

AS-BUILT 6/7/95

3952 3/4 V.L.R. 1/2 Sewer Outfall

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- 1) Pasture - Apply 2 tons per acre dolomitic limestone (82 lbs./1000 sq.ft.) and 800 lbs. per acre 10-10-10 fertilizer (74 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil at the time of seeding, apply 400 lbs. per acre 30-0-0 uniform fertilizer (8 lbs./1000 sq.ft.)

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 80 lbs. per acre (1.4 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 80 lbs./1000 sq.ft. of Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.2 lbs./1000 sq.ft.) of re-seeding grasses. During the period of October 18 thru February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 80 lbs./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 80 lbs./1000 sq.ft.) of unweeded straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq.ft.) of commercial asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal./1000 sq.ft.) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RESTORED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 800 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 tons per acre of annual ryegrass (23 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of re-seeding grasses (0.7 lbs./1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 80 lbs./1000 sq.ft.) of unweeded straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq.ft.) of commercial asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal./1000 sq.ft.) for anchoring.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT AND EROSION CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (967-2437).

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, unless, perimeter slopes and all slopes greater than 3:1 b) 14 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/ditches shown must be fenced and warning signs posted around their perimeters in accordance with the 1.1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5. All disturbed areas must be stabilized within the three period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec.3.1), and One-5.3, temporary seedings (Sec.3.2) and mulching (Sec.5.2). Temporary stabilization with mulch alone can only be done when recommended seeding rates do not allow for proper permeation and establishment of grasses.

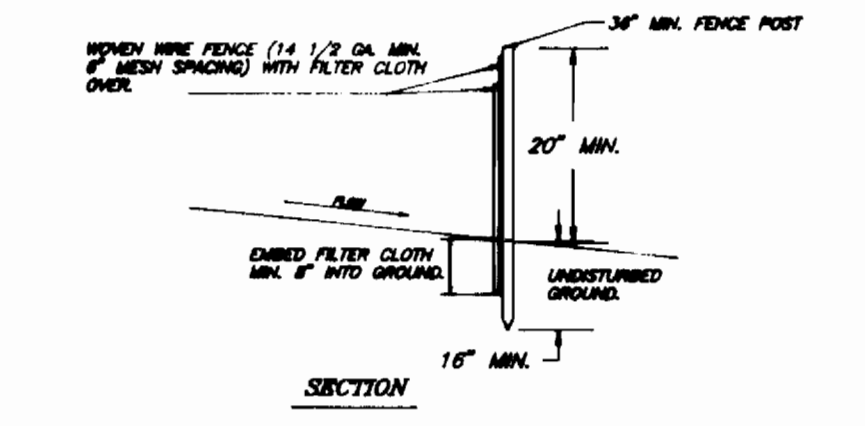
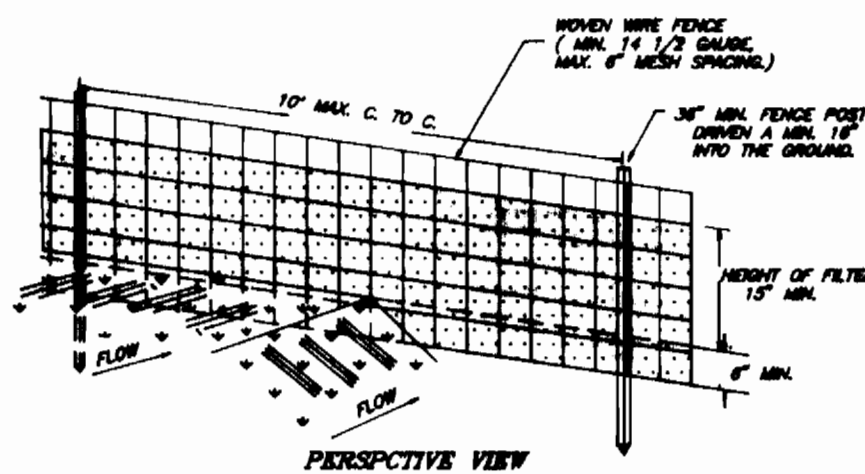
6. All sediment control structures are to remain in place and are to be maintained in operating condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

7. SITE ANALYSIS: Total Area of Site: 2.86 AC. Area Disturbed: 2.86 AC. Area to be reseeded or planted: 2.86 AC. Area to be vegetatively stabilized: 2.86 AC. Total Cut: 2,850 C.Y. Total Fill: 2,850 C.Y.

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment control must be provided, if deemed necessary by the Howard County (HCP) Sediment Control Inspector.

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.



STANDARD SYMBOL: S - S - S

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 1. WOMEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR SAMPLES.
- 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOMEN WIRE FENCE WITH TIES SPACED EVERY 24\"/>

POSTS: STEEL EITHER T OR U TYPE OR 2\"/>

FENCE: WOMEN WIRE, 14 GA. # 1\"/>

NO SCALE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH THIS PLAN. FOR SEDIMENT CONTROL DETAILS, SEE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL STANDARD SF-1 FOR SILT FENCE.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

SIGNATURE: [Signature] DATE: 7-7-94

US. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

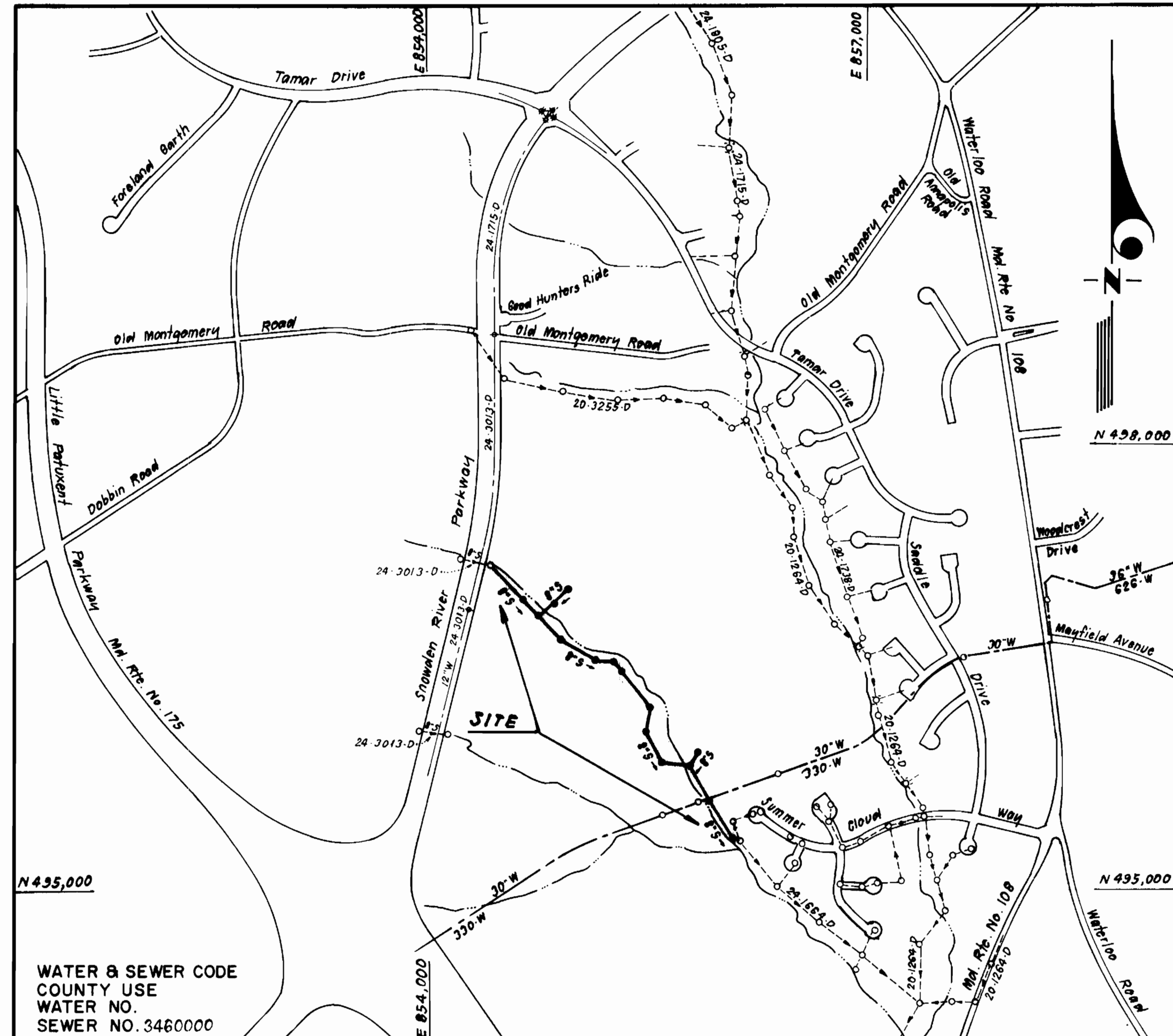
APPROVED: [Signature] DATE: 7/7/94

HOWARD S.C.D.

CONSTRUCTION SEQUENCE

- 1. Obtain all necessary permits. (Wetlands Permit No.)
- 2. Install Sediment Control Devices.
- 3. Obtain approval of Sediment Control Inspector before proceeding with construction.
- 4. Install 8\"/>

NOTE: Contractor shall meet all conditions set forth in the terms of the Wetlands Permit.



WATER & SEWER CODE COUNTY USE WATER NO. SEWER NO. 3460000

VICINITY MAP SCALE: 1" = 600'

CONTRACT NO. 20-3352 - D

VILLAGE OF LONGREACH SECTION 4, AREA 2, PHASE 216

SEWER OUTFALL HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

Table with 2 columns: TYPE OF BUILDING, NO. OF LOTS, NO. OF WHC's, NO. OF SHC's, DRAINAGE AREA. Values are mostly N/A or LITTLE PATUXENT.

LITTLE PATUXENT W.W.T.P.

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 Inspector, 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. Any cost incurred to the contractor for tunneling or bracing at poles shall be included in unit prices bid for excavation and backfill.
- 6. For details not shown on the drawings use Howard County Standard Details.
- 7. For materials and construction methods use Howard County Standard Specifications & Details and Howard County Design Manual, Volume IV (Latest Edition). The contractor shall have copies of these on the job site.
- 8. 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.
- 9. 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 Damage Control - 787-9068
- Baltimore Gas & Electric Company - Contractor Services - 850-4620
- Baltimore Gas & Electric Company - Trouble Shooting - 298-9001
- "Miss Utility" - 1-800-257-7777
- Chesapeake & Potomac (C & P) Telephone Company - 1-800-257-7777
- Bureau of Utilities Howard County - 313-4900
- Colonial Pipeline Company - 795-1390

- 10. 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.
- 11. Contractor shall remove trees, stumps, and roots along line of excavation as directed by the Inspector. Payment for such removal shall be included in the unit price bid for excavation and backfill.
- 12. 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.
- 13. All water mains to be D.I.P. Class 52 unless otherwise noted.
- 14. Top of all water mains to have a minimum of 3'-1/2' cover unless otherwise noted.
- 15. Valves adjacent to tees shall be strapped to tees.
- 16. Block all fittings with concrete.
- 17. Bury line elevations on fire hydrants shall be set to the elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with S.D. Det. W.I.I. & W.I.I. Soil around the fire hydrant to be compacted in accordance with Sections 1000 & 1005 of the Standard Specifications.
- 18. All water house connections shall be for an inside meter setting.
- 19. The contractor shall not operate any water main valves on the existing system.
- 20. All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C., or D.I.P. unless otherwise noted.
- 21. The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
- 22. All manholes shall be 4'-0" inside diameter, unless otherwise noted.
- 23. Water main and water house connection lines must have a minimum of one foot separation from the sanitary sewer and sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.
- 24. Manholes designated thus: WT, shall have a Watertight Frame and Cover.

QUANTITIES table with columns: ITEM, QUANTITIES ESTIMATED, QUANTITIES AS BUILT, TYPE, MANUFACTURER / SUPPLIER. Includes rows for 8" SEWER, 4' O.D. MH, 8" SEWER, 8" SEWER.

NAME OF UTILITY CONTRACTOR: SURVEY & DRAFTING DIV.-AS BUILT DATE:

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND. Includes signatures and dates for Director of Public Works and Chief, Bureau of Engineers.

CLARK - FINEPROCK & SACKETT, INC. ENGINEERS - PLANNERS - SURVEYORS. 7155 MINSTREL WAY COLUMBIA MARYLAND 21045.



Table with columns: DES, DRN, CHK, DATE, BY, NO., REVISION, DATE. Includes entries for JTR, CCM, and MAY 94.

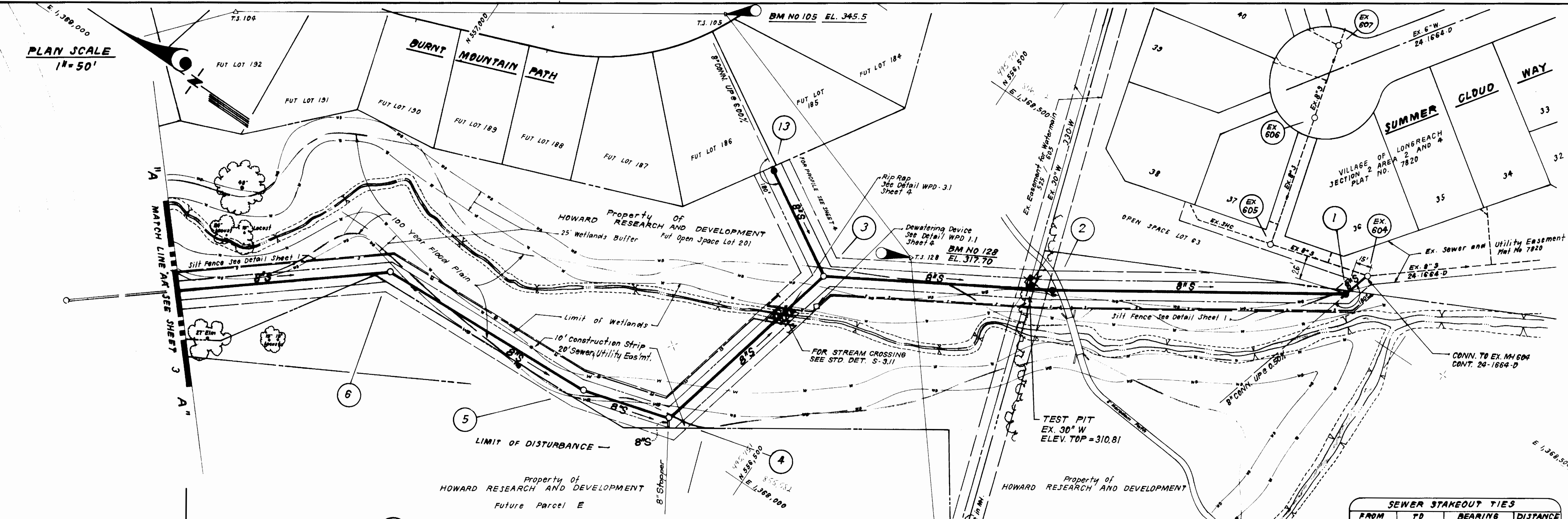
TITLE SHEET 600'SCALE MAP NO. 37 BLOCK NO. 7

COLUMBIA VILLAGE OF LONGREACH SECTION 4 - AREA 2 - PHASE 216 SEWER OUTFALL 6TH ELECTION DISTRICT CONTRACT NO. 20-3352-D

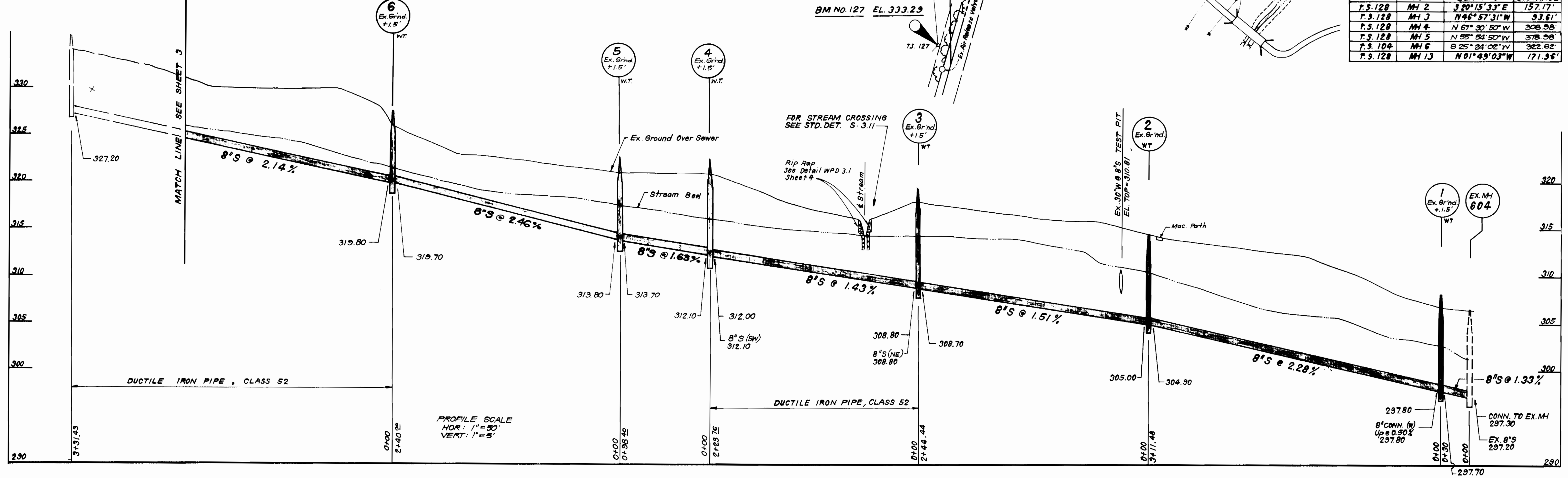
SCALE AS SHOWN SHEET 1 of 4

AS-BUILT 6/7/95

PLAN SCALE
1"=50'



FROM	TO	BEARING	DISTANCE
P.S. 128	MH 2	S 20° 15' 33" E	157.17'
P.S. 128	MH 3	N 46° 57' 31" W	93.61'
P.S. 128	MH 4	N 67° 30' 50" W	308.98'
P.S. 128	MH 5	N 55° 54' 50" W	378.98'
P.S. 104	MH 6	S 25° 24' 02" W	322.62'
P.S. 128	MH 13	N 01° 49' 03" W	171.96'



9952 5/2 V.L.R. 4/2

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: [Signature] DATE: 7/8/94

Chief, Bureau of Engineering: [Signature] DATE: 7/8/94

Chief, Bureau of Utilities: [Signature] DATE: 6-30-94

Chief, Land Development Div.: [Signature] DATE: 7/8/94

CLARK, FINEPROCK & SACKETT, INC.
ENGINEERS - PLANNERS - SURVEYORS

7135 MINSTREL WAY COLUMBIA MARYLAND 21045
(301) 381-7500 BALTO. (301) 621-8100 WASH.



DES: JTR
DRN: JTR
CHK: CCM

DATE: MAY 94

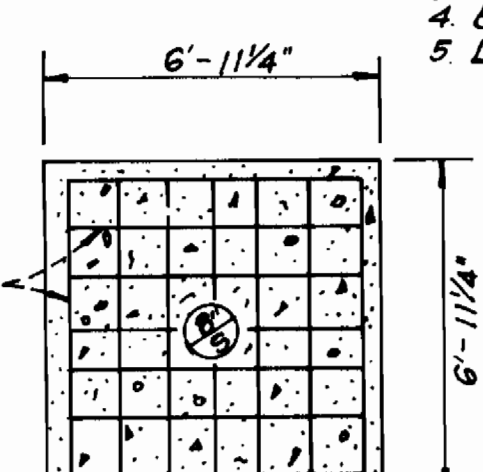
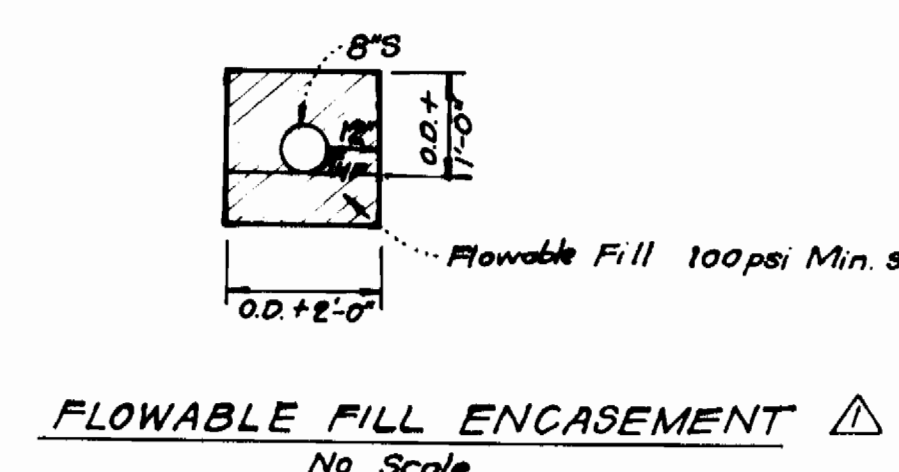
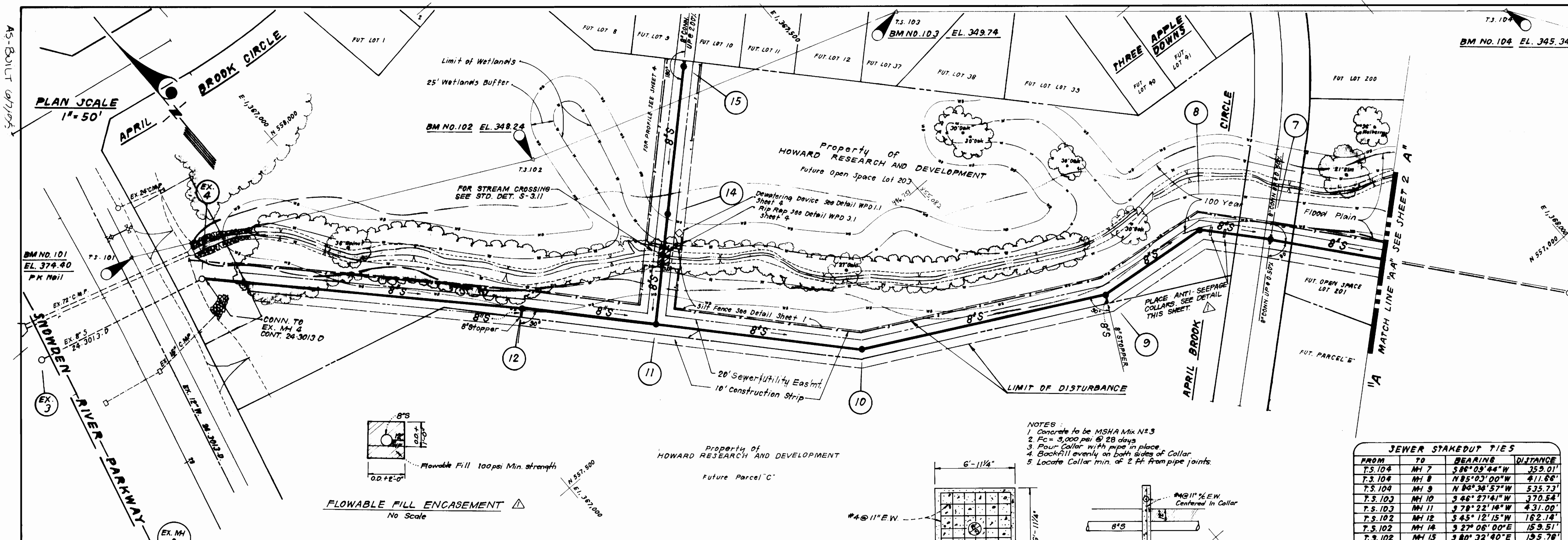
REVISION: 1 Rev Sewer Plan & Profile from MH 3 to MH 6 10-28-94

PLAN & PROFILE OF
A SEWER OUTFALL

60' SCALE MAP NO. 37 BLOCK NO. 7

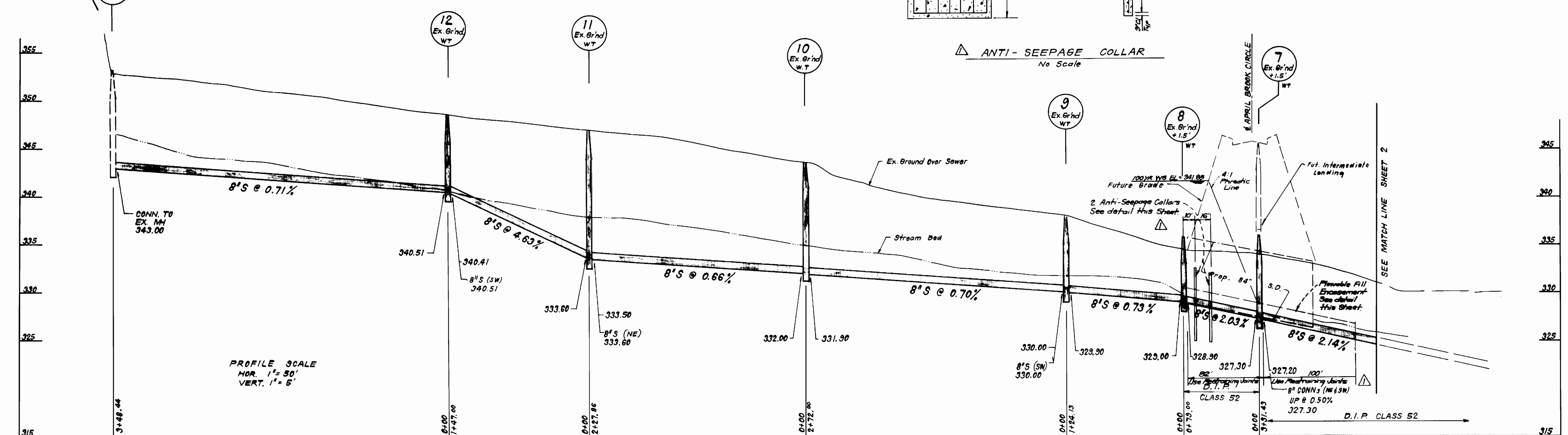
COLUMBIA
VILLAGE OF LONGREACH
SECTION 4- AREA 2 - PHASE 216
SEWER OUTFALL
6TH ELECTION DISTRICT
CONTRACT NO. 20- 3352-D

SCALE AS SHOWN
SHEET 2 OF 4



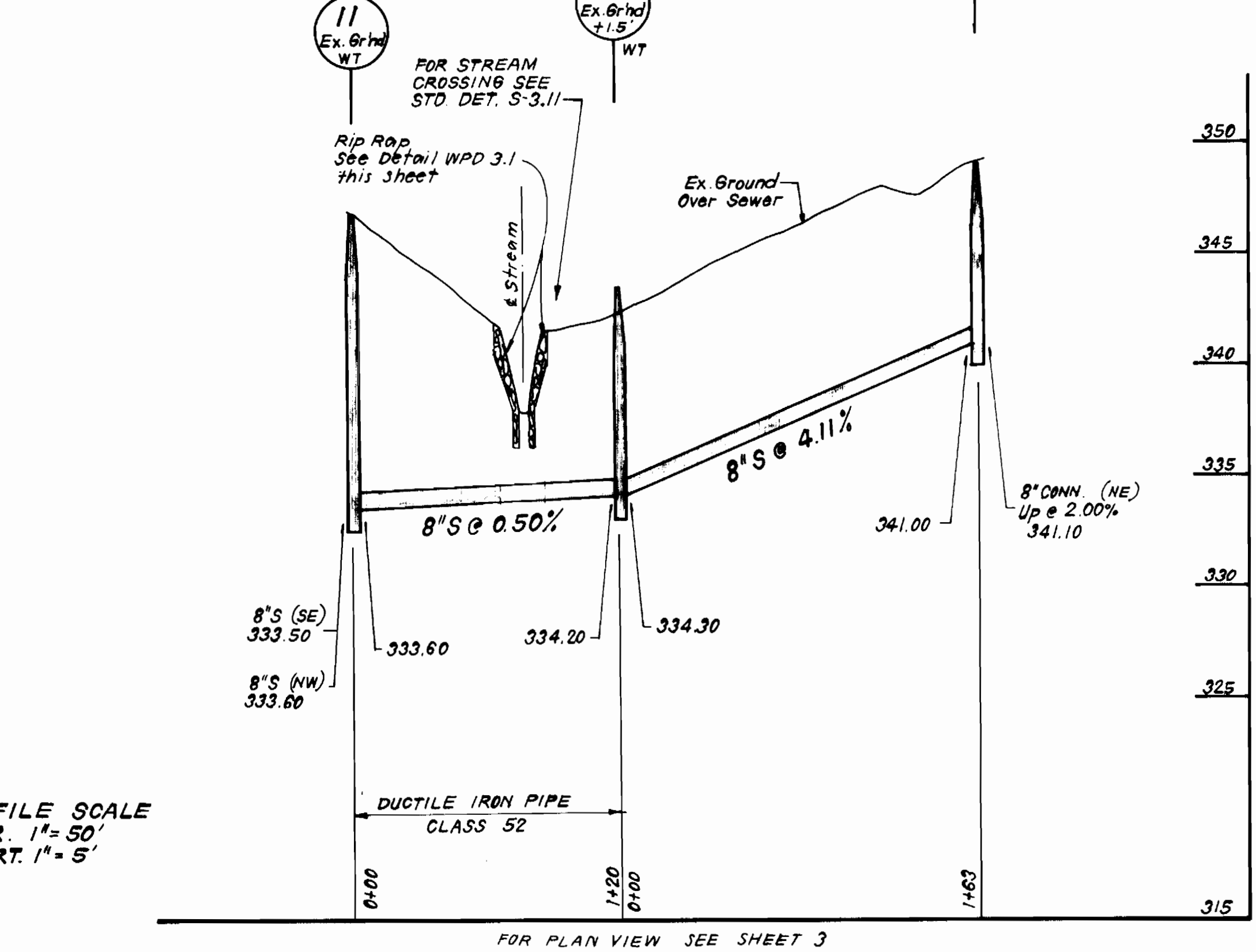
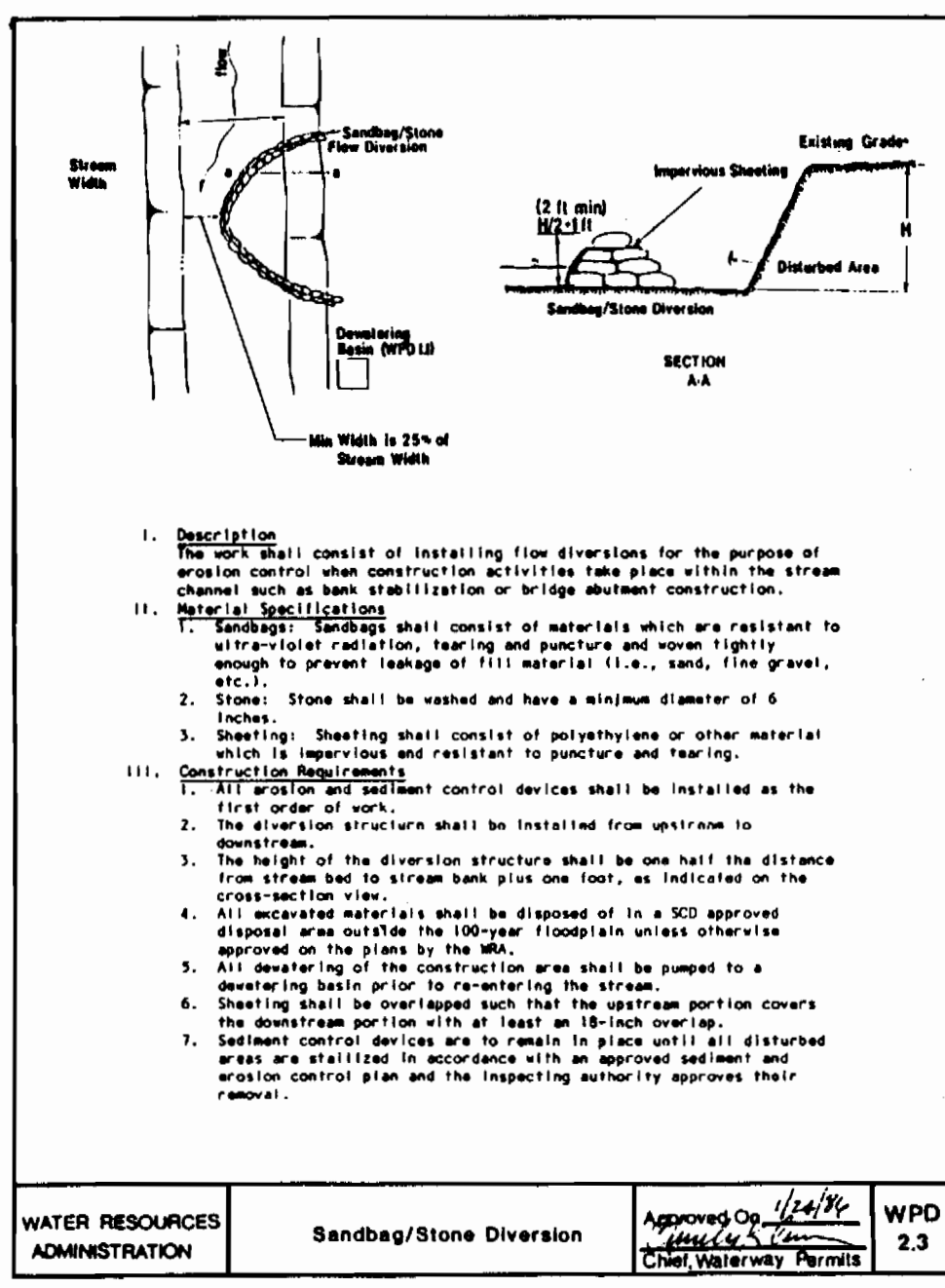
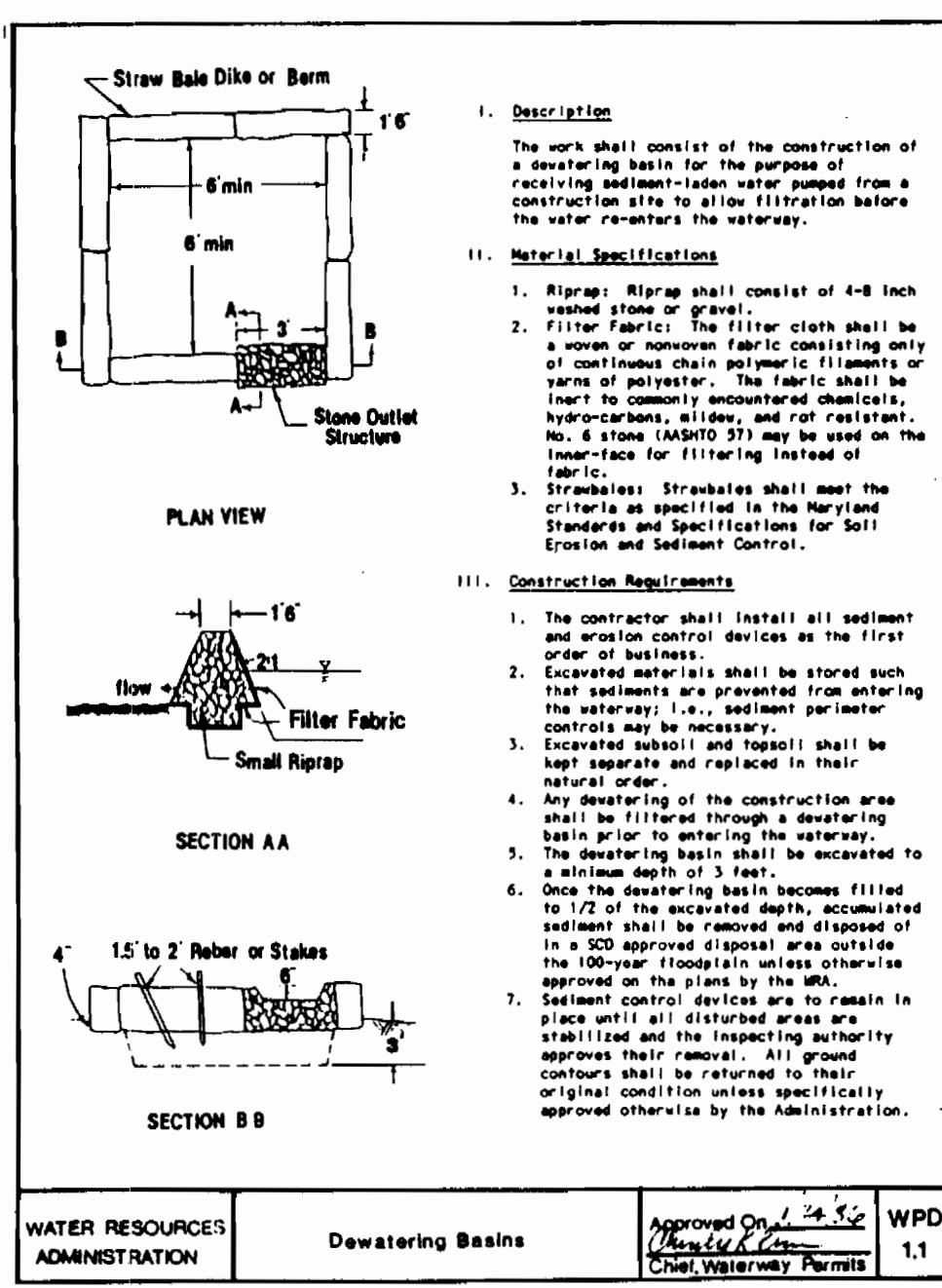
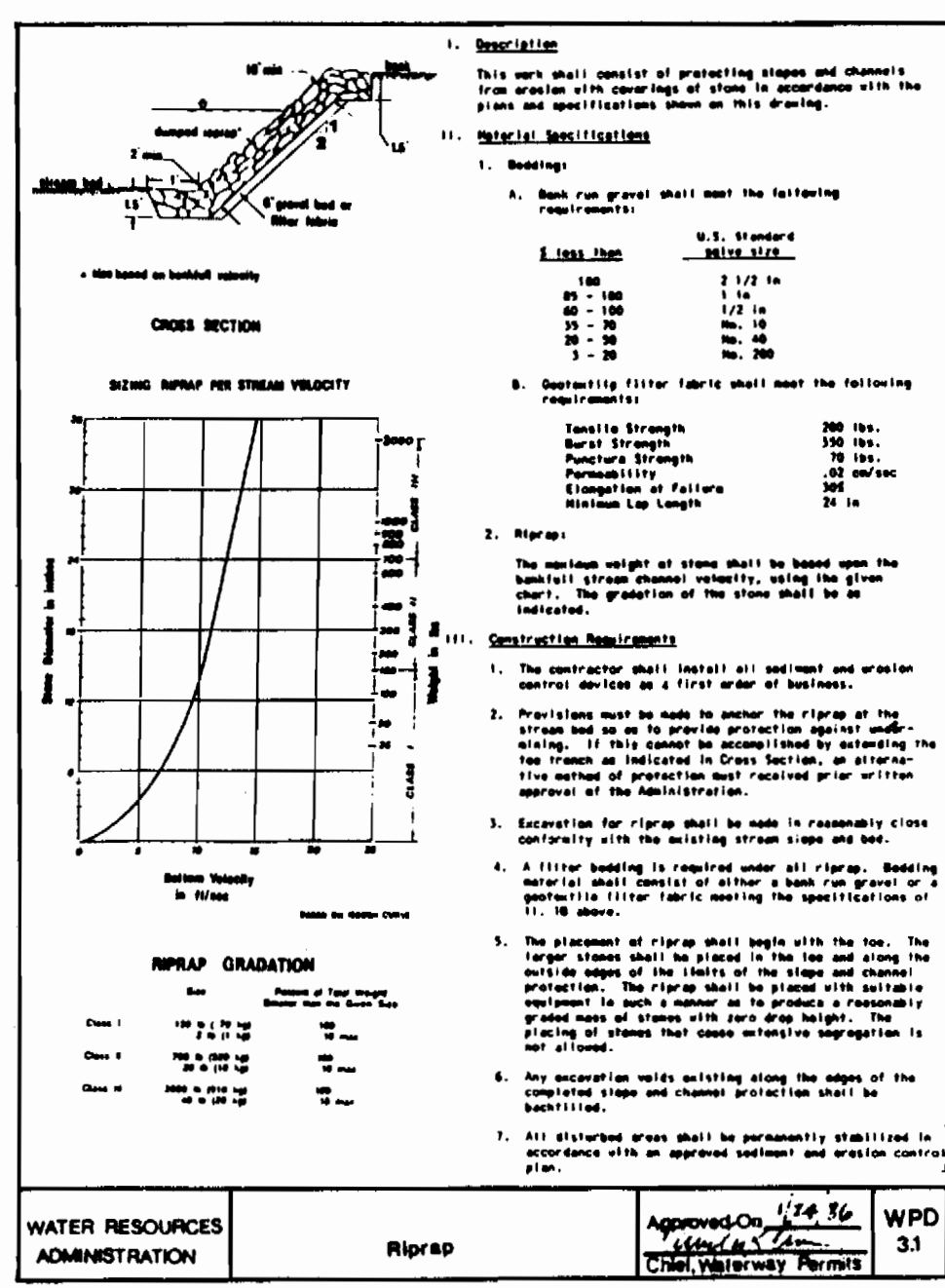
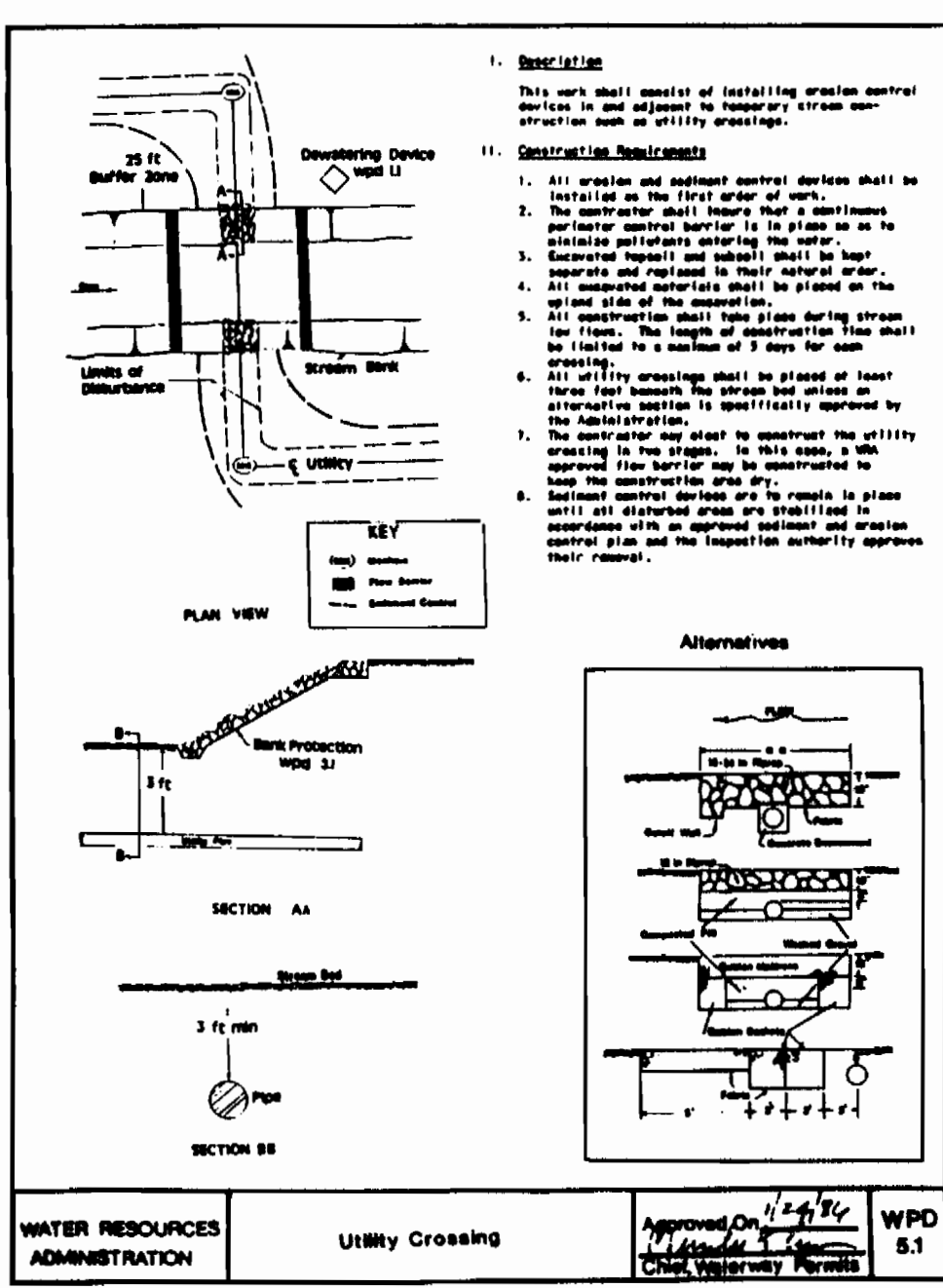
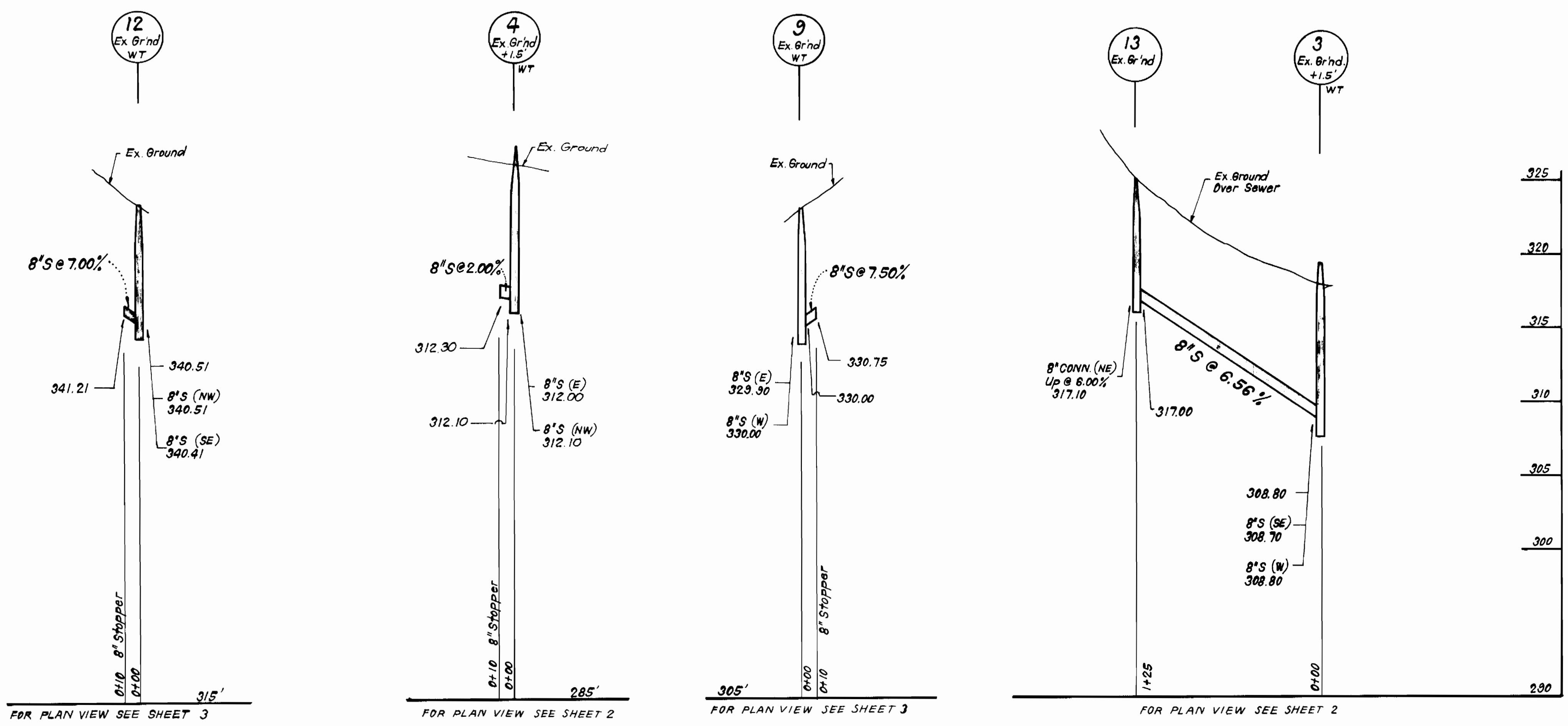
- NOTES:
1. Concrete to be MSHA Mix #3
 2. Fc = 3,000 psi @ 28 days
 3. Pour Collar with pipe in place
 4. Backfill evenly on both sides of Collar
 5. Locate Collar min. of 2 ft from pipe joints

FROM	TO	BEARING	DISTANCE
T.S. 104	MH 7	S 86° 03' 44" W	359.01'
T.S. 104	MH 8	N 85° 03' 00" W	411.66'
T.S. 104	MH 9	N 84° 34' 57" W	535.73'
T.S. 103	MH 10	S 46° 27' 41" W	370.54'
T.S. 103	MH 11	S 78° 22' 18" W	431.00'
T.S. 102	MH 12	S 45° 12' 15" W	162.14'
T.S. 102	MH 14	S 27° 06' 00" E	159.51'
T.S. 102	MH 15	S 80° 32' 40" E	195.76'



2566
 5/13 V.L.R.: 4/2

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>[Signature]</i> 7/10/94 Chief, Bureau of Engineering: <i>[Signature]</i> 7/10/94 Chief, Bureau of Utilities: <i>[Signature]</i> 6-30-94 Chief, Land Development Div.: <i>[Signature]</i> 7/1/94		CLARK-FINPROCK & SACKETT, INC. ENGINEERS - PLANNERS - SURVEYORS 7135 MINSTREL WAY COLUMBIA MARYLAND 21045 (301) 381-7500 BALTO. (301) 621-8100 WASH.		DES: JTR DRN: JTR CHK: CCM DATE: MAY 94 CFS: <i>[Signature]</i> Added Anti-Seepage Collars, Flowable Fill & Restraining Joints 12.30.94		PLAN & PROFILE OF A SEWER OUTFALL 600' SCALE MAP NO. 37 BLOCK NO. 7		COLUMBIA VILLAGE OF LONGREACH SECTION 4 - AREA 2 - PHASE 216 SEWER OUTFALL 6TH ELECTION DISTRICT CONTRACT NO. 20-3352-D		SCALE AS SHOWN SHEET 3 OF 4	
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3352
 S/A
 VLR 4/2

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *[Signature]* DATE: 7/8/94
 Chief, Bureau of Engineering: *[Signature]* DATE: 7/8/94
 Chief, Bureau of Utilities: *[Signature]* DATE: 7/8/94
 Chief, Land Development Div.: *[Signature]* DATE: 7/8/94

CFS CLARK - FINEPROCK & SACKETT, INC.
 ENGINEERS - PLANNERS - SURVEYORS
 7135 MINSTREL WAY COLUMBIA MARYLAND 21045
 (301) 381-7500 BALTO. (301) 621-8100 WASH.



DES: JTR					
DRN: JTR					
CHK: CCM					
DATE: MAY 94	BY: CFS	NO. 1	REVISION: Rev. Sewer @ MH 4	DATE: 10-28-94	

PROFILES OF
 SEWER OUTFALL
 AND W.R.A. DETAILS
 60' SCALE MAP NO. 37 BLOCK NO. 7

COLUMBIA
 VILLAGE OF LONGREACH
 SECTION 4 AREA 2 PHASE 216
 SEWER OUTFALL
 6TH ELECTION DISTRICT
 CONTRACT NO. 20-3352-D
 SCALE AS SHOWN
 SHEET 4 OF 4