

QUANTITIES			
ITEM	ESTIMATED	"AS-BUILT"	SUPPLIER
8" Sewer	5910 L.F.	5767 L.F.	
6" Sewer	400 L.F.	528 L.F.	
Manhole	250 V.F.	246 V.F.	

CAPITAL PROJECT S-4-6039
CONTRACT NO. 579-S
BROOKDALE SANITARY SEWERS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS



CONTRACT NO. 579-S
 BROOKDALE SEWER MAIN EXTENSION
 HOWARD COUNTY CAPITAL PROJECT S-4-6039

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

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 3-21-75
 W. O. Liberty
 CHIEF-BUREAU OF ENGINEERING

CONTRACT NO. 579-S

LOCATION MAP OF
SANITARY SEWERS

BROOKDALE SEWER MAINS
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

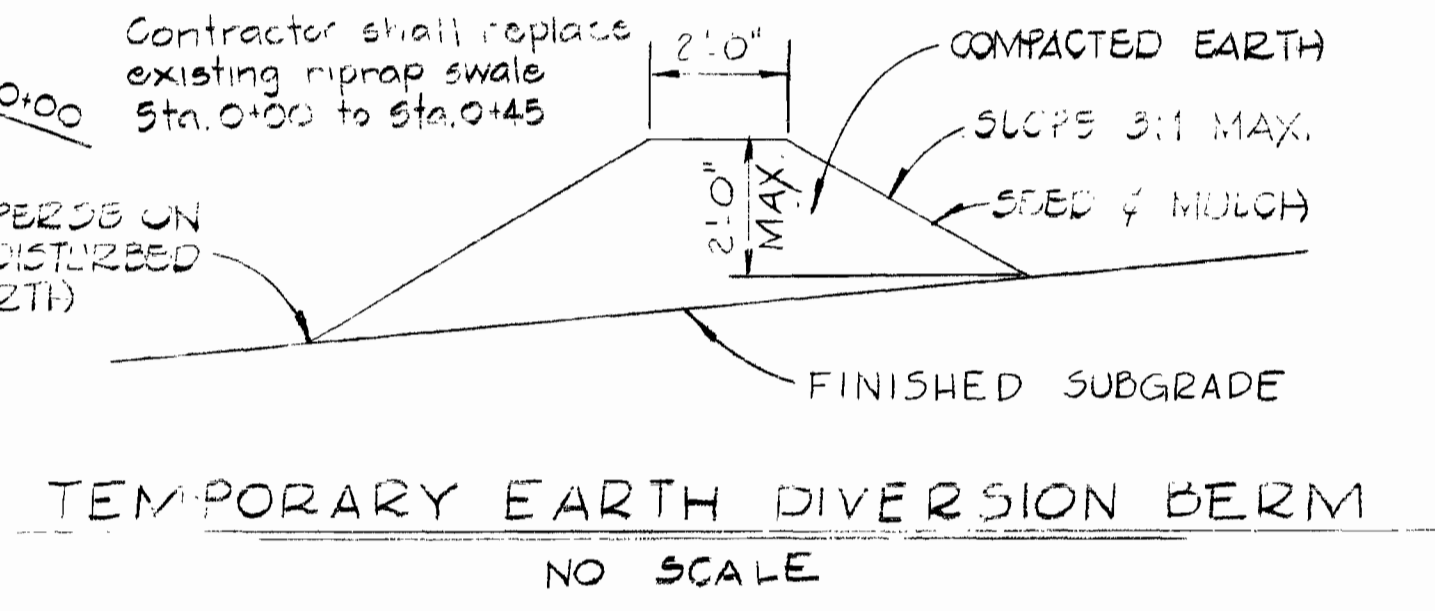
DRAWING
 NO. 1
 OF 7

SCALE
 AS
 SHOWN

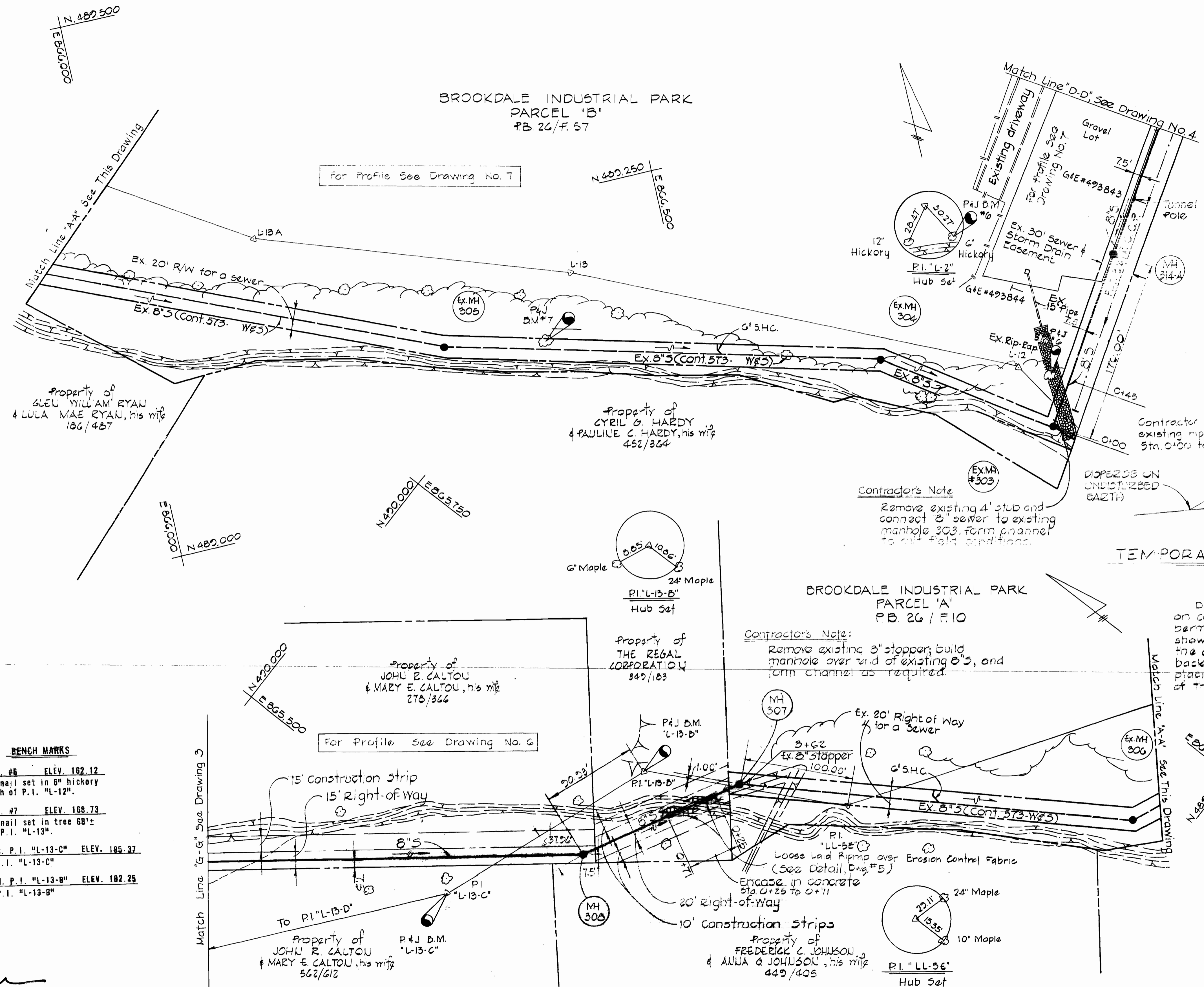
DESIGNED BY
 DRAFTED BY
 CHECKED BY

GENERAL NOTES

1. Approximate locations of existing mains 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.
2. All horizontal controls are based on Maryland State Coordinates.
3. All vertical controls are based on Maryland State 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 all standard details see standards bound in specifications.
7. Contractor shall locate existing utilities in advance of construction operations in the vicinity of proposed utilities.
8. Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these plans; State Highway Administration - 531-5533; Baltimore Gas and Electric Company - Underground Electric Distribution Engineering - "Damage Control" - 234-5691; Baltimore Gas and Electric Company - Underground Gas Distribution Engineering - 559-0100; Chesapeake and Potomac Telephone Co. - 725-9976
9. 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.
10. 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.
11. All sewer mains shall be C.S.P.X., V.C.P.X., or A.C.P. Class 2400 unless otherwise noted.
12. The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
13. All manholes shall be 4'-0" inside diameter, unless otherwise noted.
14. Cost of Polyfilter-X and rip-rap to be included in the unit price bid for furnishing and laying of sewer mains.
15. Gabions and Reno Mattresses in flood plains which will be subjected to high flows may be used in place of rip-rap.
16. Sodding to be provided in areas of low flow.
17. Watertight manhole frame and cover to be used where indicated on drawings. Standard Detail S-12 (RCR-63A). Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.

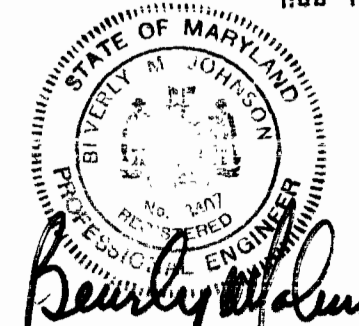


Diversion berms are required every 250 feet on continuous slopes of 4% or greater. The berms shall conform to the typical section shown hereon and shall be constructed across the construction areas immediately after the backfilling of the pipe trench and prior to placing stabilization in order to prevent erosion of the backfilled areas.



BENCH MARKS

P & J B.M. #6	ELEV. 162.12
60 penny nail set in 6" hickory 30'± South of P.I. "L-12"	
P & J B.M. #7	ELEV. 168.73
60 penny nail set in tree 68'± South of P.I. "L-13"	
P & J B.M. P.I. "L-13-C"	ELEV. 185.37
Hub for P.I. "L-13-C"	
P & J B.M. P.I. "L-13-B"	ELEV. 182.25
Hub for P.I. "L-13-B"	



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1023 N. CALVERT ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 3-21-75
W. D. FILLER
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 579-S

PLAN OF SEWER MAINS

BROOKDALE SEWER MAINS
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

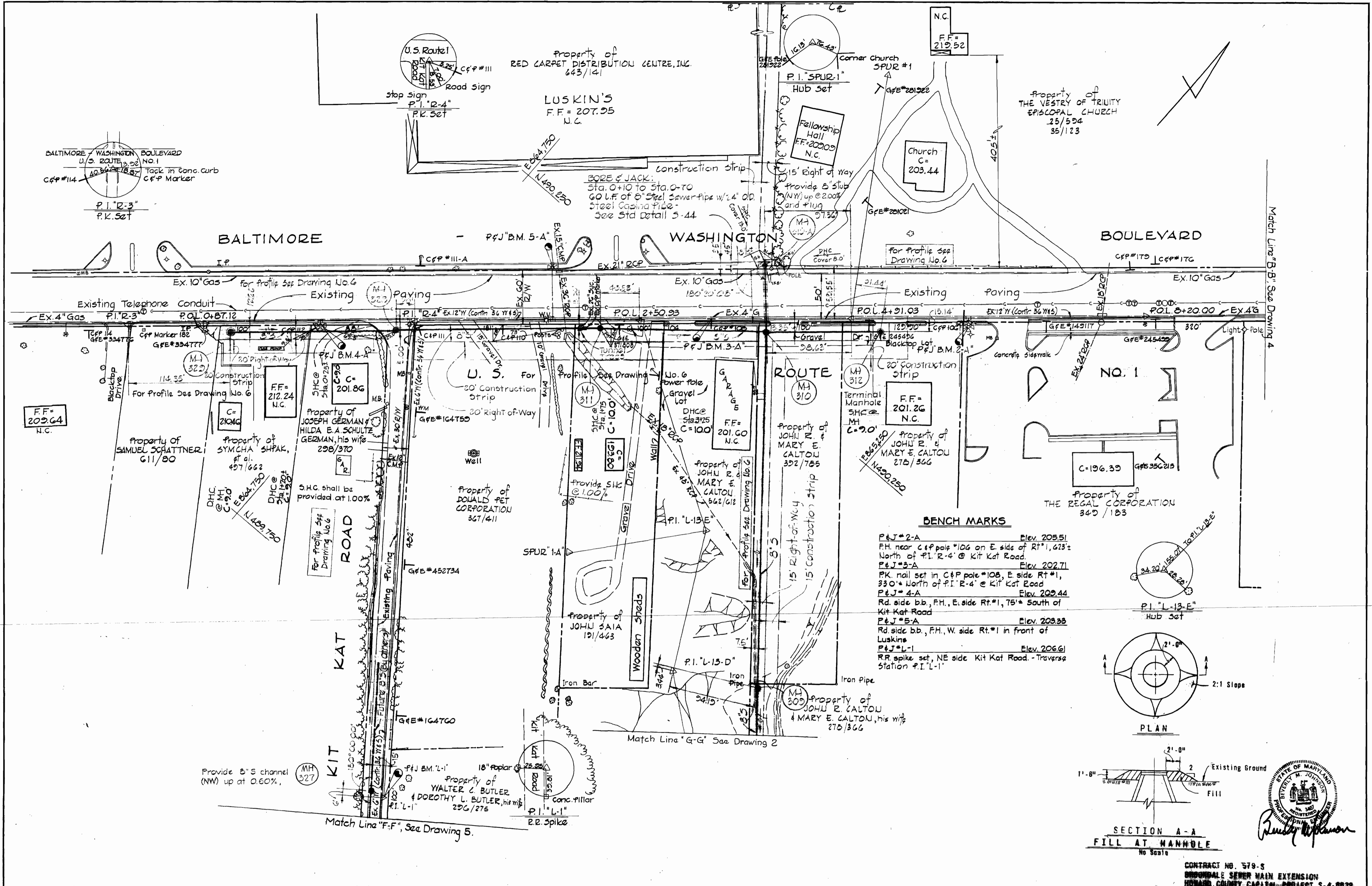
CONTRACT NO. 579-S
BROOKDALE SEWER MAIN EXTENSION
HOWARD COUNTY CAPITAL PROJECT S-4-6039
DRAWING NO. 2 OF 7
SCALE 1" = 50'

As Built May 15, 1980

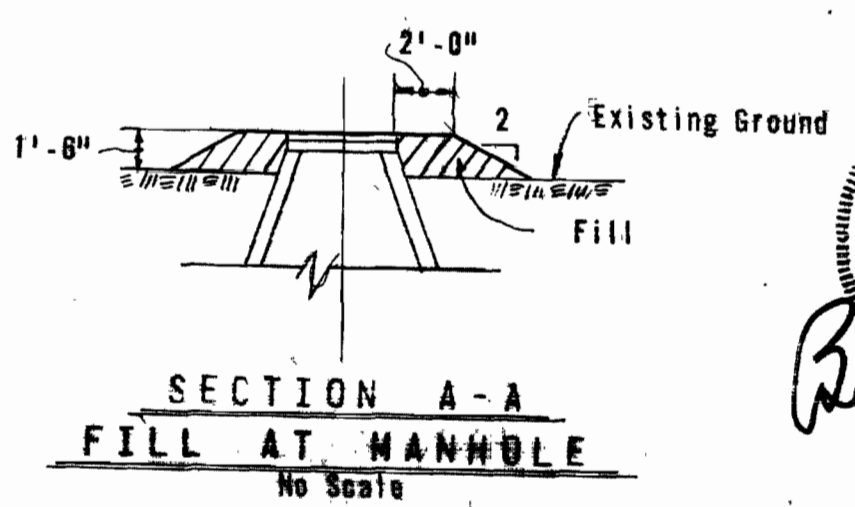
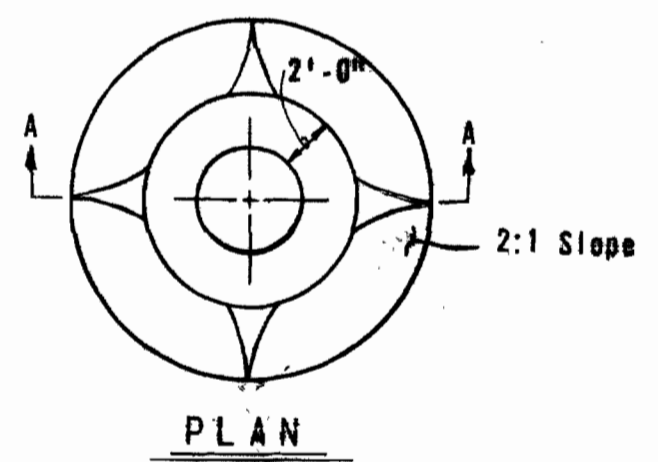
suspend

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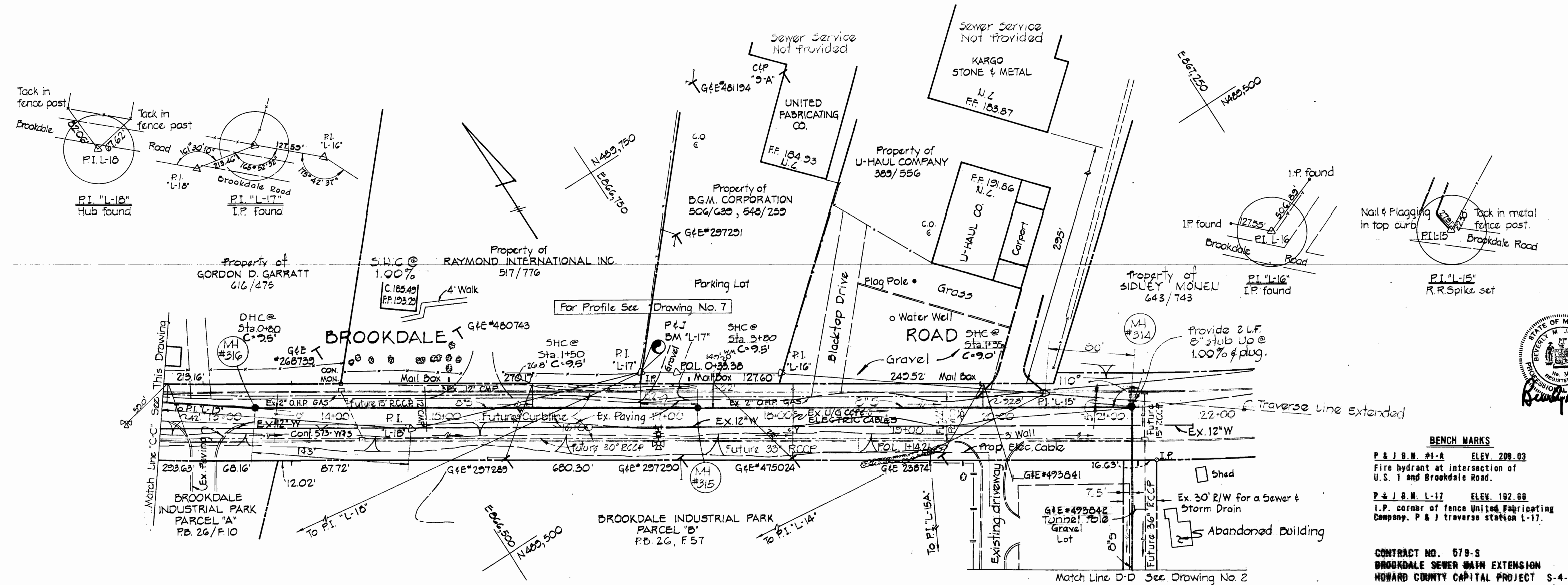
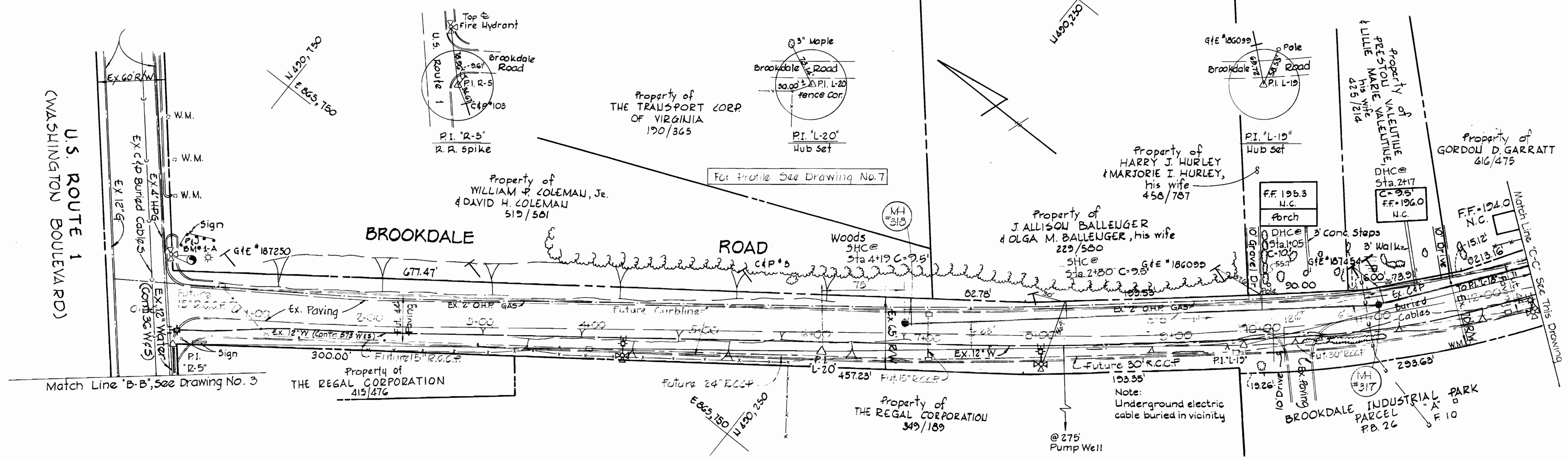
- BENCH MARKS**
- P&J*2-A Elev. 205.51
F.H. near C&P pole #106 on E. side of Rt #1, 623'± North of P.I. "R-4" @ Kit Kat Road.
 - P&J*3-A Elev. 202.71
P.K. nail set in C&P pole #108, E. side Rt #1, 330'± North of P.I. "R-4" @ Kit Kat Road.
 - P&J*4-A Elev. 209.44
Rd. side bb., F.H., E. side Rt #1, 75'± South of Kit Kat Road.
 - P&J*5-A Elev. 209.33
Rd. side bb., F.H., W. side Rt #1 in front of Luskins.
 - P&J*L-1 Elev. 206.61
R.R. spike set, NE side Kit Kat Road - Traversa Station P.I. "L-1"



CONTRACT NO. 579-S
 BROOKDALE SEWER MAIN EXTENSION
 HOWARD COUNTY CAPITAL PROJECT S-4-0033

DESIGNED: TAF
 DRAFTED: TAF
 CHECKED: TAF

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 3-21-75 DATE	CONTRACT NO. 579-S	PLAN OF SEWER MAINS	BROOKDALE SEWER MAINS ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND	DRAWING NO. 3 OF 7 SCALE 1" = 50' JULY 6, 1979
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BENCH MARKS

P & J B.M. #1-A ELEV. 208.03
Fire hydrant at intersection of U.S. 1 and Brookdale Road.

P & J B.M. L-17 ELEV. 192.68
I.P. corner of fence United Fabricating Company. P & J traverse station L-17.

CONTRACT NO. 679-S
BROOKDALE SEWER MAIN EXTENSION
HOWARD COUNTY CAPITAL PROJECT S-4-6838



SUSPENSE

SUSPENSE

WS 579-S/4

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 3-21-71 <i>W. O. Gilbert</i> CHIEF-BUREAU OF ENGINEERING	CONTRACT NO. 579-S	PLAN OF SEWER MAINS	BROOKDALE SEWER MAINS ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND	DRAWING SCALE NO. 4 OF 7 1" = 50' DESIGNED: TAF DRAFTED: ABL CHECKED: TAF
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As Built May 15, 1980

Property of
WALTER C. BUTLER &
DOROTHY L. BUTLER, WIFE
296/275

Property of
WALTER C. BUTLER &
DOROTHY L. BUTLER, WIFE
296/275

Property of
FREDERICK C. JOHNSON &
ANNA G. JOHNSON
442/405

Property of
GLEN WILLIAM RYAN &
LULA MAE RYAN, WIFE
186/487

Property of
CYRIL G. HARDY &
PAULINE C. HARDY, WIFE
452/364, Lot 29

Property of
AMANDA SCHULTE
228/370

Property of
HARRY J. ROBERTS &
LUELLA M. ROBERTS, WIFE
124/597

Property of
MILTON C. LAWSON
(HELEN J. LAWSON,
his wife)
455/502

Property of
STANLEY H. AMOS &
SADIE Y. AMOS, his wife
531/1

Property of
WILLIAM PALMER
168/378

Property of
CYRIL G. HARDY &
PAULINE C. HARDY, WIFE
452/364

Property of
CYRIL G. HARDY &
PAULINE C. HARDY, WIFE
452/364

Property of
CYRIL G. HARDY &
PAULINE C. HARDY, WIFE
452/364

Property of
HARRY J. ROBERTS &
LUELLA M. ROBERTS, WIFE
124/597

Property of
CYRIL G. HARDY &
PAULINE C. HARDY, WIFE
FRUSSELL BETTY ARNOLD
478/764

Property of
FRED LEE RHOADES
504/545

NOTE:

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.

NOTE: Erosion Control Fabric shall be Poly Filter X shall be as manufactured by Carthage Mills, Inc. Permealiner M-1125 as manufactured by Staff Industries Inc. or equal.

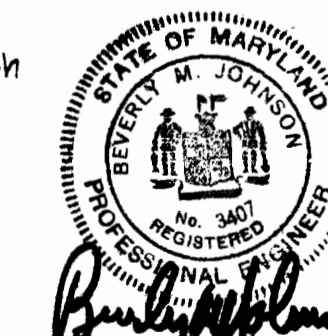
Maintain 1'-0" minimum clearance between Rip-Rap and Top of Pipe.

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

BENCH MARKS

- P & J BM #1 Elev. 201.75
R.R. spike in C&P pole #5, 50' North-east of P.I.-L-2.
- P & J BM #2 Elev. 200.00
Rd. side bb., F.H., ±350' from P.I.-L-3 to L-4.
- P & J BM #3 Elev. 195.03
60 penny nail set in G & E pole #479947 30' North of L-5
- P & J BM #4 Elev. 148.55
Rim of Exist. Sanitary MA #GG25, 25'± S. of L-17

Note: Connect proposed 8" sewer to existing manhole # GG25 and reform channel to suit field conditions.



CONTRACT NO. 579-S
BROOKDALE SEWER MAIN EXTENSION
HOWARD COUNTY CAPITAL PROJECT 3-4-6039

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
3-21-75
W. O. Schubert
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 579-S

PLAN OF
SEWER MAINS

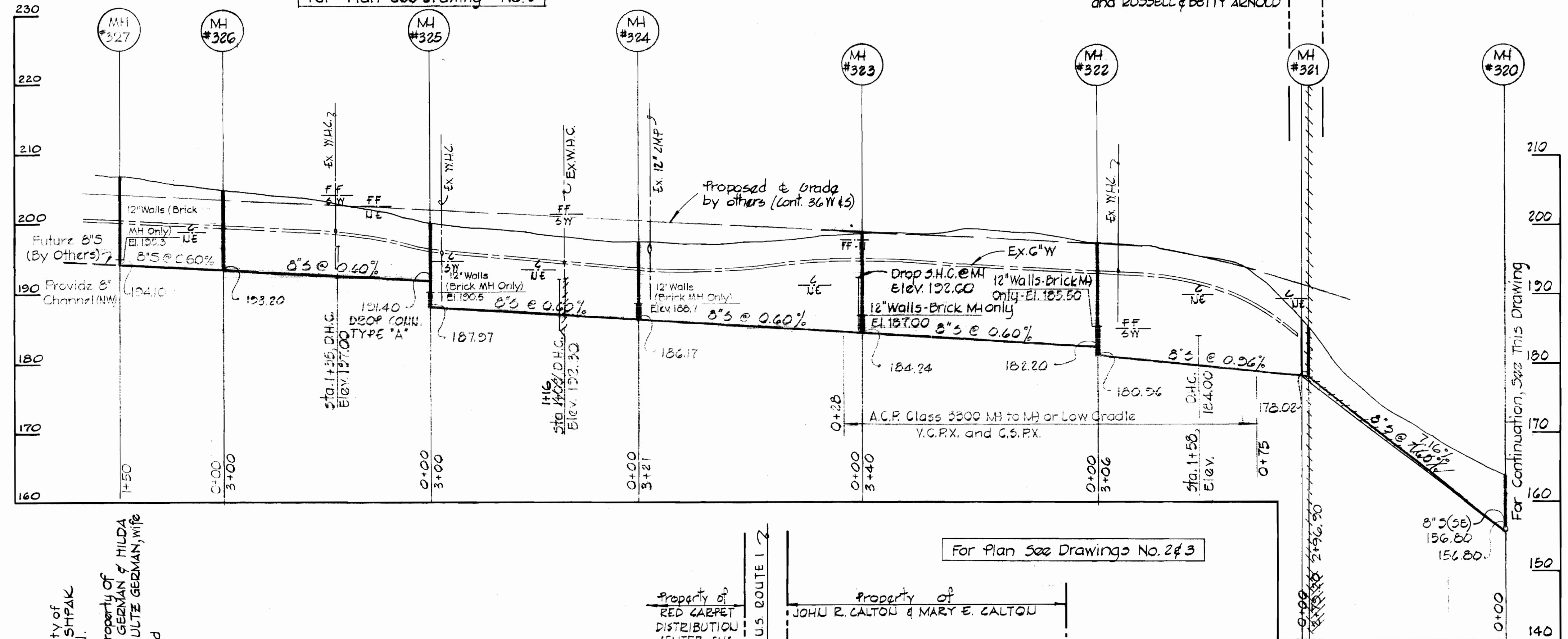
BROOKDALE SEWER MAINS
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING SCALE
NO. 5 OF 7
1" = 50'

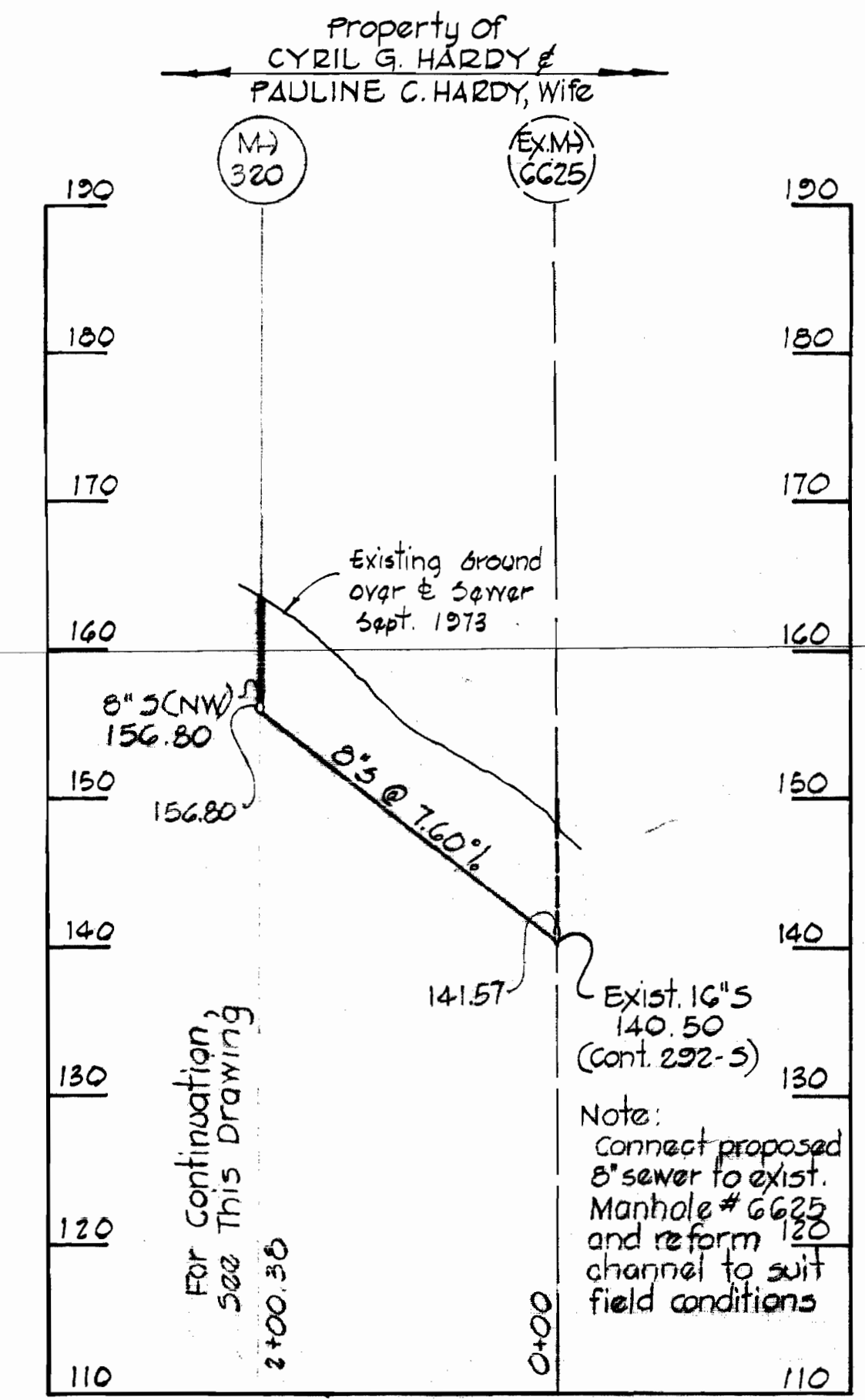
DESIGNED: TAP
DRAFTED: HDB
CHECKED: TAP

KIT KAT ROAD

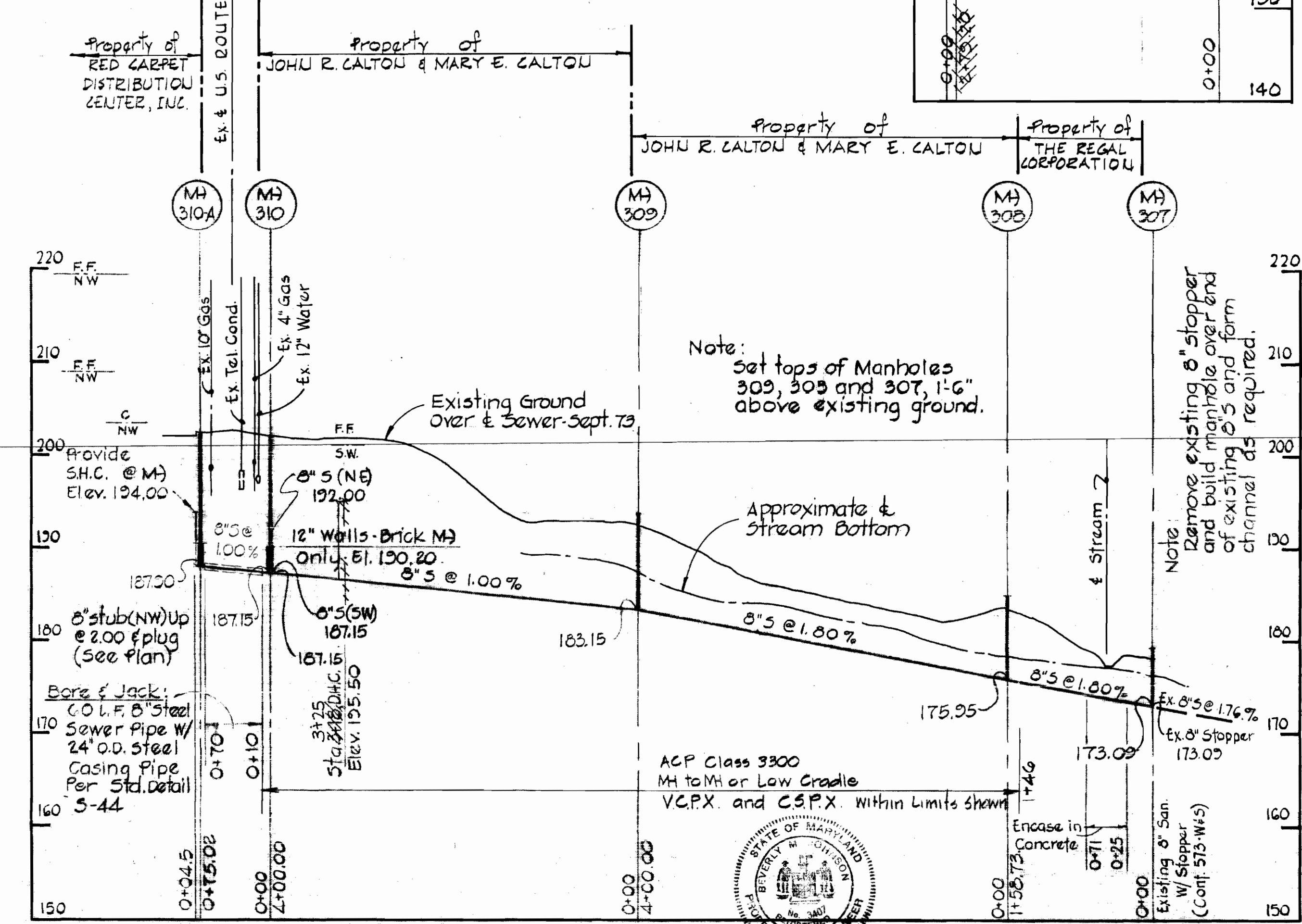
For Plan See Drawing No. 5



For Plan See Drawing No. 5



For Plan See Drawings No. 2 & 3



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE 3-21-75
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 579-S

PROFILES OF SEWER MAINS

REGULABLE SEWER MAINS
SECTION DISTRICT NO. 11
HOWARD COUNTY, MARYLAND

DRAWING NO. 8 OF 7

SCALE HORIZ: 1"=40' VERT: 1"=10'

CONTRACT NO. 579-S
REGULABLE SEWER MAIN EXTENSION
HOWARD COUNTY CAPITAL PROJECT S-4-6030

As Built May 15, 1980

Suspense

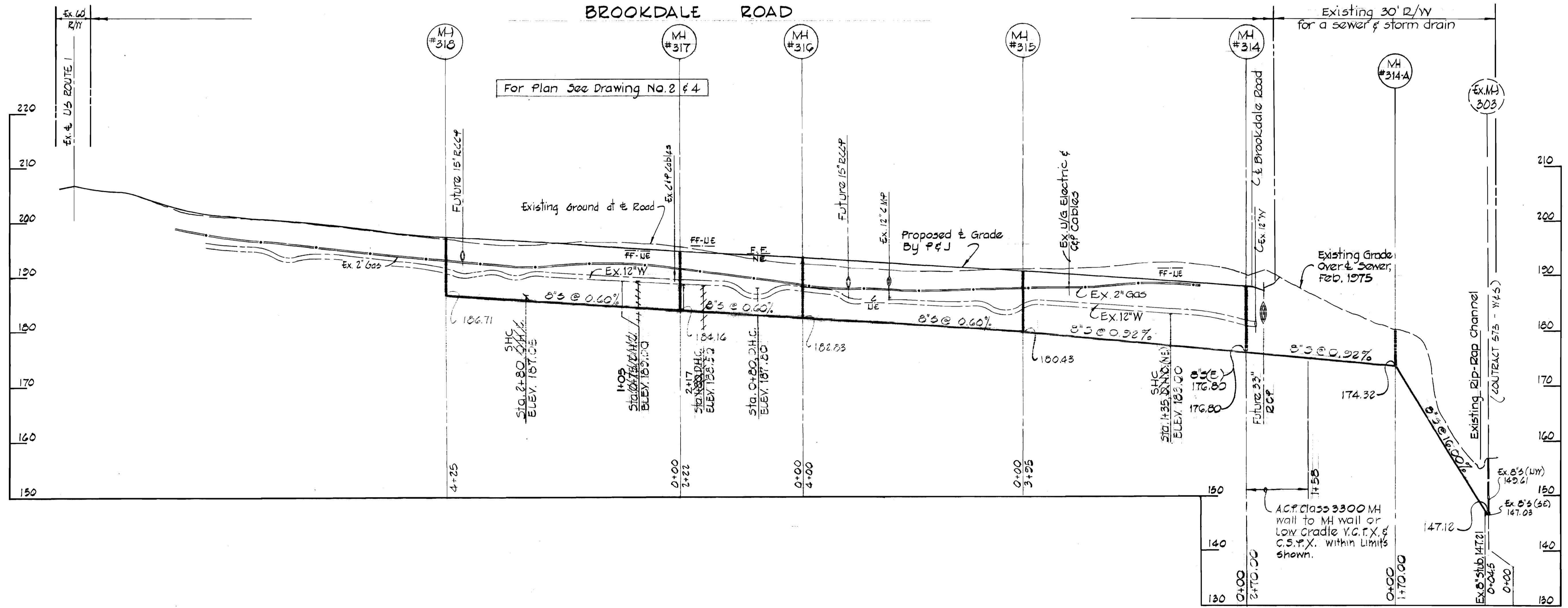
Suspense

WS 579-S/6

WS 579-S/1

Suspension

Suspension



Note:
 Connect proposed 8" sewer
 to existing manhole # 303
 and form channel to suit.



CONTRACT NO. 579-S
 BROOKDALE SEWER MAIN EXTENSION
 HOWARD COUNTY CAPITAL PROJECT S-4-6839

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 3-21-75 CHIEF-BUREAU OF ENGINEERING	CONTRACT NO. 579-S	PROFILES OF SEWER MAINS	BROOKDALE SEWER MAINS ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND	DRAWING NO. 7 OF 7	SCALE: HORIZ: 1"=100' VERT: 1"=10' CHECKED: YAC
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W.O. #3346

JULY 6, 1979