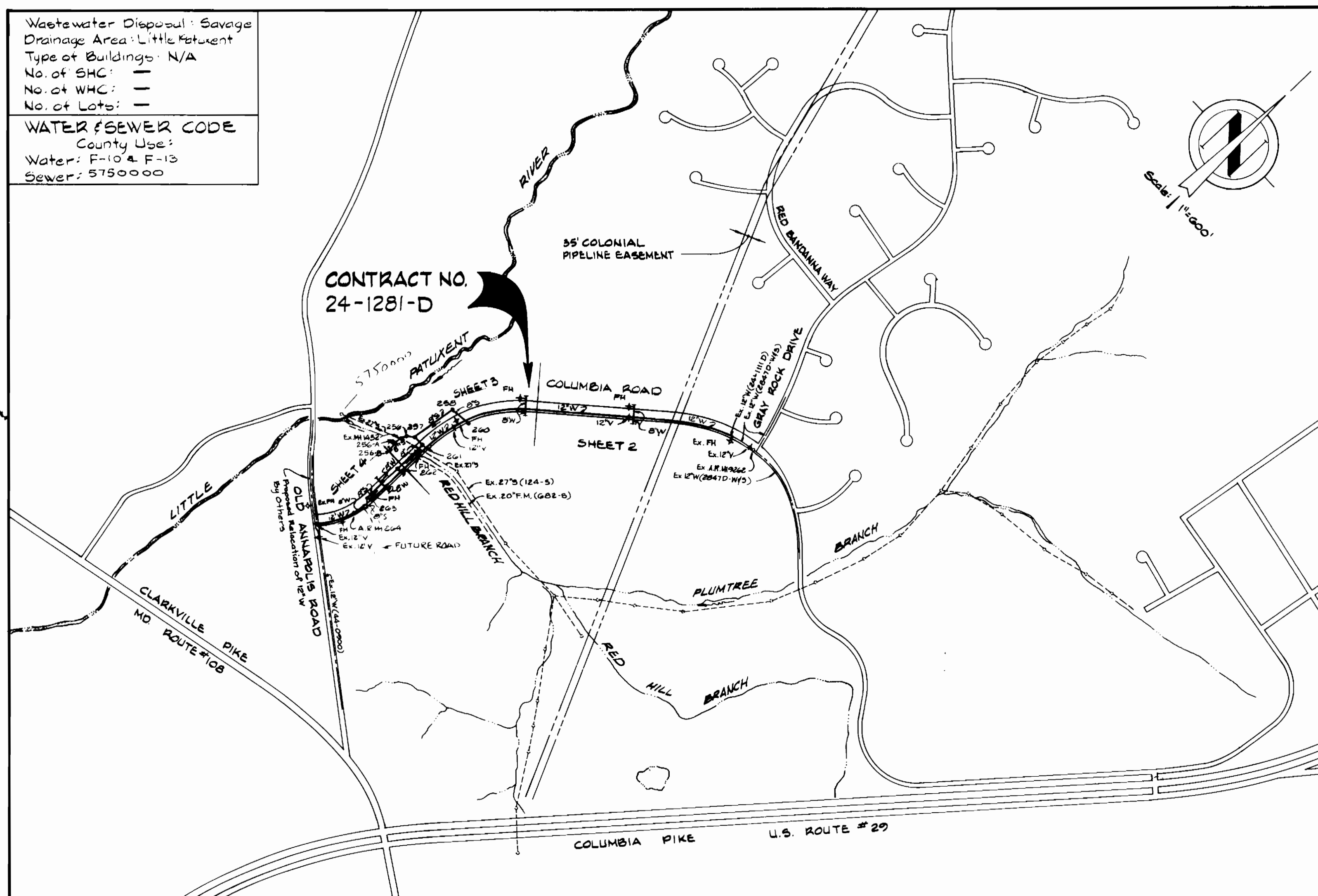


**CONSTRUCTION SEQUENCE  
SEDIMENT CONTROL PROCEDURES**

1. OBTAIN SEDIMENT CONTROL PERMIT (ARTICLE 15.05-3).
2. OBTAIN WATER RESOURCES ADMINISTRATION PERMIT.
3. CONSTRUCT CONTINUOUS SILT FENCE ON STREAM SIDE OF PIPE IN AREAS OF ENCASEMENT.
4. CLEAR GRUB AND STRIP AS REQUIRED FOR PIPE ENCASEMENTS. PROTECT STREAM FROM EROSION OF STORED TOPSOIL SEPARATE TOPSOIL FROM SUBSOIL.
5. EXCAVATE FOR AND CONSTRUCT ENCASEMENTS.
6. EXCAVATED MATERIAL SHALL BE STOCKPILED ON HIGH SIDE OF TRENCH.
7. CONSTRUCT SILT FENCE ADJACENT TO RED HILL BRANCH CROSSING.
8. CONSTRUCT STONE OUTLET SEDIMENT PITS FOR DEWATERING PUMP DISCHARGE AT ALL LOCATIONS NOT PROTECTED BY DEVELOPMENT SEDIMENT TRAPS.
9. CONSTRUCT SEWER ACROSS AREA WHERE RED HILL BRANCH WILL BE TEMPORARILY RELOCATED.
10. TEMPORARY RELOCATION OF RED HILL BRANCH WILL BE CONSTRUCTED BY OTHERS.
11. COMPLETE SEWER CONSTRUCTION. CROSSING OF STREAM BED WILL BE PERFORMED WITH THE STREAM DIVERTED.
12. CULVERT AND GABION STRUCTURES WILL BE CONSTRUCTED BY OTHERS.
13. RESTORE EROSION CONTROL STRUCTURES DISTURBED BY SEWER CONSTRUCTION.
14. STABILIZE DISTURBED AREAS AS CONSTRUCTION PROGRESSES WITH TEMPORARY SEEDING AND MULCHING (OR PERMANENT RESTORATION).
15. COMPLETE PERMANENT RESTORATION.
16. REMOVE SEDIMENT STRUCTURES WHEN DIRECTED.
17. 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 SOIL CONSERVATION SERVICE INSPECTOR.

Wastewater Disposal: Sewage  
 Drainage Area: Little Potomac  
 Type of Buildings: N/A  
 No. of SHC: —  
 No. of WHC: —  
 No. of Lots: —

**WATER / SEWER CODE**  
 County Use:  
 Water: F-10 & F-13  
 Sewer: 5750000



**GENERAL NOTES**

1. 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.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
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.
7. 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
8. 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 561-2585
  - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 234-5621
  - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING - 298-9013
  - MISS UTILITY - 1-559-0100
  - COLONIAL PIPELINE CO. - 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 992-2366
9. 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.
10. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION.
11. ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
12. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2" COVER UNLESS OTHERWISE NOTED.
13. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
14. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
15. 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 THE STANDARD SPECIFICATIONS.
16. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
17. 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.
18. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
19. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
20. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
21. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS. STANDARD DETAIL G.5.92 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
22. ALL W.H.C.'S SHALL BE 3/4" UNLESS OTHERWISE NOTED.
23. ALL COPPER WATER HOUSE CONNECTIONS SHALL UTILIZE FLARED FITTINGS.
24. ORIGINAL GROUND OVER WATER AND SEWER WAS TAKEN FROM AERIAL PHOTOGRAPHY PREPARED BY MAPS AND INC., AND VERIFIED BY FIELD SURVEY IN OCTOBER 1983.
25. STRAW BALE DIKE AND SILT FENCE ARE INTERCHANGEABLE.

**CONTRACT NO. 24-1281-D**  
**DORSEY HALL**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL / SUPPLIER
8" S(DIP) L.F.	80	77 L.F.	ATLANTIC STATES
8" Sewer L.F.	1400	1356 L.F.	SDR 35 PVC / J.M. Mfg Co.
Manholes Ea.	7	9 EA.	ATLANTIC PRECAST CONC.
12" Water L.F.	3350	3499 L.F.	DIP ATLANTIC STATES / A+P
8" Water L.F.	240	240 L.F.	ATLANTIC STATES / A+P
6" Water L.F.	25	25 L.F.	ATLANTIC STATES / A+P
12" Valves Ea.	2	4 EA.	M+H / BELAIR RD. SUPPLY
8" Valves Ea.	7	7 EA.	M+H / BELAIR RD. SUPPLY
Air Release M+H Ea.	1	1 EA.	DRESSER - VALMATIC
Fire Hydrants Ea.	6	6 EA.	M+H DRESSER / BELAIR RD.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT  
*John M. Nelson* 11-16-84  
 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:

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications, and Road Construction Plans F-85-16.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*Henry F. ...* 11-24-84  
 DIRECTOR OF PUBLIC WORKS DATE  
*Robert ...* 11-28-84  
 CHIEF BUREAU OF UTILITIES DATE

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



DES: S.J.  
 IN: J.R.K.  
 CHK: A.B.N.  
 DATE: 12/14/84

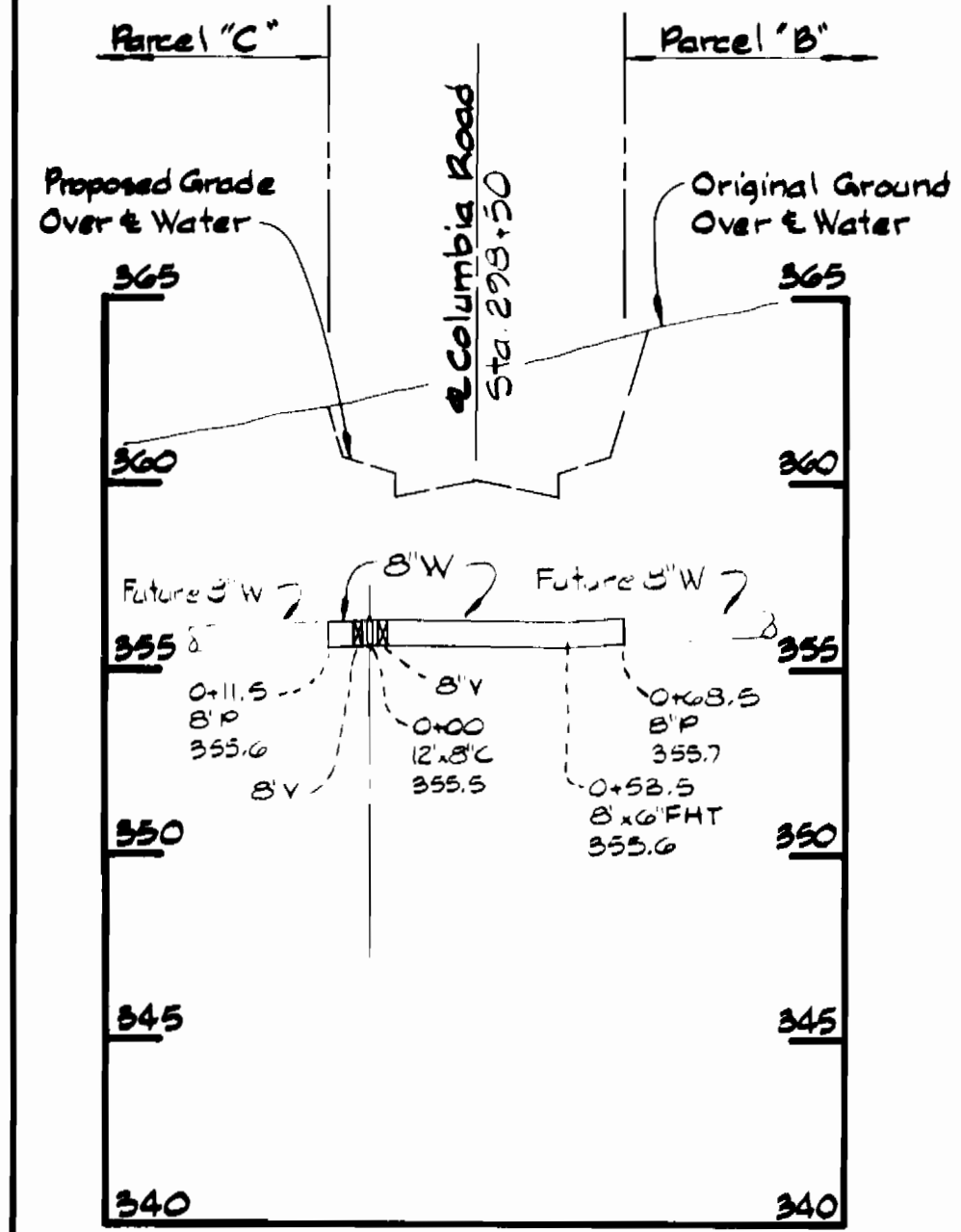
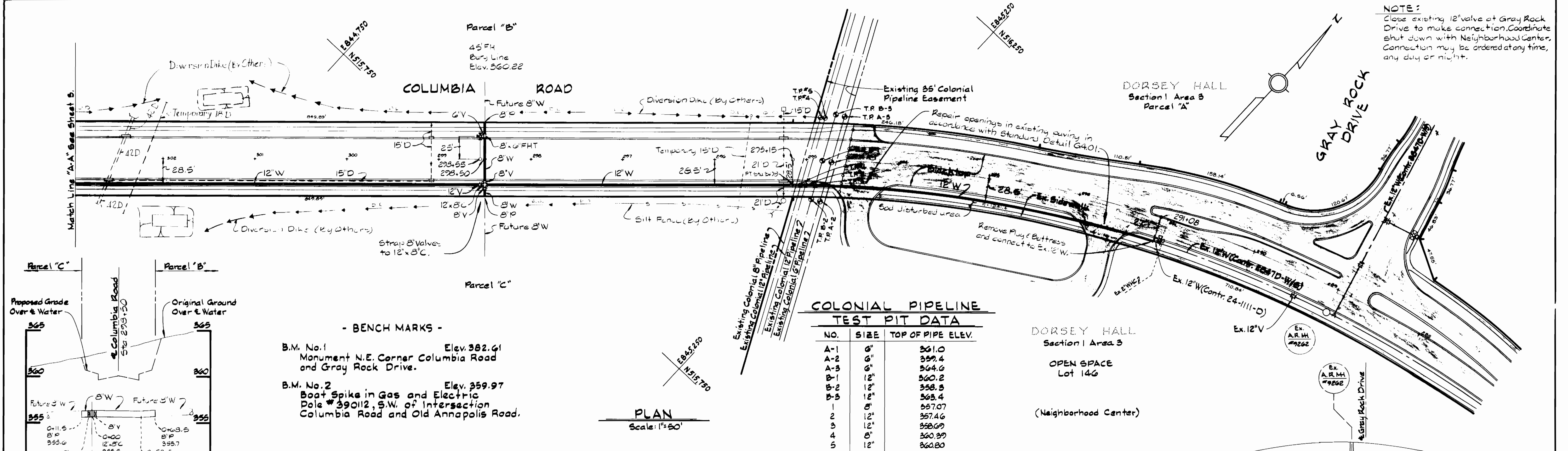
VICINITY MAP AND GENERAL NOTES

As-Built: WHITMAN  
 DORSEY HALL SECTION 2 AREA 1  
 ELECTION DISTRICT NO. 2  
 CONTRACT NO. 24-1281-D

SCALE 1"=60'  
 SHEET 1 OF 6



**NOTE:**  
 Close existing 12" valve at Gray Rock Drive to make connection. Coordinate shut down with Neighborhood Center. Connection may be ordered at any time, any day or night.



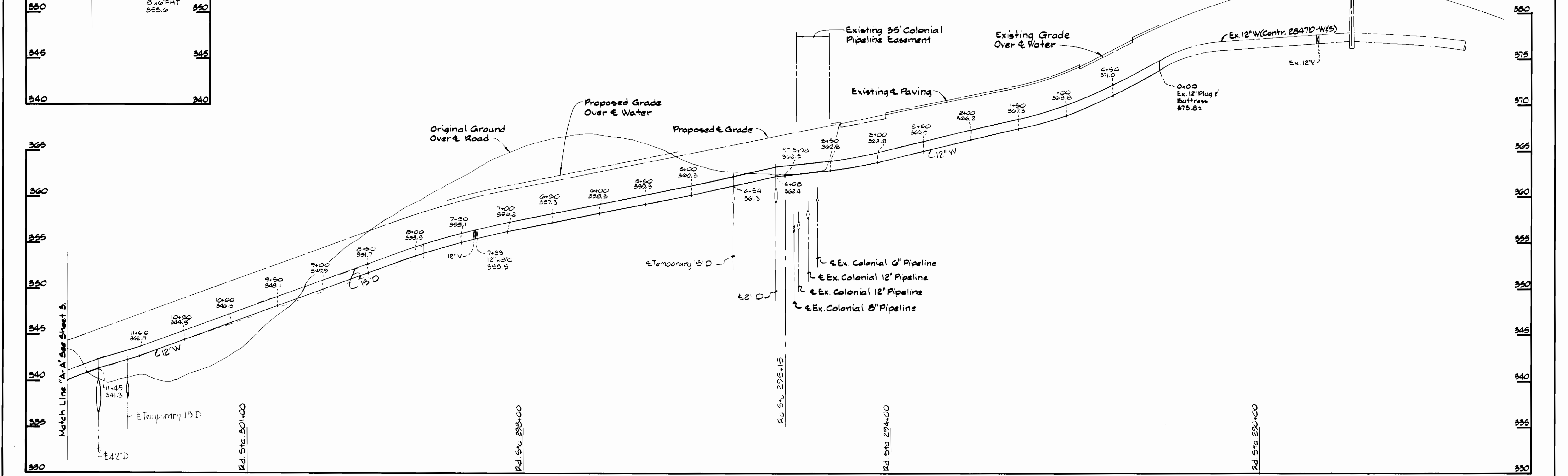
**- BENCH MARKS -**  
 B.M. No.1 Elev. 382.61  
 Monument N.E. Corner Columbia Road and Gray Rock Drive.  
 B.M. No.2 Elev. 359.97  
 Boat Spike in Gas and Electric Pole #390112, S.W. of Intersection Columbia Road and Old Annapolis Road.

**COLONIAL PIPELINE TEST PIT DATA**

NO.	SIZE	TOP OF PIPE ELEV.
A-1	6"	361.0
A-2	6"	359.4
A-3	6"	364.6
B-1	12"	360.2
B-2	12"	358.3
B-3	12"	363.4
1	6"	357.07
2	12"	357.46
3	12"	358.69
4	6"	360.39
5	12"	362.80

DORSEY HALL Section 1 Area 3  
 OPEN SPACE Lot 146  
 (Neighborhood Center)

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



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

24-510, 346.5  
 30-515, 346.5  
 30-515, 345

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works - DATE: 11-4-11  
 Chief of Bureau of Engineering - DATE: 11-4-11  
 Chief of Bureau of Utilities - DATE: 11-4-11  
 Chief of Land Development Division - DATE: 11-4-11

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:

PLAN & PROFILE OF WATER & SEWER MAINS  
 600 SCALE MAP NO. 24 / 30 BLOCK NO. 22 / 3,4

DORSEY HALL SECTION 2 AREA 1  
 ELECTION DISTRICT NO. 2  
 CONTRACT NO. 24-1281-D

SCALE AS SHOWN  
 SHEET 2 OF 6

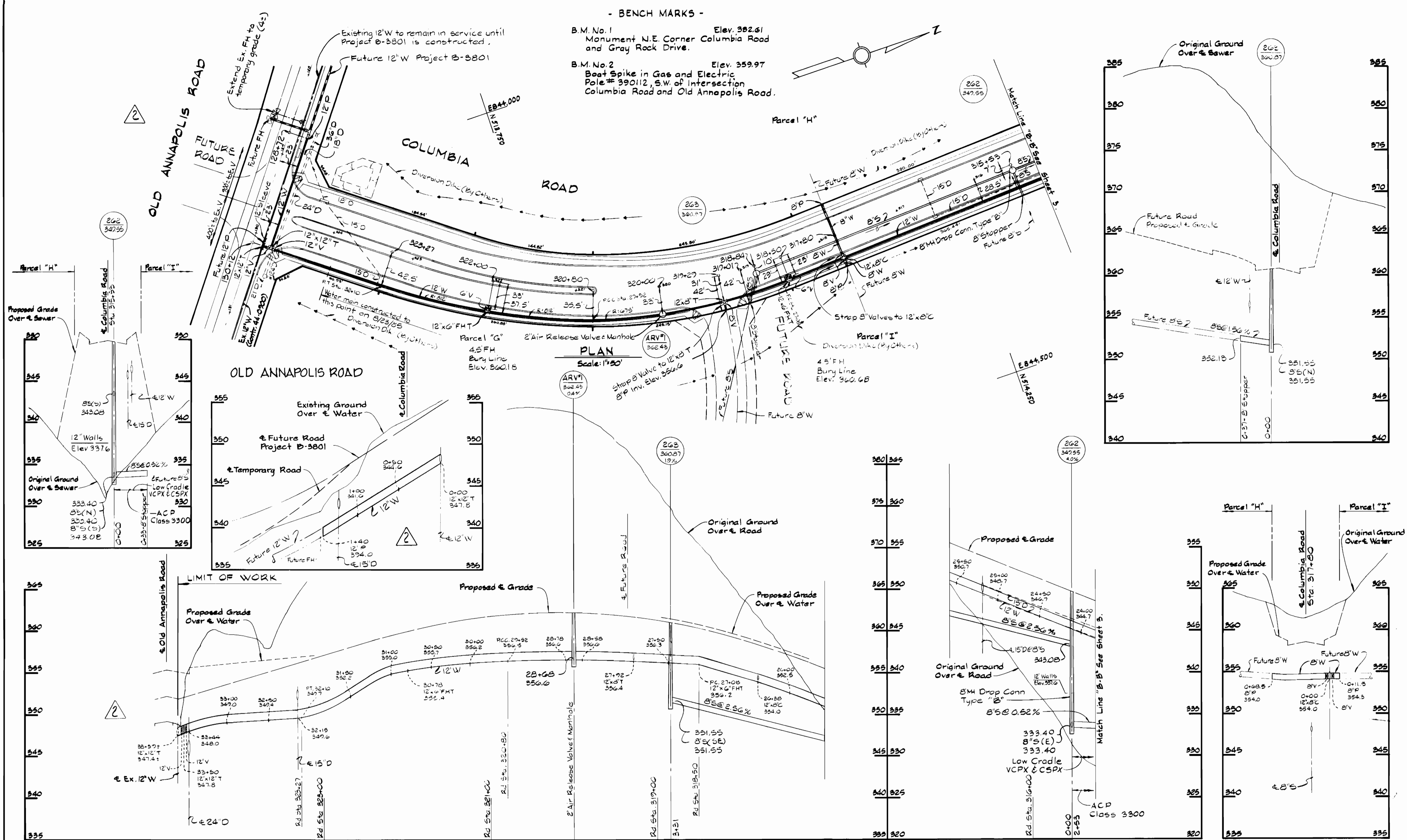
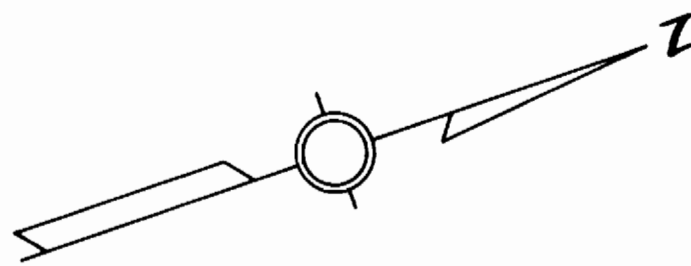




- BENCH MARKS -

B.M. No. 1 Elev. 352.61  
Monument N.E. Corner Columbia Road  
and Gray Rock Drive.

B.M. No. 2 Elev. 359.97  
Boat Spike in Gas and Electric  
Pole # 390112, S.W. of Intersection  
Columbia Road and Old Annapolis Road.



PLAN  
Scale: 1"=50'

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



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Walter F. Neumaier*  
DIRECTOR OF PUBLIC WORKS DATE: 11-21-89

*Walter F. Neumaier*  
CHIEF - BUREAU OF ENGINEERING - DATE: 11-21-89

*Walter F. Neumaier*  
CHIEF - BUREAU OF UTILITIES - DATE: 11-21-89

*Walter F. Neumaier*  
CHIEF - LAND DEVELOPMENT DIVISION - DATE: 11-21-89

WHITMAN, REQUARDT  
AND ASSOCIATES  
ENGINEERS

2315 ST PAUL ST  
BALTIMORE, MARYLAND

DES: S.J.	GCH: 1	Removed Sta 0+59.5 from B'W Profile	2/19/89
J.R.K.	2	Revised water at Old Annapolis Road	10/24/89
CHK: R.B.N.			
DATE:	BY:	NO.	REVISION

PLAN & PROFILE OF  
WATER & SEWER MAINS

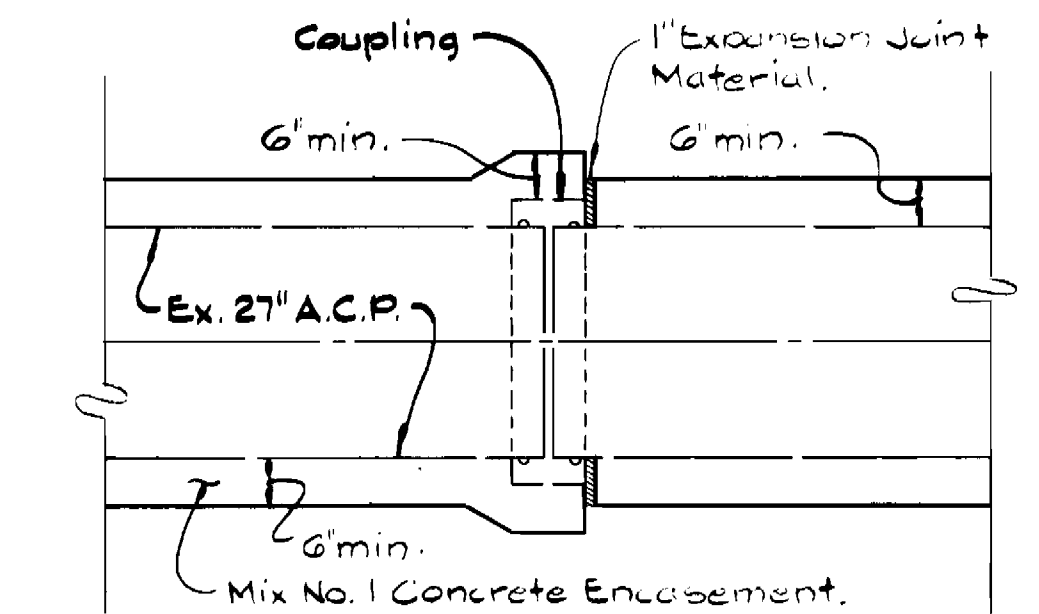
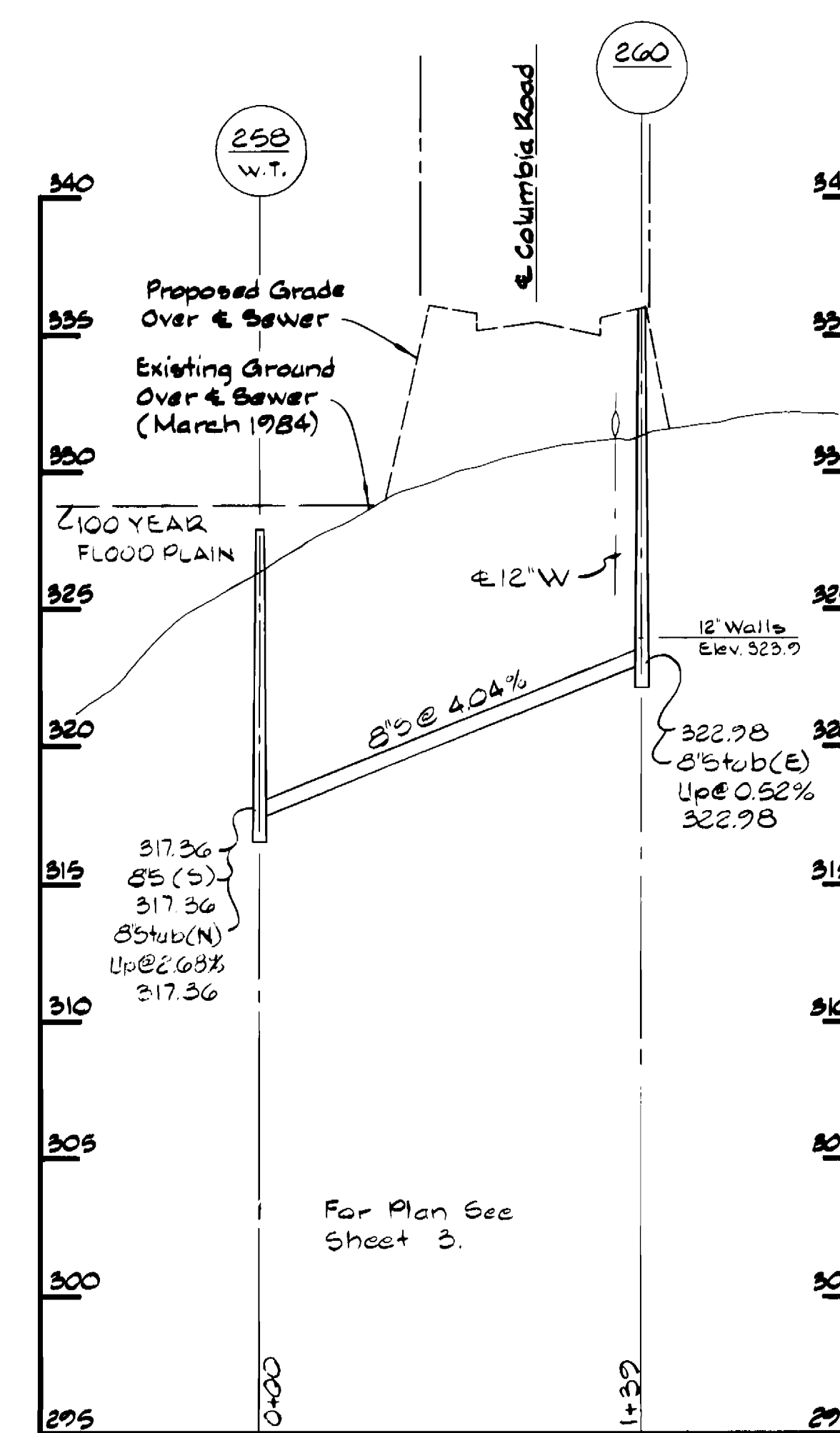
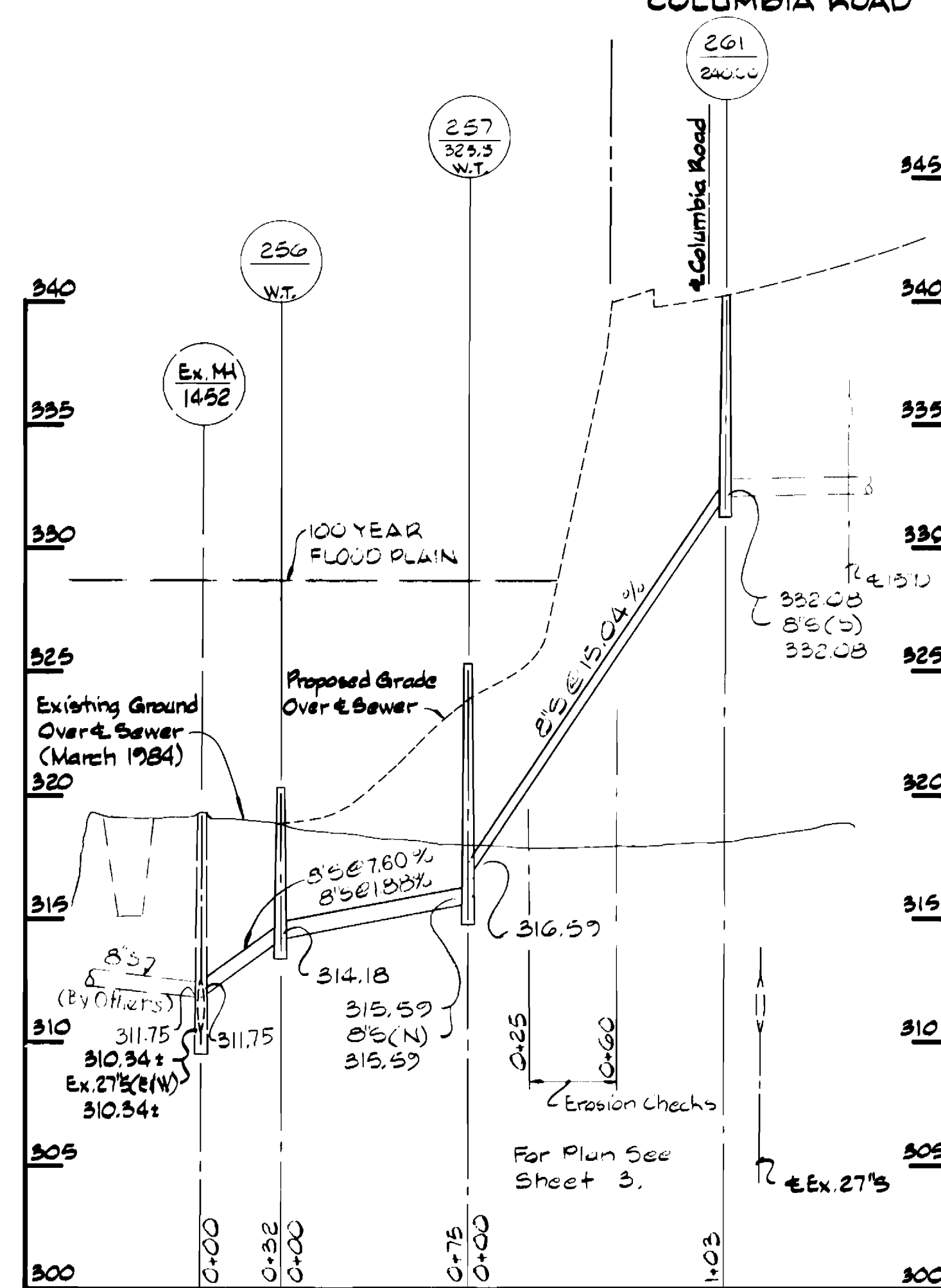
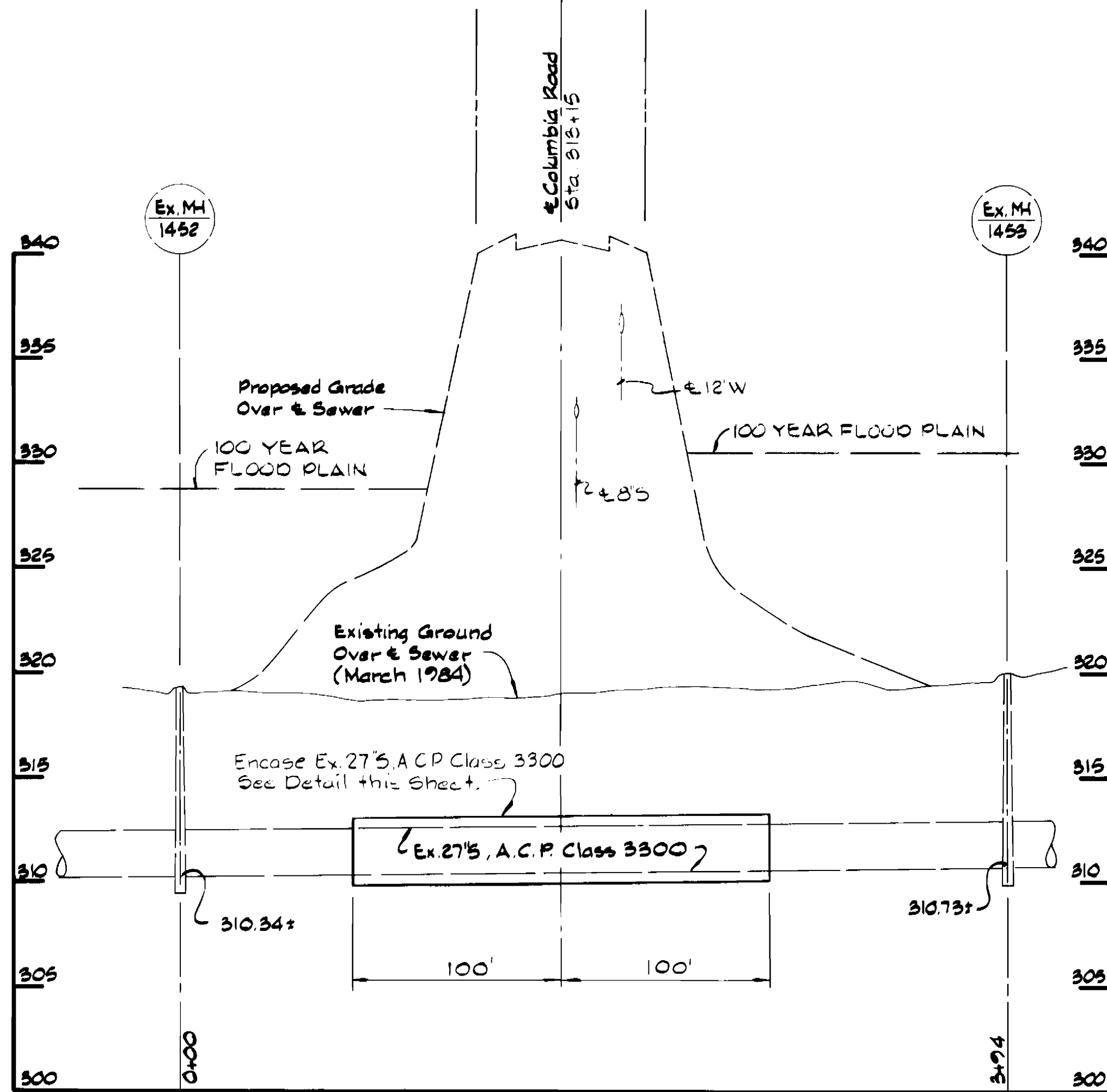
600' SCALE MAP NO. 30 BLOCK NO. 3

DORSEY HALL  
SECTION 2 AREA 1  
ELECTION DISTRICT NO. 2  
CONTRACT NO. 24-1281-D

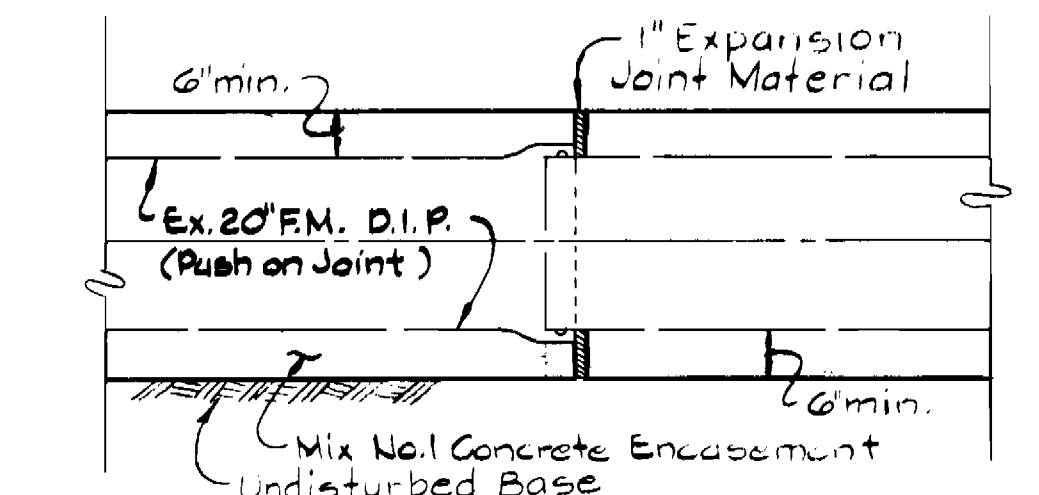
SCALE  
AS  
SHOWN

SHEET  
4 OF 6

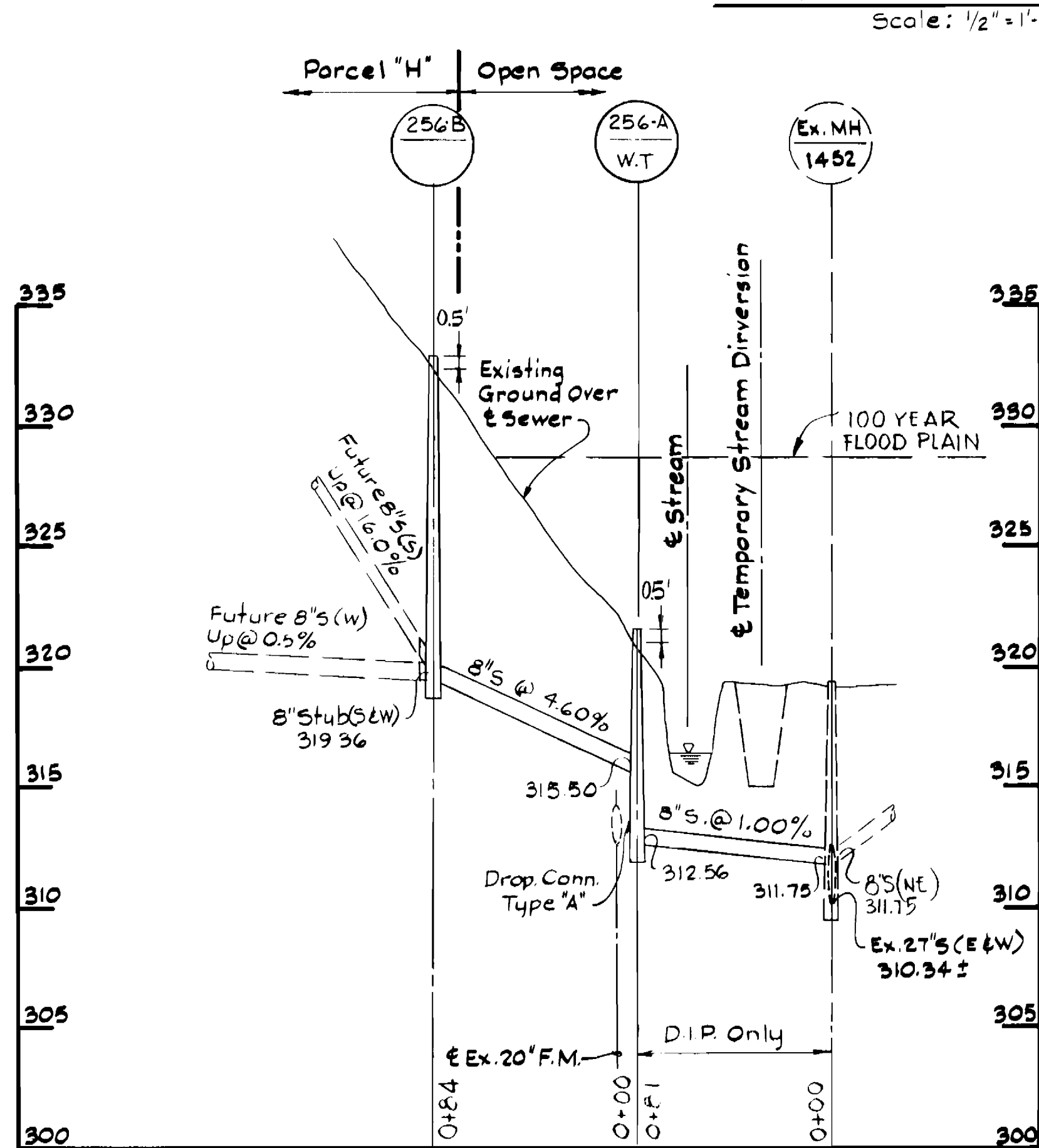
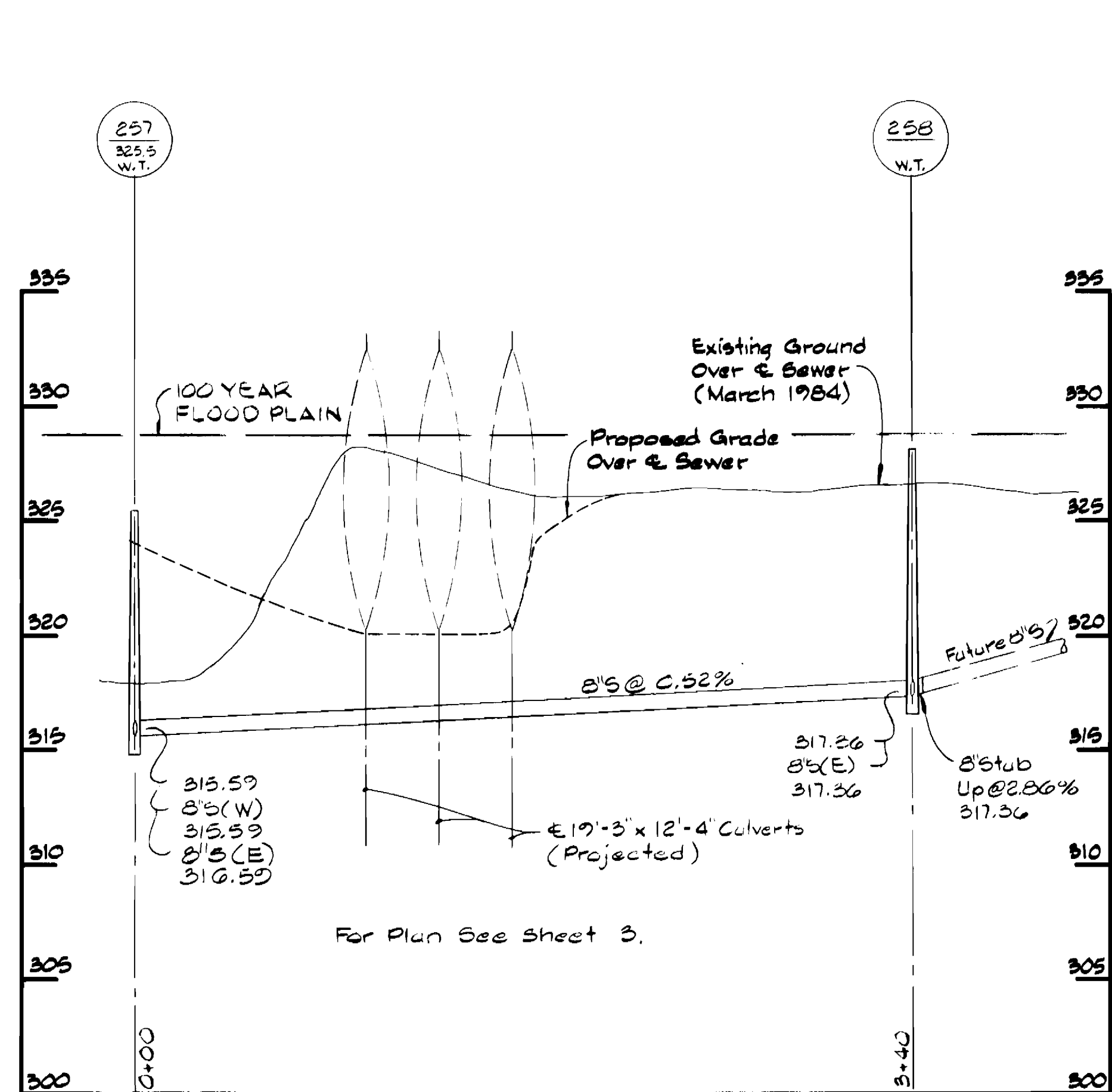
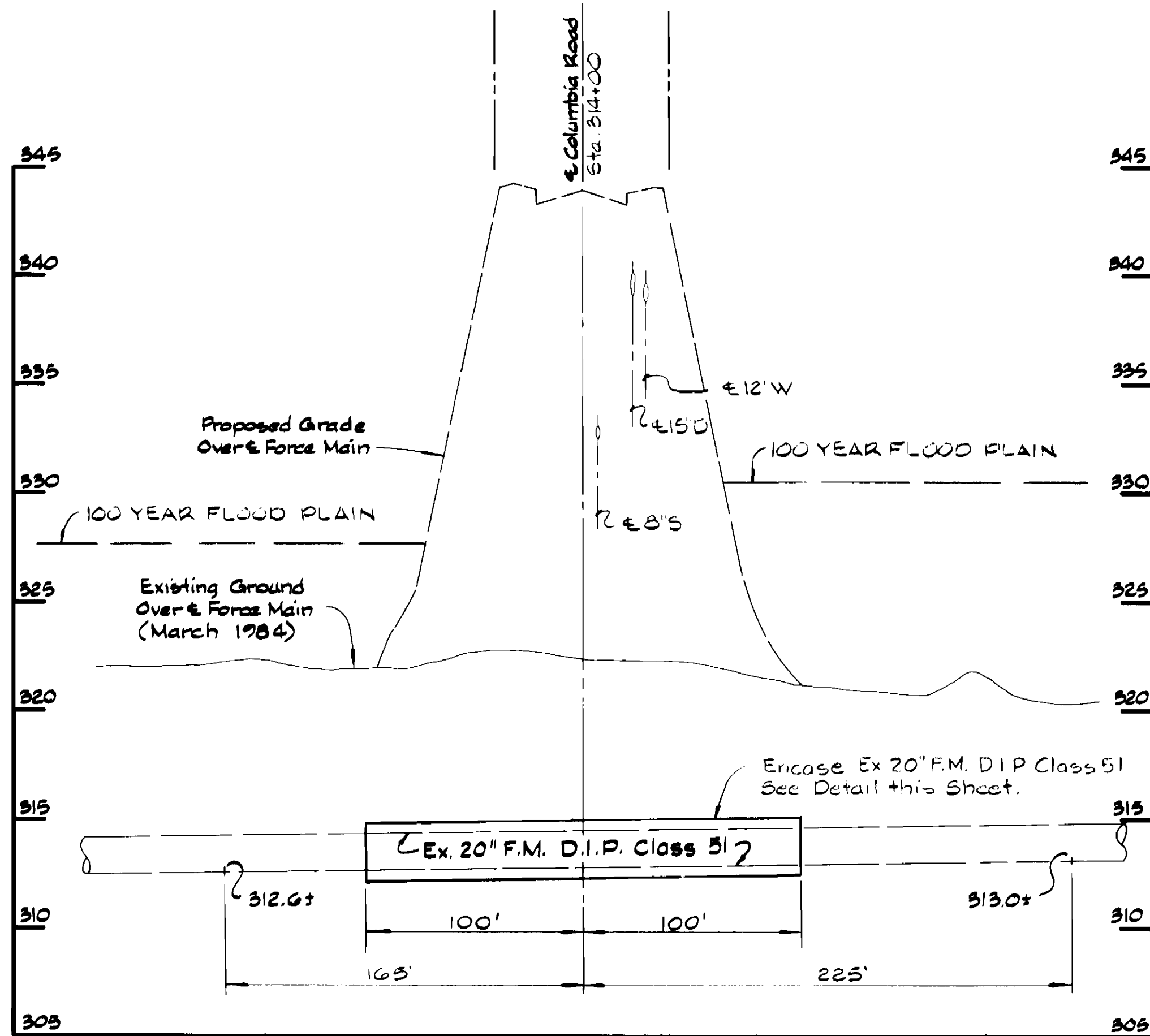
COLUMBIA ROAD



**NOTES:**  
 1. Encasement shall begin and end at pipe joints and shall not have construction joints except at pipe joints.  
 2. Width shall be 6" min. each side of pipe. Carry to undisturbed trench.



**ELEVATION**  
**ENCASEMENT DETAIL**  
Scale: 1/2" = 1'-0"



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

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works: *Robert F. ...*  
 Chief - Bureau of Engineering: *...*  
 Chief - Bureau of Utilities: *...*  
 Chief - Land Development Division: *...*

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

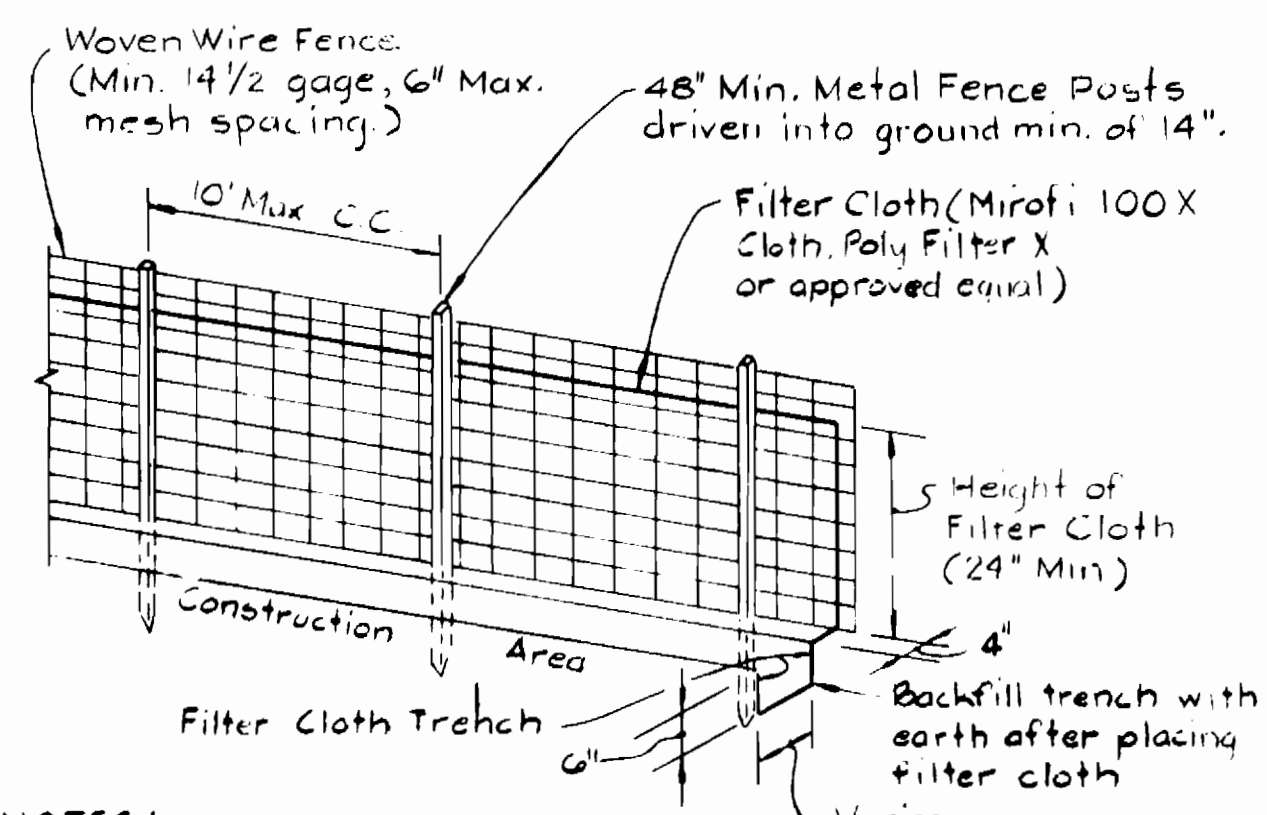
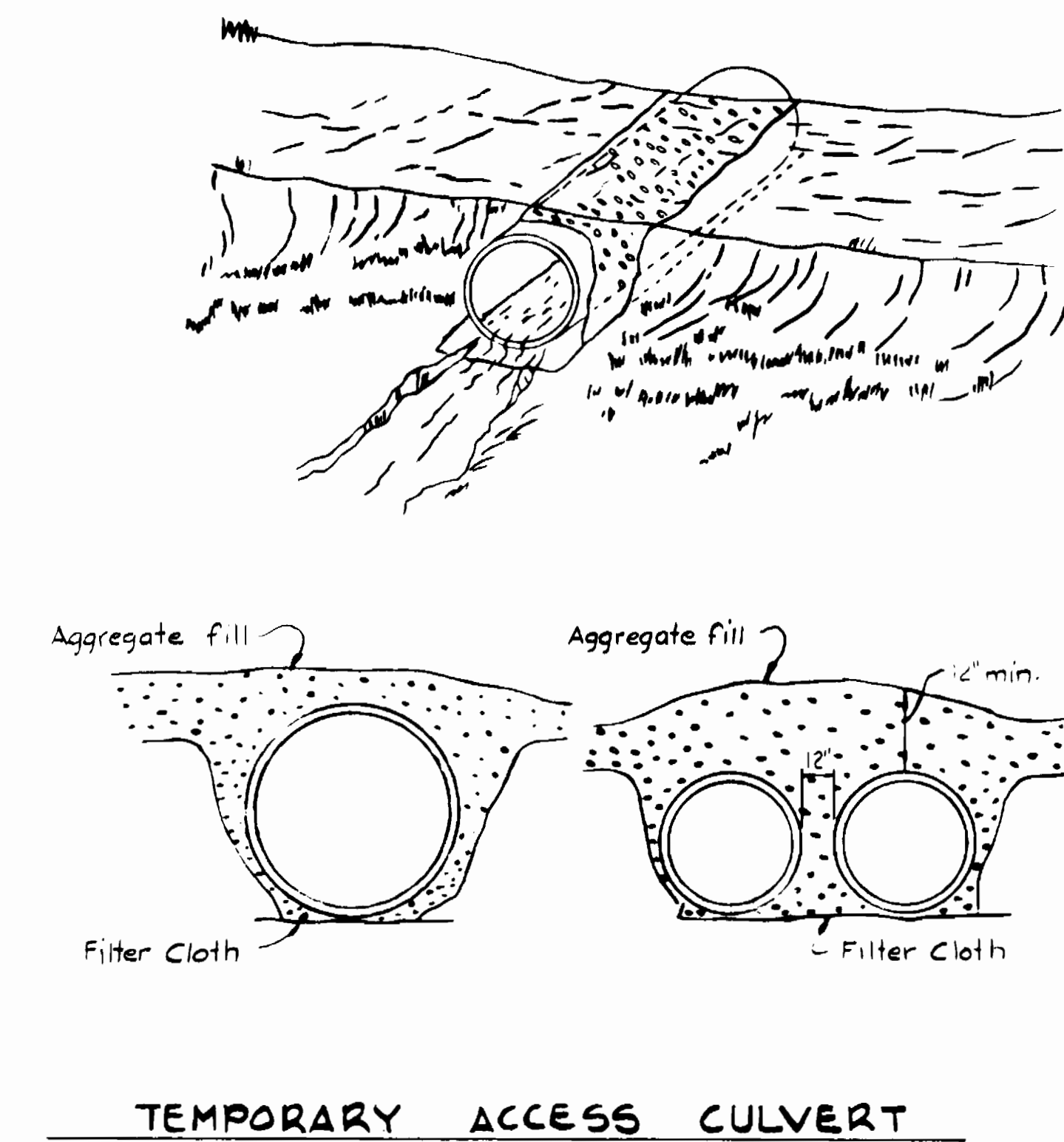
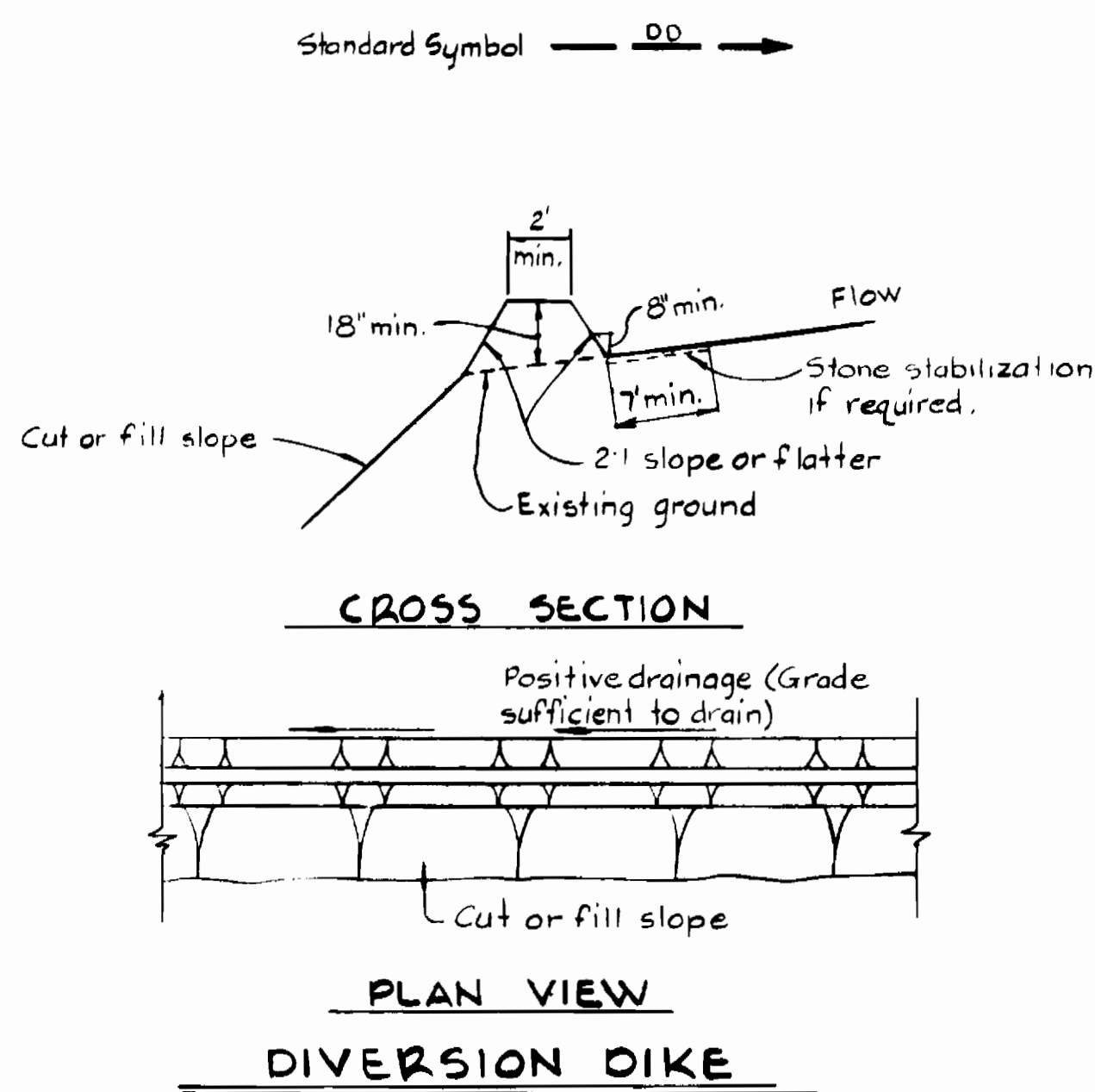
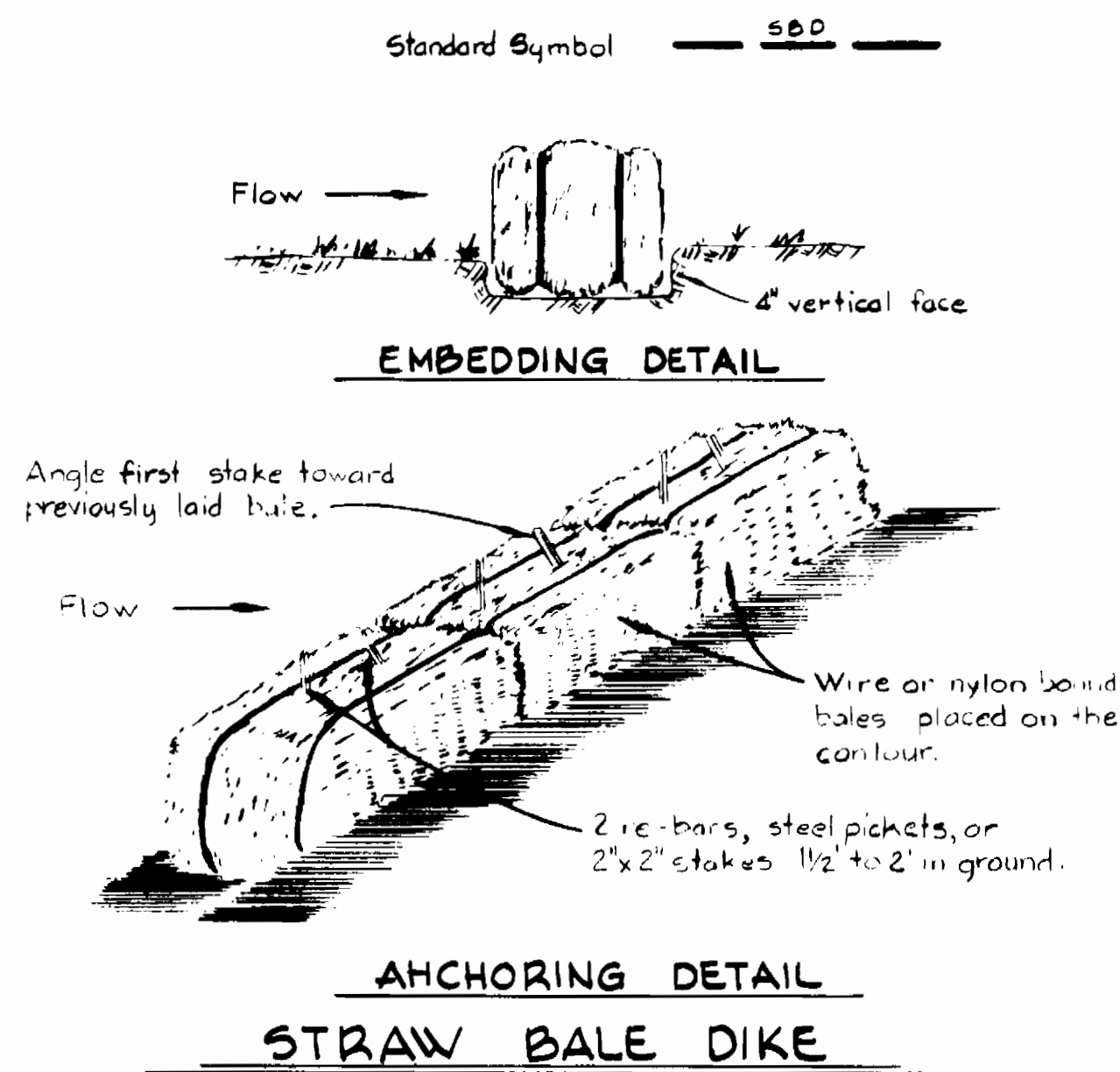
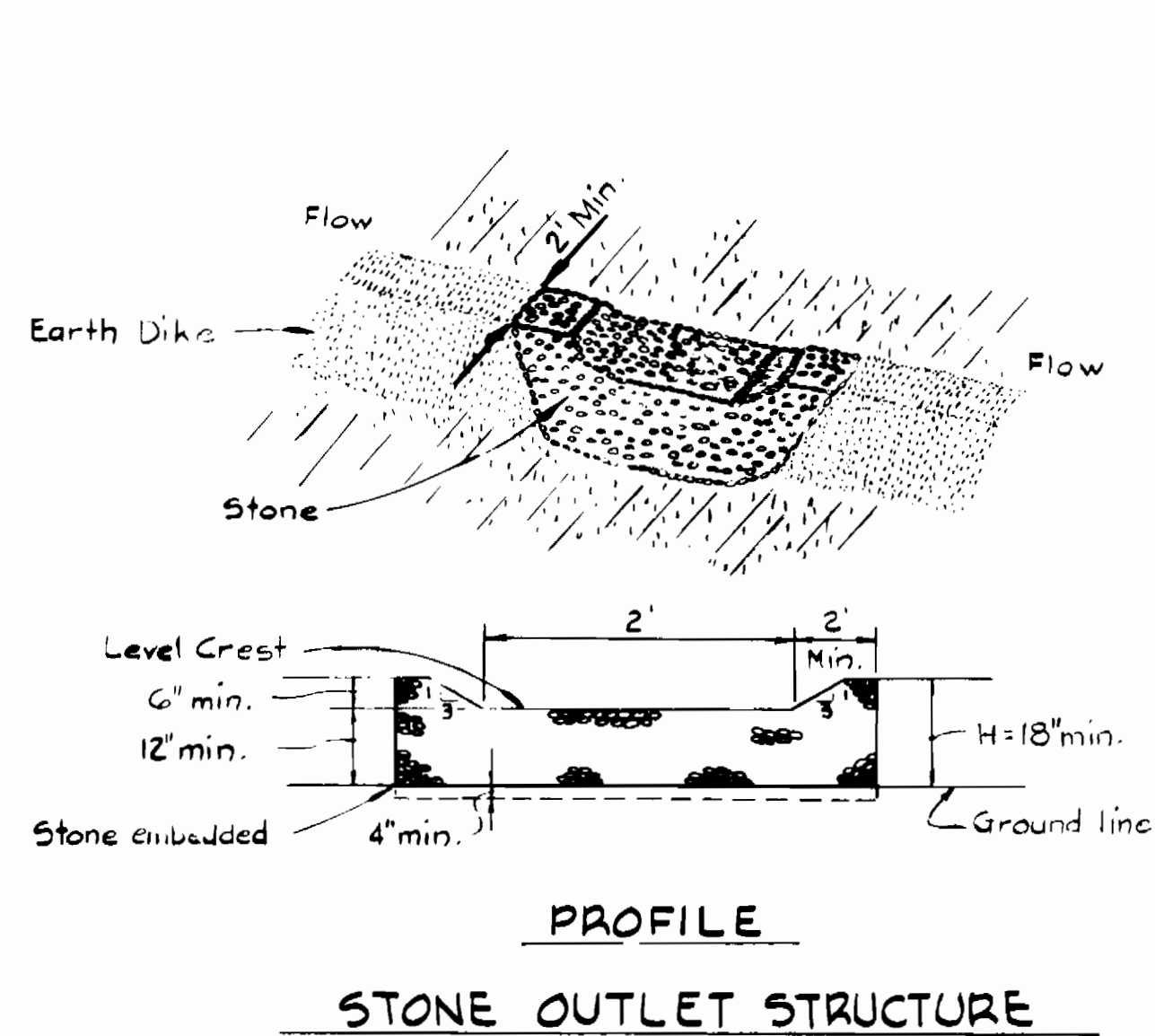
DES: B.J.	CEH	1	Added 8" S(E) @ MH 257	2/1/84
DRN: J.R.K.				
CHK: R.B.N.				
DATE:	BY NO.	REVISION	DATE	

PROFILES & DETAILS OF  
 SEWER MAINS

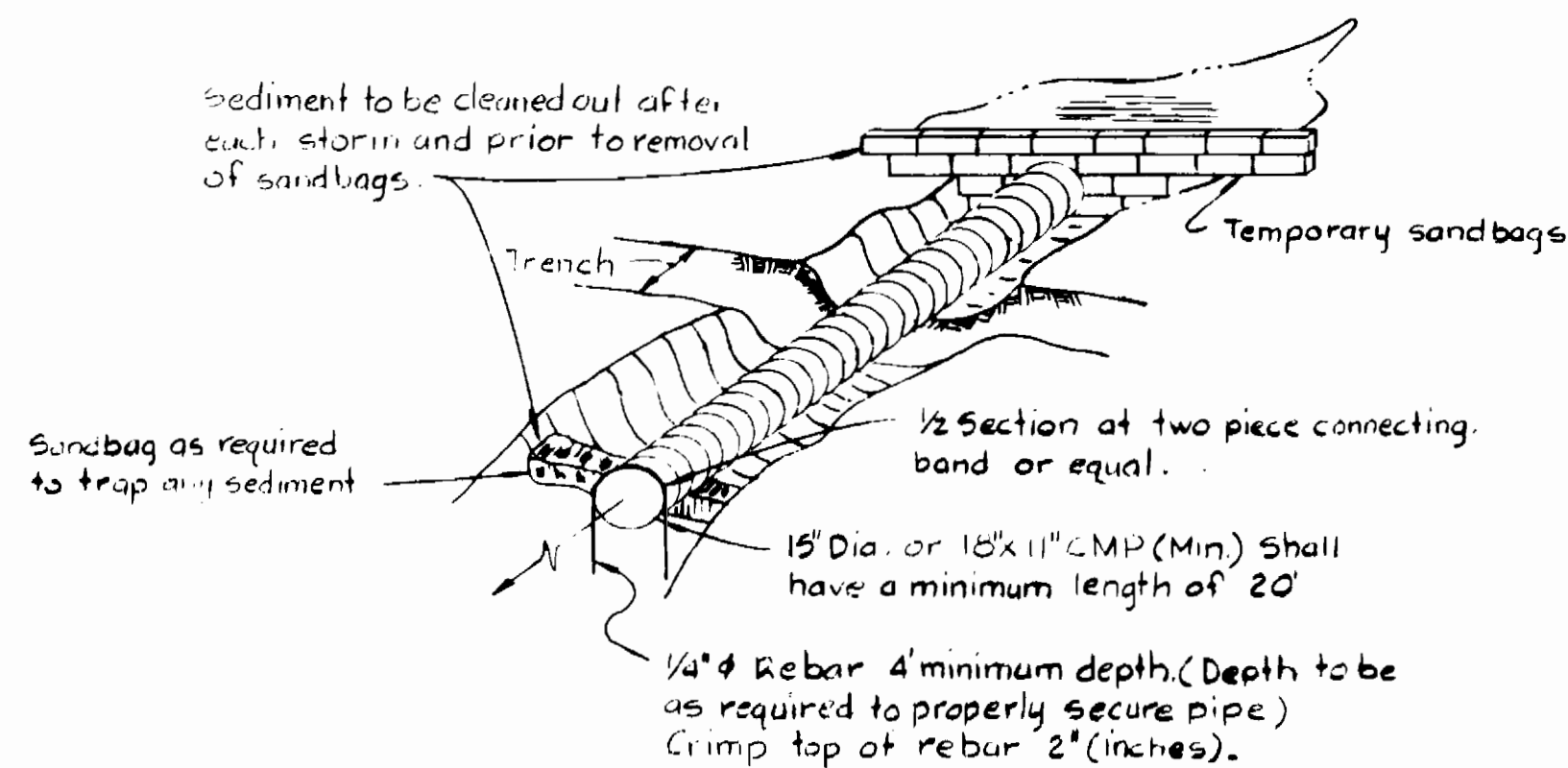
DORSEY HALL  
 SECTION 2 AREA 1  
 ELECTION DISTRICT NO. 2  
 CONTRACT NO. 24-1281-D

SCALE AS SHOWN  
 SHEET 5 OF 6

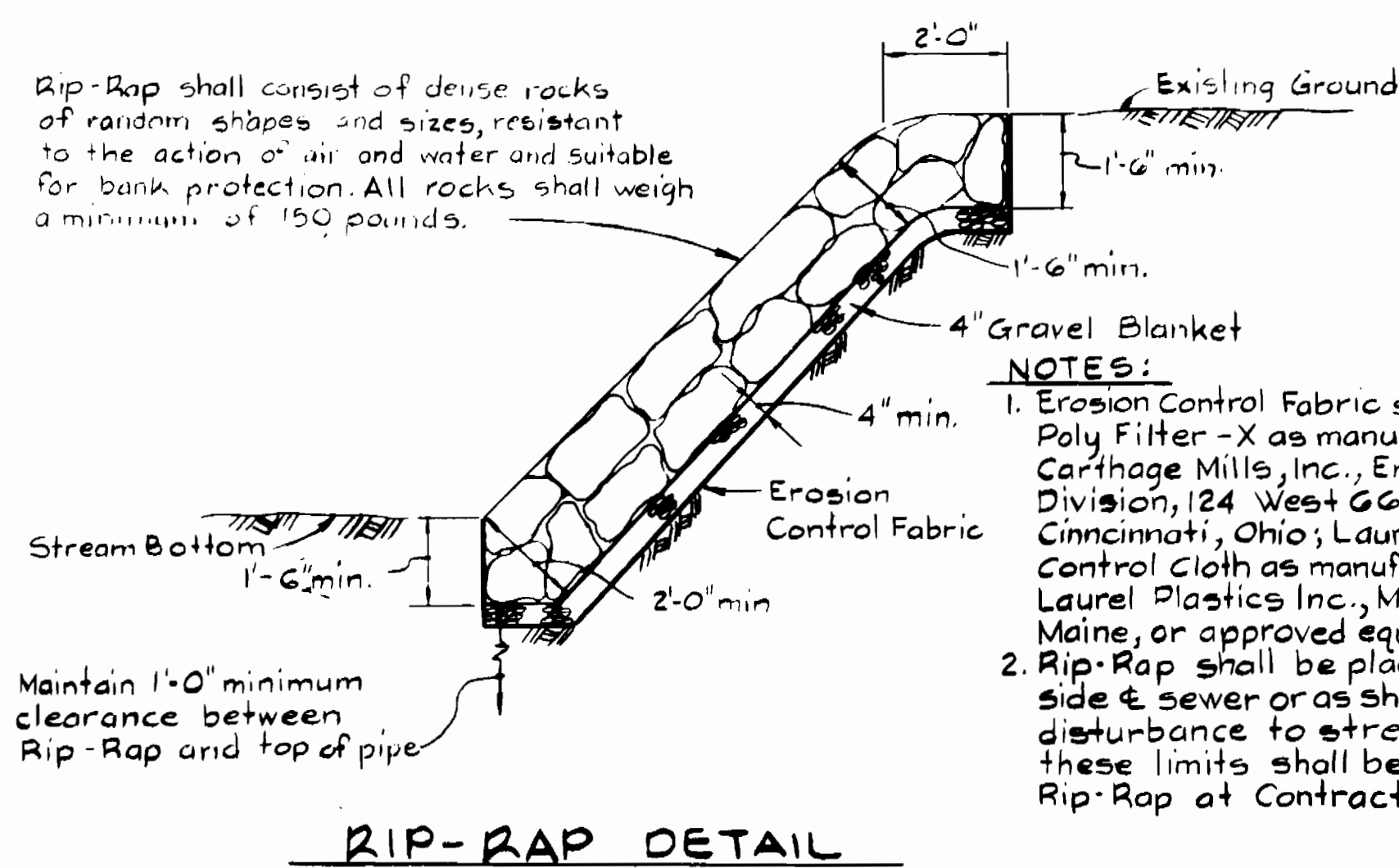




- NOTES:**
1. Woven wire fence to be fastened securely to fence posts by use of wire ties.
  2. Filter cloth to be fastened securely to woven wire fence by use of wire ties spaced every 24" at top and mid section.



**SOIL CONSERVATION MEASURES AT SMALL STREAM CROSSING**



- NOTES:**
1. Erosion Control Fabric shall be Poly Filter - X as manufactured by Carthage Mills, Inc., Erosion Control Division, 124 West 66<sup>th</sup> Street, Cincinnati, Ohio; Laurel Erosion Control Cloth as manufactured by Laurel Plastics Inc., Madison, Maine, or approved equal.
  2. Rip-Rap shall be placed 6' each side of sewer or as shown. Any disturbance to stream banks beyond these limits shall be protected with Rip-Rap at Contractors expense.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] 11-21-81 CHIEF - BUREAU OF UTILITIES - DATE	WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS 2315 ST. PAUL ST. BALTIMORE, MARYLAND	DES - SJ			SEDIMENT CONTROL DETAILS	DORSEY HALL SECTION 2 AREA 1 ELECTION DISTRICT NO 2 CONTRACT NO. 24-1281-D	SCALE AS SHOWN
		DRN - J.R.K.					SHEET 6 OF 6
[Signature] 11-21-81 CHIEF - BUREAU OF ENGINEERING - DATE		CHK - RBN					
[Signature] 11-21-81 CHIEF - LAND DEVELOPMENT DIVISION - DATE		DATE:	BY: NO	REVISION	DATE	600 SCALE MAP NO.	BLOCK NO.