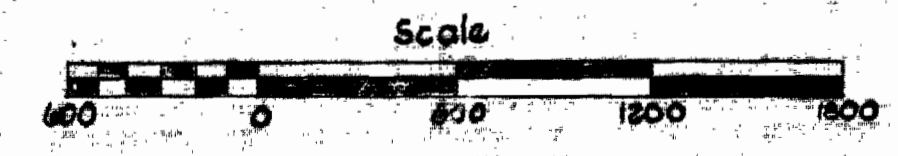


CONTRACT NO. 522-S
CENTENNIAL SANITARY SEWER PROJECT
NO. S-4-6030 PHASE 2
HOWARD COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS

TYPE OF PIPE USED:
 ASBESTOS CEMENT PIPE BY
 "CERTAILED" WITH "FLUID TITE"
 JOINTS"
 DUCTILE IRON WHERE SPECIFIED
 BY U.S. PIPE AND FOUNDRY
 WITH "TYTON JOINTS".

DESIGN DATA					
Area Symbol	Area Acres	Population Density Ultimate	Population Ultimate	Ult. Avg. Sewage Flow (M.G.D.)	Ult. Peak Design Flow (M.G.D.)
A	80	5.00	400	0.036	0.11
B	2300	2.43	5,600	0.504	1.91
A-B	2380	2.52	6,000	0.540	2.00



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

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 1-8-74
 CHIEF - BUREAU OF ENGINEERING

CONTRACT NO. 522-S

LOCATION MAP OF
SANITARY SEWERS

ELECTION DISTRICT NO. 2

DRAWING NO. OF	1	SCALE As Shown	7, 8, 11, 12
	6		13, 15, 16, 17
			18

JUNE 23, 1977

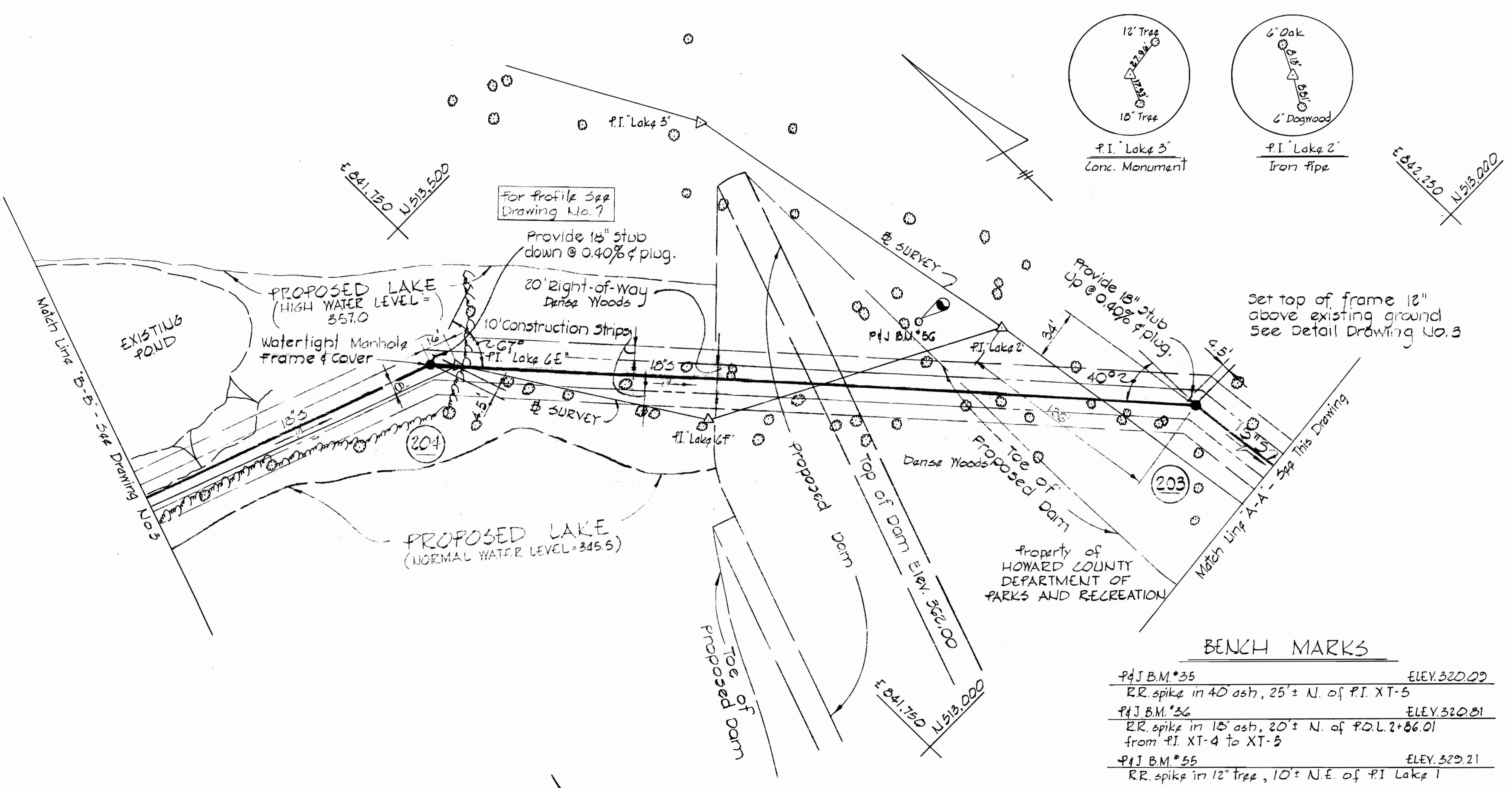
WS 522-5/1

W.O. 53-21

AS BUILT DEC. 19, 1977

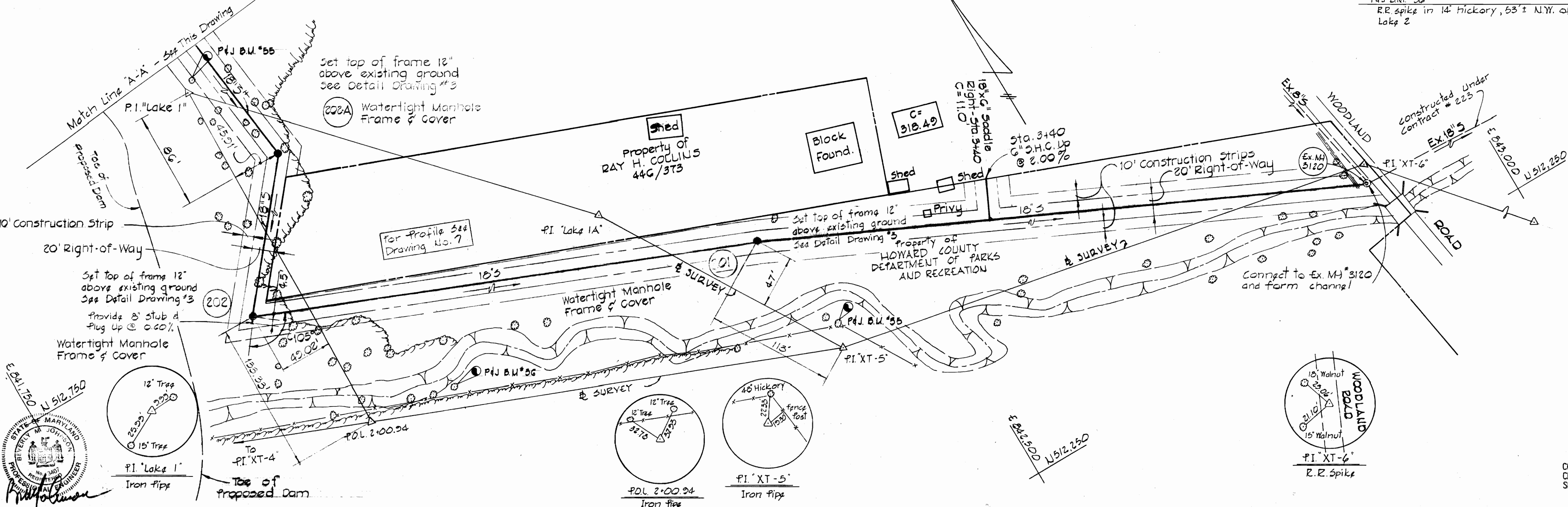
GENERAL NOTES

- Approximate location of existing utilities is 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.
- 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.
- Contractor shall notify the following utilities or agencies at least (5) days before starting work shown on these plans.
BALTIMORE GAS AND ELECTRIC COMPANY
Underground Electric Distribution Engineering
"Damage Control" - Mr. G.J. Zeller, Manager 234-5691
Underground Gas Distribution Engineering - Mr. Bell 234-5533
CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
Mr. Joe Sawcenko, Field Engineer 788-8517
- Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum, or tunnel as required. Cost for tunneling or bracing at poles shall be included in the unit prices bid for excavation.
- All pipe elevations shown are invert elevations.
- All manholes shall be 4'-0" inside diameter, unless otherwise noted.
- The Contractor shall provide a pipe joint in each sewer main within 2'-0" of the exterior of manhole walls.
- Watertight Manhole frame and cover to be used where indicated on drawings (Standard detail S-12 (RCR-63A)).
- For details not shown on the Contract Drawings, see standard details bound in the Specifications.
- Trees are to be protected from damage to the maximum extent.
- 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 price bid for excavation and backfill for sewer mains.
- 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.
- All vertical and horizontal controls are based on Maryland State Grid System.



BENCH MARKS

P4J B.M.*35	ELEV. 320.02
R.R. spike in 40' ash, 25' ± N. of P.I. XT-5	
P4J B.M.*36	ELEV. 320.21
R.R. spike in 15' ash, 20' ± N. of P.O.L. 2+86.01 from P.I. XT-4 to XT-5	
P4J B.M.*55	ELEV. 329.21
R.R. spike in 12' tree, 10' ± N.E. of P.I. Lake 1	
P4J B.M.*56	ELEV. 357.31
R.R. spike in 14' hickory, 53' ± N.W. of P.I. Lake 2	



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1-8-74
DATE

CONTRACT NO. 522-S

PLAN OF SEWER MAINS

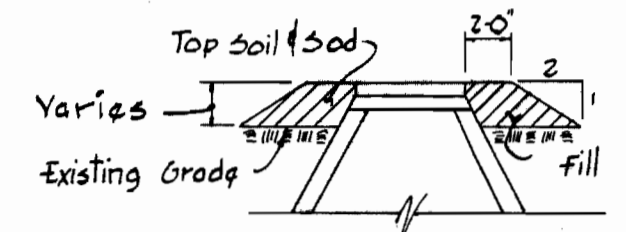
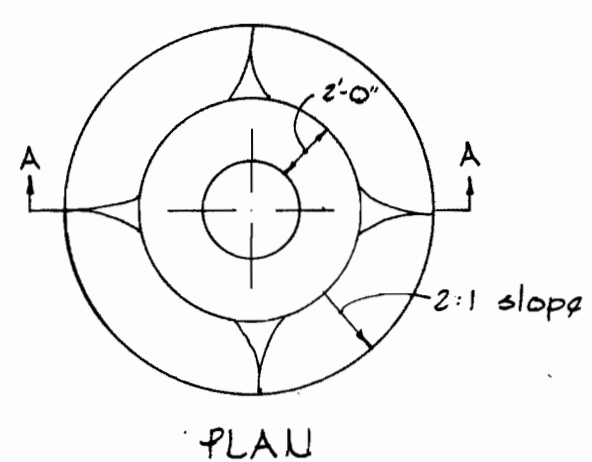
ELECTION DISTRICT NO. 2

DRAWING NO. 2 OF 8

SCALE 1"=50'

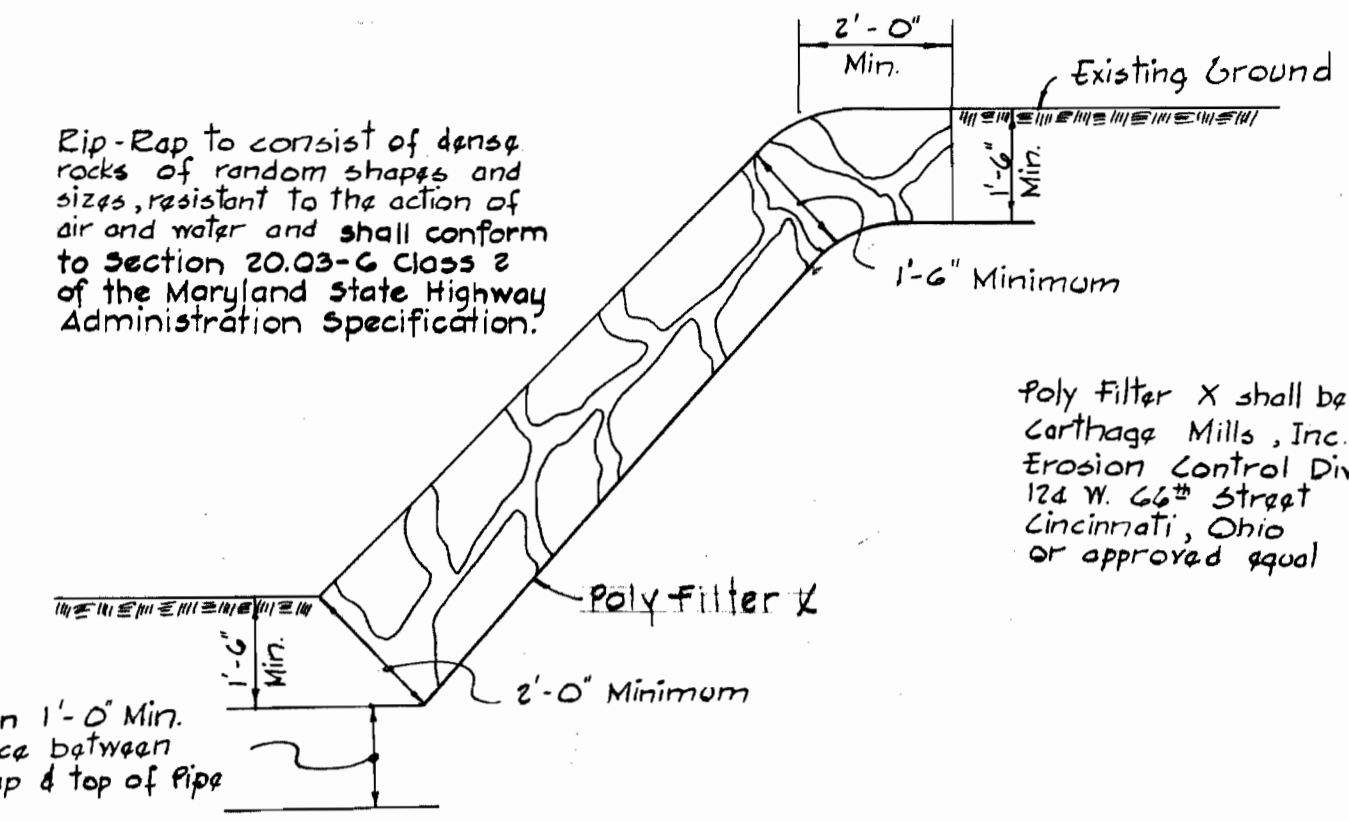
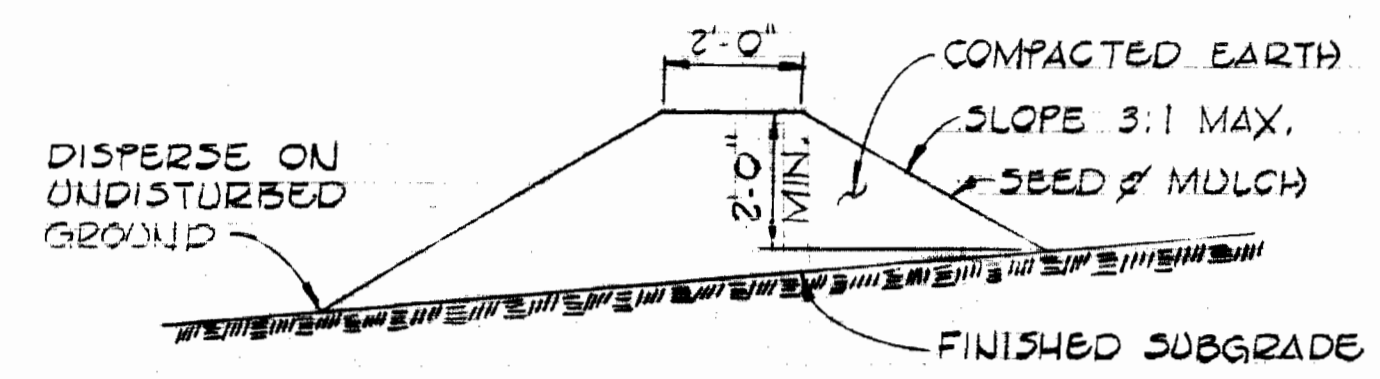
Designed: MGA
Drafted: MGA
Checked: MGA
Pos. ghts. # 12, 16, 17

"AS BUILT" DEC 19 1977



FURNISHING AND PLACING
SPECIAL BACKFILL AT MANHOLES
NO SCALE

Diversion Berms are required every 250 feet on continuous slopes of 4% or greater. The berms shall conform to the typical cross section shown below 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.

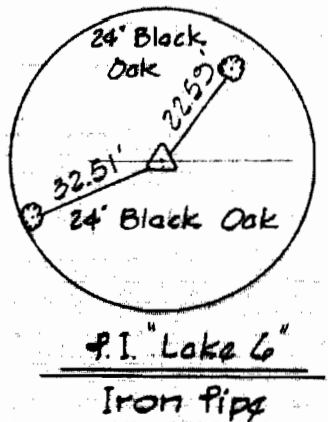
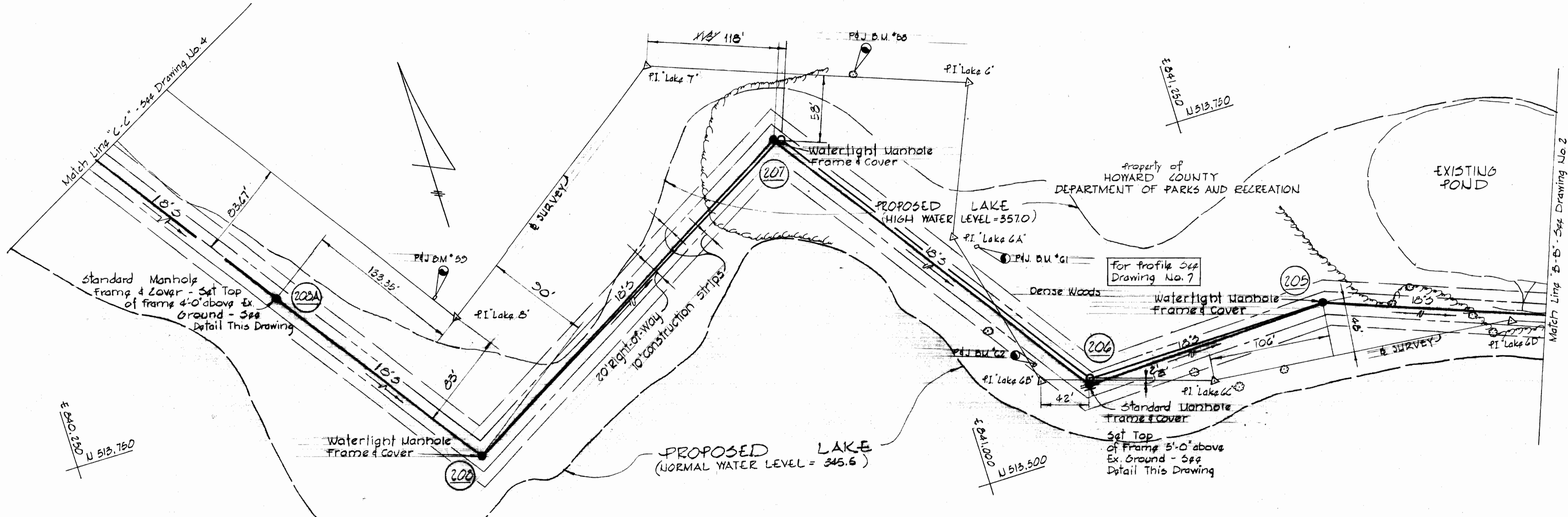


Rip-Rap to consist of dense rocks of random shapes and sizes, resistant to the action of air and water and shall conform to Section 20.03-G Class 2 of the Maryland State Highway Administration Specification.

Poly Filter X shall be as manufactured by Carthage Mills, Inc. Erosion Control Division 124 W. 62nd Street Cincinnati, Ohio or approved equal

BENCH MARKS

- PI J.B.M. #58 ELEV. 357.96
E.R. spike in 36" poplar, 100'± from P.I. Lake 6 to P.I. Lake 7
- PI J.B.M. #59 ELEV. 363.20
Top guard 0' high, 25.4' from P.I. Lake 8 to P.I. Lake 9
- PI J.B.M. #61 ELEV. 352.96
Guard, 15'± S.W. of P.I. Lake 6A
- PI J.B.M. #62 ELEV. 351.51
Guard, 15'± from P.I. Lake 6B to P.I. Lake 6A



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE 1-8-74
W. O. Jeschke
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 522-5

PLAN OF
SEWER MAINS

ELECTION DISTRICT NO. 2

DRAWING
NO. 3
OF 6

SCALE
As Shown

CONTRACT NO. 522-5
CENTENNIAL AREA
SP6050, PHASE II

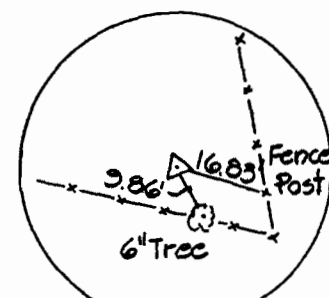
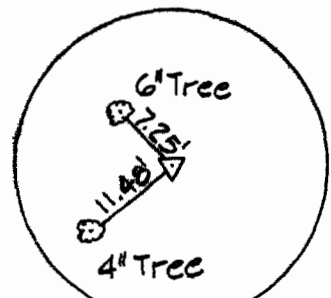
JUNE 23, 1977

WS 522-5/3

"AS BUILT"
DEC. 19, 1977

CENTENNIAL ESTATES

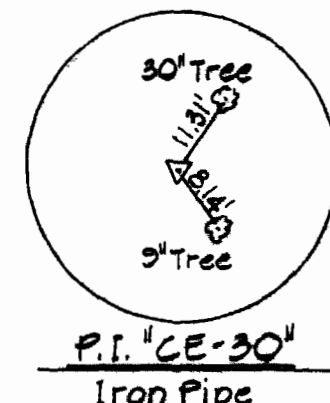
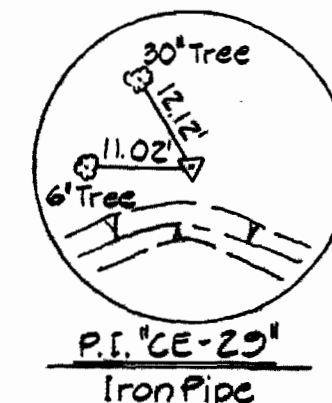
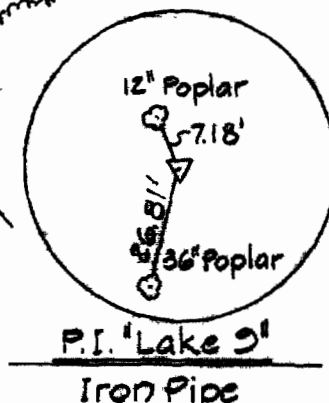
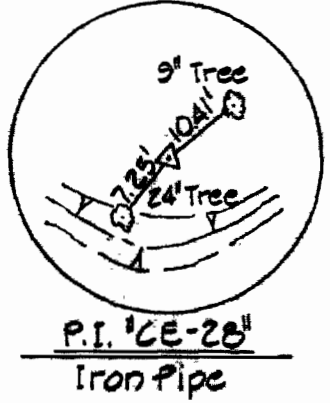
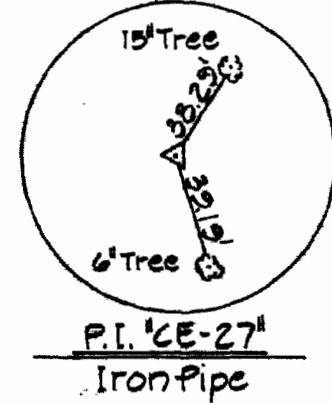
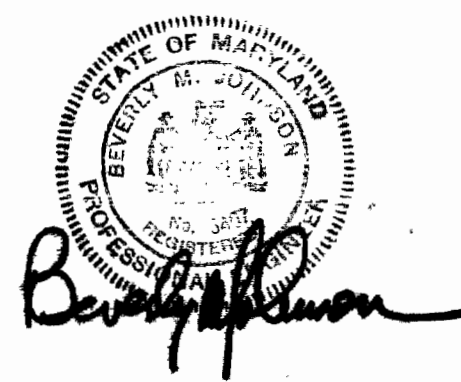
As Proposed by W.R.F.A
3/4/75



Notes:
Set top of frame of Manholes 212 thru 215, 12" above ex. ground. See Detail Drawing No. 3

BENCH MARKS

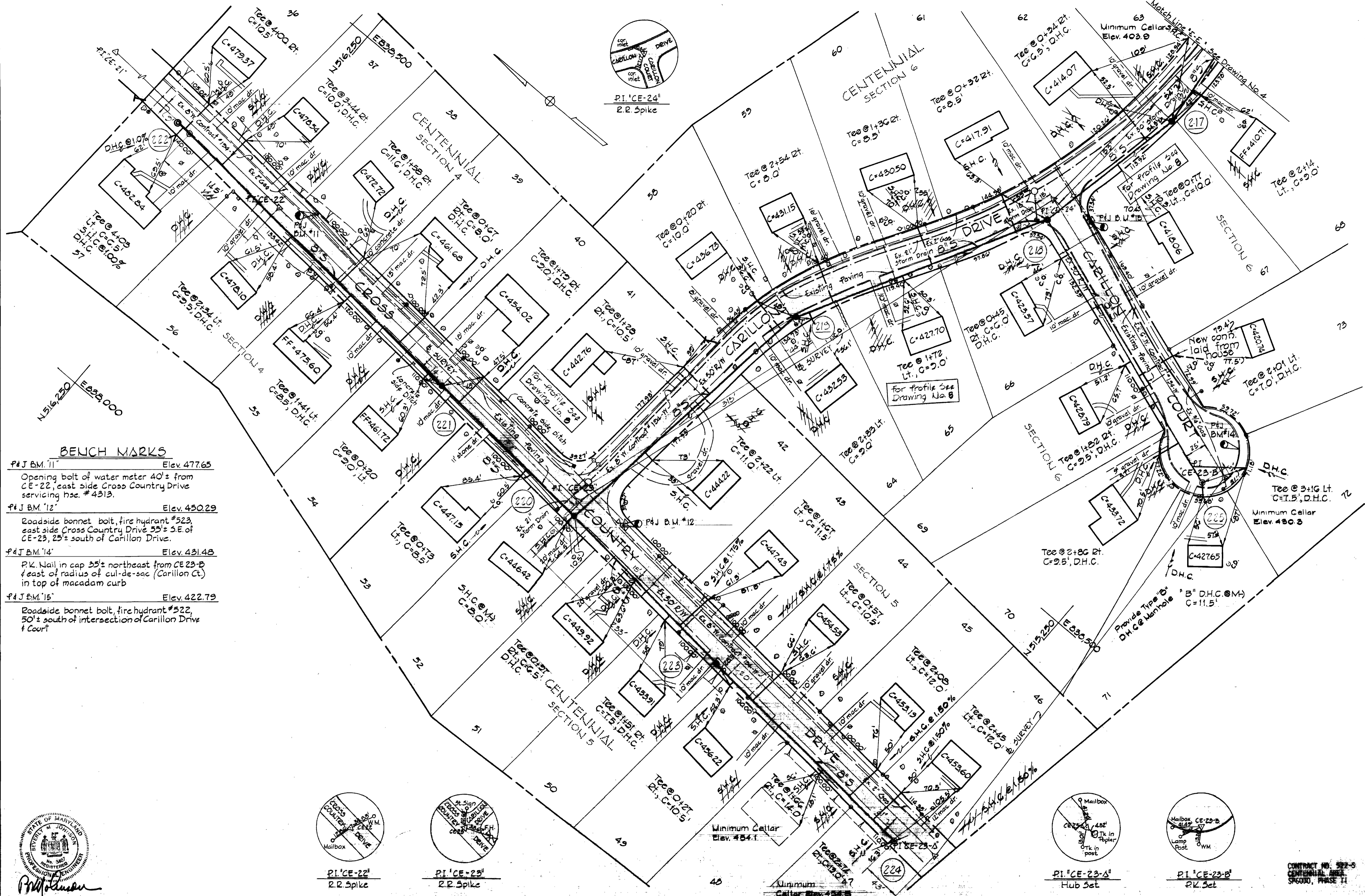
P&J B.M. #46	ELEV. 352.60
R.R. spike set in 36" ash, 10" N of P.I. 'CE-25'.	
P&J B.M. #47	ELEV. 355.57
Nail in root 15" wild cherry, 10" W of P.I. 'CE-28'.	
P&J B.M. #48	ELEV. 361.00
Nail in 8" wild cherry, 5" W of P.O.L. 2+63.71 (P.I. 'CE-27' - P.I. 'CE-28')	
P&J B.M. #49	ELEV. 371.85
Nail in 18" wild cherry, 40" S of P.I. 'CE-27'.	
P&J B.M. #50	ELEV. 383.80
Nail in 4" wild cherry, 10" S of P.I. 'CE-26'.	
P&J B.M. #51	ELEV. 392.36
Cut nail in 4" wild cherry, 35" W of P.I. 'CE-25'.	
P&J B.M. #60	ELEV. 368.40
R.R. spike in 36" poplar, 27" W of P.I. 'Lake 0'.	



PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-9-74 DATE	CONTRACT NO. 522-5	PLAN OF SEWER MAINS	ELECTION DISTRICT NO. 2	DRAWING NO. 4	SCALE 1" = 50'
					OF 6	

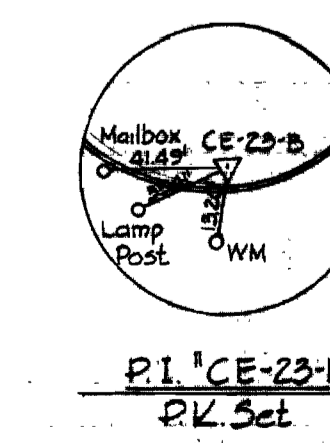
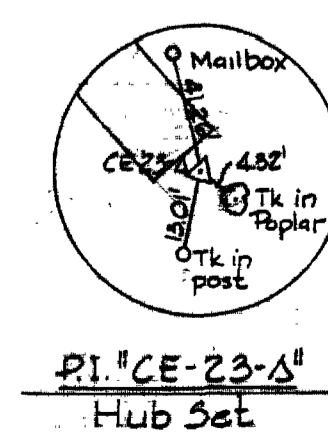
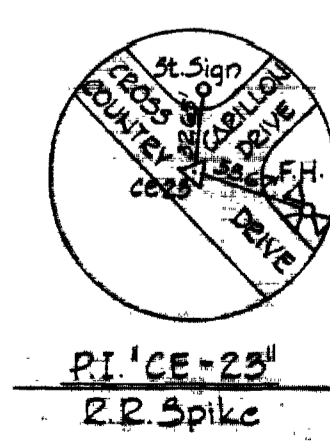
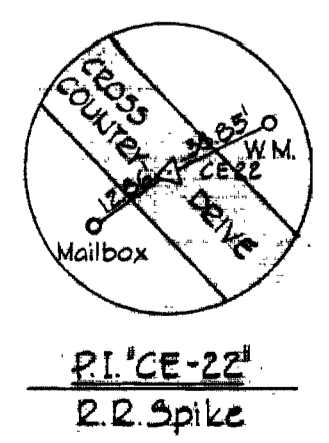
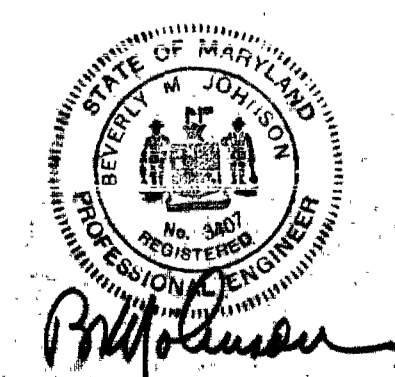
WS 522-5/4

"AS BUILT" Dec. 12, 1977



BENCH MARKS

- P&J B.M. "11" Elev. 477.65
Opening bolt of water meter 40'± from CE-22, east side Cross Country Drive servicing hse. #4313.
- P&J B.M. "12" Elev. 450.29
Roadside bonnet bolt, fire hydrant #523, east side Cross Country Drive 35'± S.E. of CE-23, 25'± south of Carillon Drive.
- P&J B.M. "14" Elev. 431.48
P.K. Nail in cap 35'± northeast from CE-23-B (east of radius of cul-de-sac (Carillon Ct.) in top of macadam curb
- P&J B.M. "15" Elev. 422.79
Roadside bonnet bolt, fire hydrant #522, 50'± south of intersection of Carillon Drive & Court



CONTRACT NO. 522-5
CENTENNIAL AREA
SP690, PHASE "A"

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1-8-74
DATE
W. O. Filbert
CHIEF - BUREAU OF ENGINEERING

CONTRACT NO. 522-5

PLAN OF
SEWER MAINS

SECTION NUMBER NO. 2

DRAWING SCALE
NO. 3
OF 8
1"=50'

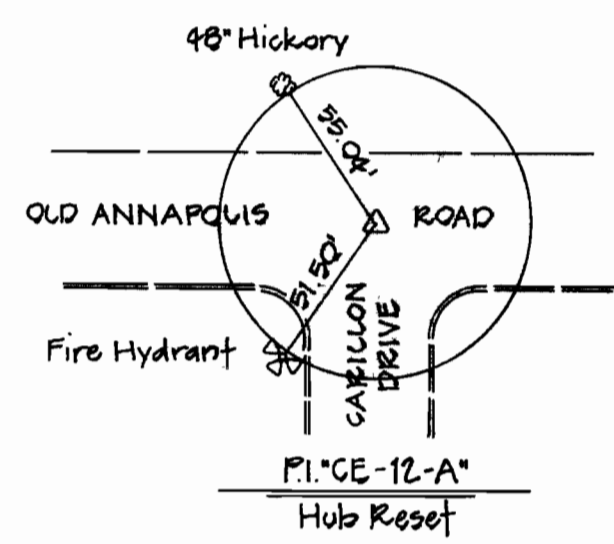
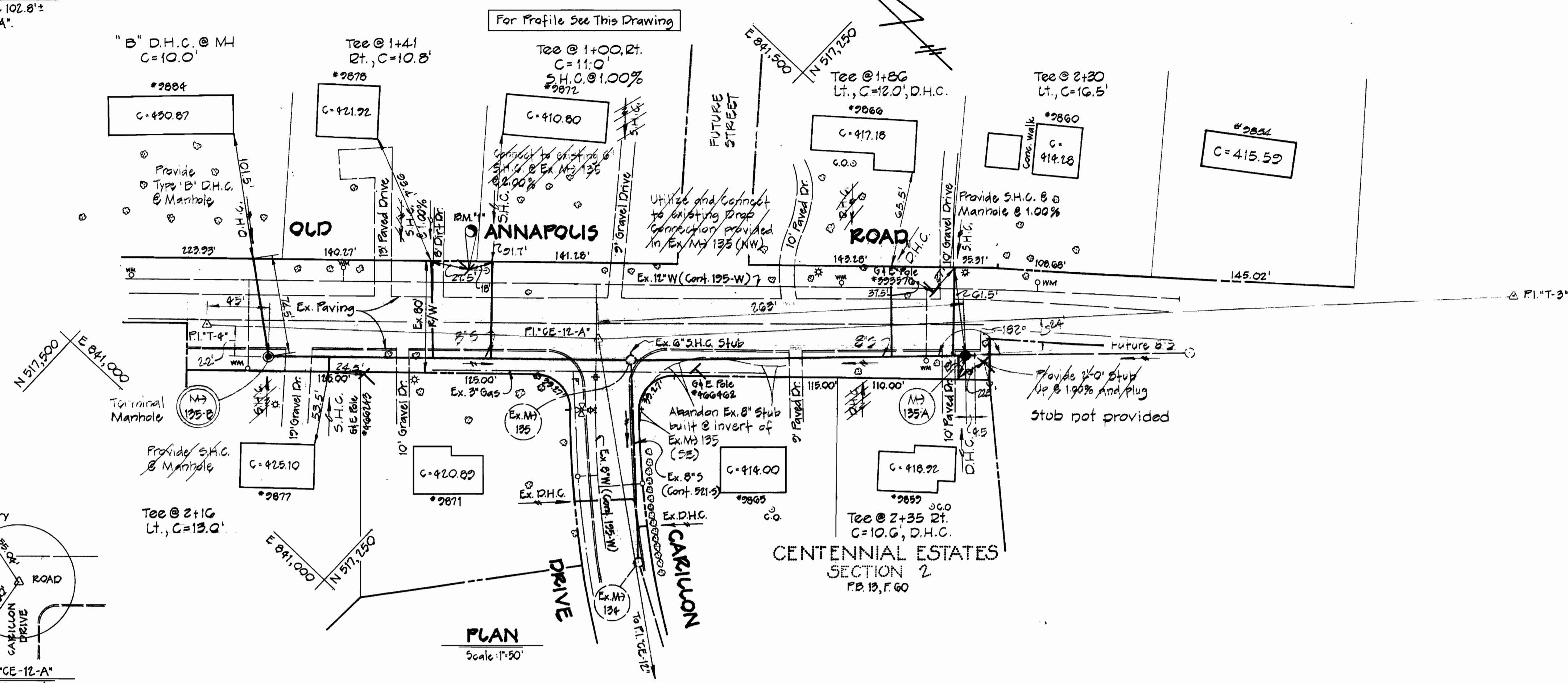
JUNE 23, 1977

WS 522-S/5

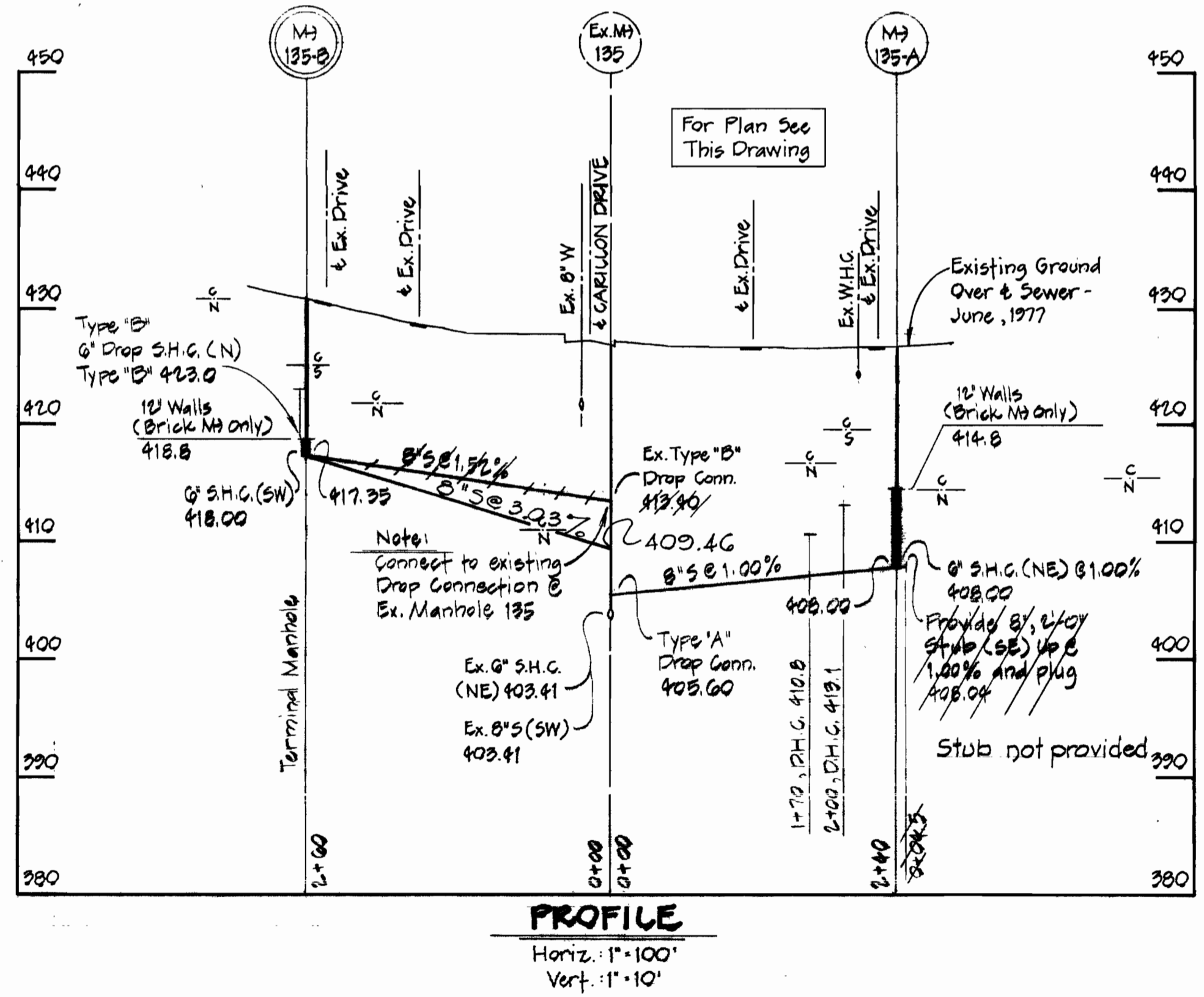
"AS BUILT"
DEC. 19, 1977

BENCH MARK

BM "1" Elev. 426.47
Galvanized Spike in Pole 102.8'±
Northeast of P.I. "CE-12-A"



OLD ANNAPOUS ROAD

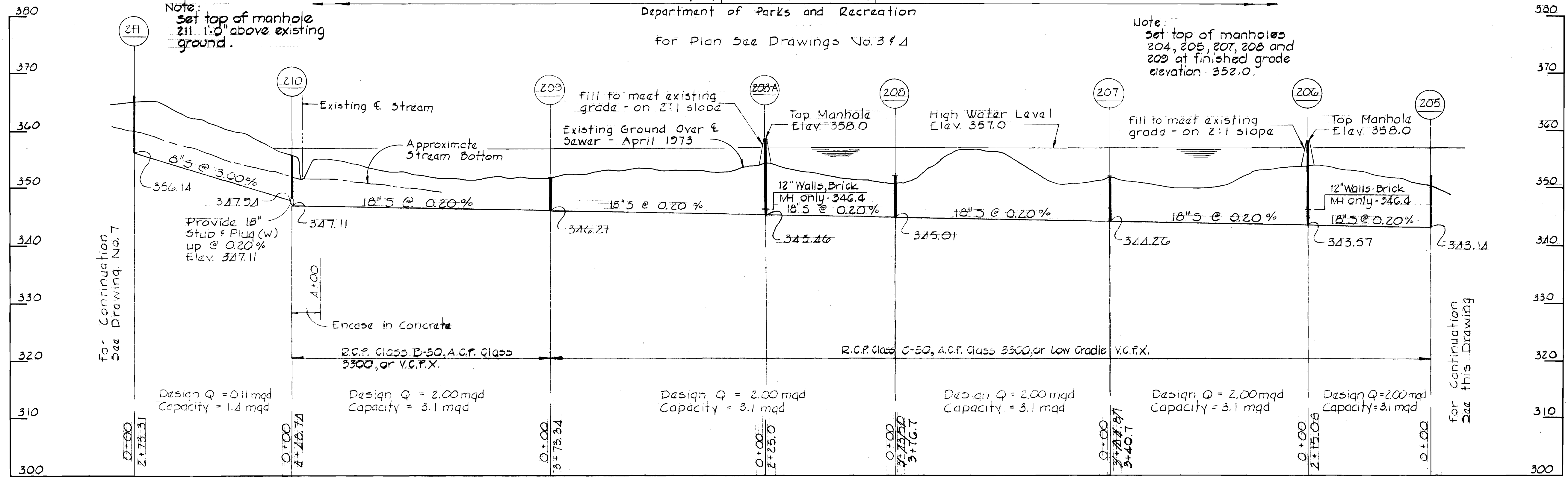


Contract No. 522-5
Centennial Area
S-4-6030, Phase II

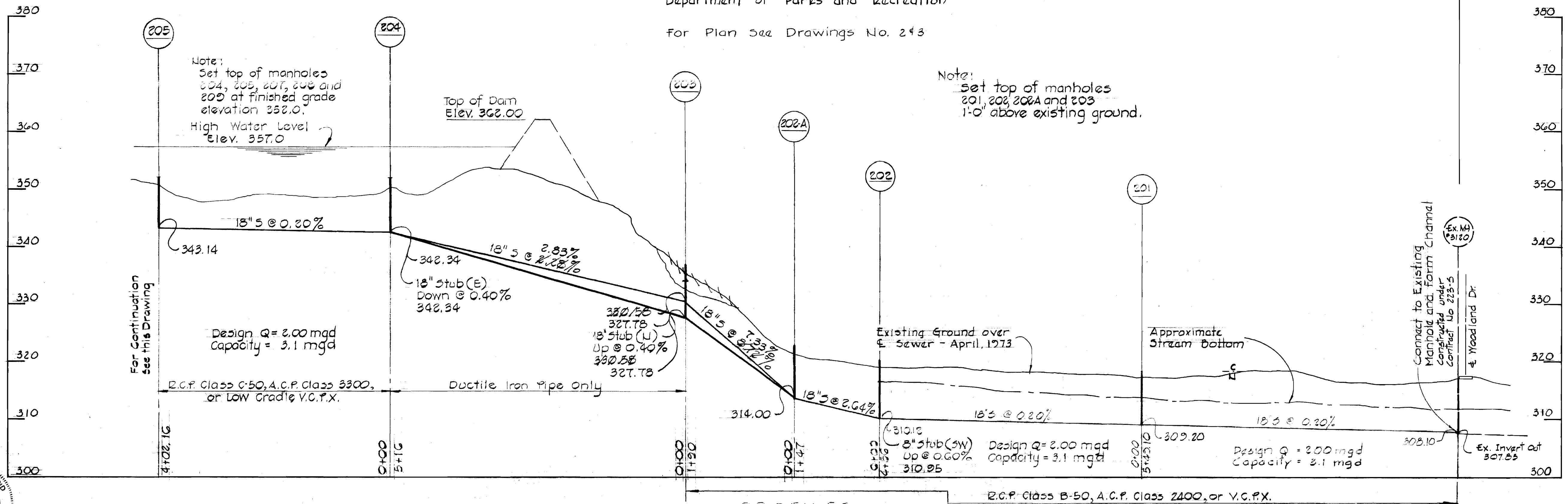
PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 6-14-77 DIRECTOR OF PUBLIC WORKS DATE	CONTRACT NO. 522-S CAPITAL PROJECT NO. S-4-6030 6-24-77 CHIEF BUREAU OF ENGINEERING DATE	PLAN & PROFILE OF SEWER MAINS	ELECTION DISTRICT NO. 2	DRAWING NO. 6	SCALE AS SHOWN	Designed: RDB
					OF 8		Checked: TAF

"AS BUILT" DEC. 19, 1977

Property of Howard County
Department of Parks and Recreation
For Plan See Drawings No. 3f4



Property of Howard County
Department of Parks and Recreation
For Plan See Drawings No. 2f3

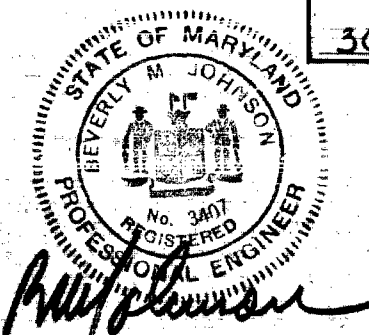


PROFILES

SCALE: Horiz. 1" = 100'
Vert. 1" = 10'

CONTRACT NO. 522-5
CENTRAL AREA
SPCRO, PHASE II

"AS BUILT"
Dec. 12, 1977



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE 1-8-74
200
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 522-5

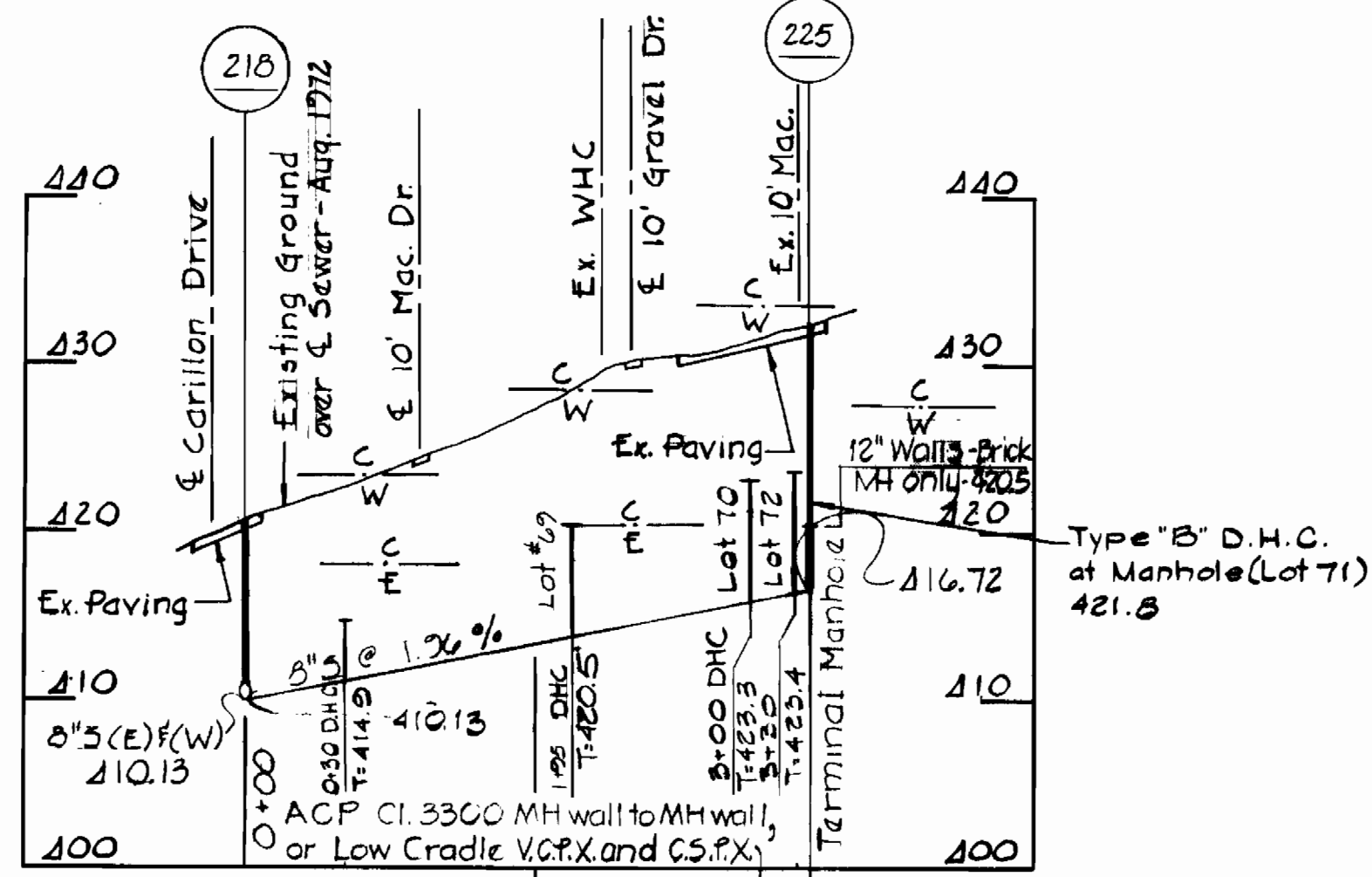
PROFILES

ELECTION DISTRICT NO. 2

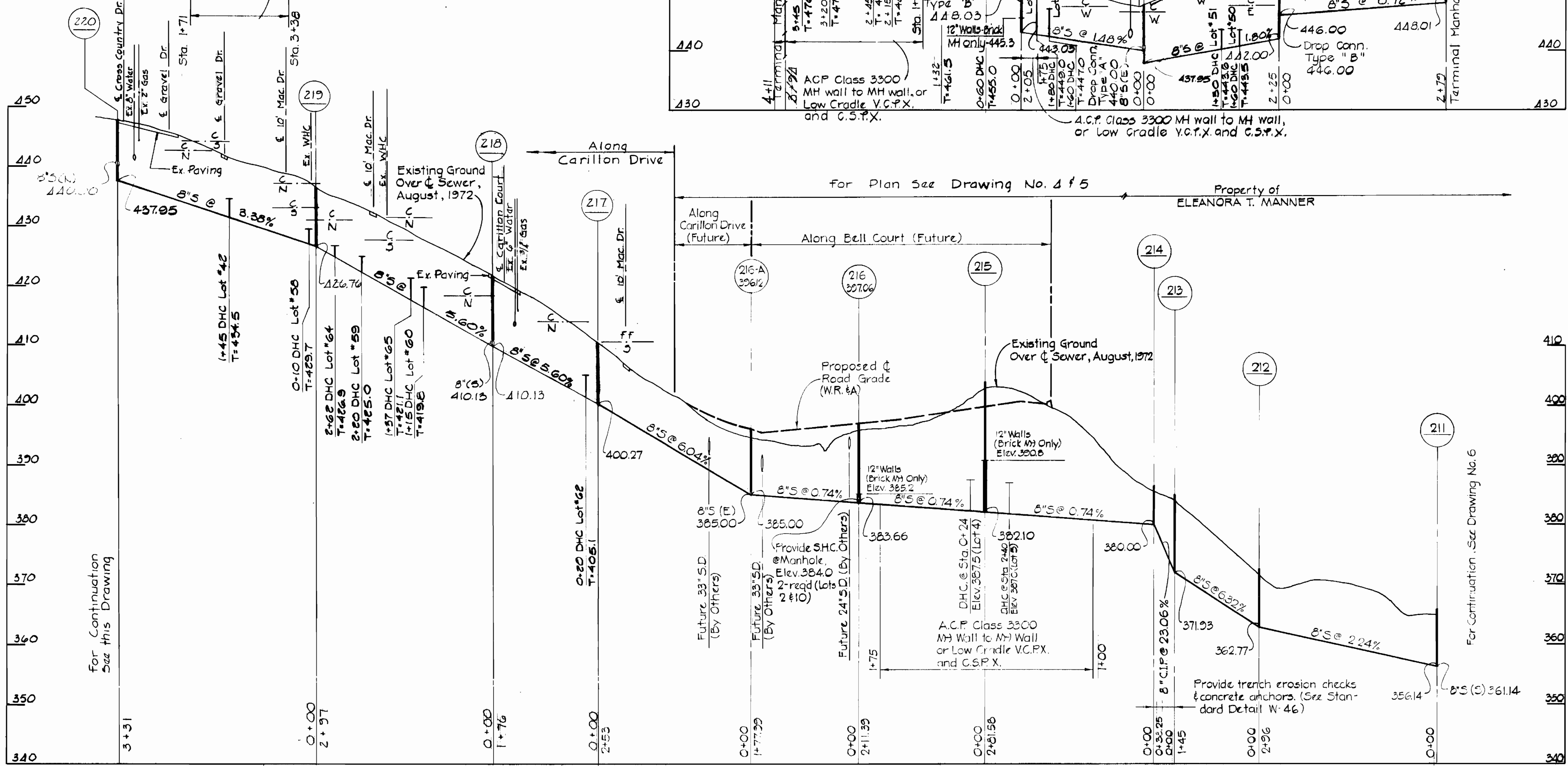
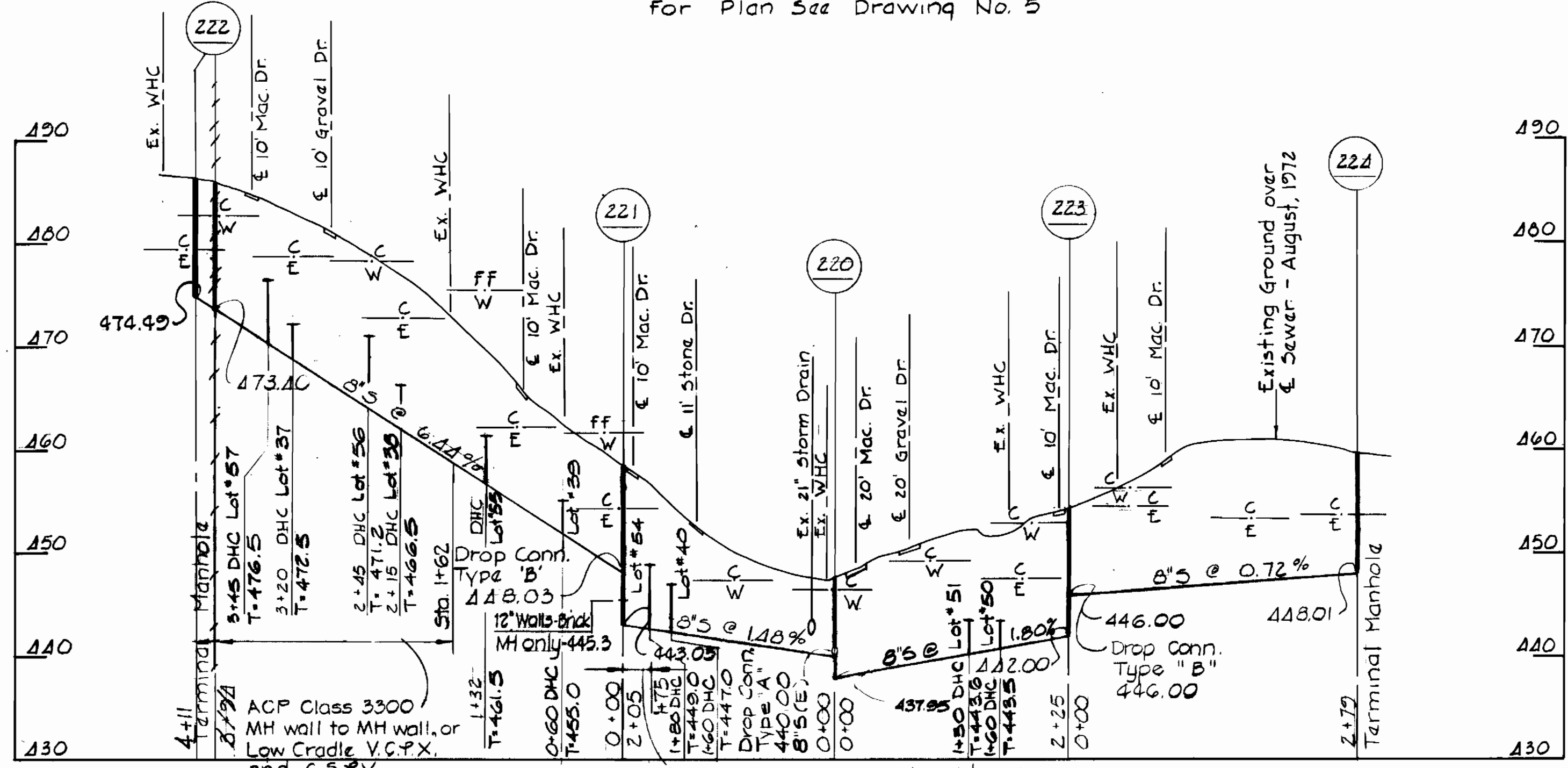
DRAWING NO. 7
OF 8

SCALE As Shown
Checked: MS

CARILLON COURT
For Plan See Drawing No. 5



CROSS COUNTRY DRIVE
For Plan See Drawing No. 5



PROFILES

SCALE: Horiz. 1" = 100'
Vert. 1" = 10'



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 1-8-74
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 522-S

PROFILES

ELECTION DISTRICT NO 2

DRAWING NO. 8 OF 8

SCALE: As Shown
Assigned: MCA
Drafted: AM
Checked: DM