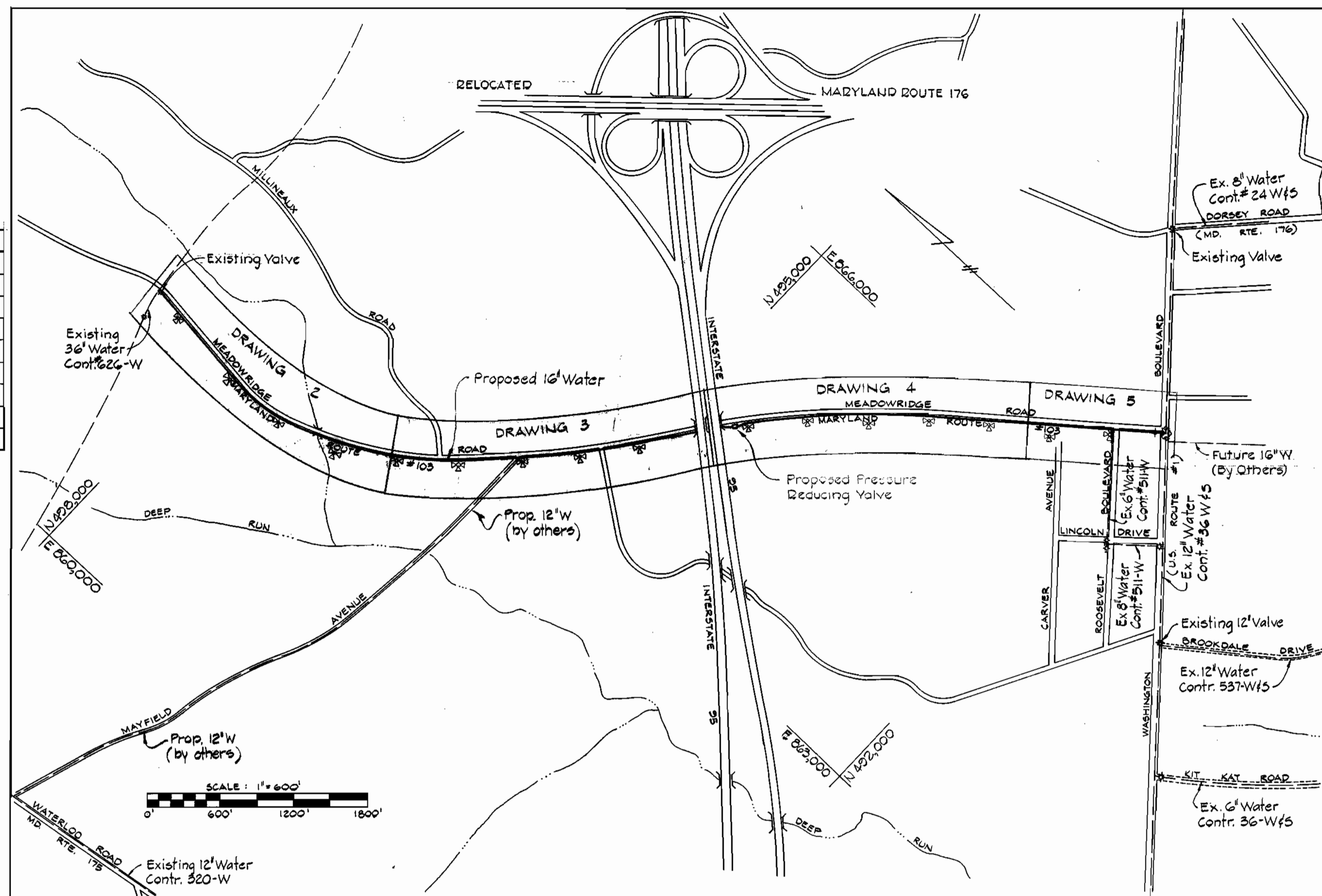


QUANTITIES			
SIZE	ESTIMATED	"AS-BUILT"	SUPPLIER
16" W	8435 L.F.	8435 L.F.	Atlantic
12" W	18 L.F.	18 L.F.	Atlantic
8" W	26 L.F.	27 L.F.	Atlantic
6" W	170 L.F.	178 L.F.	Atlantic
Fire Hydrant	16 Ea.	14 EQ.	M & H
Air Release Valve	2 Ea.	2 Ea.	GA Indus.
Pressure Reducing Valve	1 Ea.	1 EQ.	M & H
20" Steel Mains Pipe	234 L.F.*	234 L.F.	
16" Steel Water Pipe	240 L.F.*	240 L.F.	

* Does Not Include Lump Sum Item A-17



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 supply. Any damage incurred due to the contractor's operations shall be repaired immediately at the contractor's expense.
- All pipe elevations shown are \odot invert elevations.
- The contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in the vicinity of proposed utilities.
- For standard details see standards bound in specifications.
- Clear all utilities by a minimum of 6". Clear all utility poles by 2'-0" minimum or tunnel as required. Any costs incurred to the contractor for tunneling or bracing at poles shall be included in unit prices bid for excavation.
- 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 & 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 - 725-9978
 Miss Utility - 1-800-393-3648
- 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.
- 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 water mains to be C.I.P. or C.L.P. unless otherwise noted.
- Top of all water mains to have a minimum of 3'-6" cover unless otherwise noted.
- All valves shall be strapped to tees, where applicable, in accordance with standard details.
- Buttress or anchor all water main fittings with concrete in accordance with details in the specifications.
- Bury line elevations on fire hydrants shall be set to the 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 to be compacted in accordance with Section 5-15 of the Standard Specifications.
- Cost of strapping fire hydrants and valves to be included in the unit price bid for furnishing and installing fire hydrants.
- All rights of way for fire hydrants are in accordance with Standard Detail W-47 unless otherwise noted.
- Horizontal and vertical control is based on the Maryland State Grid Coordinate System.

CAPITAL PROJECT W-5-8047

CONTRACT NO. 713-W

**MEADOWRIDGE ROAD WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND**

DEPARTMENT OF PUBLIC WORKS

Bundy W. Johnson

CONTRACT NO. 713-W
MEADOWRIDGE ROAD
HOWARD COUNTY CAPITAL PROJECT W-5-8047
WATER MAIN EXTENSION

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. E. J. ... 6/28/78 *W.O. ...* 6-28-78
DIRECTOR OF PUBLIC WORKS / DATE CHIEF BUREAU OF ENGINEERING / DATE

CONTRACT NO. 713-W
CAPITAL PROJECT NO. W-5-8047

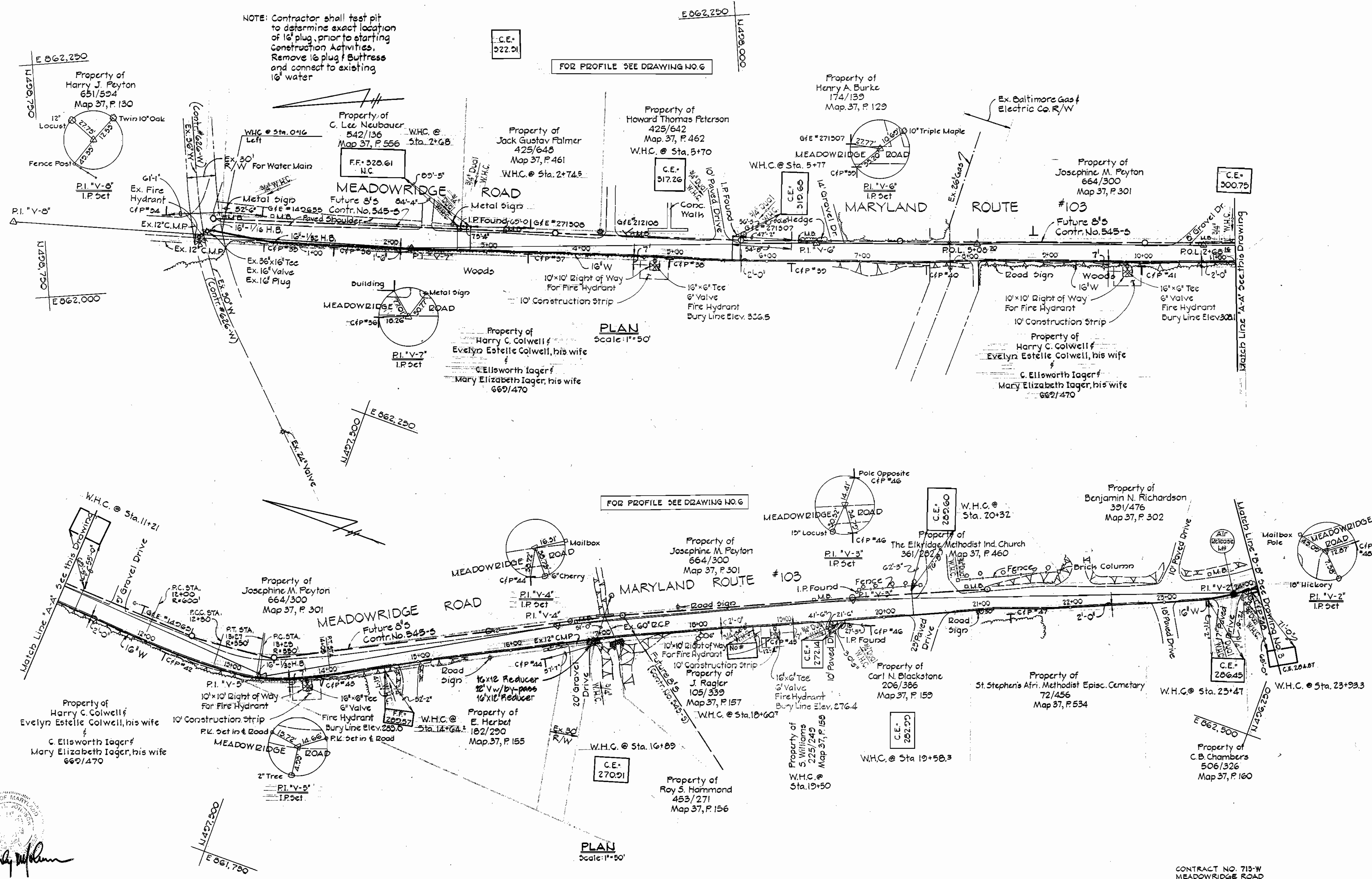
LOCATION MAP

MEADOWRIDGE ROAD - MARYLAND ROUTE #103
ELECTION DISTRICT ELKCRIDGE NO. 1

DRAWING NO. 1	SCALE AS SHOWN
OF 9	

WS 713-W/1

NOTE: Contractor shall test pit to determine exact location of 16" plug, prior to starting construction activities. Remove 16" plug & buttress and connect to existing 16" water



Bruce J. Johnson

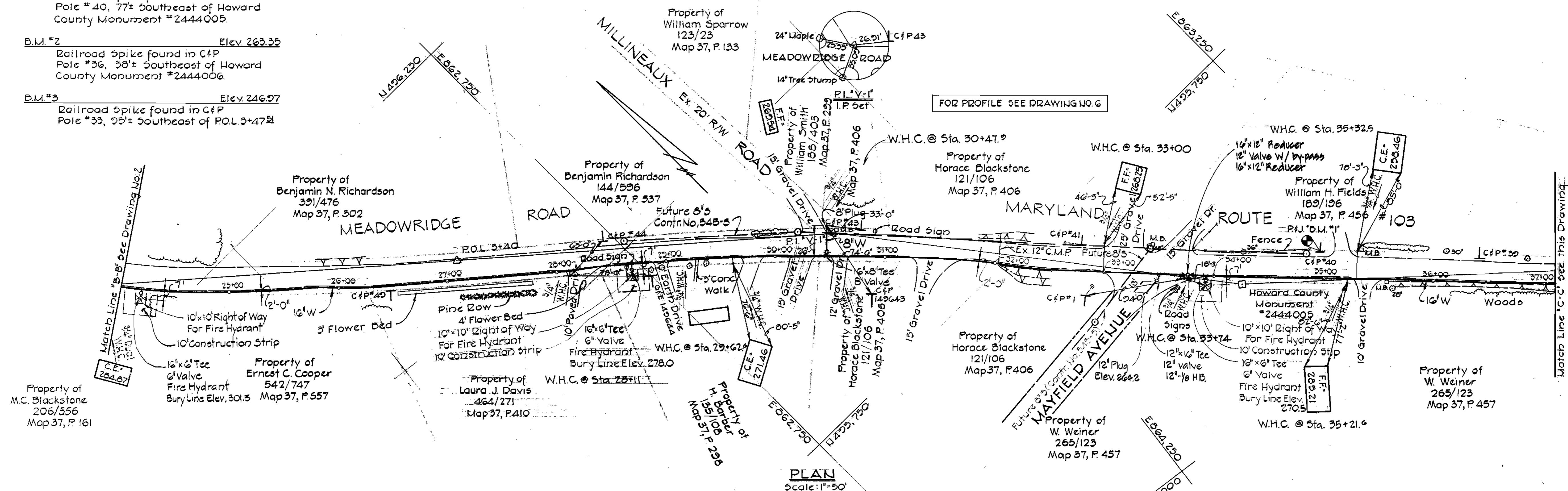
CONTRACT NO. 713-W
MEADOWRIDGE ROAD
HOWARD COUNTY CAPITAL PROJECT W-5-8047
WATER MAIN EXTENSION

WS 713-W/2

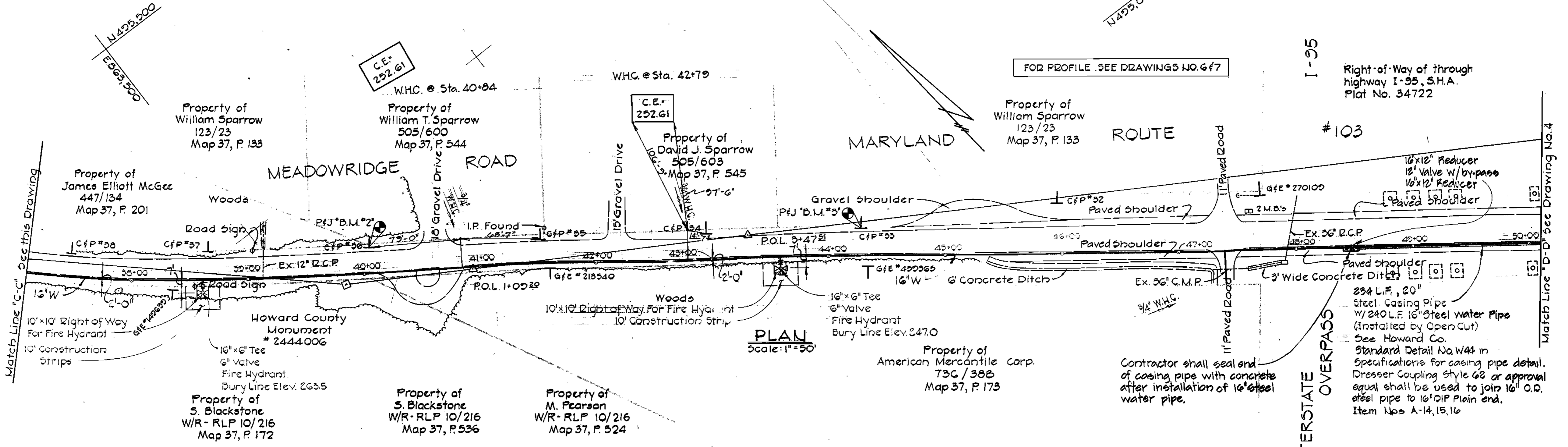
<p>PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND</p>	<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R.E. Grudenberg</i> 6/28/78 <i>W.O. Zilber</i> 6-28-78 DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE</p>	<p>CONTRACT NO. 713-W CAPITAL PROJECT NO. W-5-8047</p>	<p>PLAN OF WATER MAINS</p>	<p>MEADOWRIDGE ROAD-MARYLAND ROUTE #103 ELECTION DISTRICT ELK RIDGE NO.1</p>	<p>DRAWING NO. 2 OF 9 SCALE 1"=50'</p>	<p>DESIGNED E.D.C. DRAFTED T.A.W. CHECKED E.D.C. DATE 5/23/78</p>
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BENCH MARKS

- B.M. #1 Elev. 272.63
Railroad Spike found in C&P Pole #40, 77' Southeast of Howard County Monument #2444005
- B.M. #2 Elev. 263.35
Railroad Spike found in C&P Pole #36, 38' Southeast of Howard County Monument #2444006
- B.M. #3 Elev. 246.97
Railroad Spike found in C&P Pole #33, 95' Southeast of P.O.L. 3+47.5



PLAN Scale: 1"=50'



PLAN Scale: 1"=50'



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ENGINEERS
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BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. E. Linderburg 6/28/78 W. O. Pithers 6-28-78
DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE

CONTRACT NO. 713-W
CAPITAL PROJECT NO. W-5-8047

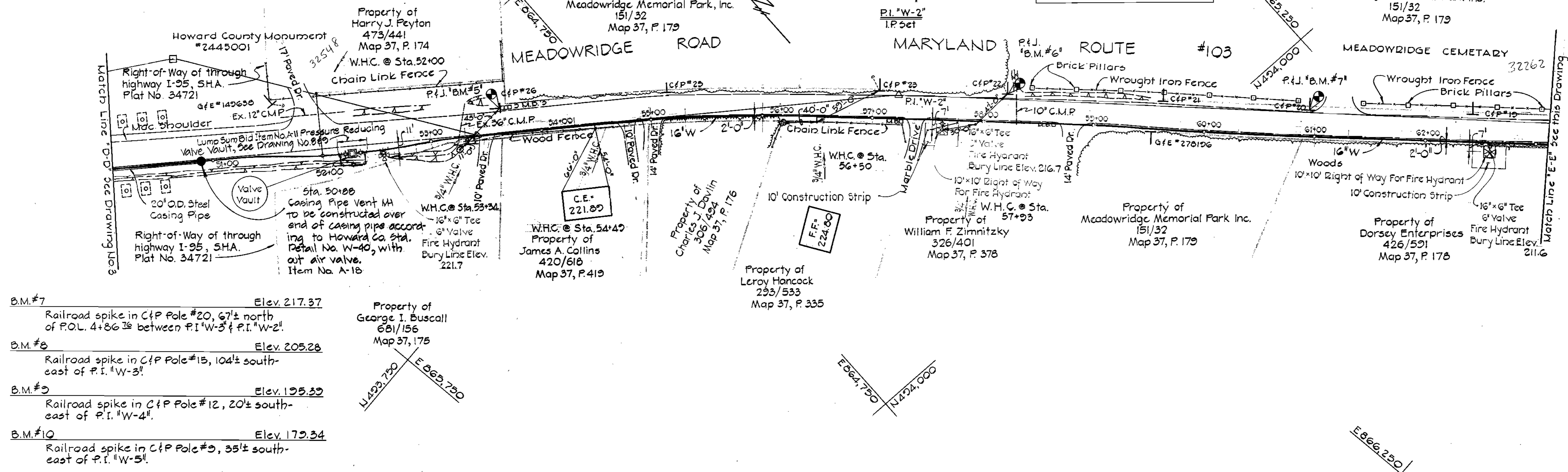
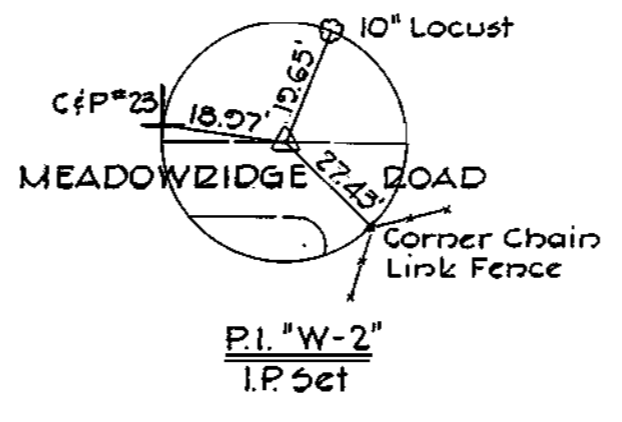
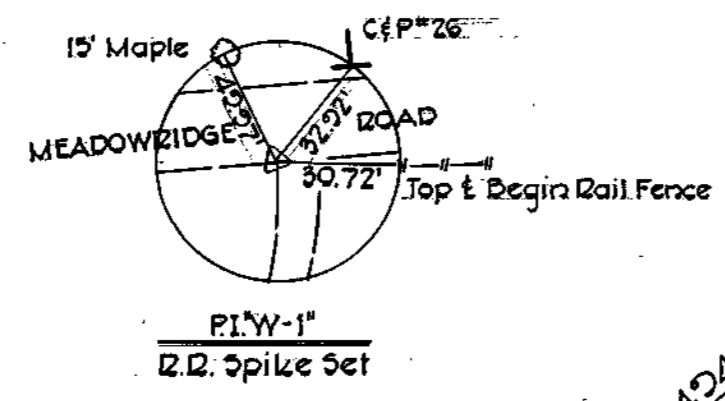
PLAN OF WATER MAINS

MEADOWRIDGE ROAD - MARYLAND ROUTE #103
ELECTION DISTRICT ELKRIDGE NO.1

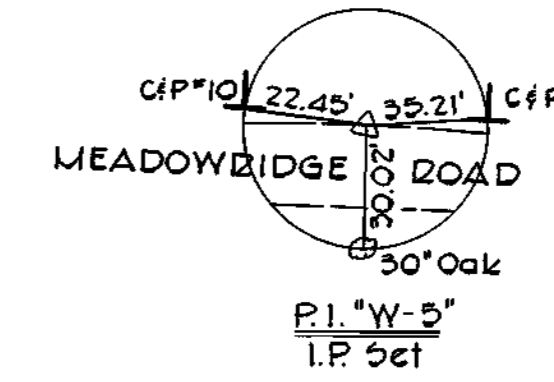
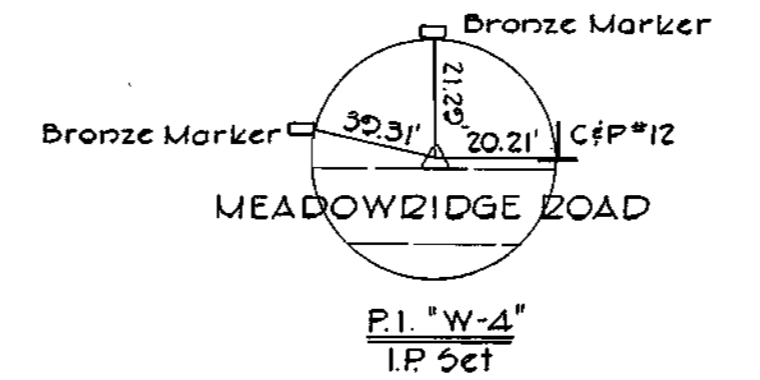
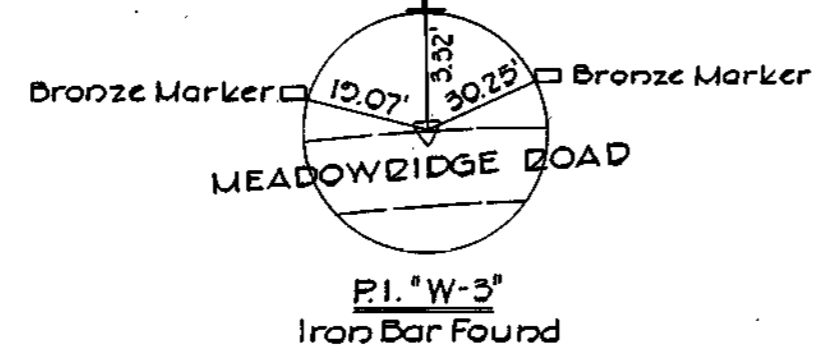
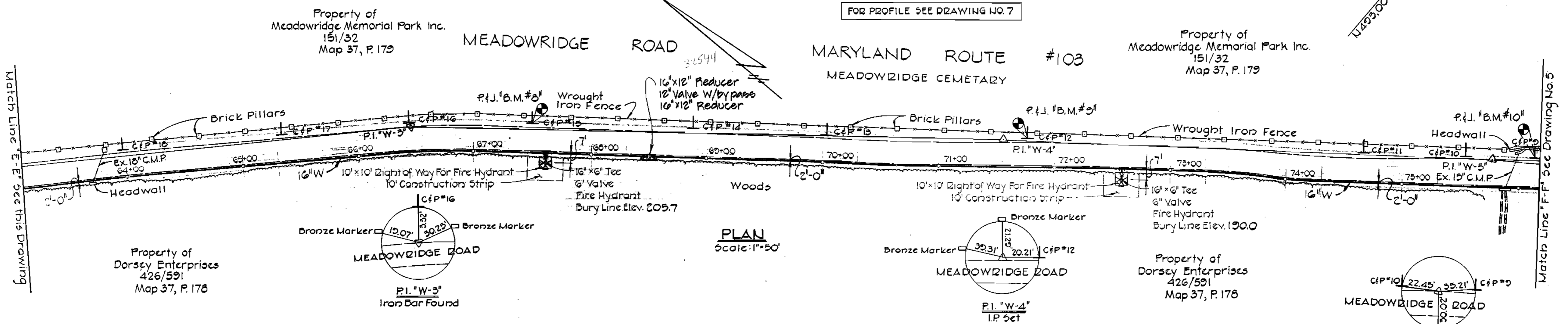
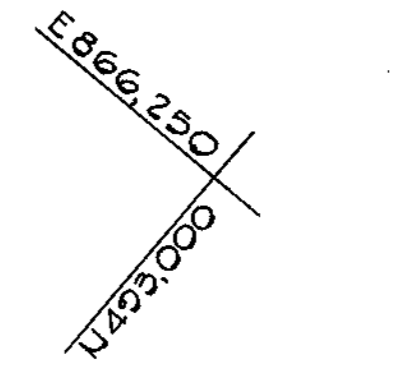
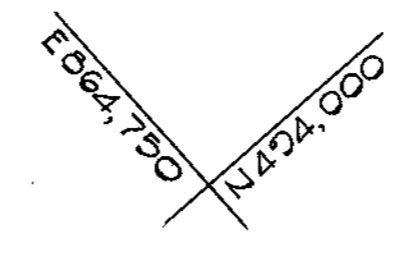
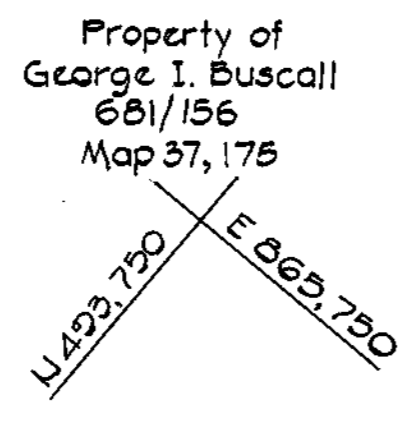
DRAWING NO. 3 OF 9
SCALE 1"=50'
DESIGNED E.D.C.
DRAFTED T.A.W.
CHECKED E.D.C.
DATE 5/23/78

BENCH MARKS

- B.M.#4 Elev. 247.22
X-cut top end of bridge abutment 12'± west of Howard County Monument #2445001.
- B.M.#5 Elev. 221.31
Railroad spike in C&P Pole #26, 33'± south-east of P.I. "W-1".
- B.M.#6 Elev. 216.62
Railroad spike in C&P Pole #22, 100'± south-east of P.I. "W-2".



- B.M.#7 Elev. 217.37
Railroad spike in C&P Pole #20, 67'± north of P.O.L. 4+86.76 between P.I. "W-3" & P.I. "W-2".
- B.M.#8 Elev. 205.28
Railroad spike in C&P Pole #15, 104'± south-east of P.I. "W-3".
- B.M.#9 Elev. 195.39
Railroad spike in C&P Pole #12, 20'± south-east of P.I. "W-4".
- B.M.#10 Elev. 179.34
Railroad spike in C&P Pole #9, 35'± south-east of P.I. "W-5".



Randy W. Johnson

CONTRACT NO. 713-W
MEADOWRIDGE ROAD
HOWARD COUNTY CAPITAL PROJECT W-5-8047
WATER MAIN EXTENSION

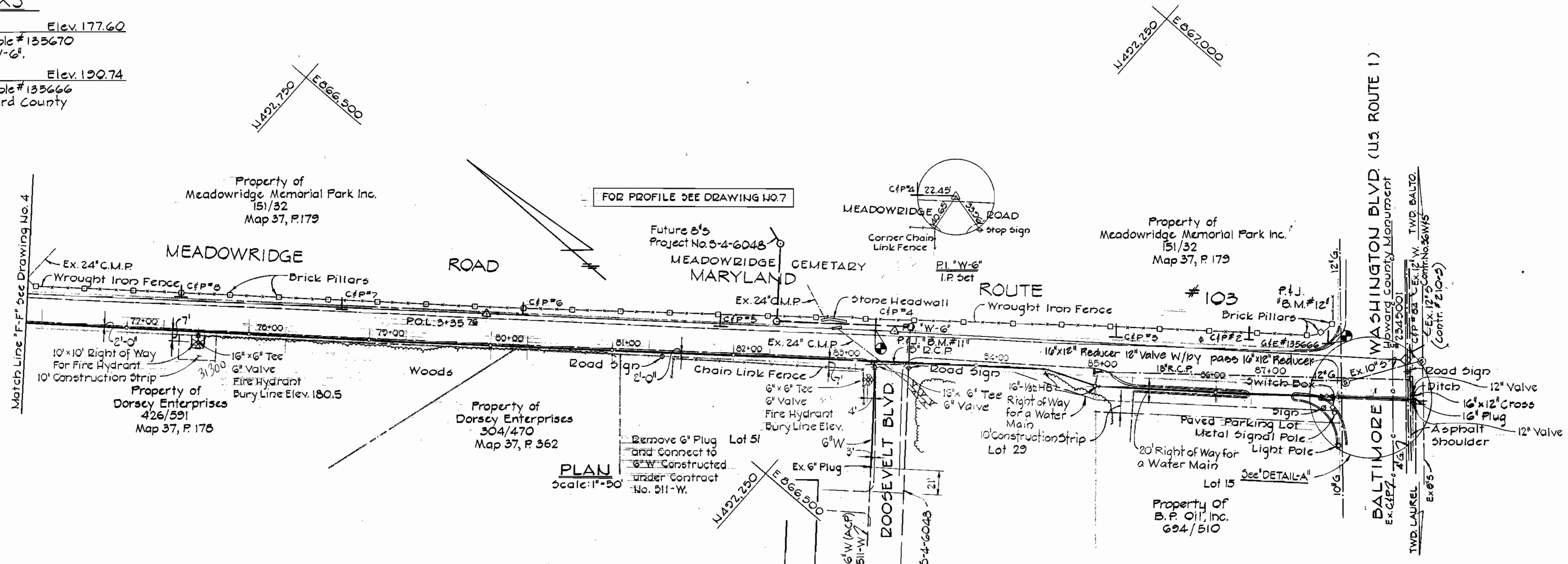
PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R.E. Brudenbury</i> 6/28/78 <i>W.O. Johnson</i> 6/28/78 DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE	CONTRACT NO. 713-W CAPITAL PROJECT NO. W-5-8047	PLAN OF WATER MAINS	MEADOWRIDGE ROAD - MARYLAND ROUTE #103 ELECTION DISTRICT ELKRIDGE NO.1	DESIGNED E.D.C.	DRAWING NO. 4 OF 9	SCALE 1"=50' 5/23/78
					DRAFTED T.A.W.		

WS 713-W/4

BENCH MARKS

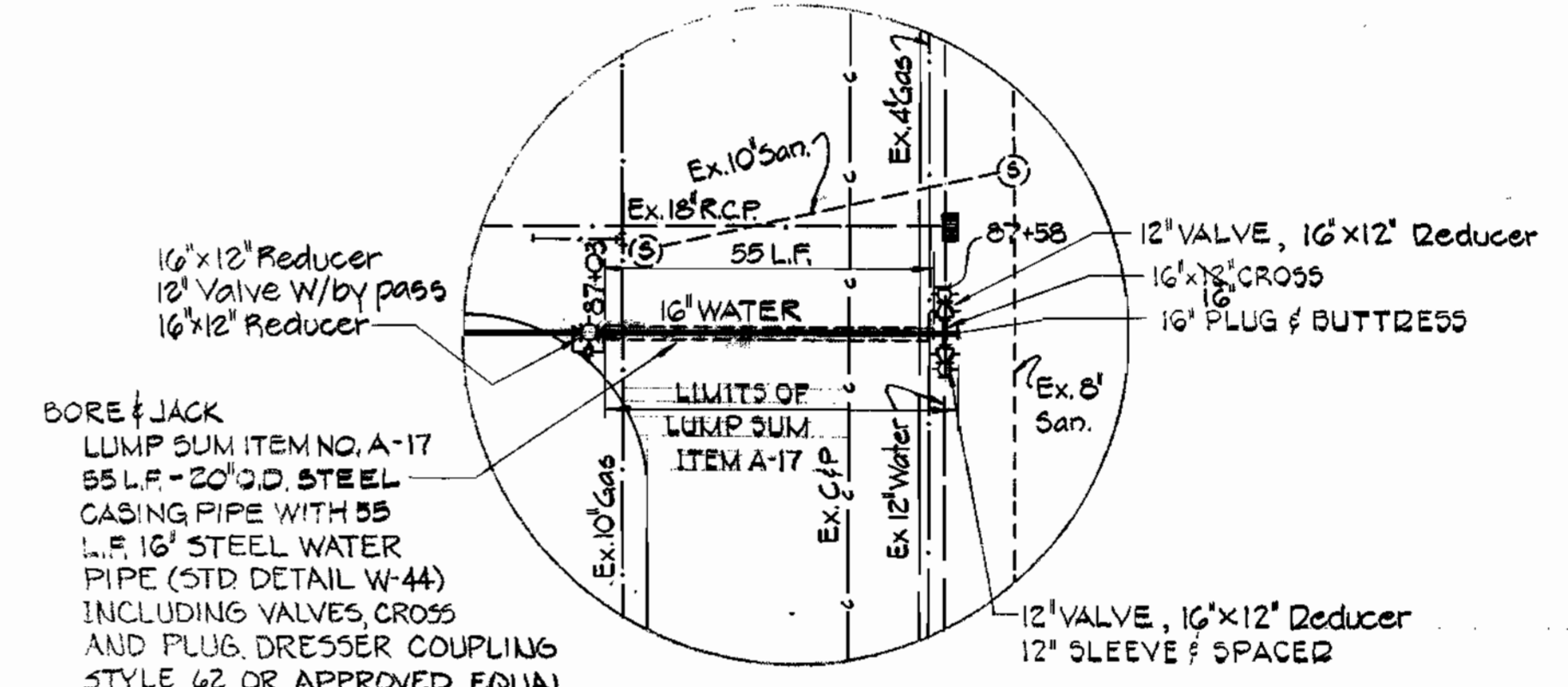
B.M. #11 Elev. 177.60
 Railroad spike in Gate Pole #135670
 18'± northwest of P.I. #W-6.

B.M. #12 Elev. 190.74
 Railroad spike in Gate Pole #135666
 66'± northwest of Howard County
 Monument #2345001.



FOR PROFILE SEE DRAWING NO. 7

PLAN
 Scale: 1"=50'



BORE & JACK
 LUMP SUM ITEM NO. A-17
 55 L.F. - 20\"/>

DETAIL 'A'
 Not to Scale



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 1023 N. CALVERT ST.
 BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
R.E. Brandenburg 6/28/78 *W.O. Peltner* 6-23-78
 DIRECTOR OF PUBLIC WORKS DATE: CHIEF BUREAU OF ENGINEERING DATE:

CONTRACT NO. 713-W
 CAPITAL PROJECT NO. W-5-8047

PLAN OF
 WATER MAINS

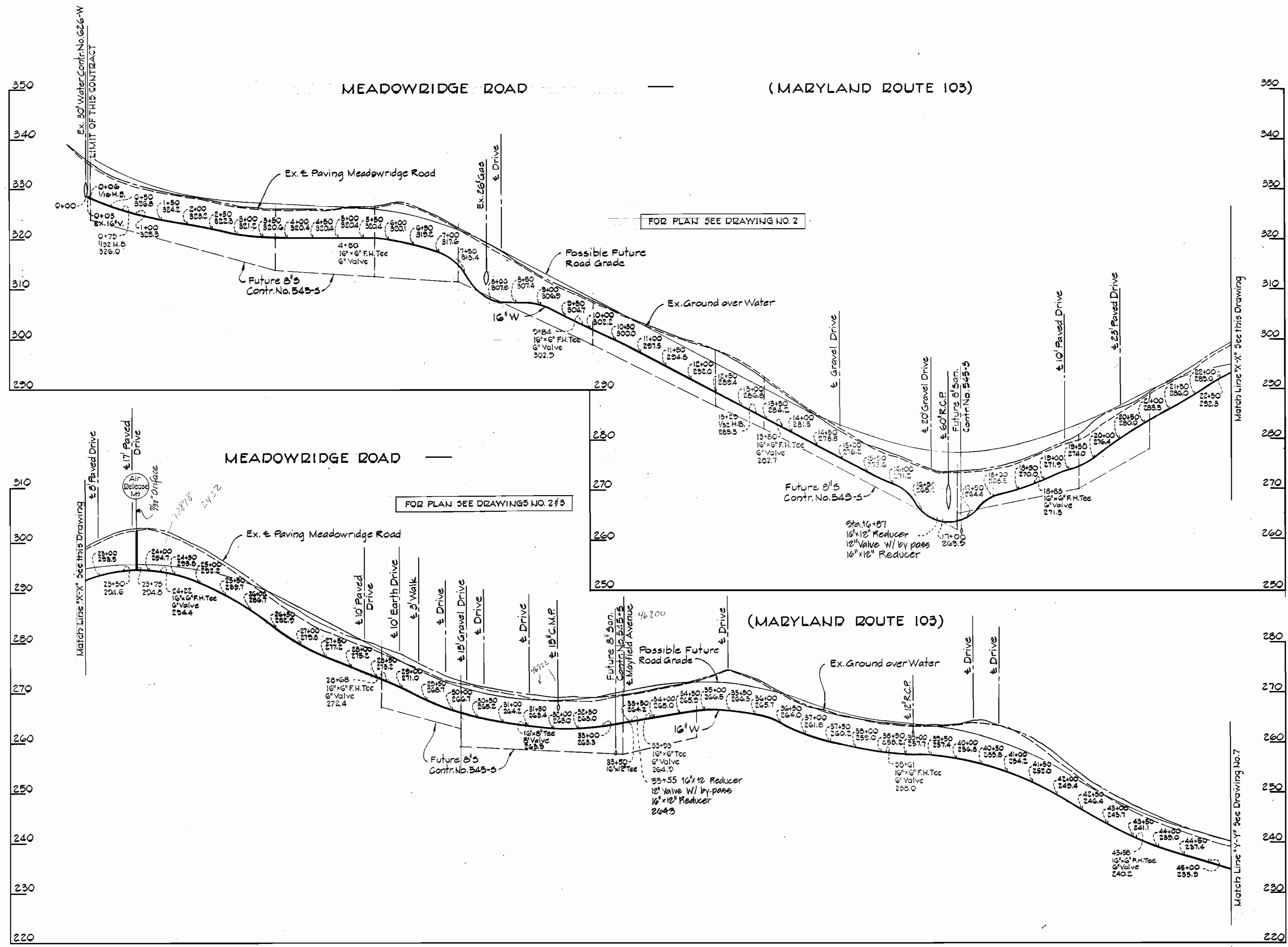
MEADOWRIDGE ROAD - MARYLAND ROUTE #103
 ELECTION DISTRICT ELKRIDGE NO.1

CONTRACT NO. 713-W
 MEADOWRIDGE ROAD
 HOWARD COUNTY CAPITAL PROJECT W-5-8047
 WATER MAIN EXTENSION

DESIGNED E.D.C.	SCALE 1"=50'
DRAFTED T.A.W.	
CHECKED E.D.C.	
DATE 5/23/78	

WS 713-W/5

WS 713-W/6



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R.E. Brudenberg 6/28/78 *W.D. Folbert* 6-28-78
DIRECTOR OF PUBLIC WORKS DATE CHIEF BUREAU OF ENGINEERING DATE

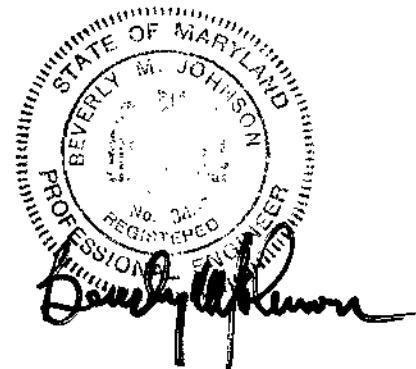
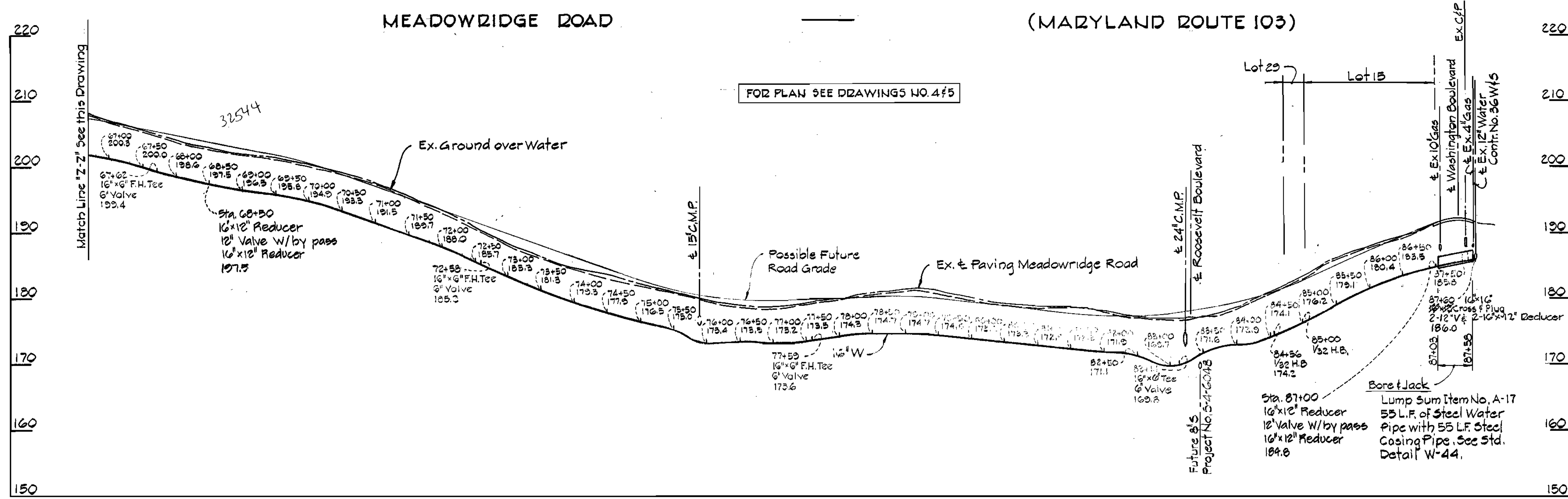
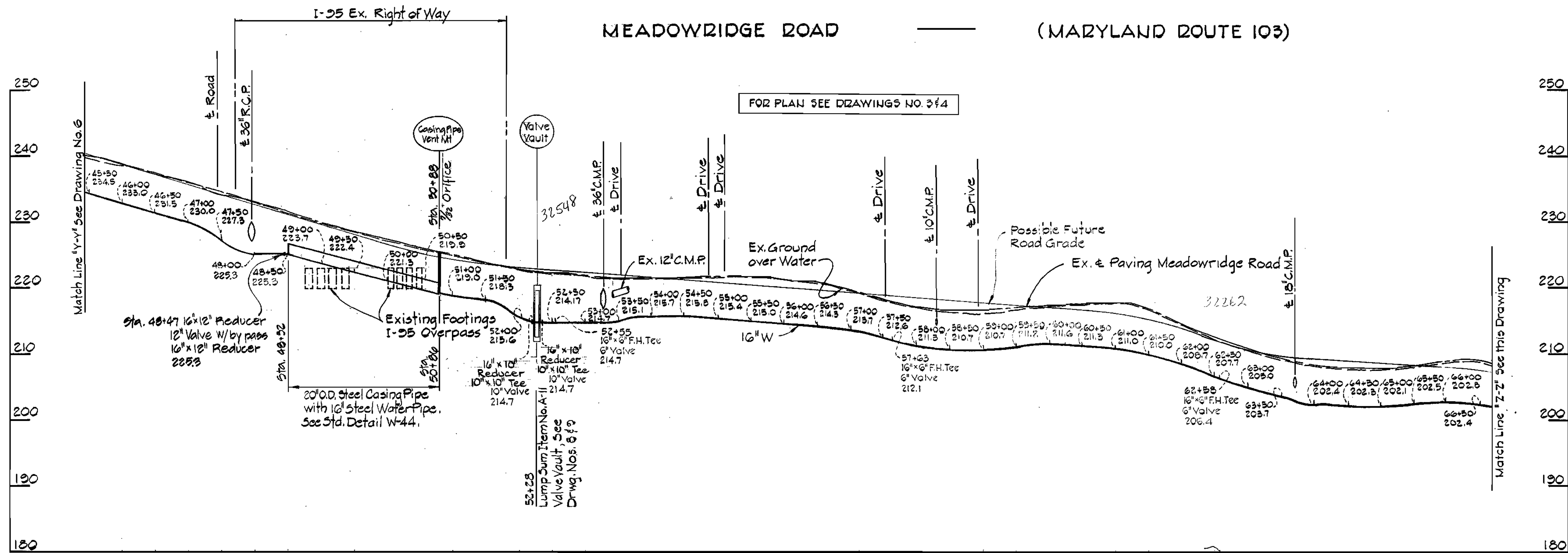
CONTRACT NO. 713-W
CAPITAL PROJECT NO. W-5-8047

PROFILE OF
WATER MAINS

MEADOWRIDGE ROAD - MARYLAND ROUTE #103
ELECTION DISTRICT ELKRIDGE NO.1

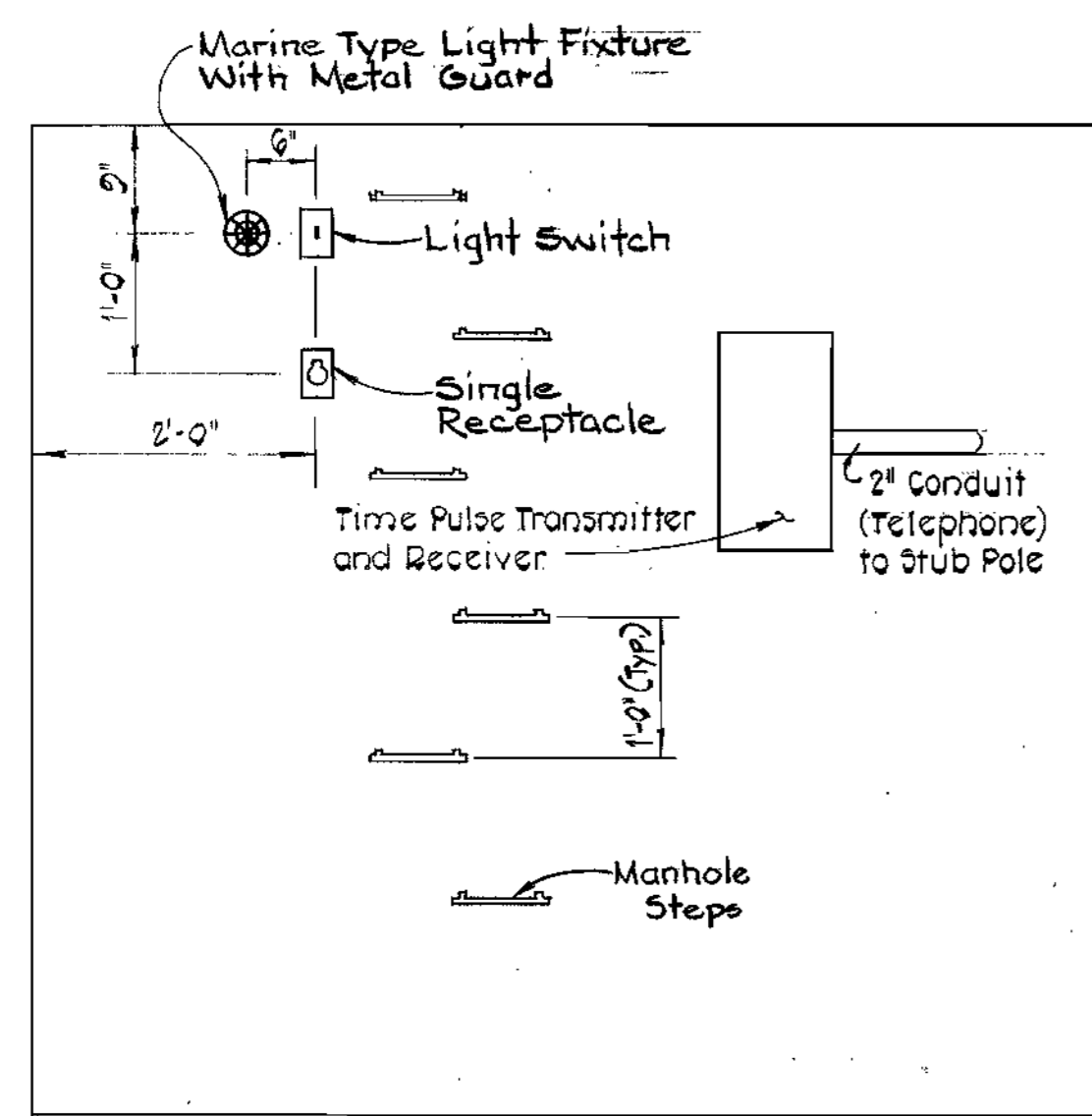
DRAWING NO. 6 OF 9	SCALE	DESIGNED
	HORIZ. 1"=100'	DRAFTED
	VERT. 1"=10'	CHECKED
		E.D.C.
		J.A.W.
		E.D.C.

CONTRACT NO. 713-W
MEADOWRIDGE ROAD
HOWARD COUNTY CAPITAL PROJECT NO. W-5-8047
WATER MAIN EXTENSION

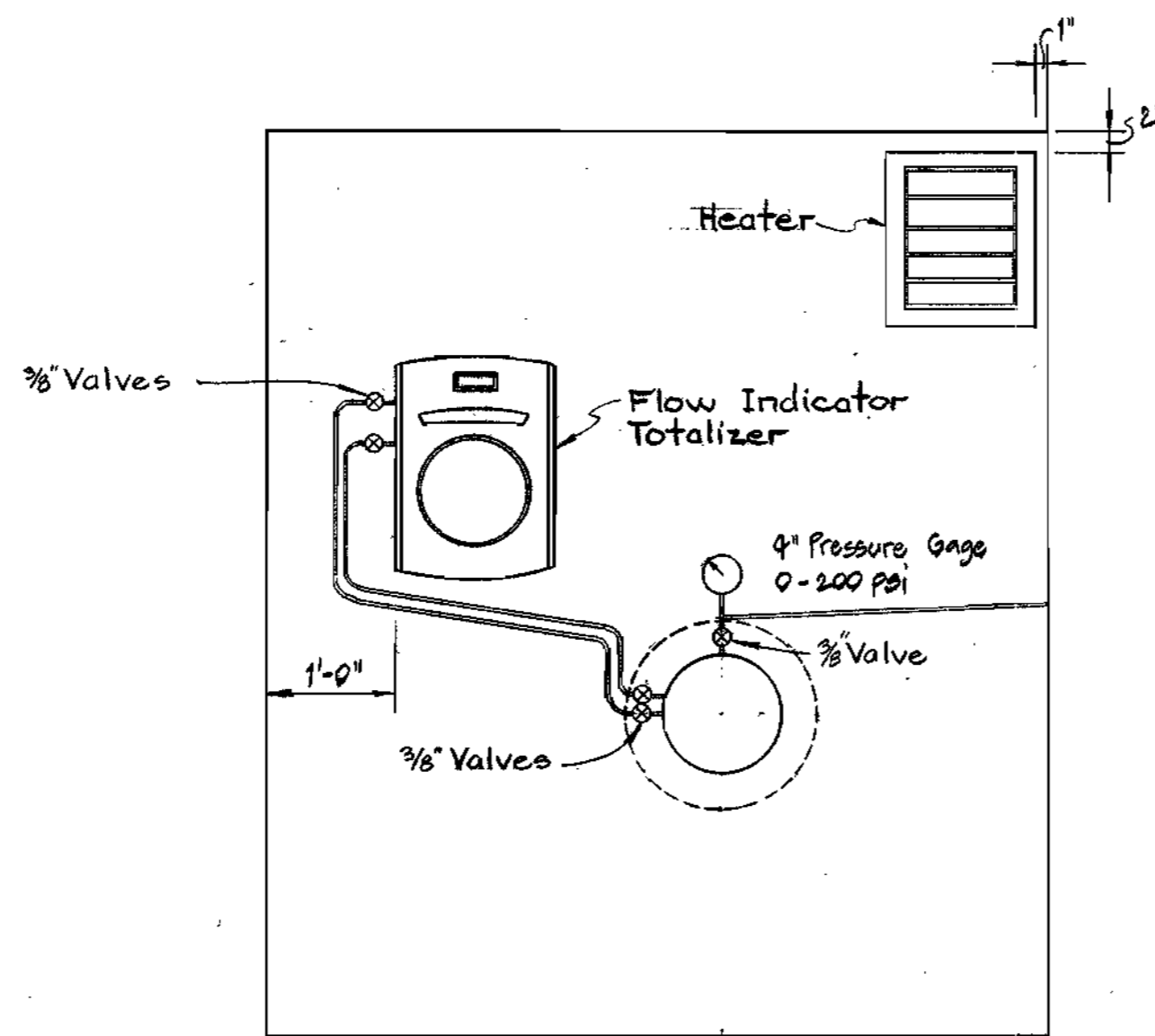


CONTRACT NO. 713-W
MEADOWRIDGE ROAD
HOWARD COUNTY CAPITAL PROJECT W-5-8047
WATER MAIN EXTENSION

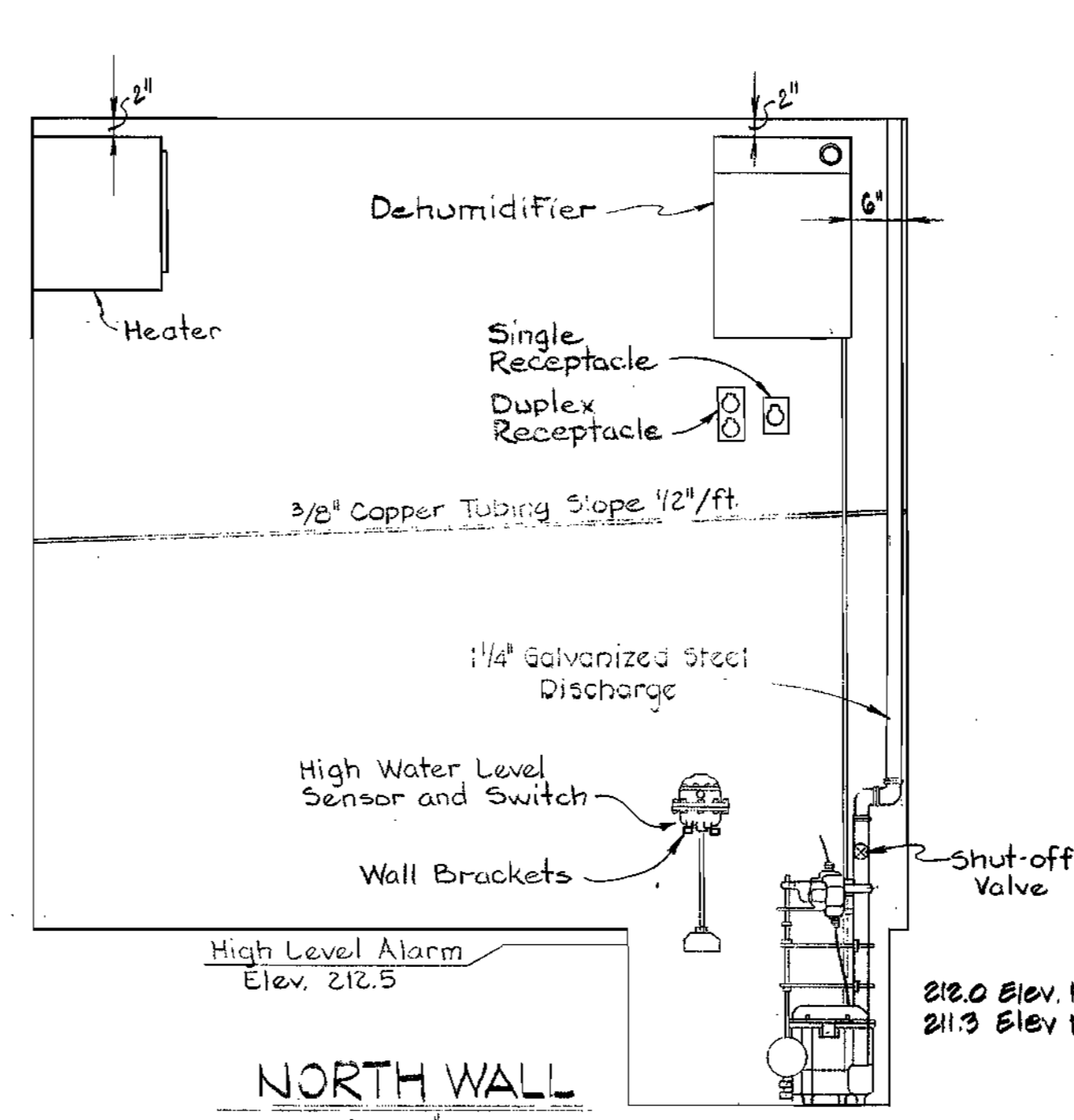
PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. E. Brudenbaker</i> 6/28/78 <i>W. J. Kubit</i> 6-28-78 DIRECTOR OF PUBLIC WORKS DATE CHIEF BUREAU OF ENGINEERING DATE	CONTRACT NO. 713-W CAPITAL PROJECT NO. W-5-8047	PROFILE OF WATER MAINS	MEADOWRIDGE ROAD-MARYLAND ROUTE #103 ELECTION DISTRICT ELKRIDGE NO. 1	DRAWING NO. 7 OF 9	SCALE HORIZ. 1"=100' VERT. 1"=10'	DESIGNED E.D.C. DRAFTED A.D.T. CHECKED E.D.C. 10/27/77
					W.O. 3355		



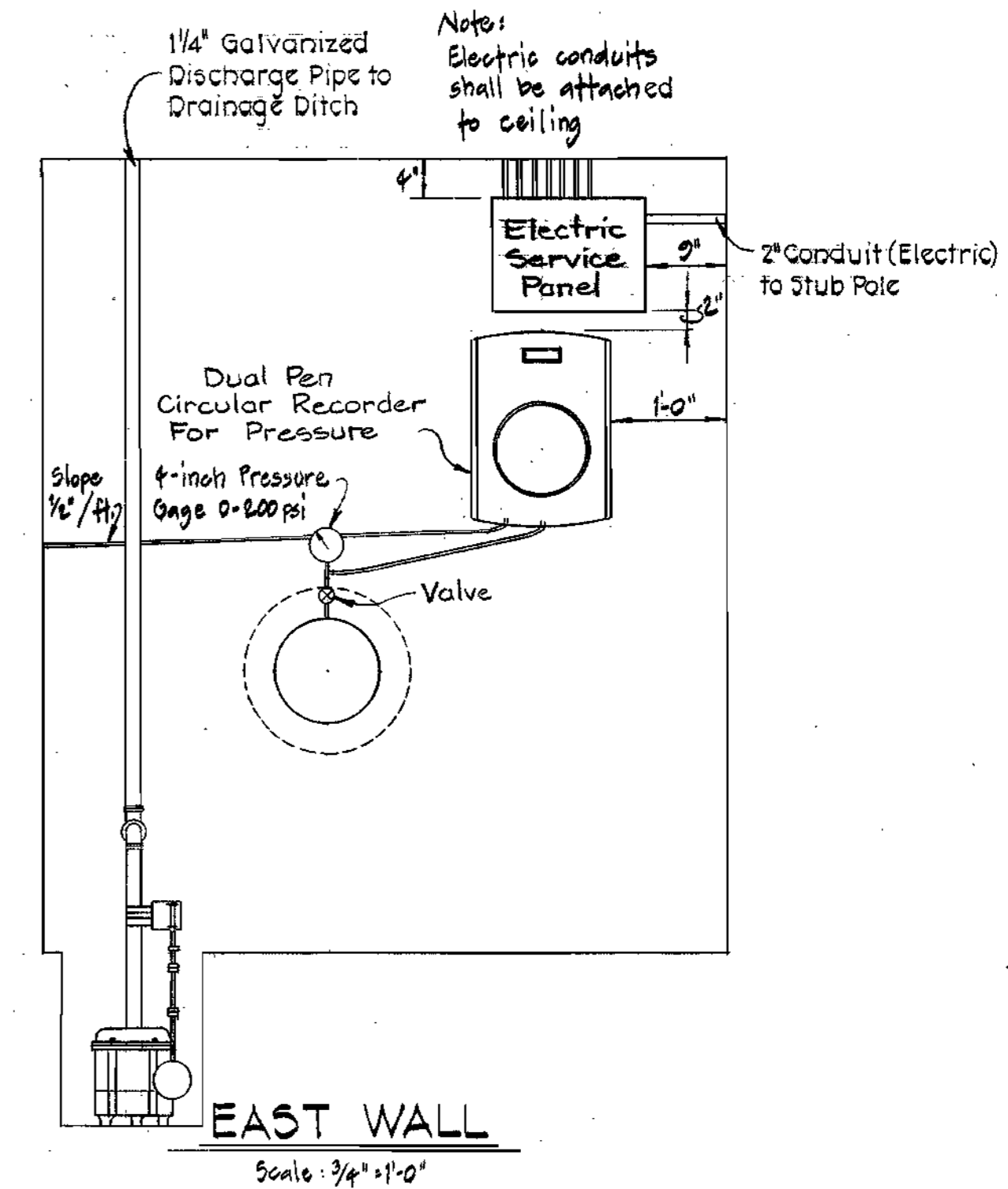
SOUTH WALL
Scale: 3/4" = 1'-0"



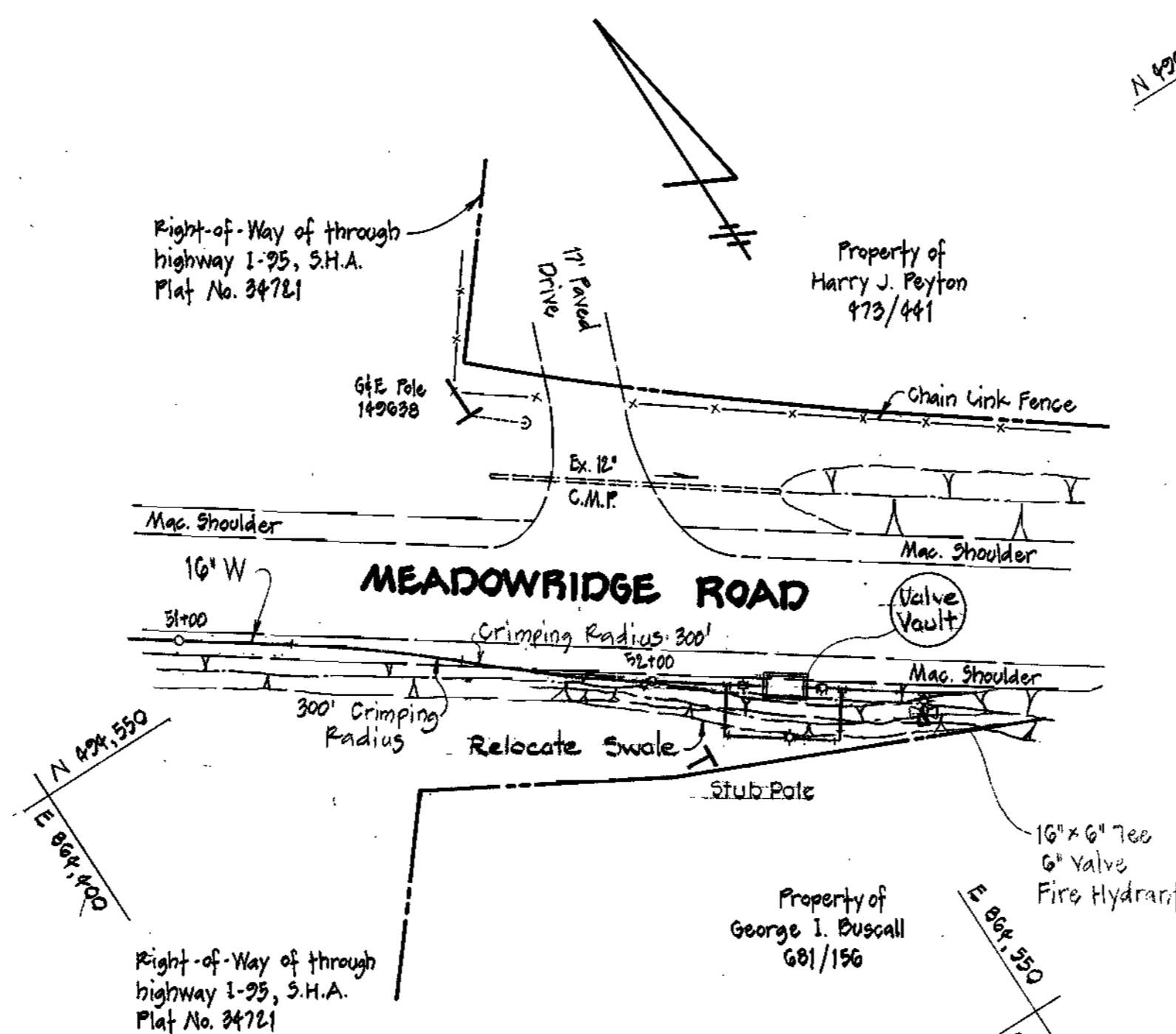
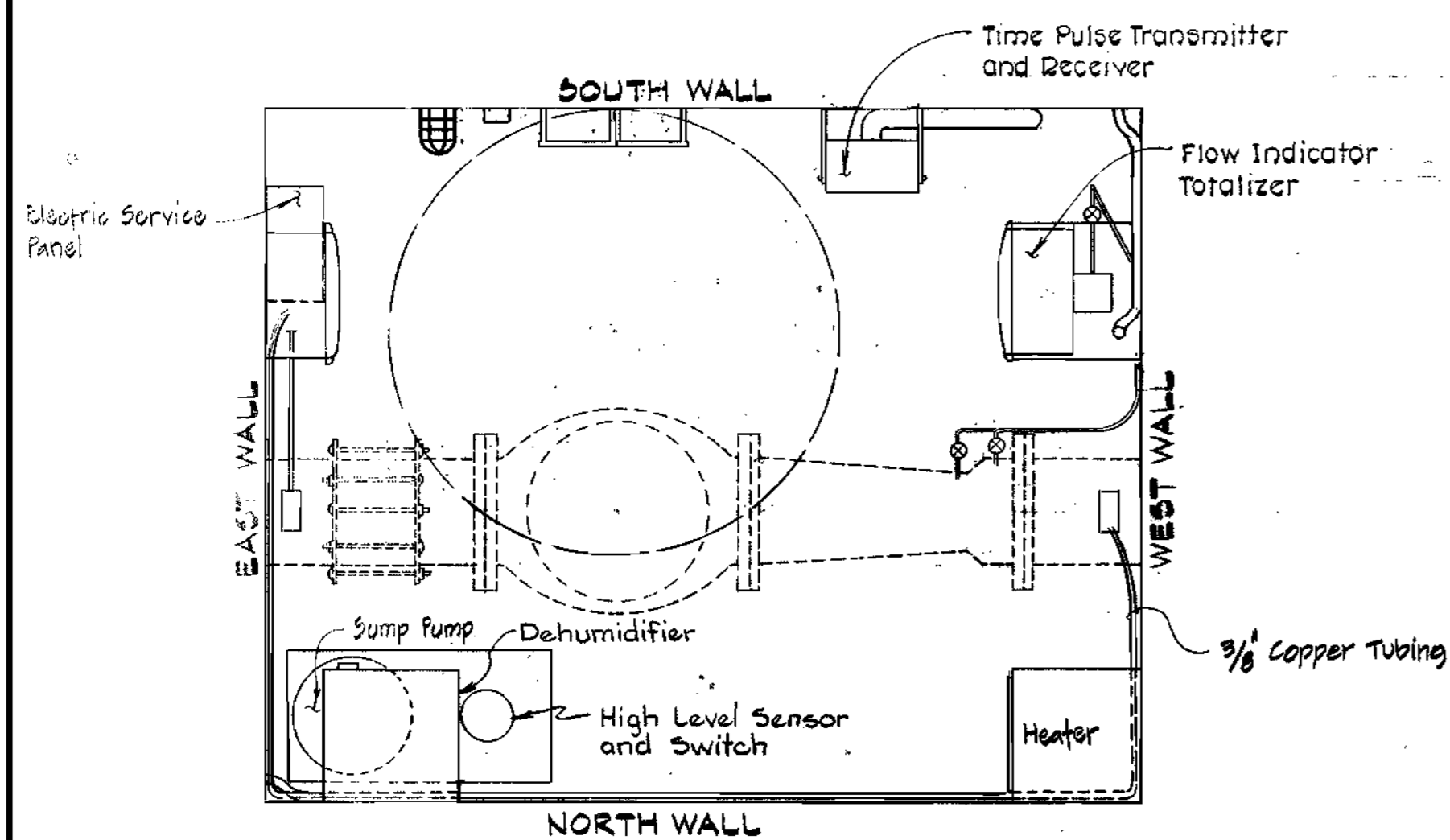
WEST WALL
Scale: 3/4" = 1'-0"



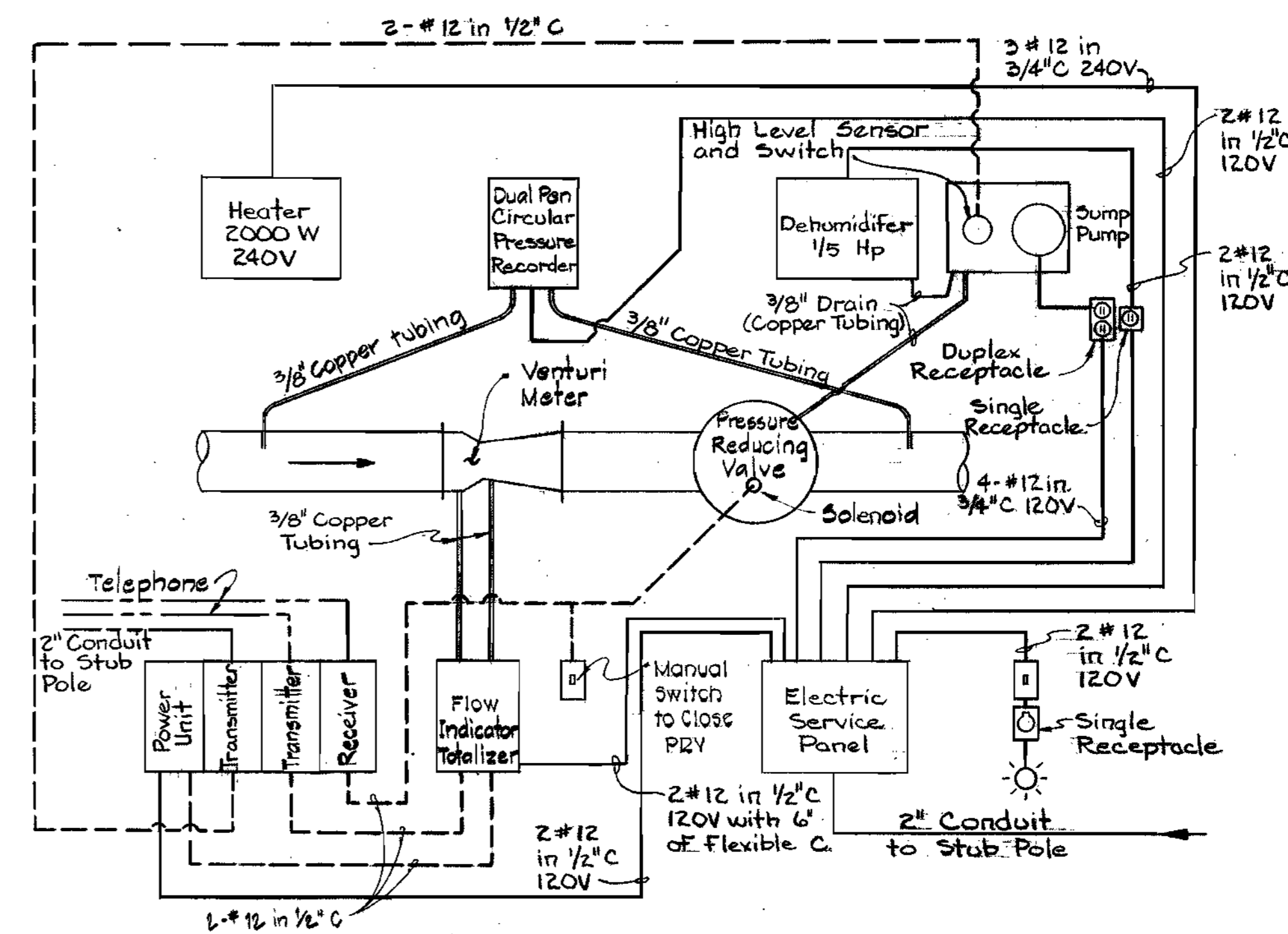
NORTH WALL
Scale: 3/4" = 1'-0"



EAST WALL
Scale: 3/4" = 1'-0"



SITE PLAN
Scale: 1" = 30'



VAULT EQUIPMENT SCHEMATIC
Not to Scale

NOTE:
1. Relocated swale shall be stabilized with seed & mulch.
2. Old swale shall be filled and the area regraded to drain toward the new swale.



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R.E. Jenschke 6/28/78
DIRECTOR OF PUBLIC WORKS DATE

CONTRACT NO. 713-W
CAPITAL PROJECT NO. W-5-8047

PRESSURE REDUCING VALVE VAULT MECHANICAL AND TELEMTRY EQUIPMENT

MEADOWRIDGE ROAD - MARYLAND ROUTE #103
ELECTION DISTRICT ELKRIDGE NO. 1

DRAWING NO. 9 OF 9

SCALE AS SHOWN

DESIGNED R.H.B.
DRAWN E.C.
CHECKED E.C.
DATE 10/27/77