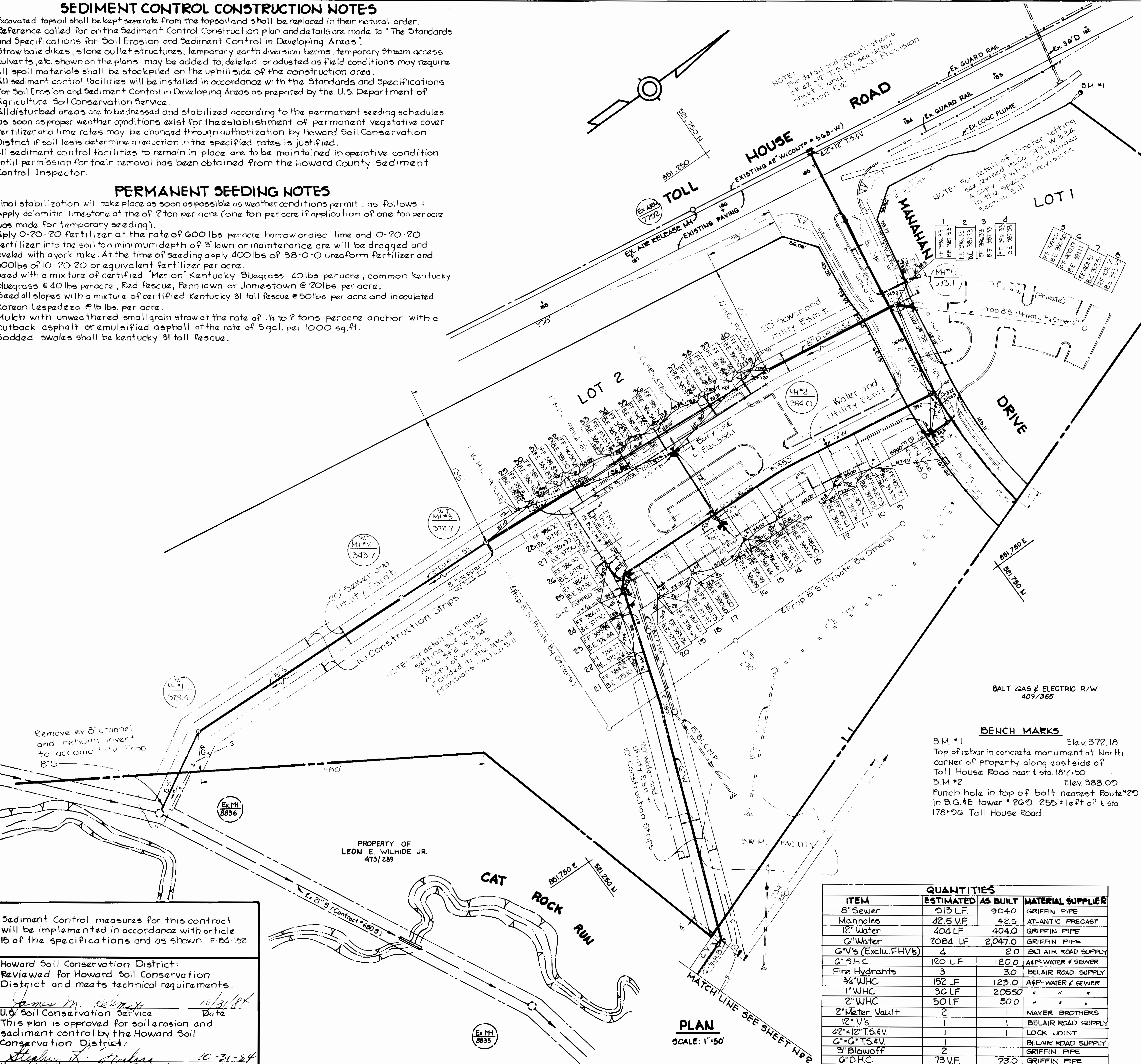
SEDIMENT CONTROL CONSTRUCTION NOTES

1. Excavated topsoil shall be kept separate from the topsoil and shall be replaced in their natural order.
2. Reference called for on the Sediment Control Construction plan and details are made to "The Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas".
3. Straw bale dikes, stone outlet structures, temporary earth diversion berms, temporary Stream access culverts, etc. shown on the plans may be added to, deleted, or adusted as field conditions may require
4. All spoil materials shall be stockpiled on the uphill side of the construction area.
5. All sediment control facilities will be installed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas as prepared by the U.S. Department of Agriculture Soil Conservation Service.
6. All disturbed areas are to be dressed and stabilized according to the permanent seeding schedules as soon as proper weather conditions exist for the establishment of permanent vegetative cover.
7. Fertilizer and lime rates may be changed through authorization by Howard Soil Conservation District if soil tests determine a reduction in the specified rates is justified.
8. All sediment control facilities to remain in place are to be maintained in operative condition untill permission for their removal has been obtained from the Howard County Sediment Control Inspector.

PERMANENT SEEDING NOTES

Final stabilization will take place as soon as possible as weather conditions permit, as follows:

1. Apply dolomitic limestone at the of 2 ton per acre (one ton per acre if application of one ton per acre was made for temporary seeding).
2. Aply 0-20-20 fertilizer at the rate of 600 lbs. per acre harrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 3" lawn or maintenance are will be dragged and leveled with a york rake. At the time of seeding apply 400 lbs of 38-0-0 ureaform fertilizer and 500 lbs of 10-20-20 or equivalent fertilizer per acre.
3. Seed with a mixture of certified "Merion" Kentucky Bluegrass - 40 lbs per acre; common kentucky Bluegrass @ 40 lbs per acre, Red fescue, Penn lawn or Jamestown @ 20 lbs per acre.
4. Seed all slopes with a mixture of certified Kentucky 31 tall fescue @ 50 lbs per acre and inoculated Korean Lespedeza @ 15 lbs. per acre.
5. Mulch with unweathered small grain straw at the rate of 1½ to 2 tons per acre anchor with a cutback asphalt or emulsified asphalt at the rate of 5 gal. per 1000 sq. ft.
6. Sodded swales shall be kentucky 31 tall fescue.



Sediment Control measures for this contract will be implemented in accordance with article 15 of the specifications and as shown F 84-152

Howard Soil Conservation District:
Reviewed for Howard Soil Conservation District and meets technical requirements.

James M. [signature] 10/31/84
U.S. Soil Conservation Service — Date

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

[signature] 10-31-84
Howard Soil Conservation District — Date

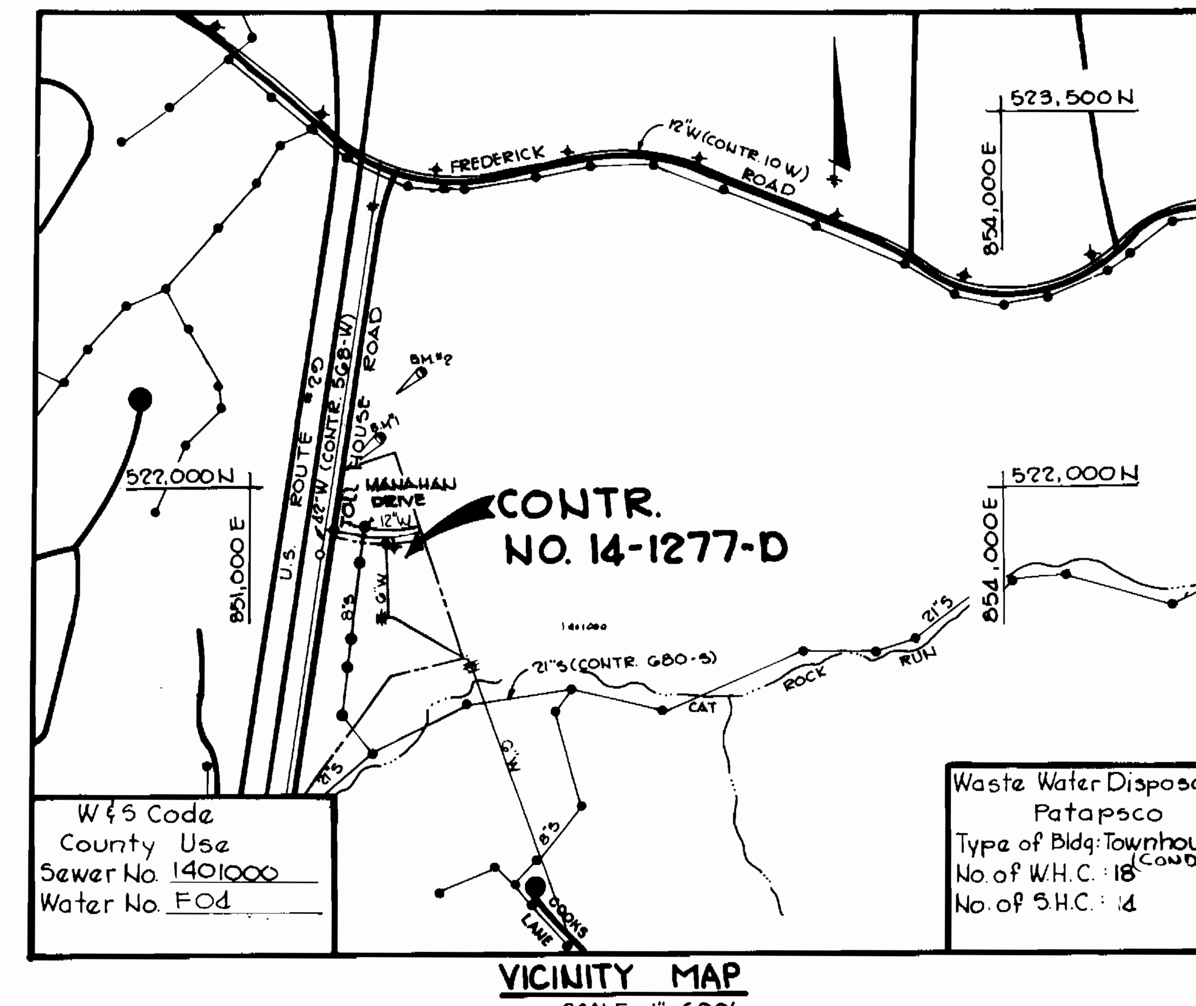
BENCH MARKS

B.M. #1 Elev. 372.18
Top of rebar in concrete monument at North corner of property along east side of Toll House Road near ℄ sta. 182+50

B.M. #2 Elev. 388.09
Punch hole in top of bolt nearest Route #29 in B.G.&E tower #269 255'± left of ℄ sta 178+96 Toll House Road.

QUANTITIES

ITEM	ESTIMATED	AS BUILT	MATERIAL SUPPLIER
8" Sewer	913 L.F.	904.0	GRIFFIN PIPE
Manholes	42.5 V.F.	42.5	ATLANTIC PRECAST
12" Water	404 LF	404.0	GRIFFIN PIPE
6" Water	2084 LF	2,047.0	GRIFFIN PIPE
6" V's (Exclu. FHV's)	4	2.0	BELAIR ROAD SUPPLY
6" S.H.C.	120 LF	120.0	A&P-WATER & SEWER
Fire Hydrants	3	3.0	BELAIR ROAD SUPPLY
3/4" WHC	152 LF	123.0	A&P-WATER & SEWER
1" WHC	36 LF	205.50	" " "
2" WHC	50 LF	50.0	" " "
2" Meter Vault	2	1	MAYER BROTHERS
12" V's	1	1	BELAIR ROAD SUPPLY
42"×12" T.S.&V.	1	1	LOCK JOINT
6"×6" T.S.&V.	1		BELAIR ROAD SUPPLY
3" Blowoff	2		GRIFFIN PIPE
6" D.H.C.	73 V.F.	73.0	GRIFFIN PIPE



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". 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 inncurred 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 IV, Standard Specifications and Details for Construction. 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 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 five working days before starting work shown on these plans:

State Highway Administration	531-5533
Baltimore Gas & Electric Co. - Contractor Services	561-2585
Baltimore Gas & Electric Co. - Under Ground Damage Control	234-5621
Baltimore Gas & Electric Co - Trouble Shooting	298-9013
Miss Utility	1-559-0100
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	992-2366

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 3½' 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 hydrants shall be set to the elevations shown on the drawings. All fire hydrants shall be strapped and buttressed with concrete in accordance with standard details. Soil around the fire hydrant to be compacted in accordance with Section 1005 & 1008 of the General Requirements for Water and Sewer.
17. All water house connections shall be for an inside meter setting unless otherwise shown.
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 G 5.52 Volume IV. Where watertight manhole from and cover is used, set top of frame 1'-6" above finished grade.
25. House(s) with the symbol "C.N.S." indicates the cellar can not be served.
26. All water house connections shall have a minimum vertical clearance of 12" above 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.
30. Contact Bureau of Utilities 72 hours prior to making connection of prop. 12" W. to ex. 42" W. in Toll House Road in accordance to section 5.07 of the special provisions.
31. All work, materials and fittings for the connection of the prop. 12" W. to the ex. 42" W in Toll House Road shall be in accordance with section 5.11 of the special provision and as shown on these plans.
32. Watermain and water house connection line must have a minimum of one foot separation from the sanitary sewer and sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[signature] 11-2-84 — DIRECTOR OF PUBLIC WORKS, DATE
[signature] 11-2-84 — CHIEF, BUREAU OF ENGINEERING, DATE
[signature] 11-2-84 — CHIEF, LAND DEVELOPMENT DIV., DATE
[signature] 11-2-84 — CHIEF, BUREAU OF UTILITIES, DATE

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

ARTHUR E. MUEGGE

DES: J.K.B.
DRN: T.J.M.
CHK:
DATE: 8-1-84

BY	NO.	REVISION	DATE

PLAN OF A
WATER AND SEWER MAIN

600' SCALE MAP NO. 24 BLOCK NO.

TOLL HOUSE SECTION I LOT 1 & 2
ELECTION DISTRICT NO. 2
HOWARD COUNTY MARYLAND
CONTRACT NO. 14-1277-D

SCALE AS SHOWN
SHEET 1 OF 5

AS-BUILT 8-9-89

Oct 9, 1984

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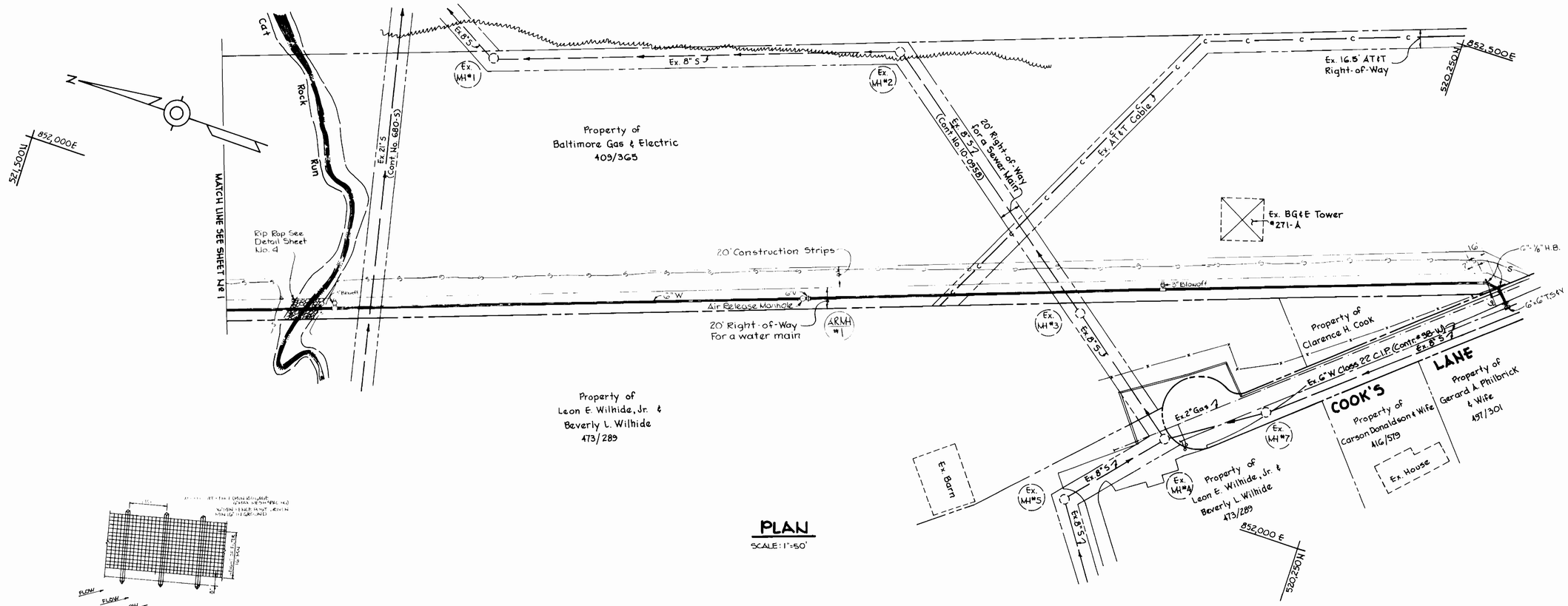
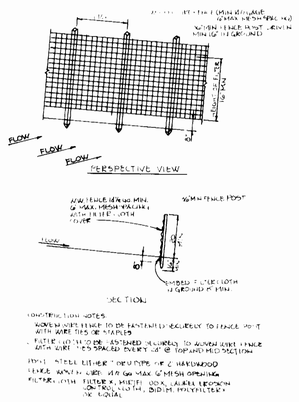


PLAN

SCALE: 1"=50'

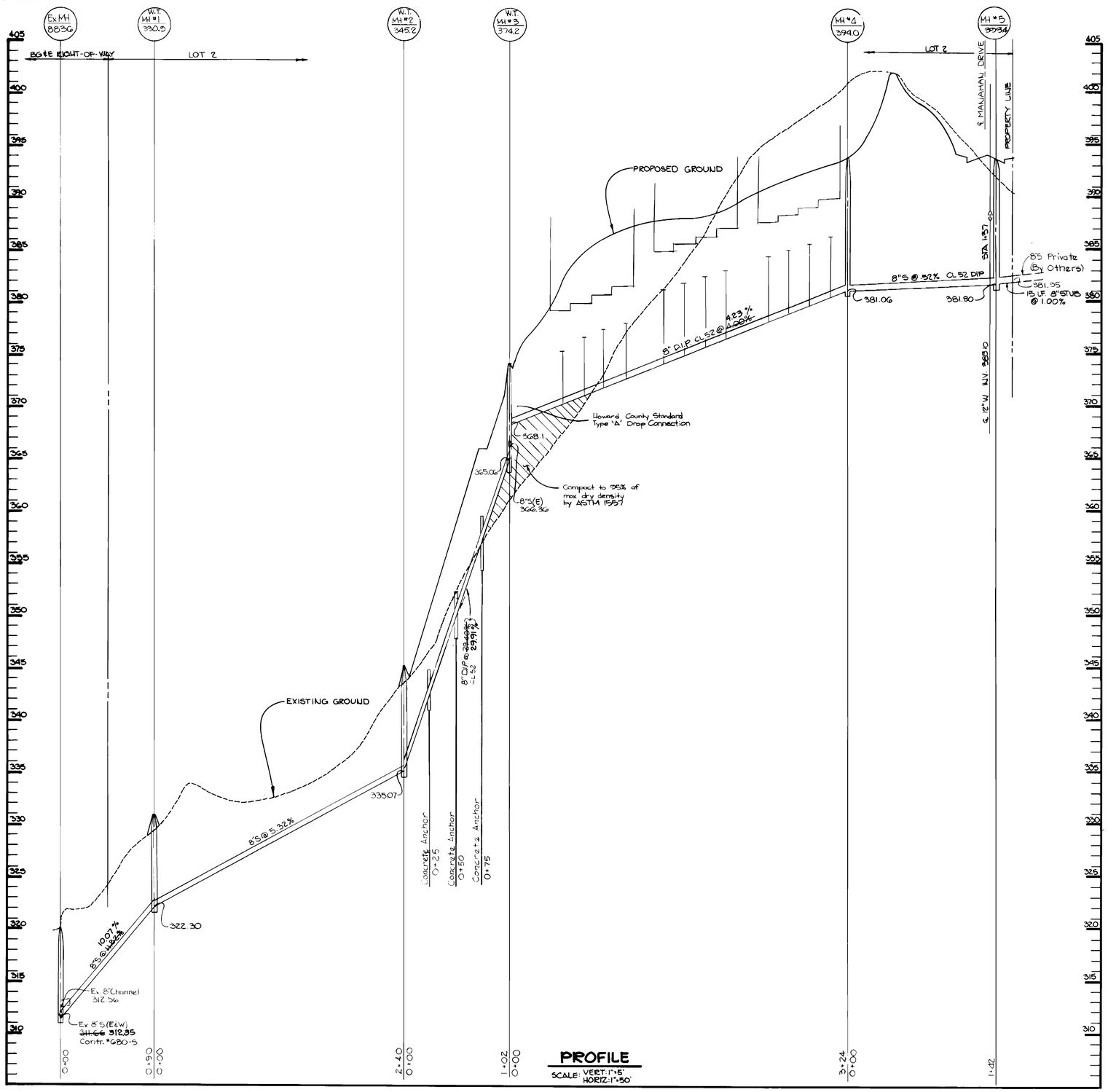


SILT FENCE DETAIL

NO SCALE

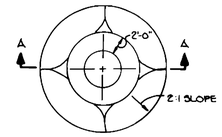
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	THE RIEMER GROUP INC. 3105 HEALTH PARK DRIVE ELLICOTT CITY, MARYLAND 21043		DES: J.K.B DRN: T.J.M. CHK: DATE: 8/11/84	BY	NO.	REVISION	DATE	PLAN OF A WATER AND SEWER MAIN	TOLL HOUSE SECTION I LOTS 1&2 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND CONTRACT NO. 14-1277-D	SCALE AS SHOWN SHEET 2 OF 5
DIRECTOR OF PUBLIC WORKS DATE CHIEF, LAND DEVELOPMENT DIV. DATE	CHIEF, BUREAU OF ENGINEERING DATE CHIEF, BUREAU OF UTILITIES 11-2-84 DATE	ARTHUR E. MUEGGE						600' SCALE MAP NO 24 BLOCK NO.		

AS-BUILT 8-9-89

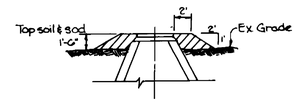


PROFILE

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



PLAN



SECTION A-A

Notes:

1) All manhole frame and covers shall be flush with grade except when shown on Profile to be set higher than grade.
2) Manhole frame and covers to be set higher than grade shall be set in accordance with this detail.
3) Manhole frames and covers to be set higher than 1'-6" shall be set as noted on the Profile and in accordance with this Detail.

FILL AROUND MH's 1,2 & 3

NO SCALE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE
CHIEF, BUREAU OF ENGINEERING — DATE
CHIEF, LAND DEVELOPMENT DIV. — DATE
CHIEF, BUREAU OF UTILITIES — DATE

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

ARTHUR E. MUEGGE

DES: J.D.P.
DRN: T.J.M.
CHK:
DATE: 8/11/84

BY	NO.	REVISION	DATE
W.D.S.	1	REVISED SLOPE BETWEEN EX. MH & MH 1, PROVIDE ADDITIONAL ANCHORS	2/4/85

PROFILE OF A SEWER MAIN

600' SCALE MAP NO. 24 BLOCK NO.

TOLL HOUSE SECTION 1 LOTS 1&2
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
CONTRACT NO. 14-1277-D

SCALE AS SHOWN

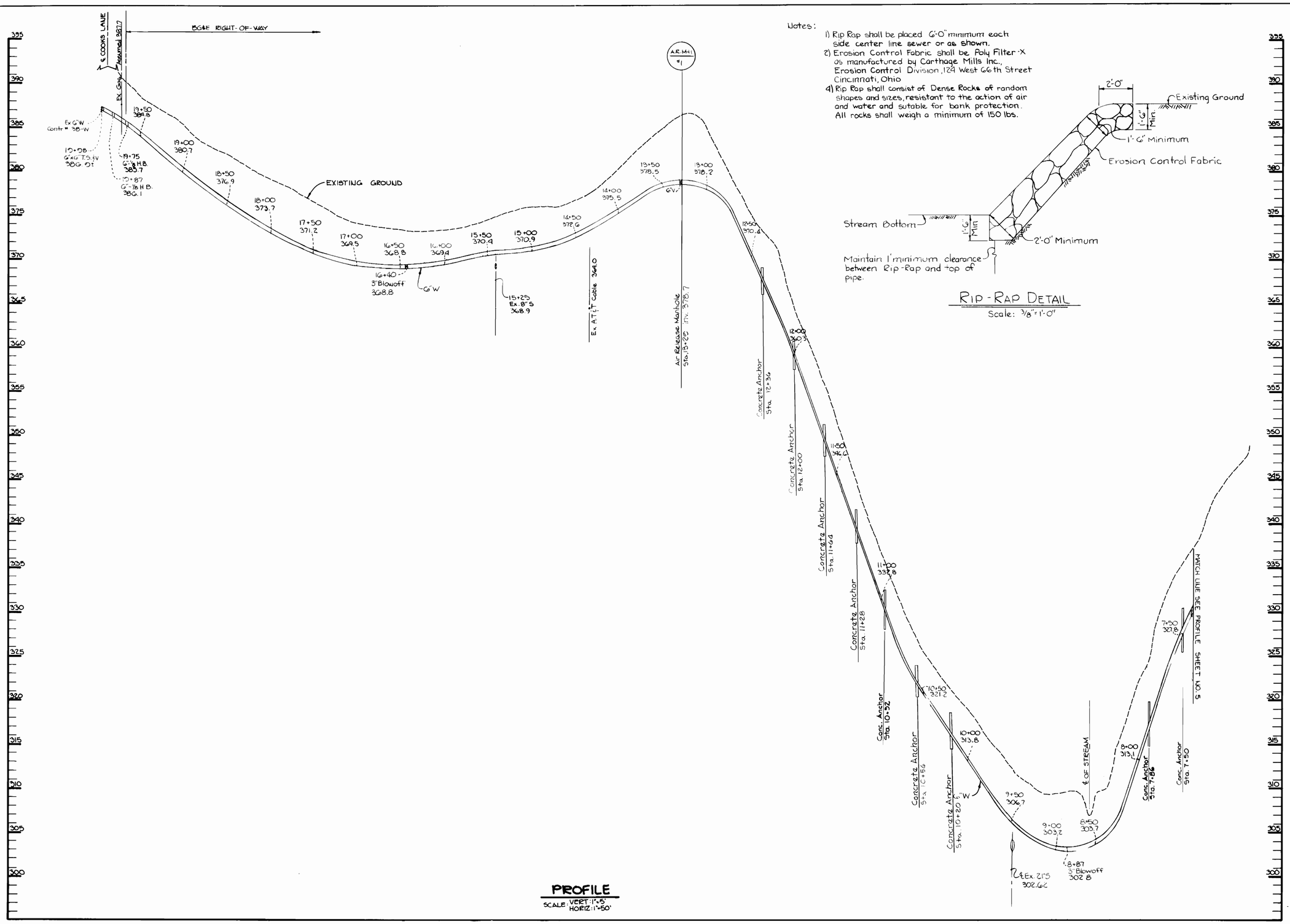
SHEET 3 OF 5

AS-BUILT 8-9-89

Sept 25, 1984

Notes:

1) Rip Rap shall be placed 6'-0" minimum each side center line sewer or as shown.
2) Erosion Control Fabric shall be Poly Filter-X as manufactured by Carthage Mills Inc., Erosion Control Division, 124 West 66th Street Cincinnati, Ohio
4) Rip Rap shall consist of Dense Rocks of random shapes and sizes, resistant to the action of air and water and suitable for bank protection. All rocks shall weigh a minimum of 150 lbs.



PROFILE

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

RIP-RAP DETAIL

Scale: 3/8"=1'-0"

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 11-2-84
CHIEF, BUREAU OF ENGINEERING — DATE 11-2-84
CHIEF, LAND DEVELOPMENT DIV. — DATE 11-2-84
CHIEF, BUREAU OF UTILITIES — DATE 11-2-84

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

ARTHUR E. MUEGGE

DES: JDP
DRN: TJM
CHK:
DATE: 8/1/84

BY	NO.	REVISION	DATE
W.D.S.	1	Provide Additional Concrete Anchors	

PROFILE OF A WATER MAIN

600' SCALE MAP NO. 24 BLOCK NO.

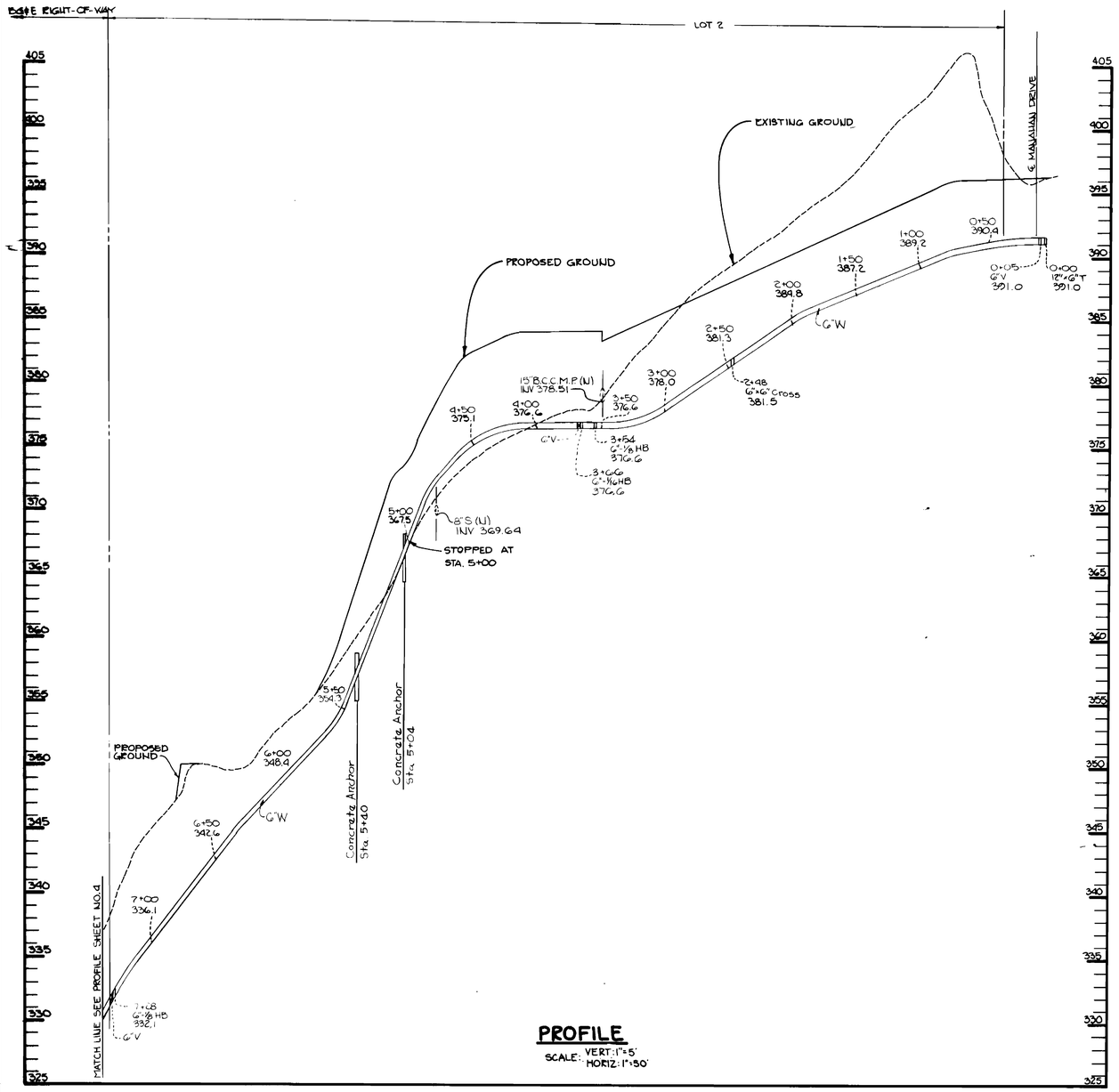
TOLL HOUSE SECTION 1 LOTS 1&2
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
CONTRACT NO. 14-1277-D

SCALE AS SHOWN

SHEET 4 OF 5

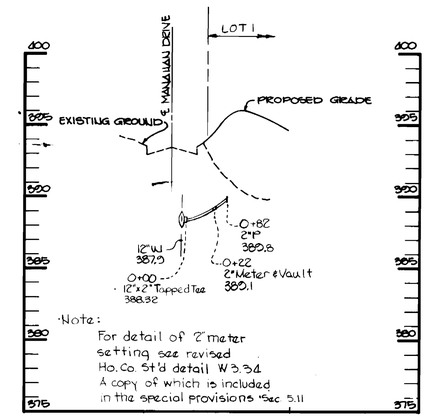
AS-BUILT 8-9-89

Sept 25, 1984



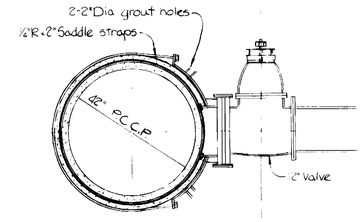
PROFILE

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



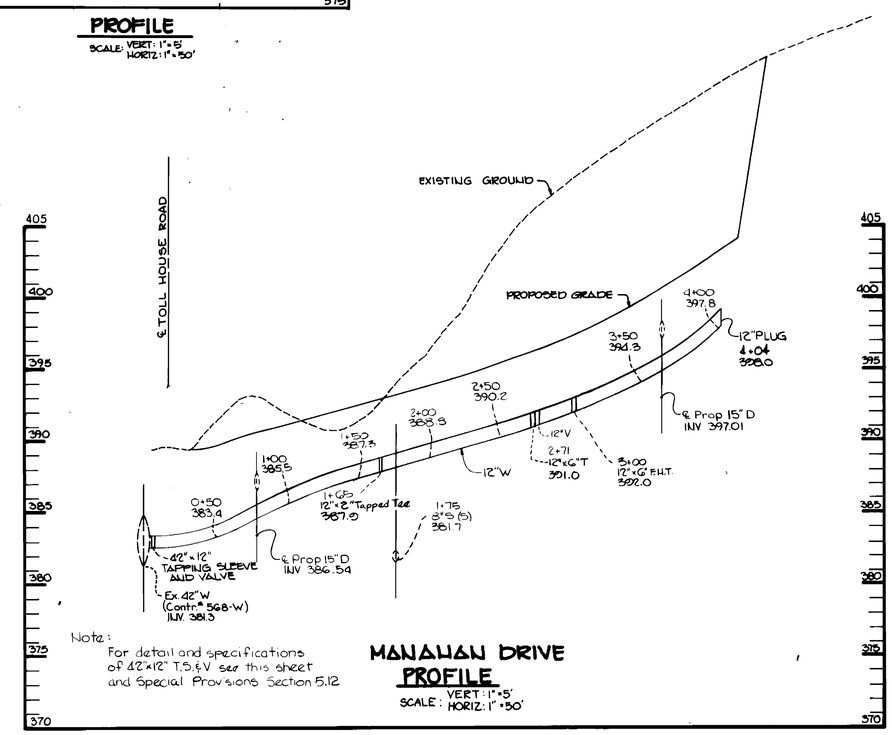
PROFILE

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



42" x 12 TAPPING SLEEVE AND VALVE DETAIL

NO SCALE



Note:
For detail and specifications of 42"x12" T.S.&V see this sheet and Special Provisions Section 5.12

MANAHAN DRIVE PROFILE

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 11-2-84
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/84
CHIEF, LAND DEVELOPMENT DIV. — DATE 11-2-84
CHIEF, BUREAU OF UTILITIES — DATE 11-2-84

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

ARTHUR E. MUEGGE

DES: J.D.P				
DRN: T.J.M.				
CHK:				
DATE: 8/1/84	W.D.S.	1	Provide Additional Concrete Anchors	2/4/85
	BY	NO.	REVISION	DATE

PROFILES OF A WATER MAIN

600' SCALE MAP NO. 25 BLOCK NO.

TOLL HOUSE SECTION 1 LOTS 1 & 2
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
CONTRACT NO. 14-1277-D

SCALE AS SHOWN

SHEET 5 OF 5

AS-BUILT 8-9-89

Oct. 3, 1984