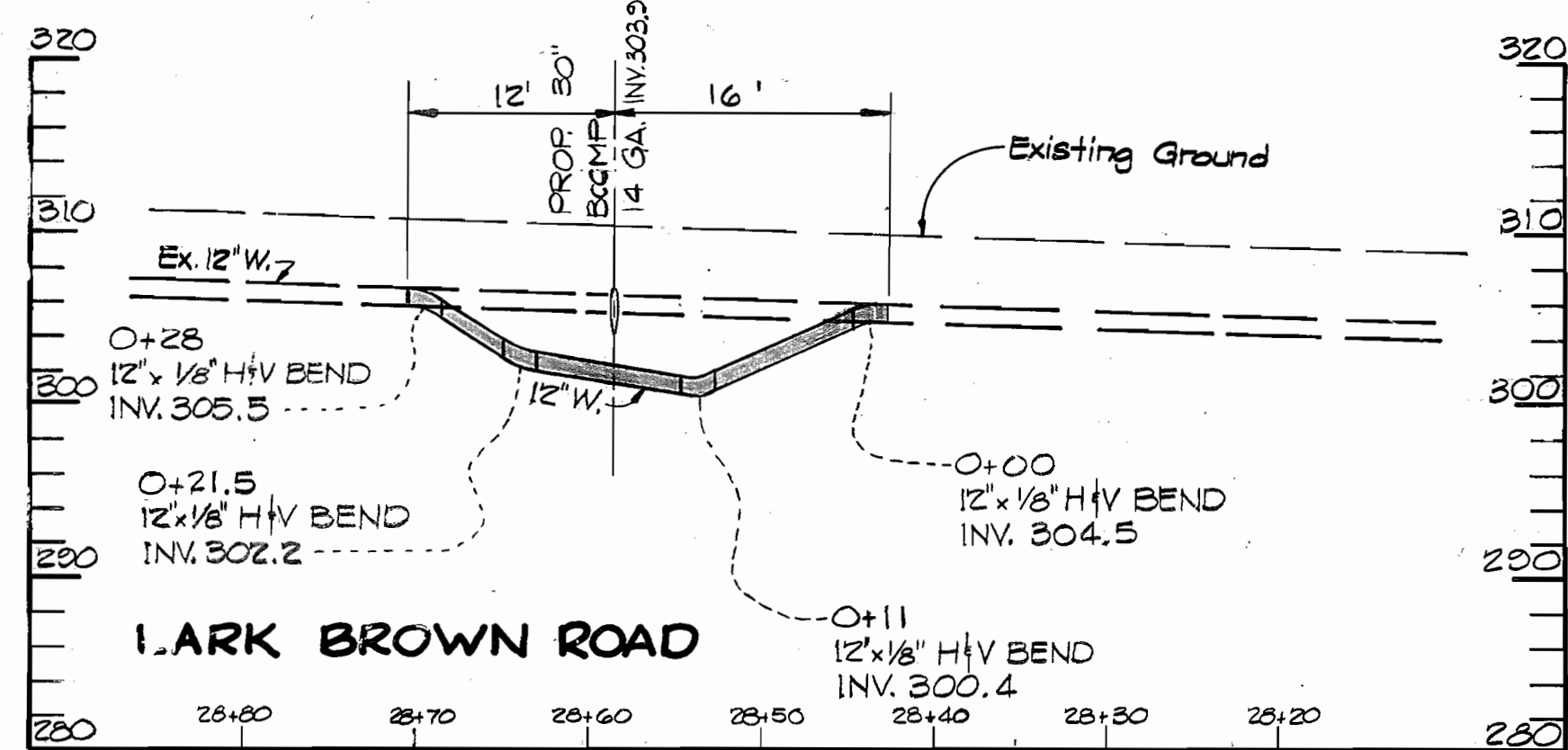
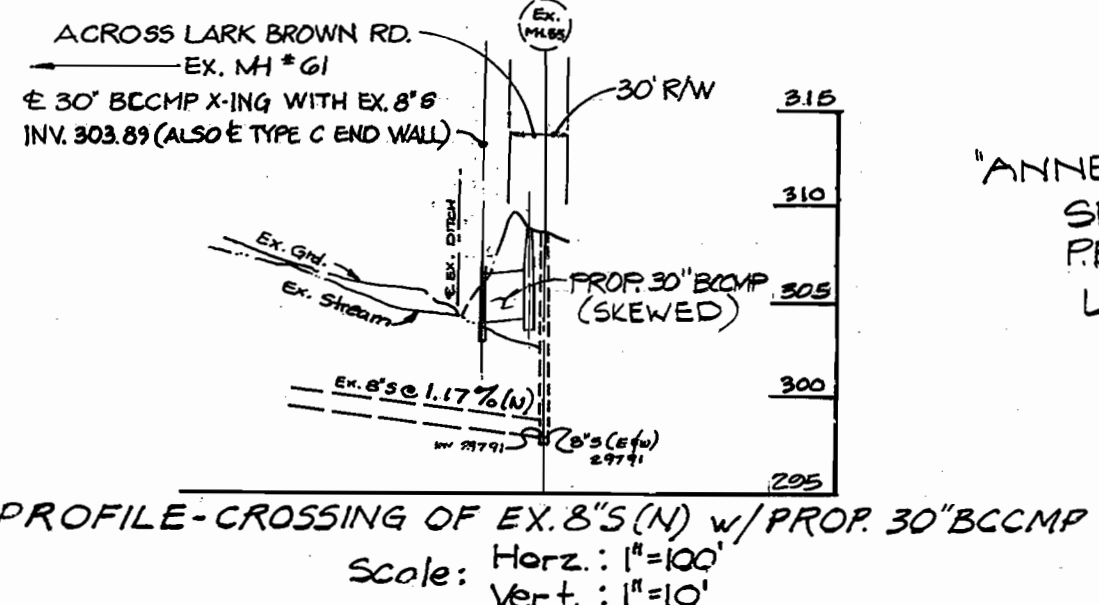


BILL OF MATERIALS		
ITEM	QUANTITY AS BUILT	SUPPLIER
MANHOLES (4' DIAM.)	3	
8" SAN SEWER	400	
6" SH. CONN.	430	
DROP HSE. CONN. TYPE 'A'	4	
8" WATER MAIN	410	
6" WATER MAIN	12	
8" TAPPING TEE & VALVE	1	
6" GATE VALVE	1	
6" FIRE HYDRANT	1	
8" 1/4 BEND	1	
8" CAP	1	
8"x6" TEE	1	
12" WATER MAIN	32	
3/4" W. HSE. CONN.	314	
12" 1/8 BEND	8	



GENERAL NOTES CONTINUED

- 20. ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.I.V.W.A. SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3 INCHES THROUGH 12 INCHES FOR WATER AND OTHER LIQUIDS.
- 21. FOR REMOVAL AND LOWERING OF SECTION OF EXISTING 12" WATER MAIN, THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE BUREAU OF UTILITIES, AND NOTIFY THEM AT LEAST 5 WORKING DAYS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL ALSO NOTIFY THOSE FAMILIES AFFECTED BY THIS WORK A MINIMUM OF 48 HOURS, PRIOR TO SHUTDOWN OF THE MAIN.

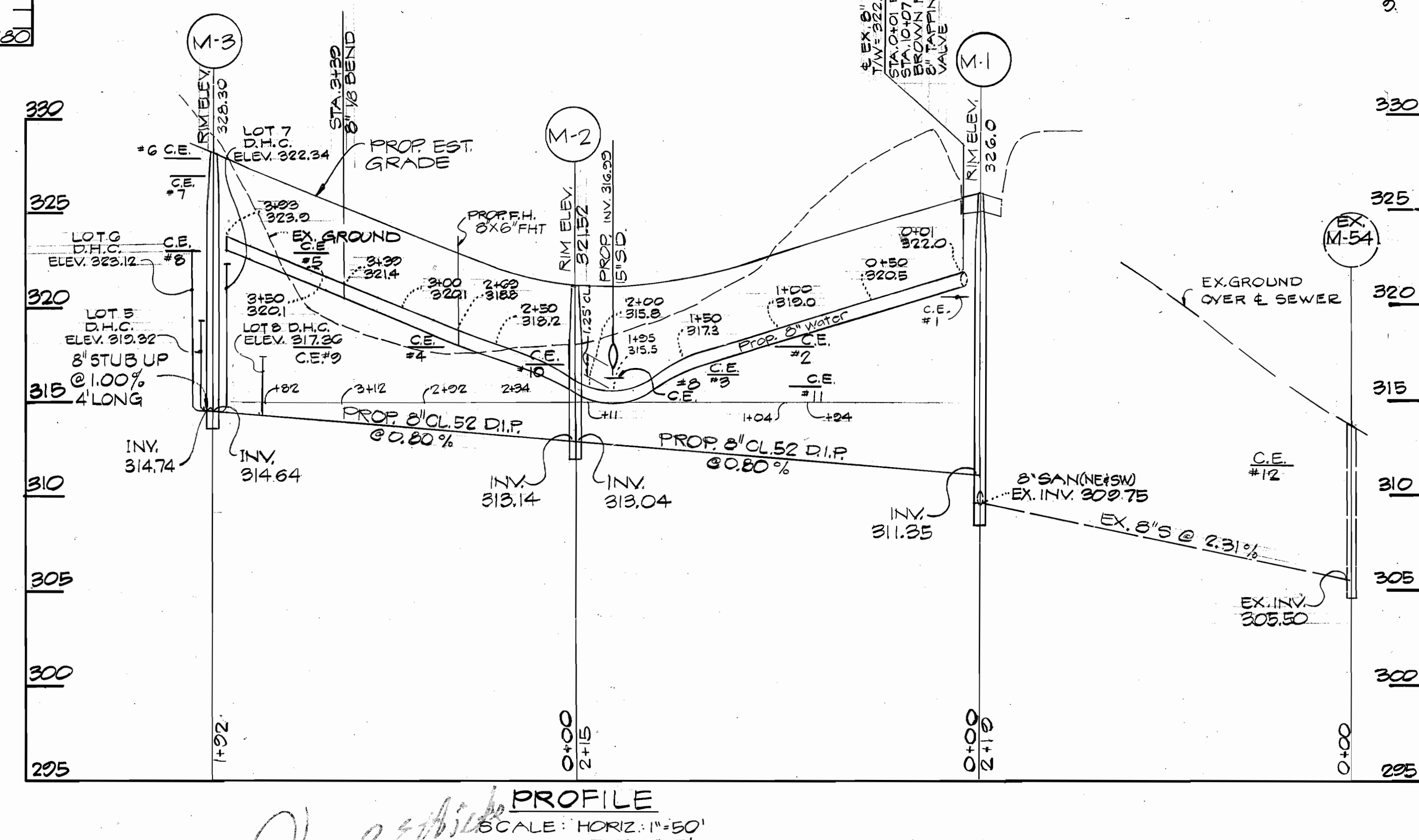
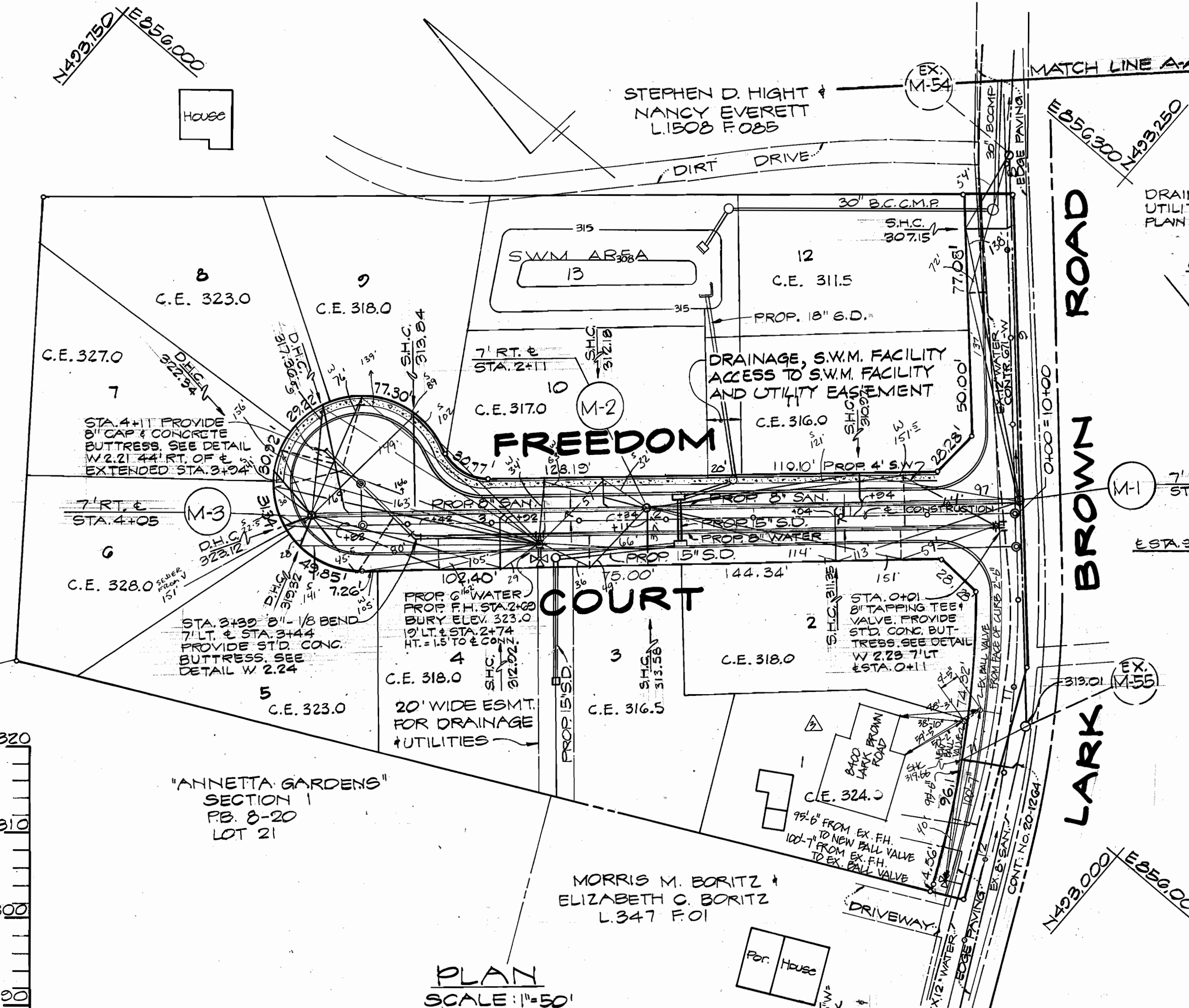
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION AND

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Helm 9/28/88
SIGNATURE DATE
U.S. SOIL CONSERVATION SERVICE

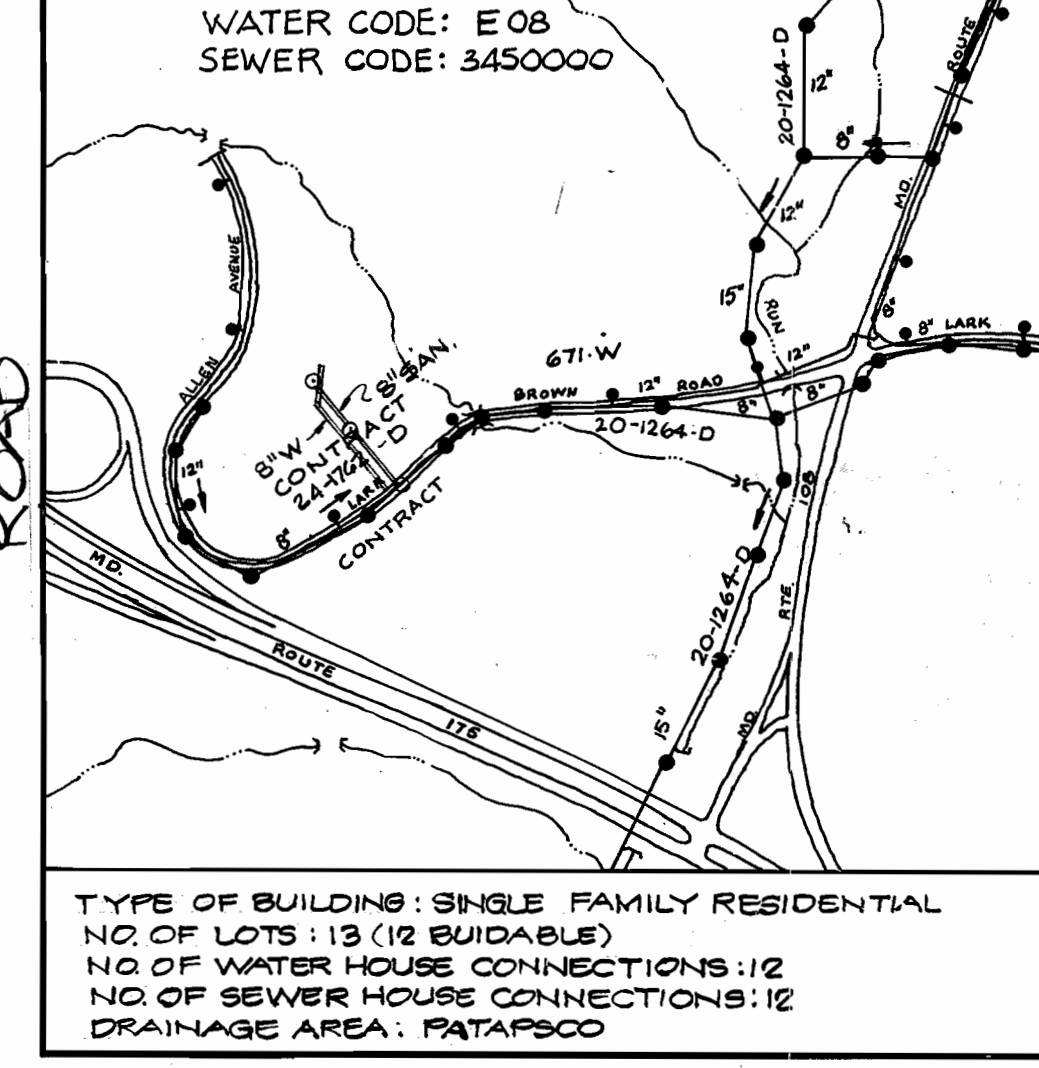
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *Stephen L. John* 9/28/88
HOWARD SOIL CONSERVATION DISTRICT DATE



BENCH MARK NO 2944001 ELEV. 307.40
Std. Conc. Mon. set flush with surface, 0.25 mile from Traffic Lt. @ Rte 108, in south side of median of Rte 175.

BENCH MARK NO H.E.C. 003 ELEV. 310.24
PK. Nail set in North shoulder of Lark Brown Rd. 93 Ft. North of & San. MH-54.



GENERAL NOTES

- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- THE APPROXIMATE LOCATION OF EXISTING UTILITIES 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. DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS, UNLESS OTHERWISE INDICATED.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6'. CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
- FOR ALL STANDARD DETAILS SEE STANDARDS BOUND IN SPECIFICATIONS.
- THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION 531-5533
 - B.G. & E. CO. (CONTRACTOR SERVICES) 880-4620
 - B.G. & E. CO. (UNDERGROUND DAMAGE CONTROL) 850-2004
 - B.G. & E. CO. (TROUBLE SHOOTING) 296-9001
 - MISS UTILITY 1-800-257-7777
 - COLONIAL PIPELINE CO 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DRW. 992-2366
 - C.I.P. TELEPHONE CO. 1-800-257-7777
 - A.T. & T. - CABLE LOCATION DIVISION 301-393-3553
- TREES ARE TO BE PROTECTED TO MAXIMUM EXTENT. TREES 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 AS DIRECTED BY THE ENGINEER. PAYMENT 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 REQUIRED TO COMPLY WITH MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE D.I.P., CLASS 52 ONLY.
- TOP OF WATER MAINS TO HAVE A MINIMUM OF 3-1/2' COVER UNLESS OTHERWISE NOTED.
- ALL VALVES SHALL BE STRAPPED TO TEES IN ACCORDANCE WITH STANDARD DETAILS.
- 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 STD. DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED, IN ACCORDANCE WITH SECTION 1003 & 1008 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING.
- ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X., OR A.C.P. CLASS 2400 UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Helm 10/3/88
DIRECTOR OF PUBLIC WORKS DATE

Richard M. Reimer 9-22-88
CHIEF, BUREAU OF UTILITIES DATE

James M. Helm 10-3-88
CHIEF, BUREAU OF ENGINEERING DATE

Smallwood 9/30/88
CHIEF, LAND DEVELOPMENT DIVISION DATE

HICKS ENGINEERING COMPANY, INC.
CIVIL ENGINEERS

200 EAST JOPPA ROAD
SUITE 402
TOWSON, MD 21204

DES: D.J.D.
DRN: L.A.W.
CHK: D.E.H.
DATE: AUG. 87

Y.P.	REVISION	DATE
1	REVISED AS-BUILT W.H.C. FOR LOT #1	11/7/89
2	ADDED MODIFIED 12" W RELOCATION DETAILS	9/16/88
3	REMOVED 12" WATER RELOCATION DETAILS	8/22/88

PLAN AND PROFILE
WATER AND SEWER MAINS

CONTRACT NO. 24-1762-D
600' SCALE MAP NO. 37 BLOCK NO. 19

LARK BROWN ESTATES
LOTS NO. 1 THRU 13
FREEDOM COURT AT LARK BROWN ROAD
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 1