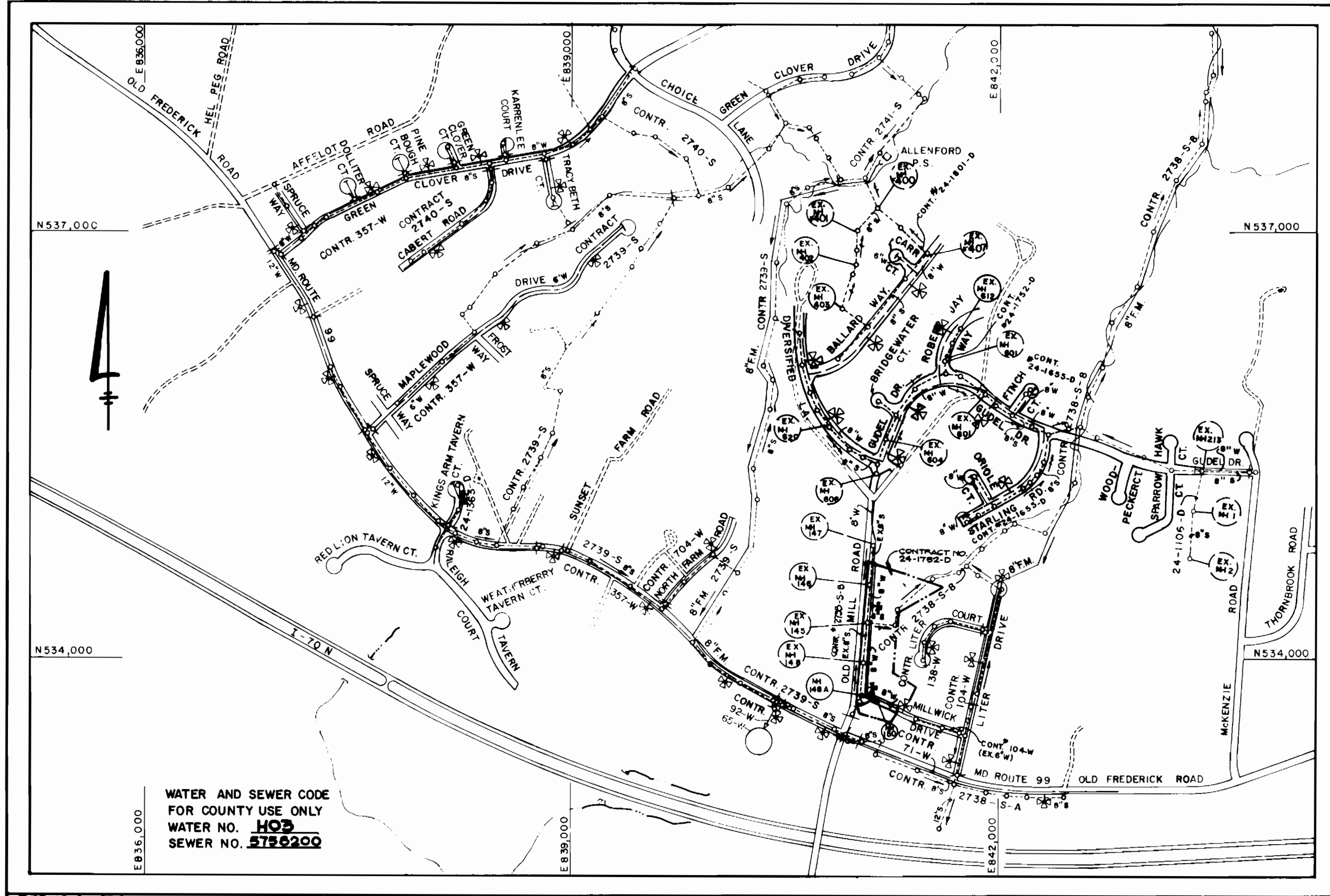


**GENERAL NOTES**

- 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. DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6".
- 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 VOLUME IV 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 NOT BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S 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: 850-4620
  - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL: 859-9004
  - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING: 298-9001
  - MISS UTILITY: 1-559-0100
  - COLONIAL PIPELINE COMPANY: 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 992-2366
  - C&P TELEPHONE COMPANY: 1-800-257-7777
- 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. 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 AND 1008 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 THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL G5.52 WHERE WATER-TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 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 FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G5.51.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153: DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER & OTHER LIQUIDS.



TYPE OF BUILDING	RESIDENTIAL
NUMBER OF LOTS	12 (11 SULLOUBLE)
NO OF WATER HOUSE CONNECTIONS	11
NO OF SEWER HOUSE CONNECTIONS	11
DRAINAGE AREA	LITTLE PATUXENT

**VICINITY MAP**  
SCALE: 1" = 600'

TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT  
VIA THE ROUTE 108 PUMPING STATION.

# CONTRACT NO. 24-1752-D

## OLD MILL

### LOTS 1-12

## WATER AND SEWER MAIN EXTENSIONS

# HOWARD COUNTY, MARYLAND

## DEPARTMENT OF PUBLIC WORKS

QUANTITIES			
ITEM	EST'D	AS-BUILT	SUPPLIER
8" SEWER	192 L.F.	186 L.F.	WATERWORKS
MANHOLES	2 EA.	2 EA.	WATERWORKS
6" SEWER	435 L.F.	423 L.F.	WATERWORKS
8 1/2" SADDLES	8 EA.	9 EA.	WATERWORKS
8" WATER	1687 L.F.	1662 L.F.	WATERWORKS
6" WATER	36 L.F.	28 L.F.	"
F.H. W/VALVE	2 EA.	2 EA.	"
1" W.H.C.	50 L.F.	53 L.F.	"
3/4" W.H.C.	160 L.F.	152 L.F.	"
8 x 6 REDUCER	1 EA.	1 EA.	"

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-88-228

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*James M. Nelson* 9/7/88  
SOIL CONSERVATION SERVICE DATE

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

APPROVED:

*Stephen L. Fisher* 9/7/88  
HOWARD SOIL CONSERVATION DISTRICT DATE

REFERENCE NUMBERS:
S 87 - 82
P 8 - 16
F 88 - 228

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James M. Nelson* 9/9/88  
DIRECTOR OF PUBLIC WORKS DATE

*Robert B. Brown* 9-2-88  
CHIEF BUREAU OF UTILITIES DATE

*W. S. Adams* 9-9-88  
CHIEF BUREAU OF ENGINEERING DATE

*Paul L. Brown* 9/2/88  
CHIEF LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC.  
CONSULTING ENGINEERS AND LAND SURVEYORS  
8388 COURT AVENUE  
ELLCOTT CITY, MARYLAND 21043



DES: P.W.K.	
DRN: S.B.	
CHK: P.W.K.	
DATE: 9/6/87	BY: NO
REVISION	DATE

TITLE	SHEET
600' SCALE MAP NO. 17	BLOCK NO.

**OLD MILL**  
LOTS 1-12  
CONTRACT NO. 24-1752-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 1 OF 3

MANHOLE TABULATION TABLE				
NO.	Q.RD. STA.	DISTANCE	RIM ELEV.	SLOPE
EX. MH. 145	8+13	12' LEFT	471.97	-1.0%
EX. MH. 146	10+90	4' LEFT	469.33	-1.00%
EX. MH. 148	5+46	12' LEFT	466.43	+1.7%
EX. MH. 149	2+69	7' RIGHT	469.33	-3.9%
MH. 148A	3+15	3' LEFT	467.90	-2.5%
MH. 150	SET RIM FLUSH WITH EX. GROUND			
EX. MH. 147	13+66	10' RIGHT	461.65	-2.0%

RIMS OF EX. MANHOLES TO BE ADJUSTED TO ELEVATIONS SHOWN

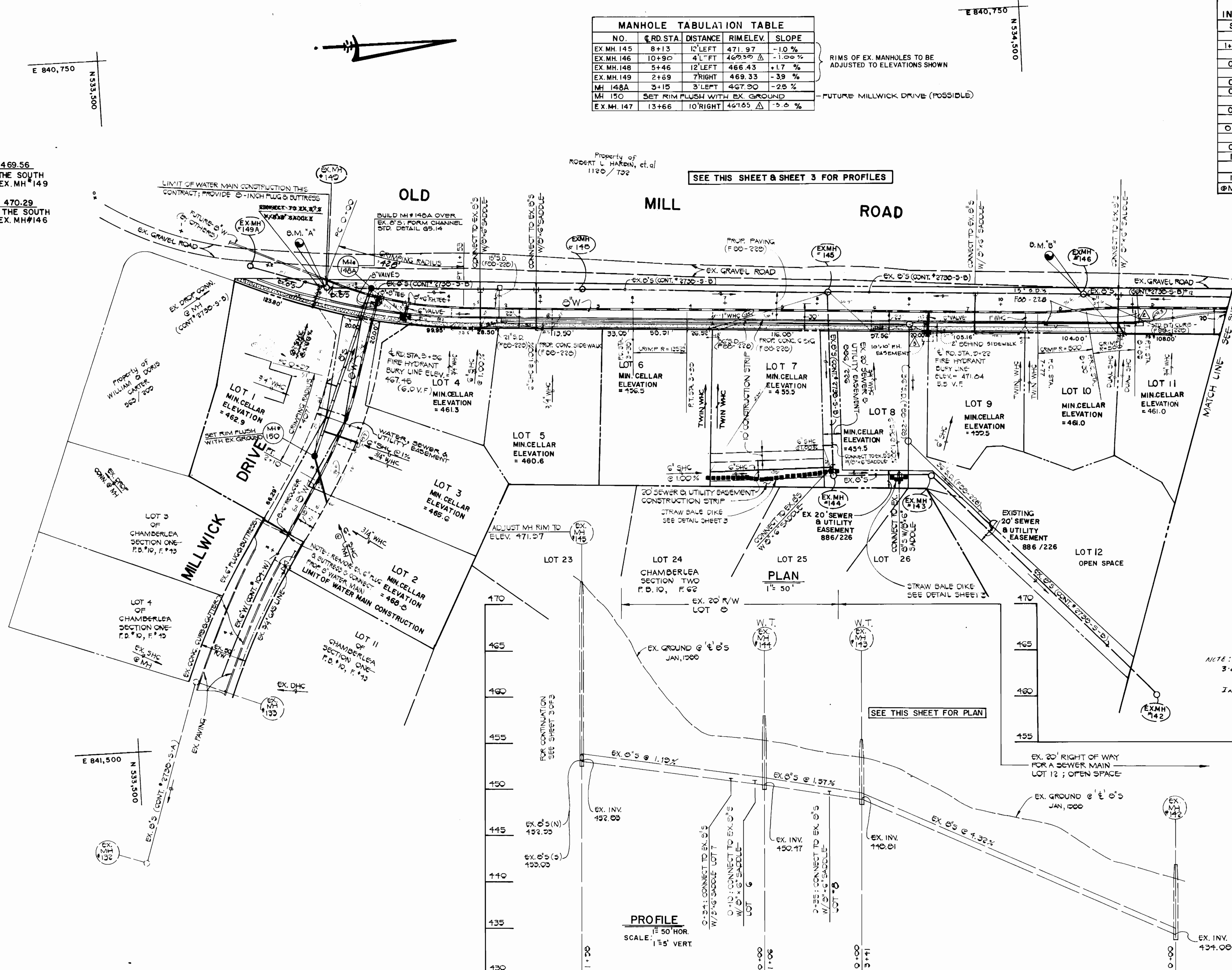
FUTURE MILLWICK DRIVE (POSSIBLE)

SEWER HOUSE CONNECTIONS INVERT ELEVATIONS AT PROPERTY LINE		
STATION	LOT	ELEVATION
EX. MH. #145 TO EX. MH. #146		
1+60 RT. (1%)	LOT 9	454.73
EX. MH. #143 TO EX. MH. #144		
0+35 RT. @ 1%	LOT 8	449.49 (1%)
EX. MH. #144 TO EX. MH. #145		
0+10 LT. @ 1%	LOT 6	452.00 (1%)
0+34 LT. @ 1%	LOT 7	451.05 (1%)
EX. MH. #146 TO EX. MH. #147		
0+38 RT.	LOTS 10 & 11	455.61
EX. MH. #148 TO EX. MH. #149A		
0+08 LT. (1%)	LOT 1	456.94
EX. MH. #148 TO MH. #148A		
0+49 LT. (1%)	LOT 5	456.61 (1%)
1+10 LT. (1%)	LOT 4	457.17 (1%)
MH. #148A TO MH. #150		
1+63 LT. (1%)	LOT 3	461.59 (1%)
0+M#150 LT.	LOT 2	462.95

**BENCH MARKS**

**B.M. "A"** ELEV. 469.56  
CROSS-CUT (X) ON THE SOUTH SIDE OF THE RIM OF EX. MH #149

**B.M. "B"** ELEV. 470.29  
CROSS-CUT (X) ON THE SOUTH SIDE OF THE RIM OF EX. MH #146



SEE THIS SHEET & SHEET 3 FOR PROFILES

**PLAN**

1" = 50'

**PROFILE**

SCALE: 1" = 5' VERT.

NOTE: ADDITIONAL AS BUILTS DONE 3-28-89 BY REQUEST H.C. INSPECTOR (M.K.H.) INDICATED IN CIRCLE O

CONTRACT NO. 24-1752-D  
OLD MILL  
LOTS 1-12  
WATER AND SEWER EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. ...* 9/1/88  
DIRECTOR OF PUBLIC WORKS DATE

*Robert W. ...* 9-2-88  
CHIEF, BUREAU OF UTILITIES DATE

*Michael ...* 9/2/88  
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC. #9757

CONSULTING ENGINEERS AND LAND SURVEYORS  
8388 COURT AVENUE  
ELLCOTT CITY, MARYLAND 21043

STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
TERRELL A. FISHER

DES: P.W.K.	GW. 5	REVISE 8" VALVE BACK TO ORIGINAL LOCATION	12/2/88
DRN: D.B.S.	GW. 4	REVISE LOCATION OF 8" VALVE	11/10/88
CHK: P.W.K.	MJM	REVISE FIRE HYDRANT SETTING	11-2-88
	MJM	ADD PROPOSED STORMS DRAINS	11-2-88
	MJM	REVISE MANHOLE TABLE	11-1-88
DATE: 12/2/87	BY: NO.	REVISION	DATE

**PLAN**

**WATER AND SEWER MAINS**

600' SCALE MAP NO. 17 BLOCK NO.

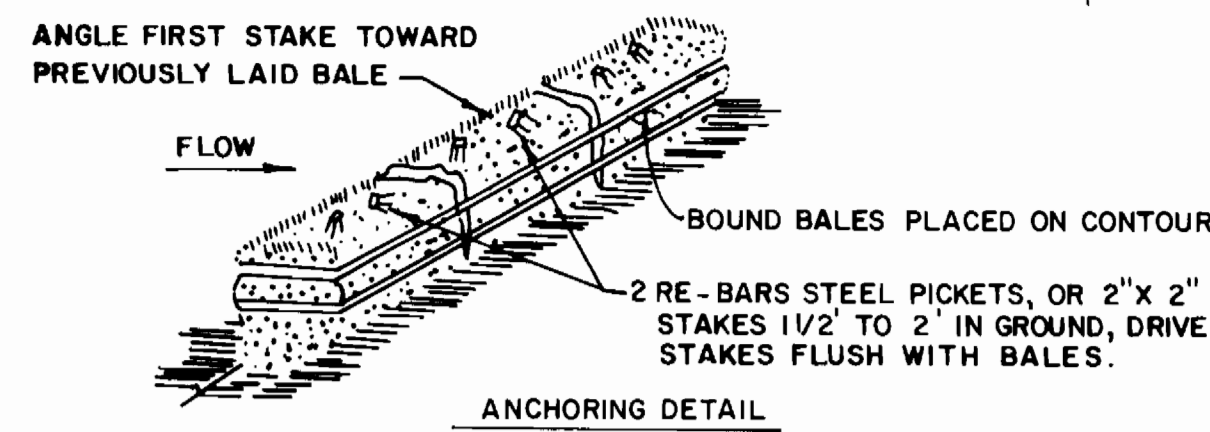
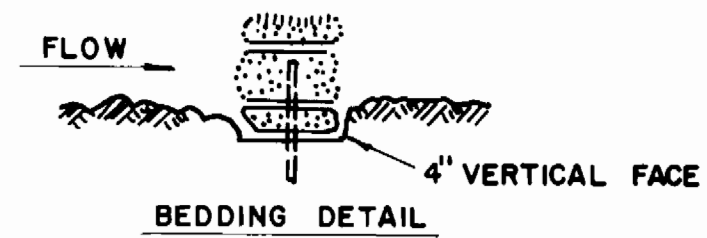
**OLD MILL**  
LOTS 1-12  
CONTRACT NO. 24-1752-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 2 OF 3

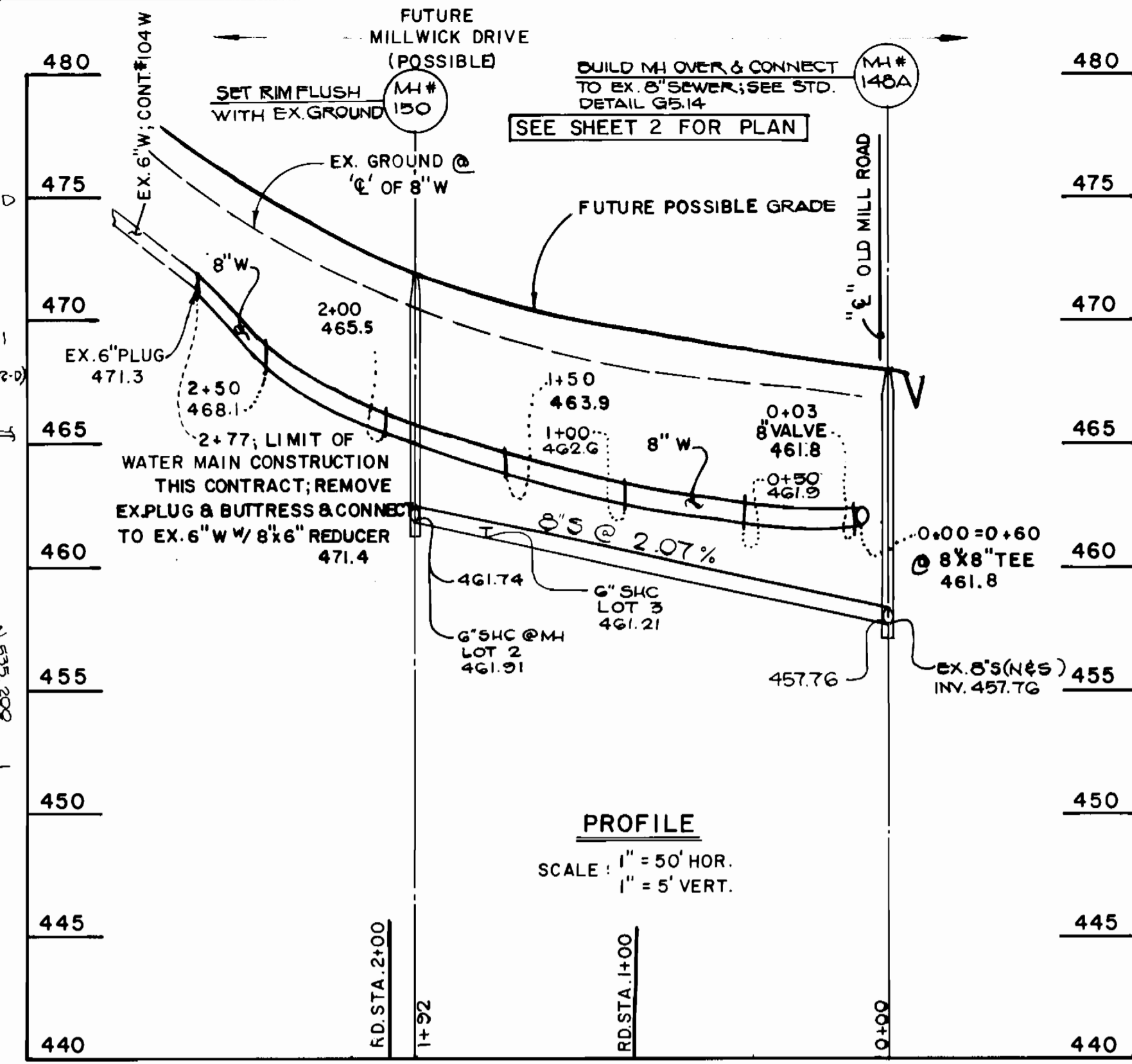
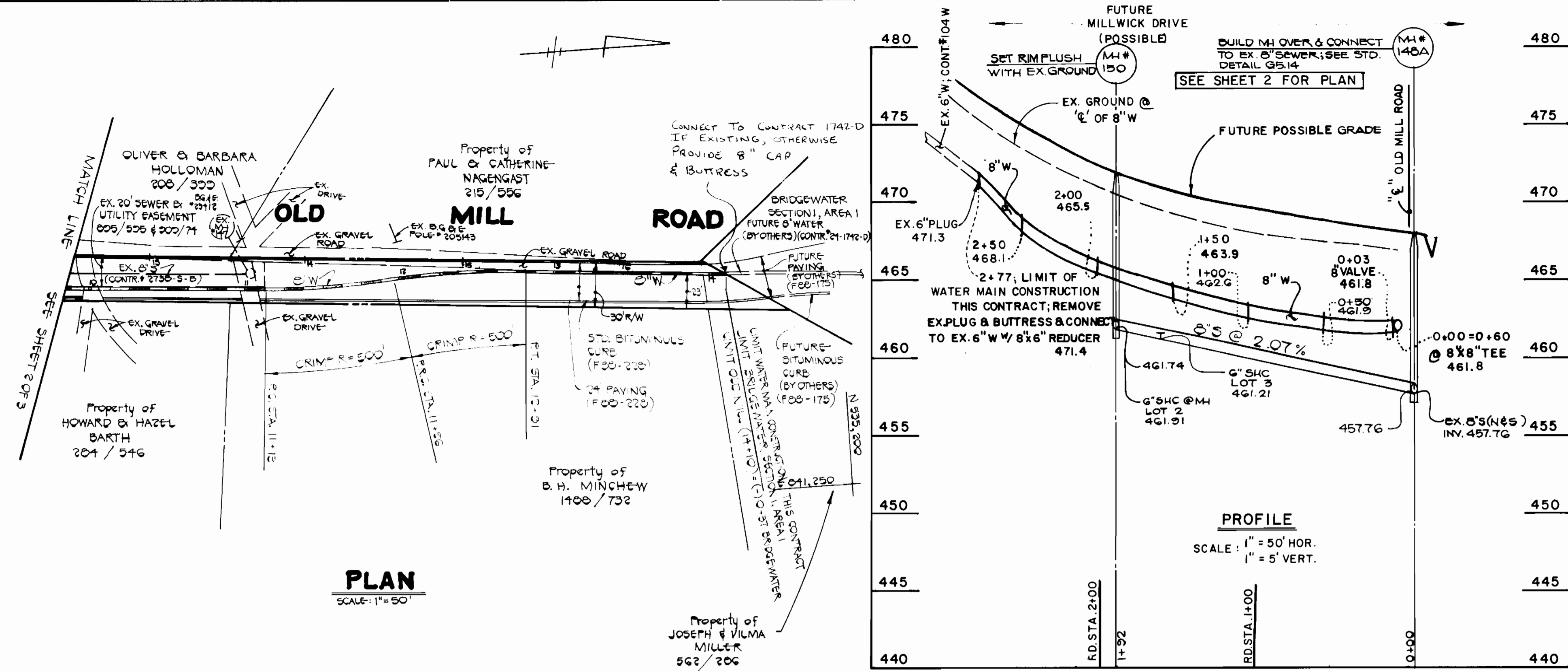
BRUNING 69150

Additional As BUILTS 03-28-89

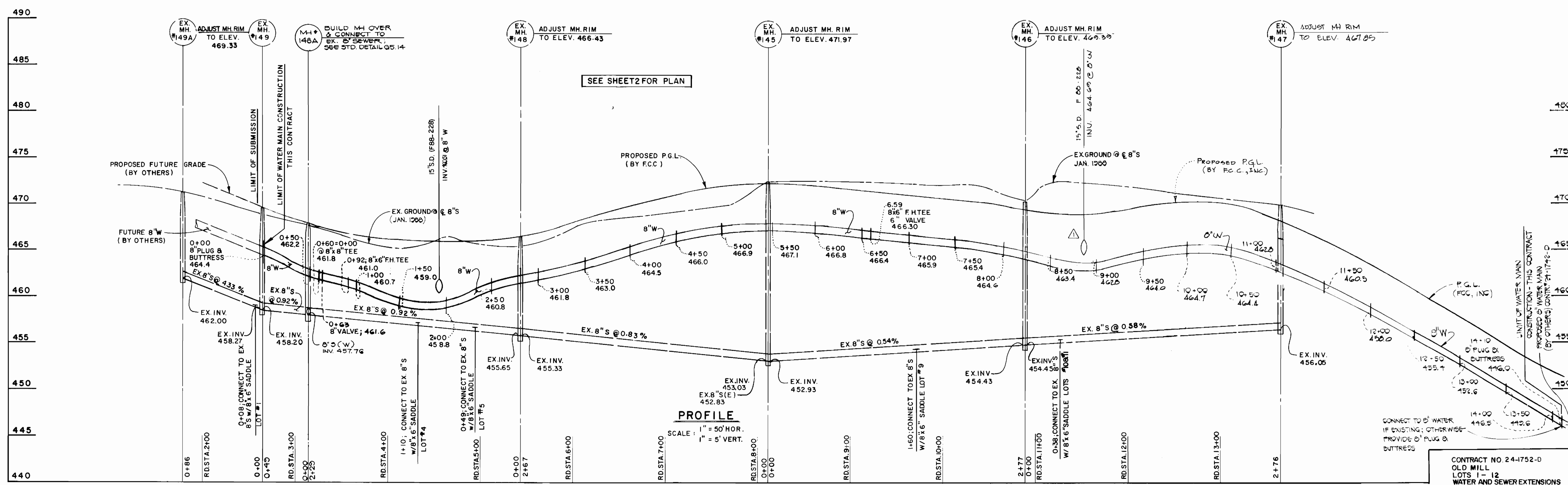


**STRAW BALE DIKE**

- BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
- INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



**OLD MILL ROAD**  
EX. 20' R/W FOR A SEWER MAIN



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* DATE: 9-2-88  
Chief, Bureau of Utilities: *[Signature]* DATE: 9-2-88

Chief, Bureau of Engineering: *[Signature]* DATE: 9/2/88  
Chief, Land Development Division: *[Signature]* DATE: 9/2/88

FISHER, COLLINS AND CARTER, INC. #9757  
CONSULTING ENGINEERS AND LAND SURVEYORS  
8388 COURT AVENUE  
ELLICOTT CITY, MARYLAND 21043

TERRELL A. FISHER

DES: P.W.K.			
DRN: S.B.			
CHK: P.W.K.	G.W. 3	REVISE B VALVE BACK TO ORIGINAL LOCATION	11/10/88
	MJM 2	REVISE LOCATION OF B VALVE	11/10/88
		Add 5.0' of Rainfall WM Profile: 7-50 to 12-50	11-2-88
DATE: 11/10/87	BY NO.	REVISION	DATE

PROFILES  
WATER AND SEWER MAINS

600' SCALE MAP NO. 17 BLOCK NO.

OLD MILL  
LOTS 1-12  
CONTRACT NO. 24-1752-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 3 OF 3

ADDITIONAL 11-2-88 11-2-88 11-2-88