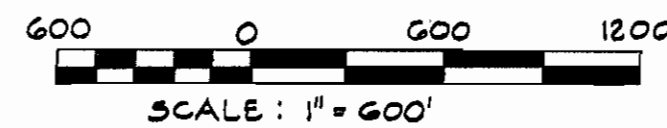
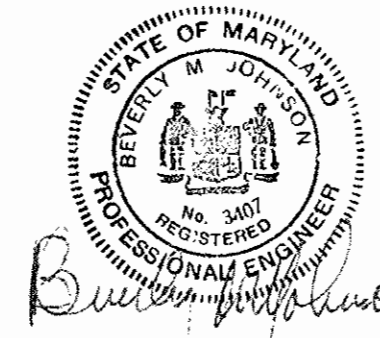


QUANTITIES		
SIZE	ESTIMATED	AS-BUILT
10" Sewer	303 L.F.	301 L.F.
8" Sewer	5517 L.F.	5324 L.F.
6" Sewer	516 L.F.	522 L.F.



- GENERAL NOTES**
- Approximate locations of existing mains are shown. The Contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted service. Any damage incurred shall be repaired immediately.
 - All pipe elevations shown are invert elevations.
 - Clear all utilities by a minimum of 6 inches. Clear all poles by 2'-0" minimum or tunnel as required.
 - For all standards see standards bound in the specifications.
 - Contractor shall locate existing utilities in advance of construction operations in the vicinity of proposed utilities.
 - Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these drawings:
 Baltimore Gas & Electric Company - Underground Electric Distribution Engineering - "Damage Control" - 234-5691
 Baltimore Gas & Electric Company - Underground Gas Distribution Engineering - 559-0100
 Chesapeake and Potomac Telephone Company - 725-9976
 Miss Utility - 393-3648
 - Trees are to be protected from damage to maximum extent. Trees located within the construction strip are not to be uncovered or damaged by the Contractor.
 - 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.
 - All sewer mains shall be C.S.P.X., V.C.P.X. or A.C.P. Class 2400 unless otherwise noted.
 - The Contractor shall provide a joint in all sewer mains within 2'-0" of exterior wall.
 - All manholes shall be 4'-0" inside diameter, unless otherwise noted.
 - Watertight manhole frame and cover to be used where indicated on drawings. Standard detail S-12 (RCR-63A).
 - All horizontal controls are based on Maryland State Coordinates.
 - All vertical controls are based on Maryland State Datum.
- NOTE: Sewer Pipes - Johns-Manville ACP Class 2400 - unless otherwise noted.

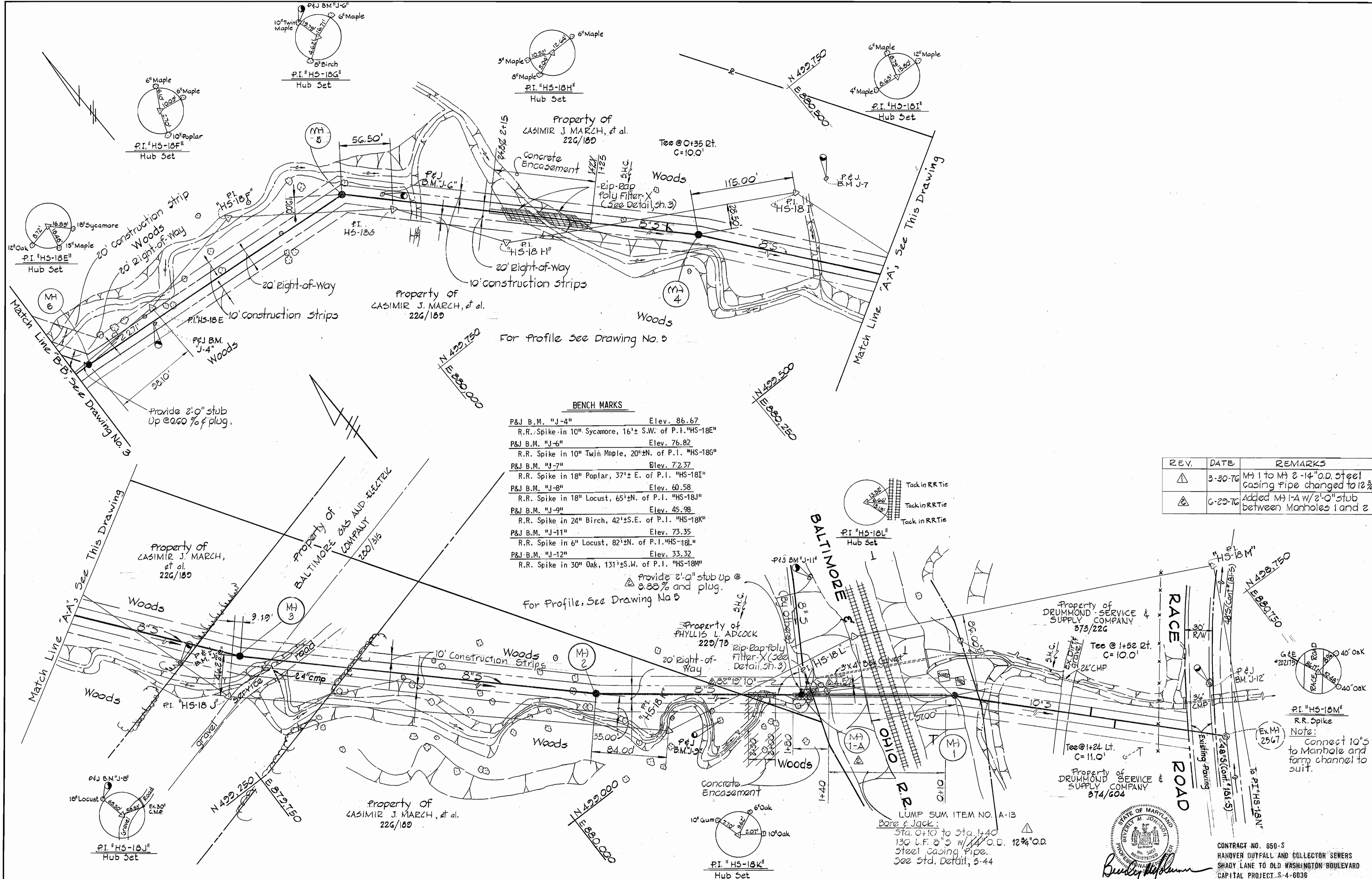
CONTRACT NO. 650-S
HANOVER OUTFALL AND COLLECTOR SEWERS
SHADY LANE TO OLD WASHINGTON BOULEVARD
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS



CONTRACT NO. 650-S
 HANOVER OUTFALL AND COLLECTOR SEWERS
 SHADY LANE TO OLD WASHINGTON BOULEVARD
 CAPITAL PROJECT S-4-6036

"AS BUILT"
 DEC. 22, 1976

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 5-9-75 DATE	CONTRACT NO. 650-S CAPITAL PROJECT NO. S-4-6036	LOCATION MAP OF SANITARY SEWERS	ELECTION DISTRICT ELKRIDGE NO. 1	DRAWING NO. 1 OF 6 SCALE AS SHOWN	DESIGNED: TAF DRAFTED: RBB CHECKED: TAF
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BENCH MARKS

P&J B.M. "J-4"	Elev. 86.67
R.R. Spike in 10" Sycamore, 16'± S.W. of P.I. "HS-18E"	
P&J B.M. "J-6"	Elev. 76.82
R.R. Spike in 10" Twin Maple, 20'± N. of P.I. "HS-18G"	
P&J B.M. "J-7"	Elev. 72.37
R.R. Spike in 18" Poplar, 37'± E. of P.I. "HS-18I"	
P&J B.M. "J-8"	Elev. 60.58
R.R. Spike in 18" Locust, 65'± N. of P.I. "HS-18J"	
P&J B.M. "J-9"	Elev. 45.98
R.R. Spike in 24" Birch, 42'± S.E. of P.I. "HS-18K"	
P&J B.M. "J-11"	Elev. 73.35
R.R. Spike in 6" Locust, 82'± N. of P.I. "HS-18L"	
P&J B.M. "J-12"	Elev. 33.32
R.R. Spike in 30" Oak, 131'± S.W. of P.I. "HS-18M"	

REV.	DATE	REMARKS
1	3-30-76	MH 1 to MH 2 - 14" O.D. Steel casing pipe changed to 12"
2	6-23-76	Added MH 1-A w/ 2'-0" stub between Manholes 1 and 2

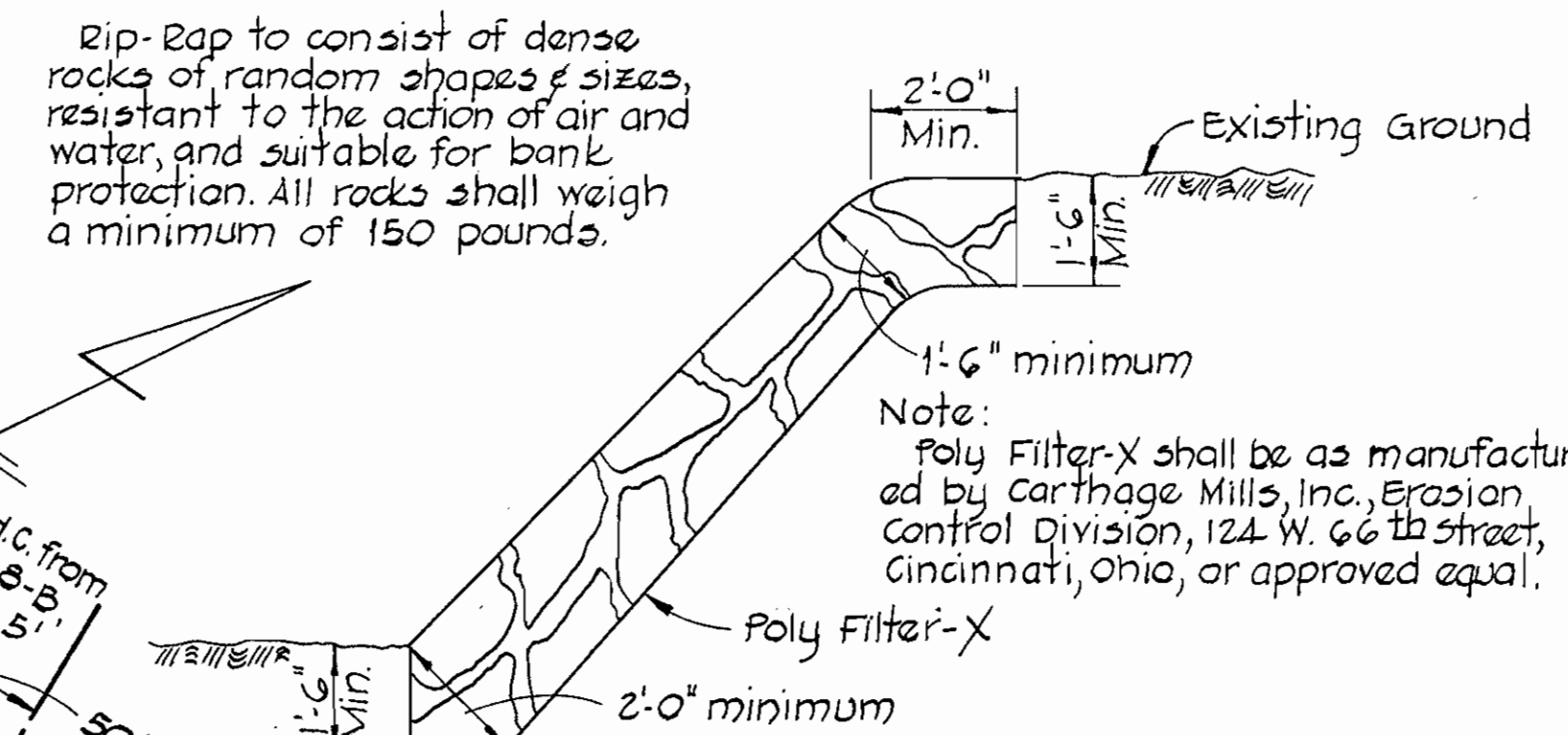
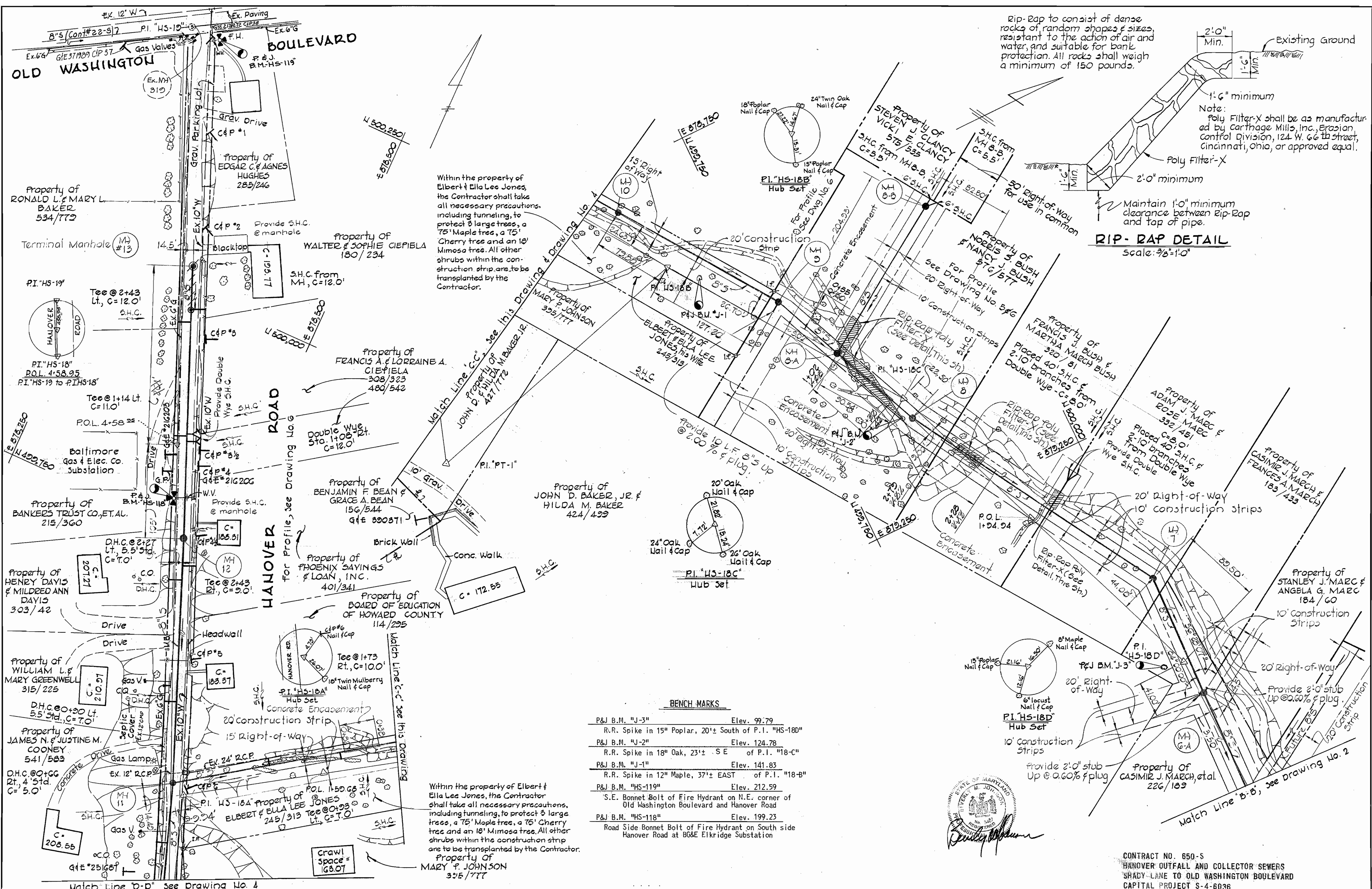
LUMP SUM ITEM NO. A-13
Bore & Jack:
Sta. 0+10 to Sta. 1+40
130 L.F. 8" x 5" w/ 12" O.D. 12 3/4" O.D.
Steel Casing Pipe.
See Std. Detail, 5-44



CONTRACT NO. 650-S
HANOVER OUTFALL AND COLLECTOR SEWERS
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PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 5-9-75 W.D. Gilbert CHIEF BUREAU OF ENGINEERING	CONTRACT NO. 650-S CAPITAL PROJECT NO. S-4-6036	PLAN AND DETAILS HANOVER OUTFALL AND COLLECTOR SEWERS SHADY LANE TO OLD WASHINGTON BOULEVARD	ELECTION DISTRICT ELKRIDGE NO. 1	DRAWING NO. 2 OF 6	SCALE 1" = 50' DESIGNED: TAF DRAFTED: JSK CHECKED: TAF POS. SHEETS: 5, 6, 8, 9

"AS BUILT"
DEC. 22, 1976



RIP-RAP DETAIL
Scale: 3/8"=1'-0"

BENCH MARKS

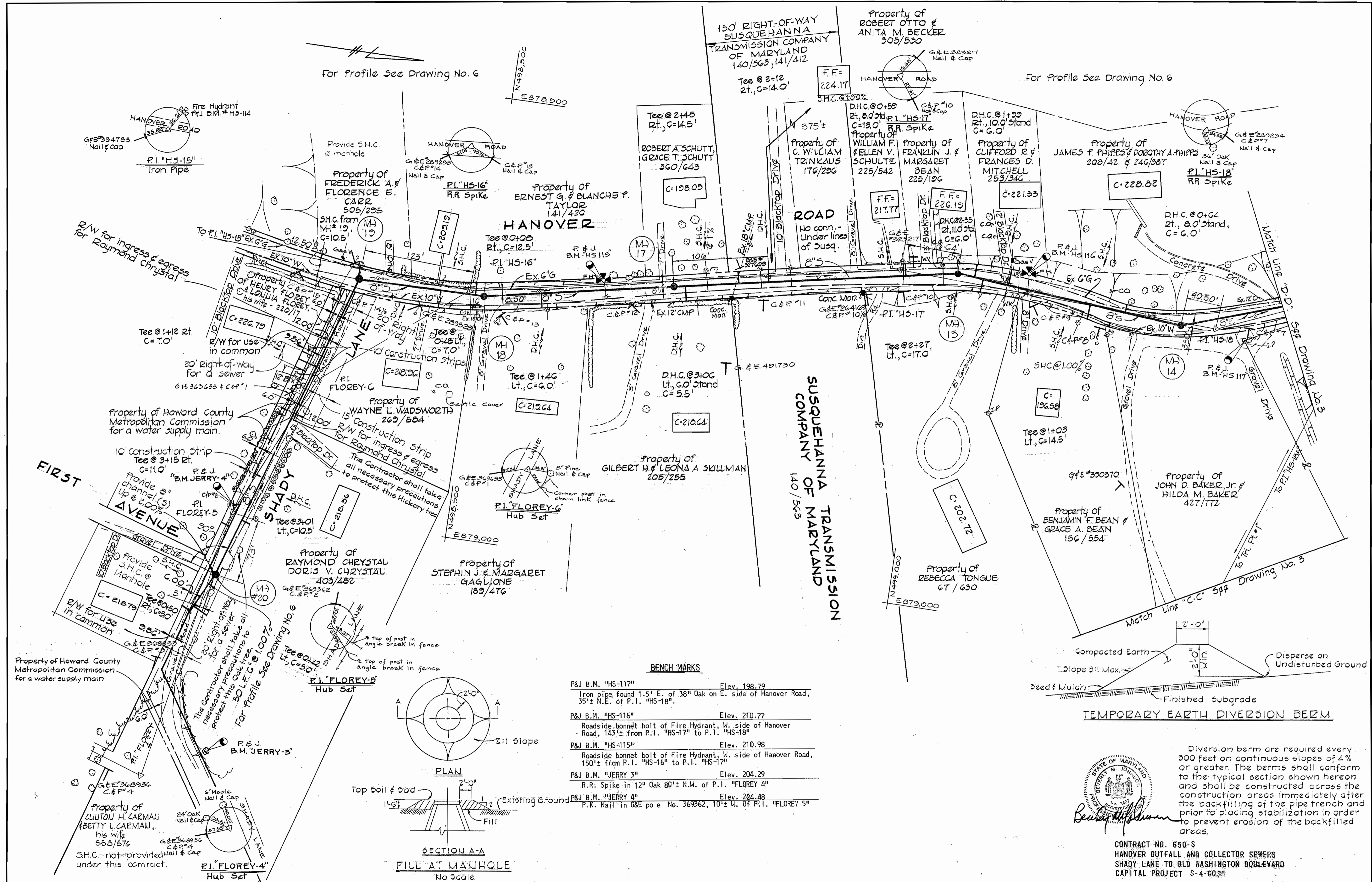
P&J B.M. "J-3"	Elev. 99.79
R.R. Spike in 15" Poplar, 20'± South of P.I. "HS-18D"	
P&J B.M. "J-2"	Elev. 124.78
R.R. Spike in 18" Oak, 23'± S E of P.I. "18-C"	
P&J B.M. "J-1"	Elev. 141.83
R.R. Spike in 12" Maple, 37'± EAST of P.I. "18-B"	
P&J B.M. "HS-119"	Elev. 212.59
S.E. Bonnet Bolt of Fire Hydrant on N.E. corner of Old Washington Boulevard and Hanover Road	
P&J B.M. "HS-118"	Elev. 199.23
Road Side Bonnet Bolt of Fire Hydrant on South side Hanover Road at B&E Elkridge Substation	



CONTRACT NO. 650-S
HANOVER OUTFALL AND COLLECTOR SEWERS
SHADY-LANE TO OLD WASHINGTON BOULEVARD
CAPITAL PROJECT S-4-6036

"A-5" BUILT
DEC. 22, 1976

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 5-9-75 DATE	CONTRACT NO. 650-S CAPITAL PROJECT NO. S-4-6036	PLAN AND DETAILS HANOVER OUTFALL AND COLLECTOR SEWERS SHADY-LANE TO OLD WASHINGTON BOULEVARD	ELECTION DISTRICT ELKRIDGE NO. 1	DRAWING NO. 3 OF 6	SCALE 1" = 50' DESIGNED: T.A.F. DRAFTED: J.S.K. CHECKED: T.A.F. POS. SHEETS
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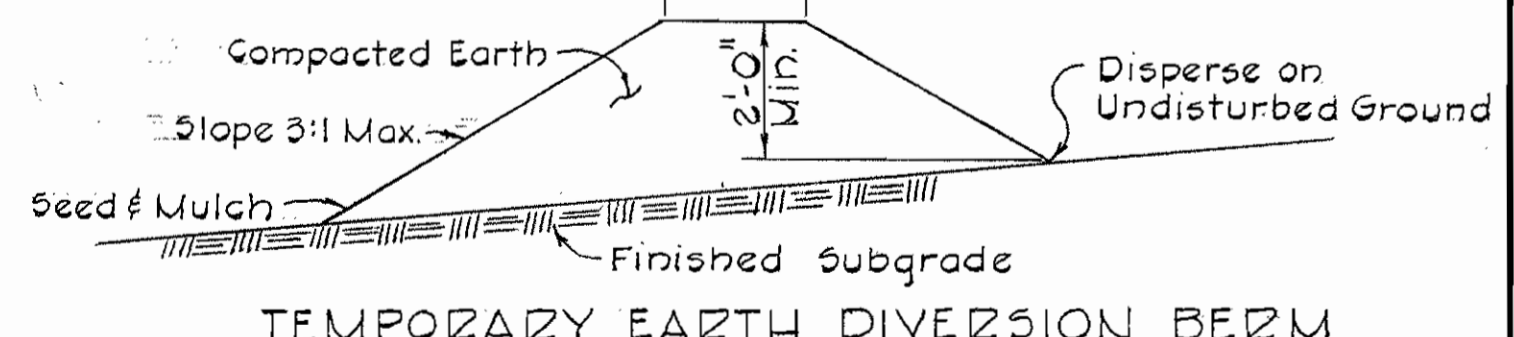
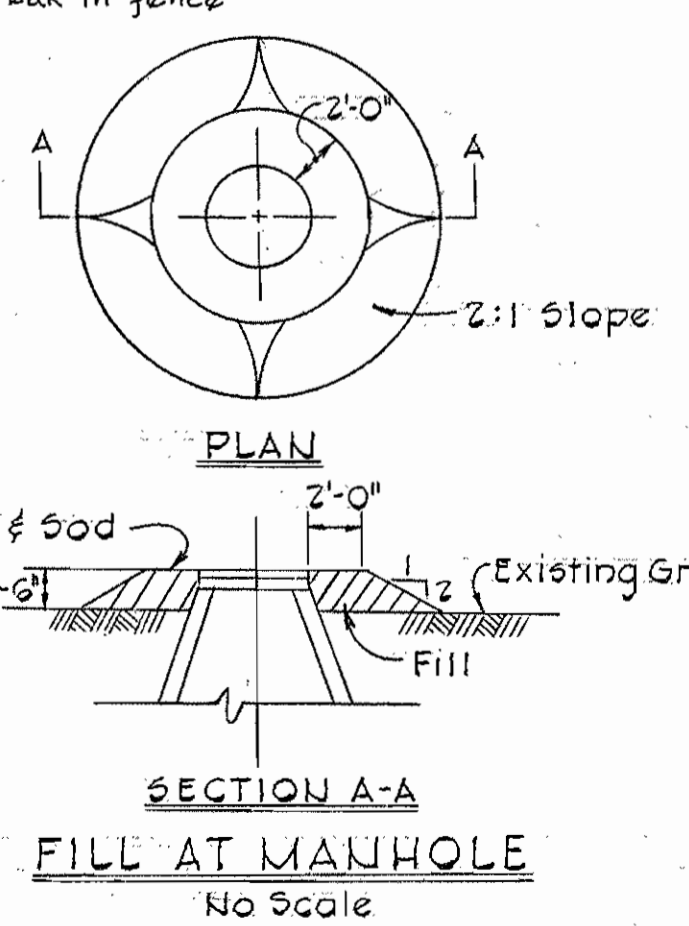


For Profile See Drawing No. 6

For Profile See Drawing No. 6

BENCH MARKS

P&J B.M. "HS-117"	Elev. 198.79
Iron pipe found 1.5' E. of 38" Oak on E. side of Hanover Road, 35'± N.E. of P.I. "HS-18".	
P&J B.M. "HS-116"	Elev. 210.77
Roadside bonnet bolt of Fire Hydrant, W. side of Hanover Road, 143'± from P.I. "HS-17" to P.I. "HS-18".	
P&J B.M. "HS-115"	Elev. 210.98
Roadside bonnet bolt of Fire Hydrant, W. side of Hanover Road, 150'± from P.I. "HS-16" to P.I. "HS-17".	
P&J B.M. "JERRY 3"	Elev. 204.29
R.R. Spike in 12" Oak 80'± N.W. of P.I. "FLOREY 4"	
P&J B.M. "JERRY 4"	Elev. 224.48
P.K. Nail in G&E pole No. 369362, 10'± W. of P.I. "FLOREY 5"	

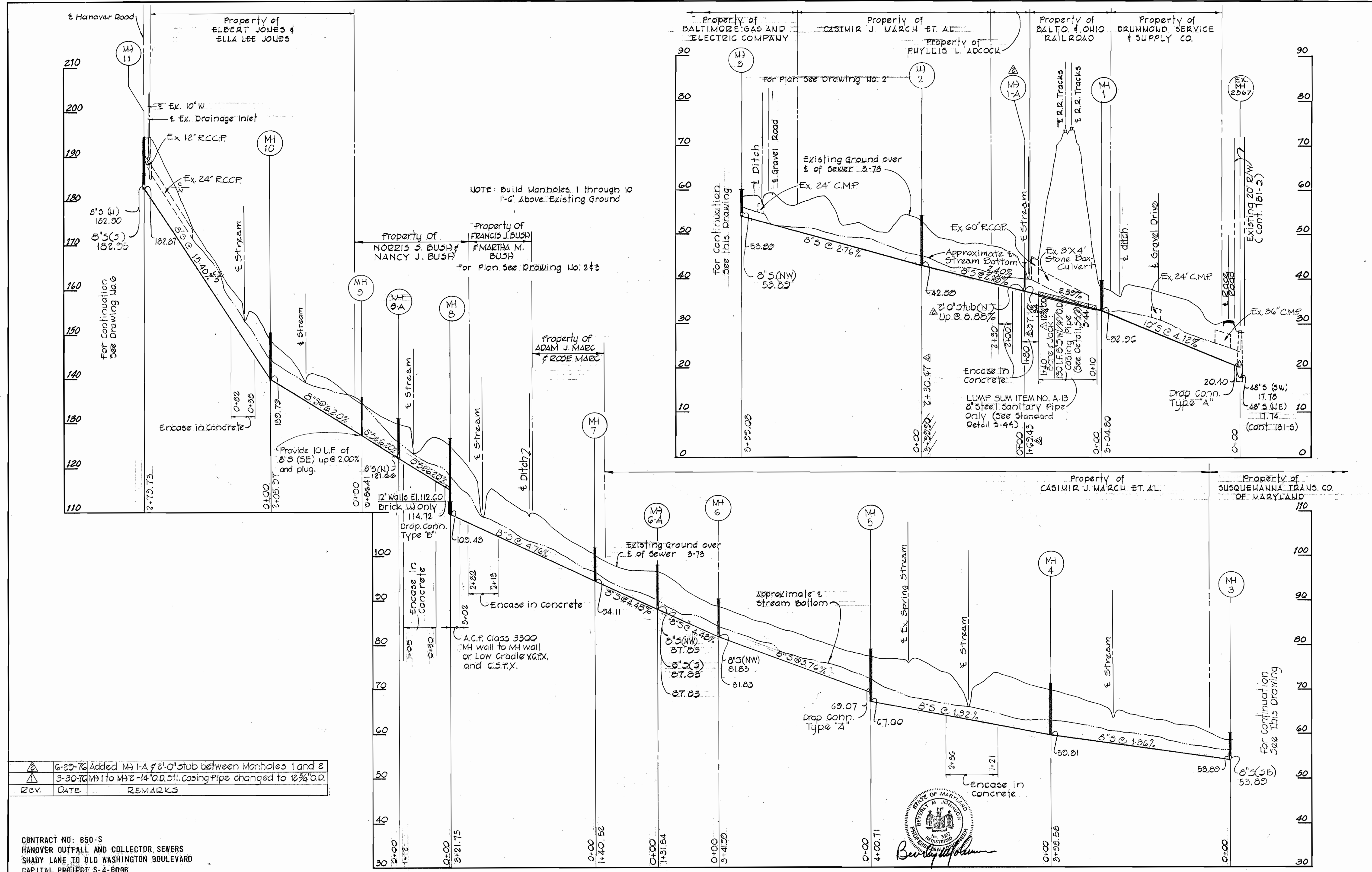


Diversion berm are required every 300 feet on continuous slopes of 4% or greater. The berms shall conform to the typical section shown hereon and shall be constructed across the construction areas immediately after the backfilling of the pipe trench and prior to placing stabilization in order to prevent erosion of the backfilled areas.

CONTRACT NO. 650-S
HANOVER OUTFALL AND COLLECTOR SEWERS
SHADY LANE TO OLD WASHINGTON BOULEVARD
CAPITAL PROJECT S-4-6036

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 5.9.75 W.O. Gilbert CHIEF BUREAU OF ENGINEERING	CONTRACT NO. 650-S CAPITAL PROJECT NO. S-4-6036	PLAN AND DETAILS HANOVER OUTFALL AND COLLECTOR SEWERS SHADY LANE TO OLD WASHINGTON BOULEVARD	ELECTION DISTRICT ELKRIDGE NO. 1	DRAWING NO. 4 OF 6	SCALE 1" = 50' POS. SHEETS 4 & 7	DESIGNED: T.A.F. DRAFTED: J.S.K. CHECKED: T.A.F. POS. SHEETS 4 & 7
							MAY 13, 1975

"AS BUILT" Dec. 22, 1976



NOTE: Build Manholes 1 through 10
1'-6" Above Existing Ground

NOTE: Build Manholes 1 through 10
1'-6" Above Existing Ground

NOTE: Build Manholes 1 through 10
1'-6" Above Existing Ground

NOTE: Build Manholes 1 through 10
1'-6" Above Existing Ground

A.C.P. Class 3300
MH wall to MH wall
or Low Cradle V.C.F.X.
and C.S.F.X.

REV.	DATE	REMARKS
△	6-23-76	Added MH 1-A & 2'-0" stub between Manholes 1 and 2
△	3-30-76	MH 1 to MH 2-14" O.D. 51' casing pipe changed to 12 3/4" O.D.

CONTRACT NO: 650-S
HANOVER OUTFALL AND COLLECTOR SEWERS
SHADY LANE TO OLD WASHINGTON BOULEVARD
CAPITAL PROJECT S-4-6036

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 5-9-75
W.O. Filbert
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 650-S
CAPITAL PROJECT NO. S-4-6036

PROFILE
HANOVER OUTFALL AND COLLECTOR SEWERS
SHADY LANE TO OLD WASHINGTON BOULEVARD

ELECTION DISTRICT
ELKRIDGE NO. 1

DRAWING NO. 5
OF 6

SCALE
1" = 100'
1" = 10'

DESIGNED: TAF
DRAFTED: DAN
CHECKED: TAF

"AS BUILT"
DEC. 22, 1976

