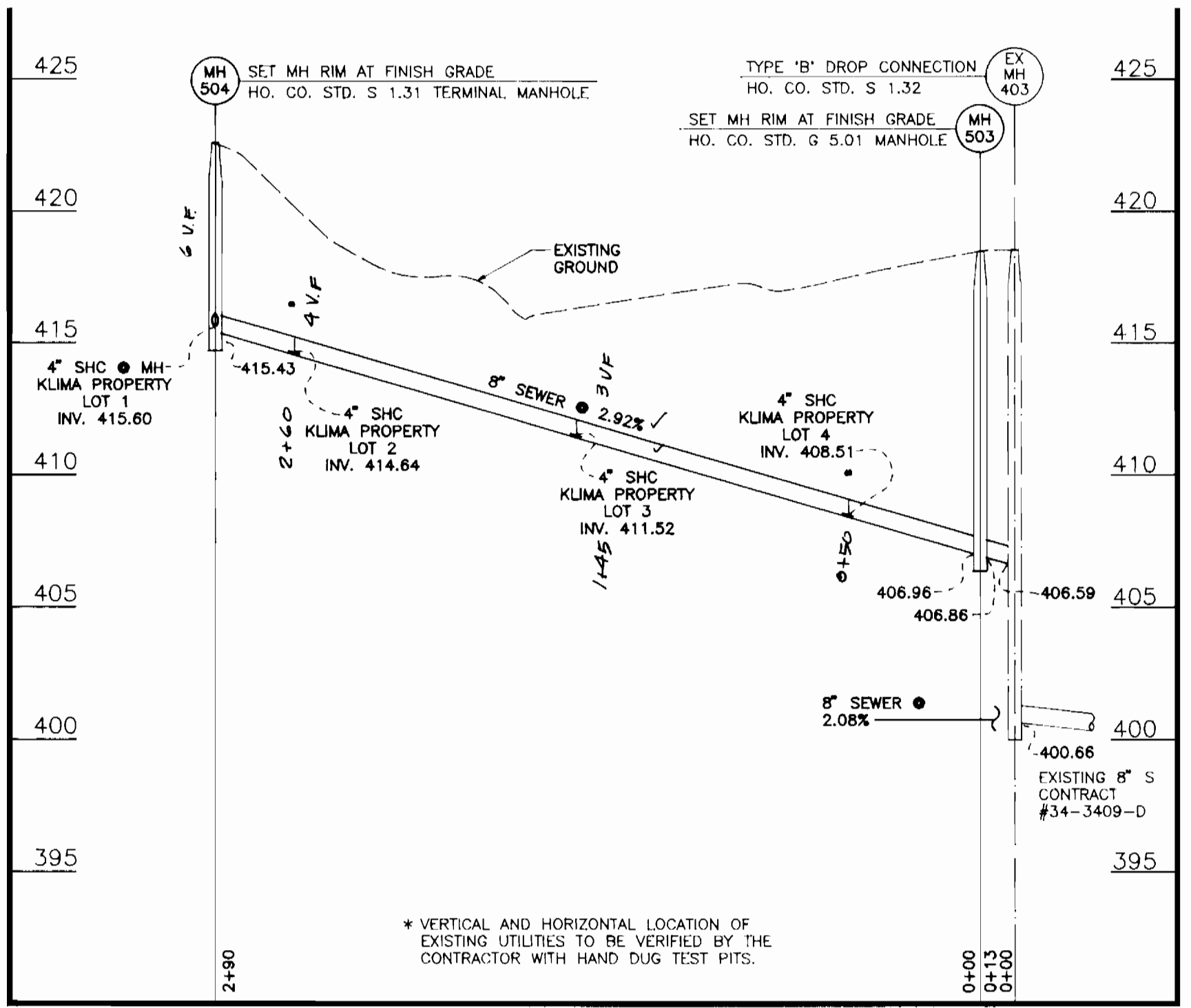
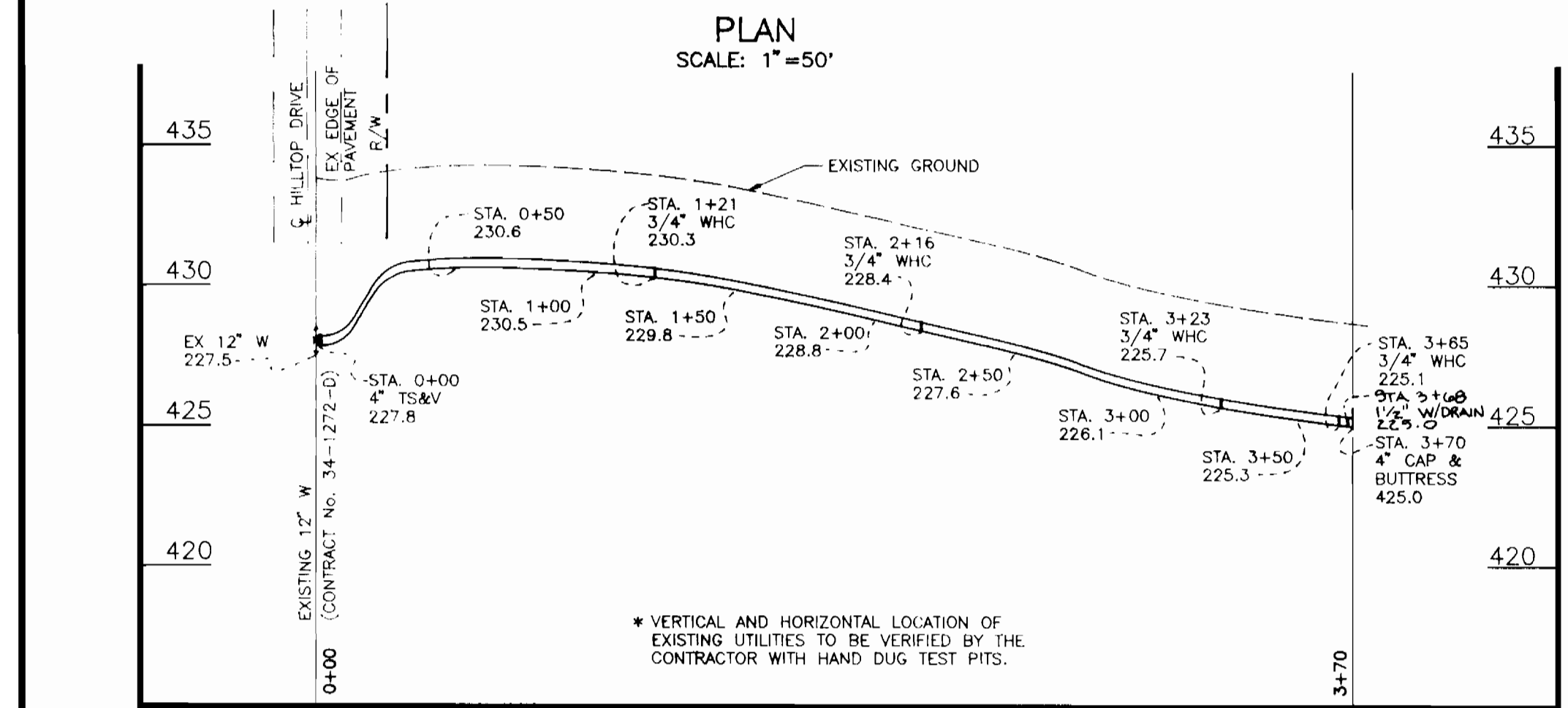


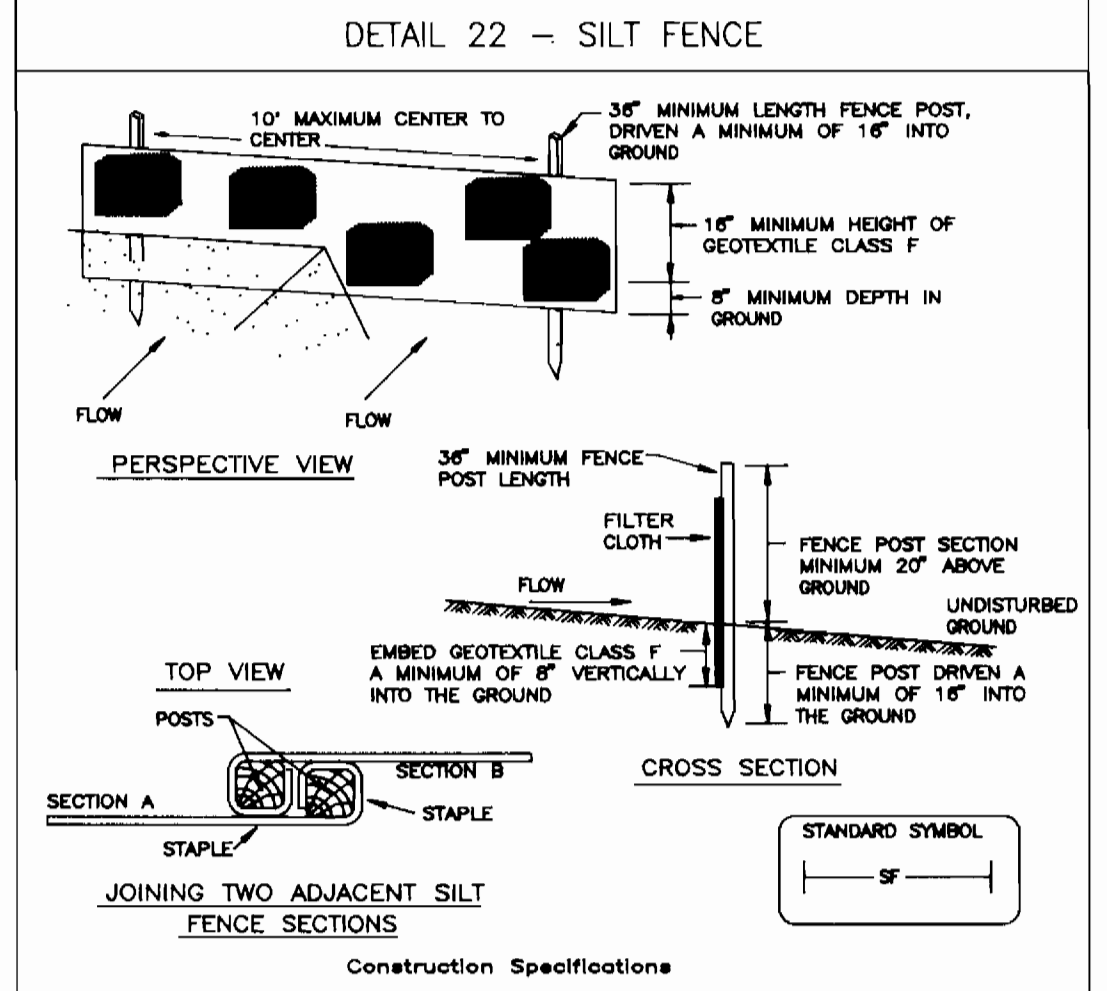
COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 35C5 AND 0025.



SEWER MAIN PROFILE  
SCALE: HORIZ. 1"=50', VERT. 1"=5'



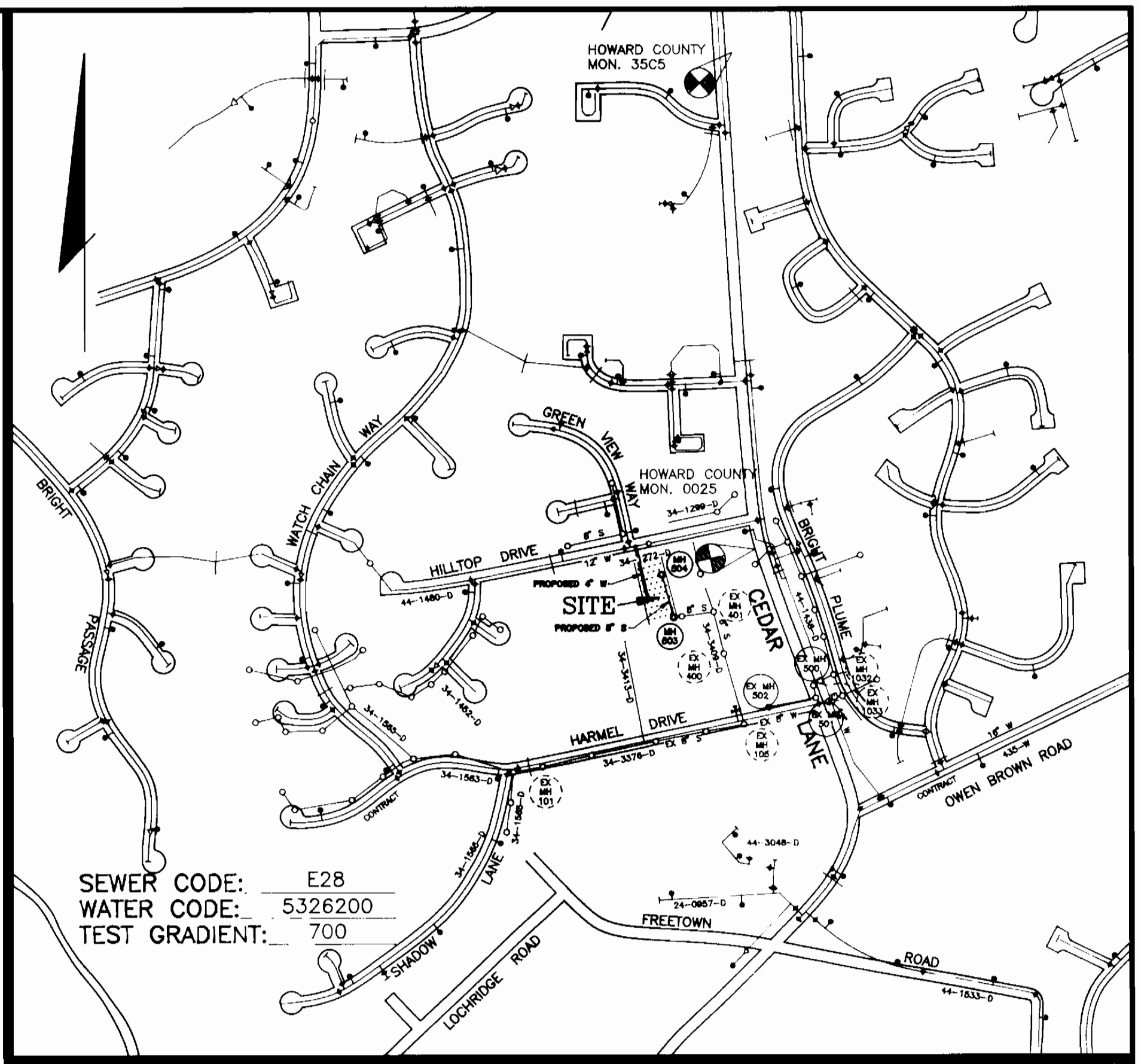
WATER MAIN PROFILE  
SCALE: HORIZ. 1"=50', VERT. 1"=5'



Construction Specifications  
1. Fence posts shall be a minimum of 3/4\"/>

GENERAL NOTES

- PART I
- 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\"/>
- STATE HIGHWAY ADMINISTRATION 531-5533  
B.G.&E. CO. CONTRACTOR SERVICES 850-4620  
B.G.&E. CO. UNDER GROUND DAMAGE CONTROL 787-9068  
MISS UTILITY 1-800-257-7777  
COLONIAL PIPELINE CO. 795-1390  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 313-4900  
BUREAU OF UTILITIES
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAIN OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(g) OF THE HOWARD COUNTY CODE.
12. COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 35C5 AND NO. 0025.  
35C5 N 562,148.416 E 1,344,554.506  
0025 N 559,255.308 E 1,344,683.964



VICINITY MAP  
SCALE: 1"=600'

PART II - WATER

- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2' 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 RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- A STATE HIGHWAY UTILITY PERMIT WILL BE REQUIRED PRIOR TO CONSTRUCTION WITHIN ROUTE 1 RIGHT-OF-WAY. JACK AND BORE METHOD UNDER ROUTE 1 WILL BE REQUIRED BY THE S.H.A. UTILITY ENGINEER.

PART III - SEWER

- ALL SEWER MAINS SHALL BE DIP CLASS 52 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.
- FORCE MAIN SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52. 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.

TYPE OF BUILDING:	SINGLE FAMILY DETACHED
NO. OF LOTS/PARCELS:	4 BUILDABLE: 4
NO. OF WATER HOUSE CONNECTIONS:	4*
NO. OF SEWER HOUSE CONNECTIONS:	4**
DRAINAGE AREA:	MIDDLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT

\*EXISTING DWELLING ON LOT 1 IS CURRENTLY SERVED BY WELL, TO BE ABANDONED.  
\*\*EXISTING SEPTIC SYSTEM ON LOT 1 TO BE ABANDONED

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
4" CAP & BUTTRESS	1		M.J. CAP (D.I.P.)	GRIFFIN PIPE
4" TAPPING SLEEVE & VALVE	1			BLEEVE = FORD A-126 CLASS B VALVE = KENNEDY BSA-126 CLASS B
4" WATER	370 L.F.		D.I.P. CL 52	GRIFFIN PIPE
3/4" W.H.C.	46 L.F.		TYPE 'K' COPPER	CAMBRIDGE LEE ASTM F88
4" SEWER	42 L.F.		P.V.C.	HAECO
8" SEWER	303 L.F.			
MANHOLES	2		PRECAST CONCRETE	ATLANTIC CONC PRODUCTS
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
AS-BUILT				

SHC INVERTS & EASEMENT CHART

STATION	LOT	ELEVATION
MH 503 TO MH 504		
② MH 504 LT	LOT 1	415.80
2+51 RT	LOT 2	414.84
1+5.3 LT	LOT 3	411.72
0+50 RT	LOT 4	408.71

NOTE: SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF HOWARD COUNTY DESIGN MANUAL AND STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS.  
REFERENCE: F 96-109

OWNERS  
RAYMOND J. KLIMA AND H. LAVAIN KLIMA  
10839 HILLTOP LANE  
COLUMBIA, MARYLAND 21042

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
DATE: 7/5/96

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
Michael A. ...  
DATE: 6-27-96

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
...  
DATE: 7/10/96

MARKS & VOGEL ASSOCIATES, INC.  
ENGINEERS - SURVEYORS - PLANNERS  
3801 PARK AVENUE, SUITE 101  
BELLICO CITY, MARYLAND 21040  
TELEPHONE: (410) 461-6828  
FAX: (410) 460-3980



DES: D.G.H.  
DRN: D.G.H.  
CHK: R.H.V.  
DATE: 1/15/96  
BY NO. REVISION DATE

PLAN OF SEWER MAIN  
600' SCALE MAP NO. 35 BLOCK NO. 11

KLIMA PROPERTY  
CONTRACT 34-3545-D  
TAX MAP #35 CEDAR ACRES, PLAT LIBER 4 FOLIO 11 ZONED R-20  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE AS SHOWN  
SHEET 1 OF 1