

CONTRACT 7W

WATER MAIN EXTENSIONS

HOWARD COUNTY METROPOLITAN COMMISSION

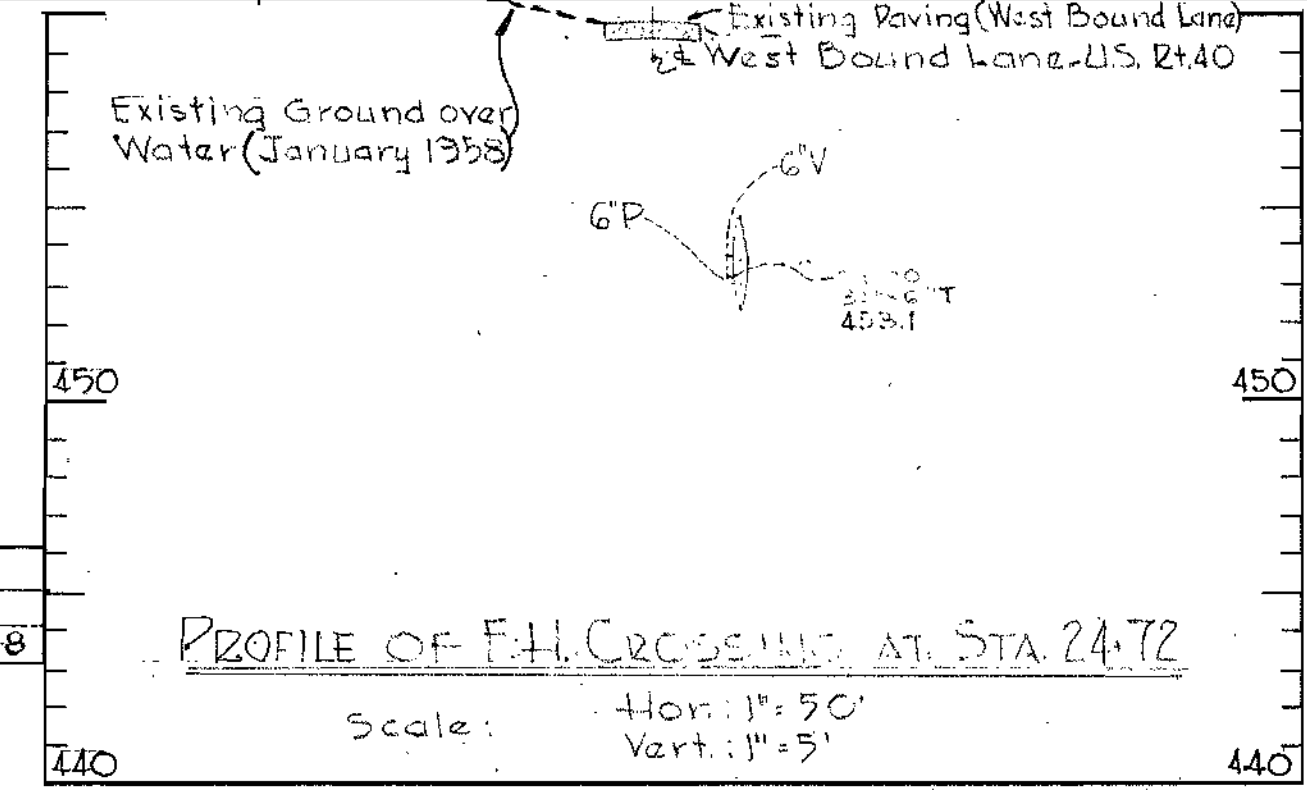
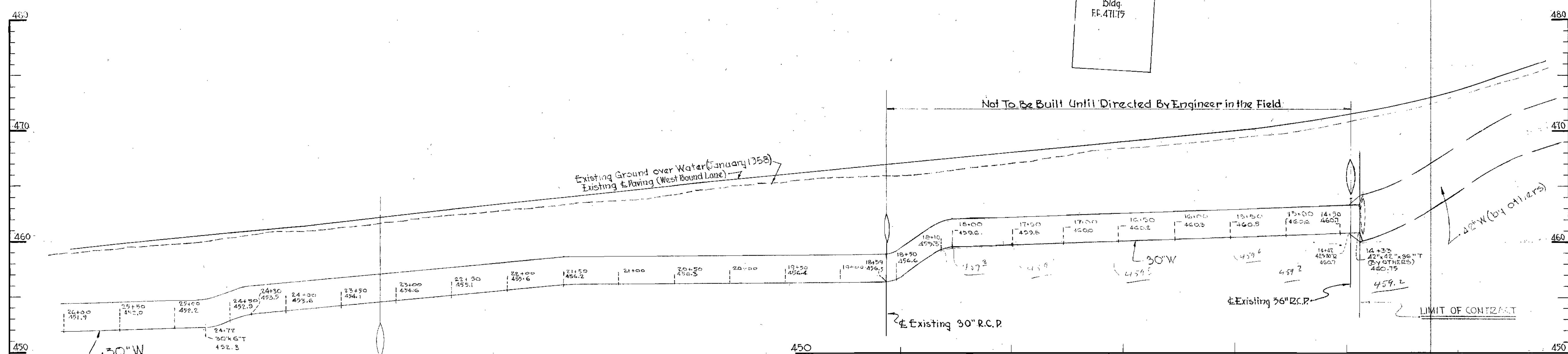
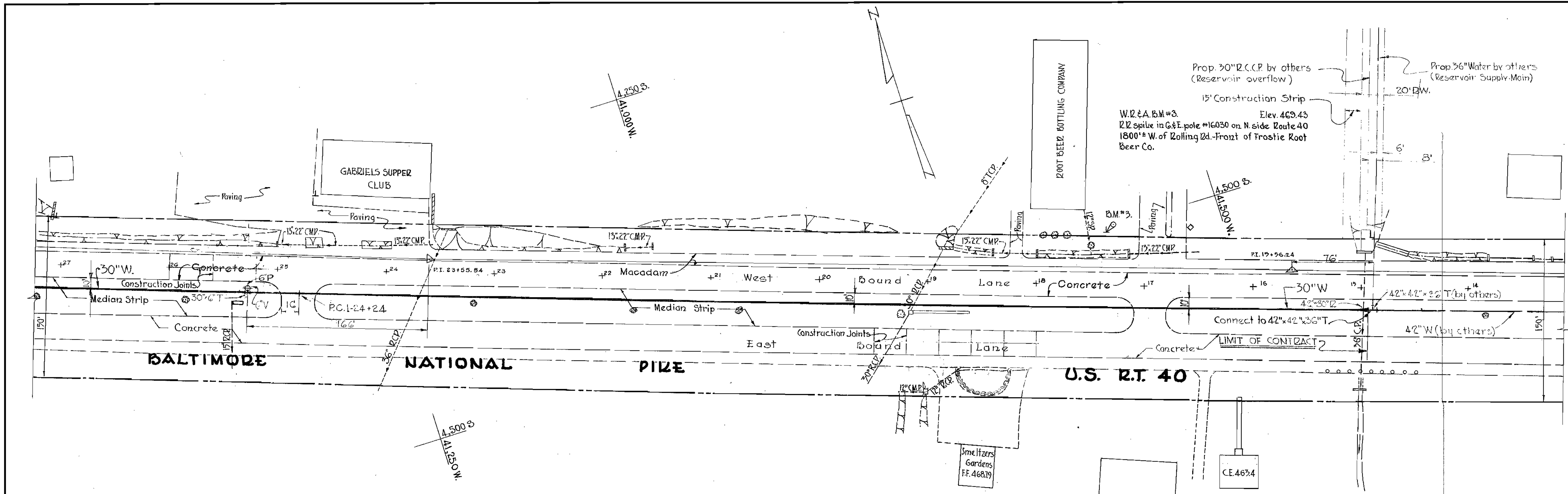
ELLICOTT CITY SUB-DISTRICT

ROAD PERMIT AND GRADES PERMIT REQUESTED _____ PERMIT NUMBER _____ GRADE ESTABLISHED _____ PROFILE NUMBER _____		APPROVED FOR CITY OF BALTIMORE DATE <u>1-9-1959</u> <i>[Signature]</i> WATER ENGINEER <i>[Signature]</i> DIRECTOR OF PUBLIC WORKS		CONTRACT NO. 7W DATE <u>January 13, 1959</u> <i>[Signature]</i> CHAIRMAN		HOWARD COUNTY METROPOLITAN COMMISSION WHITMAN REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE MARYLAND		DATE _____ REVISION _____ BY _____
DATE _____ RIGHT OF WAY _____ REF. _____	ENGINEER _____ REG. NO. _____ DESIGNED _____ DRAWN _____ DATE _____ CHECKED _____	DEPARTMENT OF PUBLIC WORKS APPROVED <i>[Signature]</i> DIRECTOR & CHIEF SANITARY ENGINEER DATE <u>11/14/58</u>		BUREAU OF ENGINEERING APPROVED <i>[Signature]</i> CHIEF DATE <u>11/14/58</u>		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING LOCATION MAP OF WATER MAIN EXTENSIONS U.S. ROUTE 40 ROLLING ROAD TO PATAPSCO RIVER ELEC. DIST. NO. 1 CATONSVILLE		SCALE AS SHOWN KEY SHEET NO. 1 POSITION SHEET OF 10 SHEET NO. 1 J.O. 3-13-1 58-1179A-4 FILE:

WS 7W/1

W.C. 1645

58-1179



BILL OF MATERIALS		
No.	Description	Size
1	Concrete Pressure Pipe	30"
1	C.I.P. Class 22	6"
1	Plug	6"
1	Valve and Vault	6"
1	Tea	30x6"

Rev.	Date	Description
1-9-1959		CROSSING DETAILS REV. TO CONFORM TO BALTO. CO. STD. DET. W-8

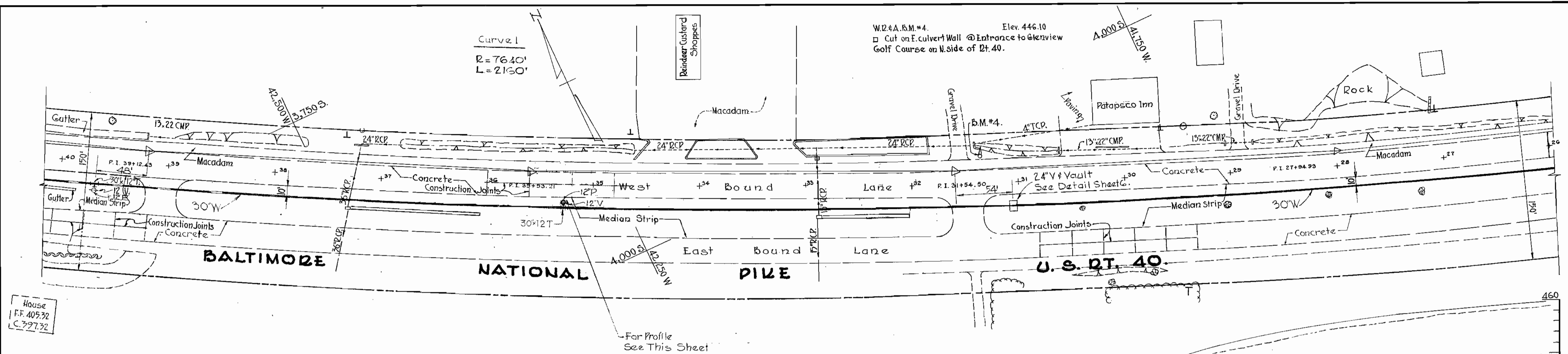
Revised June 4, 1959: 6" F.H. Crossing @ Sta. 24+72 eliminated

C.W.O. 31440

ROAD PERMIT AND GRADES PERMIT REQUESTED PERMIT NUMBER GRADE ESTABLISHED PROFILE NUMBER		APPROVED FOR CITY OF BALTIMORE 1-9-1959 DATE Director of Public Works		CONTRACT NO. 7W HOWARD COUNTY METROPOLITAN COMMISSION January 13, 1959 DATE Chairman		WHITMAN REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE MARYLAND	
DATE RIGHT OF WAY REF. STATE ROADS		DEPARTMENT OF PUBLIC WORKS APPROVED DIRECTOR & CHIEF SANITARY ENGINEER		BUREAU OF ENGINEERING APPROVED CHIEF		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING SCALE H-1"=50' V-1"=5' KEY SHEET NO. 2 POSITION SHEET 5 SW 27, 28 OF 10 SHEET NO. 2 FILE: J.O. 3-13-1 58-1180A-4	
ENGINEER REG. NO. DESIGNED DATE DRAWN CHECKED		APPROVED DATE 11/15/58		APPROVED DATE 11/15/58		CATONSVILLE ROLLING ROAD TO PATAPSCO RIVER ELEC. DIST. NO. 1	

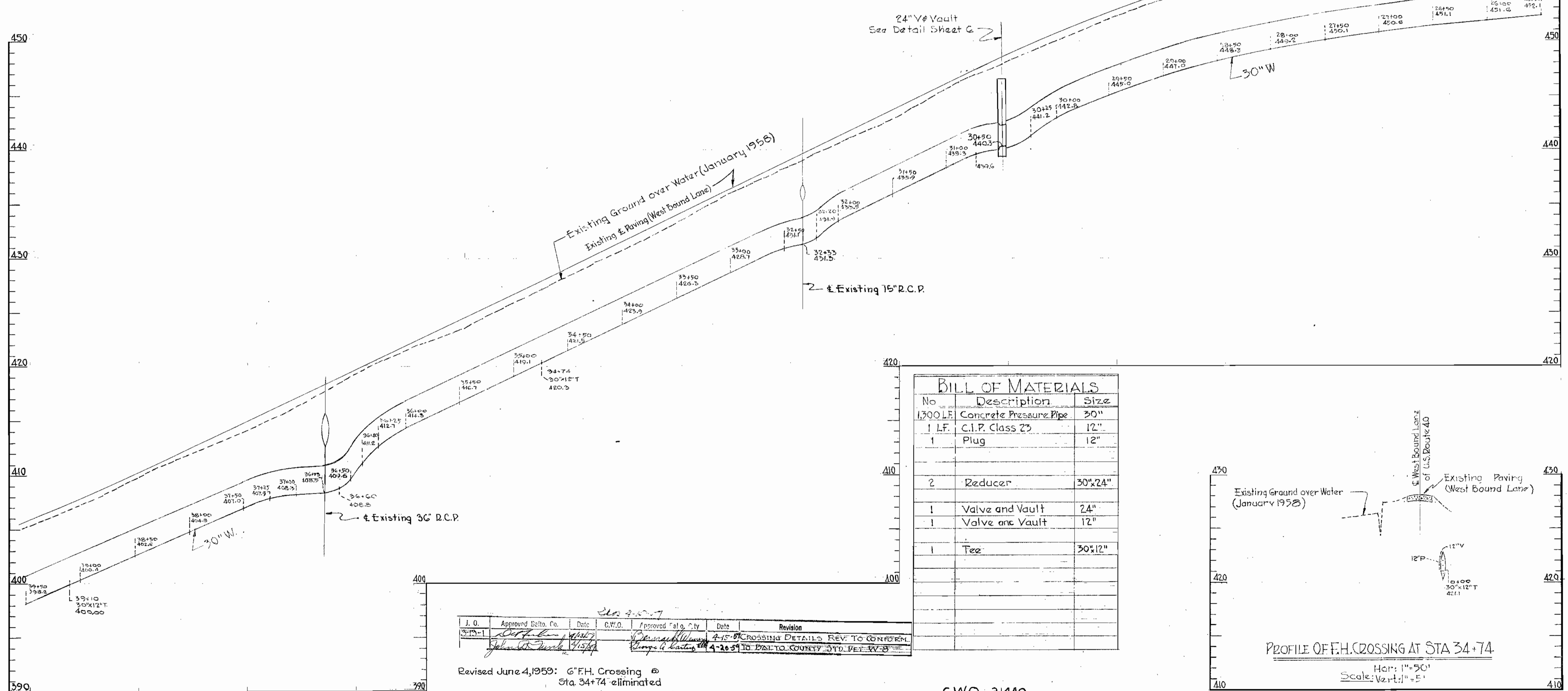
W.O. 4649

WS 7W/2



House
E.F. 40532
C.797.32

For Profile
See This Sheet



J. O.	Approved Date	Date	C.W.O.	Approved Date	Date	Revision
3-17-59	1-9-1959	1-9-1959	George A. Carter	1-9-1959	1-9-1959	4-20-59 TO BALTO. COUNTY 370. VET. 4-3

Revised June 4, 1959: G.F.H. Crossing @ Sta. 34+74 eliminated

ROAD PERMIT AND GRADES PERMIT REQUESTED PERMIT NUMBER GRADE ESTABLISHED PROFILE NUMBER		APPROVED FOR CITY OF BALTIMORE 1-9-1959 DATE WATER ENGINEER		CONTRACT NO. 7W		HOWARD COUNTY METROPOLITAN COMMISSION January 13, 1959 DATE		WHITMAN REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE MARYLAND	
DEPARTMENT OF PUBLIC WORKS APPROVED DIRECTOR & CHIEF SANITARY ENGINEER		BUREAU OF ENGINEERING APPROVED CHIEF		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS APPROVED CHAIRMAN		BUREAU OF ENGINEERING APPROVED CHIEF		SCALE H-1"=50' V-1"=5' KEY SHEET H.M.E. POSITION SHEET 4, 5 SW 29 3 SW 28	
DATE RIGHT OF WAY REF. STATE ROADS		ENGINEER REG. NO. DESIGNED DRAWN CHECKED DATE		DEPARTMENT OF PUBLIC WORKS APPROVED DATE		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS APPROVED DATE		BUREAU OF ENGINEERING APPROVED DATE	

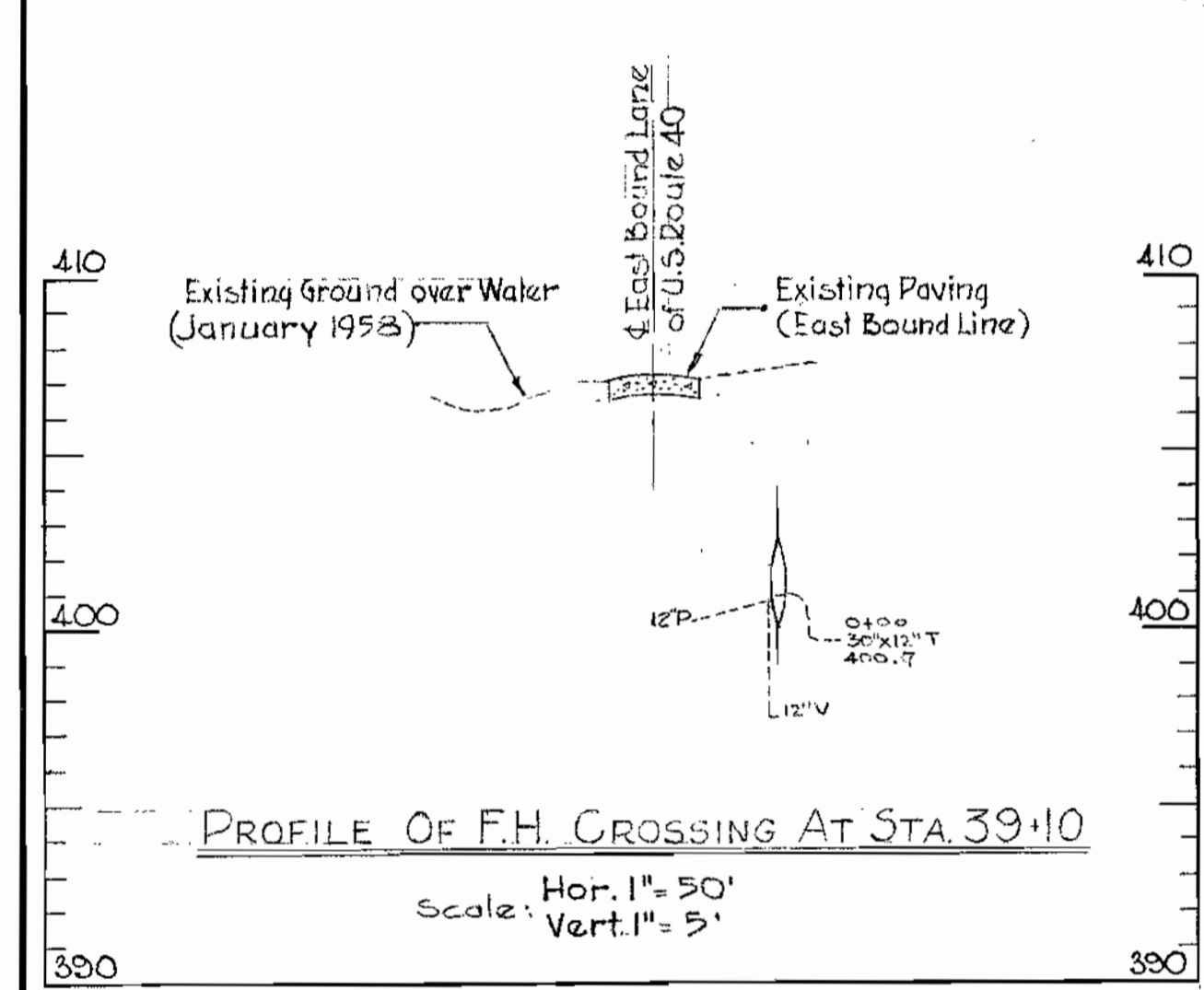
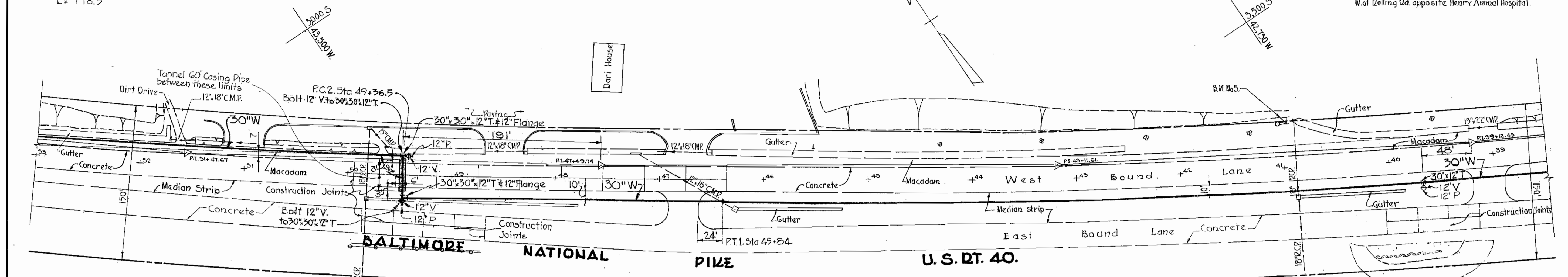
W. O. 4649

58-1181

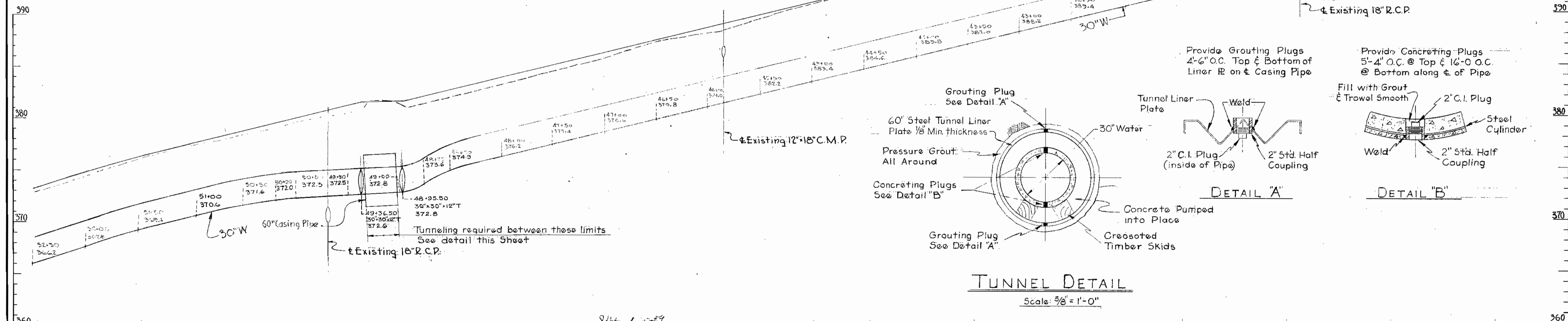
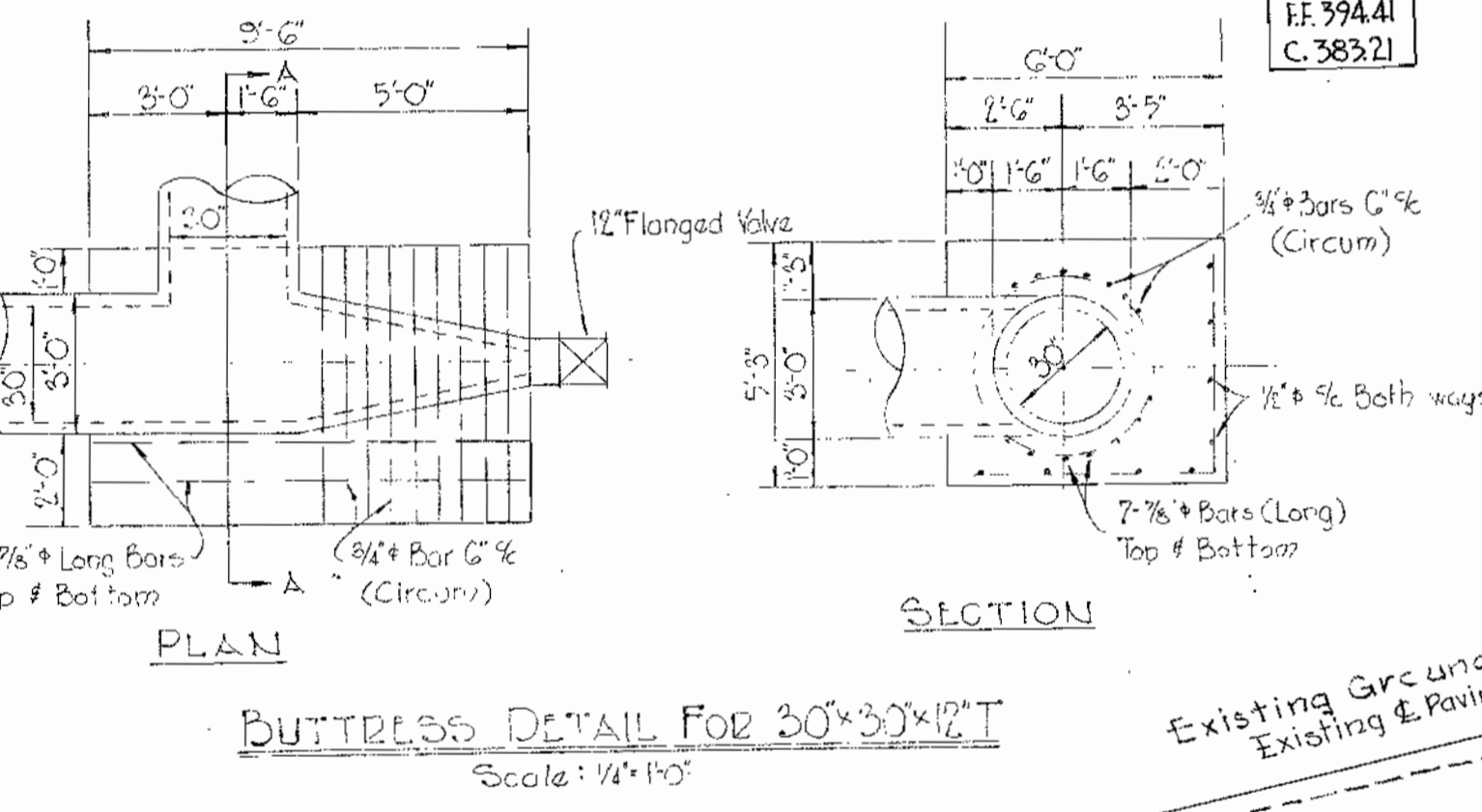
WS 7W/3

Curve 2
 R = 6875'
 L = 718.5

W.P. & A.B.M. #5 Elev. 405.12
 R.L. splice in pole # 215873 on N. side Route 40-4100'
 W. of Rolling Rd. opposite Henry Animal Hospital.



BILL OF MATERIALS		
No	Description	Size
1,300 L.F.	Concrete Pressure Pipe	30"
3 L.F.	C.I.P. Class 23	12"
3	Plug	12"
3	Valves and Vaults	12"
2	Tee	30" x 30" x 12"
1	Tee	30" x 12"
2	Valve (Hinged) Payment under item C-2	12"
30 L.F.	Tunnel Liner Pipe	60"



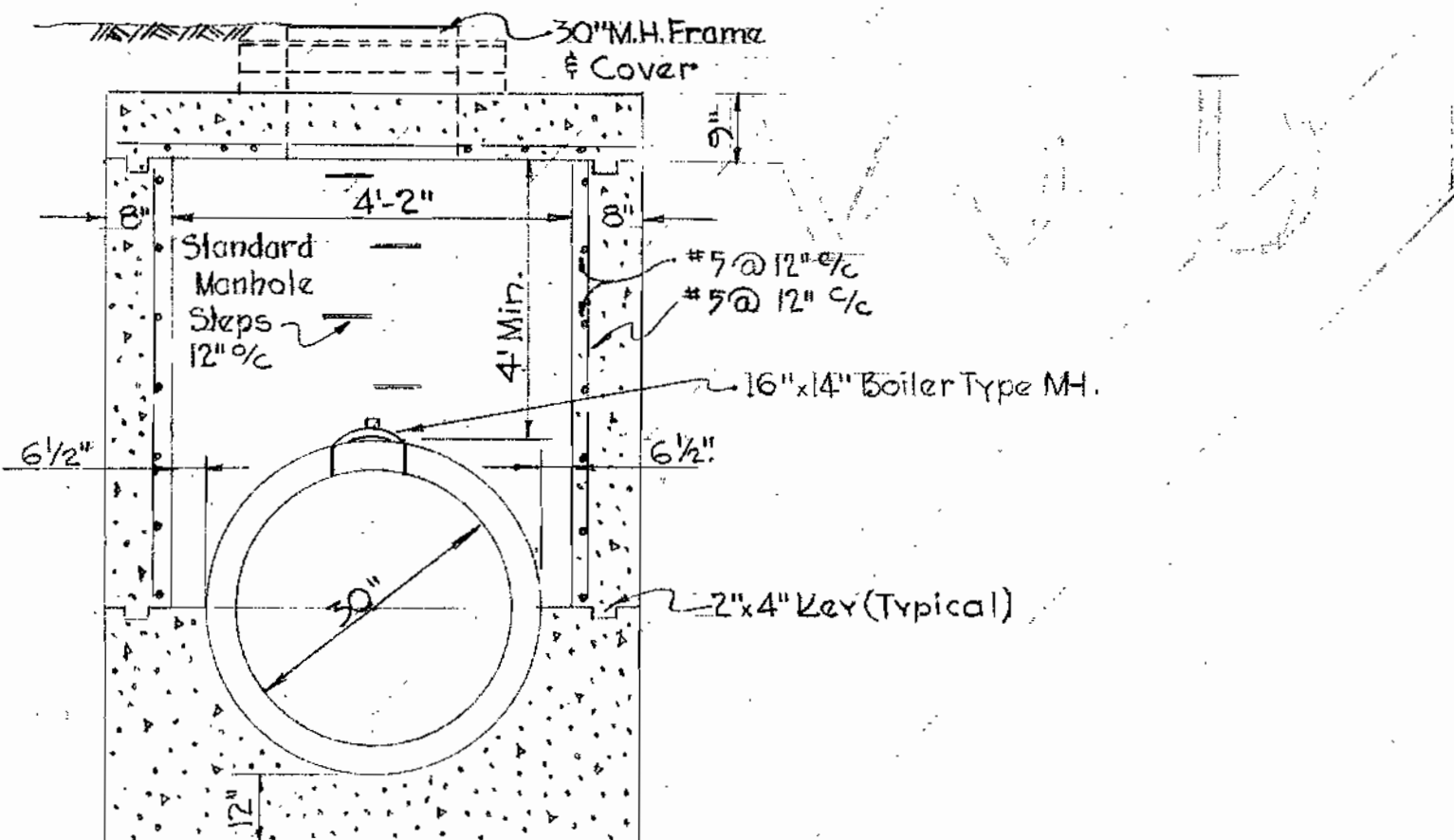
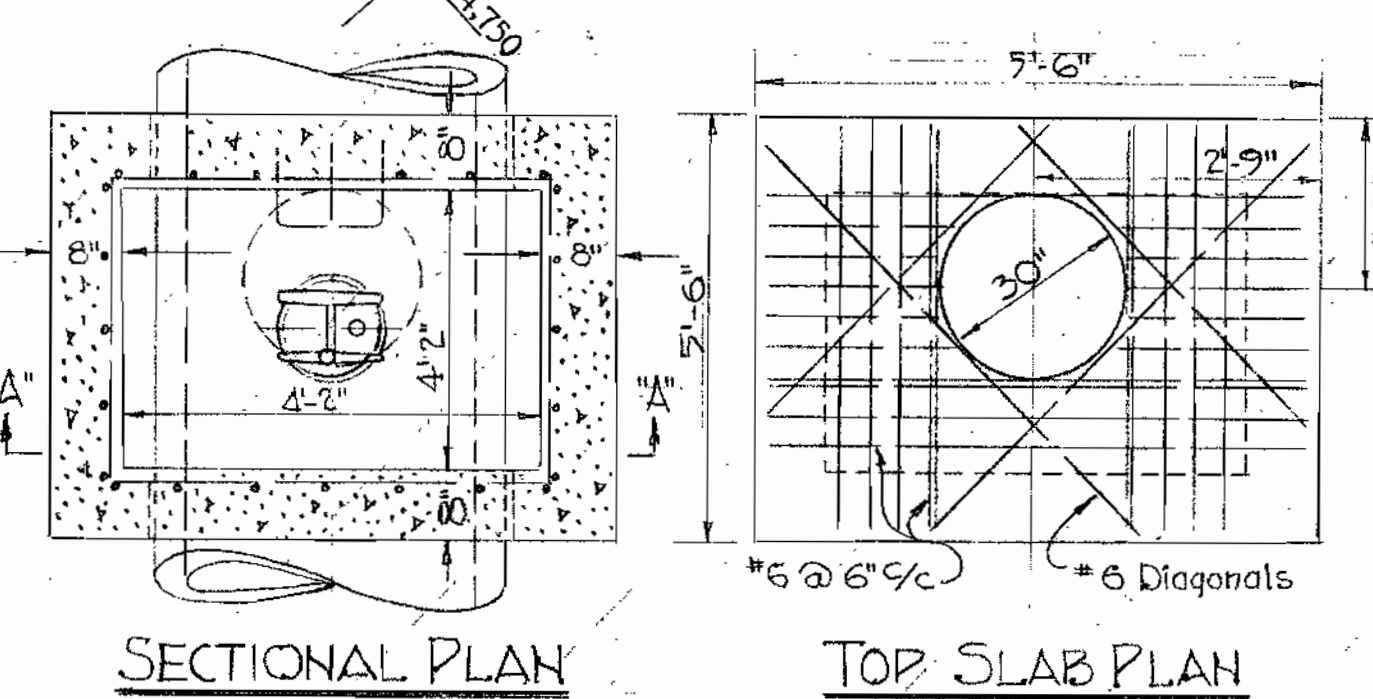
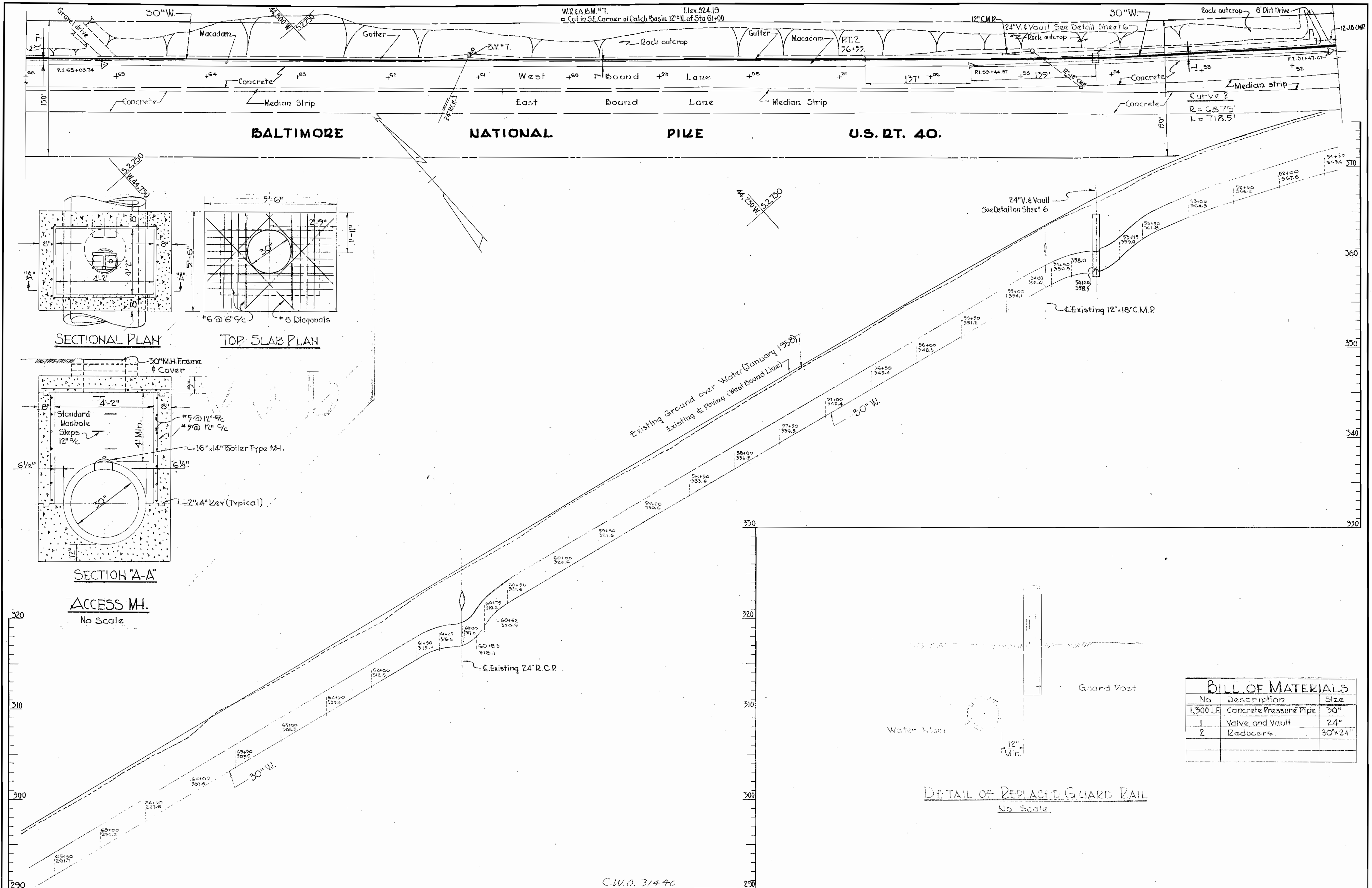
J.O.	Approved By	Date	C.W.O.	Approved By	Date	Revision
3-13-1	<i>[Signature]</i>	1-9-1953	<i>[Signature]</i>	<i>[Signature]</i>	January 13, 1953	CROSSING DETAILS REV. TO CONFORM TO BALTO COUNTY STD. DET. W-8

Revised June 4, 1959: 6" F.H. Crossing @ Sta. 39+10 eliminated

ROAD PERMIT AND GRADES PERMIT REQUESTED PERMIT NUMBER GRADE ESTABLISHED PROFILE NUMBER		APPROVED FOR CITY OF BALTIMORE DATE 1-9-1953 WATER ENGINEER		CONTRACT NO. 7W		HOWARD COUNTY METROPOLITAN COMMISSION DATE January 13, 1953 CHAIRMAN		WHITMAN REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE MARYLAND		3-17-59 TUNNELING 30"W @ STA. 49+02.5 3-17-59 JACKING 12"W @ STA. 39+10 DATE REVISION BY	
STATE ROADS DATE RIGHT OF WAY REF. ENGINEER		DEPARTMENT OF PUBLIC WORKS APPROVED DIRECTOR & CHIEF SANITARY ENGINEER		BUREAU OF ENGINEERING APPROVED CHIEF		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING		SCALE H-1"=50' V-1"=5' KEY SHEET NO. 4 POSITION SHEET NO. 4 OF 10 J.O. 3-13-1 58-1182A-4 FILE:	

W.O. 4649

WS 7W/4

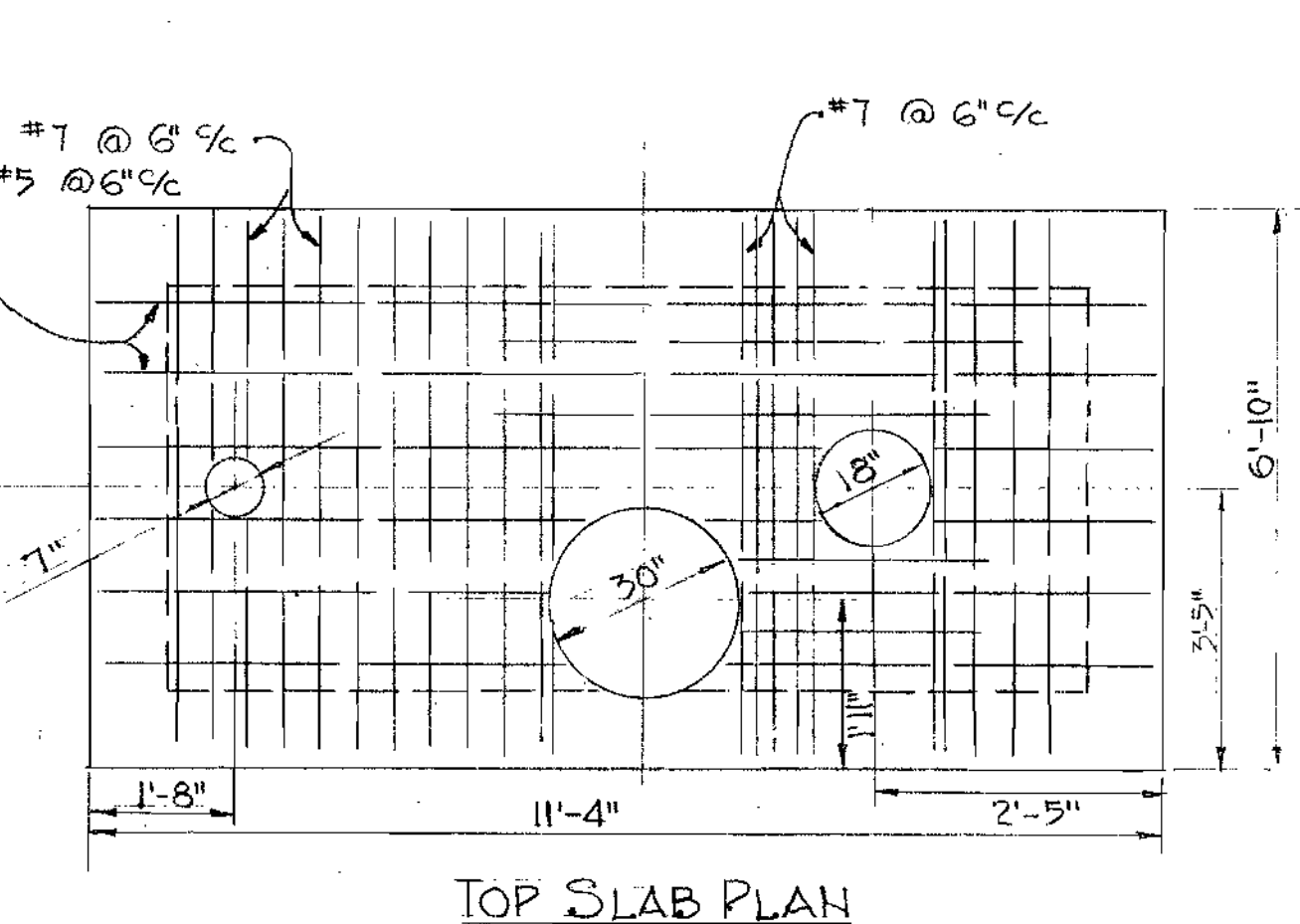
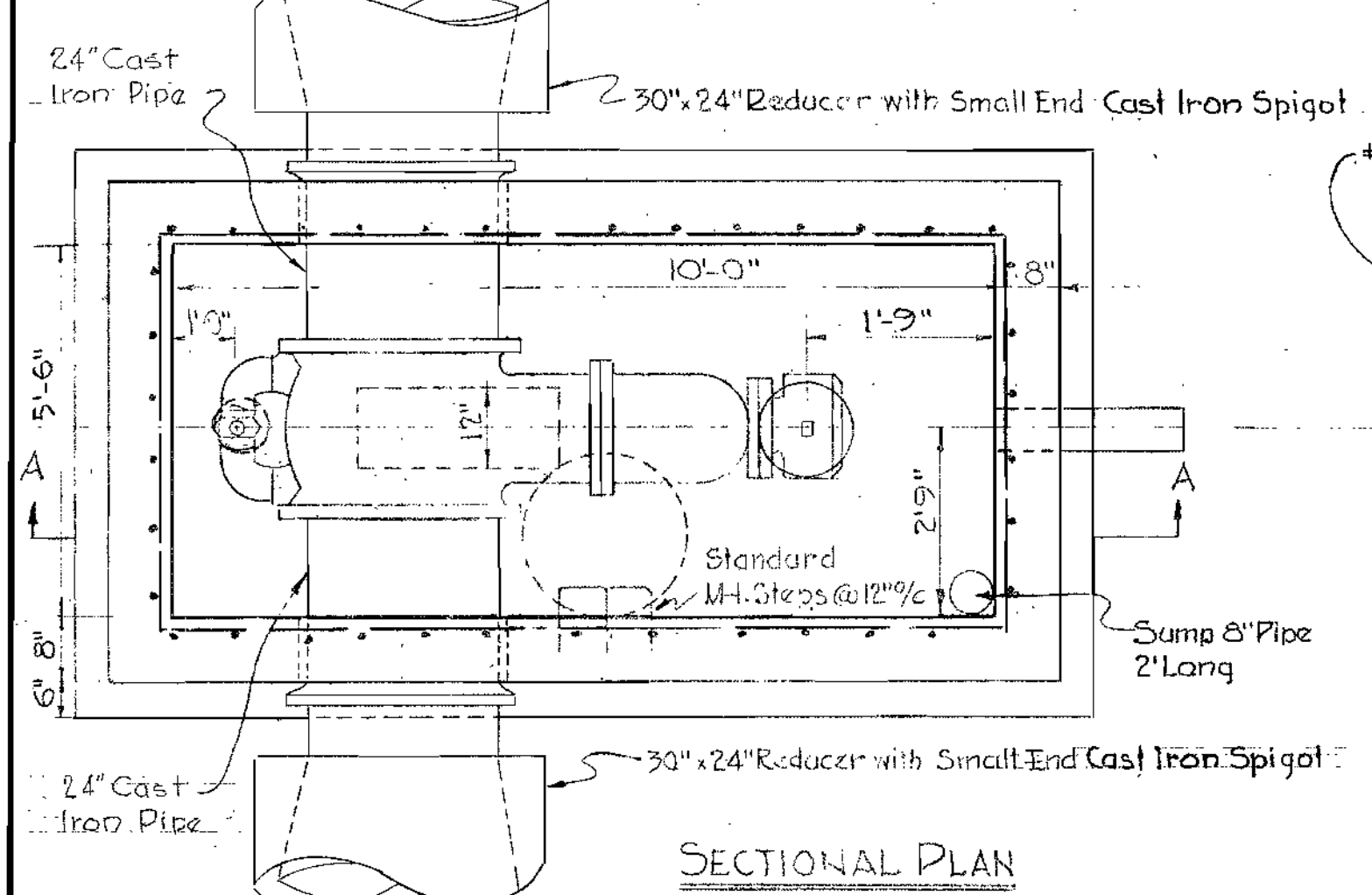
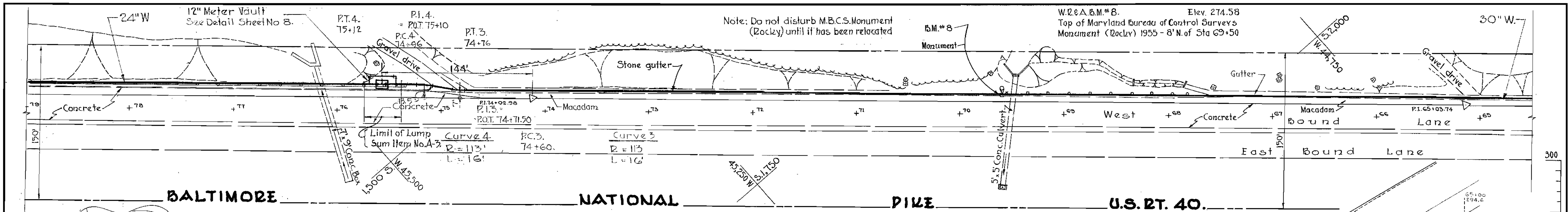


BILL OF MATERIALS		
No	Description	Size
1,300 LF	Concrete Pressure Pipe	30"
1	Valve and Vault	24"
2	Reducers	30"x24"

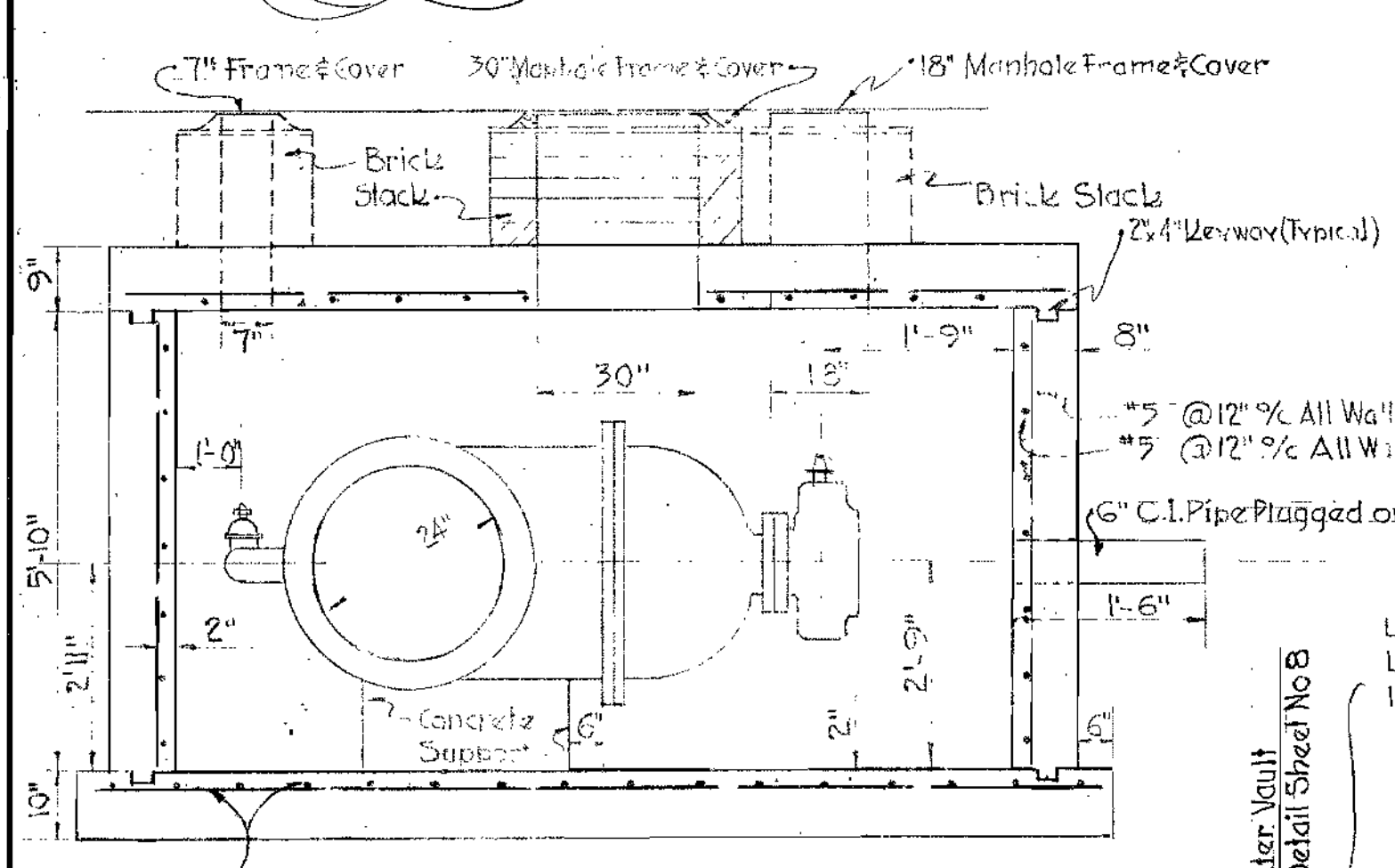
ROAD PERMIT AND GRADES PERMIT REQUESTED _____ PERMIT NUMBER _____ GRADE ESTABLISHED _____ PROFILE NUMBER _____		APPROVED FOR CITY OF BALTIMORE DATE 1-9-1959 WATER ENGINEER _____ DIRECTOR OF PUBLIC WORKS _____		CONTRACT NO. 7W		HOWARD COUNTY METROPOLITAN COMMISSION DATE January 13, 1959 CHAIRMAN _____		WHITMAN REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE MARYLAND	
DEPARTMENT OF PUBLIC WORKS ENGINEER _____ REG. NO. _____ DESIGNED _____ DRAWN _____ DATE _____ CHECKED _____		BUREAU OF ENGINEERING APPROVED _____ DIRECTOR & CHIEF SANITARY ENGINEER DATE 1/17/58		STORM DRAINS _____ WATER _____ SEWER _____ HIGHWAYS _____ STRUCTURES _____ FIELD LOCATION _____ DATE 1/13/58 1/10/58 1/15/58 1/16/58 1/10/58 1/10/58		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING PLAN & PROFILE OF WATER MAIN EXTENSIONS U.S. ROUTE 40 ROLLING ROAD TO PATAPSCO RIVER ELEC. DIST. NO. 1		SCALE H-1"=50' V-1"=5' KEY SHEET H.M.E. SHEET NO. 5 OF 10 J.O. 3-13-1 58-1183A-4 FILE _____	

W.O. 4649

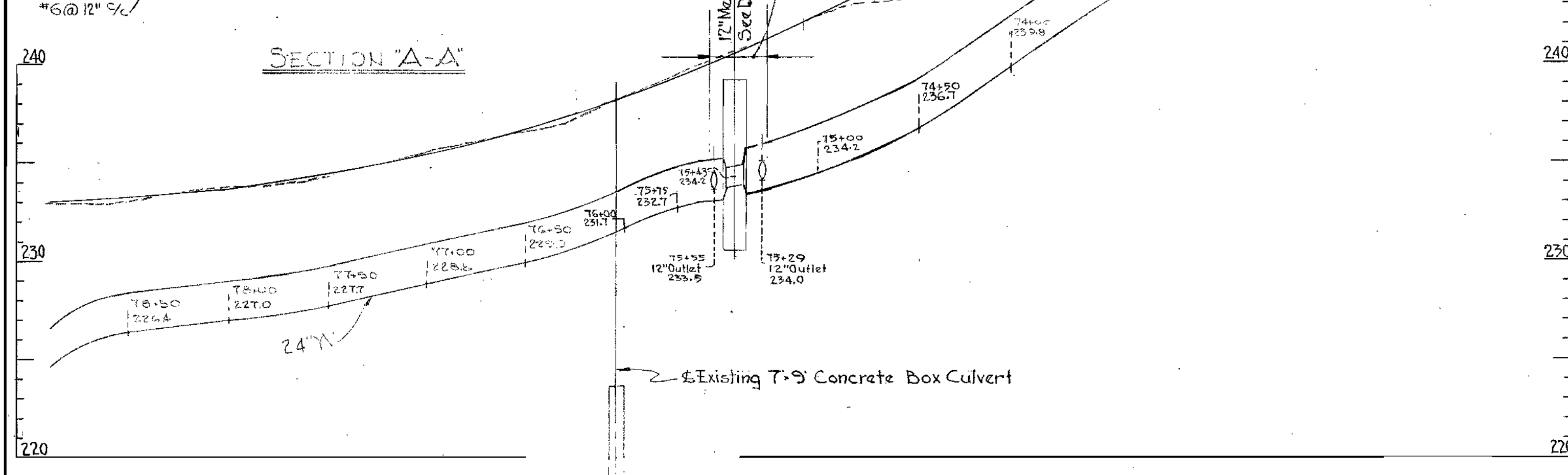
WS TW/S



HORIZONTAL VALVE VAULT
NO SCALE



Note:
One (1) inch Pitometer Corporations
shall be installed on each side of Valve.



- ### GENERAL NOTES
1. Approximate location of existing mains are shown. The Contractor shall take all necessary precautions to protect the existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately.
 2. All pipe elevations shown are invert elevations.
 3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
 4. The location of all valves, fittings etc. have been located in plan and dimensions shall be strictly adhered to unless otherwise directed by the Engineer in writing.
 5. All tops of Frost Casings on Fire Hydrants to be set 0.25' above edge of paving or as directed by Engineer in the field.
 6. For all standard details see Baltimore County Standard Details.
 7. All 6" & 8" W. to be Class 22 C.I.P.
All 12" W. to be Class 25 C.I.P.
All 24" & 30" W. to be Concrete Pressure Pipe, except as noted.
 8. In the event Guard Rail must be removed it shall be reset in accordance with detail on Sheet No. 5.

BILL OF MATERIALS		
No.	Description	Size
1,024 L.F.	Concrete Pressure Pipe	30"
290 L.F.	Concrete Pressure Pipe	24"
1	Flow Meter	12"
1	Reducer	30"x12"
1	Reducer	24"x12"

ROAD PERMIT AND GRADES		
PERMIT REQUESTED		
PERMIT NUMBER		
GRADE ESTABLISHED		
PROFILE NUMBER		
DATE	RIGHT OF WAY	REF.
	STATE ROADS	

DEPARTMENT OF PUBLIC WORKS	
ENGINEER	
REG. NO.	
DESIGNED	
DRAWN	
CHECKED	
DATE	

BUREAU OF ENGINEERING	
APPROVED	
DATE	
STORM DRAINS	
WATER	
SEWER	
HIGHWAYS	
STRUCTURES	
FIELD LOCATION	

APPROVED FOR CITY OF BALTIMORE	CONTRACT NO. 7W	C.W.O. 3140
1-9-1959		
HOWARD COUNTY METROPOLITAN COMMISSION		
January 13, 1959		
BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS		
BUREAU OF ENGINEERING		
PLANNING & PROFILE OF WATER MAIN EXTENSIONS		
U.S. ROUTE 40		
ROLLING ROAD TO PATAPSCO RIVER		
ELEC. DIST. NO. 1		

KEY SHEET	SHEET	SCALE
H.W.M.	6	H-1"=50'
POSITION SHEET	NO.	V-1"=5'
2, 3 SW 30	OF	
Z SW 31	10	
J.O. 3-13-1		
58-1184A-4		
FILE:		

WS 7W/6

3500 46,250 W

5150 46,000 W SUM

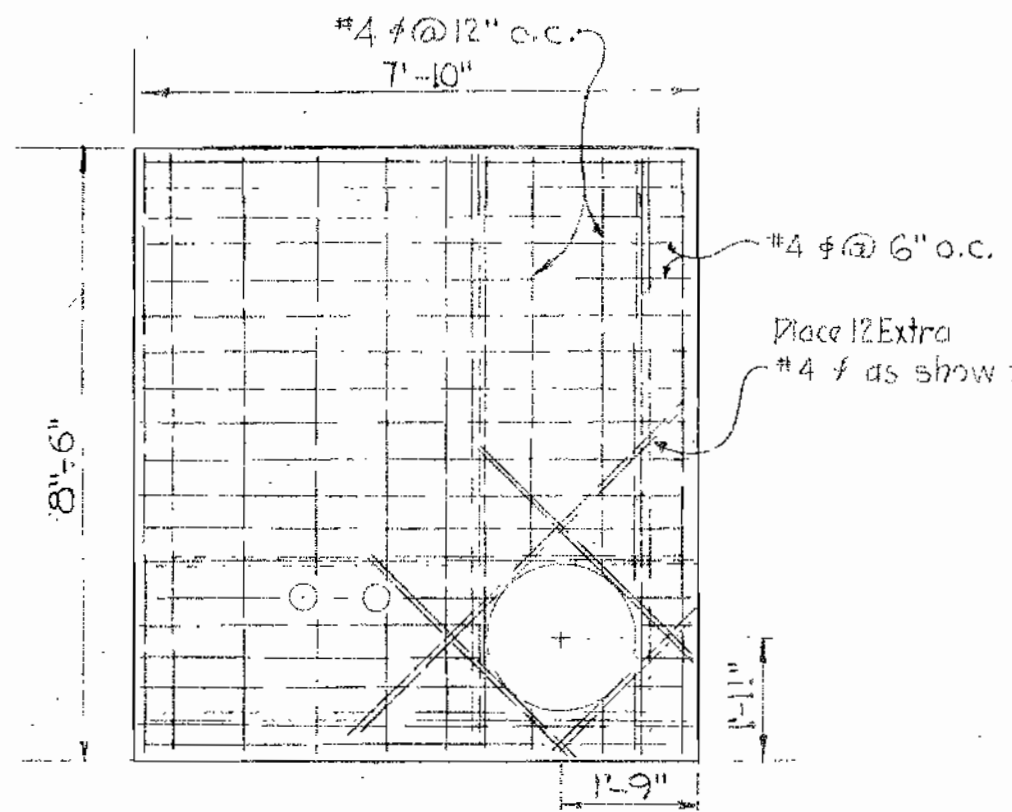
51000 45,750 W

W2 & A.B.M.#9 Elev. 238.36
 □ Cut in conc wall @ NE corner of bridge across Patapsco River on U.S. Rt. 40.

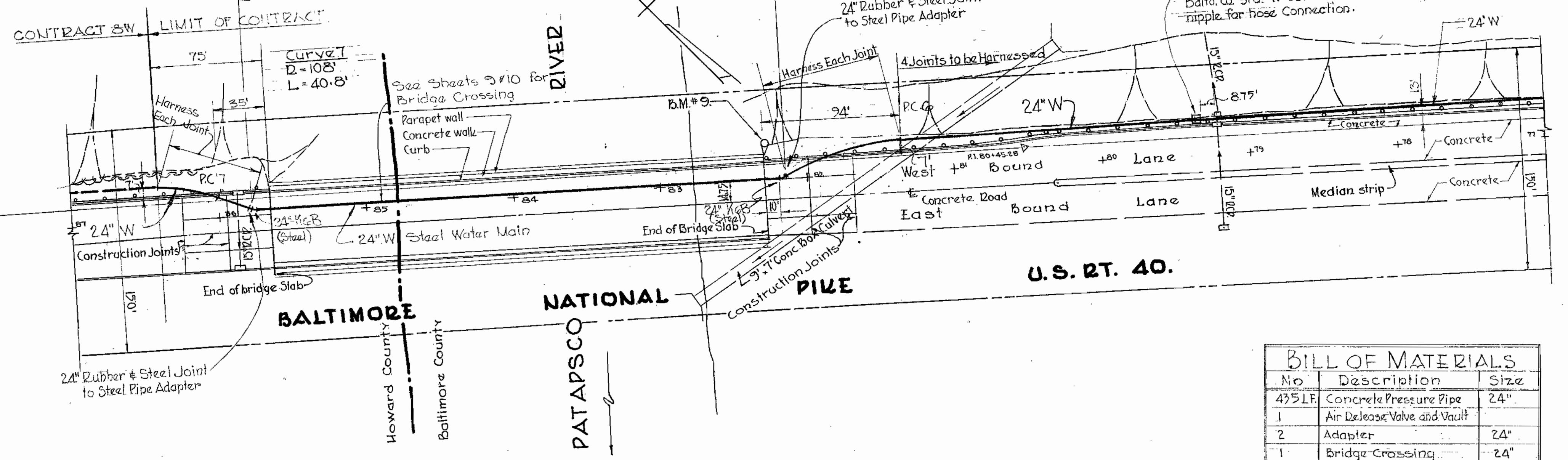
Curve 6
 R = 215'
 L = 80'

CONTRACT S.W. LIMIT OF CONTRACT

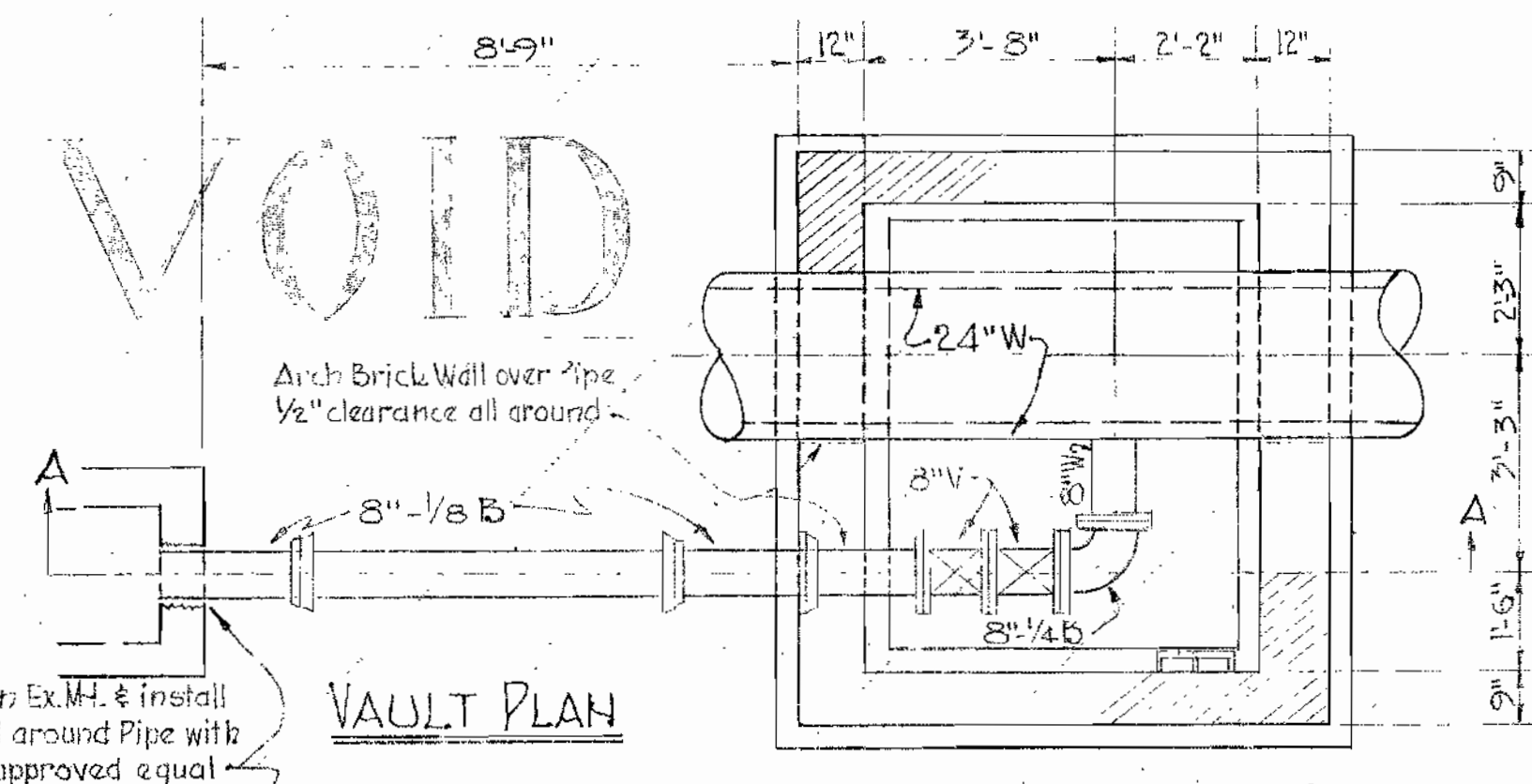
Curve 7
 R = 108'
 L = 40.8'



SLAB PLAN

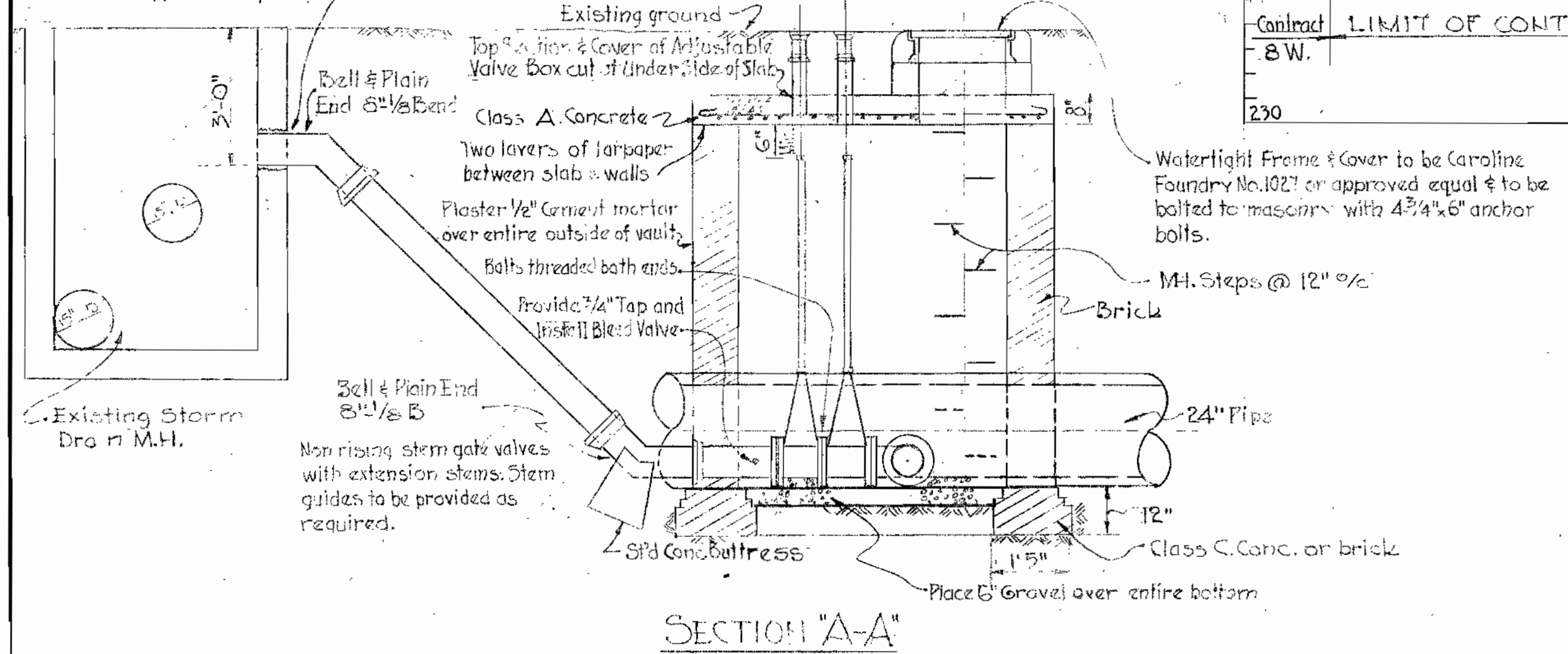


BILL OF MATERIALS		
No	Description	Size
435 LF	Concrete Pressure Pipe	24"
1	Air Release Valve and Vault	
2	Adapter	24"
1	Bridge Crossing	24"

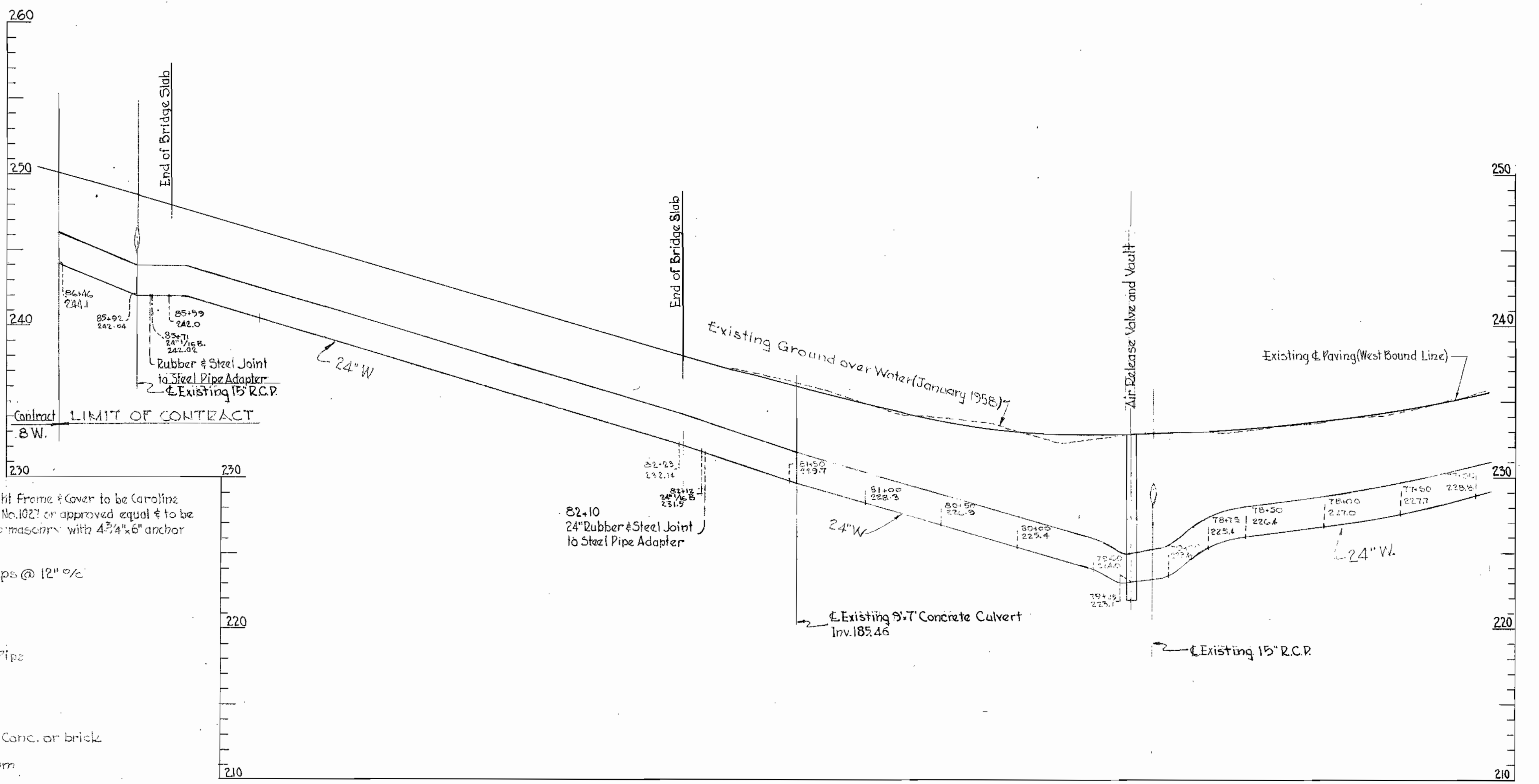


VAULT PLAN

Break Hole in Ex.M.H. & install pipe. Fill Void around Pipe with Embaco or approved equal



SECTION "A-A"



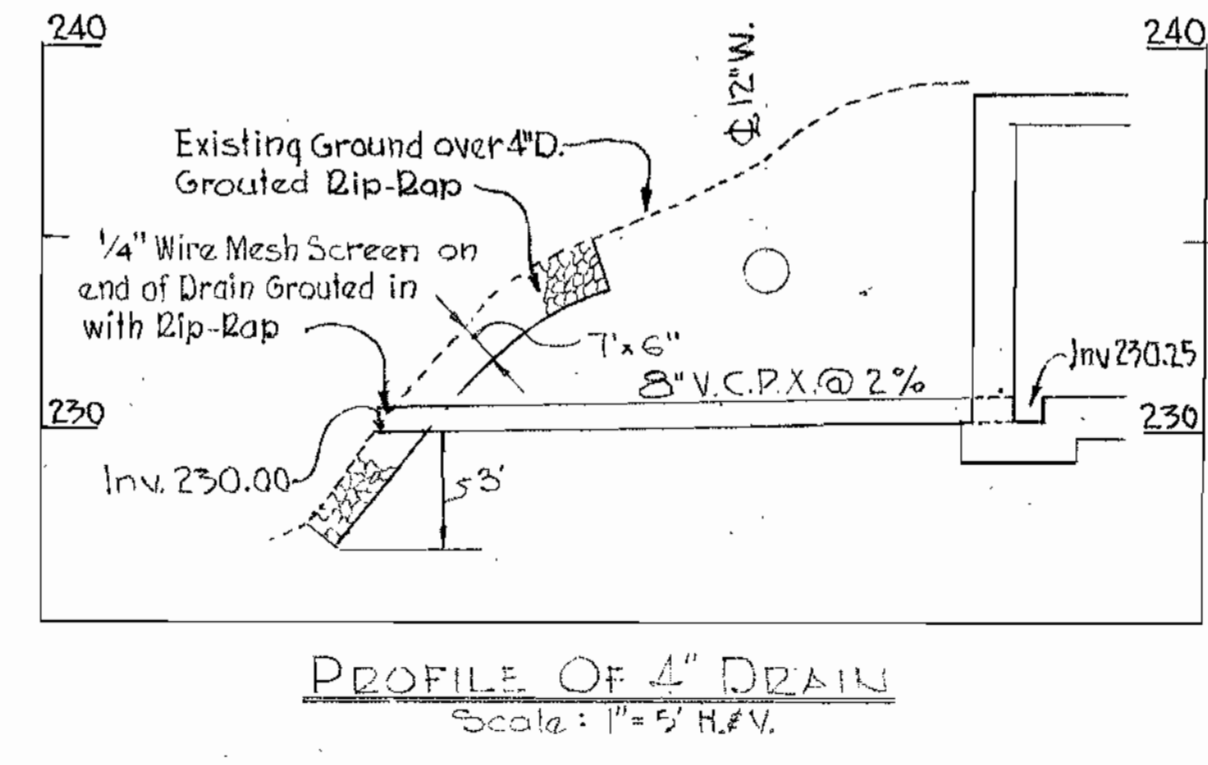
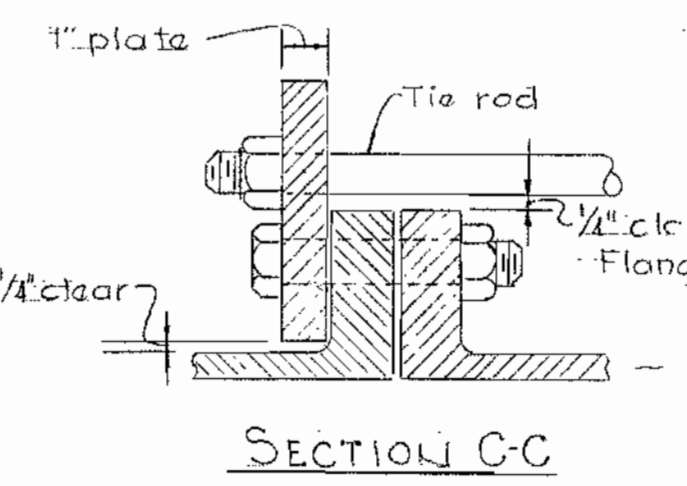
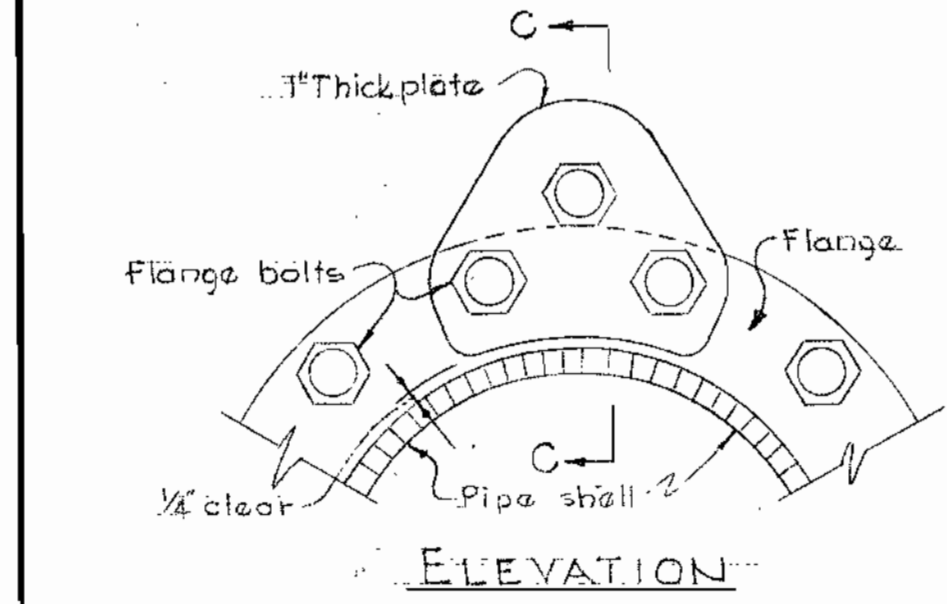
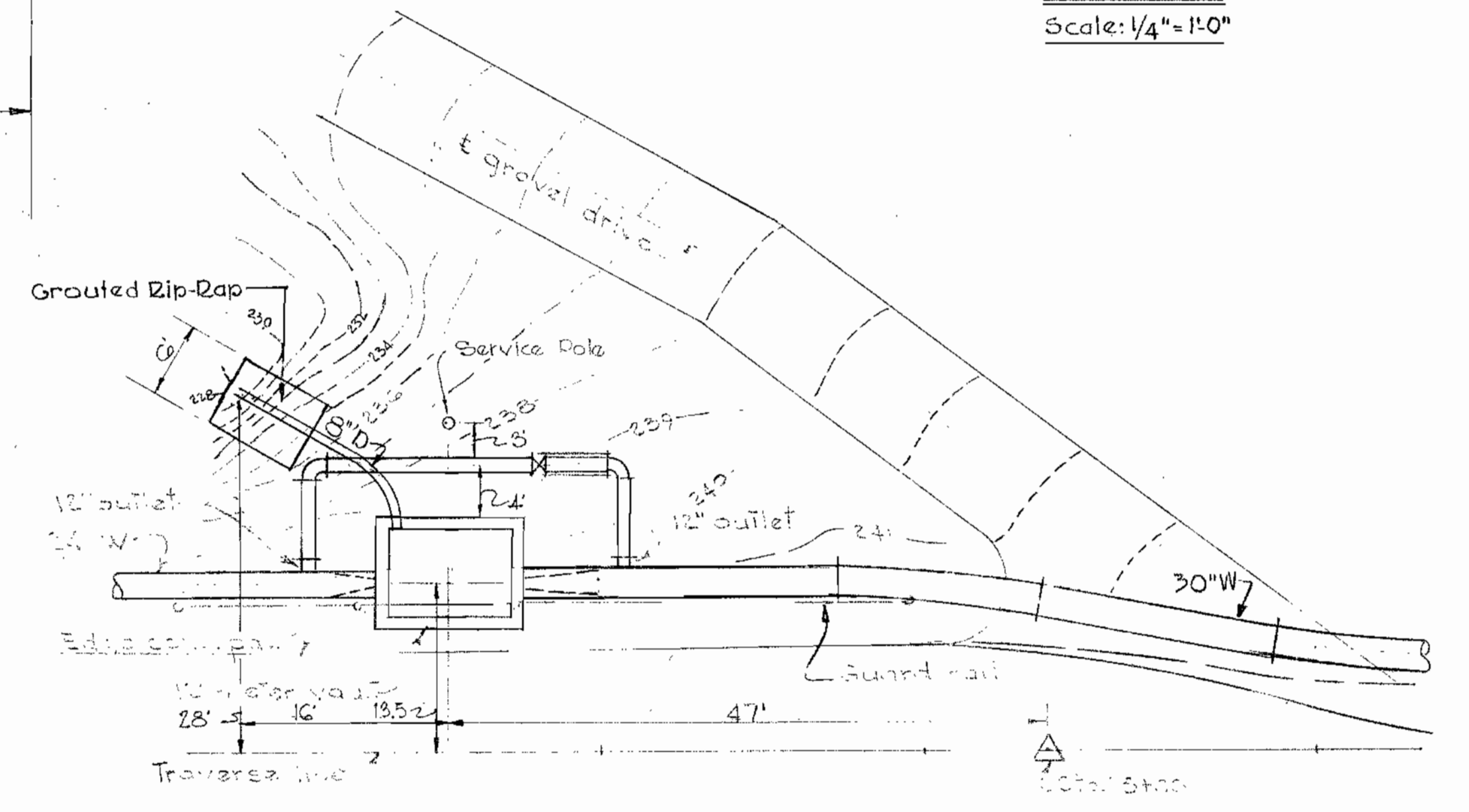
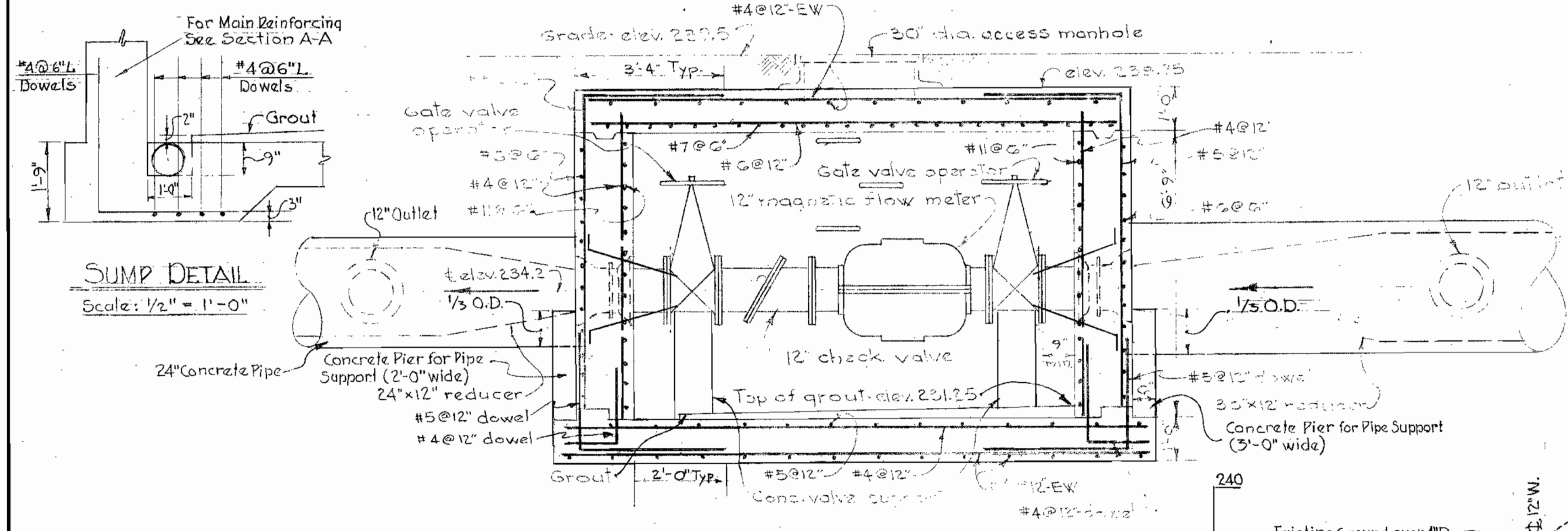
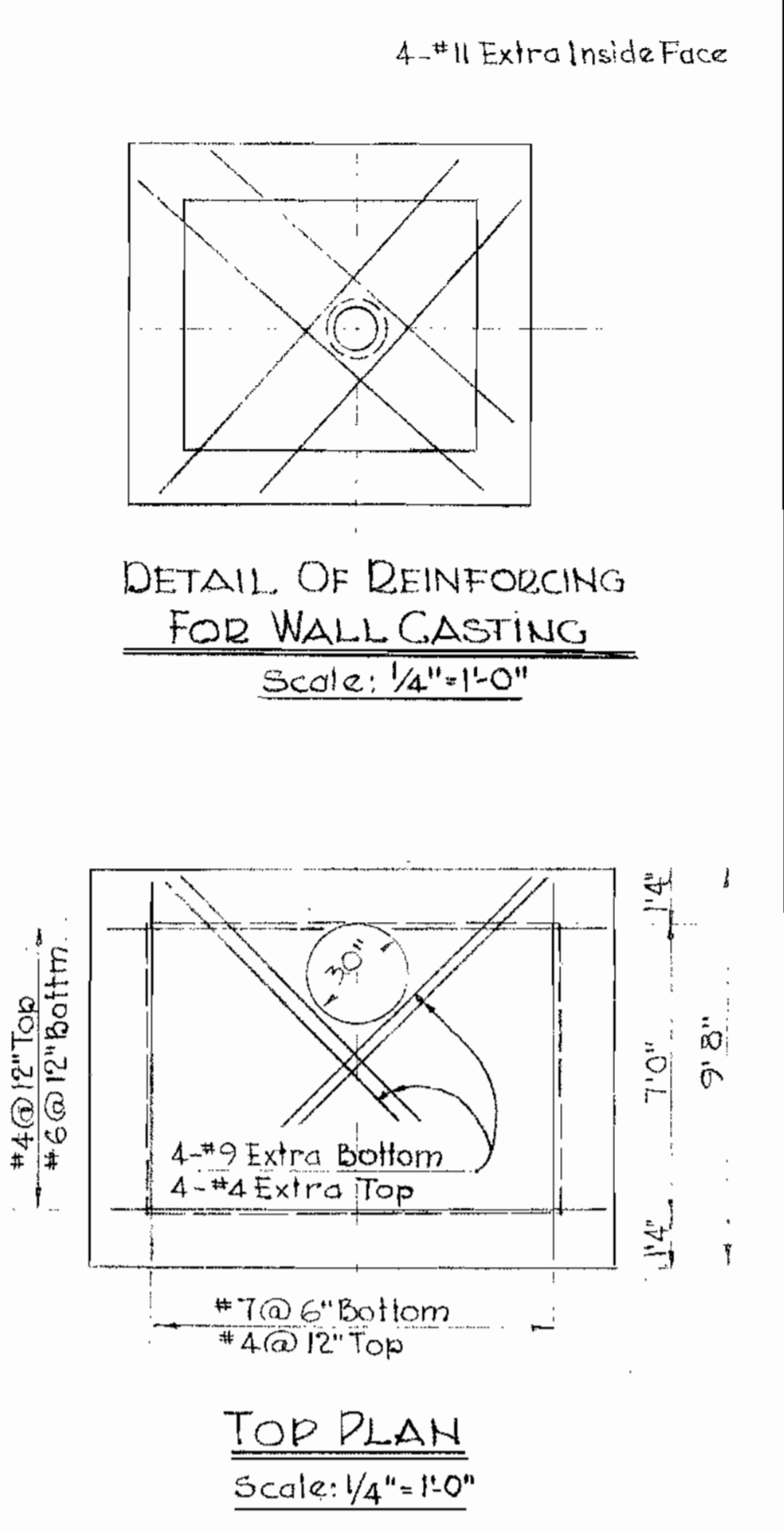
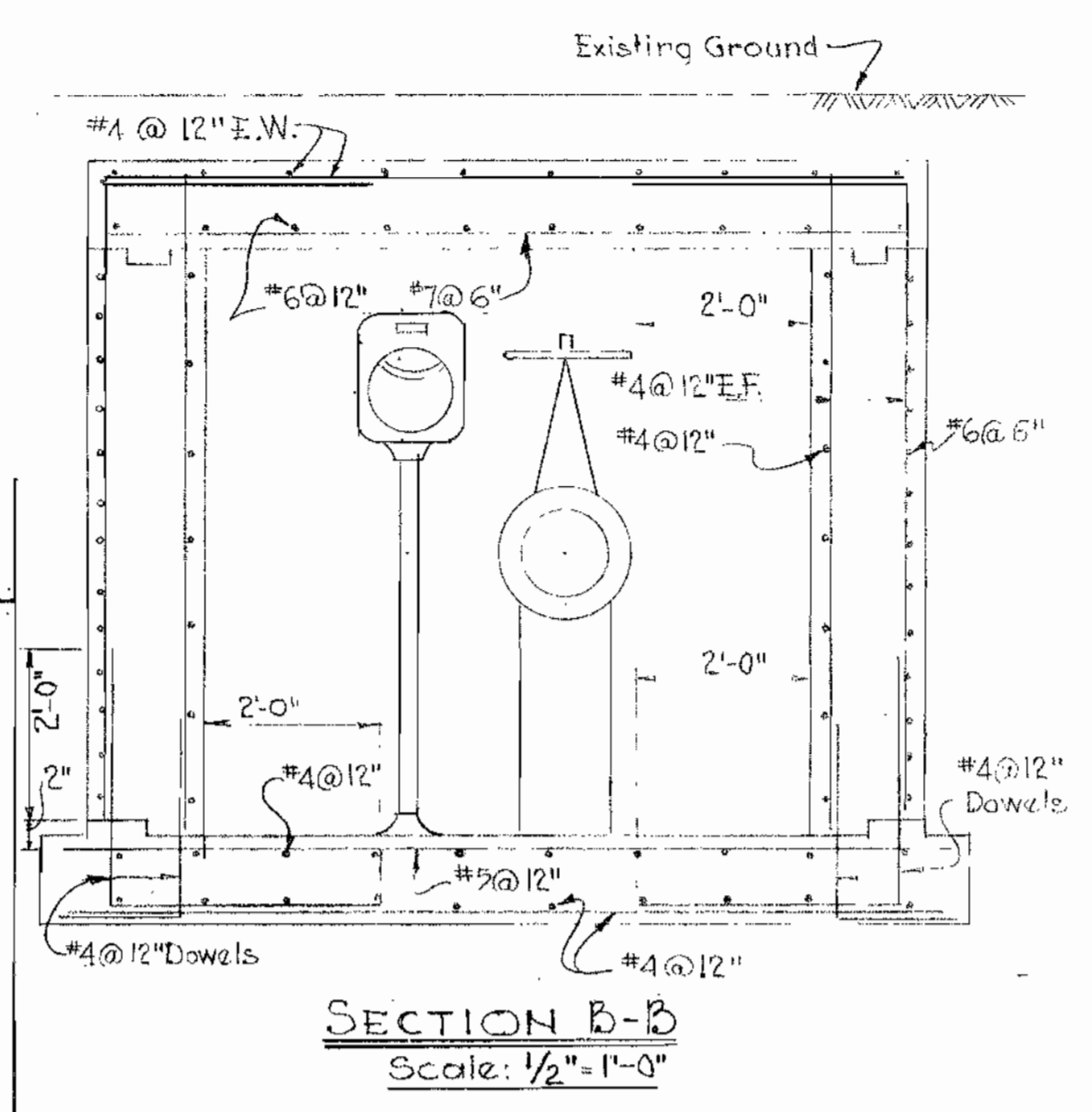
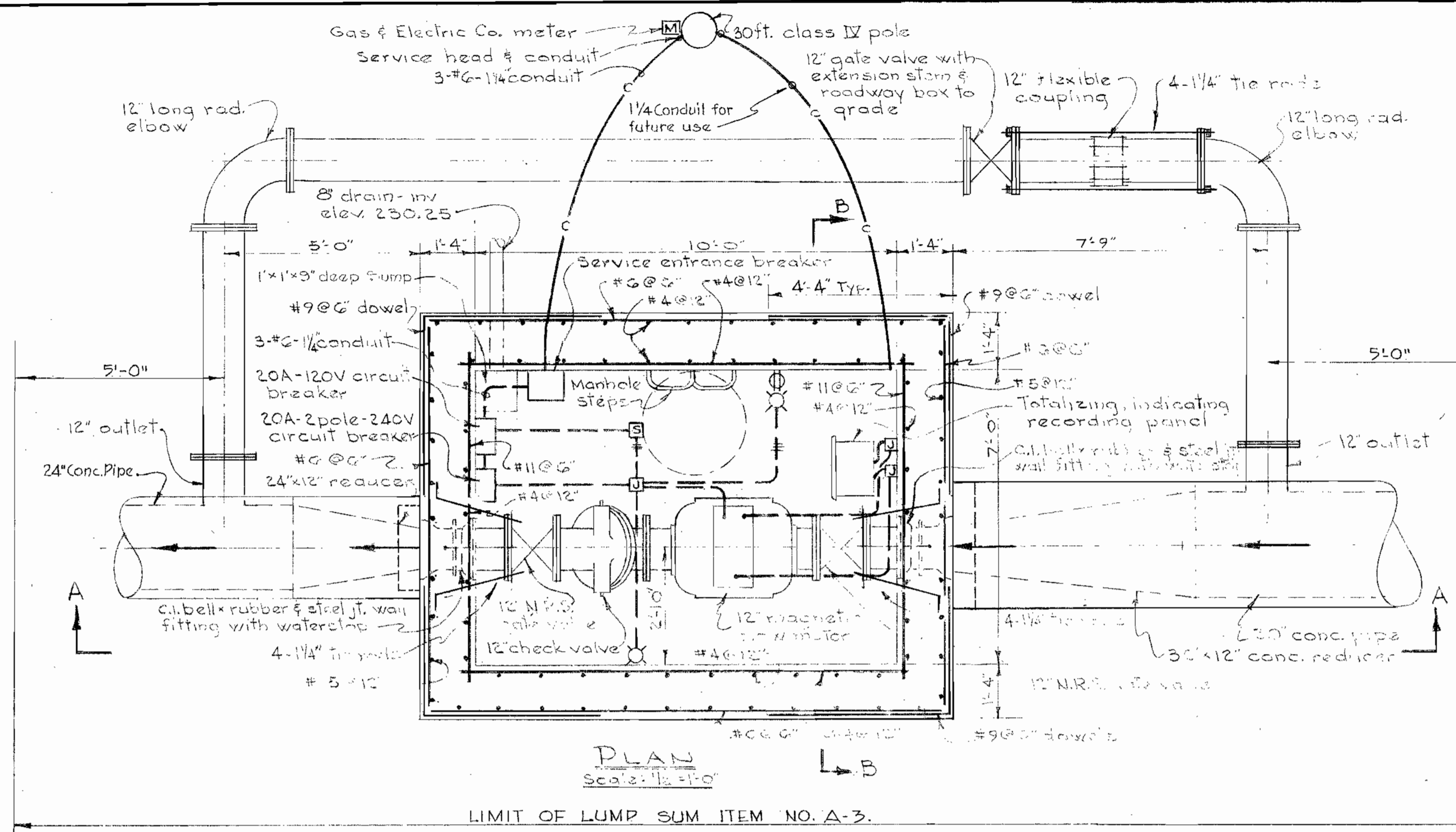
DETAIL OF BLOWOFF

Scale: 3/8" = 1'-0"

ROAD PERMIT AND GRADES PERMIT REQUESTED..... PERMIT NUMBER..... GRADE ESTABLISHED..... PROFILE NUMBER.....		APPROVED FOR CITY OF BALTIMORE 1-9-1959 DATE WATER ENGINEER		CONTRACT NO. 7W		HOWARD COUNTY METROPOLITAN COMMISSION January 13, 1959 DATE CHAIRMAN		WHITMAN REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE MARYLAND		DRAWING COMPLETED..... DATE..... REVISION..... BY.....	
DEPARTMENT OF PUBLIC WORKS ENGINEER..... REG. NO..... DESIGNED..... DRAWN..... CHECKED..... DATE.....		BUREAU OF ENGINEERING APPROVED..... CHIEF..... DATE.....		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING		SCALE AS SHOWN		KEY SHEET NO. 7 POSITION SHEET 2 S W 31 OF 10 SHEET NO. 7 J.O. FILE:			

W0.4649.

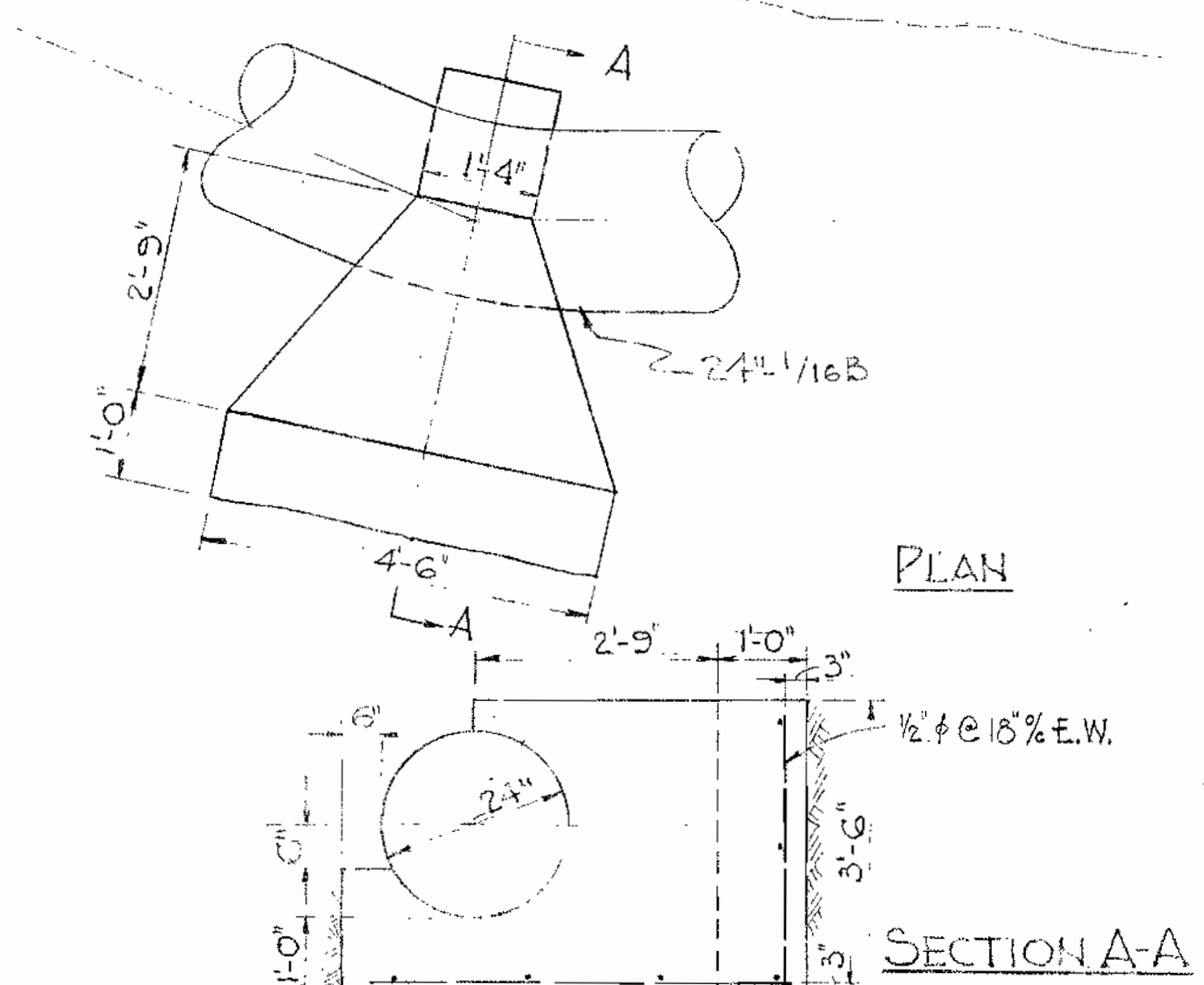
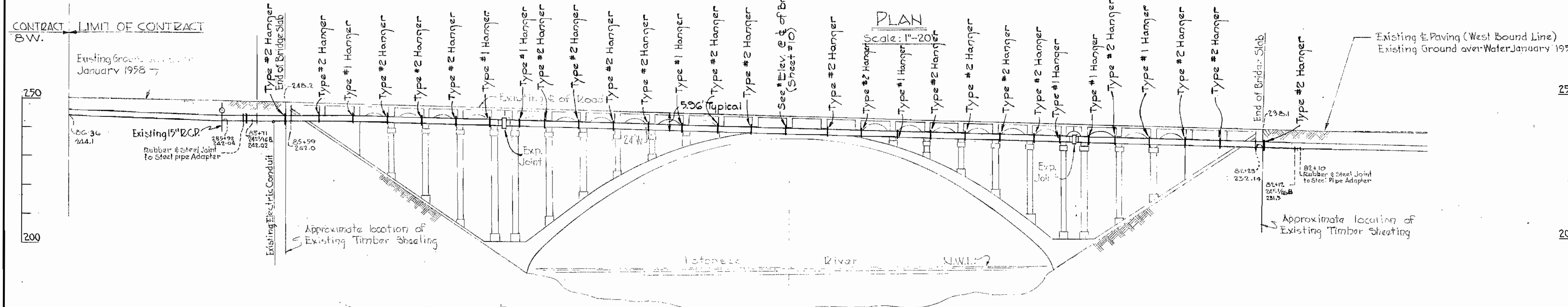
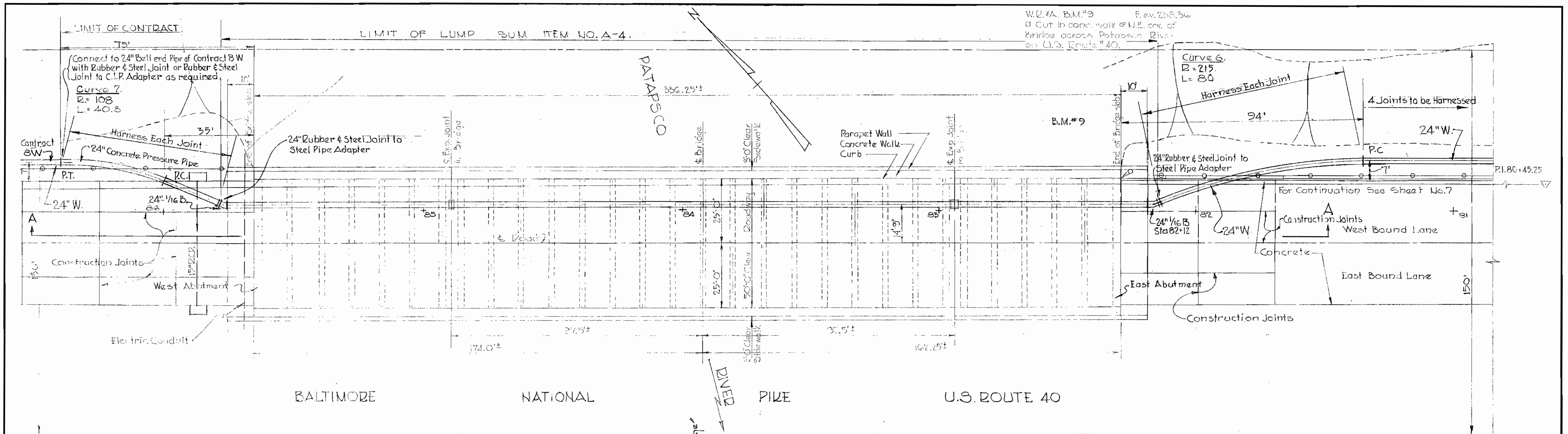
WS 7W/7



ROAD PERMIT AND GRADES		APPROVED FOR CITY OF BALTIMORE		CONTRACT NO. 7W		CWO. 31440		HOWARD COUNTY METROPOLITAN COMMISSION		WHITMAN REQUARDT & ASSOCIATES ENGINEERS		DATE		REVISION		BY	
PERMIT REQUESTED	PERMIT NUMBER	DATE	1-9-1959	DATE	January 13, 1959	DATE	January 13, 1959	CHAIRMAN	1304 ST. PAUL ST.	BALTIMORE	MARYLAND	DATE	REVISION	BY	DATE	REVISION	BY
GRADE ESTABLISHED	PROFILE NUMBER	ENGINEER	DEPARTMENT OF PUBLIC WORKS	BUREAU OF ENGINEERING	BALTIMORE COUNTY	DEPARTMENT OF PUBLIC WORKS	BUREAU OF ENGINEERING	SCALE	AS SHOWN	KEY SHEET	SHEET NO. 8	POSITION SHEET	OF 10	J.O.	FILE:		
DATE	RIGHT OF WAY REF.	REG. NO.	DESIGNED	APPROVED	DIRECTOR & CHIEF SANITARY ENGINEER	APPROVED	CHIEF	STORM DRAINS	WATER	SEWER	HIGHWAYS	STRUCTURES	FIELD LOCATION				

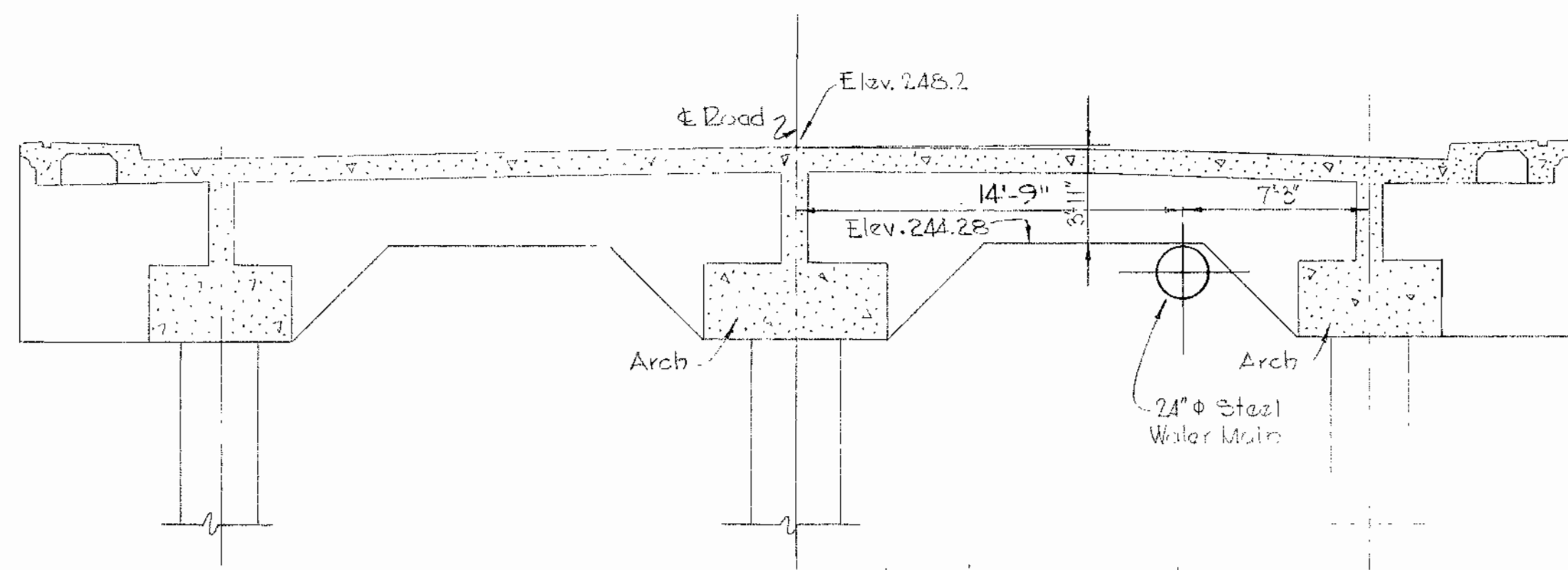
W.O.4649

WS 7W/8

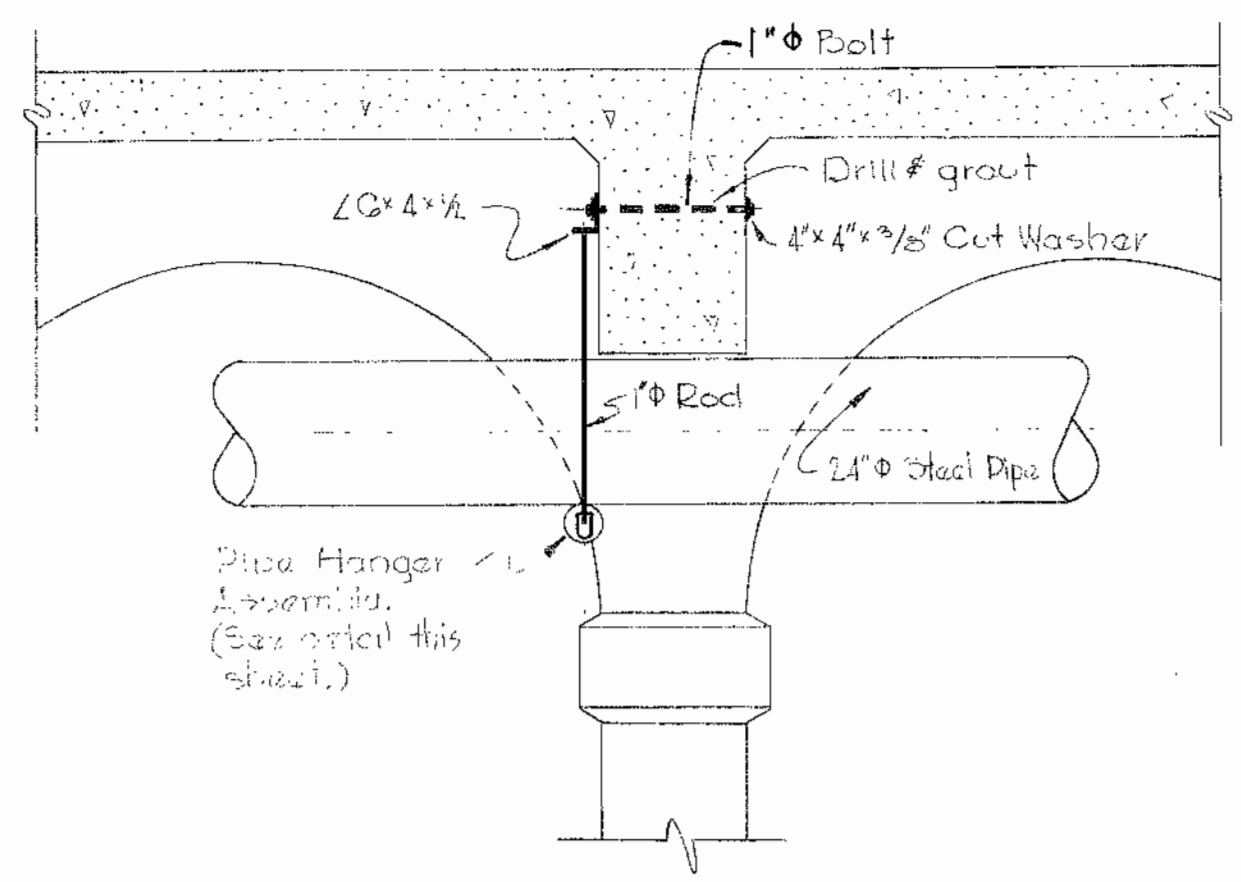


- GENERAL NOTES**
1. Approximate location of existing main as shown. The Contractor shall take all necessary precautions to protect the existing main and service, and maintain undisturbed supply. Any damage incurred shall be repaired immediately.
 2. All pipe alterations shall be made in accordance with the specifications.
 3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
 4. The location of all valves, fittings, etc. have been located in plan and dimensions shall be strictly adhered to unless otherwise directed by the Engineer in writing.
 5. All 24" W to be 1/2" steel pipe between limits shown on drawings.
 6. All drilling of holes in existing concrete bridge shall be in accordance with S.C.C. requirements.
 7. Cut neat hole for water main in existing Wood Sheeting at each end of bridge and reinforce in accordance with specifications.
 8. Harnesses shall be designed to withstand a force of 10,000#.

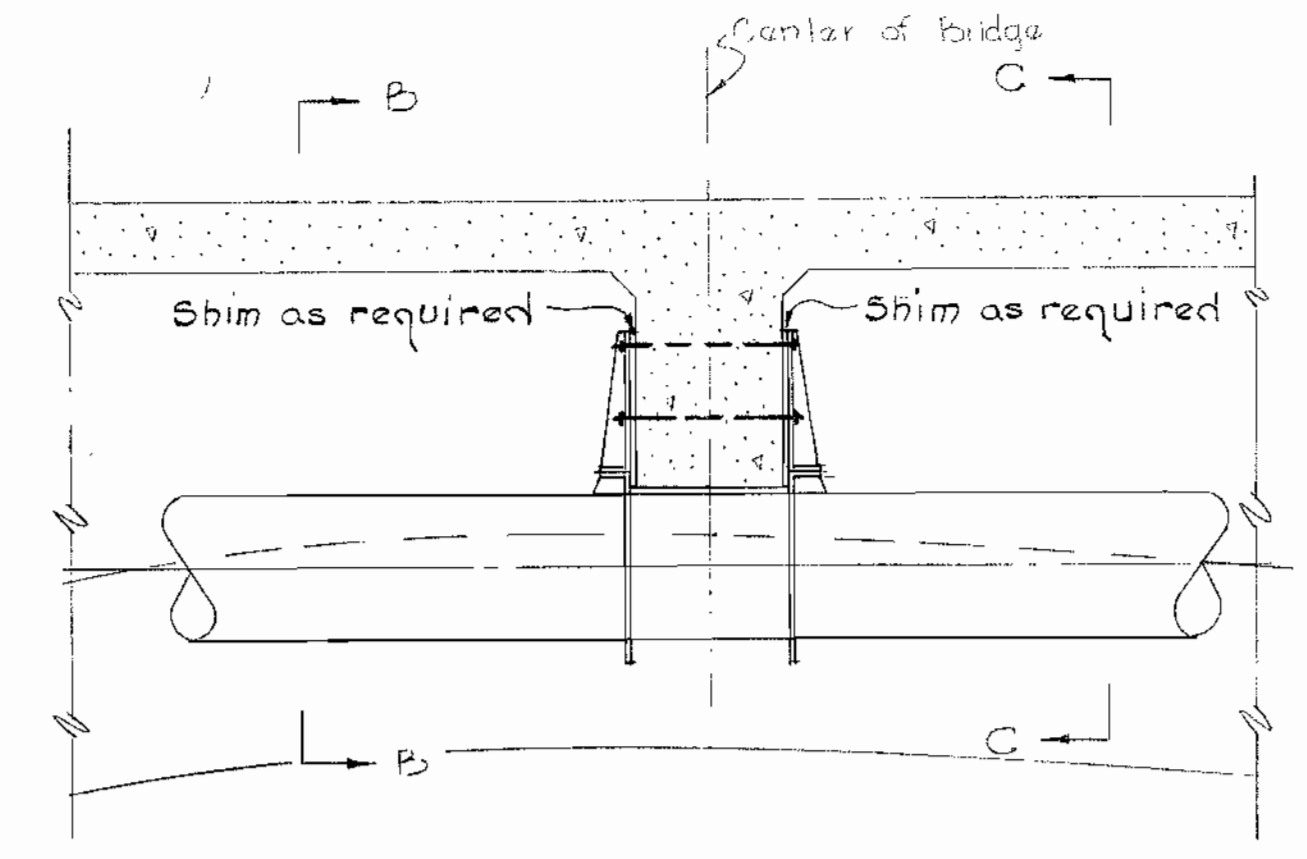
ROAD PERMIT AND GRADES PERMIT REQUESTED..... PERMIT NUMBER..... GRADE ESTABLISHED..... PROFILE NUMBER.....		DEPARTMENT OF PUBLIC WORKS APPROVED..... DIRECTOR & CHIEF SANITARY ENGINEER		BUREAU OF ENGINEERING APPROVED..... CHIEF		BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING STORM DRAINS WATER SEWER HIGHWAYS STRUCTURES FIELD LOCATION		CONTRACT NO. 7W HOWARD COUNTY METROPOLITAN COMMISSION DATE: January 18, 1959 CHAIRMAN: Carl W. Meyer		WHITMAN REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE MARYLAND		APPROVED FOR CITY OF BALTIMORE DATE: 1-9-1959 WATER ENGINEER: [Signature] DIRECTOR OF PUBLIC WORKS: George A. Carter, Jr.	
DATE RIGHT OF WAY REF.	ENGINEER REG. NO. DESIGNED DRAWN CHECKED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE	DATE APPROVED DATE



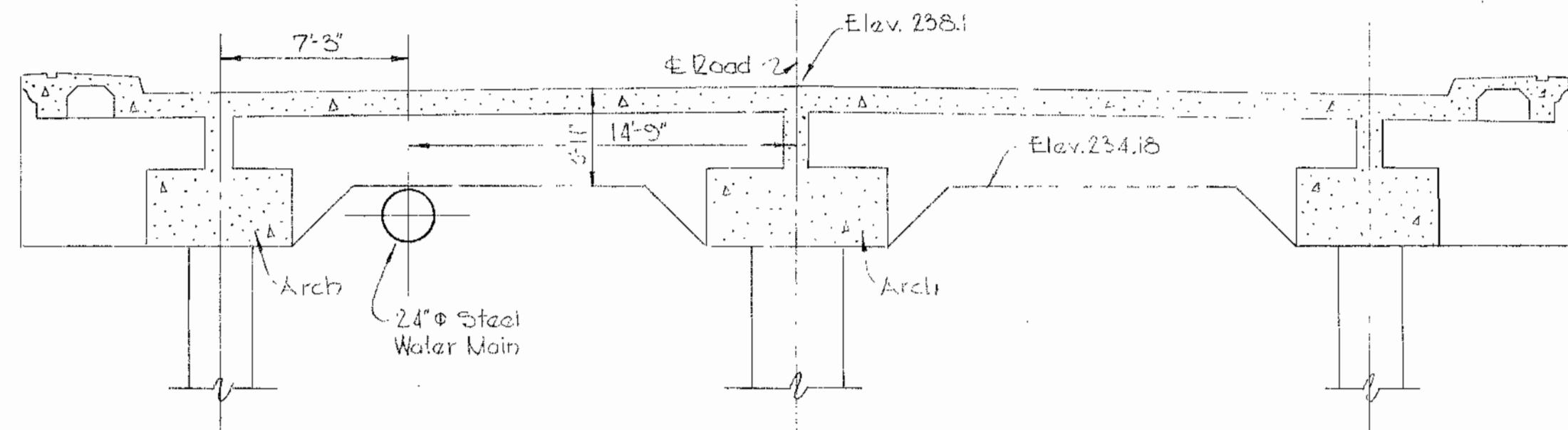
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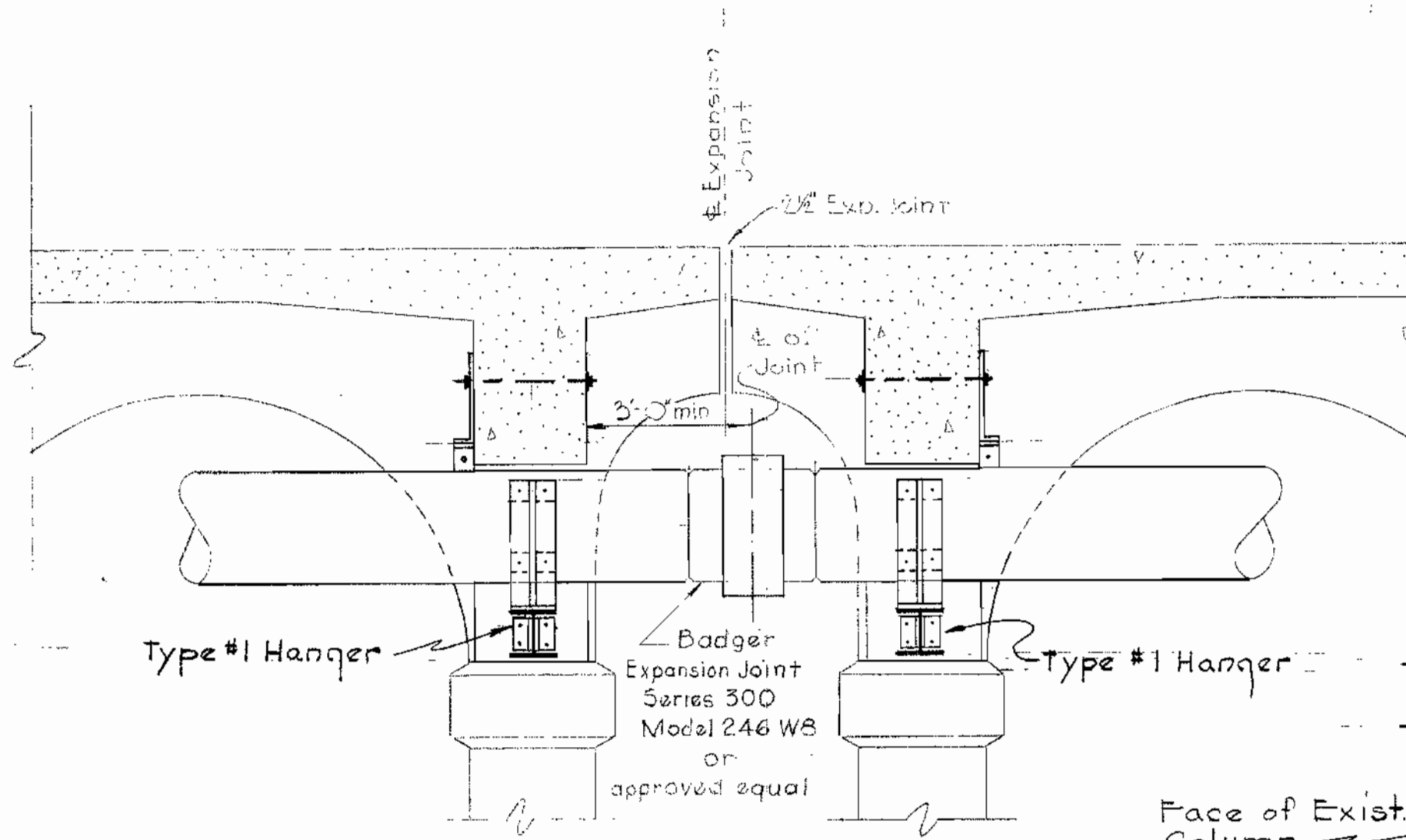
SECTION A-A
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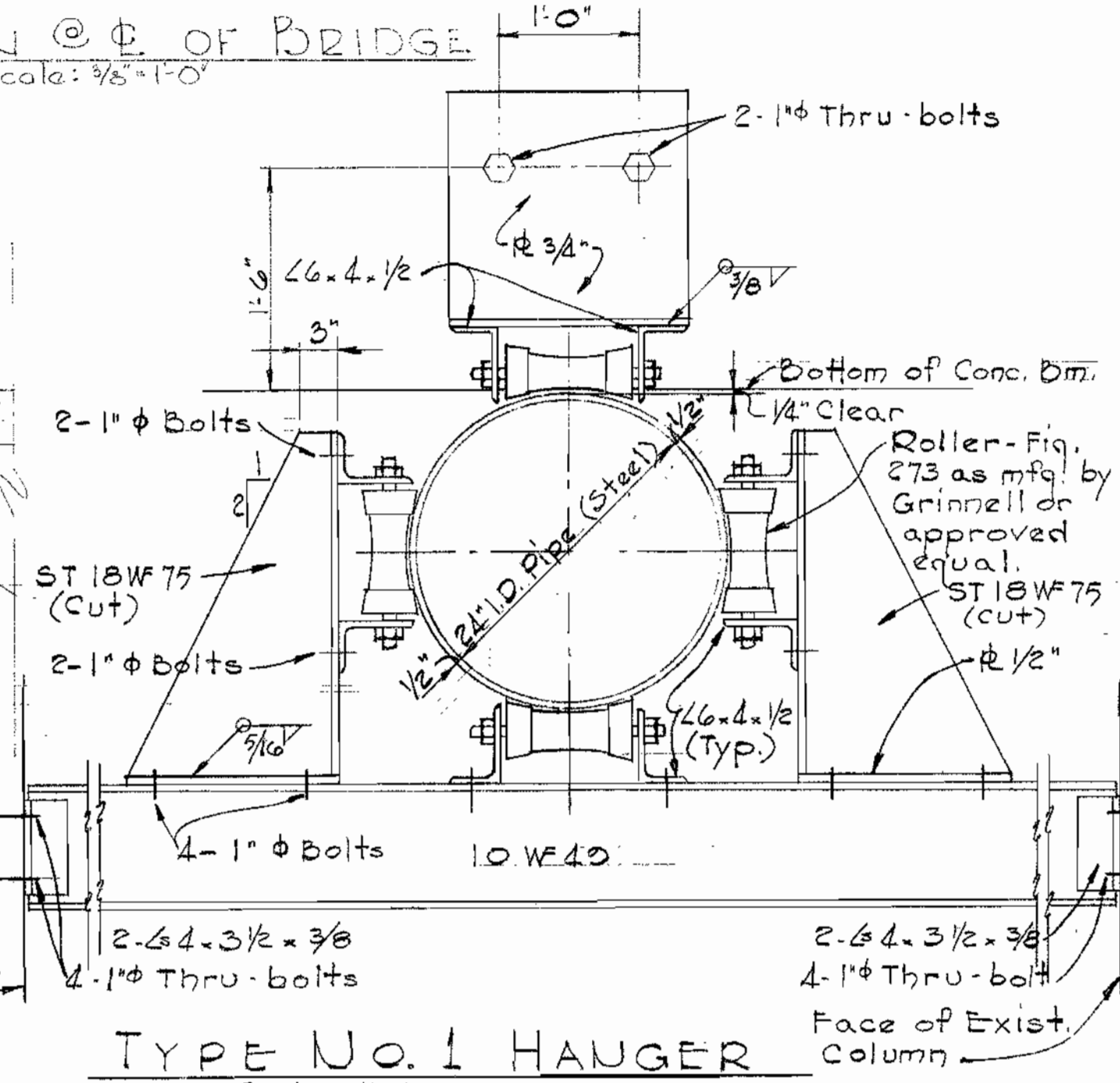
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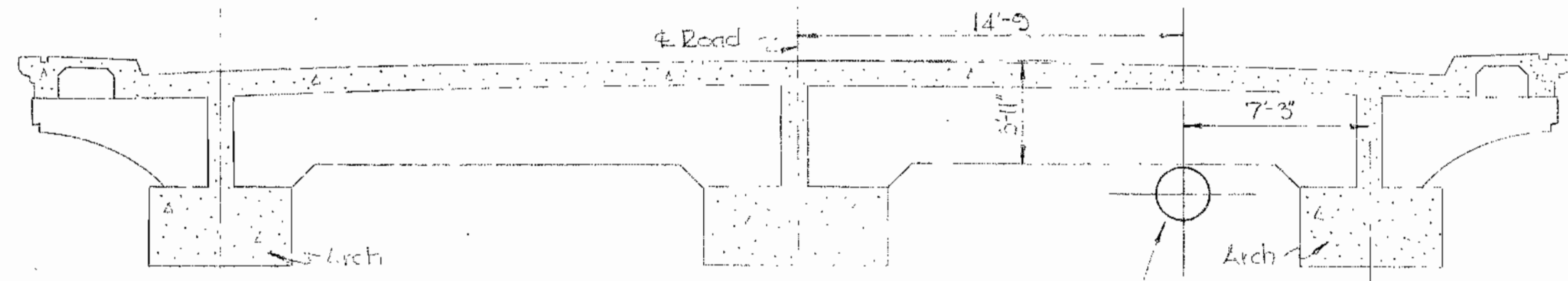
FRONT ELEVATION OF EAST ABUTMENT
Scale: 3/8"=1'-0"



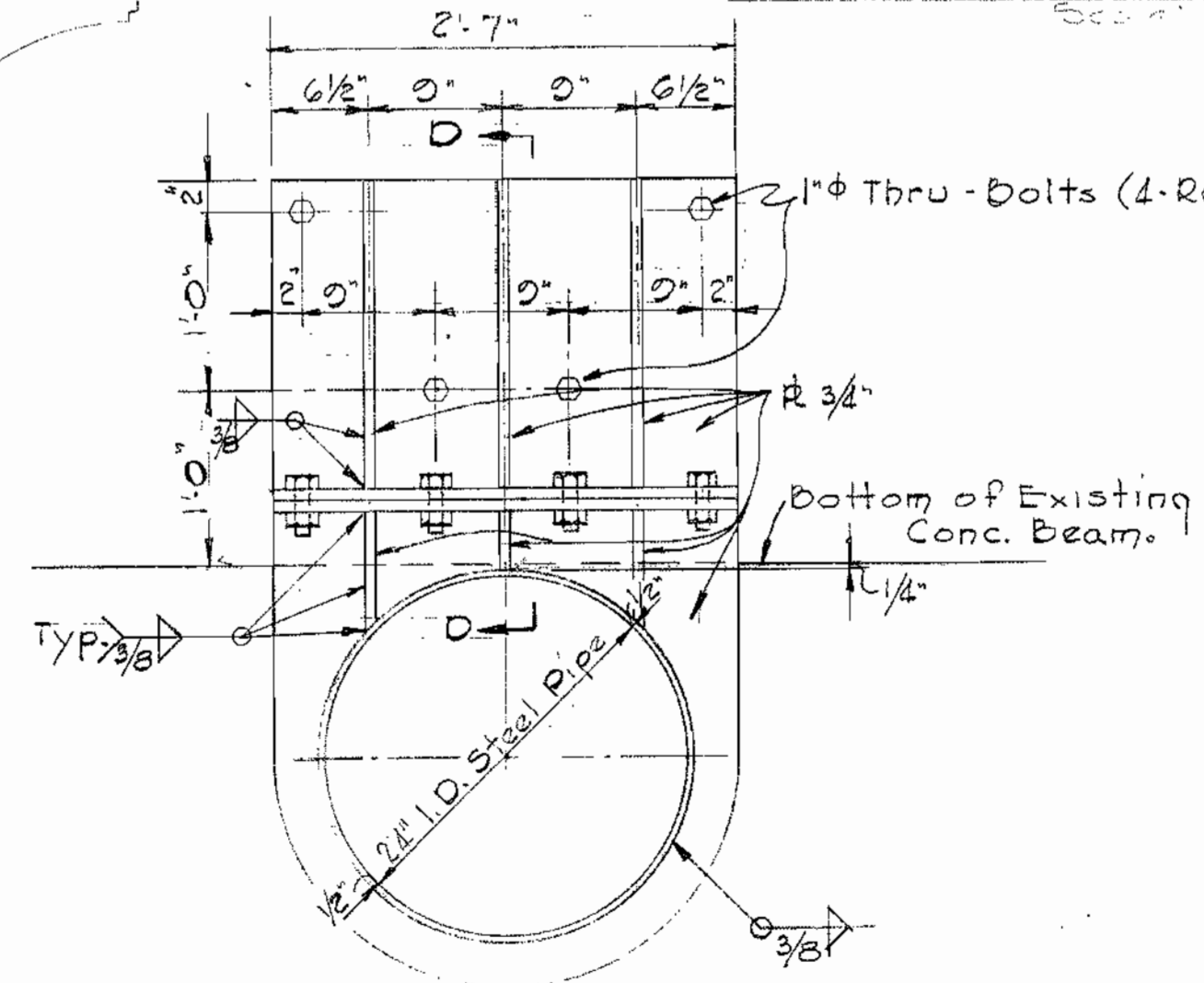
ELEVATION @ EXPANSION JOINT
Scale: 3/8"=1'-0"



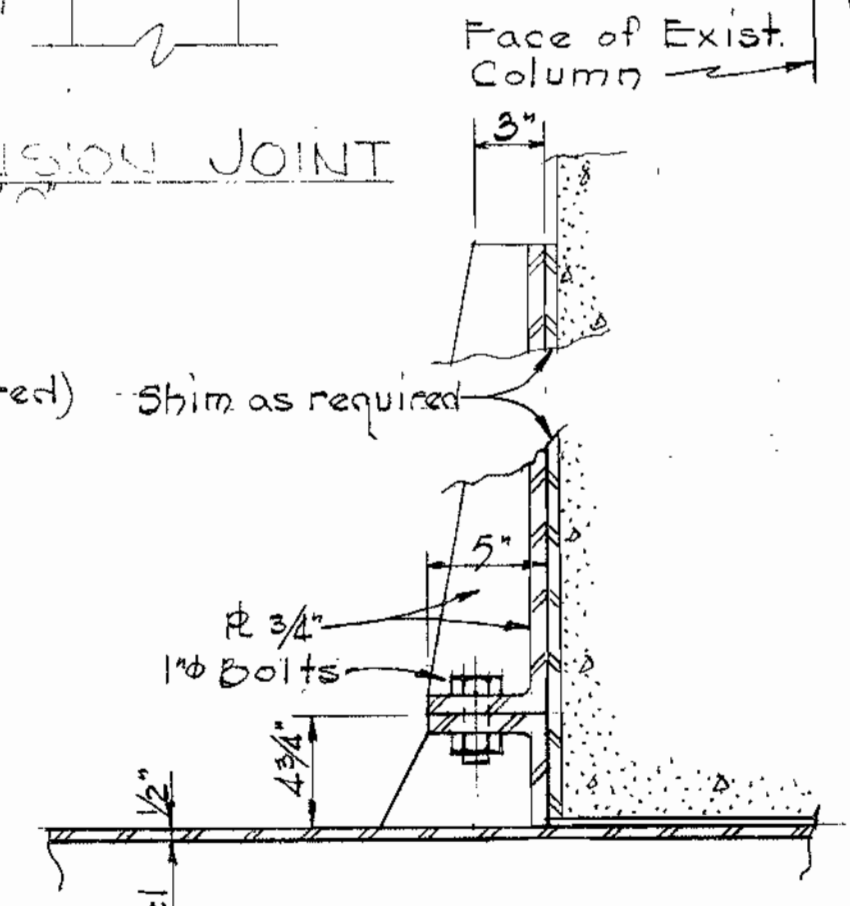
TYPE NO. 1 HANGER
Scale: 1"=1'-0"



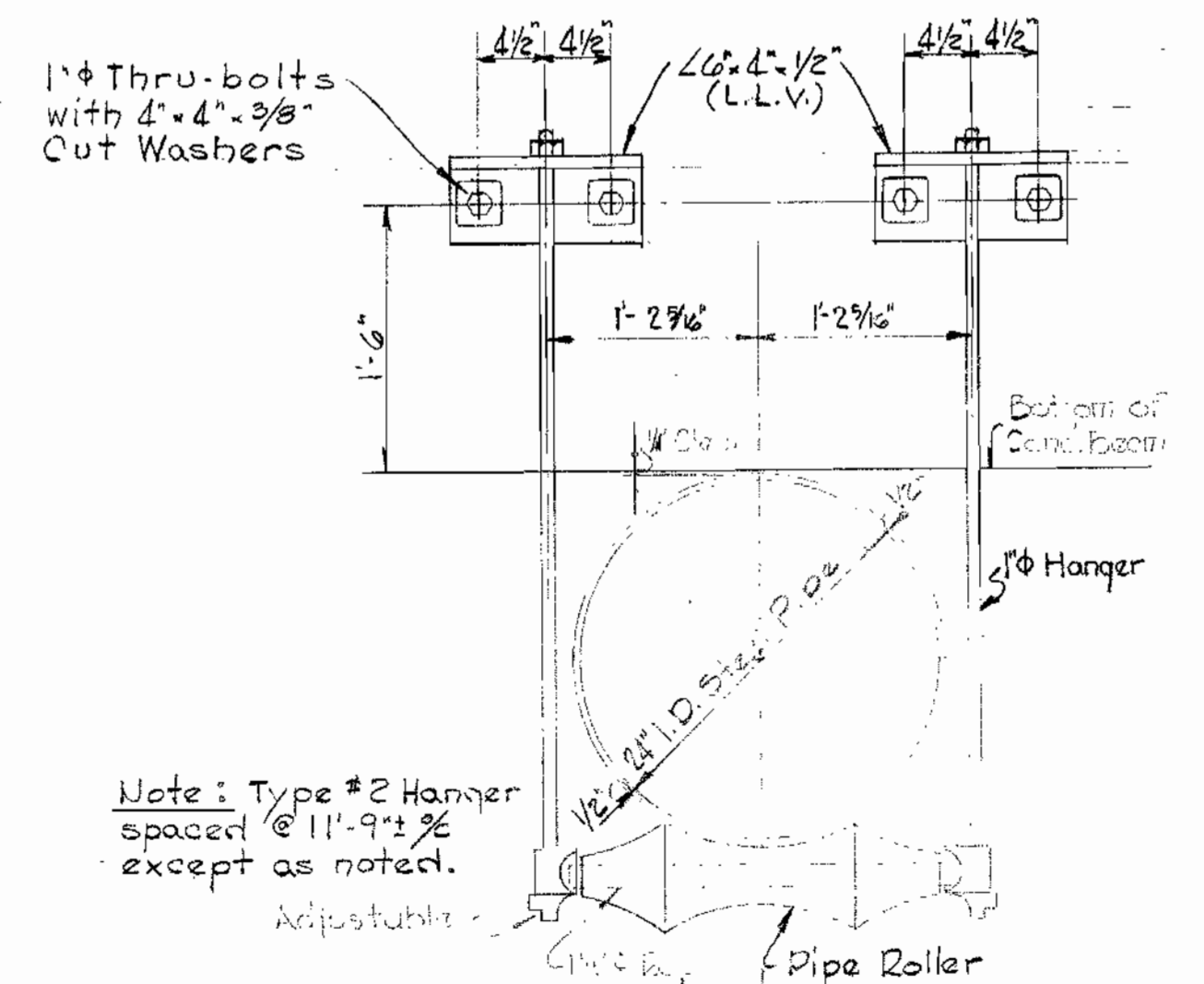
SECTION THRU CENTER OF BRIDGE
Scale: 3/8"=1'-0"



SECTION B-B
SECTION C-C SIMILAR
Scale: 1"=1'-0"



SECTION D-D
Scale: 1/2"=1'-0"



TYPE NO. 2 HANGER
Scale: 1"=1'-0"

Note: All bolts and hanger rods shall be galvanized and painted.

Note: Type #2 Hanger spaced @ 11'-9 1/2" except as noted.

ROAD PERMIT AND GRADES		
PERMIT REQUESTED		
PERMIT NUMBER		
GRADE ESTABLISHED		
PROFILE NUMBER		
DATE	RIGHT OF WAY	REF.

ENGINEER	DESIGNED
REG. NO.	DRAWN
DATE	CHECKED

DEPARTMENT OF PUBLIC WORKS	
APPROVED	DIRECTOR & CHIEF SANITARY ENGINEER
DATE	

BUREAU OF ENGINEERING	
APPROVED	CHIEF
DATE	
STORM DRAINS	WATER
SEWER	HIGHWAYS
STRUCTURES	FIELD LOCATION

HOWARD COUNTY METROPOLITAN COMMISSION	WHITMAN REQUARDT & ASSOCIATES
January 13, 1959	1304 ST. PAUL ST.
DATE	BALTIMORE MARYLAND

DATE	REVISION	BY

DETAILS OF WATER MAIN CROSSING PATAPSCO RIVER
BALTIMORE NATIONAL PIKE U.S. ROUTE 40

SCALE AS SHOWN

KEY SHEET SHEET NO. 10 OF 10
POSITION SHEET J.O. FILE

WS 7W/10