

NOTE:
WATER AND SEWER HOUSE CONNECTIONS ARE FOR FUTURE 34 SINGLE FAMILY LOTS

Waste Water Disposal: Sewage
Drainage Area: Middle Retention
Type of Building:
No. of SMC: 34
No. of WHC: 7
No. of Lots: 34
WATER & SEWER CODE
County Use:
Water: E-27
Sewer:

QUANTITIES				
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER	GAINES & CO.
BOP Sewer L.F.	250	138	U.S. PIPE	GRIFFIN-PIPE
B Sewer L.F.	2270	2220	J.P. Lazzati	Johns Manville
Manholes Ea.	15	15	ATLANTIC PRELST	ATLANTIC PRELST
B Water L.F.	830	831	U.S. PIPE	
B Valves Ea.	2	2	Smith Metropolitan	
B Water L.F.	25	25	U.S. PIPE	
Firehydrants Ea.	1	1	Smith Metro	
BWH Connections L.F.	440	498	J.P. Lazzati	
BWH Connections L.F.	220	224	Cambridge Lee	Harrington
Note: Items Above are W.F. Wilson				

CONSTRUCTION SEQUENCE

- SEDIMENT CONTROL PROCEDURES**
- OBTAIN SEDIMENT CONTROL PERMIT (ARTICLE 15.05-3)
 - OBTAIN WATER RESOURCES ADMINISTRATION PERMIT.
 - CLEAR, GRUB AND STRIP AS REQUIRED FOR SEWER CONSTRUCTION--PROTECT STREAMS FROM EROSION OF STORED TOPSOIL.
 - CONSTRUCT DIKE AND SILT FENCE STRUCTURES IMMEDIATELY AFTER STRIPPING.
 - CONSTRUCT SEWER PIPE LINES.
 - RESTORE EROSION CONTROL STRUCTURES DISTURBED BY SEWER CONSTRUCTION.
 - STABILIZE DISTURBED AREAS AS CONSTRUCTION PROGRESSES WITH TEMPORARY SEEDING AND MULCHING (OR PERMANENT RESTORATION).
 - COMPLETE PERMANENT RESTORATION.
 - REMOVE SEDIMENT STRUCTURES WHEN DIRECTED.
- 3-A SEPARATE STORED TOPSOIL FROM SUBSOIL.
4-A CONTINUOUS SEDIMENT BARRIER SHALL BE CONSTRUCTED ALONG THE LOW SIDE OF THE TRENCH WITHIN THE 100 YEAR FLOOD PLAIN AND MAINTAINED UNTIL THE AREA IS STABILIZED.
5-A EXCAVATED MATERIAL SHALL BE STOCKPILED ON HIGH SIDE OF TRENCH.
2-A ALL SEDIMENT CONTROL DEVICES SHALL REMAIN IN SERVICE WITHIN THE 100 YEAR FLOOD PLAIN UNTIL REMOVAL IS APPROVED BY THE WATER RESOURCES ADMINISTRATION INSPECTOR AND BY THE S.C.S. INSPECTOR.

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". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0123.
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123.
 - ENGINEERING - "DAMAGE CONTROL" - 234-5621.
 - "MISS UTILITY" - 1 - 559-0100
 - CHESAPEAKE & POTOMAC (CAP) TELEPHONE COMPANY - 725-9976.
 - AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3553.
 - COLONIAL PIPELINE COMPANY - 781-4841.
 - BUREAU OF UTILITIES HOWARD COUNTY - 992-2366.
- TREES ARE TO BE PROTECTED FROM DAMAGE 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 CONSTRUCTION OF THE MAIN.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL WATER MAINS SHALL BE D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3-1/2' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- BLOCK ALL FITTINGS WITH CONCRETE.
- 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 STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTIONS 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR PVC 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 DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G5.52.
- ALL MANHOLE FRAME AND COVERS SHALL BE SET 0.5' ABOVE EXISTING GRADE WHERE SHOWN IN PROFILE. SEE DETAIL G 5.41.
- ORIGINAL GROUND OVER WATER AND SEWER WAS TAKEN FROM AERIAL PHOTOGRAPHY PREPARED BY MAPS AND INC., AND VERIFIED BY FIELD SURVEY IN AUG 1981.
- ALL COPPER WATER HOUSE CONNECTIONS SHALL UTILIZE FLARED FITTINGS.
- SPECIAL EFFORT SHALL BE TAKEN TO ENSURE SPECIFIED TRENCH COMPACTION IN AREAS OF MASS FILL (M212 TO M217 AND M221 TO M225).
- STRAW BALE DIKES AND SILT FENCES ARE INTERCHANGEABLE.

CONTRACT NO. 34-1194-D
VILLAGE OF HICKORY RIDGE
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
Charles M. Wilson 3-22-84
SIGNATURE DATE
U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District.
APPROVED:
Robert W. Zich 3-22-84
HOWARD S.C.D. DATE

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications, and Road Construction Plans F-34-103

Blue February
Water and Sewer Extensions

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert M. Bunker 4-23-84
DIRECTOR OF PUBLIC WORKS-DATE
Robert M. Bunker 4-12-84
CHIEF-BUREAU OF UTILITIES-DATE

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS
2315 ST. PAUL ST.
BALTIMORE, MARYLAND

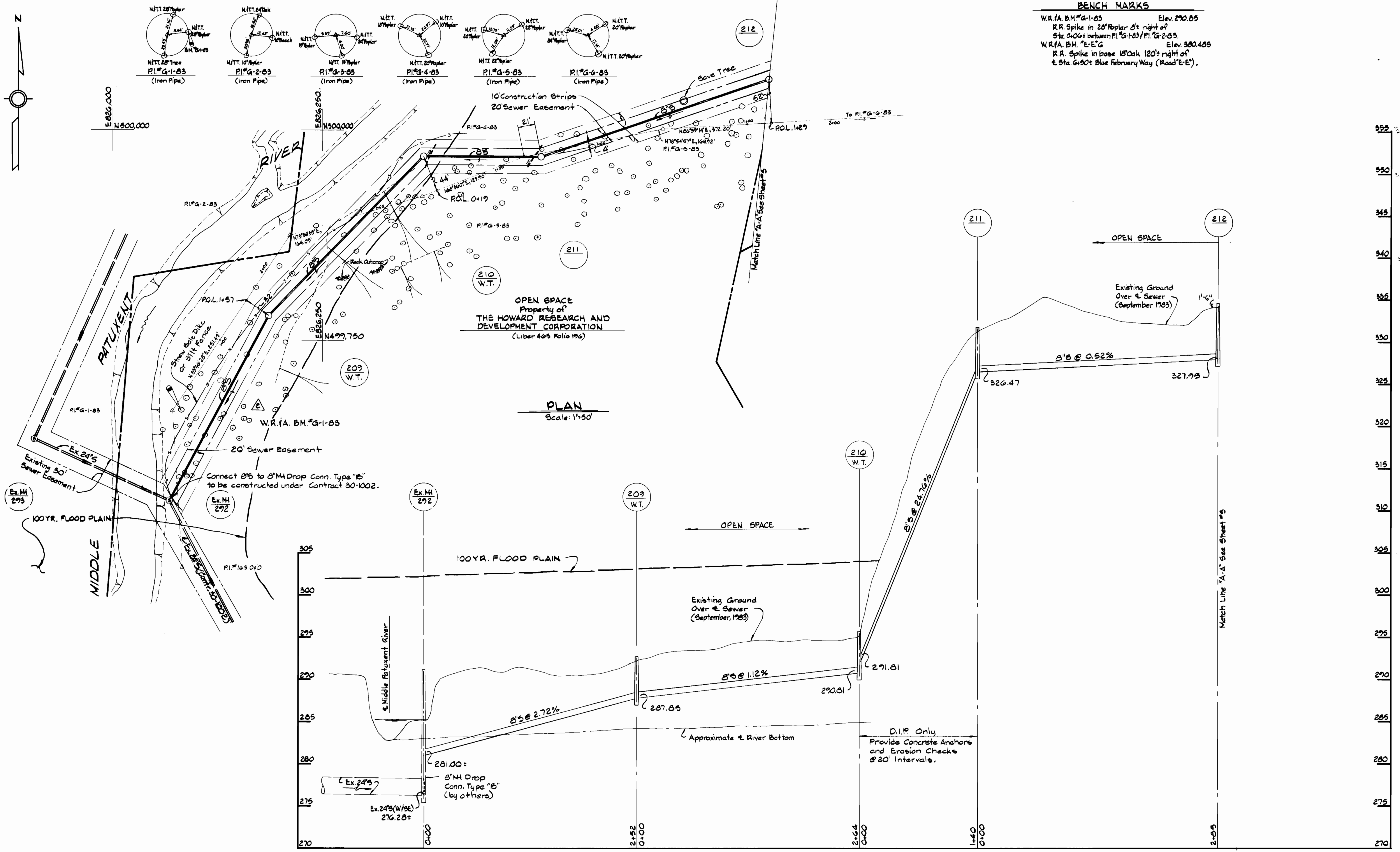


DES: S.J.					
DRN: J.R.K.					
CHK: R.B.W.	J.R.K.	Added Sediment Control Notes & General Note	6/12/84		
DATE:	J.R.K.	Deleted 5 Valve on Blue February Way	6/11/84		
BY NO.					
REVISION					
DATE					

VICINITY MAP AND GENERAL NOTES
600 SCALE MAP NO. 35 BLOCK NO.

COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 6
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1194-D
SCALE 1"=600'
SHEET 1 OF 5

BENCH MARKS
 W.R.A. B.M. #A-1-B5 Elev. 290.85
 R.R. Spike in 28" Poplar 8 1/2' right of
 Sta. 0+00 between P.I. #G-1-B5 & P.I. #G-2-B5.
 W.R.A. B.M. #E-E'G Elev. 300.485
 R.R. Spike in base 18" Oak 120' right of
 & Sta. 4+50: Blue February Way (Road "E-E").



PLAN
 Scale: 1"=50'

PROFILE
 Scale: H: 1"=50'
 V: 1"=5'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works - DATE
 Chief - Bureau of Engineering - DATE
 Chief - Bureau of Utilities - DATE
 Chief - Land Development Division - DATE

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

DES. S.J.			
DRN. J.R.K.			
CHK. R.B.N.			
DATE: 6/18/84			
BY NO.			
REVISION			
DATE			

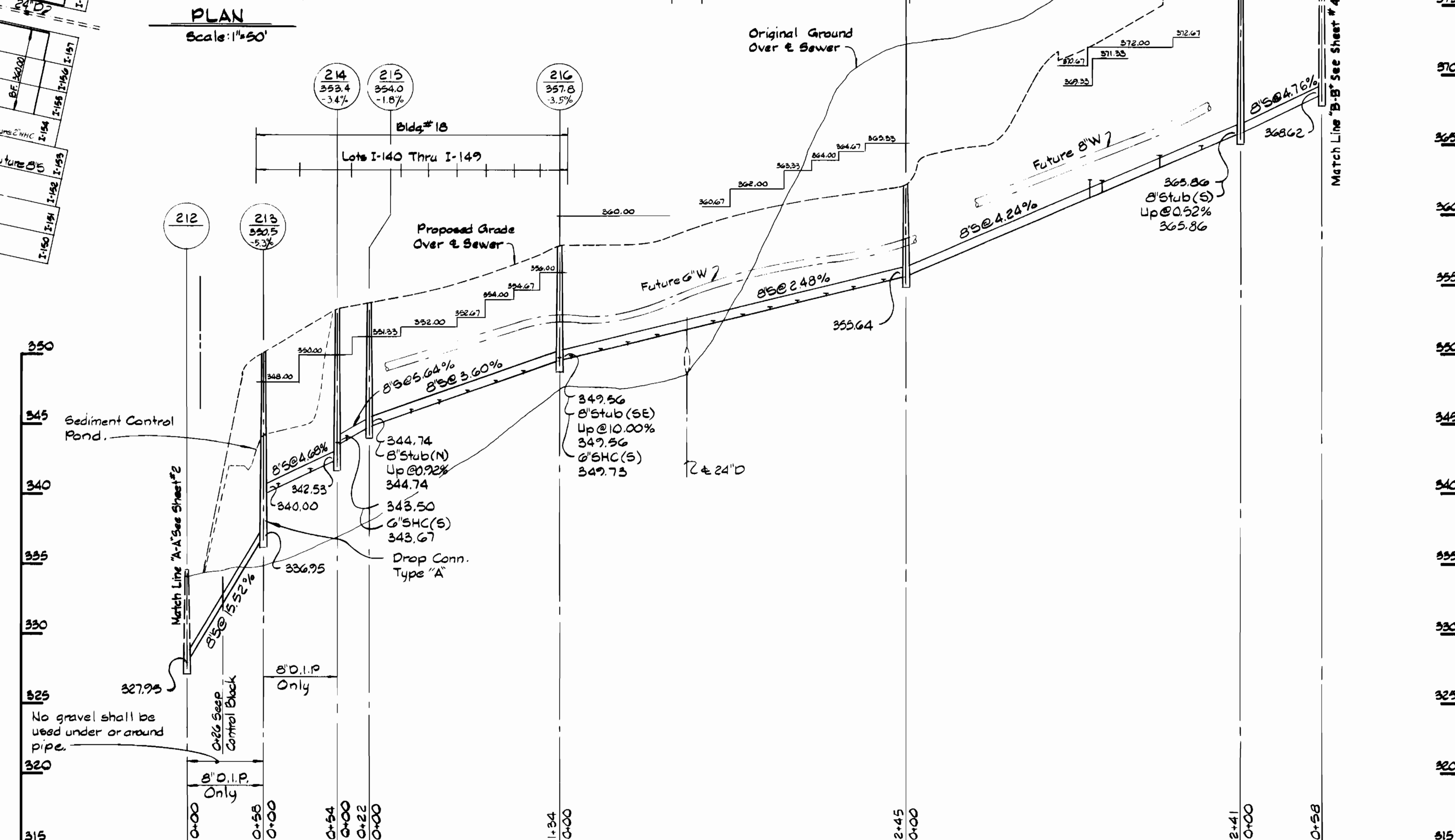
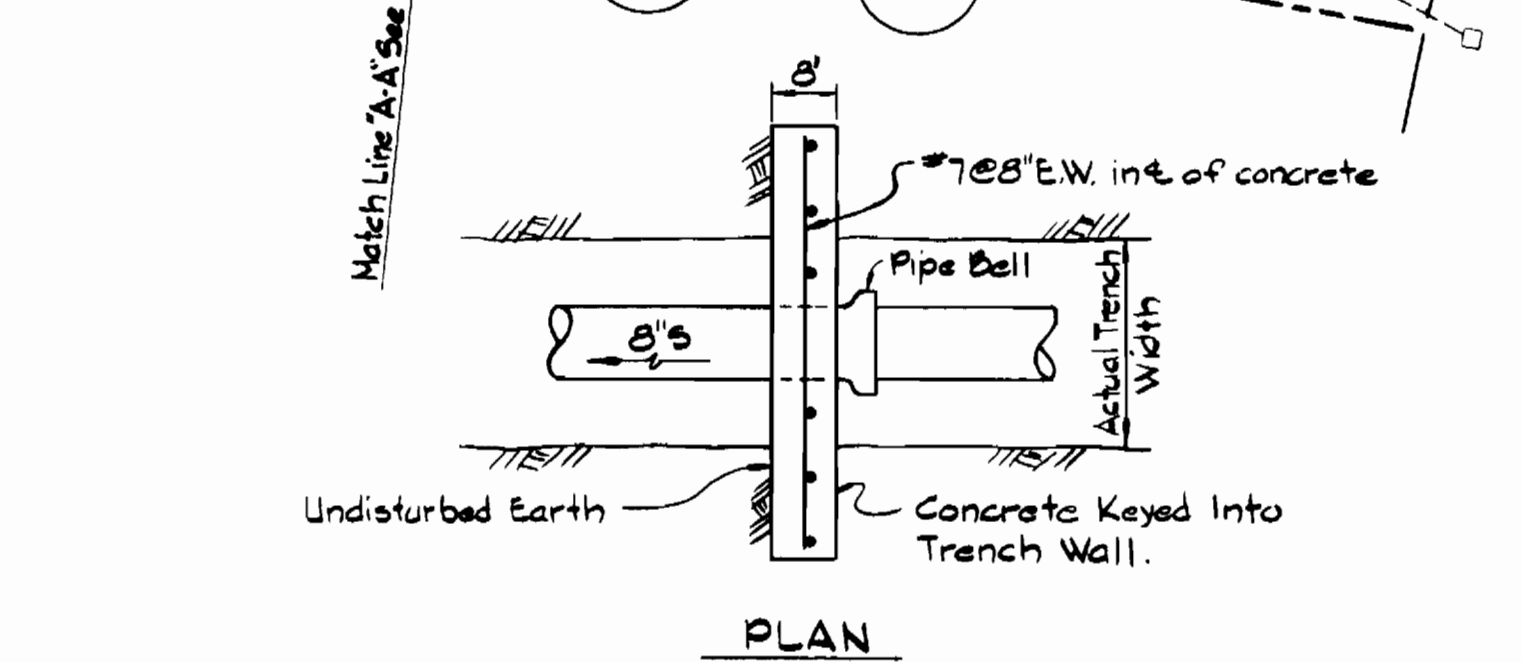
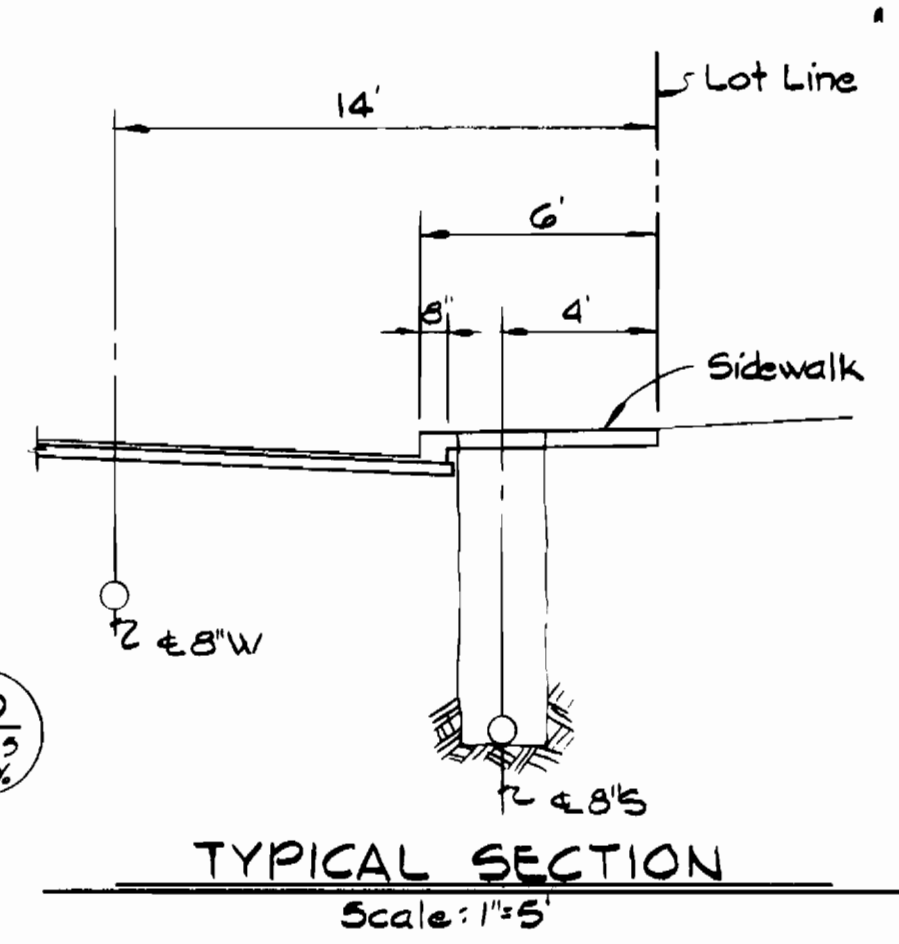
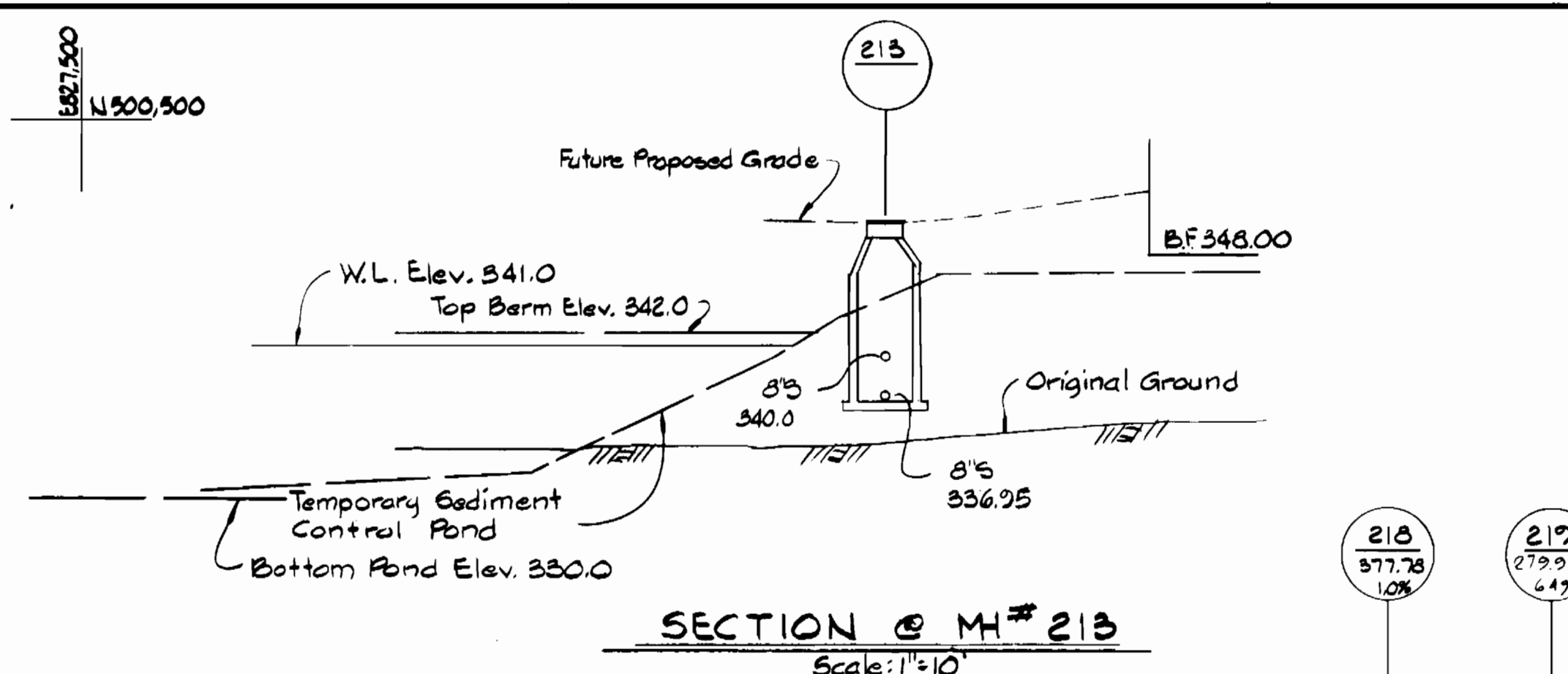
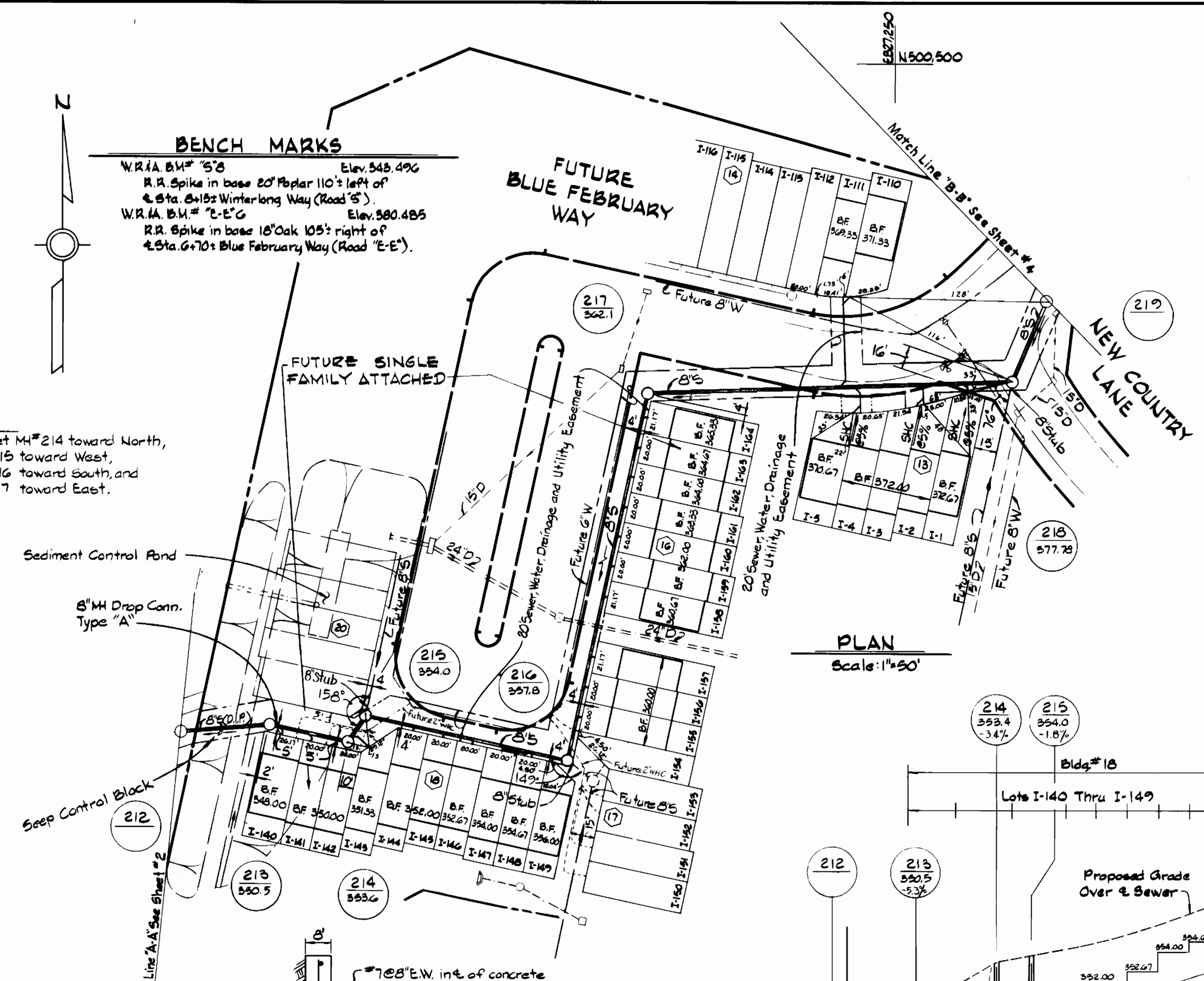
PLAN & PROFILE OF SEWER MAINS
 600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA G
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1194-D

SCALE AS SHOWN
 SHEET 2 OF 5

BENCH MARKS
 W.R.A. B.M. # 5'S Elev. 548.49%
 R.R. Spike in base 20' Poplar 110' left of
 & Sta. 6+15: Winterlong Way (Road 'S')
 W.R.A. B.M. # 2-E' Elev. 560.485
 R.R. Spike in base 18' Oak 105' right of
 & Sta. 6+70: Blue February Way (Road 'E-E').

NOTE:
 Offset M#214 toward North,
 M#215 toward West,
 M#216 toward South, and
 M#217 toward East.



SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	INVERT
M# 213 TO M# 214		
0+11	R I-140	340.69
0+29	R I-141	341.54
0+42	R I-142	345.77
M# 214 TO M# 215		
0+07	R I-143	344.27
M# 215 TO M# 216		
0+31	R I-144	346.02
0+51	R I-145	346.75
0+71	R I-146	347.46
0+91	R I-147	348.18
1+11	R I-148	349.90
0+42	R I-149	347.81
M# 216 TO M# 217		
0+29	R I-155	350.44
0+49	R I-156	350.94
0+70	R I-157	351.46
1+0	R I-158	352.45
1+21	R I-159	352.97
1+51	R I-160	353.46
1+71	R I-161	353.96
1+91	R I-162	354.46
2+11	R I-163	354.95
2+32	R I-164	355.47
M# 217 TO M# 218		
1+31	L I-110	362.47
1+40	R I-111	362.47
1+4	R I-5	362.51
1+22	R I-3	364.01
2+12	R I-1	364.96

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *[Signature]* 4-23-84
 Chief - Bureau of Utilities: *[Signature]* 4-19-84

WHITMAN, REQUARDT
 AND ASSOCIATES
 ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

DES: S.J.
 DRN: J.R.K.
 CHK: R.B.N.
 DATE: _____

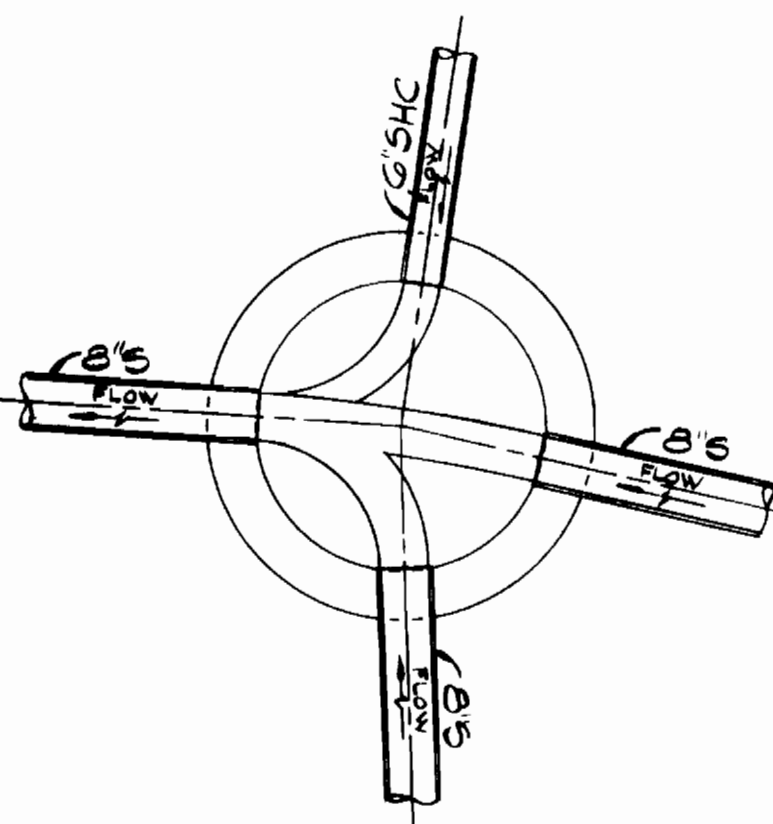
PLAN & PROFILE OF
 WATER & SEWER MAINS

COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 6
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1194-D

SCALE AS SHOWN
 SHEET 3 OF 5

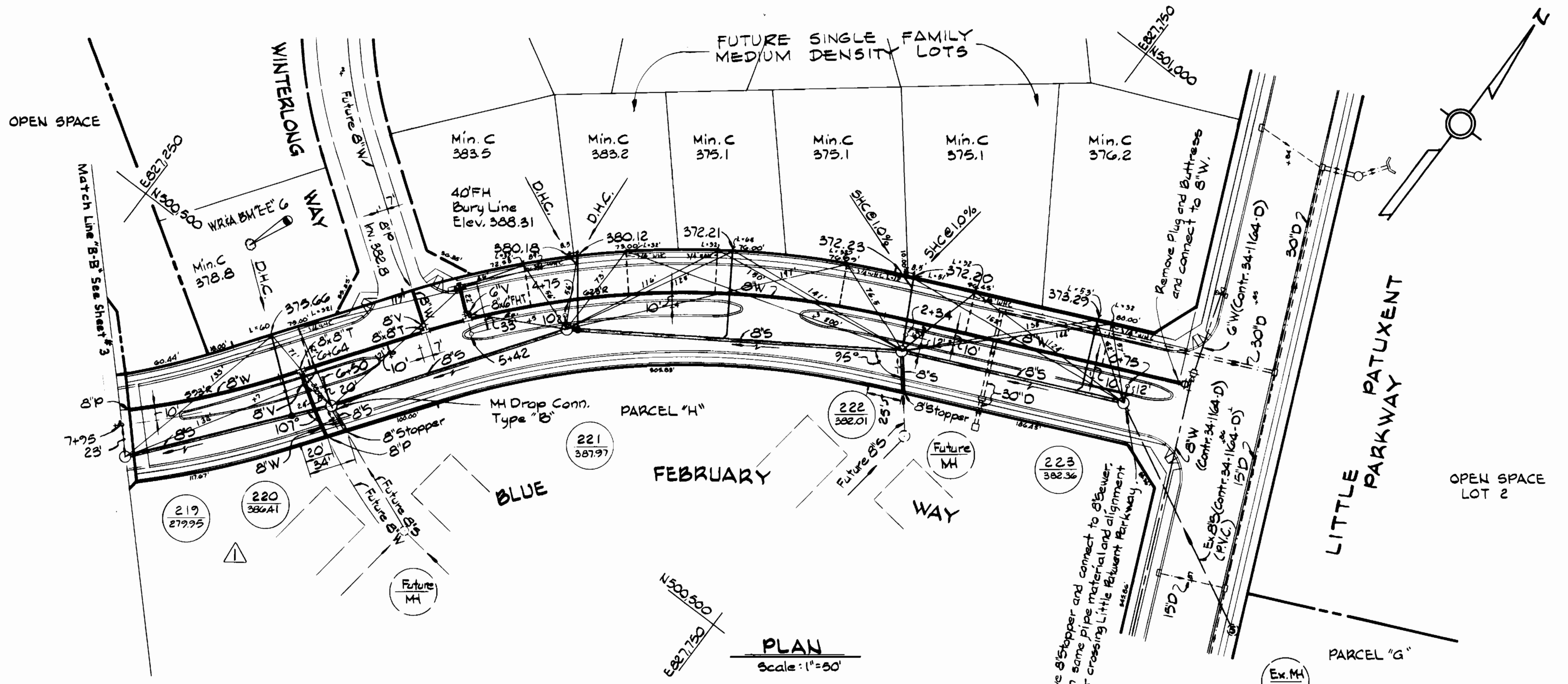
BENCH MARKS

W.R.A. BM # 5'B Elev. 343.496
 R.R. Spike in base 20' Poplar 110' left of
 & Sta. 8+15 = Winterlong Way (Road "S")
 W.R.A. BM "E-E" G Elev. 380.465
 R.R. Spike in base 15' Oak 105' right of
 & Sta. 6+70 = Blue February Way (Road "E-E")

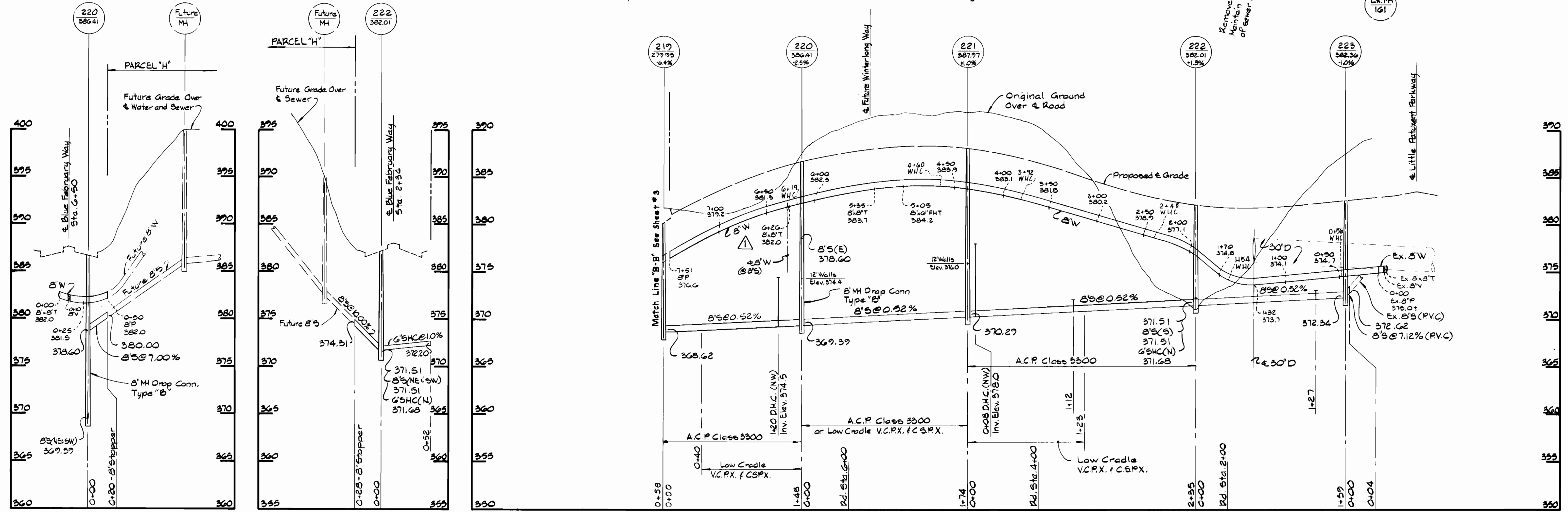


PLAN INVERT
MANHOLE NO. 222

Scale: 3/8" = 1'-0"



PLAN
 Scale: 1" = 50'



PROFILES
 Scale: H: 1" = 50'
 V: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works - DATE
 Chief - Bureau of Engineering - DATE
 Chief - Bureau of Utilities - DATE
 Chief - Land Development Division - DATE

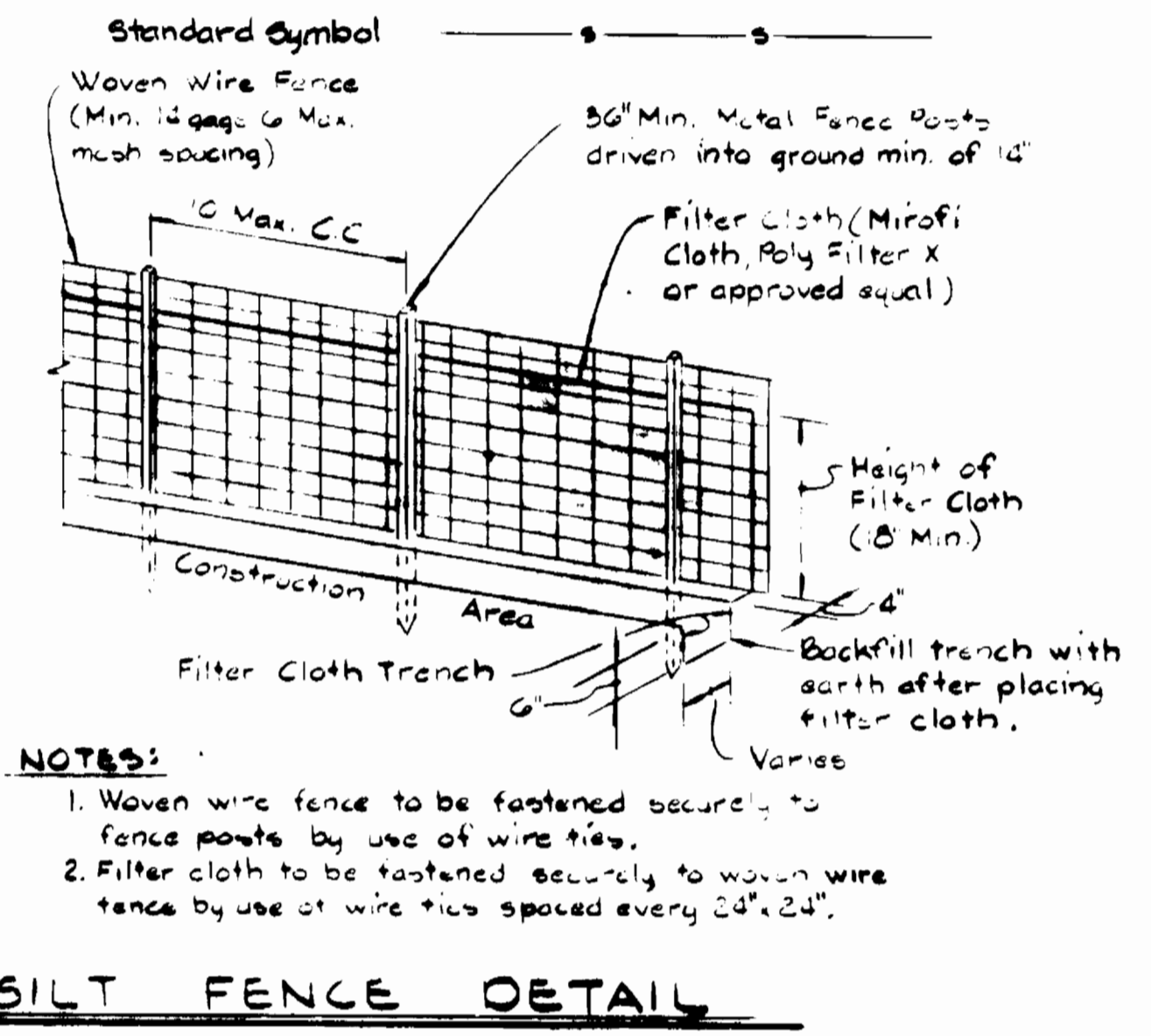
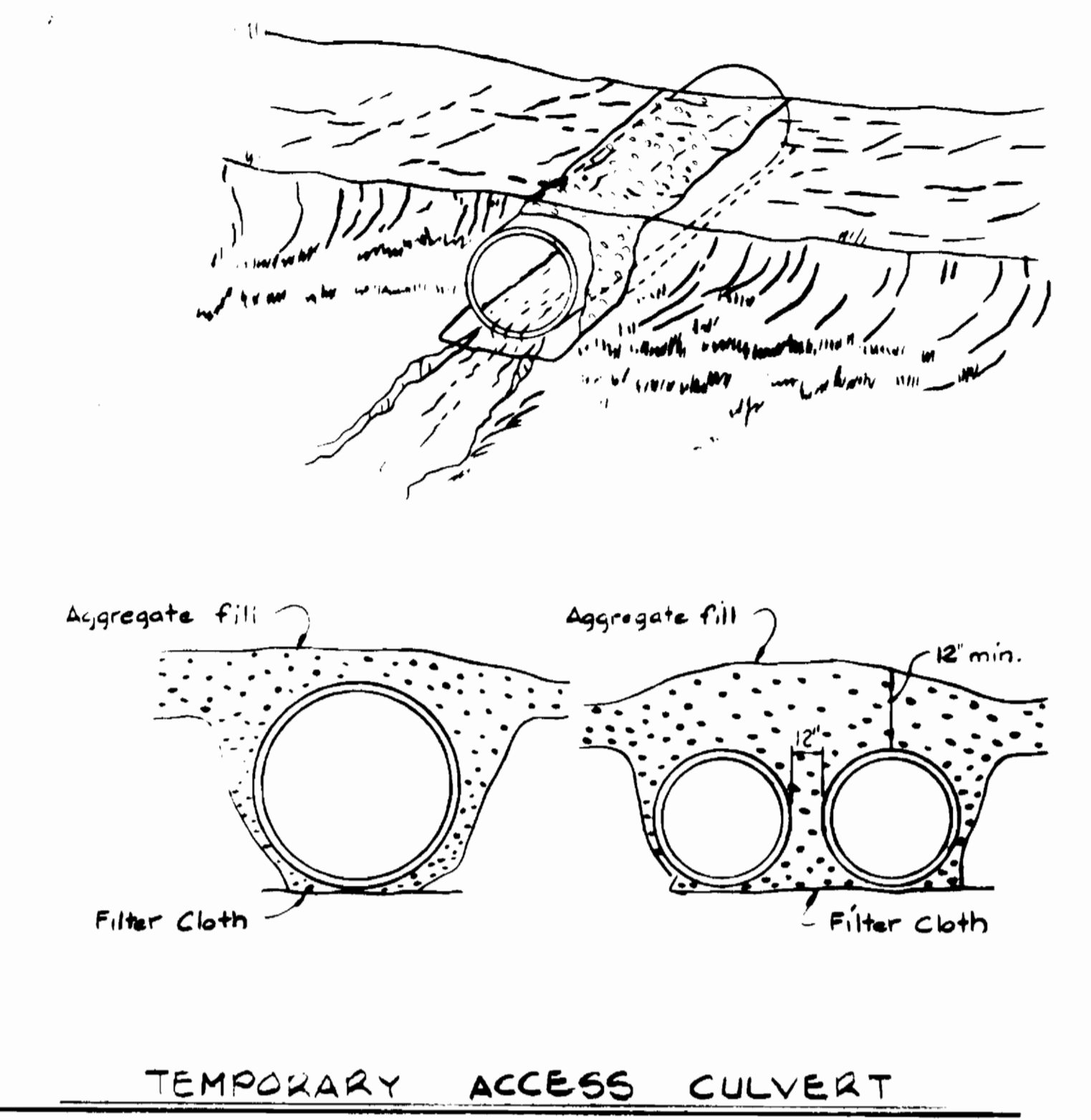
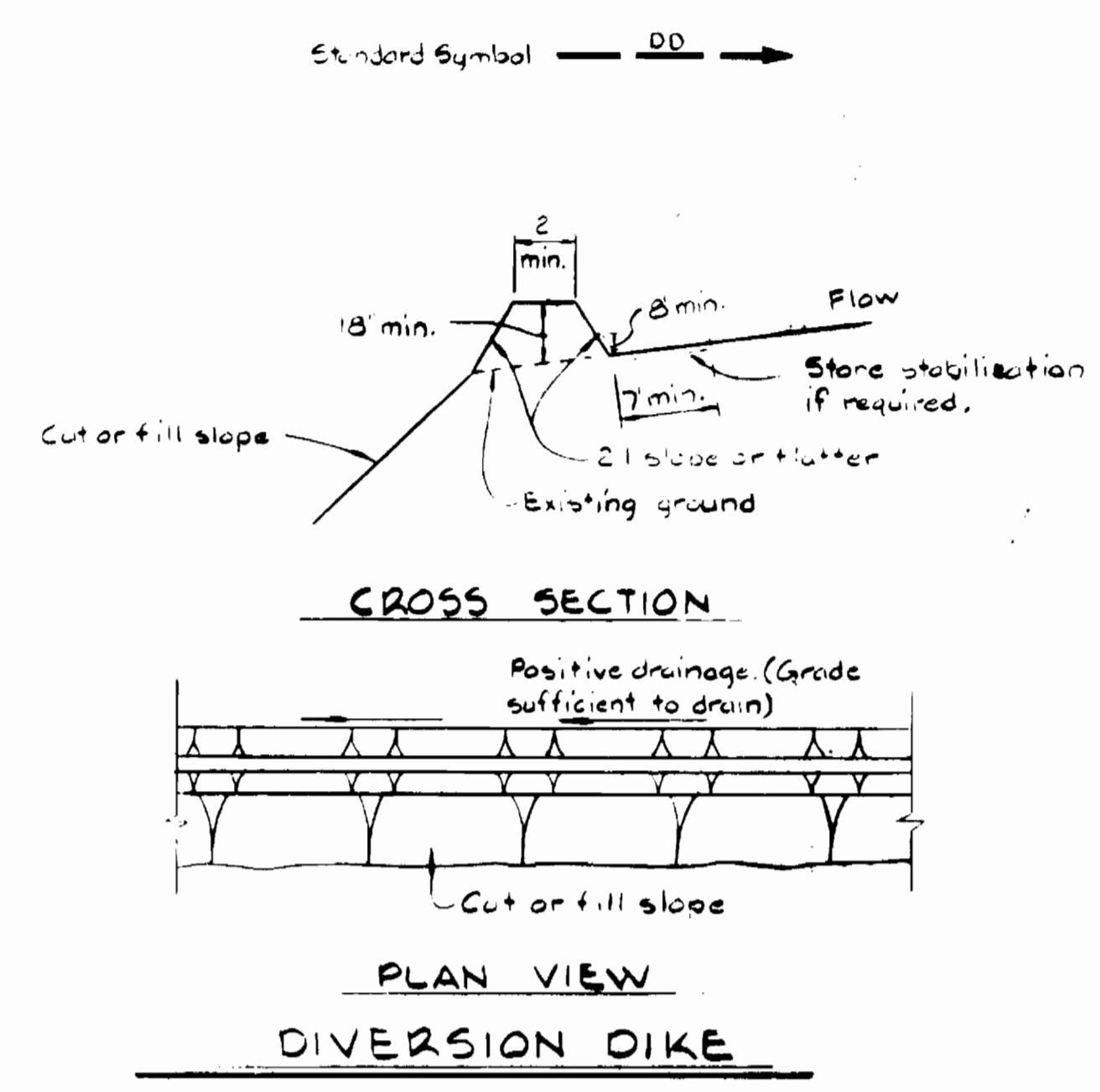
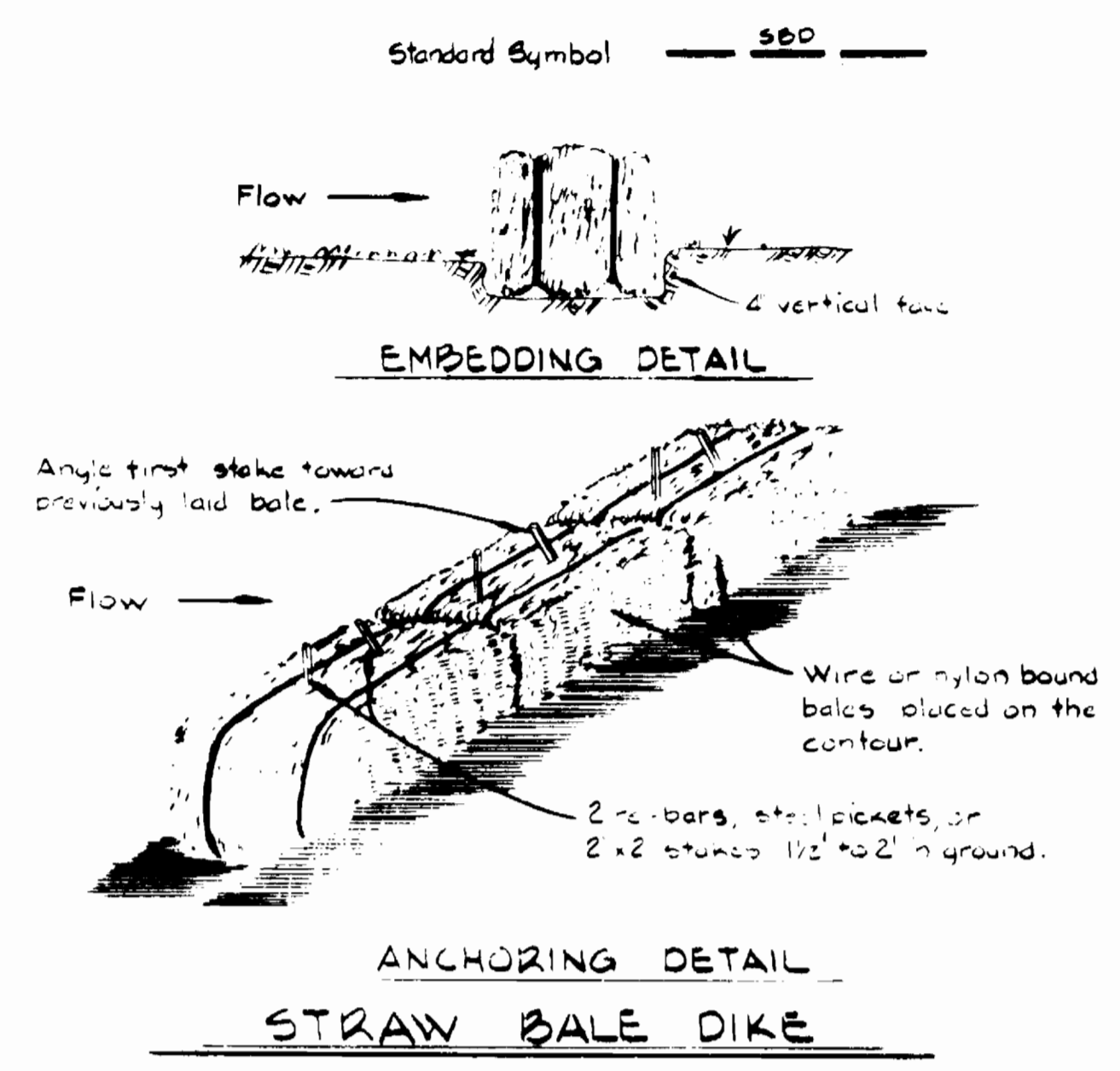
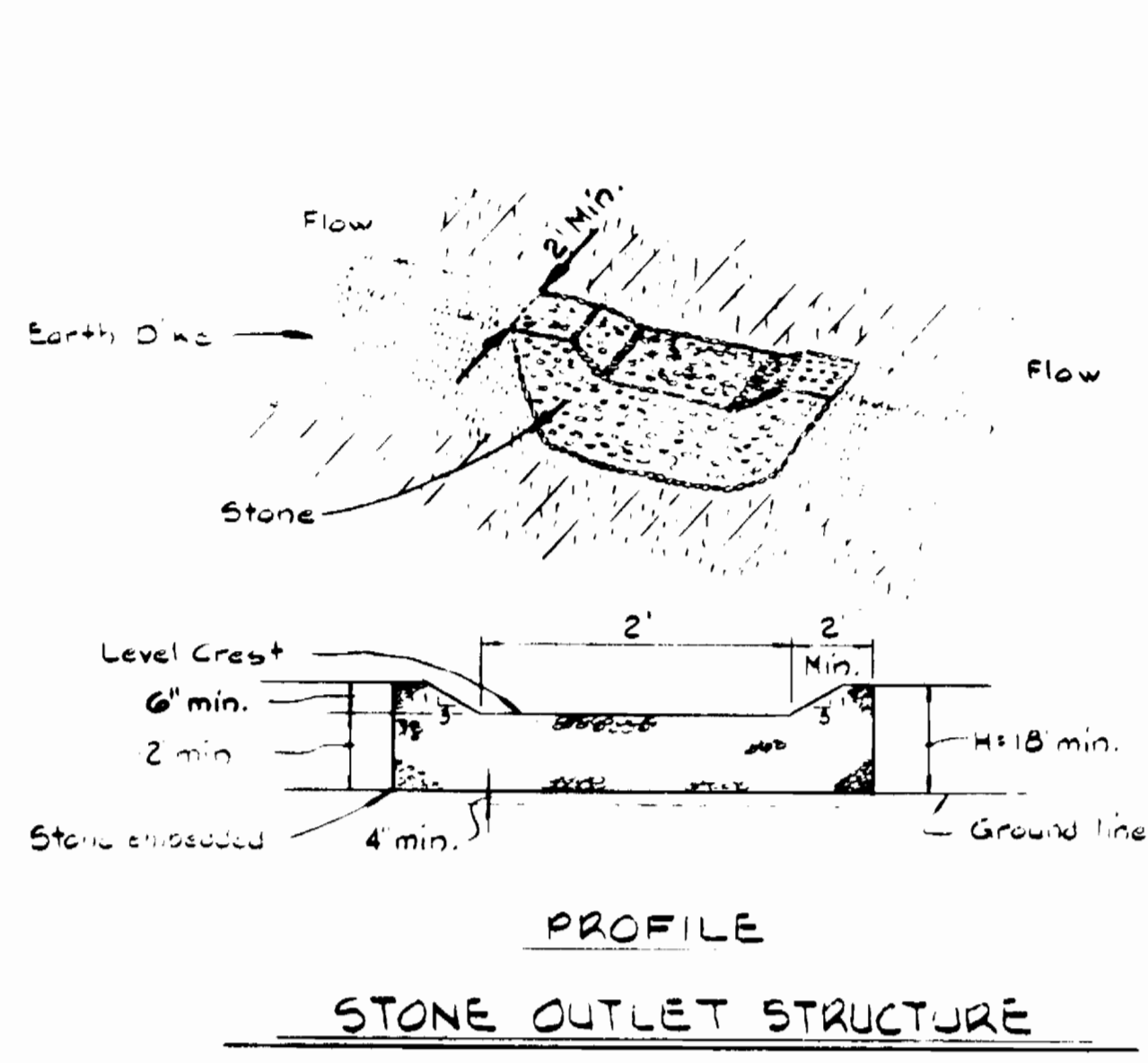
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

DES. S.J.	DRN. J.R.K.	CHK. R.B.N.	DATE
BY NO.	REVISION	DATE	
	Deleted 8" Valve	6/11/84	

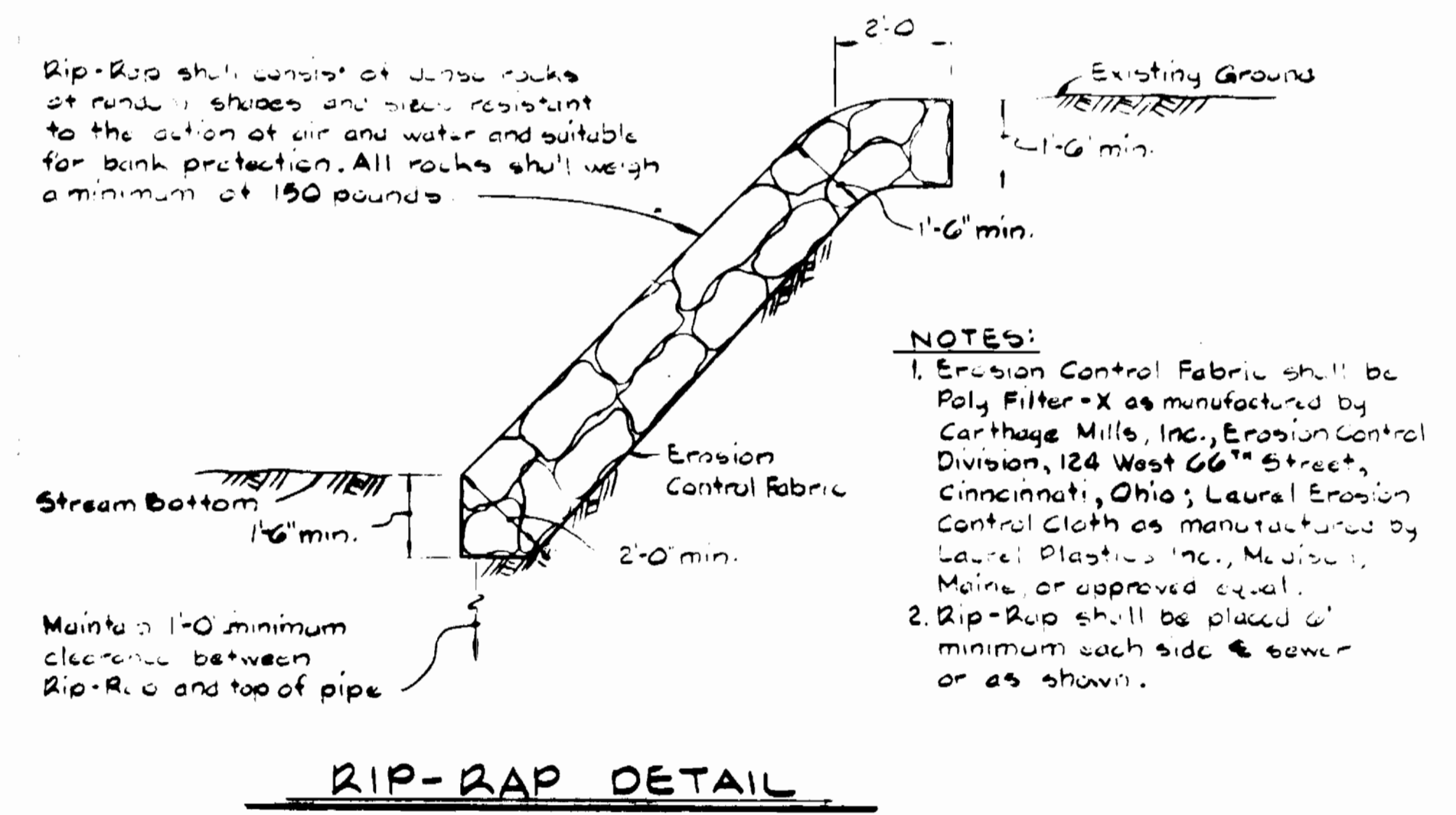
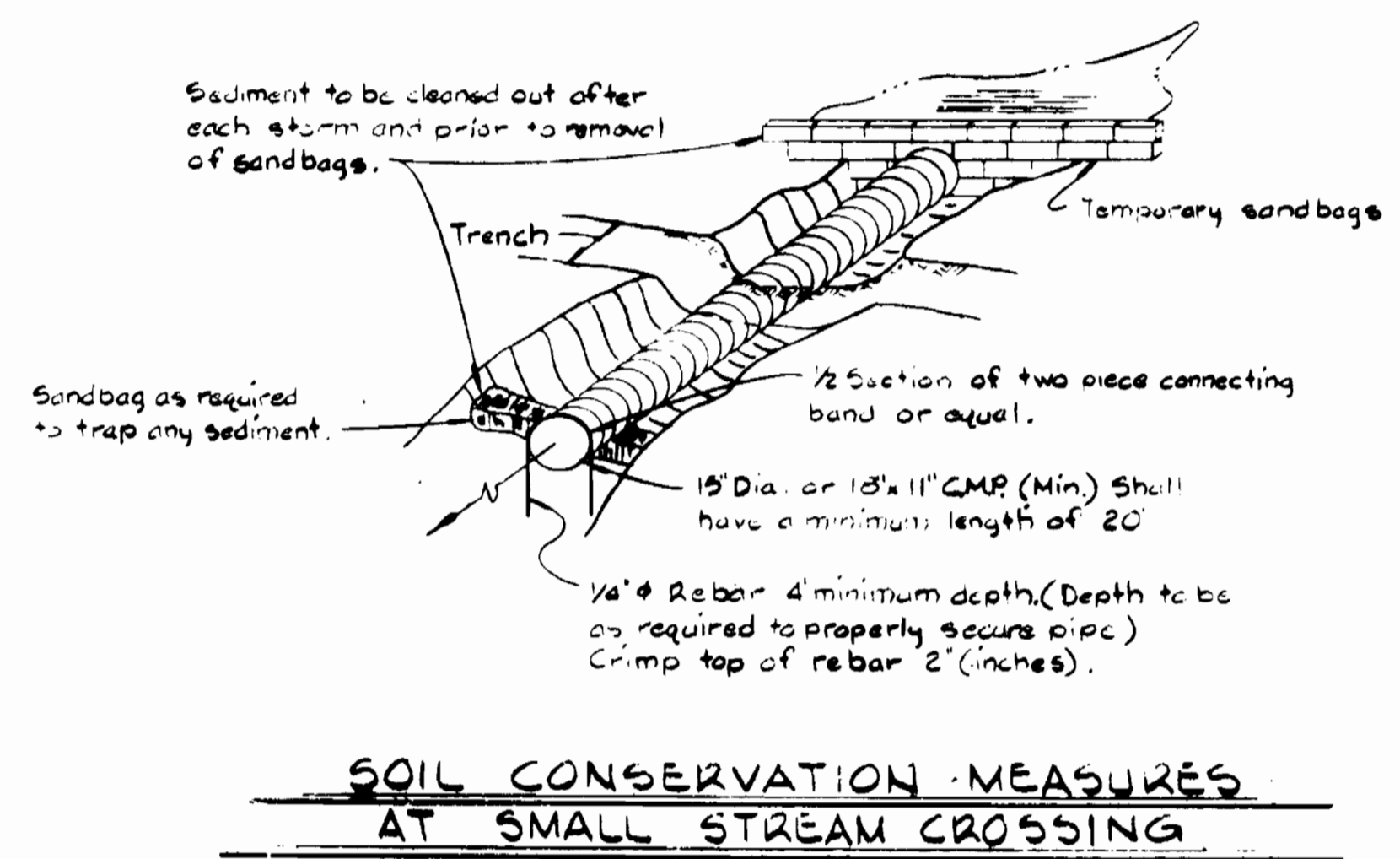
PLAN & PROFILE OF WATER & SEWER MAINS

COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 6 ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1194-D

SCALE AS SHOWN
 SHEET 4 OF 5



- NOTES:**
1. Woven wire fence to be fastened securely to fence posts by use of wire ties.
 2. Filter cloth to be fastened securely to woven wire fence by use of wire ties spaced every 24" x 24".



Blue February

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND W. F. Newman, Director R. J. Reardon, Chief of Utilities	WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS 2315 ST PAUL ST BALTIMORE, MARYLAND		DES. E.J.			SEDIMENT CONTROL DETAILS	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA G ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1194-D	SCALE AS SHOWN
			DRN. J.R.K.					
DATE: _____ BY: NO. _____ REVISION: _____ DATE: _____			600 STATE MAP NO. _____ BLOCK NO. _____		AS-BUILT December 10, 1984 April 18, 1984			