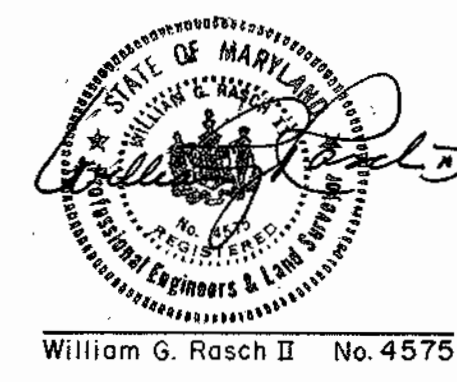


QUANTITIES			
Item	Unit	Estimated	"As-Built"
8" Sewer	L.F.	3865	
Manholes	EQ.	13	

- GENERAL NOTES**
1. Approximate locations of existing utilities are shown. The Contractor shall take all necessary precautions to protect existing utilities and to maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer by the Contractor at the Contractor's expense.
  2. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities. Cost shall be included in the unit prices bid for excavation and backfill for sewer mains.
  3. The Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these plans,  
Baltimore Gas & Electric Company - Underground Gas Distribution  
Engineering - 559-0100  
Miss Utility - 1-800-441-8355
  4. Clear all utilities by a minimum of 6". Clear all poles 2'-0" minimum or tunnel as required. Cost for tunneling or bracing at poles shall be included in the unit prices bid for excavation and backfill for sewer mains.
  5. All pipe elevations shown are invert elevations.
  6. The Contractor shall provide a pipe joint in each sewer main within 2'-0" of the exterior manhole walls.
  7. Watertight manhole frame and cover shall be used where indicated on the drawings, Standard Detail S-12 (RCR-63A). Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.
  8. For details not shown on the Contract Drawings see Standard Details bound in the specifications.
  9. Trees are to be protected from damage to the maximum extent. Trees located within the construction strips are not to be removed by the Contractor.
  10. Place regulation "Men Working" and warning signs as required to comply with Maryland State Highway Administration Manual of Traffic Control for Highway Construction & Maintenance Operations.
  11. All sewer mains shall be C.S.P.X., V.C.P.X., or A.C.P. Class 2400 unless otherwise noted.
  12. All manholes shall be 4'-0" inside diameter unless otherwise noted.
  13. The Contractor shall remove trees, stumps and roots along the line of excavation as directed by the Engineer. Payment for such removal shall be included in the unit prices bid for excavation and backfill for sewer mains.
  14. Horizontal and vertical controls are based on the Maryland State Grid Coordinate System.
  15. All sewer mains located on W.S.S.C. property shall be D.I.P. Class 51.
  16. The Contractor shall give the W.S.S.C. Construction Bureau Office two (2) weeks written notice of the anticipated starting date of construction.
  17. The Contractor shall provide a minimum of forty-eight (48) hours advance telephone notice to Mr. Allen Perrie at (301) 699-4954.
  18. Construction of the sewer mains within the W.S.S.C. property shall be performed in accordance with the W.S.S.C. "General Conditions and Standard Specifications" dated May 1977, reissued complete April 1979 and any current revisions thereto.

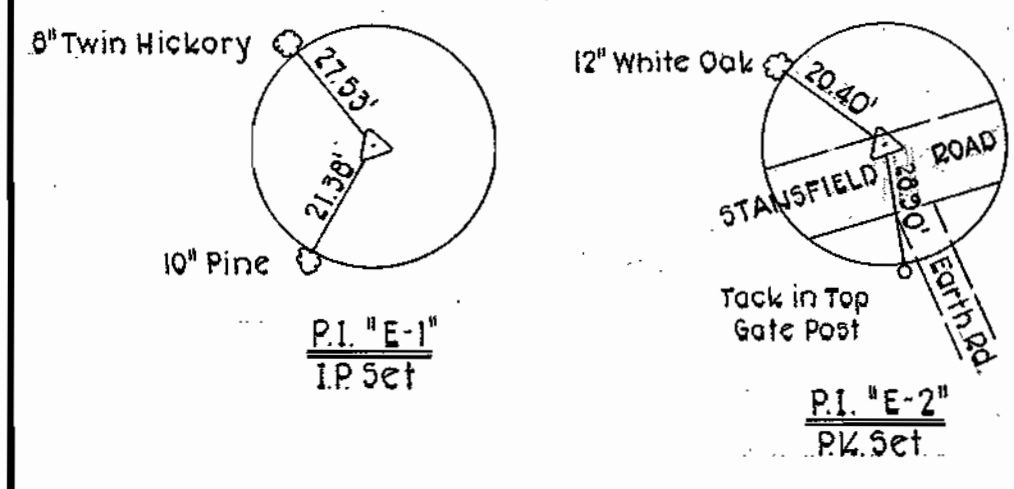
**CAPITAL PROJECT S-4-6049**  
**CONTRACT NO. 2716-S**  
**LAKEVIEW SANITARY SEWERS**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**



WASHINGTON SUBURBAN SANITARY COMMISSION FOR SANITARY SEWERS LOCATED ON W.S.S.C. PROPERTY <i>Allen S. Brown</i> 2-9-81 CHIEF BUREAU OF UTILITIES DATE <i>Allen S. Brown</i> 2/11/81 CHIEF UTILITY DIVISION DATE		PROJECT DEVELOPMENT DIVISION HEAD <i>W. A. Rosch</i> 6-25-77 DIRECTOR OF PUBLIC WORKS DATE	DATE 12/31/81	W.S.S.C. NO. 80 SO 4688 B
PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS DATE <i>W. A. Rosch</i> 6-25-77	CONTRACT NO. 2716-S CAPITAL PROJECT NO. S-4-6049	LOCATION MAP FOR SANITARY SEWERS	LAKEVIEW SANITARY SEWERS ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND

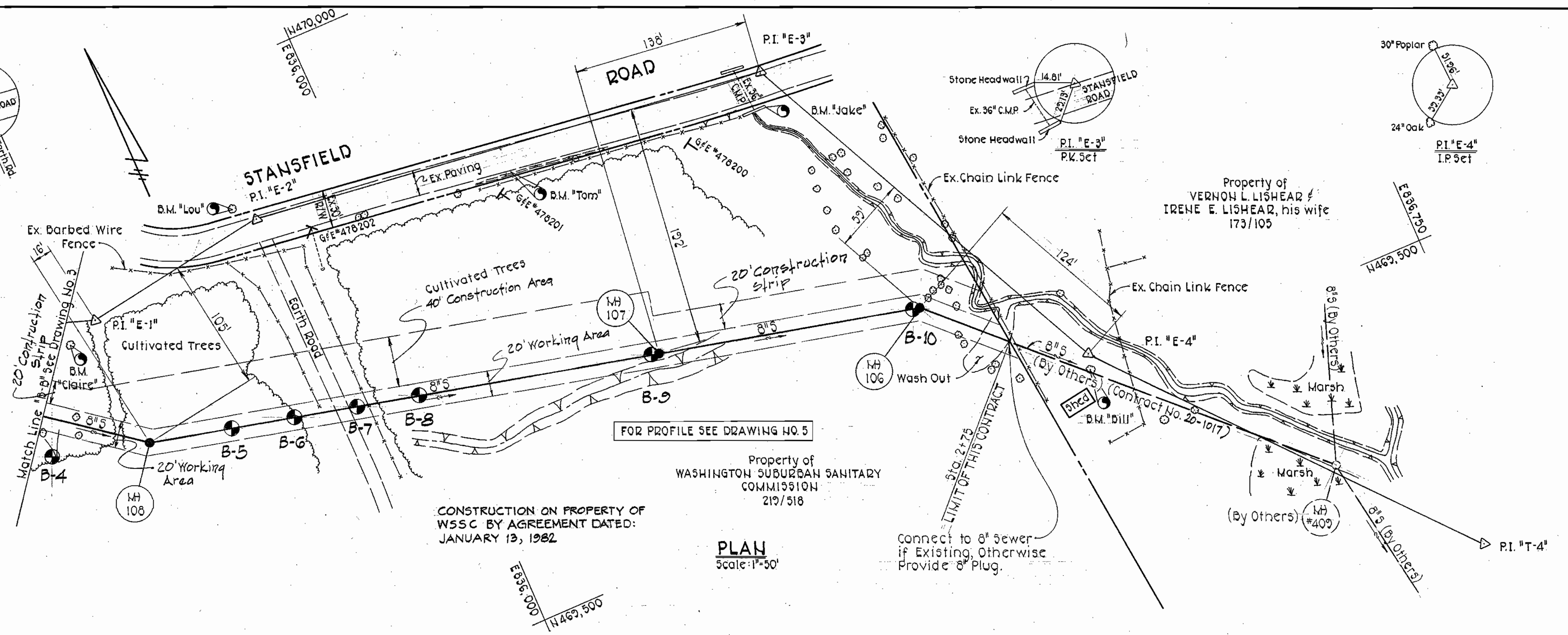
CONTRACT NO. 2716-S  
 LAKEVIEW SANITARY SEWERS  
 SUSINI DRIVE TO I-95  
 CAPITAL PROJECT S-4-6049

DRAWING NO.	SCALE	MAP NOS.
NO. 1 OF 5	1" = 600'	219 - 40 218 - 40



**BENCH MARKS**

- B.M. "Claire" Elev. 326.34  
PK. Fork in 8" Twin Hickory 27.53'  
Southwest of P.I. "E-1"
- B.M. "Lou" Elev. 333.77  
Galvanized Spike in 12" White Oak  
20.40' Northwest of P.I. "E-2"
- B.M. "Tom" Elev. 314.50  
PK. Nail 17.5' South of R.O.L. 2+00  
P.I. "E-2" to P.I. "E-3"
- B.M. "Jake" Elev. 292.30  
Cut on Top of Stone Headwall  
29'± Southeast of P.I. "E-3"
- B.M. "Bill" Elev. 278.62  
Railroad Spike in 24" Oak 13'±  
Southwest of P.I. "E-4"



WASHINGTON SUBURBAN SANITARY COMMISSION  
 FOR SANITARY SEWERS LOCATED ON W.S.S.C.  
 PROPERTY  
 PROJECT DEVELOPMENT DIVISION HEAD  
 DATE

W.S.S.C. NO. 80 SO 4688 B

PURDUM & JESCHKE  
 ENGINEERS  
 1023 N. CALVERT ST.  
 BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 DIRECTOR OF PUBLIC WORKS-DATE CHIEF-BUREAU OF ENGINEERING-DATE

CONTRACT NO. 716 - S  
 CAPITAL PROJECT NO. S-4-6049

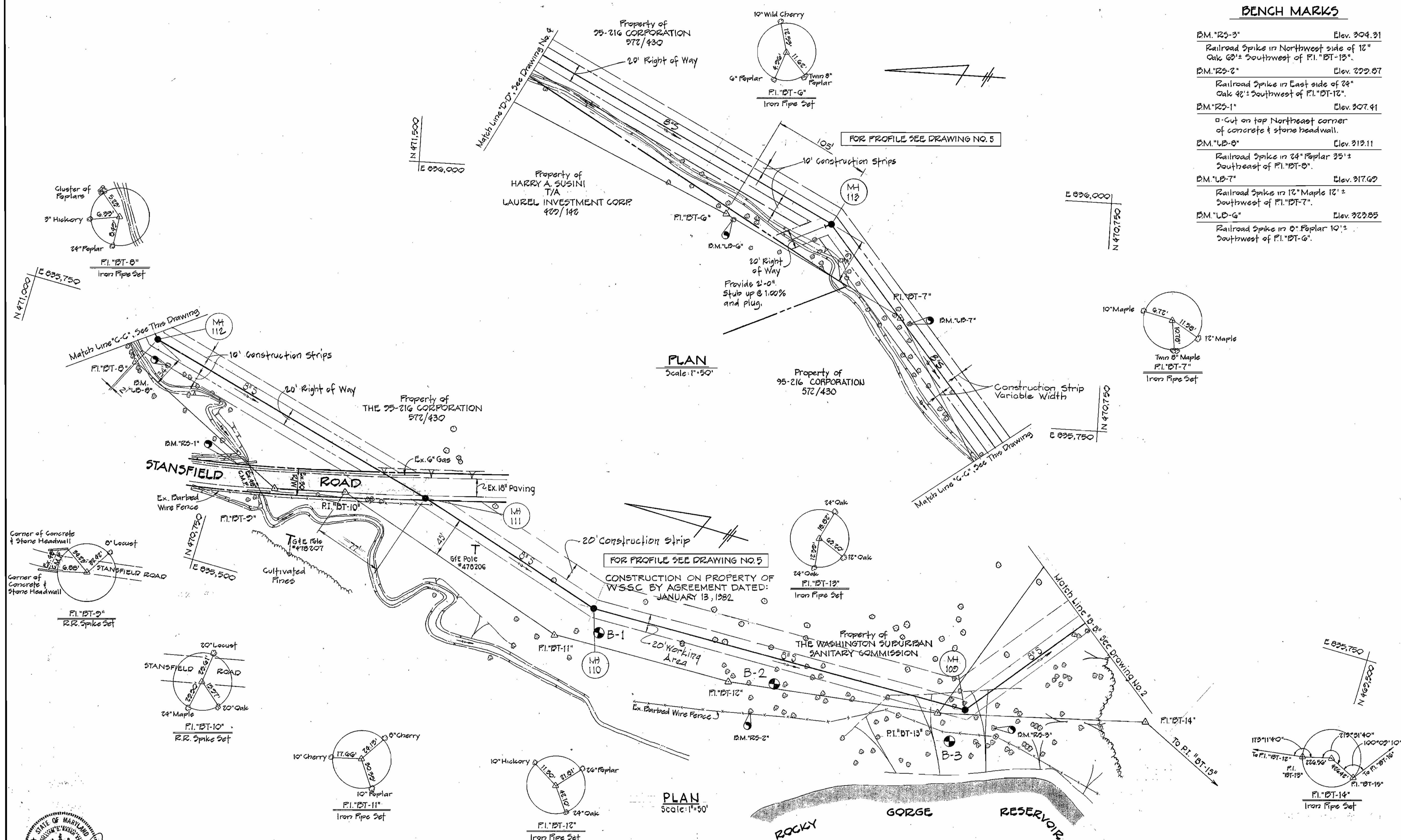
PLAN FOR  
 SANITARY SEWERS

LAKEVIEW SANITARY SEWERS  
 ELECTION DISTRICT NO. 6  
 HOWARD COUNTY, MARYLAND

DRAWING NO. 2 OF 5	SCALE As Shown	DESIGNED: EAR DRAFTED: ARZ CHECKED: REP
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**BENCH MARKS**

B.M. "RS-3"	Elev. 309.31
Railroad Spike in Northwest side of 12" Oak 63'± Southwest of P.I. "BT-13"	
B.M. "RS-2"	Elev. 322.87
Railroad Spike in East side of 24" Oak 42'± Southwest of P.I. "BT-12"	
B.M. "RS-1"	Elev. 307.41
Cut on top Northeast corner of concrete & stone headwall.	
B.M. "LB-8"	Elev. 313.11
Railroad Spike in 24" Poplar 25'± Southeast of P.I. "BT-8"	
B.M. "LB-7"	Elev. 317.69
Railroad Spike in 12" Maple 12'± Southwest of P.I. "BT-7"	
B.M. "LD-6"	Elev. 322.85
Railroad Spike in 8" Poplar 10'± Southwest of P.I. "BT-6"	



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

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

**WASHINGTON SUBURBAN SANITARY COMMISSION**

FOR SANITARY SEWERS LOCATED ON W.S.S.C. PROPERTY  
*Eric A. Pardo* 12/31/81  
 PROJECT DEVELOPMENT DIVISION HEAD DATE

W.S.S.C. NO. 80 SO 4688 B

CONTRACT NO. 2716-5  
 LAKEVIEW SANITARY SEWERS  
 SUSINI DRIVE TO I-95  
 CAPITAL PROJECT S-4-6049



*Robert Bruner* 2-9-81 *Allen S. Brown* 2/4/81  
 CHIEF BUREAU OF UTILITIES DATE CHIEF UTILITY DIVISION DATE

**DEPARTMENT OF PUBLIC WORKS**  
 HOWARD COUNTY, MARYLAND  
*W.O. Gilbert* 6-27-77  
 DIRECTOR OF PUBLIC WORKS DATE CHIEF BUREAU OF ENGINEERING DATE

CONTRACT NO. 2716-5  
 PLAN FOR SANITARY SEWERS  
 CAPITAL PROJECT NO. S-4-6049

LAKEVIEW SANITARY SEWERS  
 ELECTION DISTRICT NO. 6  
 HOWARD COUNTY, MARYLAND

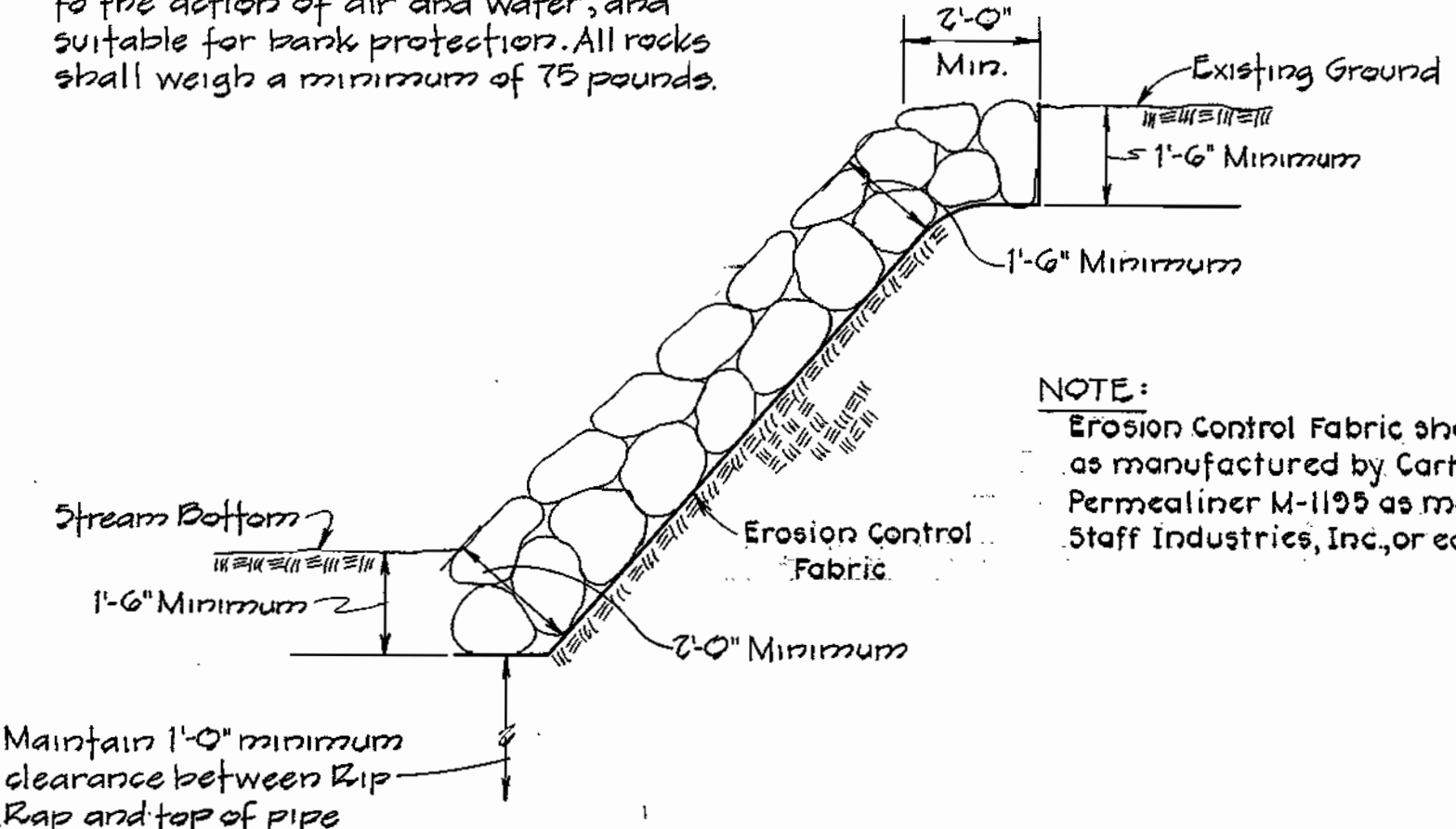
**DRAWING SCALE**  
 NO. 3 OF 5  
 1" = 50'  
 DESIGNED: REP  
 DRAFTED: REC  
 CHECKED: REC

WS 716-5/3

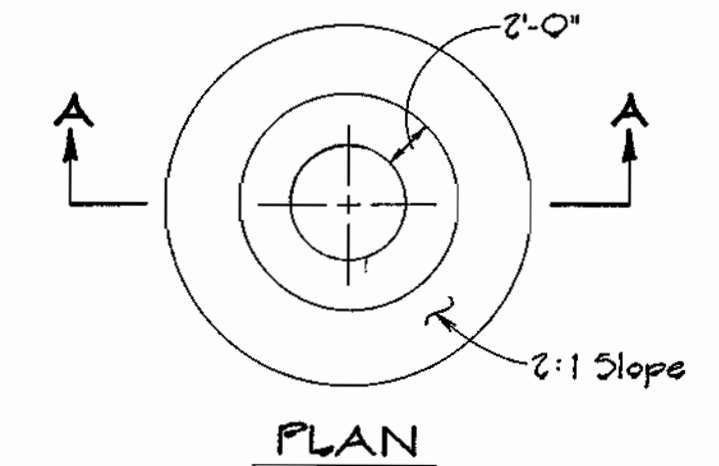
**BENCH MARKS**

B.M."LB-5"	Elev. 332.12
Railroad Spike in 15" Poplar 16' Northeast of P.I."BT-5"	
B.M."LB-4"	Elev. 337.18
Railroad Spike in bearing 15" Wild Cherry 6' North of P.I."BT-4"	
B.M."LB-3"	Elev. 354.35
Railroad Spike in 15" Maple 20' Northeast of P.I."BT-3"	
B.M."LB-2"	Elev. 352.33
Railroad Spike in 24" Maple 15' Northeast of P.I."BT-2"	
B.M."LB-1"	Elev. 357.45
Railroad Spike in 24" Maple 30' Southwest of P.I."BT-1"	
B.M."B"	Elev. 366.78
Railroad Spike in C&P Pole #5 20' Northeast of P.I."T-2"	

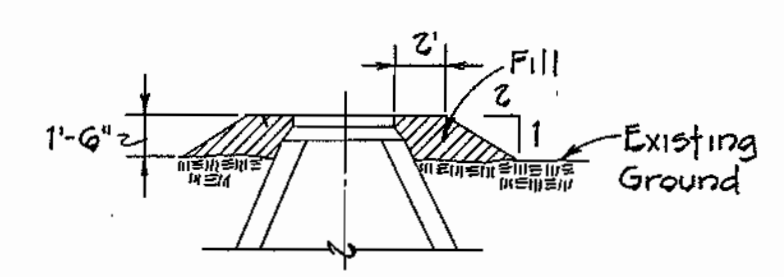
Rip Rap to consist of dense rocks of random shapes and sizes, resistant to the action of air and water, and suitable for bank protection. All rocks shall weigh a minimum of 75 pounds.



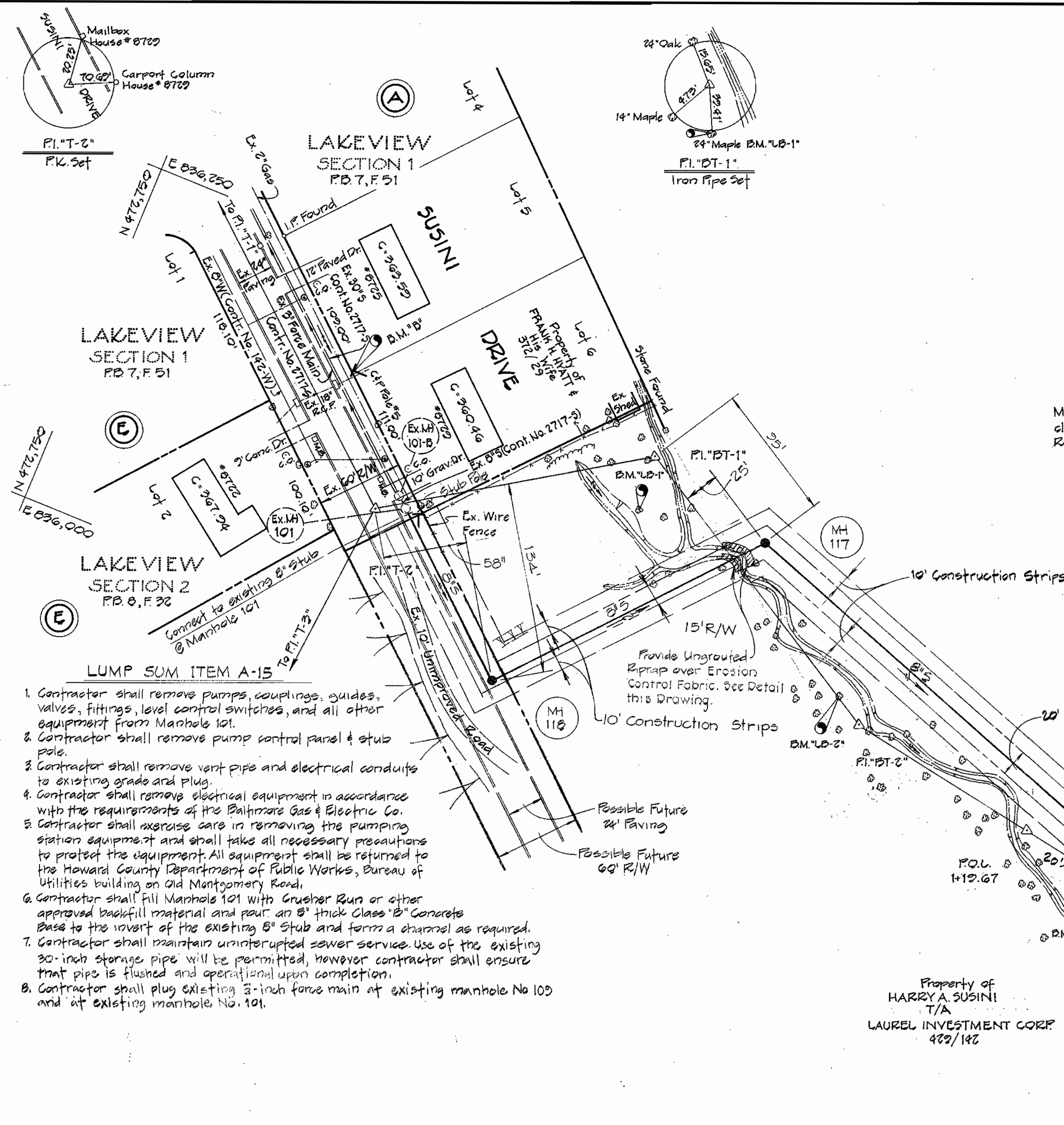
**LOOSE LAID RIPRAP DETAIL**  
No Scale



**PLAN**

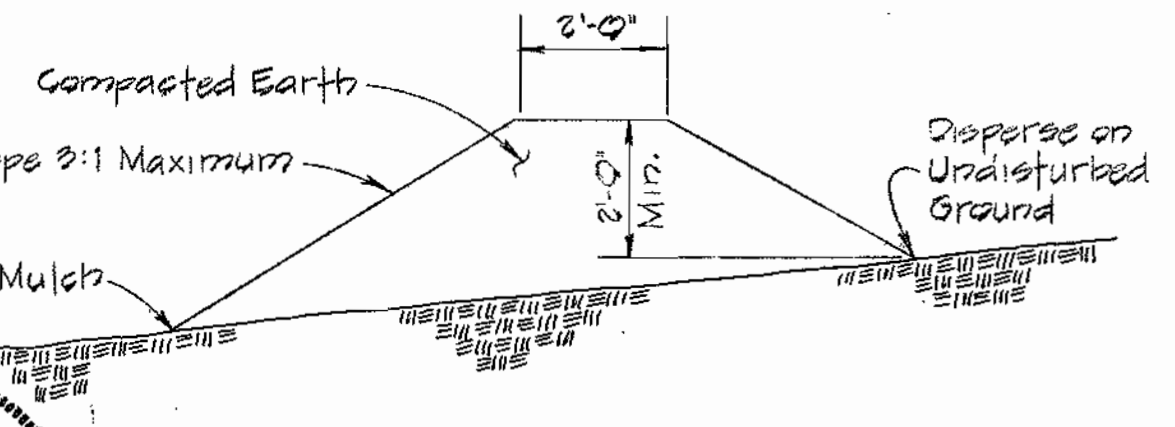


**SECTION A-A**  
**FILL AT MANHOLE DETAIL**  
No Scale

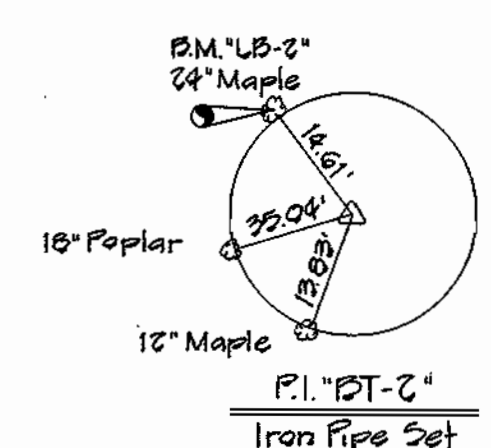


**PLAN**  
Scale: 1"=50'

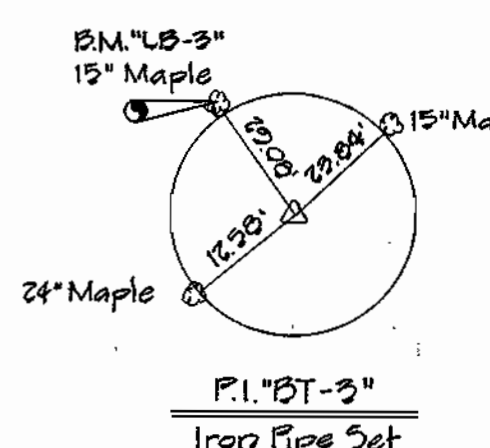
- LUMP SUM ITEM A-15**
- Contractor shall remove pumps, couplings, guides, valves, fittings, level control switches, and all other equipment from Manhole 101.
  - Contractor shall remove pump control panel & stub pole.
  - Contractor shall remove vent pipe and electrical conduits to existing grade and plug.
  - Contractor shall remove electrical equipment in accordance with the requirements of the Baltimore Gas & Electric Co.
  - Contractor shall exercise care in removing the pumping station equipment and shall take all necessary precautions to protect the equipment. All equipment shall be returned to the Howard County Department of Public Works, Bureau of Utilities building on Old Montgomery Road.
  - Contractor shall fill Manhole 101 with Crusher Run or other approved backfill material and pour an 8" thick Class "B" Concrete Base to the invert of the existing 8" Stub and form a channel as required.
  - Contractor shall maintain uninterrupted sewer service. Use of the existing 30" inch storage pipe will be permitted, however contractor shall ensure that pipe is flushed and operational upon completion.
  - Contractor shall plug existing 3" inch force main at existing manhole No. 103 and at existing manhole No. 101.



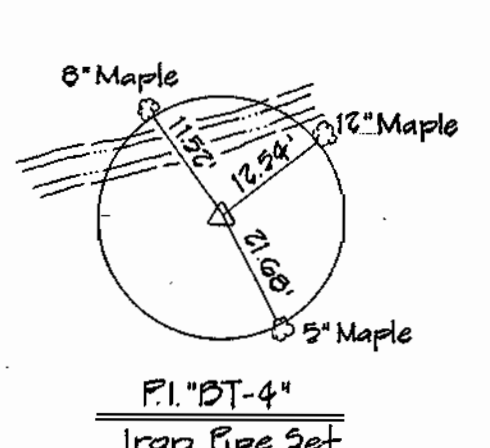
**TEMPORARY EARTH DIVERSION BERM DETAIL**  
No Scale



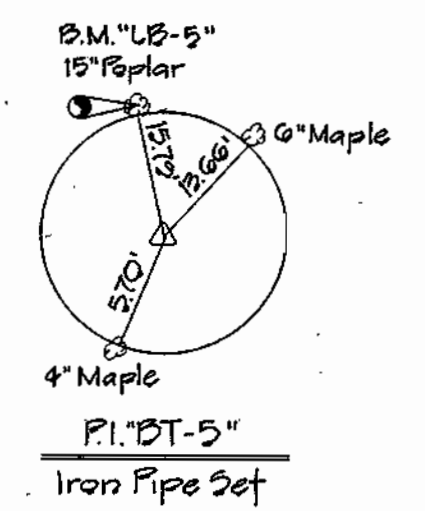
**P.I."BT-2"**  
Iron Pipe Set



**P.I."BT-3"**  
Iron Pipe Set



**P.I."BT-4"**  
Iron Pipe Set



**P.I."BT-5"**  
Iron Pipe Set



Robert M. Beaman 2-4-81  
 CHIEF BUREAU OF UTILITIES DATE  
 Allen J. Beaman 2/4/81  
 CHIEF UTILITY DIVISION DATE

79 Ray 6-28-77  
 DIRECTOR OF PUBLIC WORKS DATE  
 W.O. Rosch 6-27-77  
 CHIEF BUREAU OF ENGINEERING DATE

**PURDUM & JESCHKE**  
 ENGINEERS  
 1023 N. CALVERT ST.  
 BALTIMORE, MARYLAND

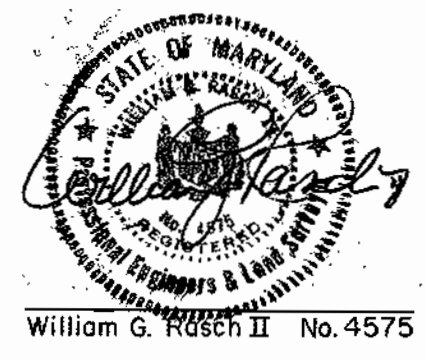
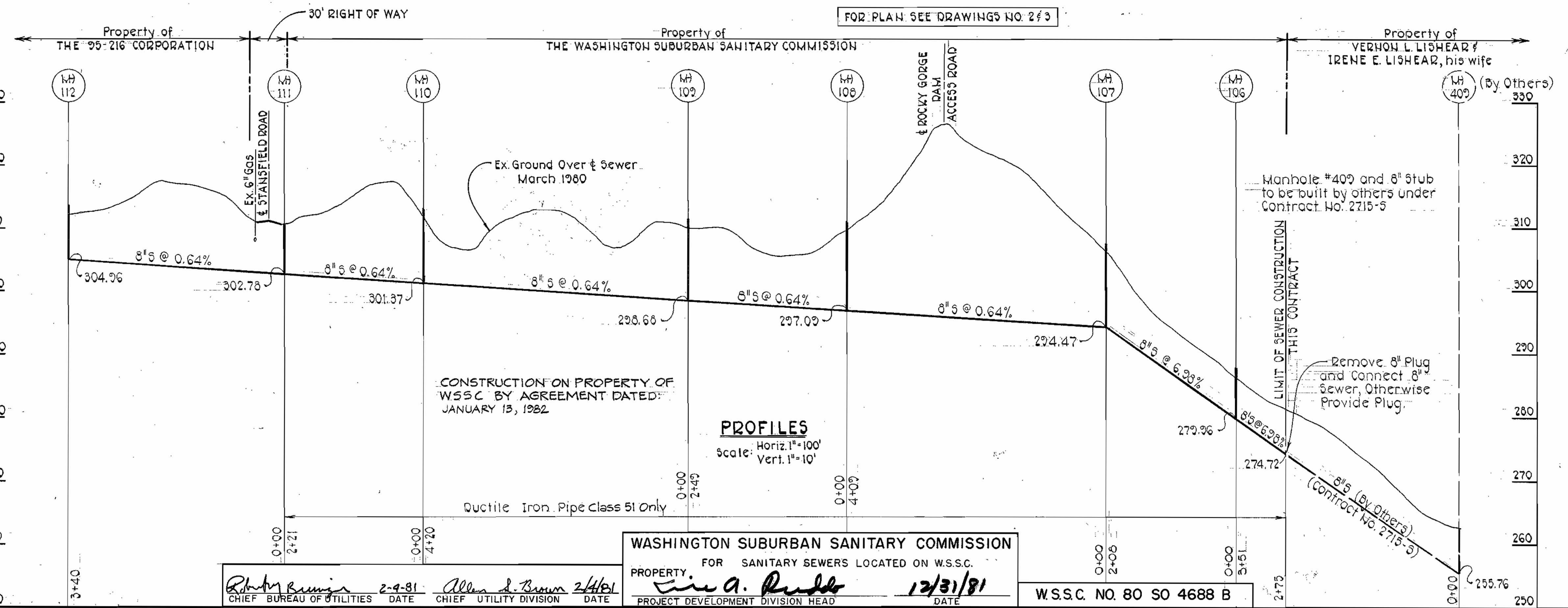
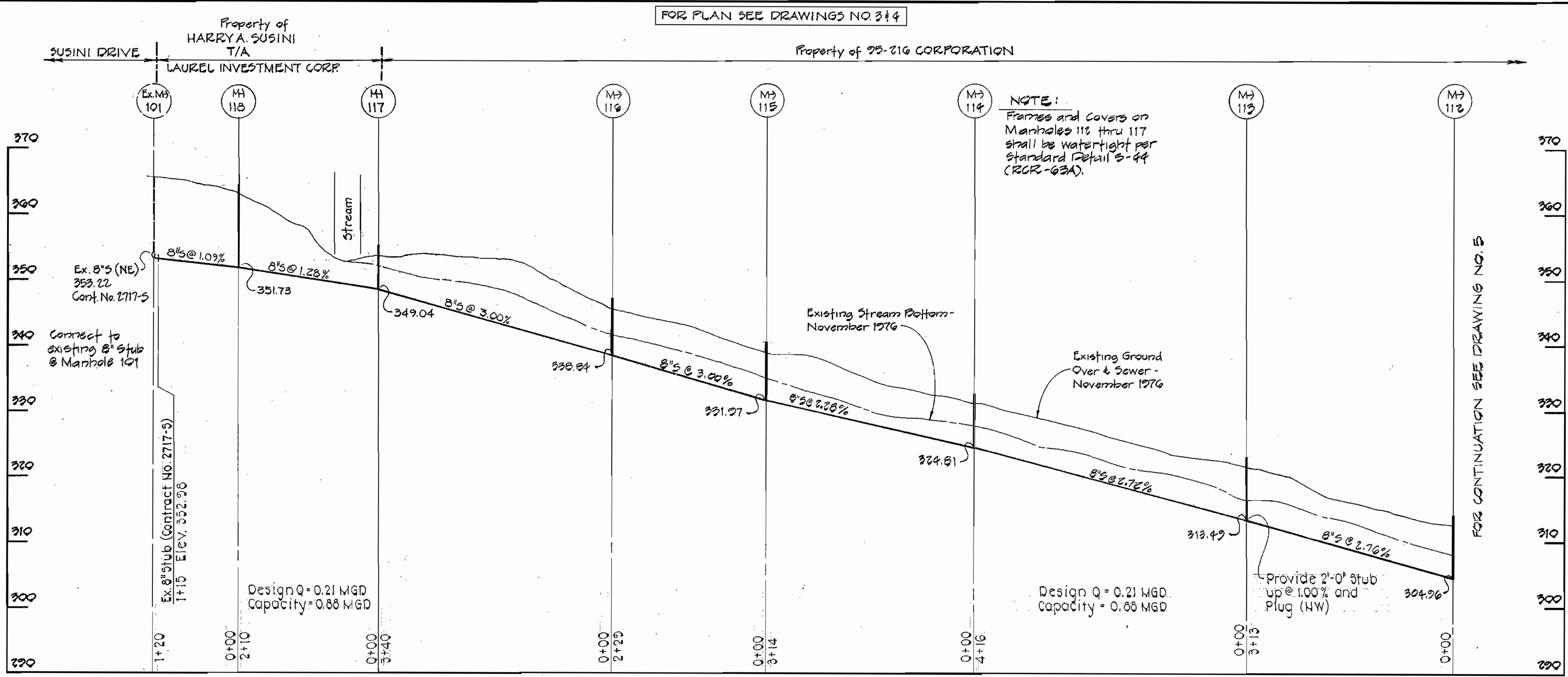
**DEPARTMENT OF PUBLIC WORKS**  
 HOWARD COUNTY, MARYLAND

CONTRACT NO. 716-S  
 CAPITAL PROJECT NO. S-4-6049

PLAN AND DETAILS  
 FOR SANITARY SEWERS

LAKEVIEW SANITARY SEWERS  
 ELECTION DISTRICT NO. 6  
 HOWARD COUNTY, MARYLAND

DRAWING NO. 4 OF 5  
 SCALE: As Shown  
 DESIGNED: REP  
 DRAFTED: REC  
 CHECKED: REP



Robert B. Berman 2-9-81  
 CHIEF BUREAU OF UTILITIES DATE  
 Allen S. Brown 2/4/81  
 CHIEF UTILITY DIVISION DATE

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
 FOR SANITARY SEWERS LOCATED ON W.S.S.C. PROPERTY  
 C. A. P. [Signature]  
 PROJECT DEVELOPMENT DIVISION HEAD DATE 12/31/81

W.S.S.C. NO. 80 SO 4688 B

CONTRACT NO. 2716-S  
 LAKEVIEW SANITARY SEWERS  
 SUSINI DRIVE TO I-95  
 CAPITAL PROJECT S-4-6049

**PURDUM & JESCHKE**  
 ENGINEERS  
 1023 N. CALVERT ST.  
 BALTIMORE, MARYLAND

**DEPARTMENT OF PUBLIC WORKS**  
 HOWARD COUNTY, MARYLAND  
 [Signature] 6-28-77  
 DIRECTOR OF PUBLIC WORKS DATE  
 [Signature] 6-27-77  
 CHIEF BUREAU OF ENGINEERING DATE

CONTRACT NO. 716-S  
 CAPITAL PROJECT NO. S-4-6049

PROFILES FOR  
 SANITARY SEWERS

**LAKEVIEW SANITARY SEWERS**  
 ELECTION DISTRICT NO. 6  
 HOWARD COUNTY, MARYLAND

DRAWING NO. 5 OF 5	SCALE As Shown	DESIGNED: REP
		DRAFTED: REC
		CHECKED: REP