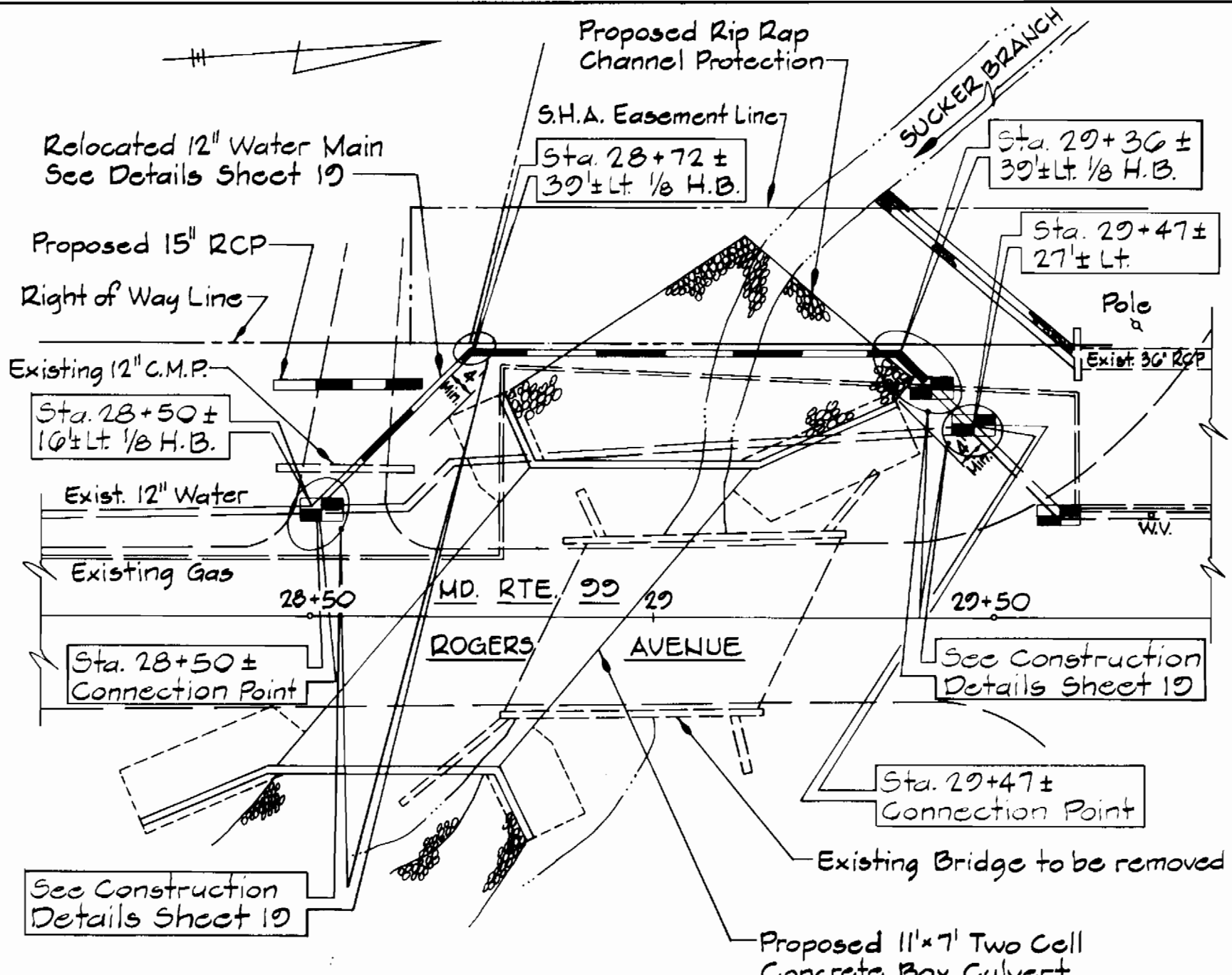


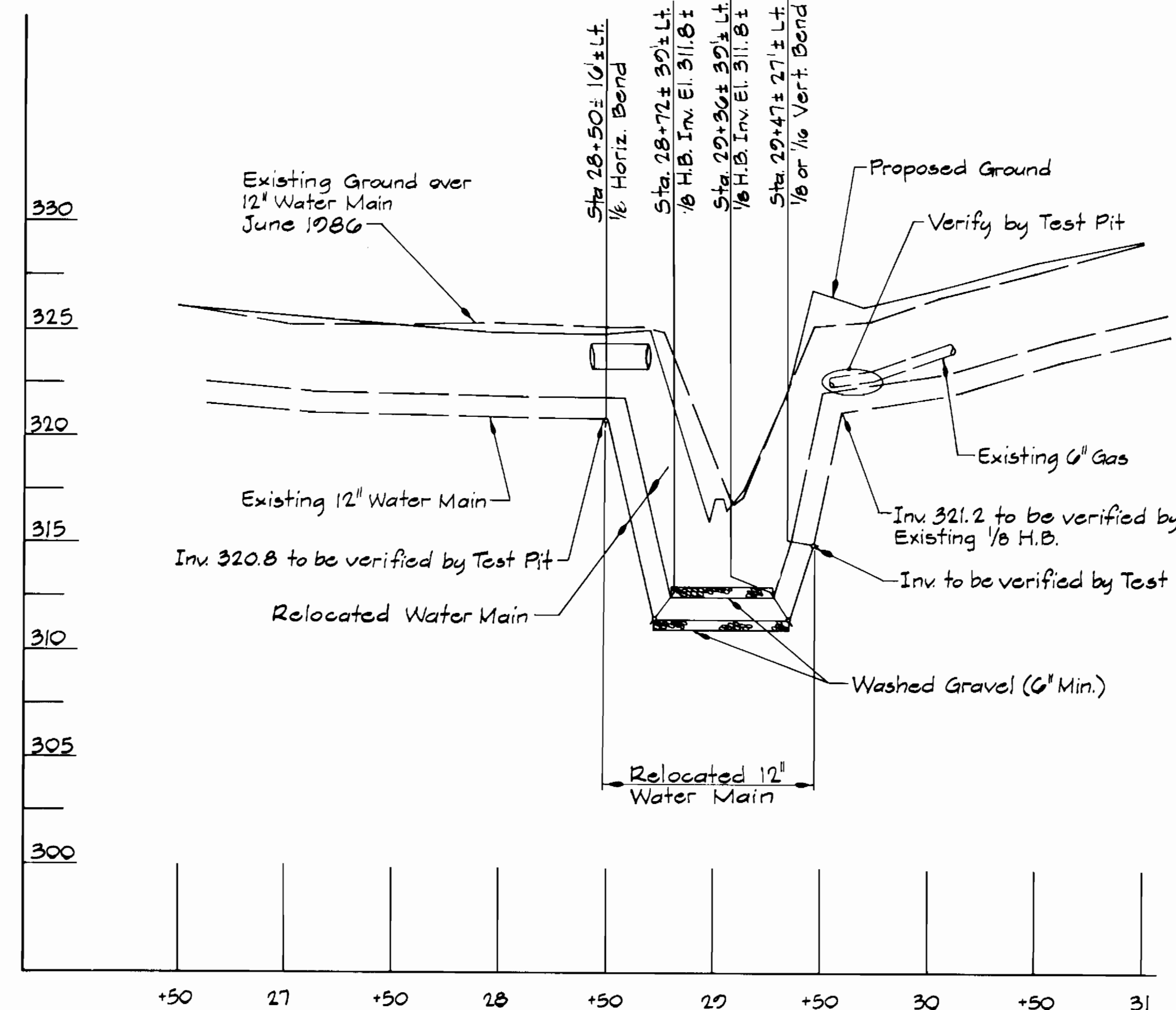
PLAN
Scale: 1" = 50'



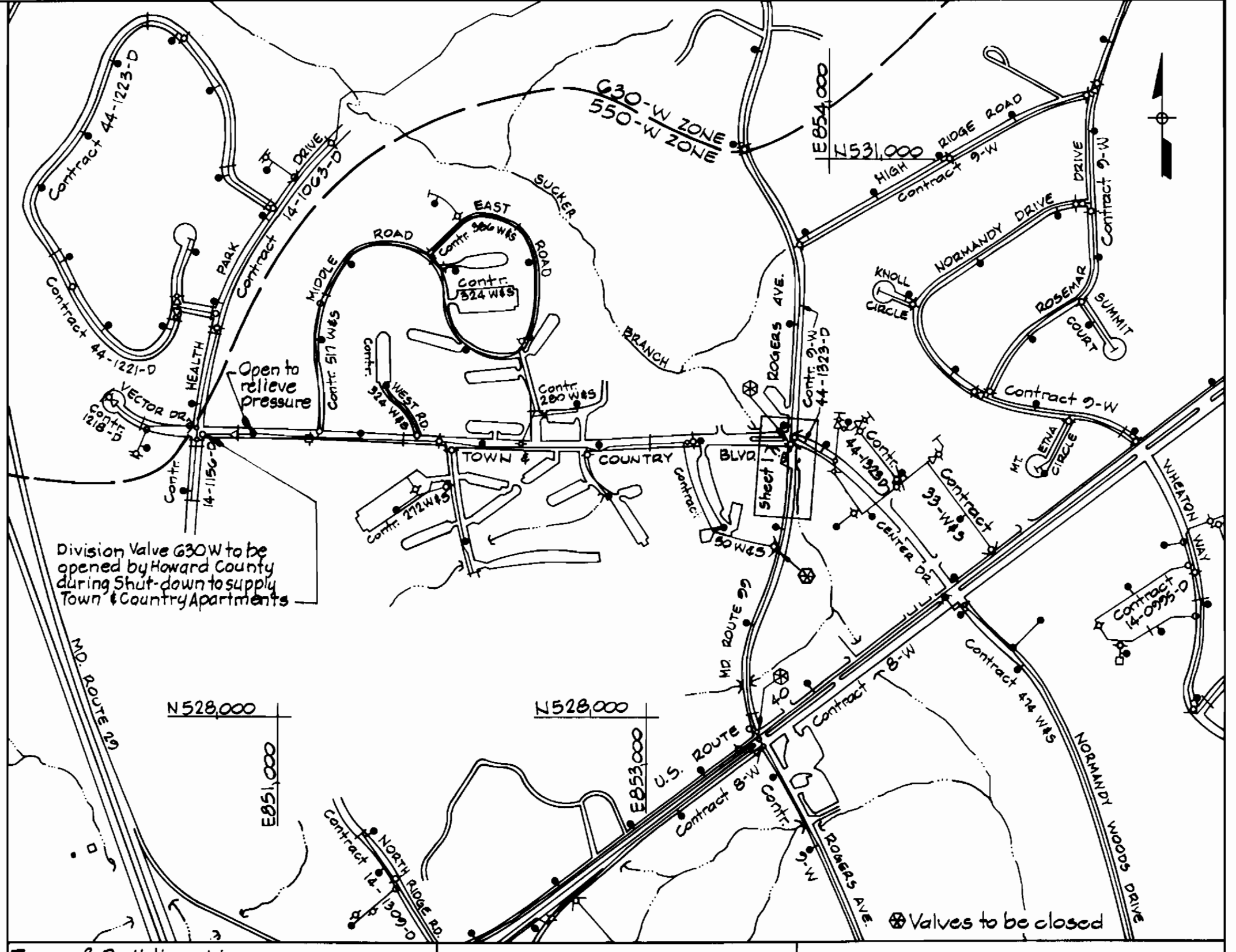
PLAN
Scale: 1" = 20'

- Notes:**
- The existing and finished ground lines shown are based on Cross Sections from SHA Contract HO-660-501-788.
 - The locations of existing underground utilities are based on record drawings and are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities.

ITEM	QUANTITIES		TYPE	SUPPLIER
	ESTIM.	AS BUILT		
12" Water	140 L.F.			



PROFILE
Scale: 1" = 50' Horiz. & 1" = 5' Vert.



VICINITY MAP
Scale: 1" = 600'

WATER CODE FOR COUNTY USE ONLY:
WATER NO. F 02

- 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 based on Maryland State Coordinates.
 - All vertical controls based on S.H.A. Surveys.
 - 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 are to be made on existing utilities, they are noted by the symbol [] at the location of the test pit. 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.
 - The Contractor shall notify the following utilities or agencies at least five working days before starting work, showing these plans:
Baltimore Gas & Electric Co.-Contractor Service-850-4620
Baltimore Gas & Electric Co.-Underground Damage Control-850-9004
Baltimore Gas & Electric Co.-Trouble Shooting-298-9001
Miss Utility-1-550-0100
Bureau of Utilities, Howard Co. Department of Public Works-992-2366
 - 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 min. of 3.5' cover unless otherwise noted.
 - Valves adjacent to trees shall be strapped to trees.
 - 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 from the Standard Specifications.
 - The Contractor shall not operate any water main valves on the existing water system. Call Howard Co. Bureau of Utilities @ 992-2366.
 - All water house connections shall be for inside meter setting, unless otherwise noted on the plans or in the specifications.

S.H.A. DRAWING NO. 18
S.H.A. CONTRACT HO-660-501-780

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: [Signature] 2-6-87
Chief, Bureau of Utilities: [Signature] 2-6-87

Wallace, Montgomery & Associates
9 W. 29th Street
Baltimore, Maryland 21218
(301) 235-7600

Chief, Bureau of Engineering: [Signature] 2-5-87
Chief, Utility Division: [Signature] 2/5/87

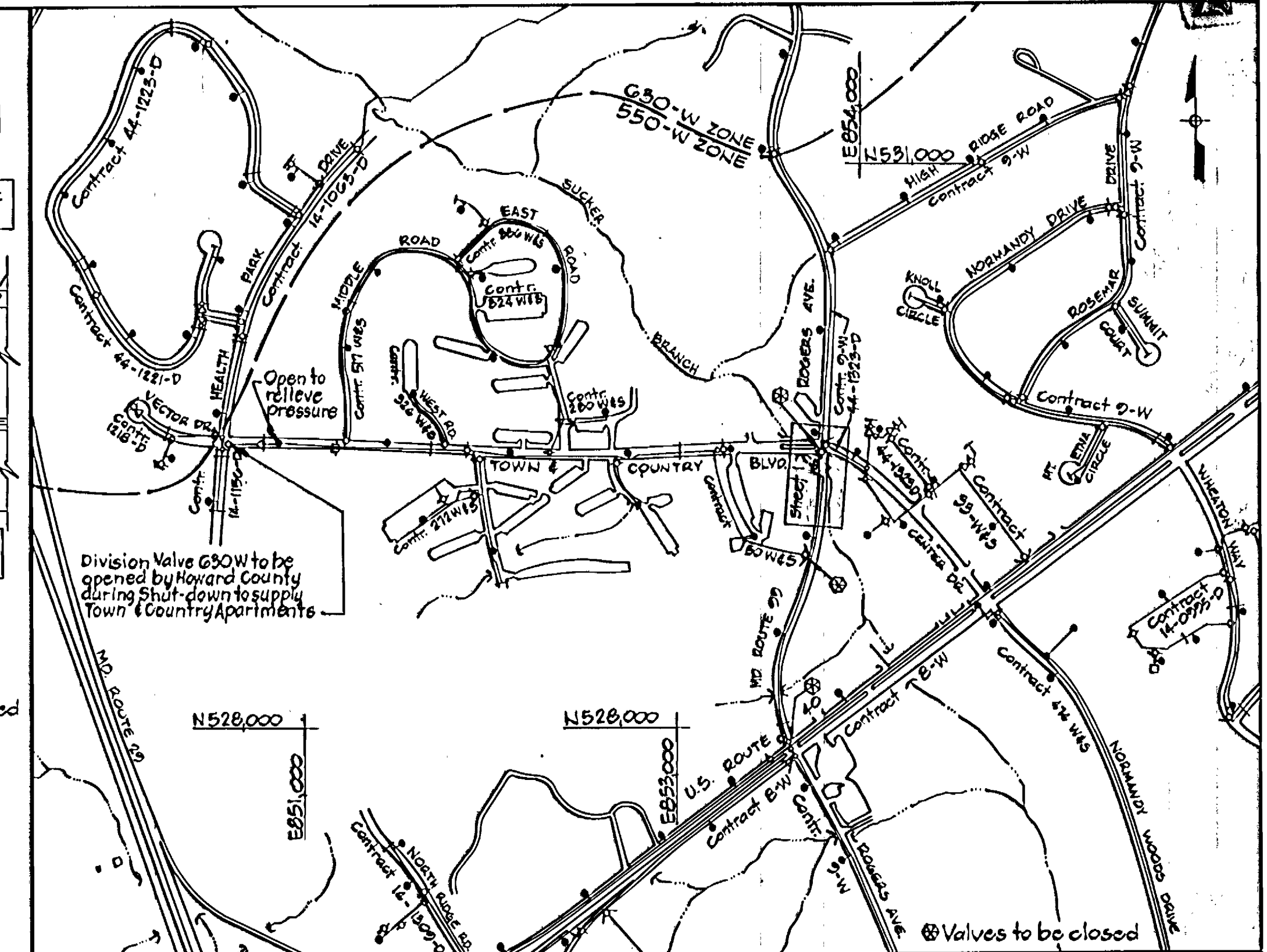
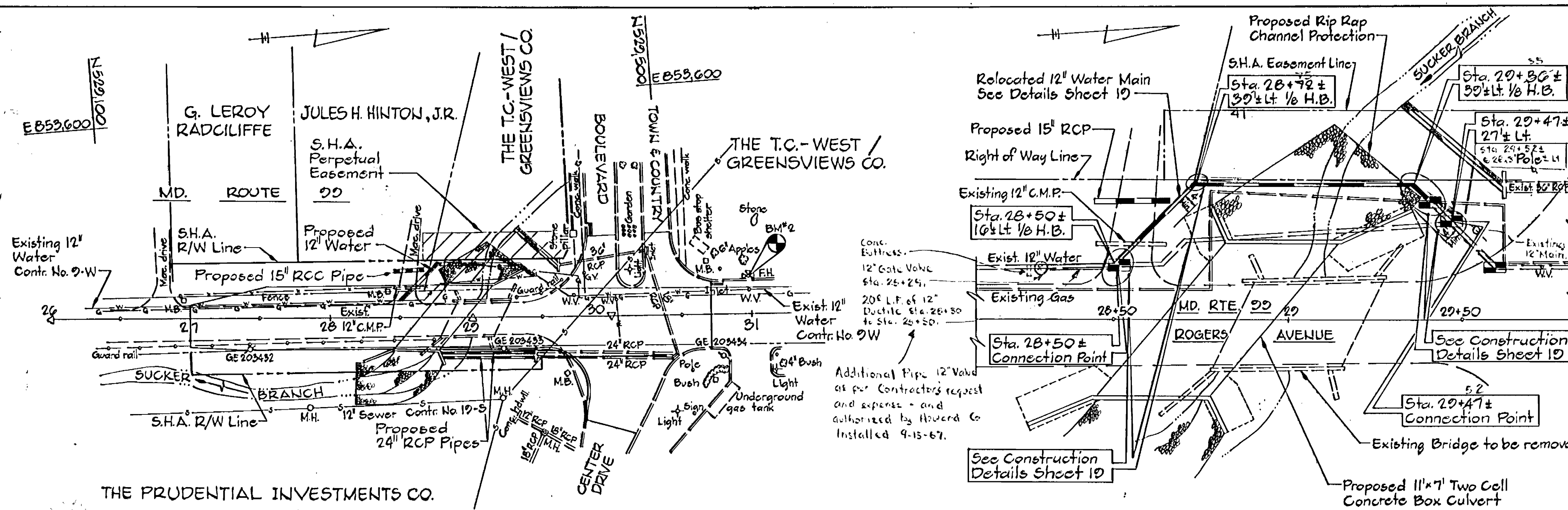
DES: J.C.W.					
DRN: S.W.S.					
CHK: J.C.W.					
DATE: 1-30-87	BY	NO.	REVISION	DATE	

PLAN AND PROFILE OF
WATER MAIN RELOCATION

600' SCALE MAP NO. 17 - BLOCK NO. 24

MD. ROUTE 99-12" WATER RELOCATION
CAPITAL PROJECT W-8156
CONTRACT NO. 44-1610
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2



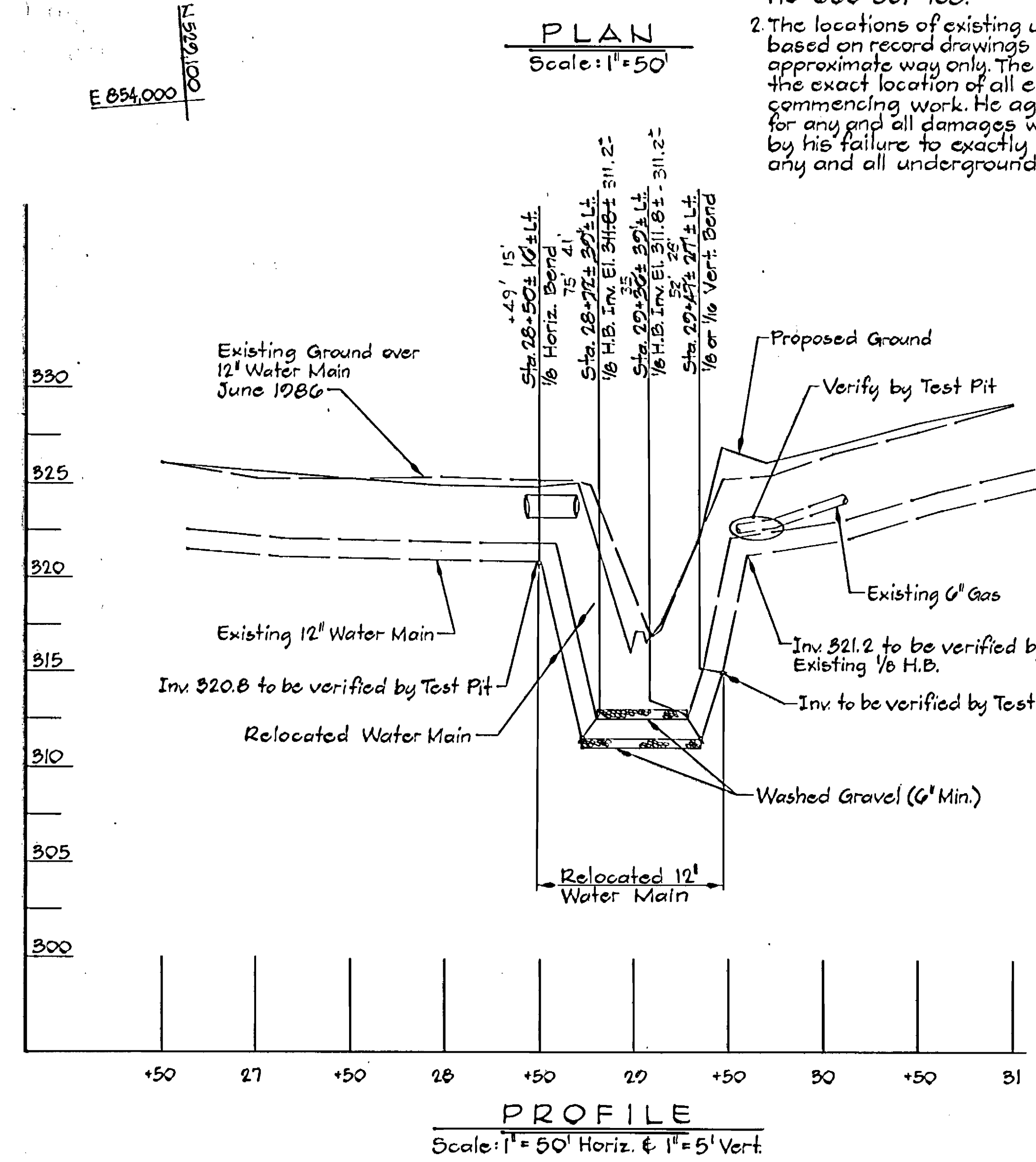
Type of Building: None Number of Parcels: None Number of Water House Conn: None Drainage Area: N/A	VICINITY MAP Scale: 1"=600'	WATER CODE FOR COUNTY USE ONLY: WATER NO. F 02
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Notes:

- The existing and finished ground lines shown are based on Cross Sections from S.H.A. Contract HO-660-501-78B.
- The locations of existing underground utilities are based on record drawings and are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities.

PLAN
Scale: 1"=20'

ITEM	QUANTITIES		TYPE	SUPPLIER
	ESTIM.	AS BUILT		
12" Water	140 L.F.			



AS BUILT
FEB 17 1988

- 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 based on Maryland State Coordinates.
 - All vertical controls based on S.H.A. Surveys.
 - 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 IX, Standard Specifications and Details for Construction. The contractor shall have a copy of Volume IX on the job.
 - Where test pits are to be made on existing utilities, they are noted by the symbol [] at the location of the test pit. 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.
 - The Contractor shall notify the following utilities or agencies at least five working days before starting work shown on these plans:
Baltimore Gas & Electric Co.-Contractor Service-850-4620
Baltimore Gas & Electric Co.-Underground Damage Control-850-0004
Baltimore Gas & Electric Co.-Trouble Shooting-298-0001
Mies Utility-1-550-0100
Bureau of Utilities, Howard Co. Department of Public Works-292-2966
 - 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 min. of 3.5' 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 100B from the Standard Specifications.
 - The Contractor shall not operate any water main valves on the existing water system. Call Howard Co. Bureau of Utilities @ 292-2800.
 - All water house connections shall be for inside meter setting, unless otherwise noted on the plans or in the specifications.
As Built 6-11-89 MAZ

S.H.A. DRAWING NO. 19
S.H.A. CONTRACT HO-660-501-780

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: [Signature] DATE: 2-5-87
Chief, Bureau of Engineering: [Signature] DATE: 2/5/87
Chief, Bureau of Utilities: [Signature] DATE: 2-6-87

WALLACE, MONTGOMERY & ASSOCIATES
9 W. 29TH STREET
BALTIMORE, MARYLAND 21218
(301) 235-7600



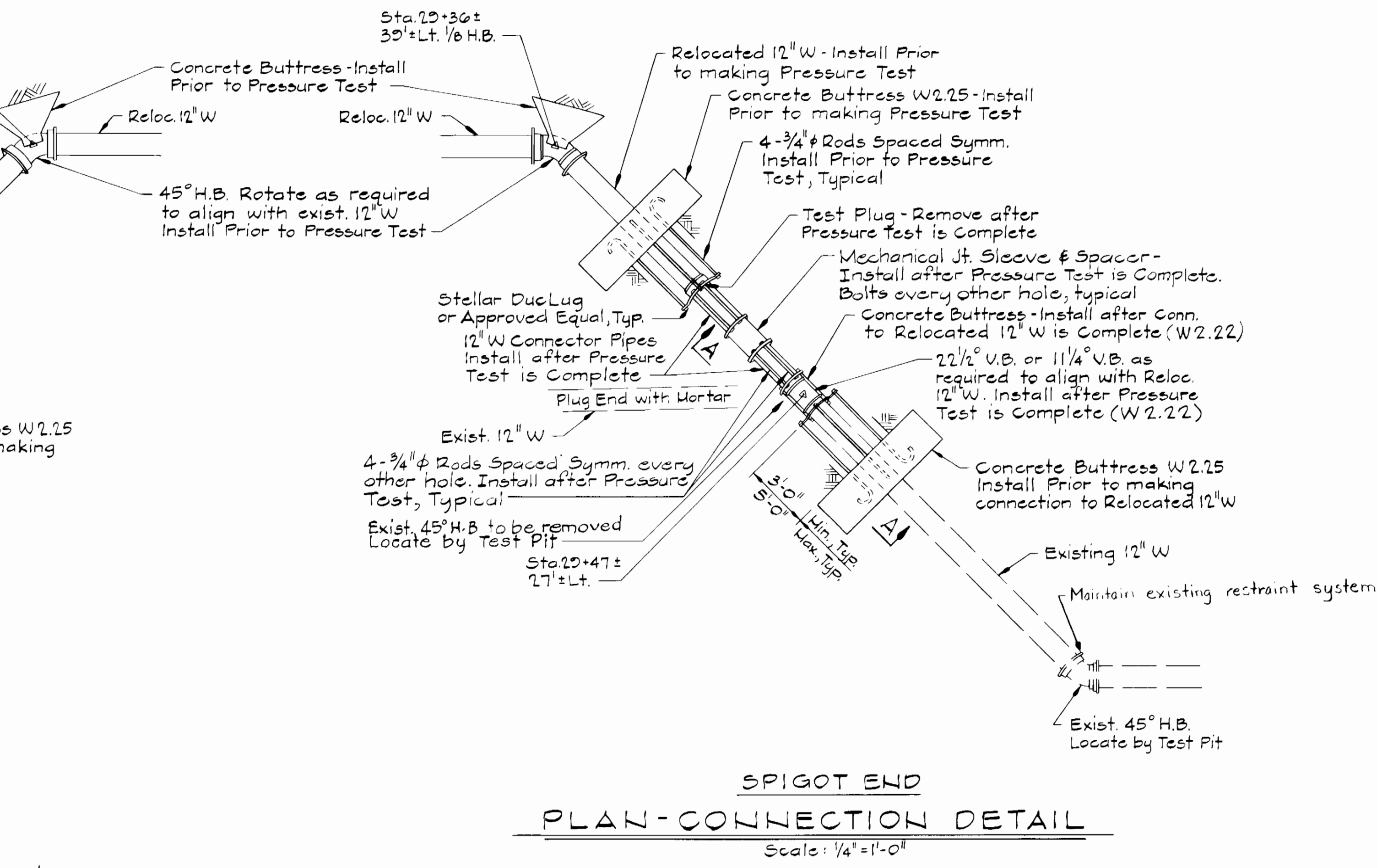
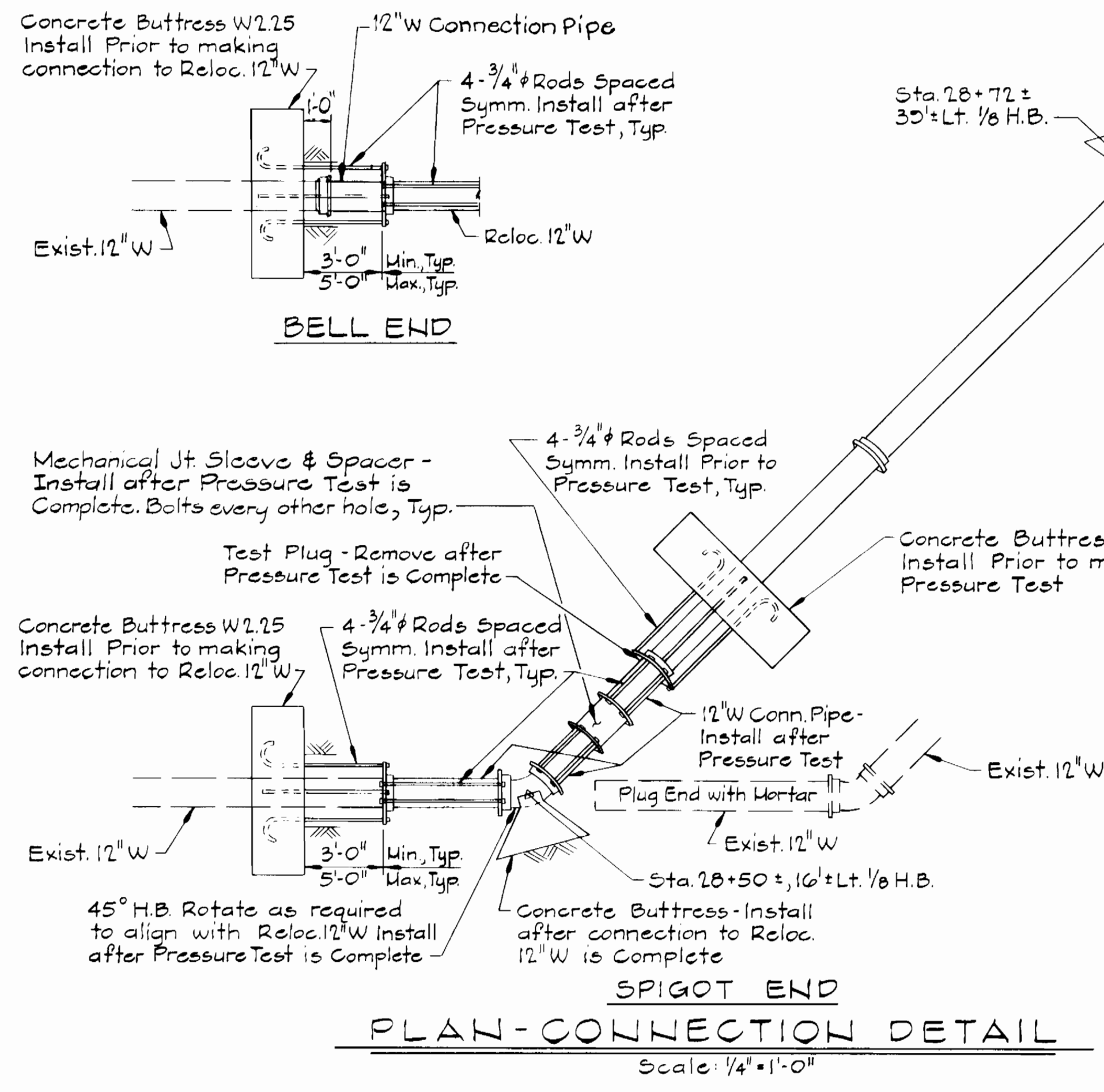
DES: J.C.W.				
DRN: S.W.S.				
CHK: J.C.W.				
DATE: 1-30-87	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 17 BLOCK NO. 29

PLAN AND PROFILE OF
WATER MAIN RELOCATION

MD. ROUTE 99-12" WATER RELOCATION
CAPITAL PROJECT W-8156
CONTRACT NO. 44-1610
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

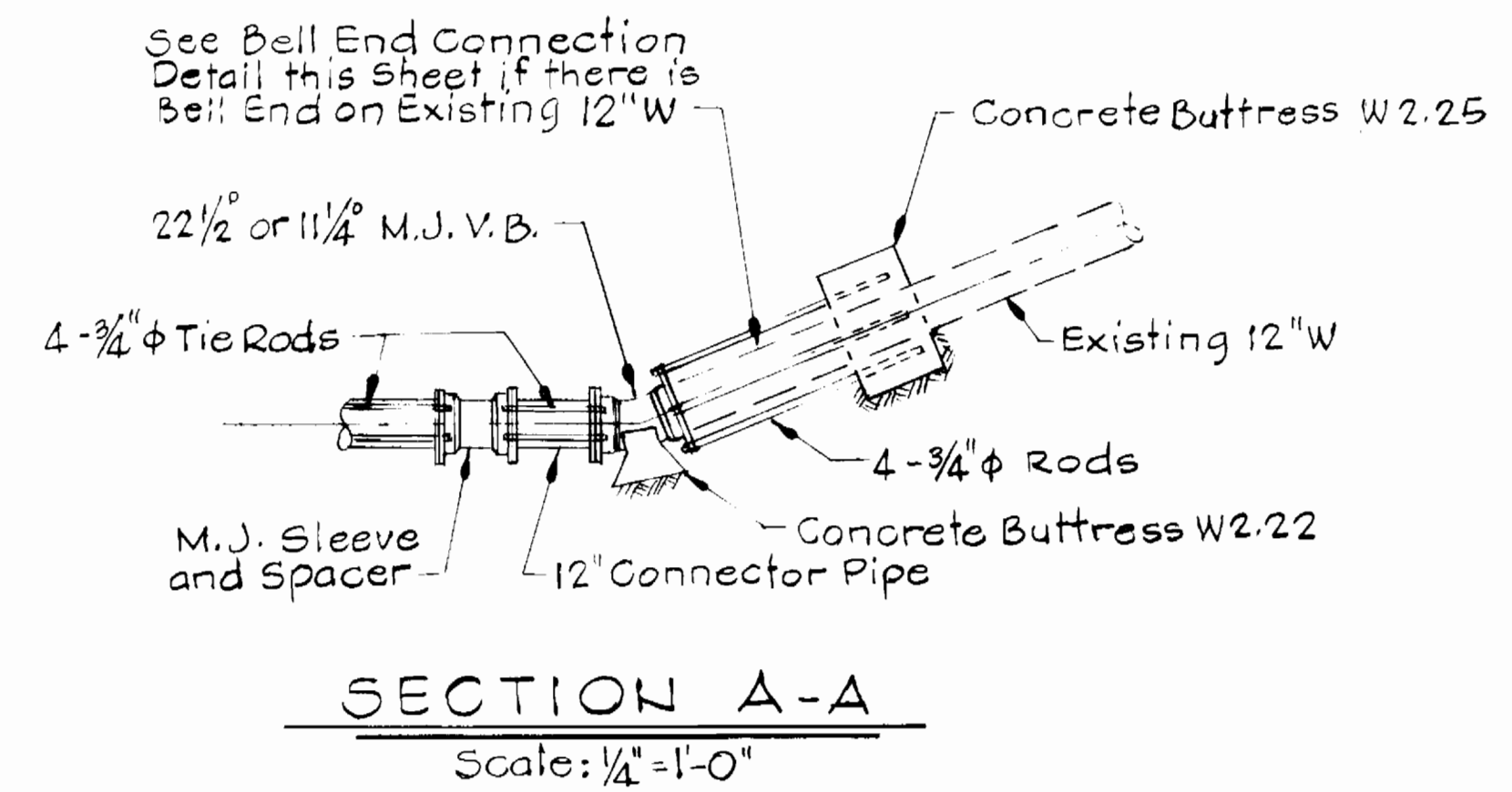
SCALE AS SHOWN
SHEET 1A OF 2

13039



Note:
 Bell End and/or Spigot End Connection Details may be used interchangeably at a Connection between the existing and relocated 12" Water Line as required to fit existing and/or relocated water line joint configuration.

- CONSTRUCTION PROCEDURE**
1. Test Pit to locate pipe joints and bends in existing 12" Water Line that are closest to Relocation points.
 2. Install relocated 12" Water Line as shown, pressure test and perform bacteriological exam.
 3. Connections between existing and relocated water line must be performed between Midnight Saturday and Seven A.M. next Sunday in order that water service can be restored in existing and relocated sections of water line by Seven A.M. Sunday. Customers served by affected sections of existing water line must be given 72 hours notice. Howard County must be given seven days notice of scheduled connections between existing and relocated water line. Coordinate with Howard County.
 4. After existing water line is shut down by Howard County drain existing water line as required to make connections to sections of relocated water line.
 5. Remove sections of existing water line as required to construct connections.
 6. Construct connections using details shown on connection plans.
 7. When connections are complete fill section or sections of relocated water line and restore water service.



S.H.A. DRAWING NO. 12
 S.H.A. CONTRACT HO-660-501-780

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

John N. Neumaier 2-5-87
 DIRECTOR OF PUBLIC WORKS DATE

Robert B. Reinger 2-6-87
 CHIEF, BUREAU OF UTILITIES DATE

William E. Riley 2-5-87
 CHIEF, BUREAU OF ENGINEERING DATE

James J. ... 2-5-87
 CHIEF, UTILITY DIVISION DATE

WALLACE, MONTGOMERY & ASSOCIATES
 9 W. 29TH STREET
 BALTIMORE, MARYLAND 21218
 (301) 235-7600



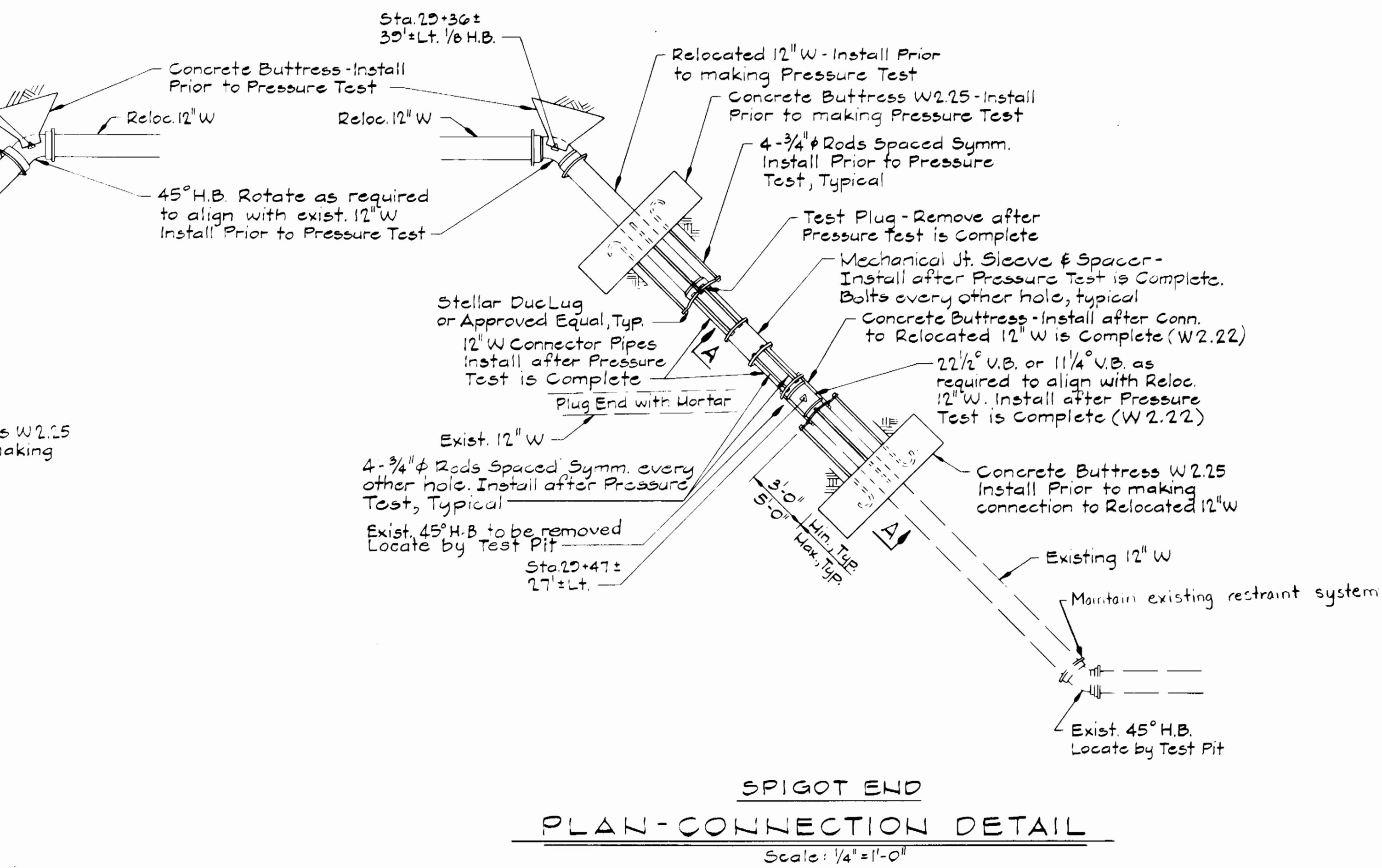
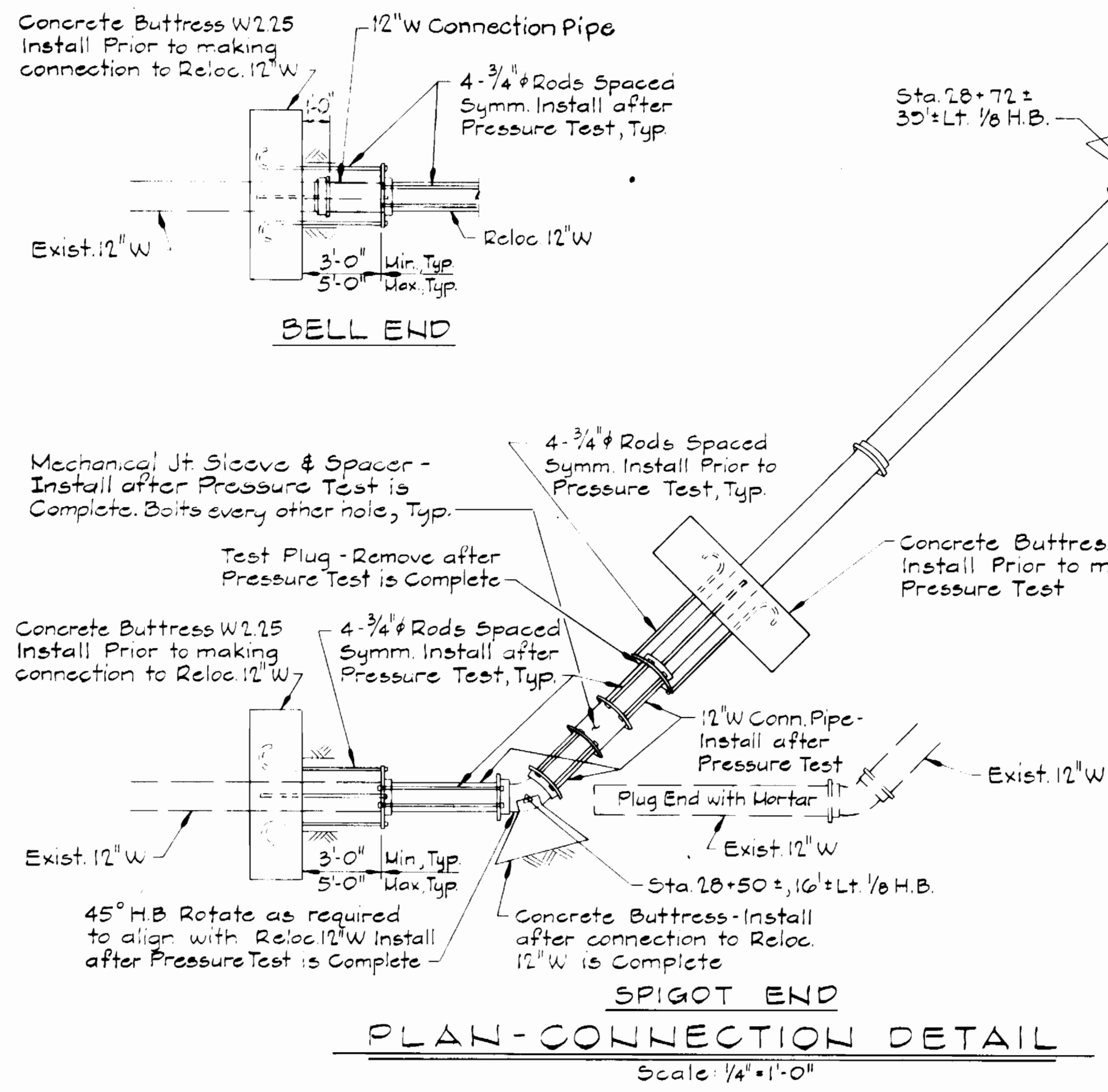
DES: J.C.W.			
DRN: D.E.D.			
CHK: J.C.W.			
DATE: 1-30-87	BY: NO.	REVISION	DATE

DETAILS
 WATER MAIN RELOCATION

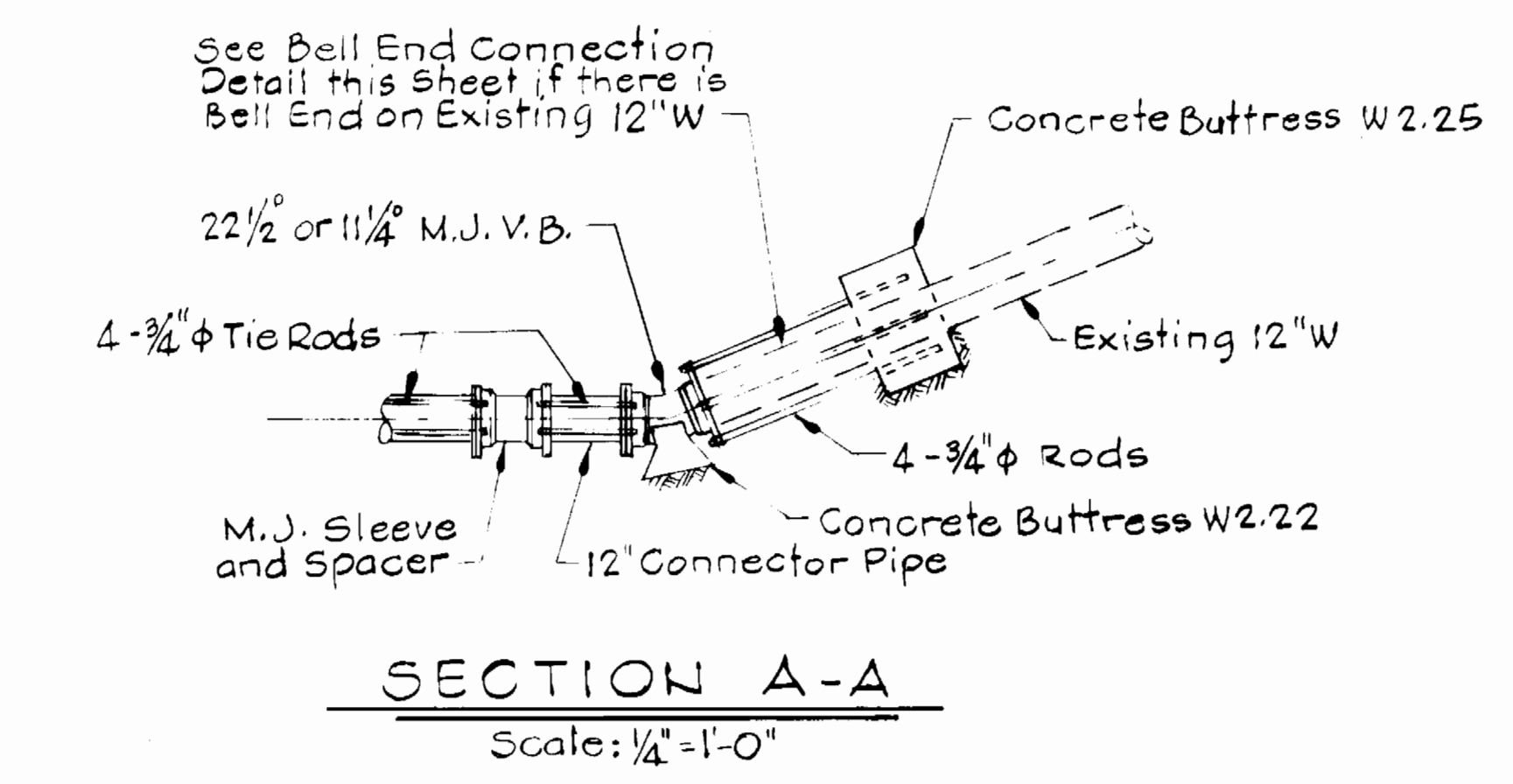
600' SCALE MAP NO. 17 BLOCK NO. 24

MD. ROUTE 99-12" WATER RELOCATION
 CAPITAL PROJECT W-8156
 CONTRACT NO. 44-1610
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 2



Note:
Bell End and/or Spigot End Connection Details may be used interchangeably at a Connection between the existing and relocated 12" Water Line as required to fit existing and/or relocated water line Joint configuration.



- ### CONSTRUCTION PROCEDURE
1. Test Pit to locate pipe joints and bends in existing 12" Water Line that are closest to relocation points.
 2. Install relocated 12" Water Line as shown, pressure test and perform bacteriological exam.
 3. Connections between existing and relocated water line must be performed between Midnight Saturday and Seven A.M. next Sunday in order that water service can be restored in existing and relocated sections of water line by Seven A.M. Sunday. Customers served by affected sections of existing water line must be given 72 hours notice. Howard County must be given seven days notice of scheduled connections between existing and relocated water line. Coordinate with Howard County.
 4. After existing water line is shut down by Howard County drain existing water line as required to make connections to sections of relocated water line.
 5. Remove sections of existing water line as required to construct connections.
 6. Construct connections using details shown on connection plans.
 7. When connections are complete fill section or sections of relocated water line and restore water service.

AS BUILT
BY: [Signature]

S.H.A. DRAWING NO. 21
S.H.A. CONTRACT HO-660-501-780

As Built 5-11-89 MAZ

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS: [Signature] 2-5-87
CHIEF BUREAU OF ENGINEERING: [Signature] 2-6-87
CHIEF BUREAU OF UTILITIES: [Signature] 2-6-87

WALLACE, MONTGOMERY & ASSOCIATES
9 W. 29TH STREET
BALTIMORE, MARYLAND 21218
(301) 235-7600

DES: J.C.W.					
DRN: D.E.D.					
CHK: J.C.W.					
DATE: 1-30-87	BY	NO.	REVISION	DATE	

DETAILS	
WATER MAIN RELOCATION	
600' SCALE MAP NO. 17	BLOCK NO. 24

MD. ROUTE 99-12" WATER RELOCATION
CAPITAL PROJECT W-8156
CONTRACT NO. 44-1610
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2

1610 N5000

B-13039