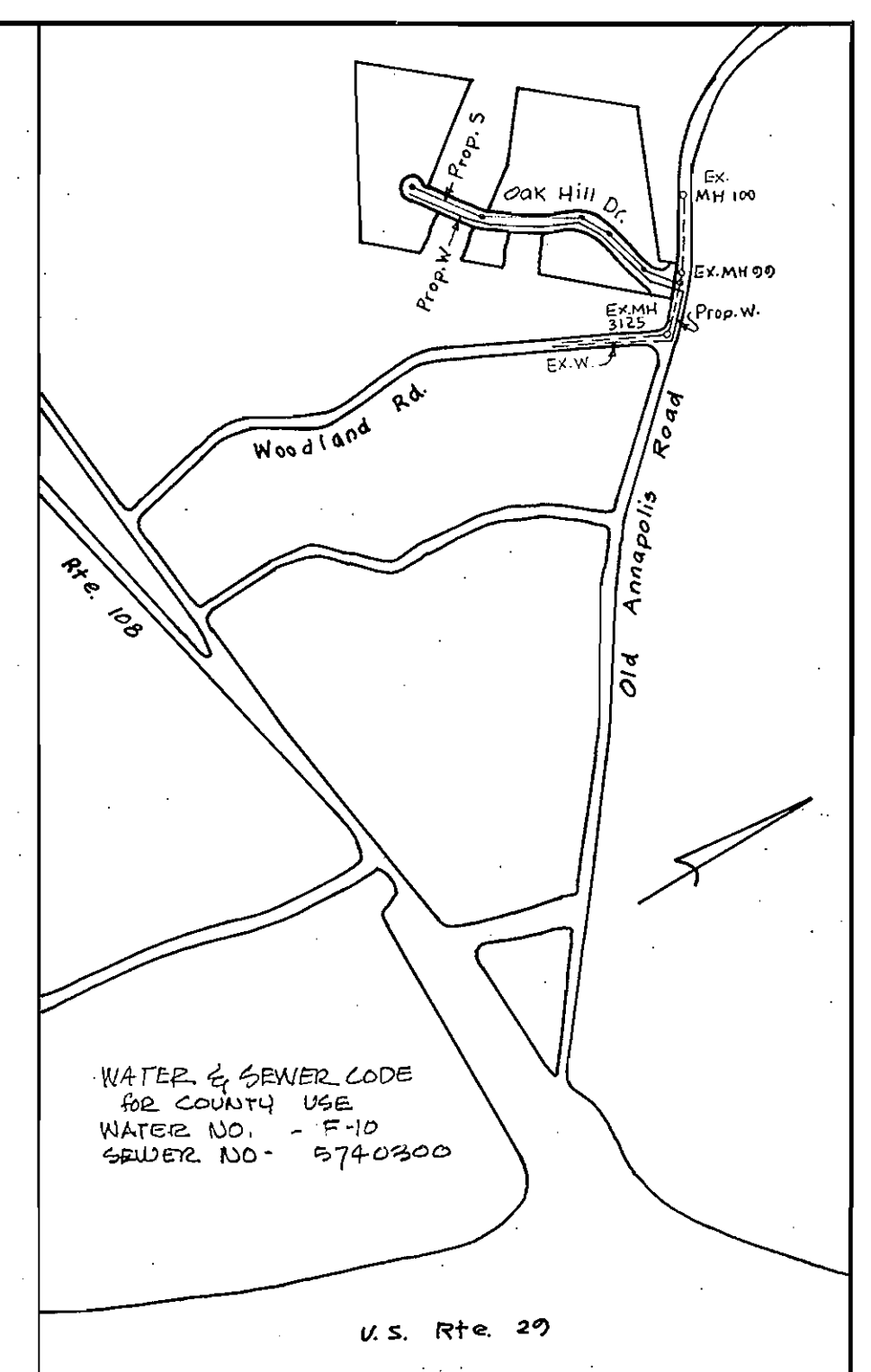
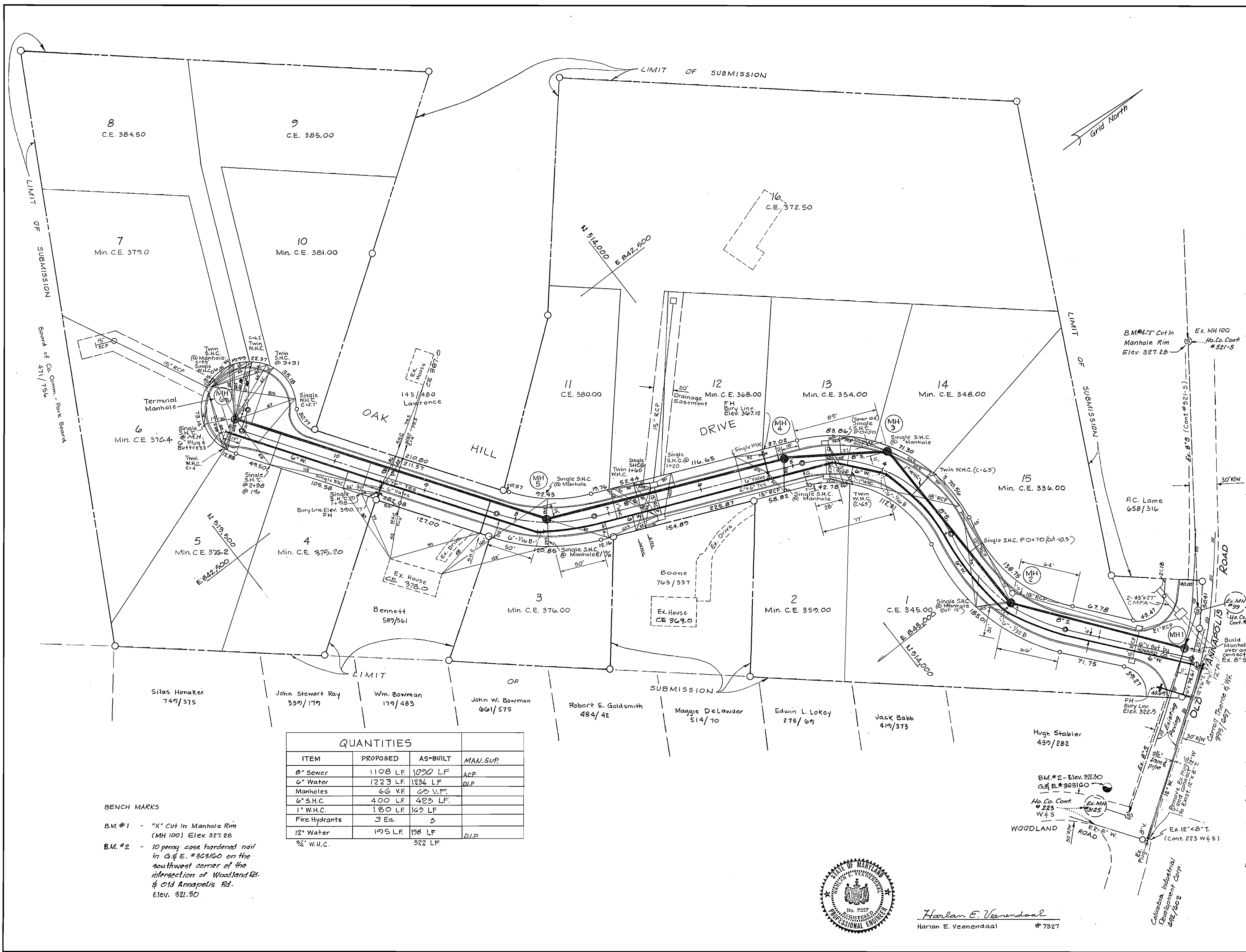


WS 813-WS/1



- GENERAL NOTES:**
- Approximate locations of existing utilities are shown. The contractor shall take all necessary precautions to protect existing utilities and services and to maintain uninterrupted service. Any damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense.
  - All pipe elevations are invert elevations.
  - The contractor shall notify "Miss Utility" (554-0100) at least three (3) days prior to beginning any construction shown hereon.
  - For all standard details, see standards band in specifications.
  - Clear all utilities by a min. of 6". Clear all poles by a 2'-0" min. or tunnel as req'd. Any costs incurred by the contractor for tunneling or bracing poles shall be included in the unit price bid for excavation.
  - The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole walls.
  - All manholes shall be 4'-0" inside diameter unless otherwise noted.
  - All water mains to have a min. of 3'-6" of cover, unless otherwise noted.
  - Block all fittings with concrete; standards bound in specifications.
  - Bury line elevations on fire hydrants shall be set to the elevations shown on the drawings. Soil around the fire hydrants to be compacted in accordance with Section 6-15 of the Standard Specifications.
  - All fire hydrants shall be strapped to the tee and shall be buttressed with concrete in accordance with standard details.
  - All horizontal and vertical controls are based on Md. State Datum.
  - All water house connections shall have valves.
  - All water mains shall be C.I.P., D.I.P., or A.C.P.X. unless otherwise noted.
  - Contractor shall notify the Gas & Electric Co. 72 hours in advance, prior to any construction in the vicinity of any gas and electric facilities by calling 539-8000 ext. 69. The contractor shall notify the C&P Telephone Co. prior to any construction in the vicinity of any Telephone Co. facilities by calling collect 685-0400 in Baltimore.
  - Trees are to be protected from damage to max. extent. All trees located within the construction are not to be removed or damaged by Contractor.
  - All valves shall be strapped to tees in accordance with standard details.
  - All sewer mains shall be C.S.P.X., V.C.P.X. or A.C.P. Class 2400 unless otherwise noted.
  - Contractor shall remove trees, stumps, and roots along line of excavation as directed by the Engineer. Paym't. for such removal shall be included in the unit price bid for excavation and backfill for water and sewer mains.
  - Place regulation "Men Working" and warning signs as req'd. to comply with Md. State Highway Admin. Manual of Traffic Control for Highway Construction and Maintenance Operations.

QUANTITIES			
ITEM	PROPOSED	AS-BUILT	MAN. SUP.
8" Sewer	1108 LF	1090 LF	ACP
6" Water	1223 LF	1234 LF	D.I.P.
Manholes	66 V.F.	65 V.F.	
6" S.H.C.	400 LF	423 LF.	
1" W.H.C.	180 LF	169 LF	
Fire Hydrants	3 Ea.	3	
12" Water	195 LF	198 LF	D.I.P.
3/4" W.H.C.		322 LF	

**BENCH MARKS**

B.M. #1 - "X" Cut In Manhole Rim (MH 100) Elev. 327.28

B.M. #2 - 10 penny case hardened nail in G. & E. #303/100 on the southwest corner of the intersection of Woodland Rd. & Old Annapolis Rd. Elev. 321.90



Harlan E. Veenendaal  
 Harlan E. Veenendaal #7327

**RICHARD BROWNE ASSOCIATES**  
 ENGINEERS SURVEYORS PLANNERS ARCHITECTS  
 COLUMBIA, MD. Wildo Lake Village Green Suite 207 790-7950  
 WAYNE, N. J.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Director of Public Works: *Richard E. Freudenberg* DATE: *10-17-78*  
 Chief Bureau of Engineering: *John O. Alford* DATE: *10-17-78*

CONTRACT NO. 813-D-W&S

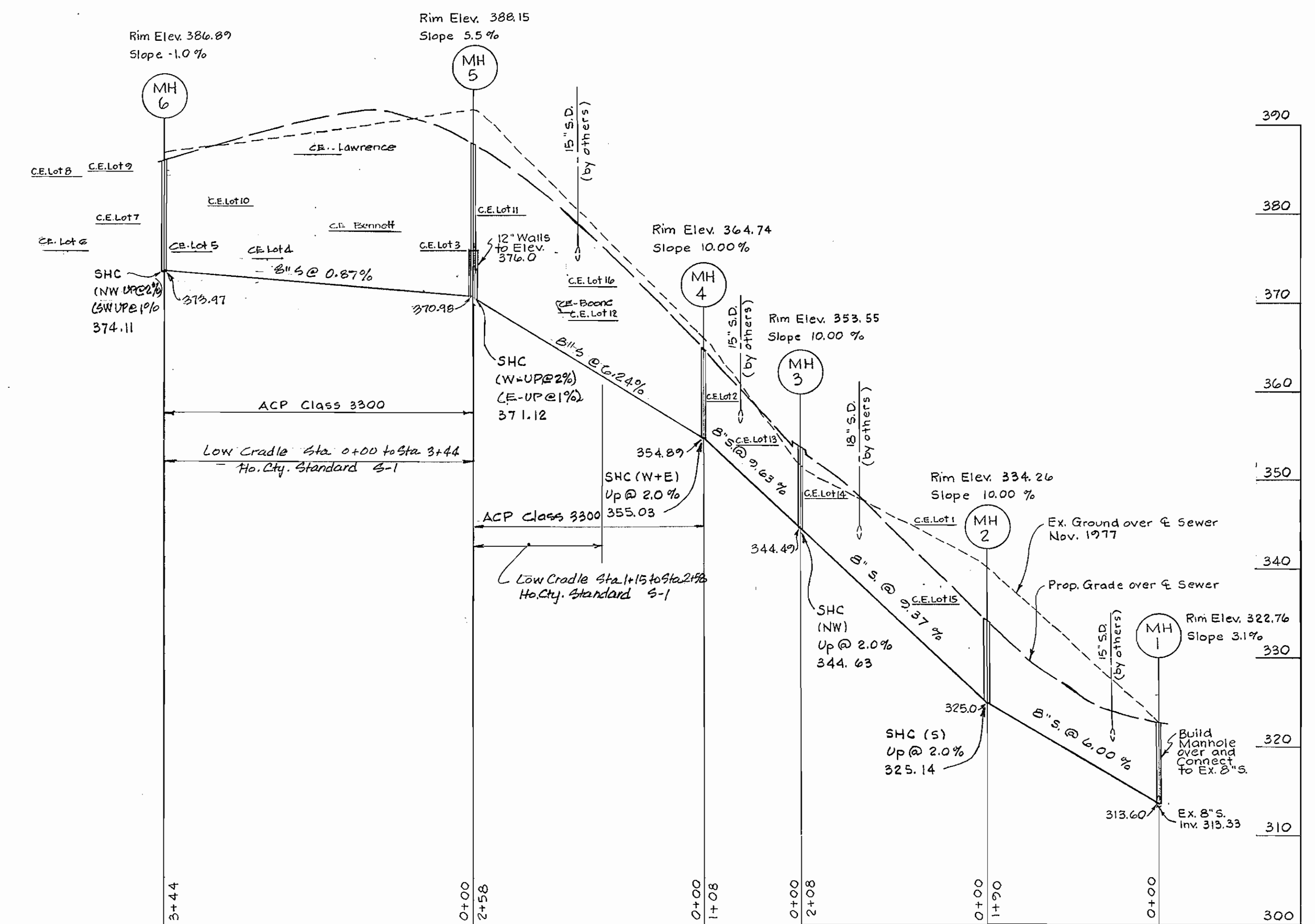
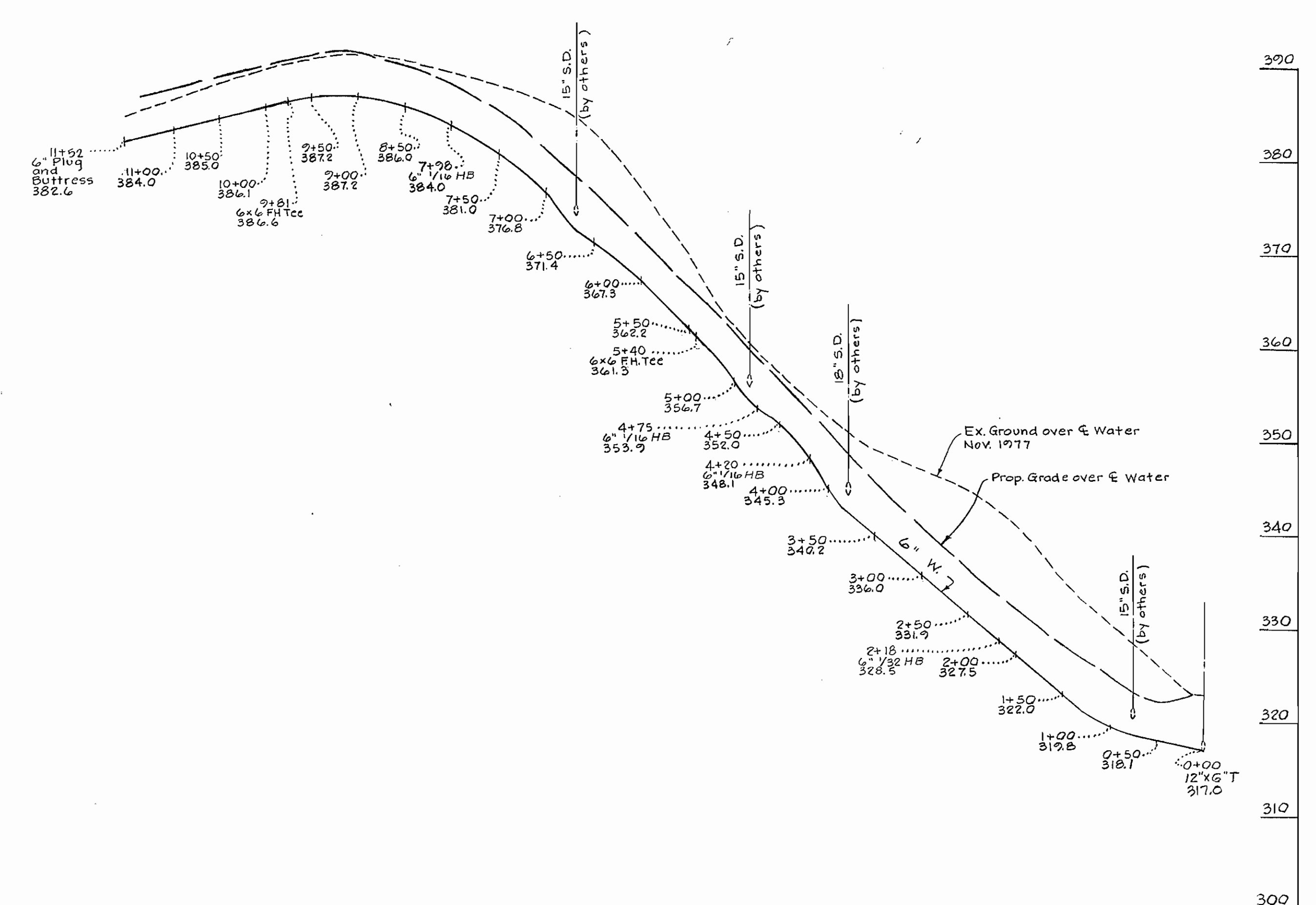
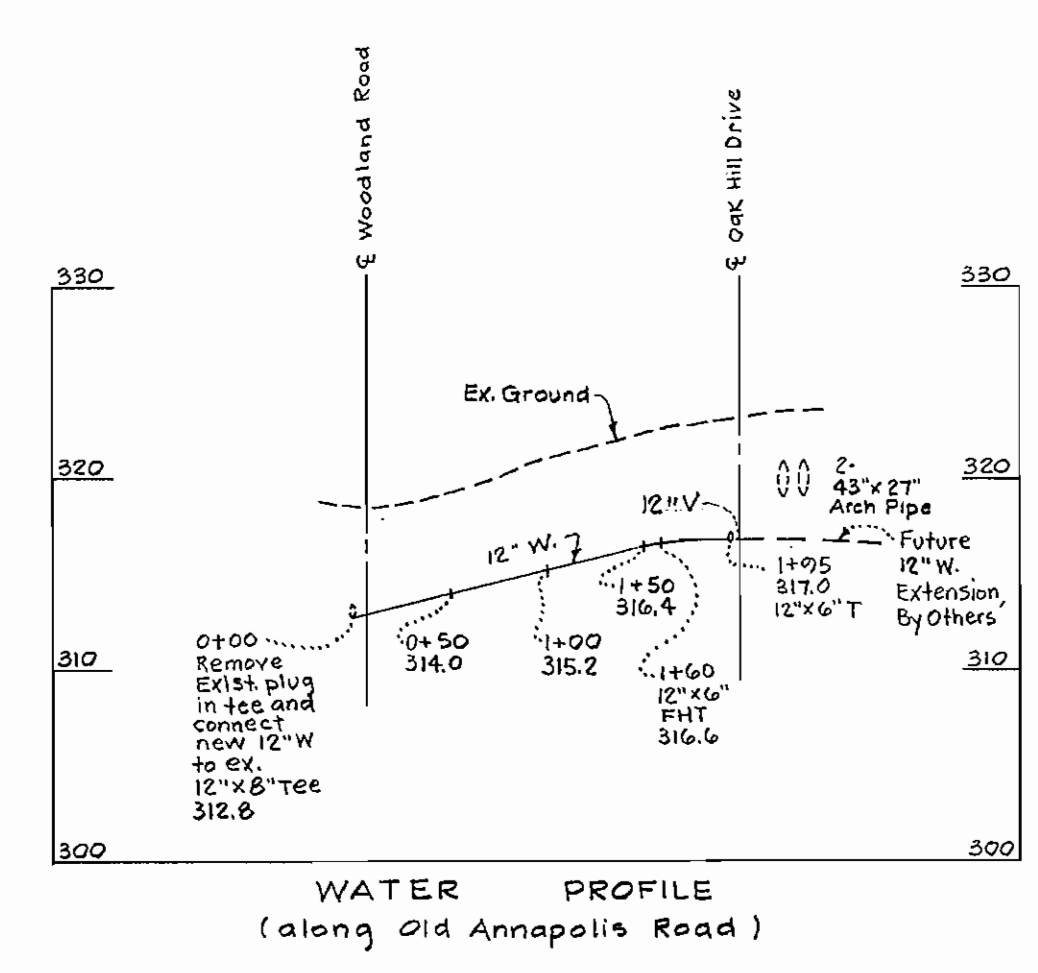
PLAN OF  
 WATER & SEWER MAINS

**OAK HILL DRIVE**  
 OAK HILL ESTATES  
 WATER AND SEWER MAIN EXTENSION  
 Election District No. 2  
 Howard County, Maryland

DRAWING NO. <u>1</u> OF <u>2</u>	SCALE 1" = 50'	DES: <u>P.V.</u> DRWN: <u>D.S.</u> CHK: DATE: <u>10-30-78</u>
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AS BUILT 3/14/80 MW

WS 813-WS/2



**RICHARD BROWNE ASSOCIATES**  
**ENGINEERS SURVEYORS PLANNERS ARCHITECTS**  
 COLUMBIA, MD.  
 Wilde Lake Village Green  
 Suite 207  
 730-7950  
 WAYNE, N. J.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Richard C. Trendelenburg* 10/17/78  
 DIRECTOR OF PUBLIC WORKS DATE  
*W. O. Liberty* 10-17-78  
 CHIEF BUREAU OF ENGINEERING DATE

CONTRACT NO. 813-D-W45

PROFILE OF  
 WATER & SEWER MAINS

**OAK HILL DRIVE**  
 OAK HILL ESTATES  
 WATER AND SEWER MAIN EXTENSION  
 Election District No. 2  
 Howard County, Maryland

DRAWING NO. 2	SCALE Horiz. 1"=100' Vert. 1"=10'	DES. P.V. DRWN: D.S. CHK:
OF 2		DATE: 6-30-78

AS BUILT 3/14/80