

WATER AND SEWER EXTENSIONS CLARK'S CROSSING

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3464-D

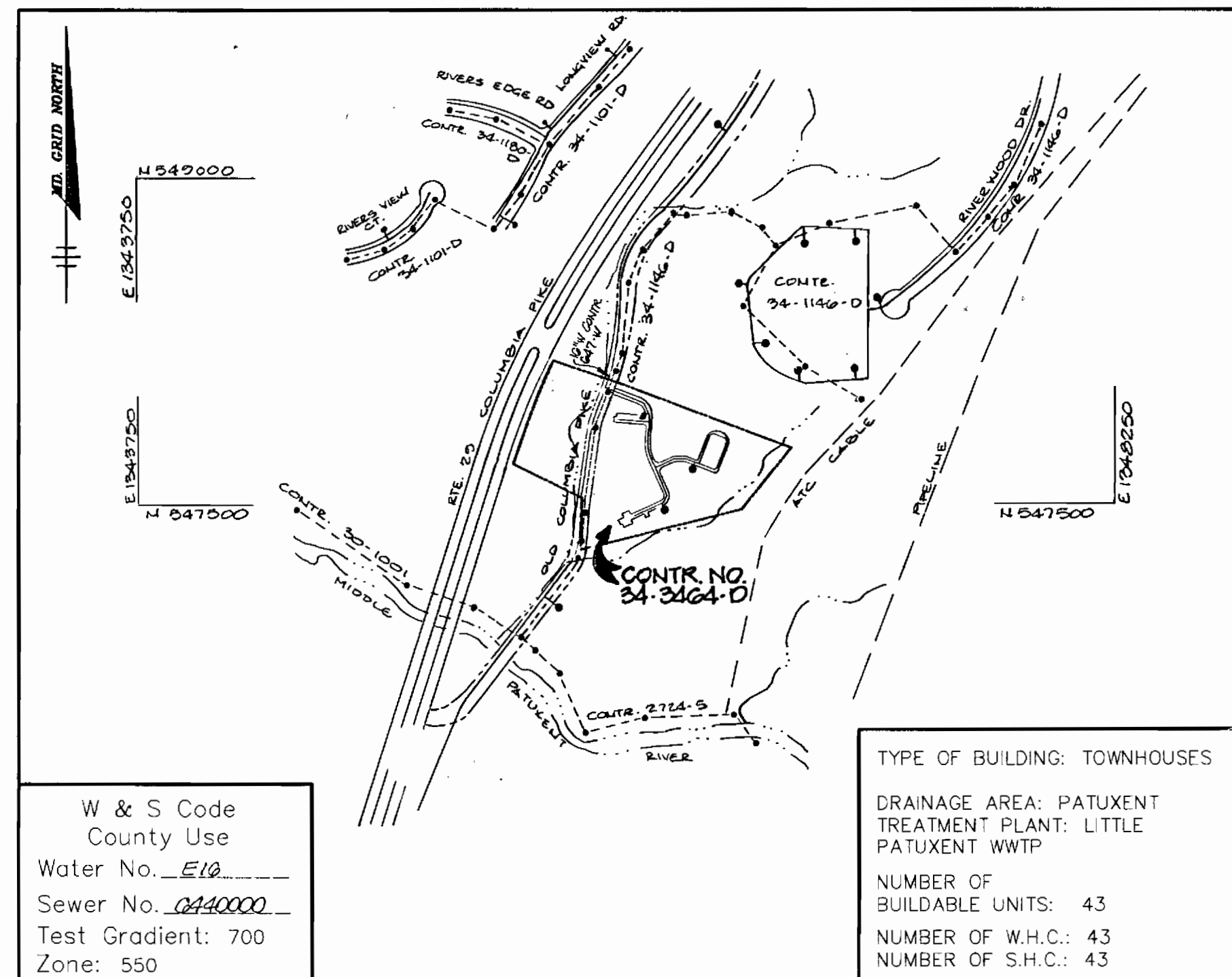
SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN OF WATER AND SEWER MAINS
3	PROFILES OF WATER AND SEWER MAINS

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 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.
6. 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.
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 utility companies 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	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-9088
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	313-4900
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. 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 elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 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 plans or in specifications.
18. All sewer mains shall be P.V.C. unless otherwise noted.
19. All manholes shall be 4'-0" inside diameter unless otherwise noted.
20. Manholes shown with 12" and 16" walls are for brick manholes only.
21. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail 05-52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
22. Manholes can be either brick or precast concrete structures.
23. Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
24. The fire hydrants shall be installed as per standard detail W.1.11.
25. Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
26. W.H.C.'s (ball valve & service box) & S.H.O.'s (cleanout) to be located minimum 7' FROM FACE OF CURB.

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	888 LF	904 L.F.	CL 52	U.S. PIPE / BRS
6" WATER	810 LF	809 "	" "	" " / " "
4" WATER	22 LF	28 "	" "	" " / " "
1 1/2" WHC	388 LF	229 "	SOFT "K"	HOWELL METALS / BRS
1" WHC	281 LF	503 "	" "	HOWELL METALS / BRS
8" SEWER	31 LF	31 "	SDR 35	J.M. WARD / BRS
SEWER MANHOLES	1 EA.	1 EA.	CONCRETE	ATLANTIC
FIRE HYDRANTS	3 EA.	3 EA.	" "	MUEBEE / BRS
8" VALVES	2 EA.	2 EA.	GATE	" / "
6" VALVES	5 EA.	5 EA.	" "	" / "
4" VALVES	1 EA.	1 EA.	" "	" / "
8"x1/16 HB	3 EA.	3 EA.	D.I.P.	U.S. PIPE / "
8"x1/8 HB	9 EA.	3 EA.	" "	" / "
8"x8" TEE	1 EA.	1 EA.	" "	" / "
8"x6" TEE	4 EA.	4 EA.	" "	" / "
6"x6" TEE	1 EA.	1 EA.	" "	" / "
6"x4" TEE	1 EA.	1 EA.	" "	" / "
8"x6" REDUCER	2 EA.	2 EA.	" "	" / "
4"x3" REDUCER	1 EA.	1 EA.	" "	GRIFFIN / "
3" BLOWOFF	1 EA.	1 EA.	" "	KUPFBIB / "
TAPPING SLEEVE & VALVE	1 EA.	1 EA.	D.I.P.	MUEBEE / "
AIR RELEASE MH	1 EA.	1 EA.	CONCRETE	ATLANTIC
6" x 1/8 HB	6 EA.	6 EA.	D.I.P.	U.S. PIPE / BRS
NAME OF UTILITY CONTRACTOR				
		CHECKBOX		
		AS-BUILT DATE		
SURVEY AND DRAFTING DIVISION				



VICINITY MAP
SCALE: 1"=600'

BENCHMARKS

BM #1 ELEV. 395.911
 HO. CO MON. 41C2
 STAMPED CONCRETE MONUMENT
 MARYLAND ROUTE 32 EAST OF ROUTE 29
 NAD83 N 551,616.403 E 1,348,104.214

BM #2 ELEV. 364.347
 HO. CO MON. 42A3
 STAMPED CONCRETE MONUMENT
 MARYLAND ROUTE 32 WEST OF ROUTE 29
 NAD83 N 550,257.684 E 1,350,806.431

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-95-123

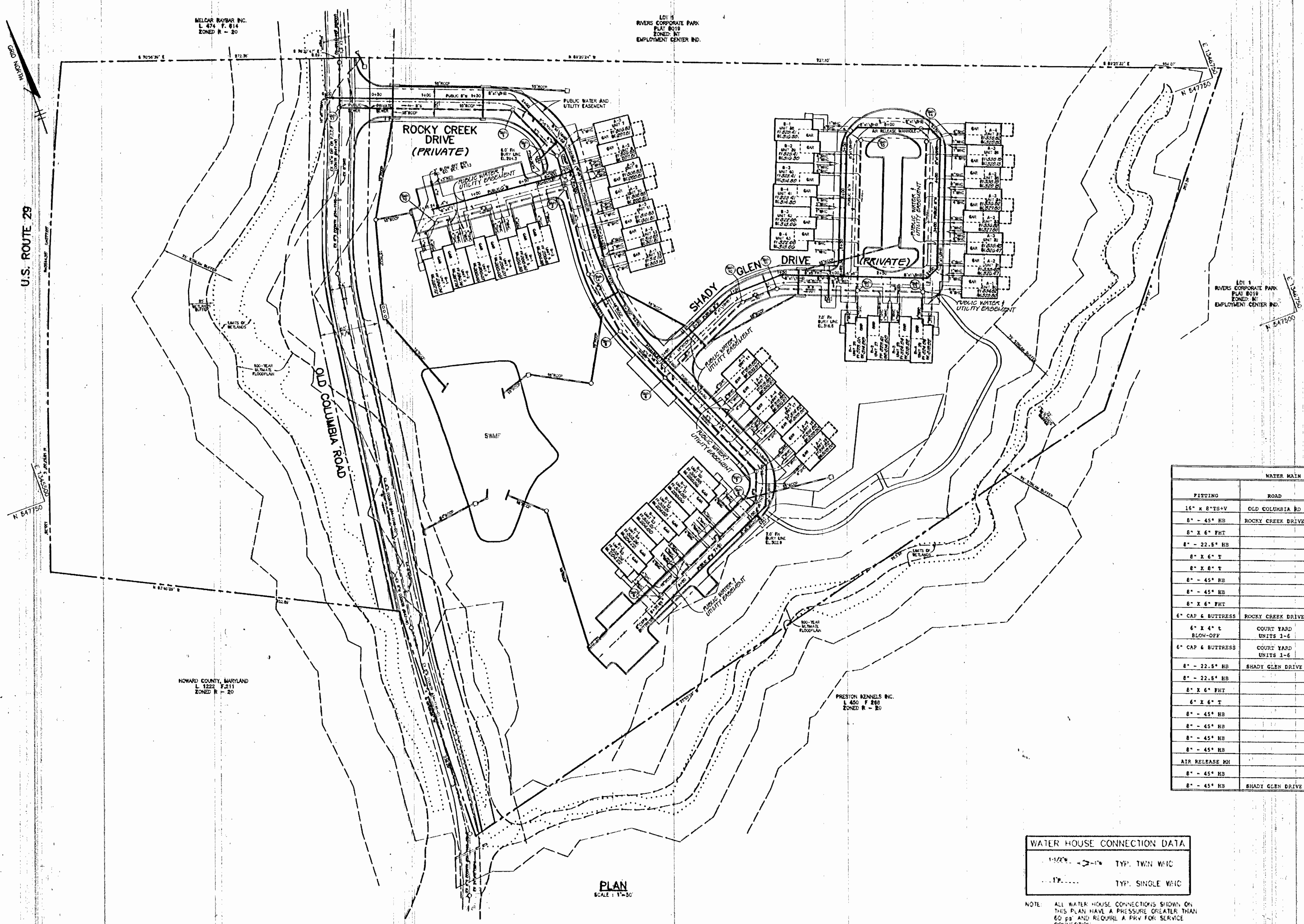
Review for Howard Soil Conservation District and meets technical requirements.

Patricia Engle / *JPR* 2/24/96
 NATURAL RESOURCES CONSERVATION SERVICE

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

John P. Robertson / *JPR* 2/24/96
 HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert Bennett</i> 2-15-96 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>John P. Robertson</i> 2/24/96 CHIEF, DEVELOPMENT ENGINEERING DIVISION	RIEMER MUEGGE & ASSOCIATES, INC. Planners • Engineers • Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, MD 21046 410-997-8900 FAX: 410-997-9282 HOCO/00200 WSTITLE.DWG		DES: AAP DRN: BRD CHK: RDA / AAP DATE: 11/1/00	TITLE SHEET	CLARK'S CROSSING UNITS 1 THRU 43 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT 34-3464-D	SCALE AS SHOWN SHEET 1 OF 3
600' SCALE MAP NO. 41 BLOCK NO. 12						AS-BUILTS 4/4/97	



WATER MAIN FITTING LOCATION SCHEDULE				
FITTING	ROAD	ROAD CL STATION	ROAD CL OFFSET	REMARKS
15" x 8" TS+V	OLD COLUMBIA RD	10+03	13.0' LT	
8" - 45" HB	ROCKY CREEK DRIVE	1+76	7.0' LT	
8" x 6" PHT		2+31	3.0' LT	
8" - 22.5" HB		2+40	5.0' LT	
8" x 6" T		2+64	7.0' LT	
8" x 8" T		4+82	4.0' LT	
8" - 45" HB		6+29	7.0' LT	
8" - 45" HB		6+62	10.0' LT	
8" x 6" PHT		6+72	8.0' LT	
6" CAP & BUTTRESS	ROCKY CREEK DRIVE	8+09	8.0' LT	
6" x 4" t BLOW-OFF	COURT YARD UNITS 1-6	1+34	7.0' RT	STD DET W4-13
6" CAP & BUTTRESS	COURT YARD UNITS 1-6	1+40	7.0' RT	
8" - 22.5" HB	SHADY GLEN DRIVE	0+97	8.0' LT	
8" - 22.5" HB		1+48	8.0' LT	
8" x 6" PHT		1+96	7.0' LT	
6" x 6" T		2+10	7.0' LT	
8" - 45" HB		2+95	7.0' LT	
8" - 45" HB		3+14	7.0' RT	
8" - 45" HB		4+41	10.0' RT	
8" - 45" HB		4+50	7.0' RT	
AIR RELEASE MH		4+57	2.0' RT	
8" - 45" HB		5+21	7.0' RT	
8" - 45" HB	SHADY GLEN DRIVE	5+30	10.0' RT	

WATER HOUSE CONNECTION DATA

TYP. TWIN WHIC
 TYP. SINGLE WHIC

NOTE: ALL WATER HOUSE CONNECTIONS SHOWN ON THIS PLAN HAVE A PRESSURE GREATER THAN 60 ps AND REQUIRE A PRV FOR SERVICE CONNECTION.

PLAN
SCALE 1/4" = 1'-0"

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert S. ...
CHIEF, BUREAU OF UTILITIES
DATE: 2-15-96

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 2/1/96

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410-997-8900 FAX: 410-997-9282
8000/80200 WSI.DWG

STATE OF MARYLAND
JAYKANT D. PAREKH # 19148

DES: AAP
DRN: BRD
CHK: KDA / AAP
DATE: 1-17-00

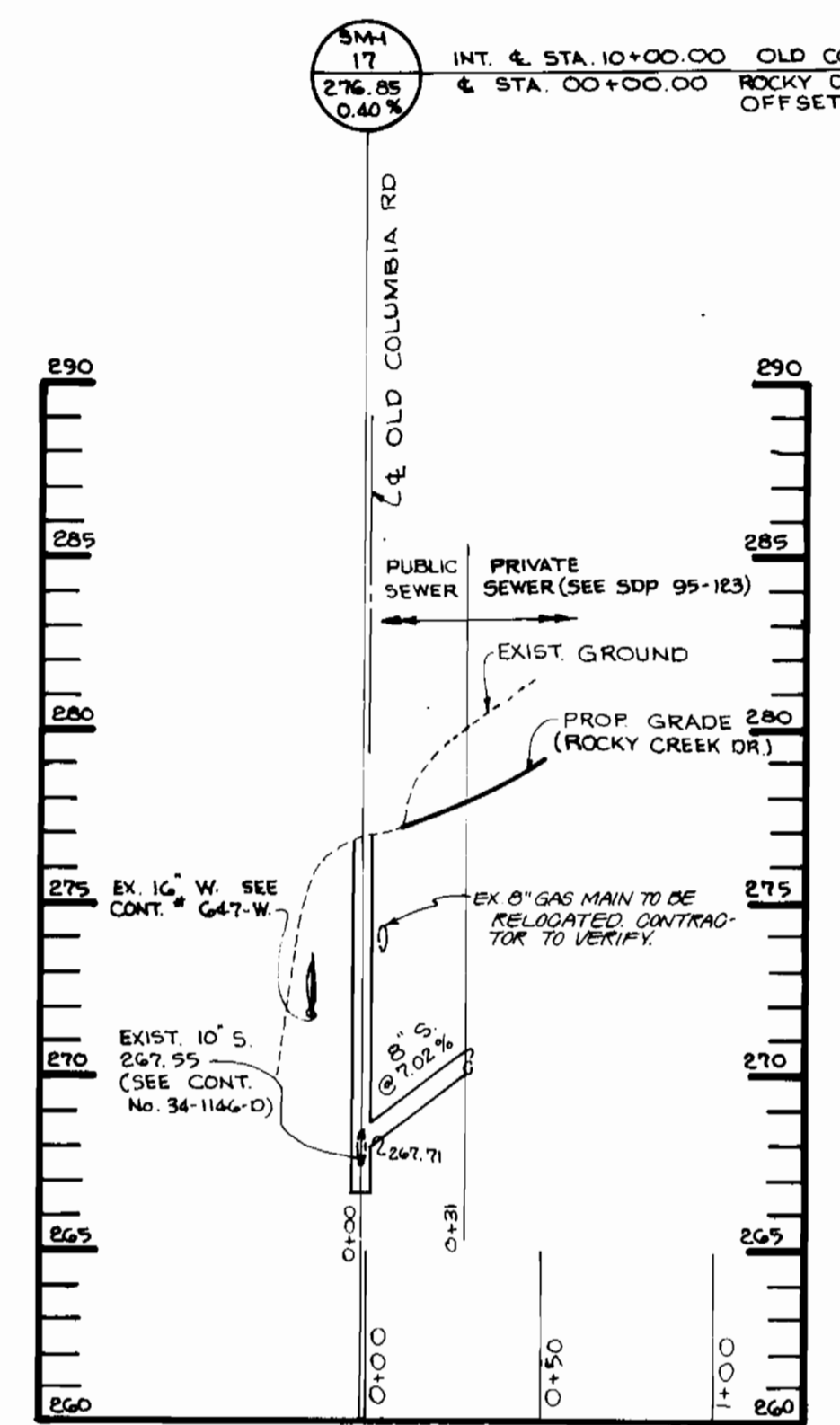
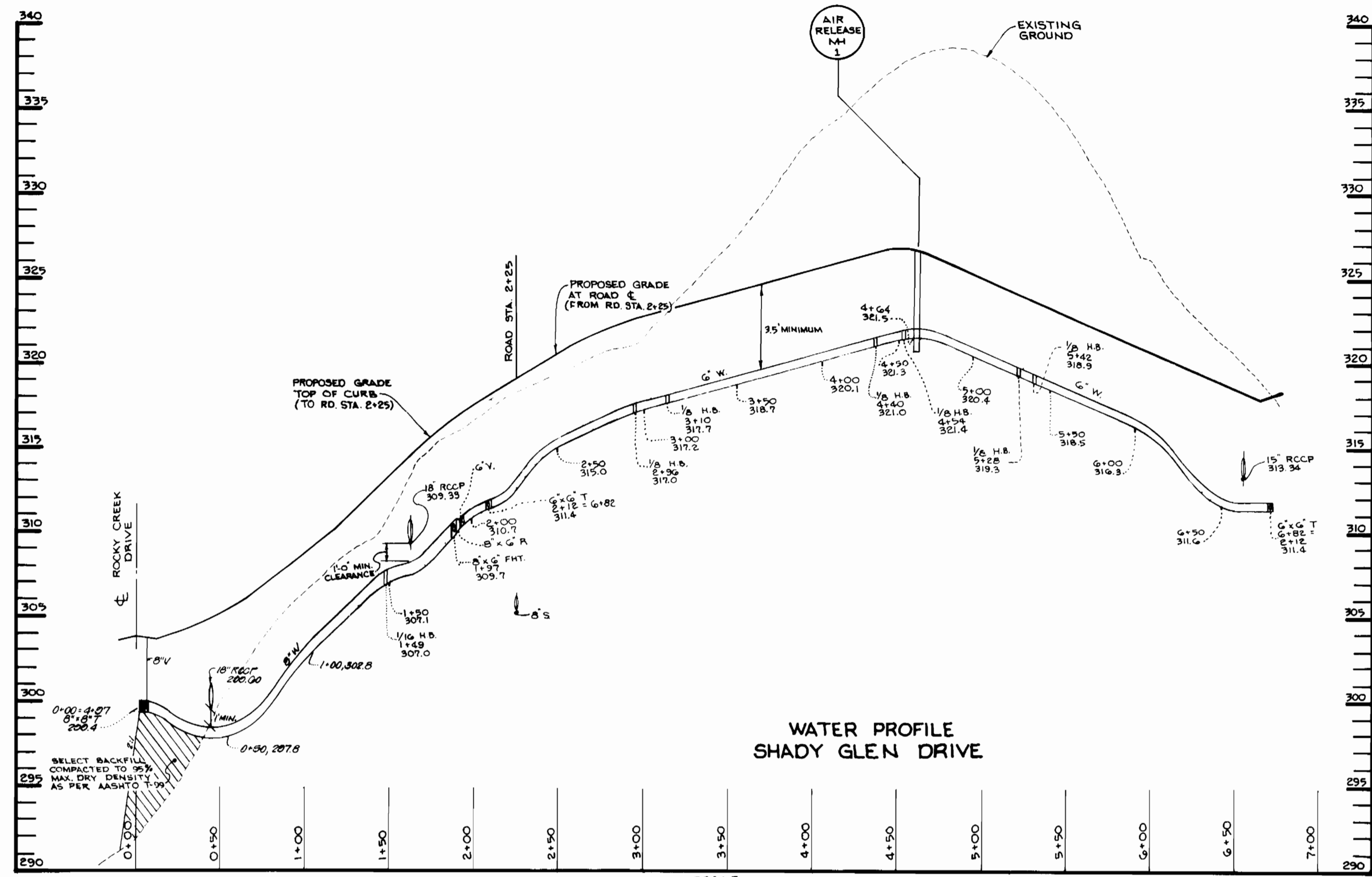
BY NO. REVISION DATE

PLAN OF WATER AND SEWER MAINS

600' SCALE MAP NO. 41 BLOCK NO. 12

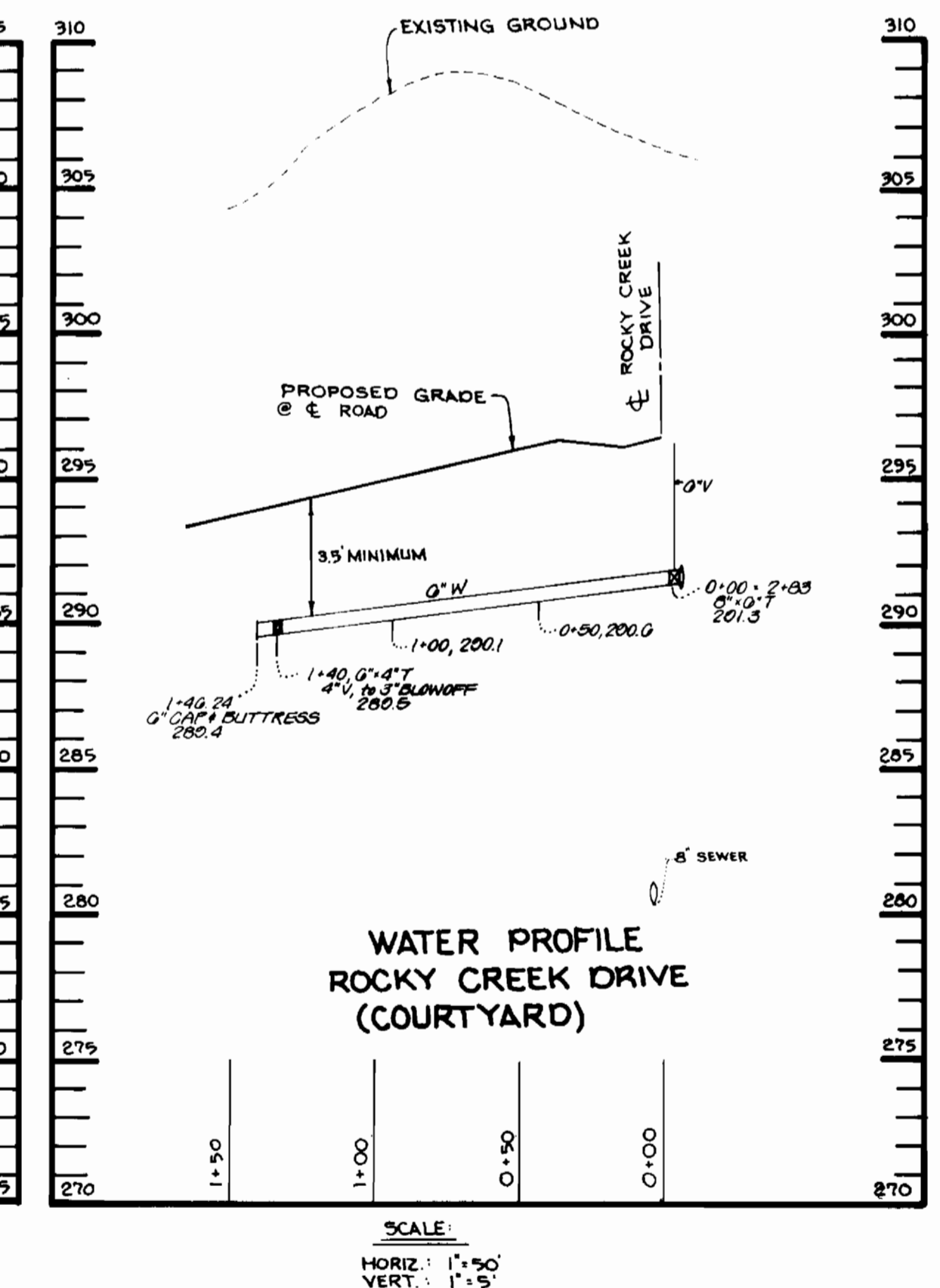
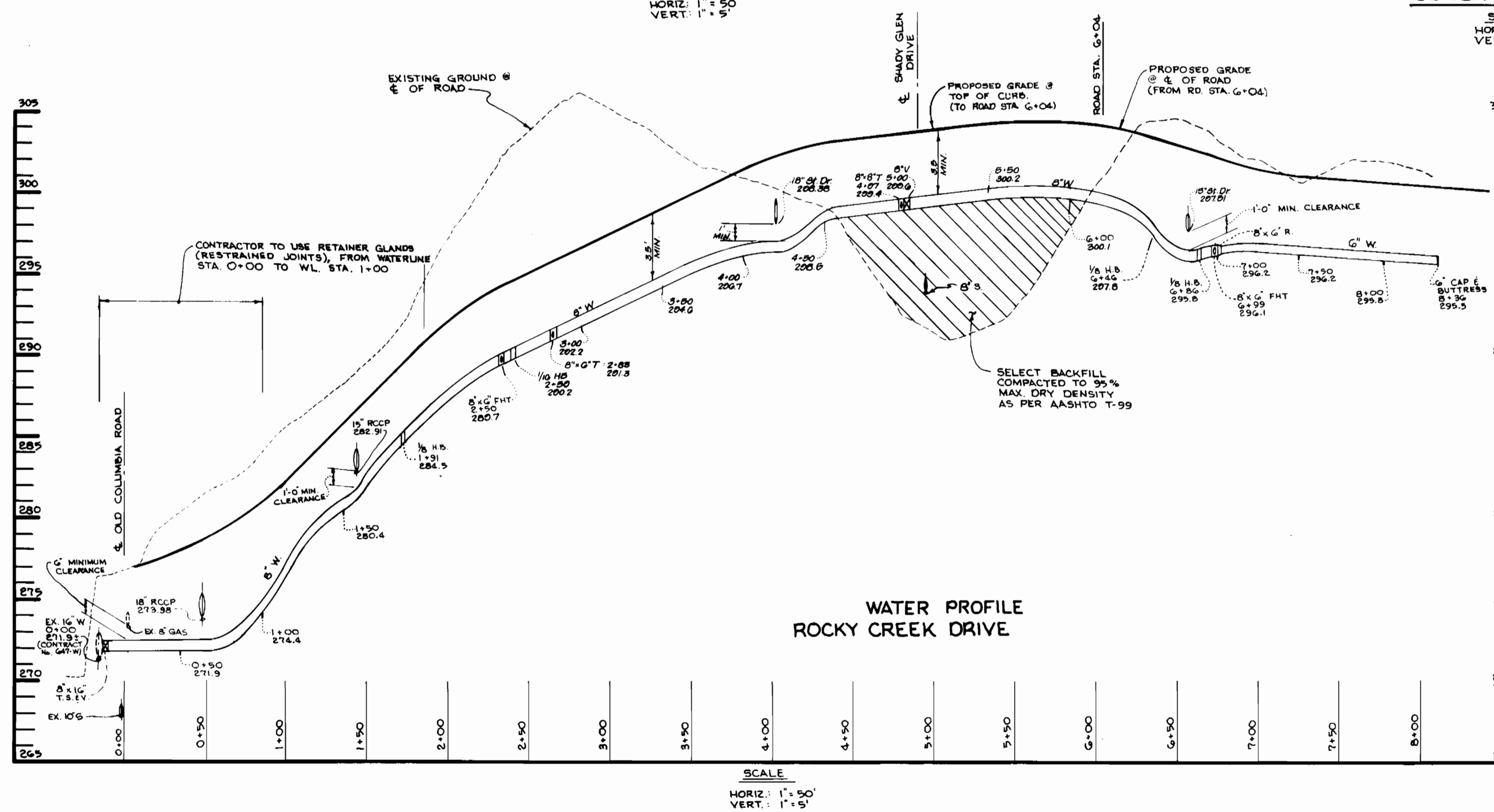
CLARK'S CROSSING
UNITS 1 THRU 43
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 34-3464-D

SCALE AS SHOWN
SHEET 2 OF 3



WATER AS-BUILTS

FROM	TO	DIST.	FROM	TO	DIST.	FROM	TO	DIST.	
MH 2	LOT 7	36'	MH 16	LOT 9	70'	MH 12	LOT 26	15'	
"	" 8	30'	"	" 6	110'	"	" 27	32'	
"	" 9	33'	"	" 4" VALVE @ STA. 2+00	18'	"	" 28	36'	
"	" 7	60'	"	3" BLOW OFF @ STA. 1+40	24'	"	" 29	75'	
"	" 8	33'	MH 9	LOT 25	19'	"	" 13	16'	
"	" 9	32'	"	" 24	38'	"	" 28	30'	
"	" 10	38'	"	" 23	42'	"	" 27	34'	
"	" 11	42'	"	" 22	79'	"	" 26	74'	
"	" 12	80'	"	" 21	84'	"	" 30	32'	
"	" 13	84'	"	" 20	121'	"	" 31	36'	
"	" 4	33'	"	" 8	24'	"	" 32	67'	
"	" 12	36'	"	" 21	55'	"	" 33	71'	
"	" 11	70'	"	" 22	60'	"	" 34	107'	
"	" 10	74'	"	" 23	98'	"	" 35	112'	
"	" 10	19'	"	" 24	102'	"	" 36	150'	
F.H.	" 21	21'	"	" 25	143'	"	" 37	154'	
MH 2	" 15'	15'	"	" 19	53'	"	" 14	37	
"	" 3	15'	"	" 18	55'	"	" 36	28'	
"	" 5	31'	"	" 19	33'	"	" 35	51'	
"	" 4	68'	"	" 7	18	31'	"	" 34	56'
"	" 4	72'	"	" 17	39'	"	" 33	91'	
"	" 3	113'	"	" 16	42'	"	" 32	95'	
"	" 2	116'	"	" 15	77'	"	" 31	133'	
"	" 1	159'	"	" 14	81'	"	" 30	137'	
"	" 16	25'	"	" 6	62'	"	" 12	49'	
"	" 2	24'	"	" 15	66'	"	" 42	86'	
"	" 3	27'	"	" 16	103'	"	" 41	90'	
"	" 4	66'	"	" 17	107'	"	" 40	128'	
"	"	"	"	"	"	"	" 39	132'	
"	"	"	"	"	"	"	" 38	169'	
"	"	"	"	"	"	"	" 39	17'	
"	"	"	"	"	"	"	" 40	33'	
"	"	"	"	"	"	"	" 41	72'	
"	"	"	"	"	"	"	" 42	77'	
"	"	"	"	"	"	"	" 43	116'	
"	"	"	"	"	"	"	" 20	20'	
"	"	"	"	"	"	"	" 32	32'	
"	"	"	"	"	"	"	" 27	27'	
"	"	"	"	"	"	"	" 21	21'	
"	"	"	"	"	"	"	" 15	15'	
"	"	"	"	"	"	"	" 5	5'	
"	"	"	"	"	"	"	" 55	55'	
"	"	"	"	"	"	"	" 58	58'	
"	"	"	"	"	"	"	" 6	6'	
"	"	"	"	"	"	"	" 9	9'	
"	"	"	"	"	"	"	" 16	16'	
"	"	"	"	"	"	"	" 60	60'	



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES DATE: 2-15-76	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 2/11/76	RIEMER MUEGGE & ASSOCIATES, INC. Planners - Engineers - Surveyors 8818 Centre Park Drive - Suite 200 - Columbia, MD 410-997-8900 FAX: 410-997-9282 J. Savell JAYKANT D. PAREKH # 19148	DES: R.P.P. DRN: R.J.C. CHK: R.D.A. / A.A.P. DATE: 1-17-70	PROFILES OF WATER & SEWER MAINS 600' SCALE MAP NO. 41 BLOCK NO. 18	CLARK'S CROSSING UNITS 1-43 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT: 34-3464-D	SCALE AS SHOWN SHEET 3 OF 3
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AS-BUILT 4/4/07