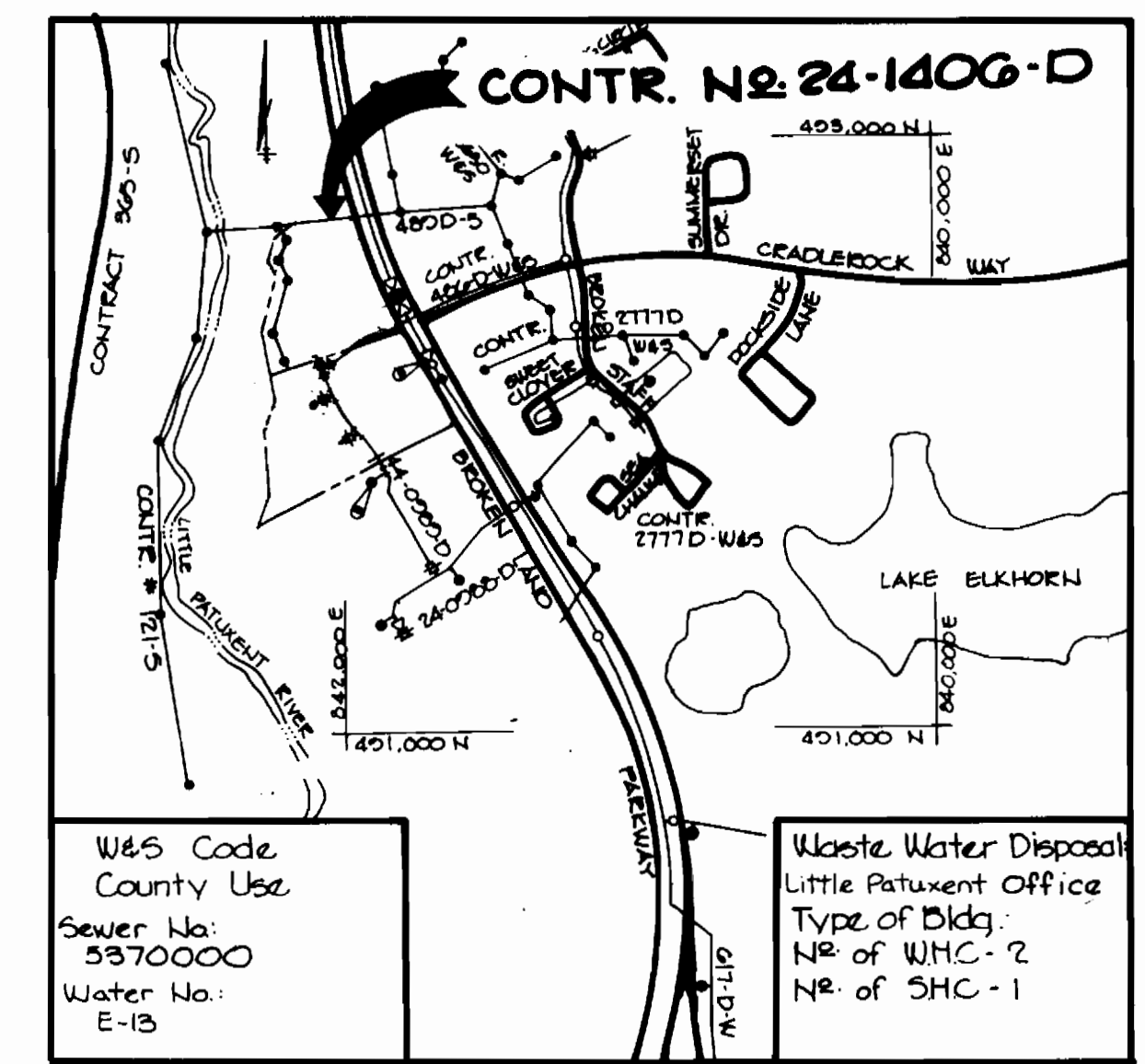


BENCH MARKS
 B.M. No. 1 Elev. 315.01
 Top nut of a fire hydrant on the west side of Broken Land Parkway near the intersection of Cradlerock Way.
 B.M. No. 2 Elev. 306.11
 Flang: bolt on a fire hydrant 410' South of Cradlerock Way and 300' West of Broken Land Parkway.



- 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.
 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 Q elevations.
 5. 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 the 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.
 6. For details not shown on the drawings and for materials and construction methods, use Howard County Design Manual, Volume IX, Standard Specifications and Details for Construction. The contractor shall have a copy of Volume IX on the job.
 7. Where test pits have been made on existing utilities, they are noted by the symbol \square 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.
 8. Contractor shall notify the following utilities or agencies at least 5 working days before starting work shown on these plans:

State Highway Administration	531-5531
Baltimore Gas & Electric Co. - Contractor Services	561-2555
Baltimore Gas & Electric Co. - Underground Damage Control	234-5621
Baltimore Gas & Electric Co. - Trouble Shooting	206-2013
Miss Utility	1-555-0100
Colonial Pipeline Co.	755-1300
Bureau of Utilities, Howard County Department of Public Works	202-2326
 9. Trees are to be protected from damage to maximum extent. Trees located within the construction strip are not to be removed or damaged by the contractor.
 10. Contractor shall remove trees, stumps and roots along line of excavation as directed by the Engineer. Payment for such removal shall be included in the unit price bid for excavation and backfill.
 11. Place regulation 'Men Working' and warning signs as required to comply with Maryland State Highway Administration Manual of Traffic Control for Highway Construction and Maintenance Operations.
 12. All water mains to be D.I.P. unless otherwise noted.
 13. Top of all water mains to have a minimum of 3 1/2' cover unless otherwise noted.
 14. Valves adjacent to tees shall be strapped to tees.
 15. Block all fittings with concrete.
 16. Bury line elevations on fire hydrant shall be set to the elevations shown on the drawings. All fire hydrants shall be strapped and buttressed with concrete in accordance with 1005 & 1006 of the General Requirements for Water & Sewer.
 17. All water house connections shall be for an inside meter setting unless otherwise noted.
 18. The contractor shall not operate any water main valves on the existing system.
 19. For all copper water house connections utilize flared type fittings only.
 20. All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C. or A.C.P. class 2400 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 brick manholes only.
 24. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G552 Volume IX. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.
 25. Houses with the symbol 'C.U.S.' indicates the cellar can not be served.
 26. All water house connections shall have a minimum vertical clearance of 12" below all sanitary sewer crossings.
 27. All sanitary sewer house connections shall have a minimum vertical clearance of 12" below all water main crossings.
 28. Profile stations shall be adjusted as necessary to conform to plan dimensions.
 29. No pipe shall be laid until lines of excavation have been brought to subgrade.

Village of Owen Brown
 Section 5 Area 2
 Plat Book 30 Folios G0 & G1

Village of Owen Brown
 Section 3 Area 1
 Plat 5201

Sediment Control measures for this contract will be implemented in accordance with article 15 of the specifications and as shown on SDP 86-27 this contract drawing and F-86-20.

Howard Soil Conservation District:
 Reviewed for Howard Soil Conservation District and meets technical requirements.
 U.S. Soil Conservation Service
 This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
 Stephen L. Shultz 9/20/85
 Chief, Bureau of Utilities

QUANTITIES			
ITEM	ESTIMATED	AS BUILT	MATERIAL SUPPLIER
8" SEWER	662 L.F.	P.V.C. SDR35	A.F.P. WATER & SEWER
MANHOLE	20 V.F.	ASTM C478	ATLANTIC PRECAST
8" WATER	677 L.F.	TYTON JOINTS	ATLANTIC STATES
6" WATER	10 L.F.		
FIRE HYDRANT	1 EA.	MUELLER CO.	A.F.P. WATER & SEWER
8" VALVES	4 EA.		A.F.P. WATER & SEWER
6" VALVES (EXCL. F.H.)	1 EA.		
MH FRAME & COVERS	5 EA.	1012-A	SEWER FRAME, B7C UTILITY SUPPLY
BRICK		SEWER	BALTIMORE BRICK CO.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: [Signature] 9-23-85
 Chief, Bureau of Engineering: [Signature] 9-23-85
 Chief, Land Development Div.: [Signature] 9-23-85
 Chief, Bureau of Utilities: [Signature] 9-23-85

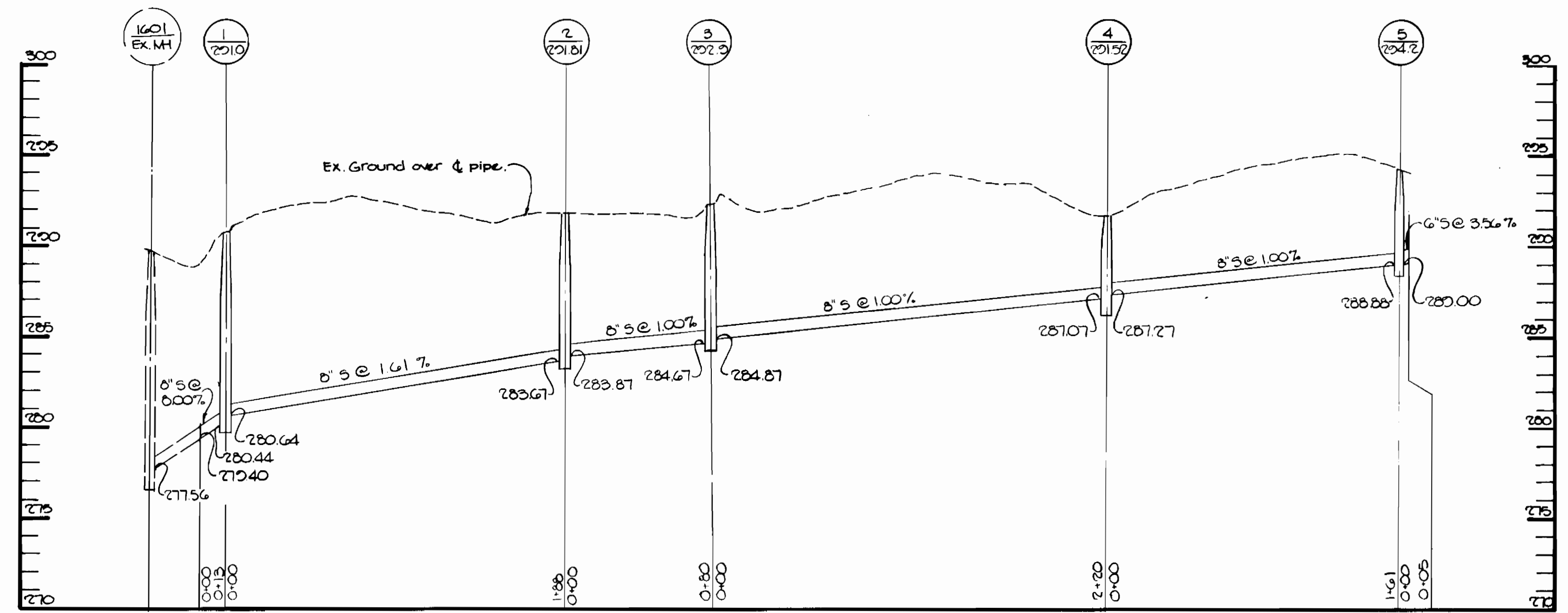
THE RIEMER GROUP INC.
 3105 HEALTH PARK DRIVE
 ELLICOTT CITY, MARYLAND 21043
 Arthur E. Muegge

DES: D.A.M.
 DRN: J.C.J.
 CHK:
 DATE: 9-20-85

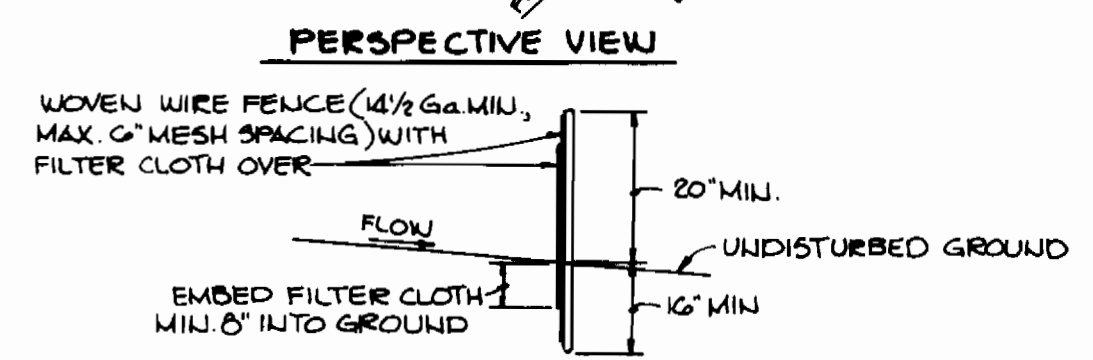
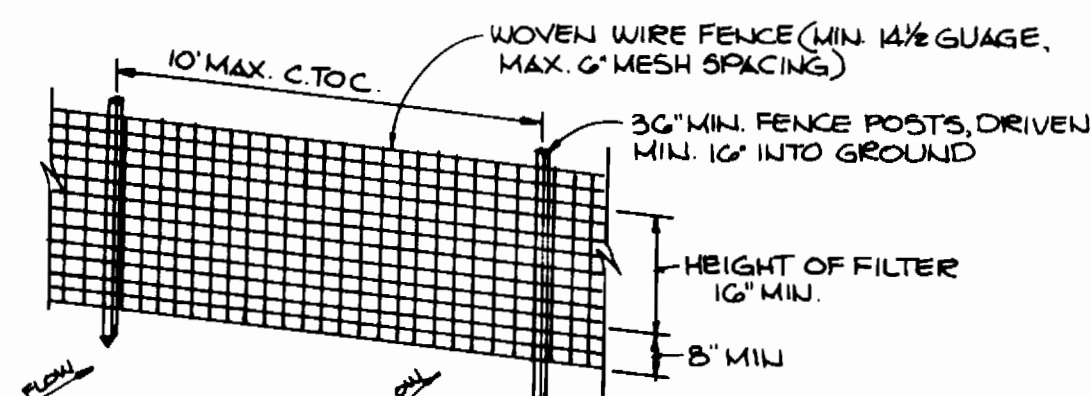
PLAN OF A WATER AND SEWER MAIN

WOODMERE VILLAGE OF OWEN BROWN SEC. 3 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-1406-D

SCALE AS SHOWN
 SHEET 1 OF 2



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

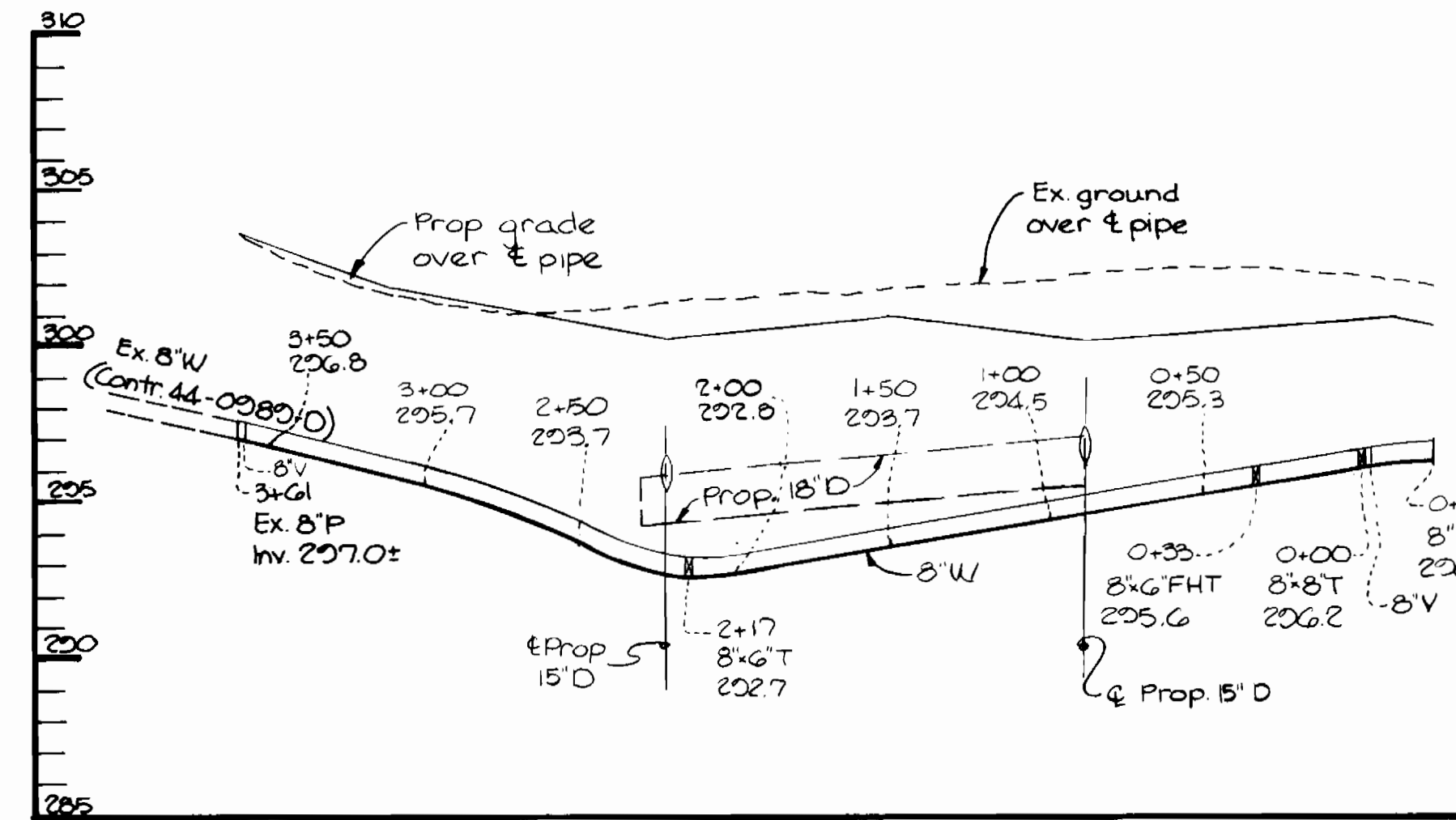


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

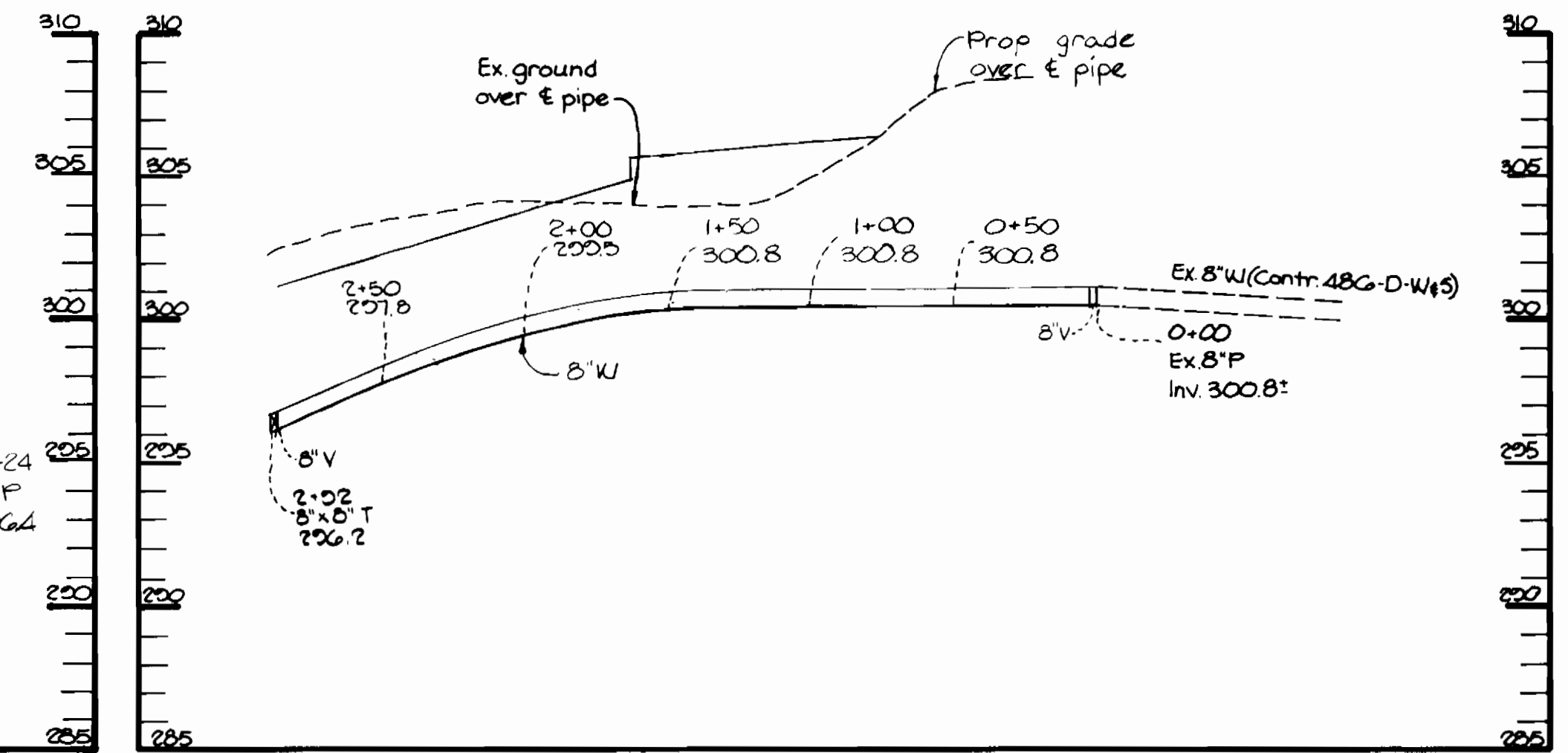
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
-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

POST: STEEL EITHER T OR U TYPE OR 2" HARDWOOD.
FENCE: WOVEN WIRE, 1 1/2 GA., 6" MAX. MESH OPENING.
FILTER CLOTH: FILTER X, MIRAF 100X, STABILINKA T140N OR EQUAL.
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE
NO SCALE



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



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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>Robert M. Benin</i> 9-23-85 Chief, Bureau of Utilities: <i>Robert M. Benin</i> 9-23-85	THE RIEMER GROUP INC. 3105 HEALTH PARK DRIVE ELLICOTT CITY, MARYLAND 21043 Chief, Bureau of Engineering: <i>Arthur E. Muegge</i> 9-23-85 Chief, Land Development Division: <i>Arthur E. Muegge</i> 9-23-85		DES: D.A.M.		WATER AND SEWER PROFILES	WOODMERE VILLAGE OF OWEN BROWN SEC. 3 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-1406-D	SCALE AS SHOWN SHEET 2 OF 2
			DRN: J.C.J.				

AS-BUILT