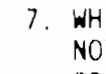
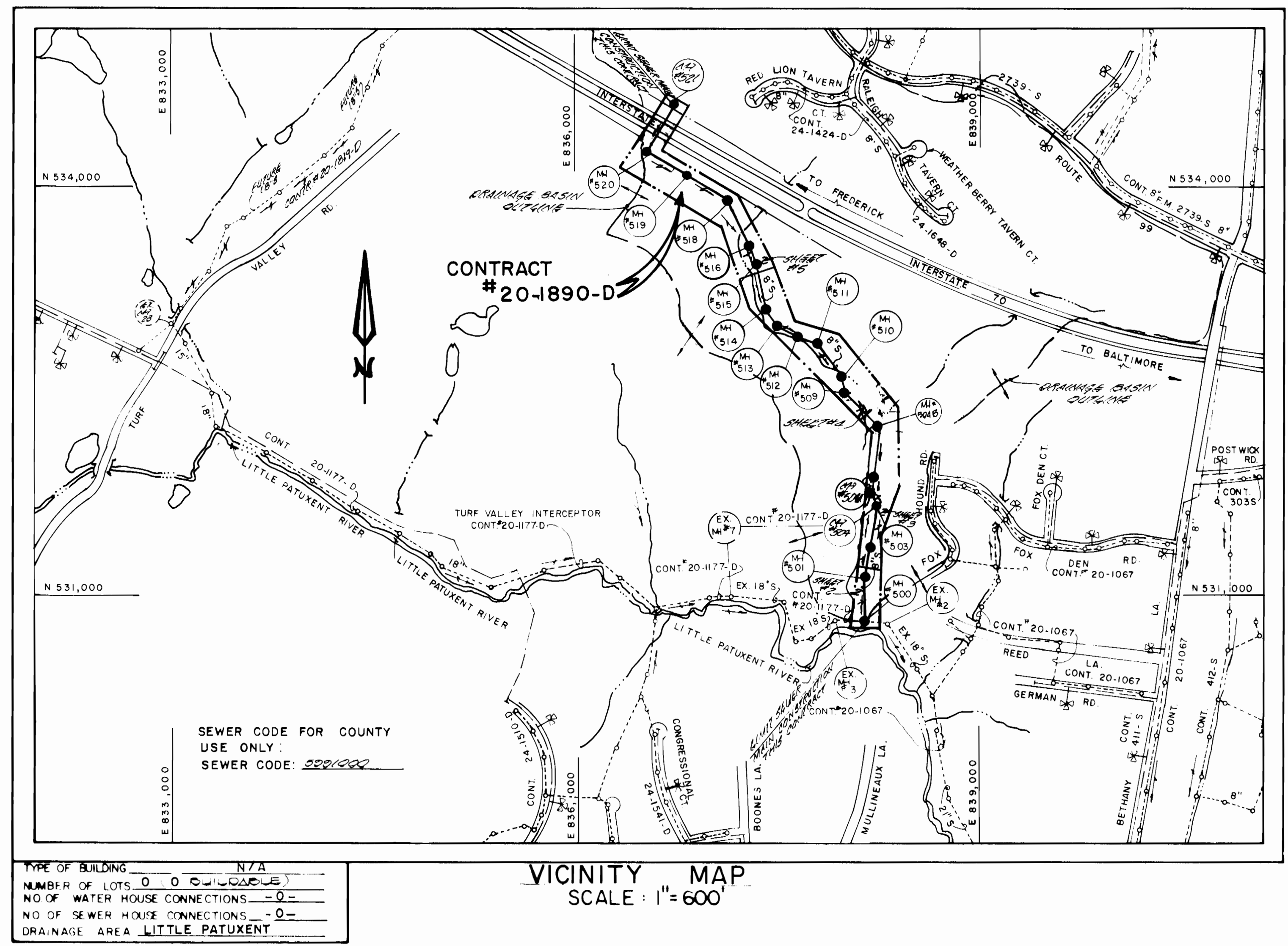


**GENERAL NOTES**

- 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 GS.52 WHERE WATERTIGHT 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 GS.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	N/A
NUMBER OF LOTS	0 (0 UNLOADABLE)
NO OF WATER HOUSE CONNECTIONS	0
NO OF SEWER HOUSE CONNECTIONS	0
DRAINAGE AREA	LITTLE PATUXENT

# CONTRACT NO. 20-1890 - D

## WETHERBURN OUTFALL

### SEWER MAIN

## HOWARD COUNTY, MARYLAND

### DEPARTMENT OF PUBLIC WORKS

QUANTITIES			
ITEM	ESTD	AS-BUILT	SUPPLIER
8" SEWER	2,149 LF	2206 LF	A.T.P. WATER AND SEWER MATERIALS, INC.
MANHOLE	19 EA	19 EA	ATLANTIC COINC. PRODUCTS, INC.
8" STAINLESS STEEL 30" DIA. W/B SEWER CONNECTIONS	2,219 LF	2109 LF	ATLANTIC STATES
30" DIA. W/B SEWER CONNECTIONS	310 LF	310 LF	SEVERN STEEL & EQUIP., INC.

NOTE: QUANTITIES FOR PIPE LENGTHS ARE MEASURED FROM MANHOLES TO MANHOLES.

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.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT  
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND METS TECHNICAL REQUIREMENTS: 2-10-89  
 SOIL CONSERVATION SERVICE

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 DIRECTOR OF PUBLIC WORKS: 2-17-89  
 CHIEF, BUREAU OF ENGINEERING: 2-21-89  
 CHIEF, PLANNING AND DEVELOPMENT DIVISION: 2-10-89

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

DES. G.W.					
DRN. G.W./S.B.					
CHK. P.W.K.					
M.M.	I	REVISE QUANTITIES			

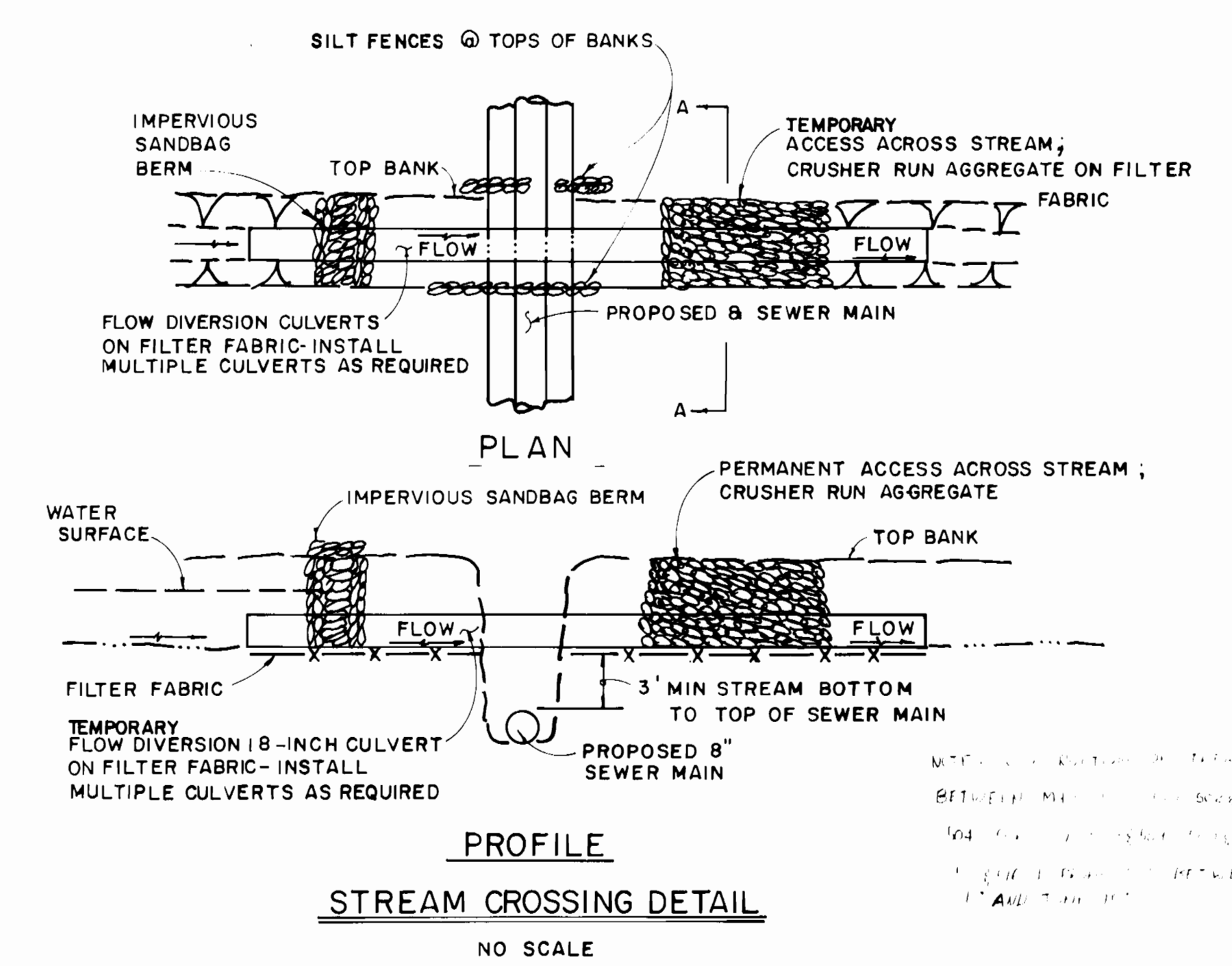
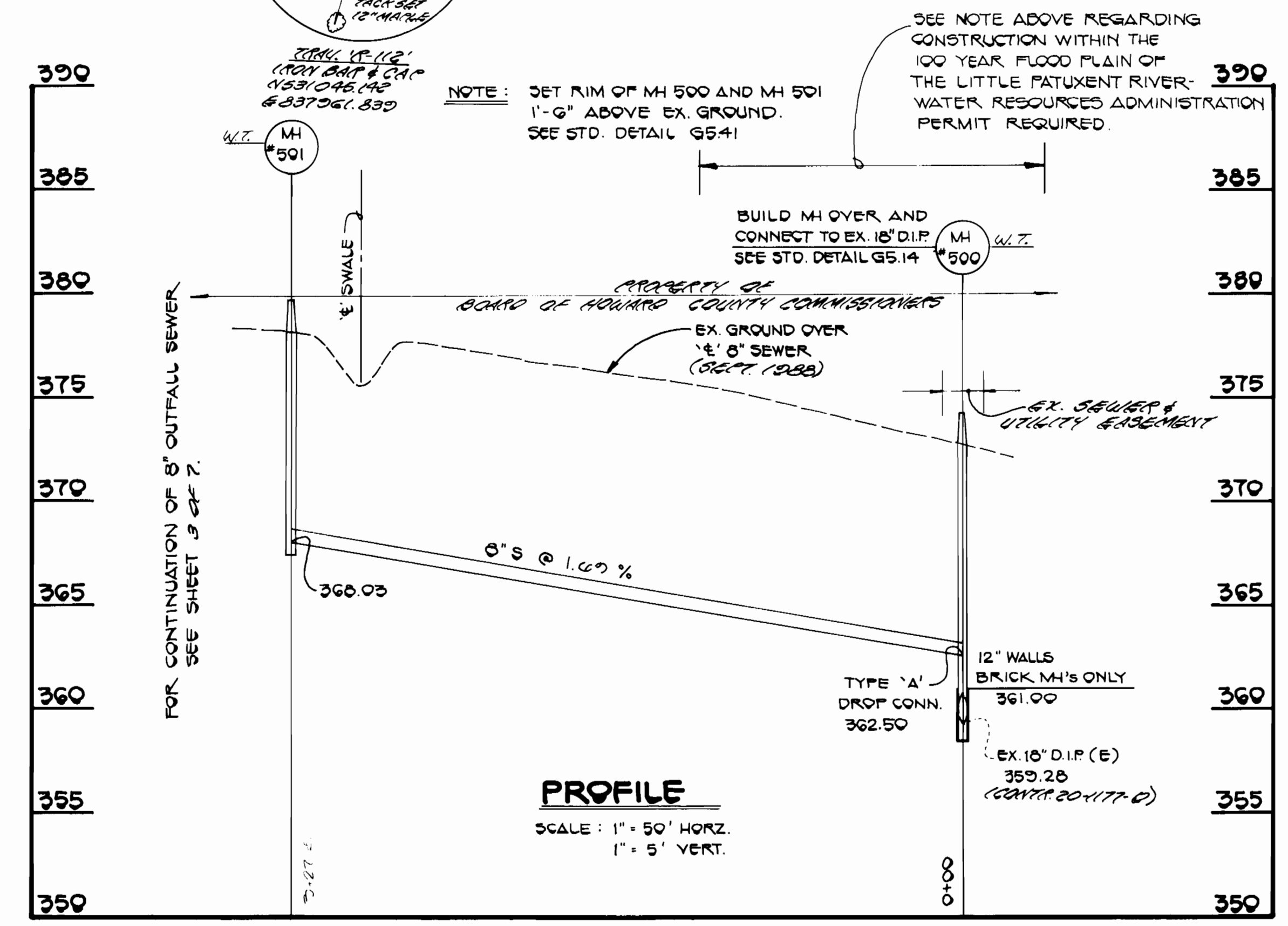
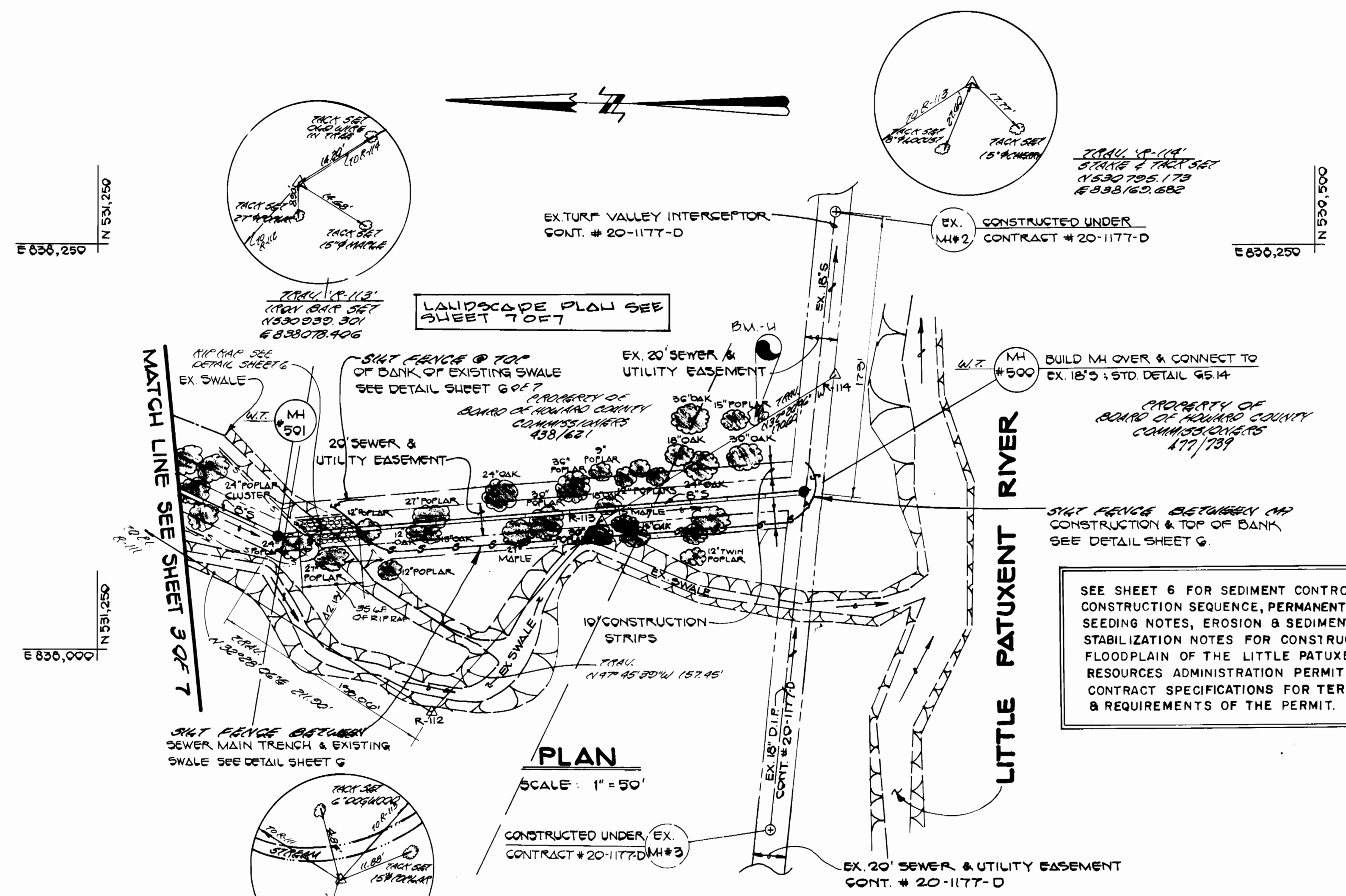
CONTRACT NO. 20-1890-D  
 WETHERBURN OUTFALL  
 SEWER MAIN  
 HOWARD COUNTY, MARYLAND

**WETHERBURN OUTFALL**  
**SEWER MAIN**  
 CONTRACT NO. 20-1890-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 1 OF 7

AS-BUILT 10/12/89

BENCH MARK  
 2.17-89  
 2.21-89  
 2.21-89  
 2.21-89



CONTRACT NO. 20-1890-D  
 WETHERBURN OUTFALL  
 SEWER MAIN  
 WATER AND SEWER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

James P. ...  
 DIRECTOR OF PUBLIC WORKS  
 DATE: 2-21-89

Robert H. ...  
 CHIEF, BUREAU OF UTILITIES  
 DATE: 2-17-89

FISHER, COLLINS, AND CARTER, INC.  
 # 9757

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

TERRILL A. FISHER

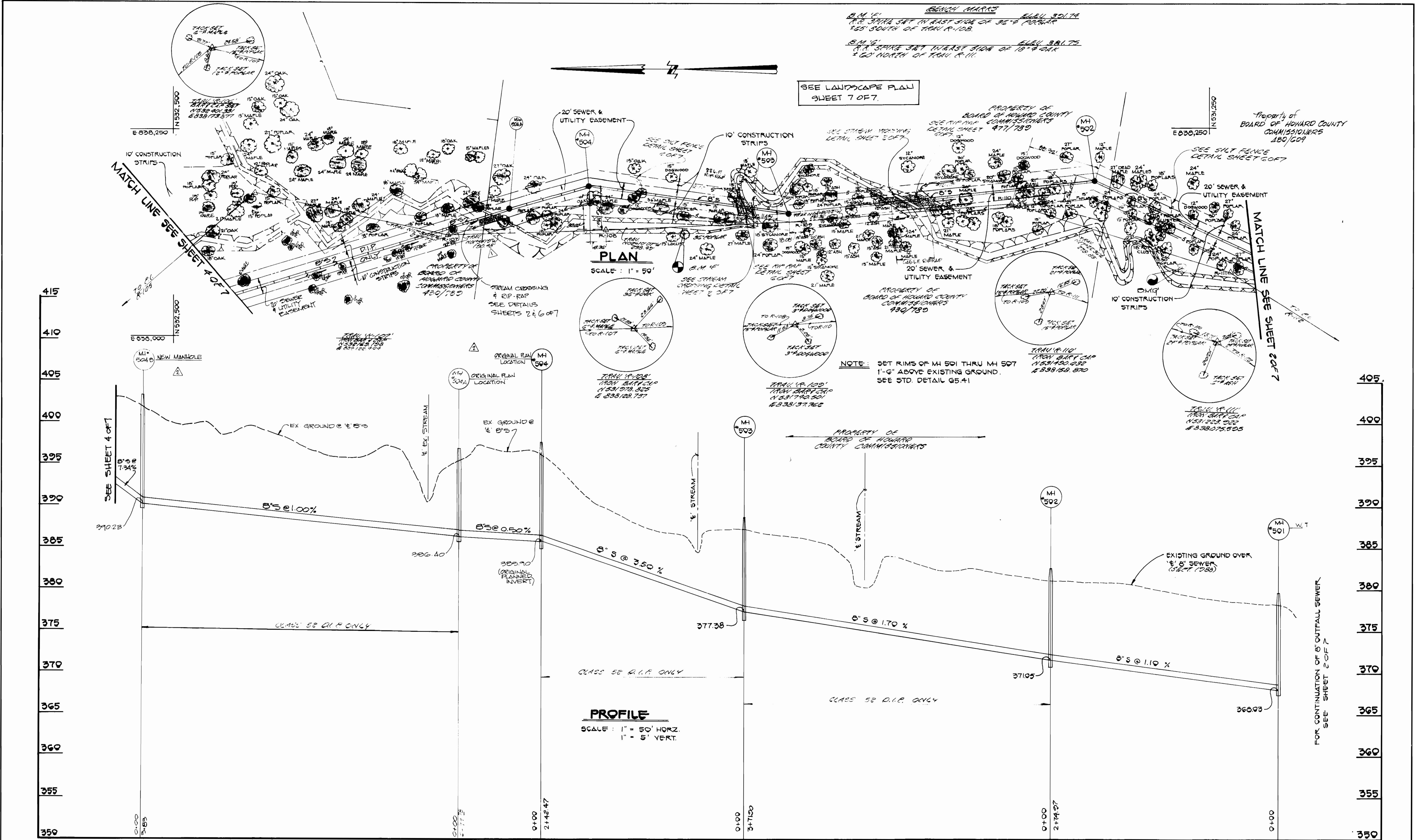
DES: G.W.					
DRN: G.W.					
CHK: P.W.K.					
DATE:	BY:	NO.	REVISION	DATE	

SEWER MAIN  
 PLAN AND PROFILE

600' SCALE MAP NO. 17 BLOCK NO. 12

WETHERBURN OUTFALL SEWER MAIN  
 CONTRACT NO. 20-1890-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 2 OF 7



B.M. 151  
 15' 0" SPALL SET IN EAST SIDE OF 36" D. PAVEMENT  
 165' SOUTH OF TRAIL R-105

B.M. 152  
 18" SPALL SET IN EAST SIDE OF 18" D. CURB  
 2' 20" NORTH OF TRAIL R-111

SEE LANDSCAPE PLAN  
 SHEET 7 OF 7.

PROPERTY OF  
 BOARD OF HOWARD COUNTY  
 COMMISSIONERS  
 SEE MAP MAP  
 DETAIL SHEET 477/780

PROPERTY OF  
 BOARD OF HOWARD COUNTY  
 COMMISSIONERS  
 180/609

PLAN  
 SCALE: 1" = 50'

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

NOTE: SET RIMS OF MH 501 THRU MH 507  
 1'-6" ABOVE EXISTING GROUND.  
 SEE STD. DETAIL G5.41

CONTRACT NO. 20-1890-D  
 WETHERBURN OUTFALL  
 SEWER MAIN  
 WATER AND SEWER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS  
 DATE: 2-17-89

CHIEF, BUREAU OF UTILITIES  
 DATE: 2-21-89

FISHER, COLLINS, AND CARTER, INC.  
 #9757

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

TERRELL A. FISHER

DES: G.W.					
DRN: G.W.					
CHK: P.W.K.	M.M.	2	REVISE PROFILE; MH 504 TO 507	7-12-87	
	M.M.	1	REVISE ALIGNMENT; MH 504 TO 509	7-12-87	
DATE:	BY	NO.	REVISION	DATE	

SEWER MAIN  
 PLAN AND PROFILE

600' SCALE MAP NO. 17 BLOCK NO. 13

WETHERBURN OUTFALL SEWER MAIN

CONTRACT NO. 20-1890-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE  
 AS  
 SHOWN

SHEET  
 3 OF 7

BENCH MARKS  
 B.M. #8 BENCH MARK ELEV. 422.42  
 R.R. SPINE SET IN 15" P. POPLAR 10' S.W. OF  
 27' STREAM AND 1' 200' S.E. OF TRAIL R. 102.  
 B.M. #9 ELEV. 422.25  
 R.R. SPINE SET IN NORTH SIDE OF 24" OAK  
 2' S. AND 10' W. OF TRAIL R. 51.  
 B.M. #10 ELEV. 420.72  
 R.R. SPINE SET IN 35" OAK, 50' N.W.  
 OF TRAIL R. 102.

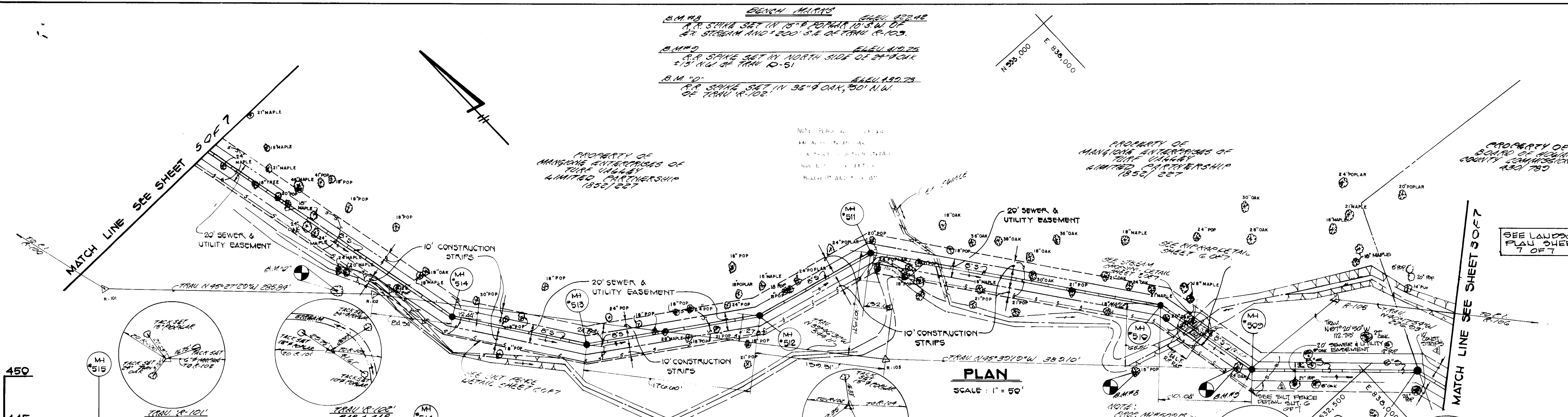
N 533.000  
 E 836.000

PROPERTY OF  
 MANSION ENTERPRISES OF  
 TURE VALLEY  
 LIMITED PARTNERSHIP  
 1852/227

PROPERTY OF  
 MANSION ENTERPRISES OF  
 TURE VALLEY  
 LIMITED PARTNERSHIP  
 1852/227

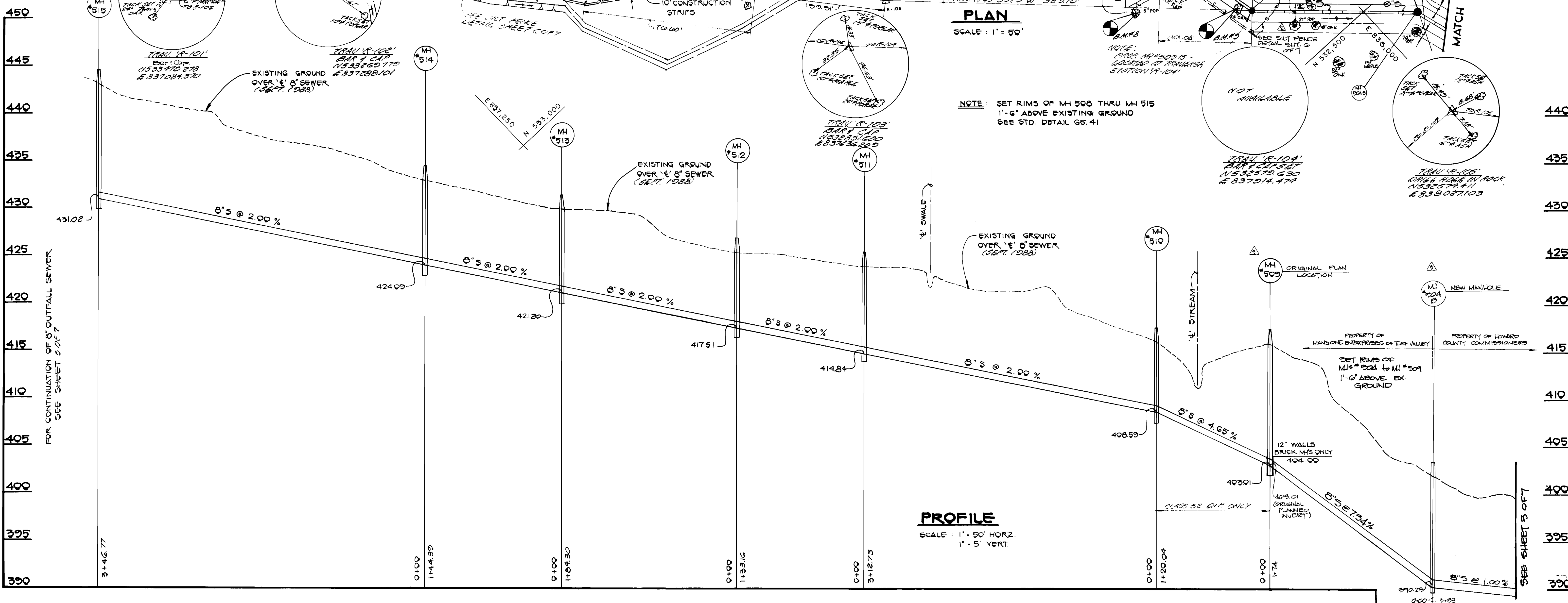
PROPERTY OF  
 BOARD OF BOARDING  
 COUNTY COMMISSIONERS  
 1852/780

SEE LANDSCAPE  
 PLAN SHEET  
 7 OF 7



**PLAN**  
 SCALE: 1" = 50'

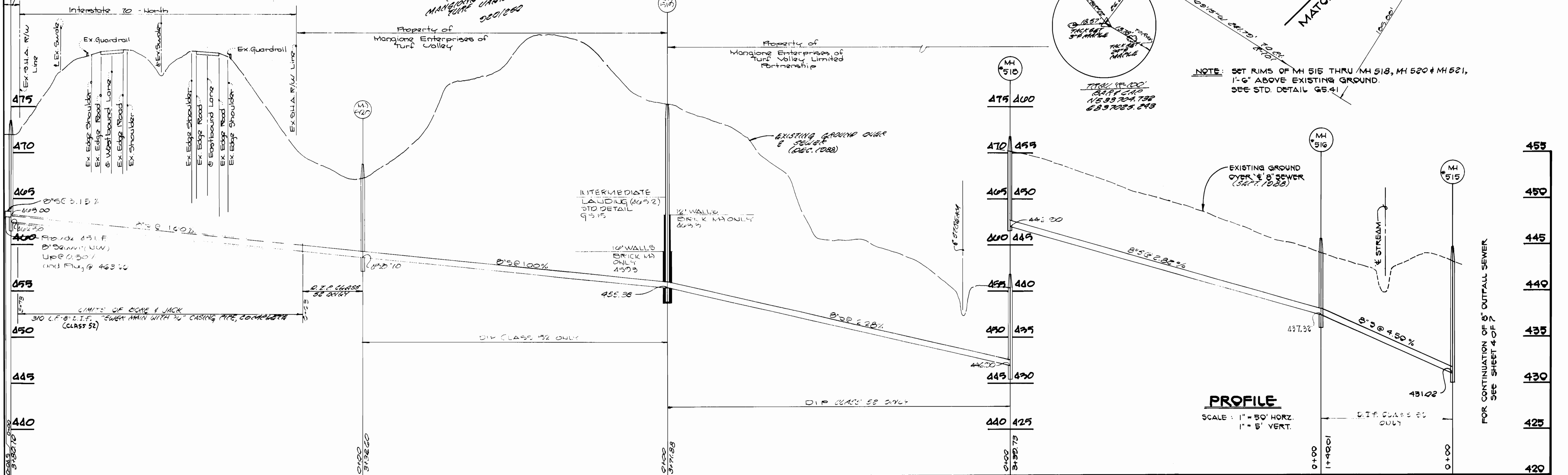
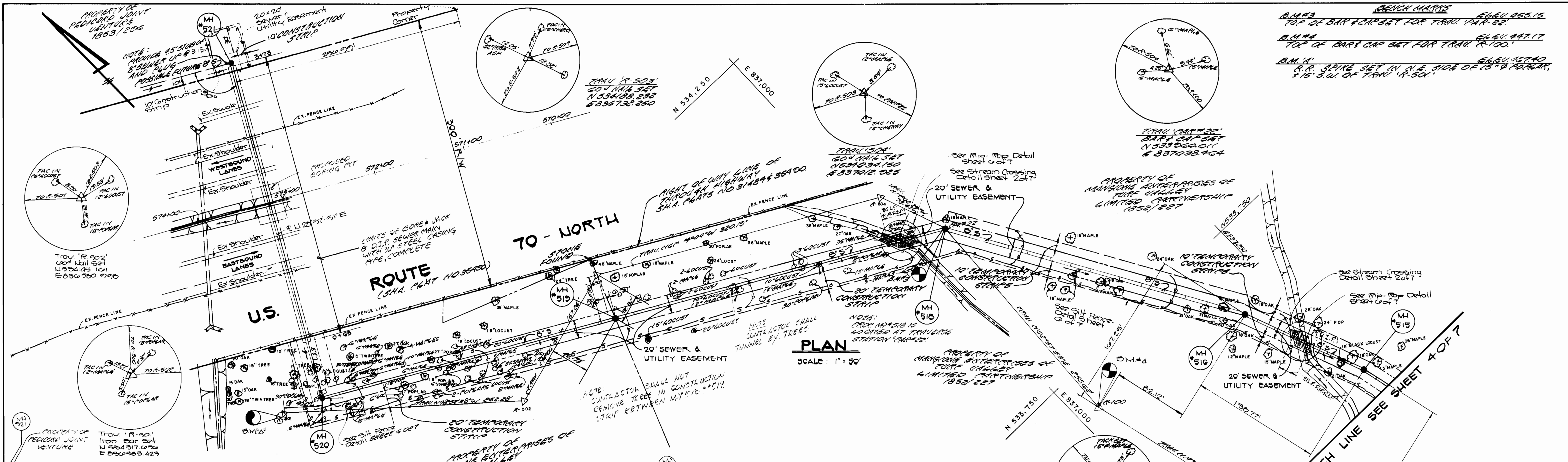
NOTE: SET RIMS OF MH 500 THRU MH 515  
 1'-0" ABOVE EXISTING GROUND  
 SEE STD. DETAIL G5.41



**PROFILE**  
 SCALE: 1" = 50' HORZ.  
 1" = 5' VERT.

CONTRACT NO. 20-1890-D  
 WETHERBURN OUTFALL  
 SEWER MAIN  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

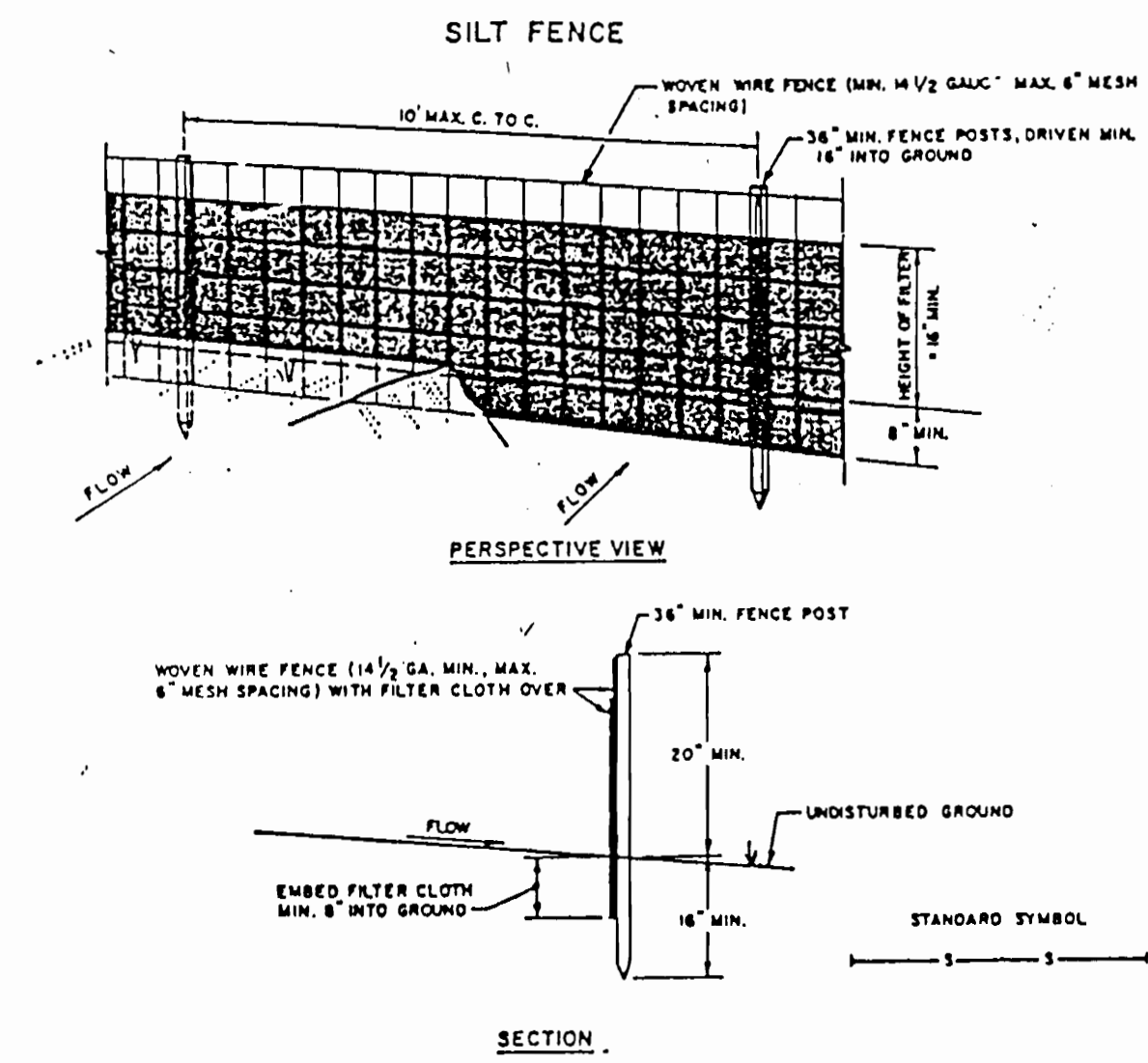
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND James P. ... DIRECTOR OF PUBLIC WORKS DATE: 2/17/89 Chief, Bureau of Utilities		FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 TERRELL A. FISHER		DES: G.W. DRN: G.W. CHK: P.W.K. DATE:		#9757 M.M. 3 REVISE PROFILE; M1504 TO M1509 7-12-89 M.M. 2 REVISE ALIGNMENT; M1504 TO M1509 7-12-89 REVISION		SEWER MAIN PLAN AND PROFILE 600' SCALE MAP NO. 17 BLOCK NO. 12		WETHERBURN OUTFALL SEWER MAIN CONTRACT NO. 20-1890-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 4 OF 7	
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**BENCH MARKS**  
 B.M.#3 ELEV. 455.15  
 TOP OF BARR CAP SET FOR TRAIL 14.50'  
 B.M.#4 ELEV. 447.17  
 TOP OF BARR CAP SET FOR TRAIL 14.100'  
 B.M.#1 ELEV. 457.40  
 R.P. SPINE SET IN N.E. SIDE OF 15' W. POWER,  
 3.15' S.W. OF TRAIL 14.50'

**NOTE:** SET RIMS OF MH 515 THRU MH 518, MH 520 & MH 521,  
 1'-6" ABOVE EXISTING GROUND.  
 SEE STD. DETAIL G5-41

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James J. ...</i> DATE: 2/1/89 Chief, Bureau of Engineering: <i>...</i> DATE: 2-21-89 Chief, Bureau of Utilities: <i>Robert ...</i> DATE: 2-17-89 Chief, Land Development Division: <i>...</i> DATE: 2/1/89		FISHER, COLLINS, AND CARTER, INC. #9757 CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 Terrell A. Fisher		DES: G.W. DRN: G.W. CHK: P.W.K. DATE: _____ BY: _____ NO.: _____ REVISION: _____ DATE: _____		SEWER MAIN PLAN AND PROFILE 600 SCALE MAP NO. 12 BLOCK NO. 13		WETHERBURN OUTFALL SEWER MAIN CONTRACT NO. 20-1890-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 5 OF 7	
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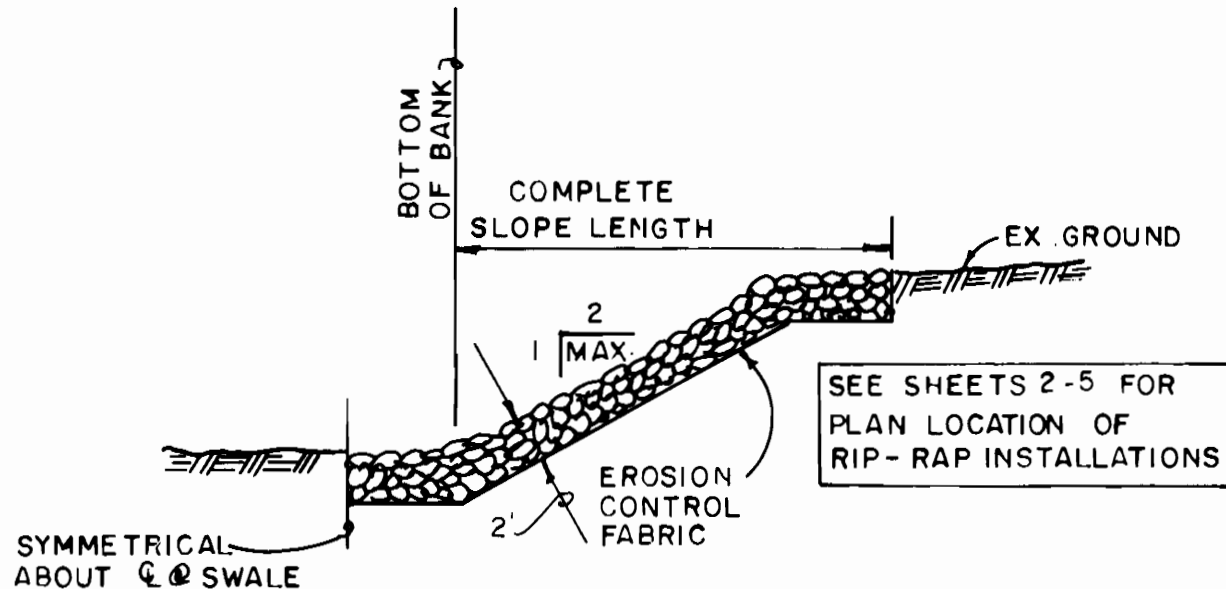
**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD  
 FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING  
 FILTER CLOTH: FILTER X, MURFEL 1100, STABILINKA 114001 OR APPROVED EQUAL  
 PREFABRICATED UNIT: GEOFAB, CIVIROFENCE, OR APPROVED EQUAL.

**RIP RAP NOTES**

1. RIP-RAP SHALL BE PLACED OVER ALL DISTURBED AREAS WITHIN THE FULL WIDTH OF THE RIGHT OF WAY AT THOSE LOCATIONS INDICATED ON THE DRAWINGS
2. RIP-RAP FOR PLACEMENT ALONG THE STREAM BANK AT THE SEWER MAIN CROSSING SHALL CONFORM TO SHA SPECIFICATIONS FOR CLASS II STONE AND THE THICKNESS OF THE RIP-RAP LAYER SHALL BE 2'0"
3. EROSION CONTROL FABRIC SHALL BE POLY FILTER - X AS MANUFACTURED BY CARTHAGE MILLS, INC. OR PERMEALINER M-1195 AS MANUFACTURED BY STAFF INDUSTRIES, INC. OR EQUAL.



**LOOSE LAID RIP-RAP DETAIL**

NO SCALE

**PERMANENT STABILIZATION AND SEEDING NOTES**

1. REFERENCE SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS FOR COMPLETE REQUIREMENTS REGARDING PERMANENT STABILIZATION AND SEEDING OF ALL DISTURBED AREAS.
2. REFERENCE PARAGRAPH 219.11 FOR EXECUTION REQUIREMENTS REGARDING PERMANENT SEEDING.
3. LIMESTONE: APPLY LIMESTONE AT THE RATE OF 1 1/2 TONS PER ACRE ON SANDY AND SILTY SOILS AND 2.3 TONS PER ACRE ON CLAY OR CLAY LOAM SOILS.
4. FERTILIZER: APPLY FERTILIZER AT THE RATE OF 600 POUNDS OF 0-20-20 PER ACRE WITH LIMESTONE APPLICATION (SEE ABOVE) IMMEDIATELY PRIOR TO SEEDING, APPLY 400 POUNDS OF 38-0-0 UREAFORM AND 500 POUNDS OF 10-20-20 PER ACRE.
5. PERMANENT SEED SHALL CONFORM TO THE REQUIREMENTS, MIXTURES AND APPLICATION RATES AS SPECIFIED IN SUBPARAGRAPH 219.10-2.
6. MULCH SHALL BE CLEAN, WEED-FREE, UNROTTED STRAW APPLIED AT THE RATE OF NOT LESS THAN 1 1/2 TONS PER ACRE OR WOOD CHIPS WITH A COVERAGE OF 1 1/2 INCHES IN DEPTH.
7. MULCH SHALL BE ANCHORED WITH CUT BACK AND EMULSIFIED ASPHALT APPLIED AT A RATE OF 5 GALLONS PER 1000 SQUARE FEET - REFERENCE SUBPARAGRAH 219.10-6 FOR MULCH ANCHORING ALTERNATIVES.

**STABILIZATION NOTES**

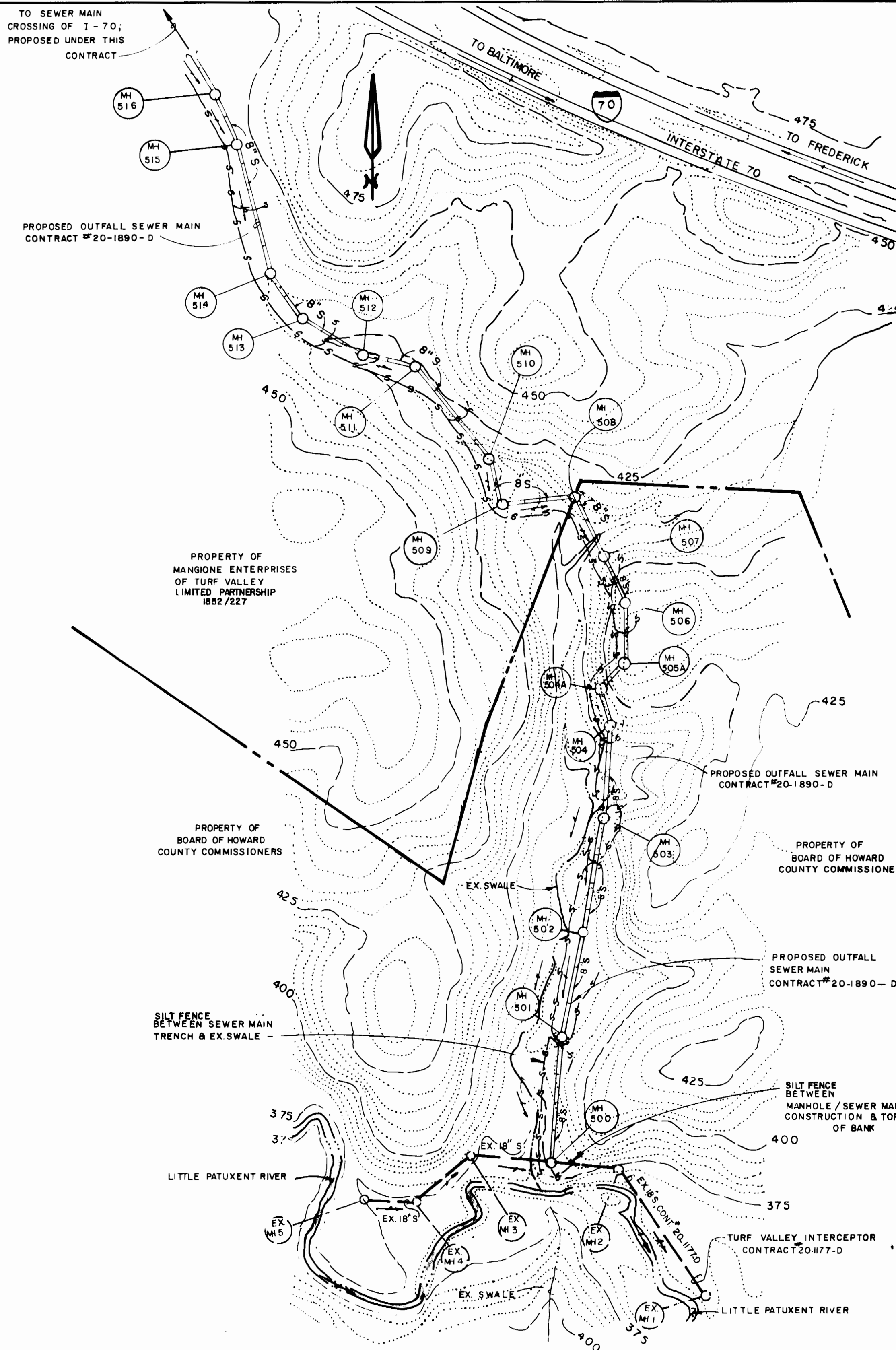
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
1. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1
  2. 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

**SEWER MAIN CONSTRUCTION SEQUENCE**

1. IMPLEMENT CONDITIONS & REQUIREMENTS OF THE TEMPORARY WATERWAY CONSTRUCTION PERMIT - SEE CONTRACT SPECIFICATIONS.
2. INSTALL REQUIRED SEDIMENT & EROSION CONTROL DEVICES - SEE PLAN SHEET FOR LOCATIONS.
3. CLEAR AND GRUB AS NECESSARY - WITHIN THE LIMITS OF THE SEWER MAIN RIGHT OF WAY ONLY.
4. EXCAVATE TRENCH; PLACE EXCAVATED MATERIAL ON THE UPGRADE SIDE OF THE SEWER MAIN TRENCH.
5. INSTALL SEWER MAIN, BACKFILL & COMPACT TRENCH IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
6. STABILIZE, SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
7. FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS AND UPON APPROVAL OF THE SOIL CONSERVATION DISTRICT INSPECTOR, REMOVE THE EROSION & SEDIMENT CONTROL DEVICES.

**EROSION AND SEDIMENT CONTROL NOTES**

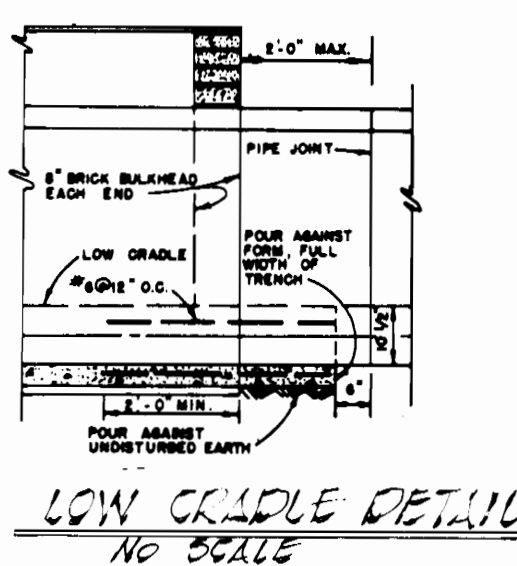
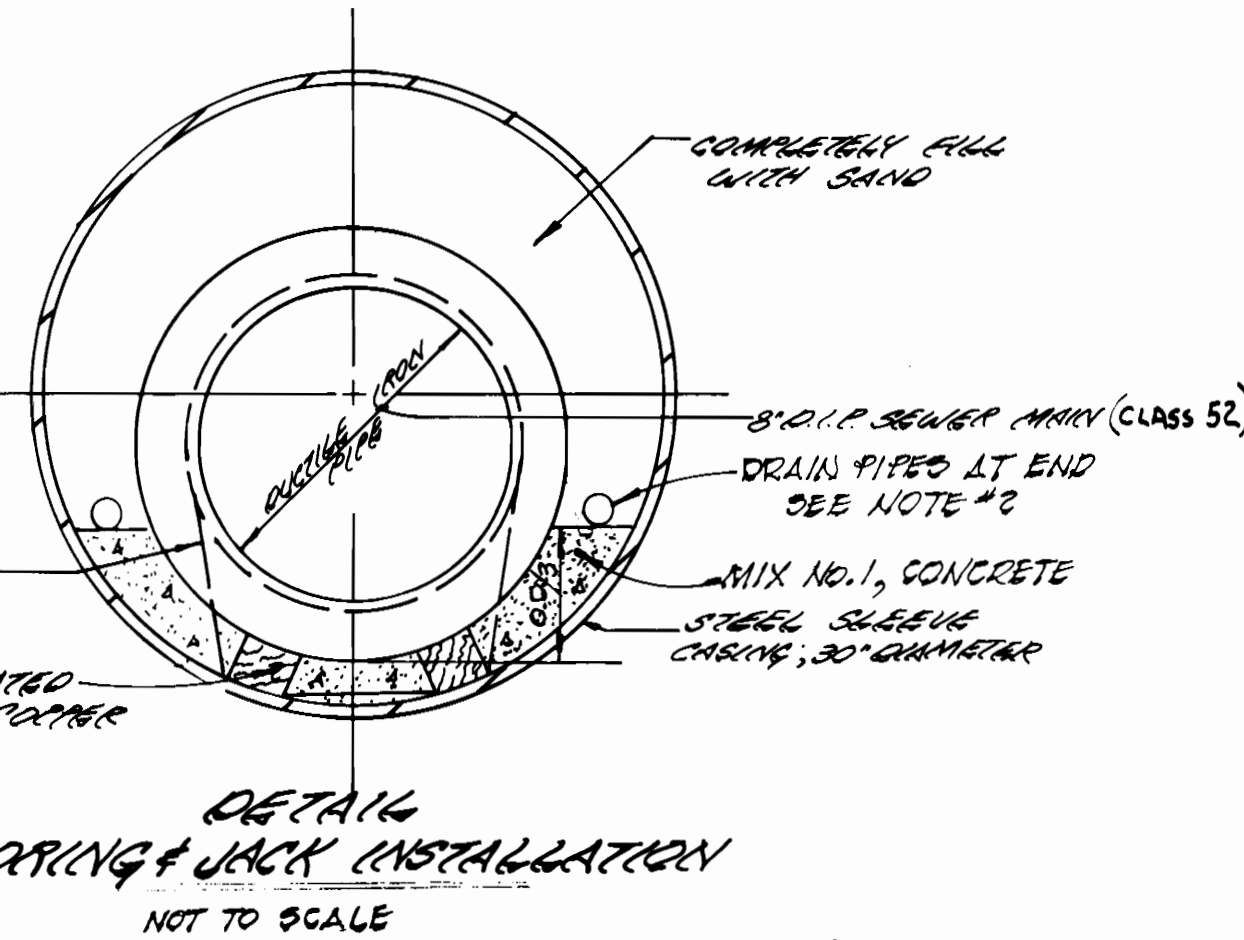
1. ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
3. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE SEWER MAIN TRENCH.
4. IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER MAIN TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
5. THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
6. ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
7. SEE SEWER MAIN CONSTRUCTION SEQUENCE THIS SHEET.



**PLAN: SEDIMENT CONTROL**

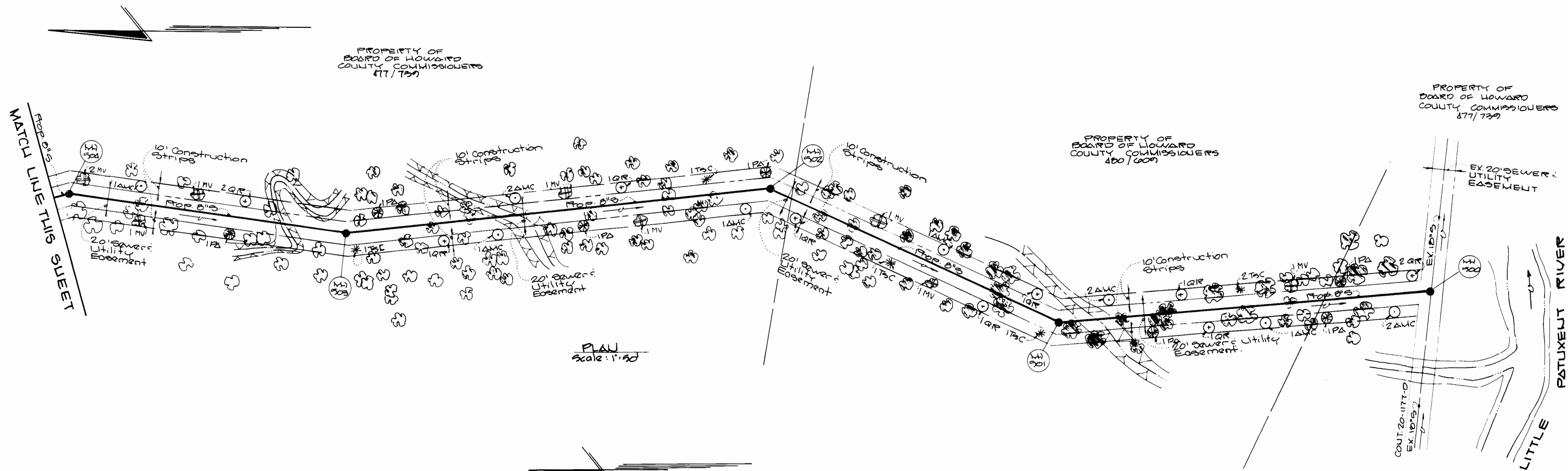
SCALE: 1" = 200'

CONTRACT NO. 20-1890-D  
 WETHERBURN OUTFALL  
 SEWER MAIN  
 WATER AND SEWER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

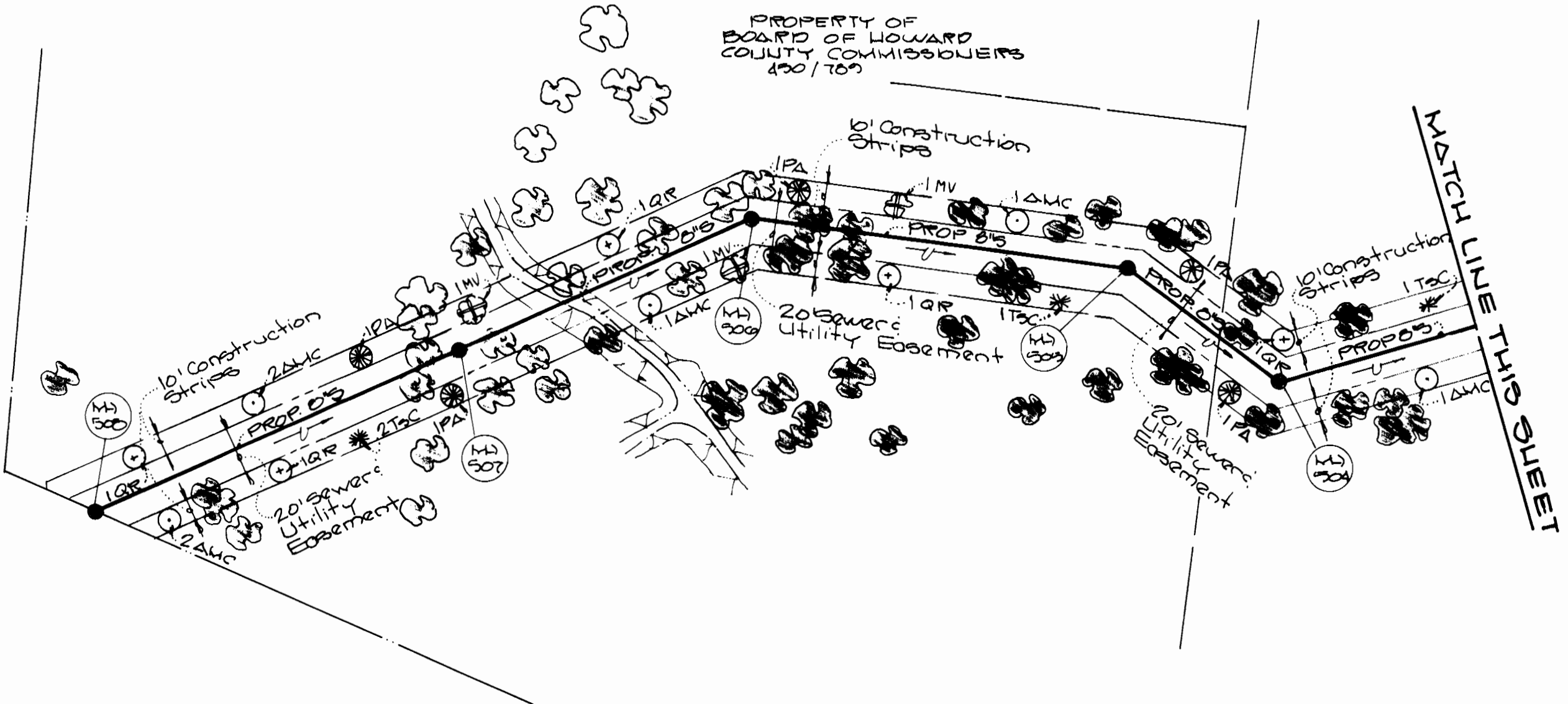


- NOTE:**
1. A JOINT IN THE MAIN PIPE TO BE PROVIDED WITHIN TWO (2) FEET OF EACH OUTSIDE END OF CASING.
  2. AN 8" BRICK BULKHEAD TO BE PROVIDED AT EACH END OF CASING. TWO (2") DIAMETER PIPES THROUGH BULKHEAD TO BE PROVIDED AT EACH SIDE OF MAIN PIPE AT LOW END OF CASING FOR DRAINAGE.
  3. ALL STRAPS AND OTHER EXPOSED STEEL TO BE COATED WITH KOPPERS BITUMASTIC 300 M, TNEMSTAR 46-413, OR EQUAL.
  4. STEEL CASING INSTALLED BY JACKING TO BE 1/2" MINIMUM THICK, A.W.W.A.C-200-75 WITH COAL TAR ENAMEL COATING, A.W.W.A.C-203 OR C-210. JOINTS TO BE WELDED FULL CIRCUMFERENCE.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>James M. Lane</i> 2-21-89 DIRECTOR OF PUBLIC WORKS DATE <i>Robert J. Dunning</i> 2-17-89 CHIEF, BUREAU OF UTILITIES DATE		FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 9757 <i>Terrell A. Fisher</i> TERRELL A. FISHER		DES: G. W. DRN: S. B. CHK: P. W. K. DATE: _____ BY NO. _____ REVISION _____ DATE _____		<b>SEWER MAIN</b> <b>DETAILS AND SEDIMENT CONTROL</b> 600' SCALE MAP NO 17 BLOCK NO. 1310		<b>WETHERBURN OUTFALL SEWER MAIN</b> CONTRACT NO. 20-1890-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 6 OF 7	
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PLAN  
Scale: 1"=50'



PLAN  
Scale: 1"=50'

**Construction Requirements  
Park Property**

1. No Part of the Park Property shall be used for Staging Areas by the Contractor.
2. Prior to Construction the Contractor shall erect a fence along the entire length of the Construction Strips. Fence posts shall be 16" Max. The fence shall have a Min. of 2 strands of Barbed Wire.
3. The Contractor shall contact the Department of Recreation and Parks 022,2400 Prior to Beginning Construction Activities on the Park Property.
4. All Plantings as part of this Landscaping Plan shall be installed immediately outside of the 20' Sewer Utility Easement within the 10' Construction Strips as indicated.

**PLANT LIST**

Quant.	Symbol	Botanical Name	Common Name	Size
10	AMC	Amelanchier Canadensis	Berriedoakberry	8'-10' HT. 2" Cal.
12	Pa	Platanus Acerifolia	Sycamore	8'-10' HT. 2" Cal.
10	QR	Quercus Rubra	Red Oak	8'-10' HT. 2" Cal.
10	TsC	Tsuga Canadiana	Canadian Hemlock	8'-10' HT. 1 1/2" Cal.
12	Pq	Phlox paniculata	Phlox	8'-10' HT. 2" Cal.

Notes:  
1. See Notes this Sheet For Construction Requirements on Park Property.  
2. There will be no separate Measurement or Payment for the Landscaping Requirements, but shall be included in the Price Bid for the Sewer Mains.

CONTRACT NO. 20-1890-D  
WETHERBURN OUTFALL  
SEWER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James M. ...</i> DATE: 2-21-89 Chief, Bureau of Engineering: <i>...</i> DATE: 2/21/89 Chief, Bureau of Utilities: <i>...</i> DATE: 2/21/89 Chief, Land Development Division: <i>...</i> DATE: 2/21/89		FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 Terrell A. Fisher		DES: P.W.K. DRN: M.C.F. CHK: T.A.F. DATE: 1/19/89 BY: NO.		LANDSCAPE PLAN 600' SCALE MAP NO. 17 BLOCK NO. 1312		WETHERBURN OUTFALL SEWER MAIN CONTRACT NO. 20-1890-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 7 OF 7
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