

HOWARD SOIL CONSERVATION DISTRICT:  
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT  
 AND MEETS TECHNICAL REQUIREMENTS.  
 U.S. SOIL CONSERVATION SERVICE DATE  
 THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT  
 CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE  
 IMPLEMENTED IN ACCORDANCE WITH ARTICLE 415 OF THE  
 HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER  
 ROAD CONSTRUCTION PLANS #F-85-143

- GENERAL NOTES**
- 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.
  - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
  - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
  - CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITIES 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 TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
  - 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 THESE DETAILS ON THE JOB.
  - 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 BEEN MADE SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
  - 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
  - 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.
  - 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.
  - ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
  - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1" COVER UNLESS OTHERWISE NOTED.
  - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
  - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
  - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE 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 SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 THE STANDARD SPECIFICATIONS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  - ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR P.V.C. UNLESS OTHERWISE NOTED.
  - THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
  - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
  - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
  - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
  - ALL WATER HOUSE CONNECTION SHALL BE SET FOR INSIDE METER SETTING.

QUANTITIES			
ITEM	PROPOSED	AS-BUILT	SUPPLIER
Fire Hydrants	5 EA.	5 0	A.F.P. MULLER
8" Water	1350 LF	1343 0 LF	A.F.P. E.L. 32.0
6" Water	603 LF	637 5 LF	A.F.P. G.C. 52.1
8" Valves	3 EA.	3 0	A.F.P.
6" Valves	1 EA.	1 0	A.F.P.
1/2" W.H.C.	257 LF	408 0 LF	A.F.P. TYPE 4 C.P.P.E.L.
1" W.H.C.	350 LF	371 0 LF	A.F.P.
Manholes	75 VF	-	A.F.P.
8" Sewer	1908 LF	1892 0	A.F.P. 3.0835 P.V.C.
6" S.H.C.	780 LF	792 0	A.F.P.
1/2" DRAIN BLOWOFF	1 EA.	2 0	A.F.P.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works  
 Chief, Bureau of Engineering  
 Chief, Bureau of Utilities  
 Chief, Planning and Development Division

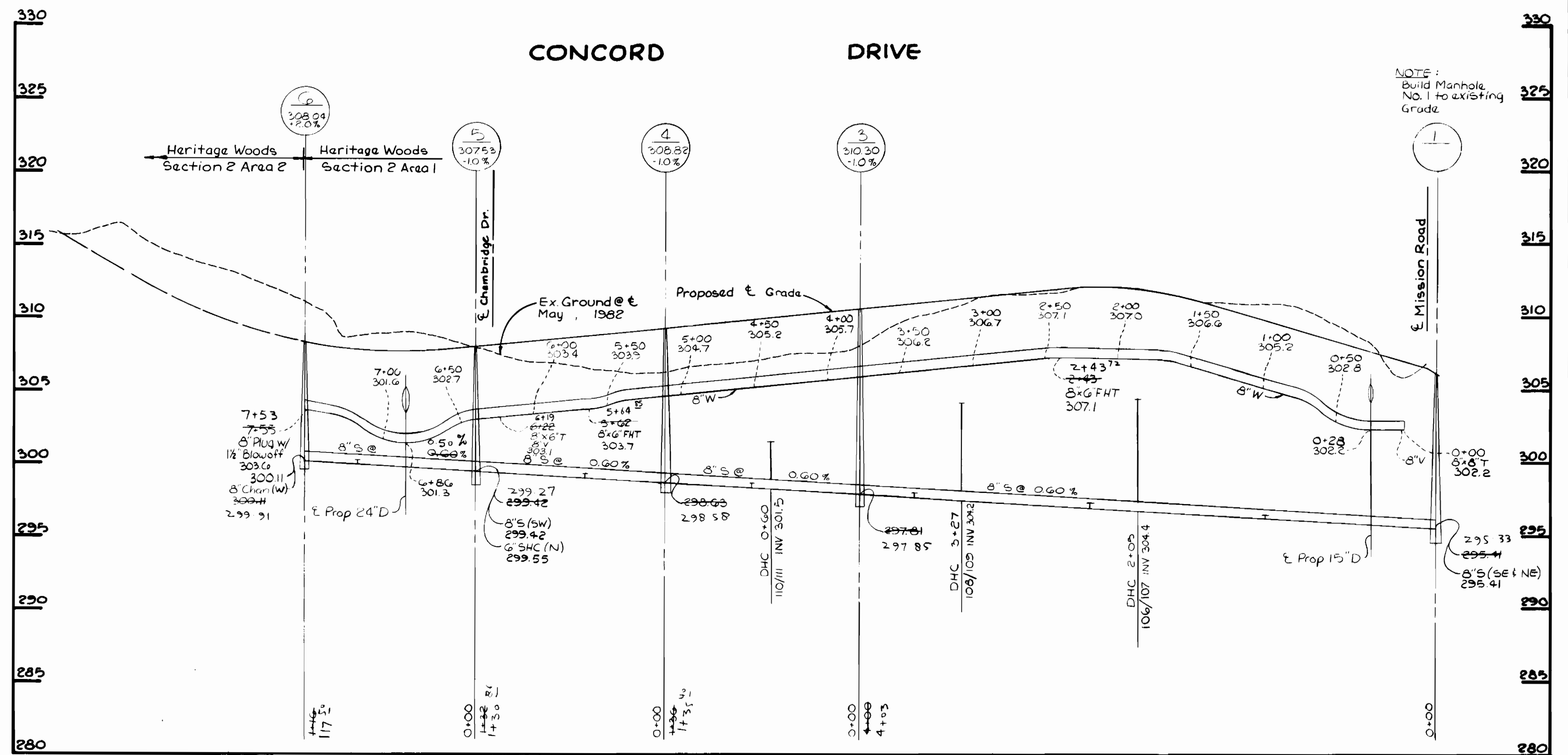
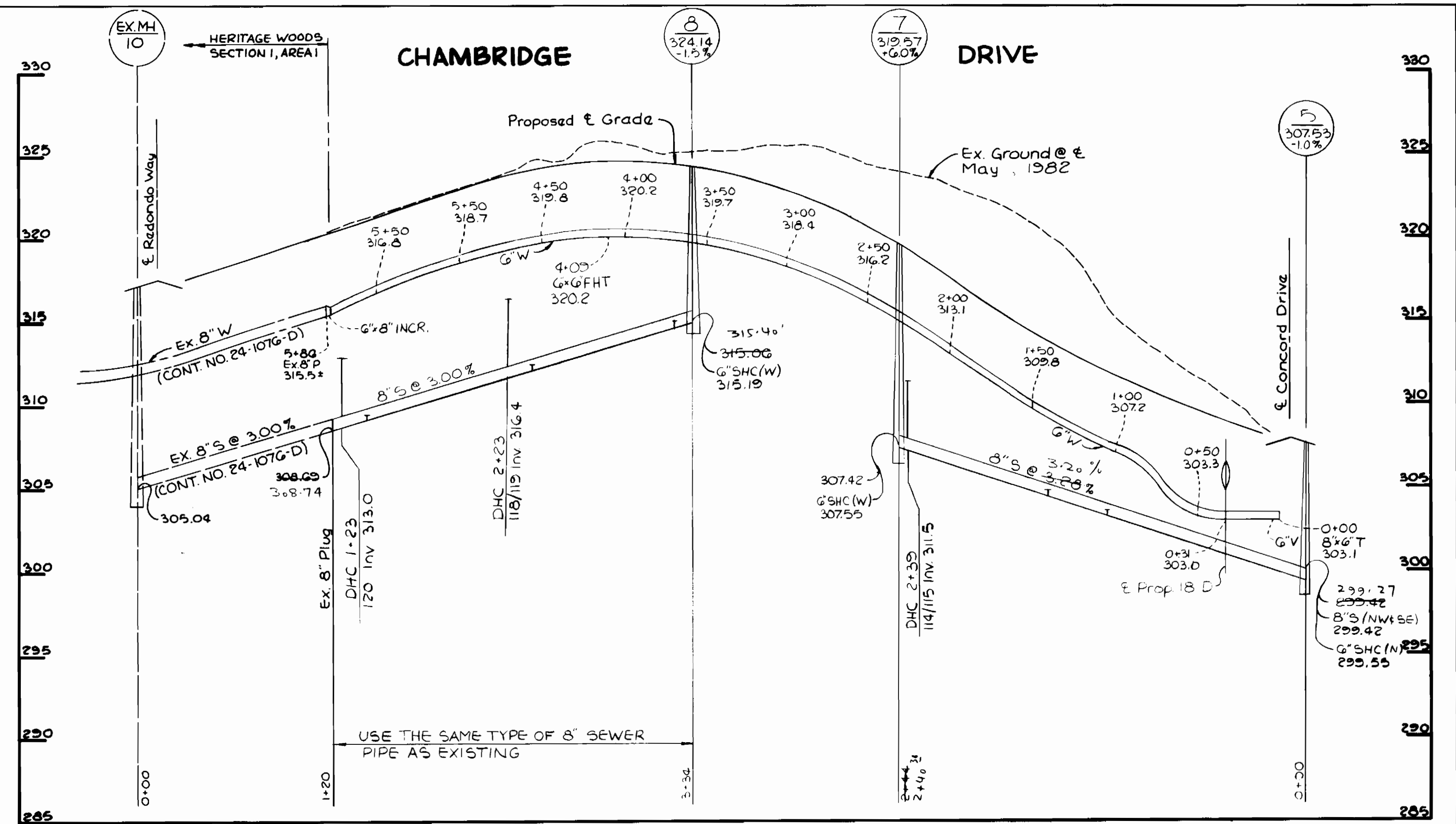
TRACY, SCHULTE  
 & ASSOCIATES INC.  
 planning architecture engineering  
 8450 Baltimore National Pike Suite 34  
 Ellicott City, Maryland 21043



DES: RJW	DATE: 5-31-85
DRN: LRC	BY NO.
CHK: JKT	REVISION
3/3 2	REVISED MIN. CELLAR ELEVATIONS
LRC 1	ADJUSTED FH LOCATIONS ON CONCORD DR.

PLAN OF  
 WATER AND SEWER MAINS

HERITAGE WOODS  
 SECTION 2, AREA 1  
 ELECTION DISTRICT NO. 6  
 CONTRACT NO. 24-1347-D  
 SCALE AS SHOWN  
 SHEET 1 OF 3



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

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

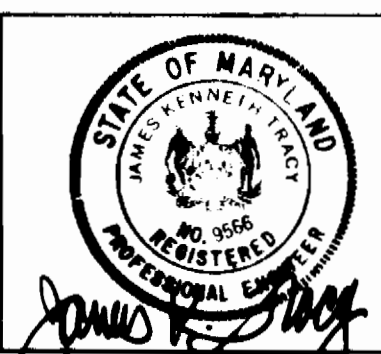
*Don F. Nemy*  
 DIRECTOR OF PUBLIC WORKS  
 DATE: 8-22-85

*William S. Ray*  
 CHIEF BUREAU OF ENGINEERING  
 DATE: 8-22-85

*Robert M. Benning*  
 CHIEF, BUREAU OF UTILITIES  
 DATE: 8-21-85

*James H. ...*  
 CHIEF, SUBURBAN DEVELOPMENT DIVISION  
 DATE: 8-22-85

TRACY, SCHULTE & ASSOCIATES INC.  
 planning architecture engineering  
 8450 Baltimore National Pike Suite 34  
 Ellicott City, Maryland 21043



DES:	RJW				
DRN:	LRC				
CHK:	JKT				
DATE:	5-31-85				
BY:	LRC	1	ADJUSTED FH LOCATIONS ON CONCORD DR	4-15-86	
	NO.		REVISION	DATE	

PROFILES OF WATER AND SEWER MAINS

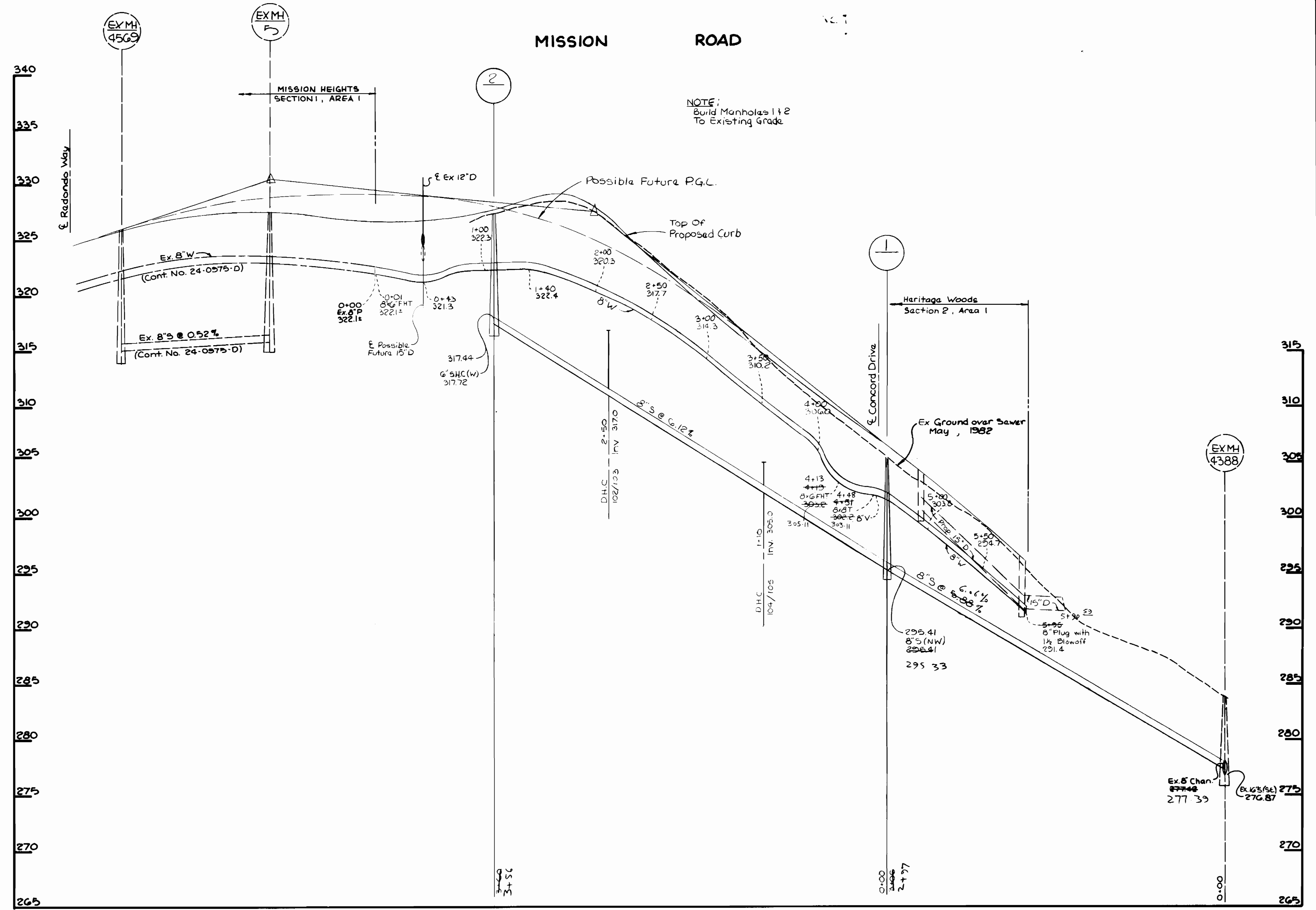
600' SCALE MAP NO. 42 BLOCK NO. 18

HERITAGE WOODS SECTION 2, AREA 1  
 ELECTION DISTRICT NO. 6  
 CONTRACT NO. 24-1347-D

SCALE AS SHOWN  
 SHEET 2 OF 3

**SEWER HOUSE CONNECTION - INVERT ELEVATION AT PROPERTY LINE**

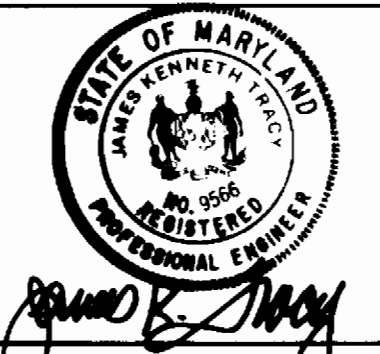
STATION	LOT	INVERT	STATION	LOT	INVERT
MANHOLE 1 - MANHOLE 2					
1+10 R	104,103	305.80	0+55 R	50,51	299.36
2+50 R	102,103	317.80	@ MH*5	85	299.85
@ MH*2	100,101	318.27			
MANHOLE 3 - MANHOLE 4					
1+17 R	98,99	296.47	0+81 R	85	300.37
2+05 L	106,107	305.04			
2+58 R	96,97	297.20			
3+27 L	108,109	304.84			
3+59 R	94,95	297.92			
MANHOLE 5 - MANHOLE 6					
0+60 L	110,111	302.10	EX. MANHOLE 10 - MANHOLE 8		
0+74 R	92,93	298.05	1+23	120	313.72
MANHOLE 7 - MANHOLE 8					
1+20 L	112,113	303.74	1+38 L	79	309.46
1+55	86,87	304.64	2+23 R	118,119	317.16
2+39	114,115	312.06	2+38 L	80,81	312.42
@ MH*7	84,85	308.59	3+24 L	82,83	315.10
MANHOLE 9 - MANHOLE 10					
1+23	120	313.72	@ MH*8	116,117	315.85
1+38 L	79	309.46			
2+23 R	118,119	317.16			
2+38 L	80,81	312.42			
3+24 L	82,83	315.10			
@ MH*8	116,117	315.85			



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

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works: *[Signature]* 8-22-85  
 Chief, Bureau of Utilities: *[Signature]*

TRACY, SCHULTE & ASSOCIATES INC.  
 planning architecture engineering  
 8450 Baltimore National Pike Suite 34  
 Ellicott City, Maryland 21043  
 Chief, Land Development Division: *[Signature]* 8-22-85



DES: RJW	BY NO.	REVISION	DATE
DRN: LRC			
CHK: JKT			
DATE: 5-31-85			

PROFILES OF  
 WATER AND SEWER MAINS  
 600' SCALE MAP NO. 42 BLOCK NO. 18  
 AS-BUILT

HERITAGE WOODS  
 SECTION 2, AREA 1  
 ELECTION DISTRICT NO. 6  
 CONTRACT NO. 24-1347-D  
 AUGUST 12, 1985

SCALE AS SHOWN  
 SHEET 3 OF 3