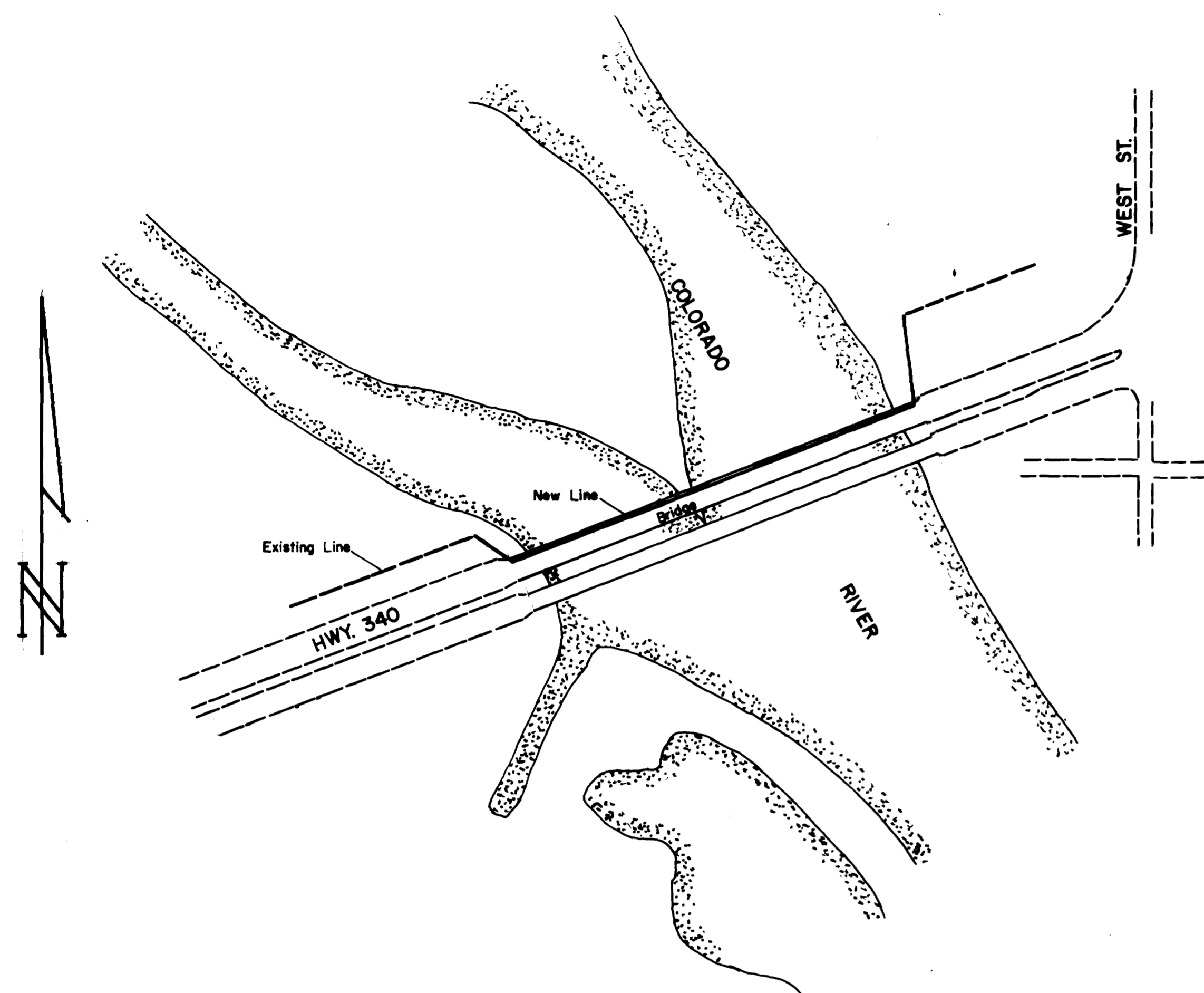


SANITARY SEWER REPLACEMENT

HIGHWAY 340 ACROSS THE COLORADO RIVER BRIDGE



1. COVER SHEET
2. DRAFTING STANDARDS & ABBREVIATIONS
3. SUMMARY OF APPROXIMATE QUANTITIES
- 4-6. PLAN AND PROFILE SHEETS
7. DETAIL SHEET
8. STANDARD SANITARY SEWER DETAILS SS-1
- 9-12. TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION
C.D.O.H. STD. S-614-50
13. BARRICADES, DRUMS, CONCRETE BARRICADES
(TEMPORARY) & VERTICAL PANELS C.D.O.H.
STD. S-614-15

CITY OF GRAND JUNCTION

DEPARTMENT OF PUBLIC WORKS AND UTILITIES, ENGINEERING DIVISION



SUMMARY OF APPROXIMATE QUANTITIES

Item No.	Ref. No.	Contract Item	Unit	Quantity														Totals
1.	203	Exploratory Excavation	Lump Sum	Lump Sum														
2.	604	Furnish & Install 12" Dia. Yelomine Pipe with fittings	L.F.	836														
3.	--	Furnish & Install Polyurethane Insulation & Aluminum Covering	L.F.	824														
4.	--	Furnish & Install Double Roller Pipe Hangers	Each	42														
5.	--	Furnish & Install Single Roller Pipe Hangers	Each	38														
6.	604	Furnish & Install 12" Dia. Class 200 PVC Pipe with fittings	L. F.	361														
7.	716	Furnish & Install 8" Dia. M.J. Plug	Each	2														
8.	716	Furnish & Install 10" FL. by M.J. Gate Valve	Each	1														
9.	716	8" Diameter Clean-Out including 12" x 8" Reducer 90° Bend & Class 200 PVC Pipe	Each	2														
10.	614	Traffic Control	Lump Sum	Lump Sum														
11.		Rip-Rap Restoration (under bridge)	Lump Sum	Lump Sum														
12.	716	Furnish & Install 12" M.J. Gate Valves	Each	2														
13.	716	Furnish & Install 10" dia. Class 200 PVC Pipe with fittings	L.F.	16														
14.	604	30" Dia. Steel Pipe	L.F.	23														

BID TABULATION SHEET

SANITARY SEWER REPLACEMENT HWY.
340 ACROSS THE COLORADO RIVER

October 10, 1985

LYLE STATES
CONSTRUCTION CO.

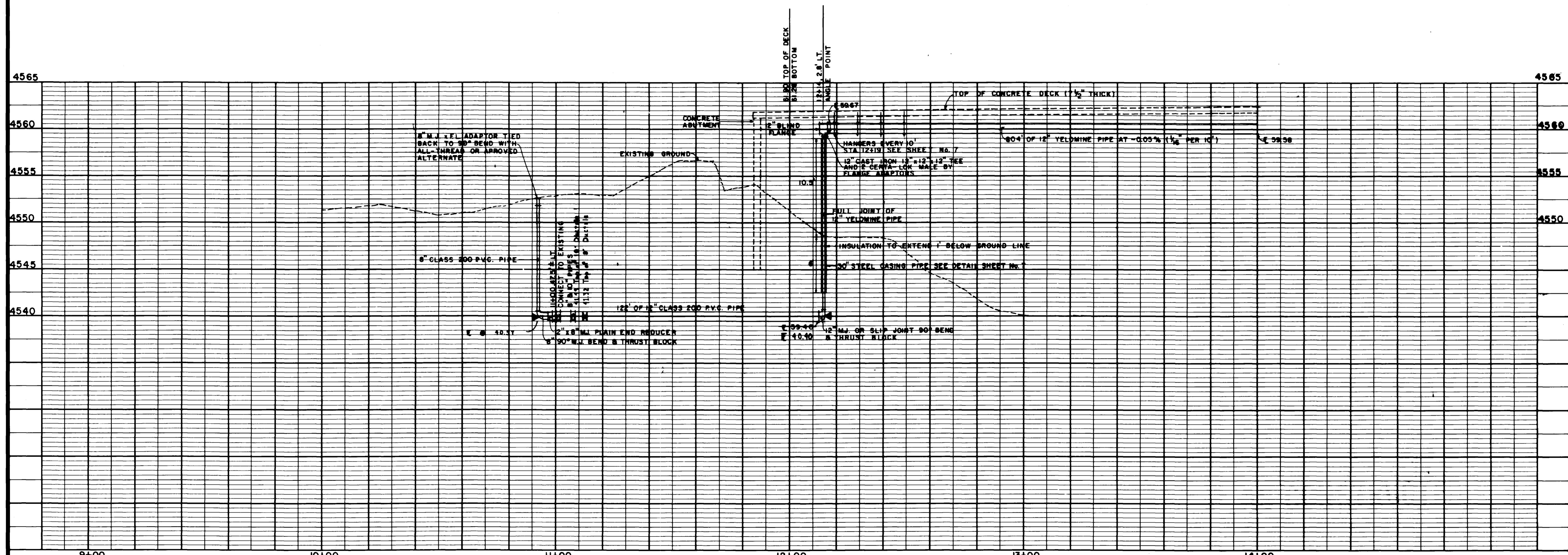
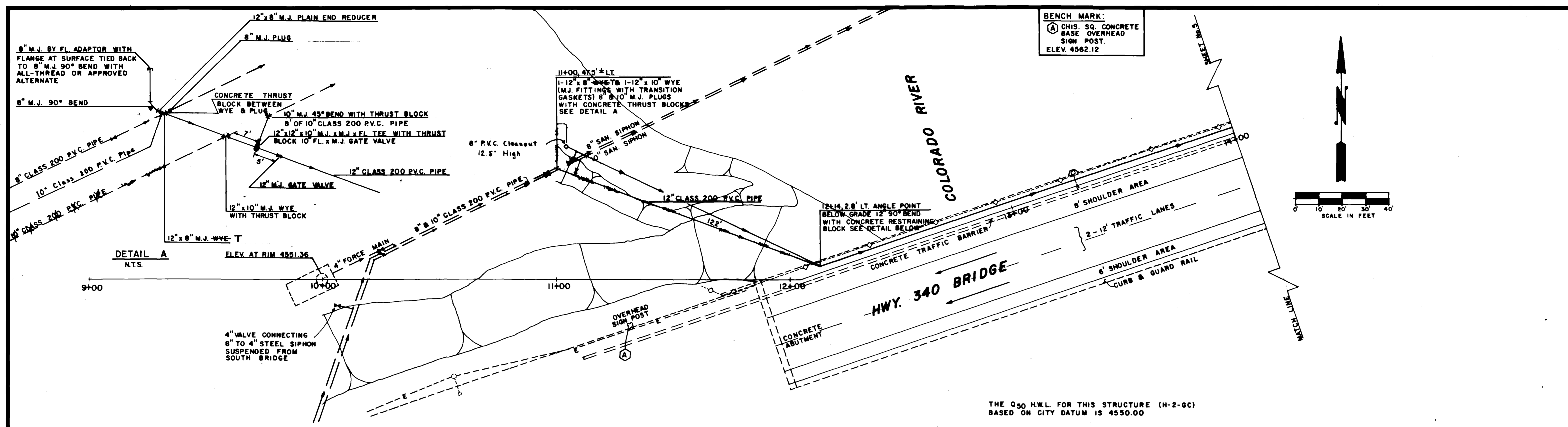
COMMERCIAL SERVICES
CONST. CO., INC.

HERNANCE
CONSTRUCTION

NIKKO
CONSTRUCTION, INC.

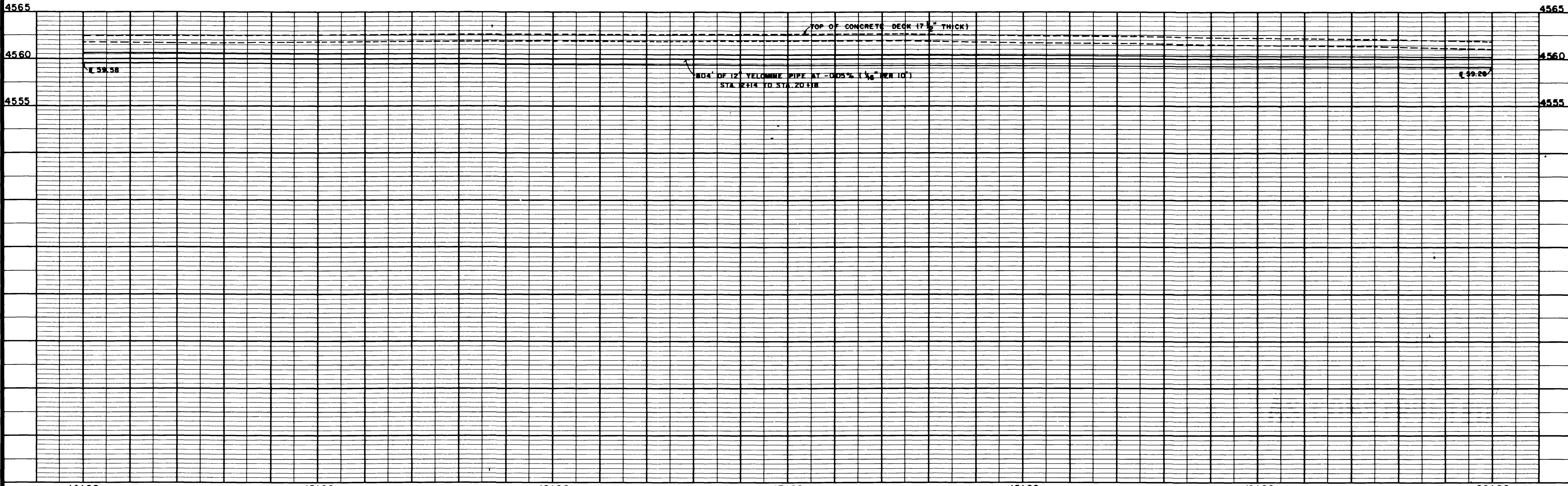
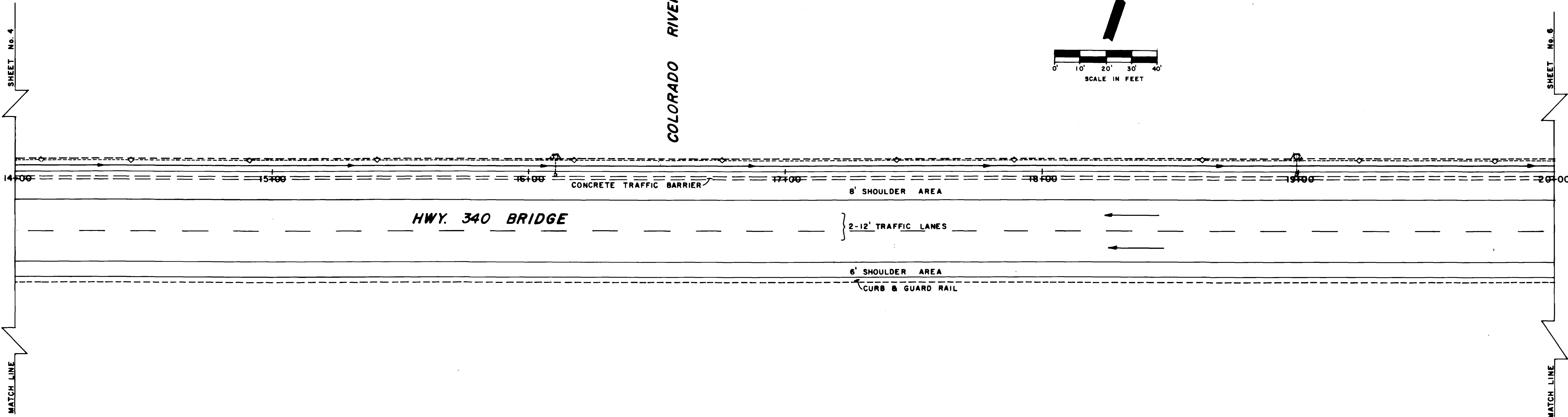
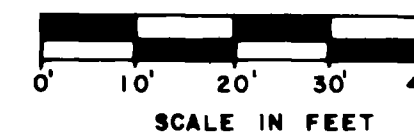
ENGINEERS
ESTIMATE

ITEM NO.	REF. NO.	CONTRACT ITEM	UNITS	QUANTITY	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE		
1.	203	Exploratory Excavation	Lump Sum	Lump Sum	1500.00	1,500.00	760.00	760.00	34.05	1,532.00	5000.00	5,000.00	440.00	440.00		
2.	604	Furnish & install 12" Dia Yelomine Pipe with fittings	L. F.	836	57.80	48,320.80	34.25	28,633.00	36.45	30,472.20	70.00	58,520.00	27.50	22,990.00		
3.		Furnish & Install Polyurethane Insulation & Aluminum Covering	L. F.	824	12.30	10,135.20	16.30	13,431.20	24.20	19,940.80	26.00	21,424.00	13.20	10,876.80		
4.		Furnish & Install Double Roller Pipe Hangers	Each	42	280.00	11,760.00	475.00	19,950.00	336.78	14,144.76	420.00	17,640.00	330.00	13,860.00		
5.		Furnish & Install Single Roller Pipe Hangers	Each	38	200.00	7,600.00	365.00	13,870.00	251.44	9,554.72	350.00	13,300.00	165.00	6,270.00		
6.	604	Furnish & Install 12" Dia. Class 200 PVC Pipe with fittings	L.F.	361	20.00	7,220.00	40.20	14,512.20	30.57	11,035.77	31.00	11,191.00	26.40	9,530.40		
7.	716	Furnish & Install 8" dia. M.J. Plug	each	2	98.00	196.00	108.00	216.00	152.50	305.00	250.00	500.00	165.00	330.00		
8.	716	Furnish & Install 10" FL by M.J. Gate Valve	Each	2	691.00	1,382.00	950.00	1,900.00	950.00	1,900.00	100.00	2,000.00	825.00	1,650.00		
9.	716	8" Diameter Clean-Out including 12"x8" Reducer 90° Bend & Class 200 PVC Pipe	Each	2	998.00	1,996.00	590.00	1,180.00	1096.50	2,193.00	300.00	1,600.00	660.00	1,320.00		
10.	614	Traffic Control	Lump Sum	Lump Sum	3200.00	3,200.00	1080.00	1,080.00	1255.00	4,255.00	4000.00	4,000.00	9900.00	9,900.00		
11.		Rip-Rap Restoration (under bridge)	L.S.	Lump Sum	700.00	700.00	450.00	450.00	2128.00	2,128.00	2000.00	2,000.00	550.00	550.00		
12.	716	Furnish & Install 12" M.J. Gate Valves	Each	2	1050.00	2,100.00	1180.00	2,360.00	1178.50	2,357.00	1400.00	2,800.00	1045.00	2,090.00		
13.	716	Furnish & Install 10" dia. Class 200 PVC Pipe with fittings	L.F.	16	40.00	640.00	65.00	1,040.00	68.31	1,092.96	70.00	1,120.00	82.50	1,320.00		
14.	604	30" Dia. Steel Pipe	L.F.	23	76.00	1,748.00	140.00	3,220.00	109.60	2,520.80	100.00	2,300.00	110.00	2,530.00		
Total Bid								\$98,498.00		\$102,602.40		\$103,432.01		\$143,395.00		\$83,657.20



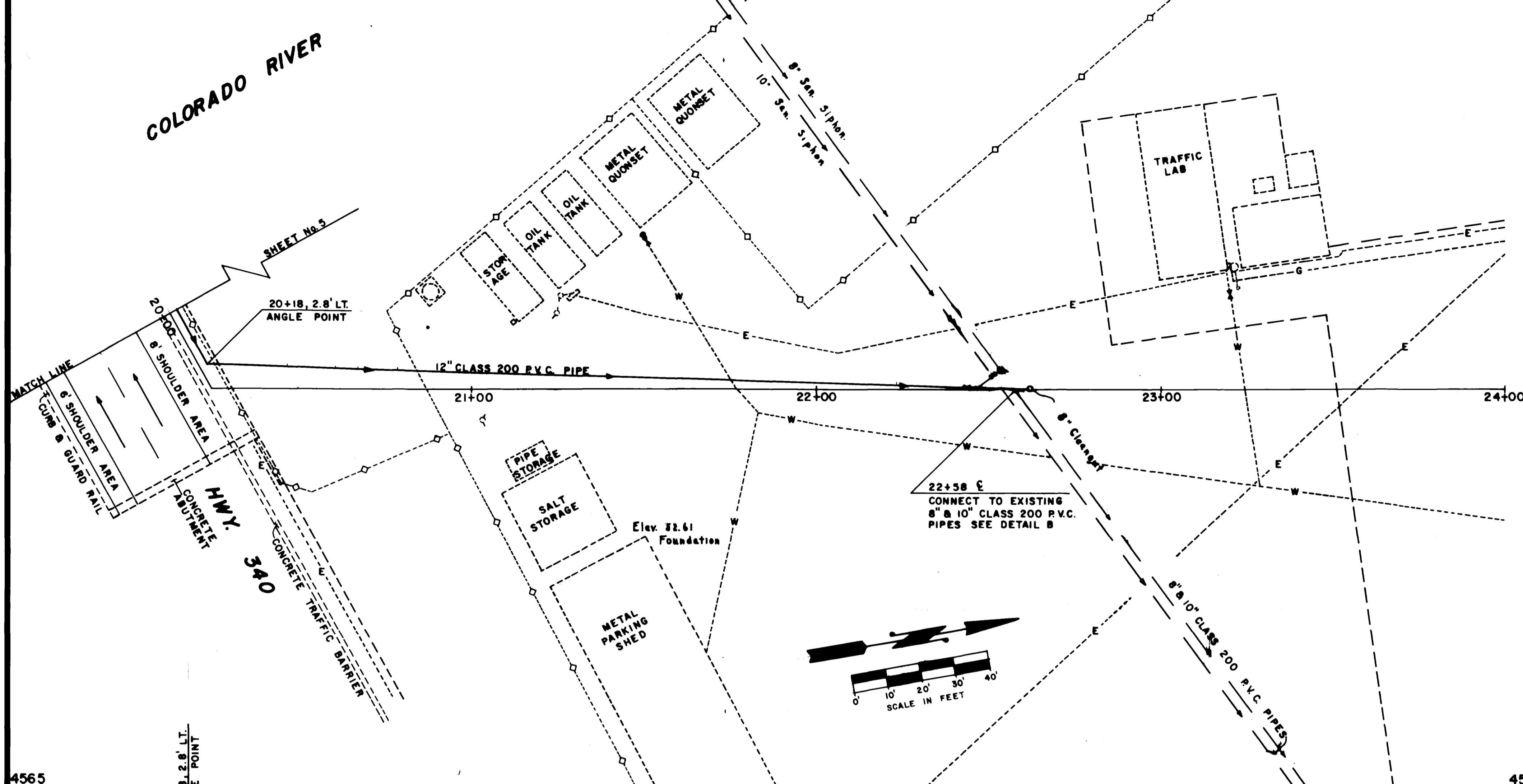
DESCRIPTION REVISION A APPENDUM No. 1 REVISION B REVISION C REVISION D	DATE -10/3/85 	DRAWN BY J.A.B. DATE 9/24/85 CHECKED BY J.A.B. DATE 9/30/85 APPROVED BY J.J.B. DATE 9/27/85 FIELD BOOK NO. L.L.II PAGE 348-360	SCALE PLAN PROFILE HORIZ. 1"=20' HORIZ. 1"=20' VERT. 1"=5'	DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION CITY OF GRAND JUNCTION, COLORADO	SANITARY SEWER REPLACEMENT HWY. 340 ACROSS THE COLORADO RIVER CONSTRUCTION PLAN & PROFILE	SHEET NO. 4 OF _____ FILE NO. _____
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COLORADO RIVER

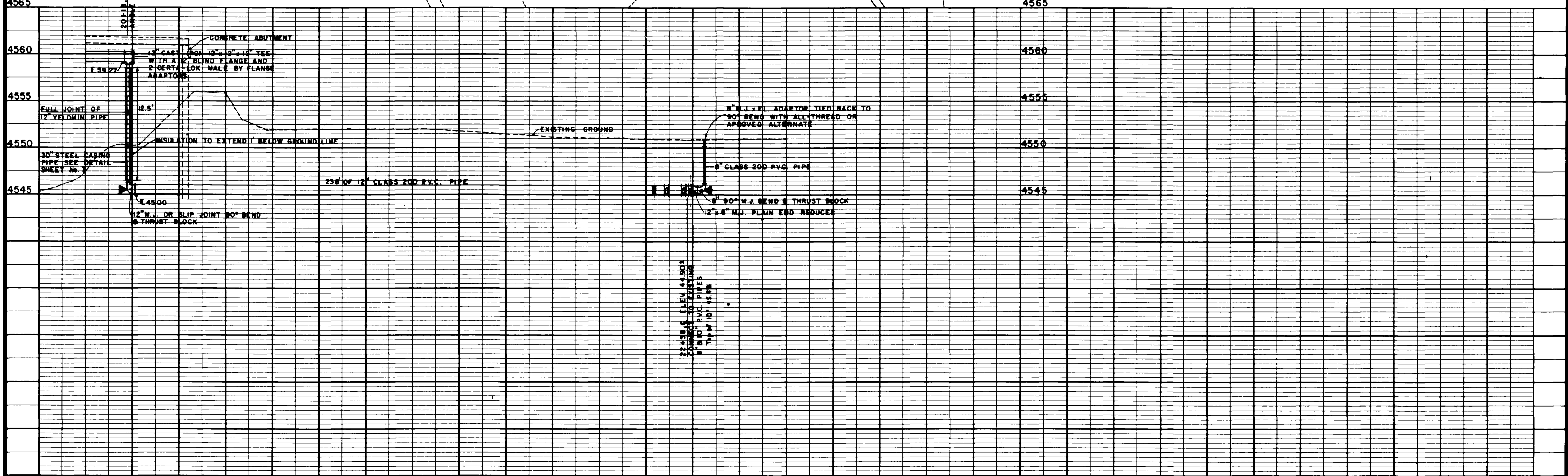
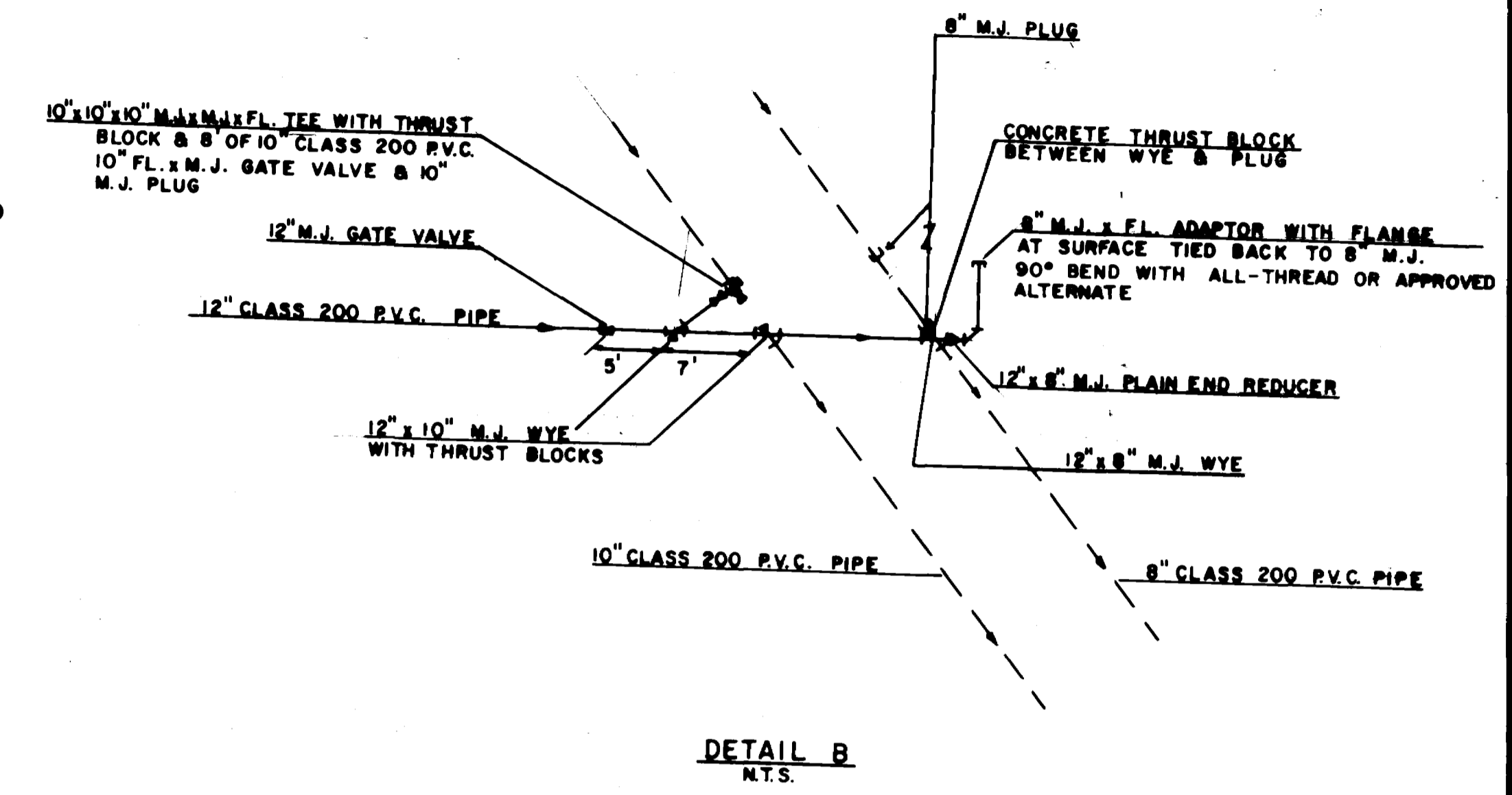


REVISION Δ ADDENDUM No. 1 REVISION Δ REVISION Δ REVISION Δ	DATE 10/3/85	DRAWN BY I.A.B. CHECKED BY I.A.B. APPROVED BY J.J.B. FIELD BOOK NO. LL II	DATE 9/25/85 DATE 9/30/85 DATE 9/27/85 PAGE 348-360	SCALE PLAN: HORIZ. 1"=20' PROFILE: HORIZ. 1"=20' VERT. 1"=5'	DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION CITY OF GRAND JUNCTION, COLORADO	SANITARY SEWER REPLACEMENT HWY. 340 ACROSS THE COLORADO RIVER CONSTRUCTION PLAN & PROFILE	SHEET NO. 5 OF _____ FILE NO. _____
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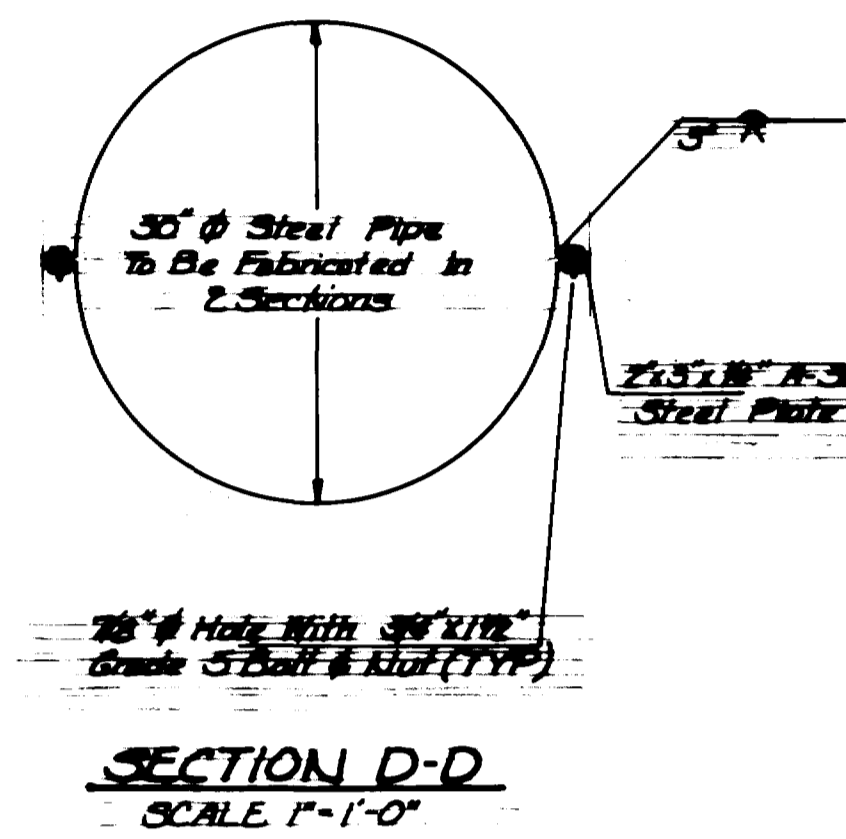
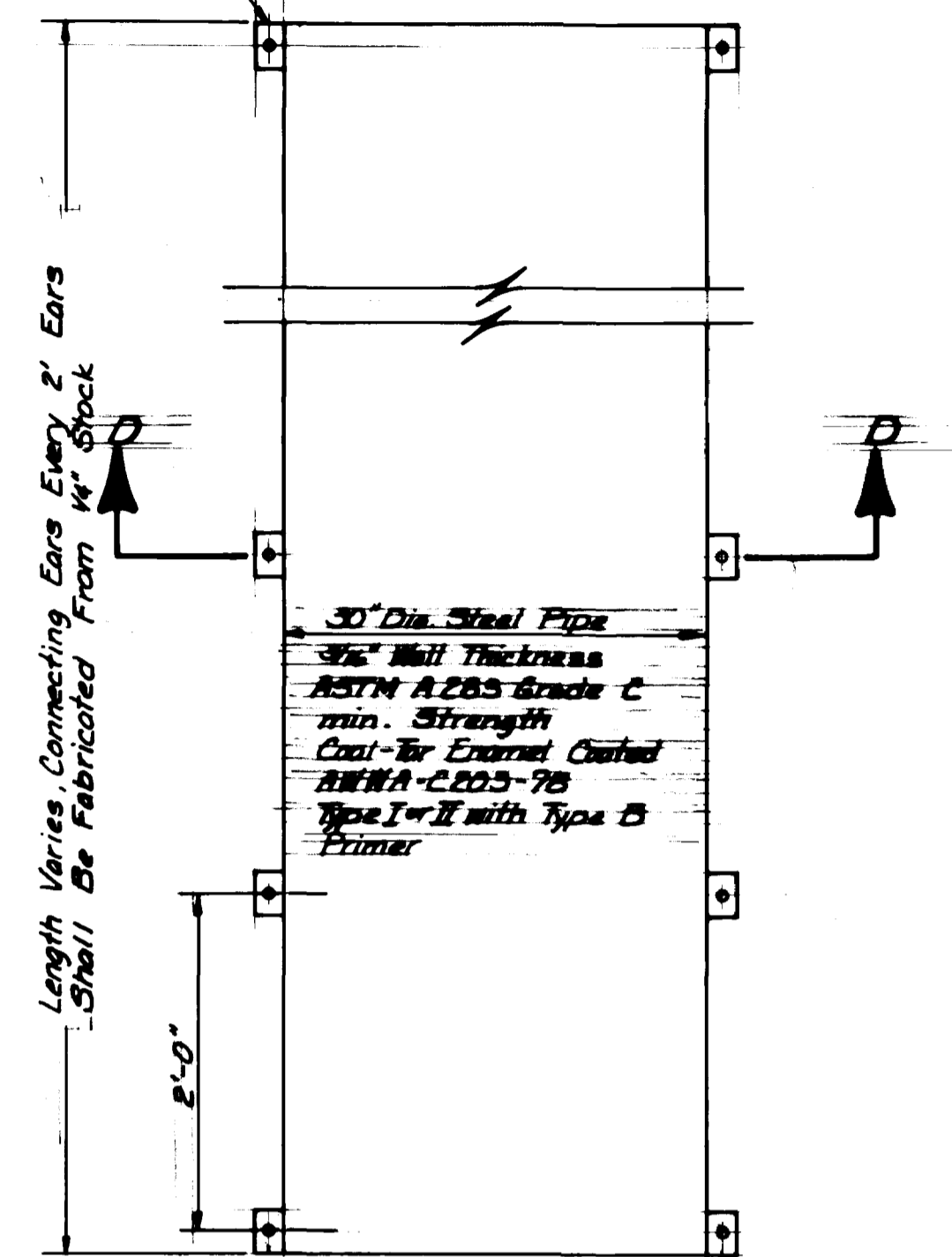
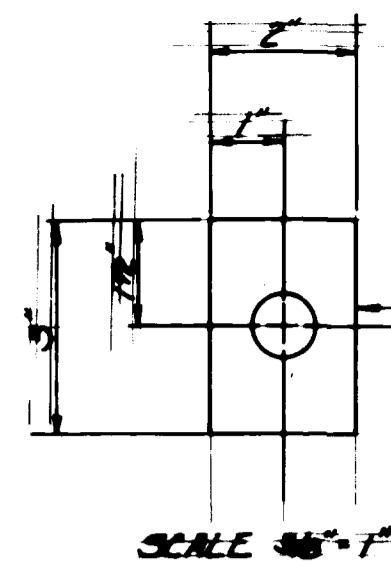
COLORADO RIVER



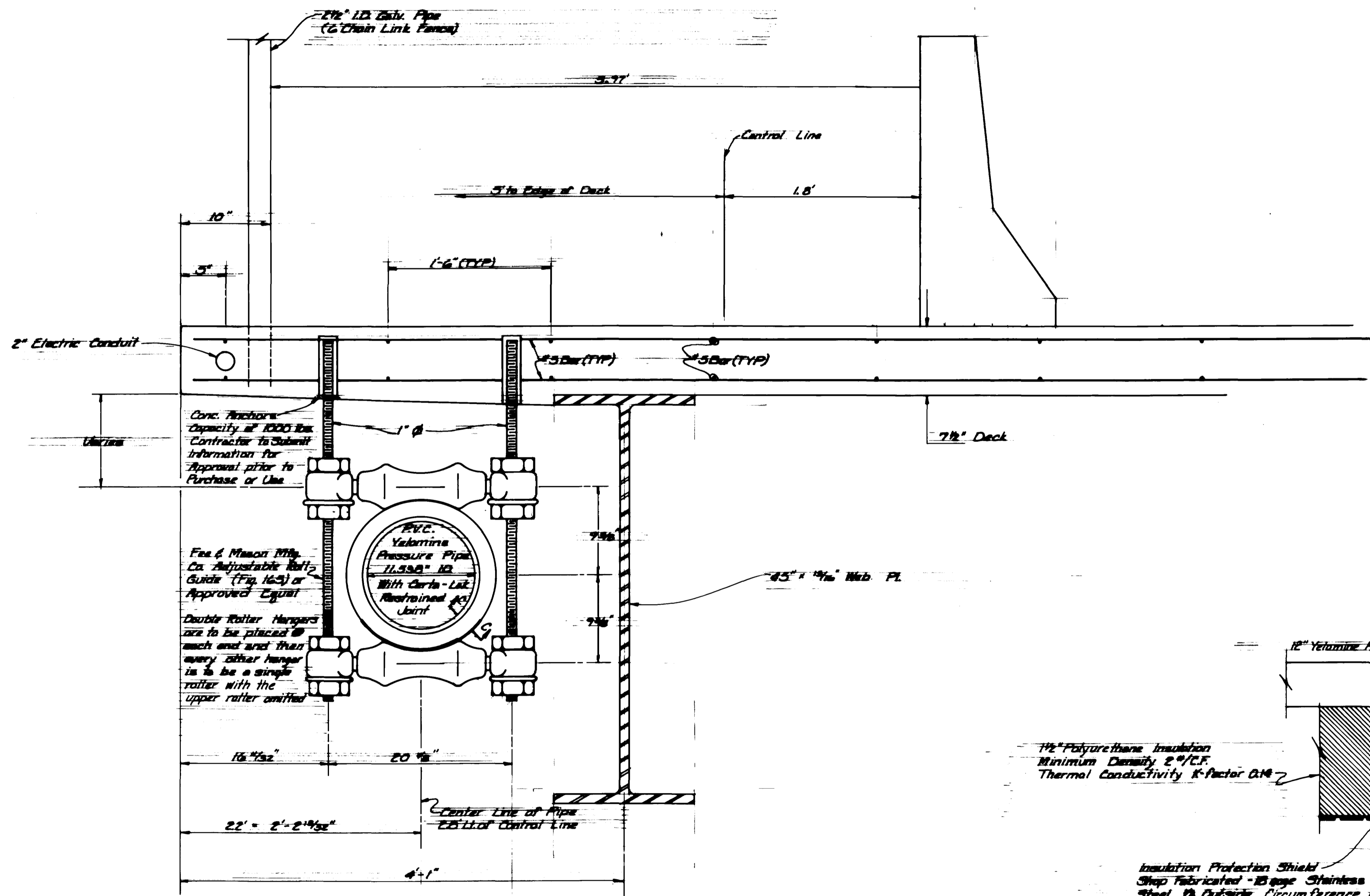
- GENERAL NOTES**
1. CONTRACTOR SHALL EXCAVATE & EXPOSE THE 8" & 10" PIPES AT THE POINTS OF CONNECTION ON BOTH SIDES OF THE RIVER PRIOR TO CONSTRUCTION.
 2. TRANSITION GASKETS SHALL BE USED TO CONNECT THE CLASS 200 P.V.C. PIPE TO THE M.J. FITTINGS.
 3. WHEN THE VELOMINE PIPE IS CUT CLOSURE SHALL BE MADE USING SOLVENT WELD BY CERTA-LOK COUPLINGS.
 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & VERIFY ALL INFORMATION ABOUT EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 5. THE OVERALL LENGTH OF THE PIPE SUSPENDED FROM THE BRIDGE SHALL BE DETERMINED BY THE ENGINEER, AS DICTATED BY TEMPERATURES AT THE TIME OF FINAL CLOSURE CONNECTION.
 6. ALL UNDERGROUND BOLTS SHALL BE STAINLESS STEEL OR CORROSION RESISTANT HIGH STRENGTH LOW-ALLOY STEEL CONFORMING TO ASTM. A242 OR A588 SPEC.
 7. THE CONTRACTOR SHALL RESTORE THE EXISTING RIPRAP UNDER THE BRIDGE TO THE CONDITION PRIOR TO EXCAVATION.
 8. PRIOR TO PURCHASING OR INSTALLING ANY OF THE APPURTENANCES ON THE BRIDGE THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND PERTINENT INFORMATION ON THE MATERIALS TO BE USED FOR WRITTEN APPROVAL BY THE ENGINEER.



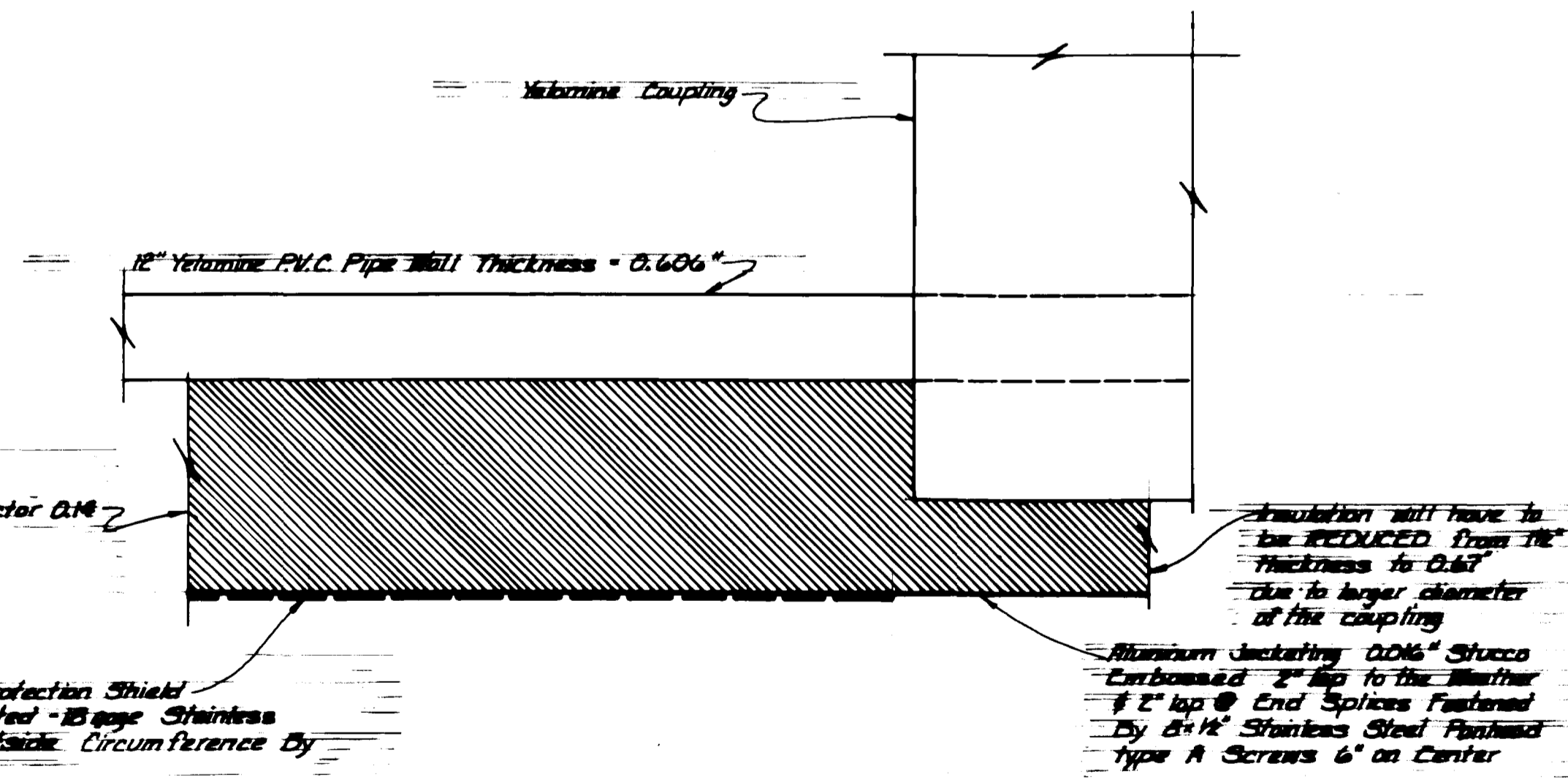
<p>REVISION A ADDENDUM No. 1</p> <p>REVISION B</p> <p>REVISION C</p> <p>REVISION D</p>	<p>DATE 10/3/85</p>	<p>DRAWN BY T.A.B.</p> <p>CHECKED BY T.A.B.</p> <p>APPROVED BY J.J.B.</p> <p>FIELD BOOK NO. 1111</p>	<p>DATE 9/28/85</p> <p>DATE 9/30/85</p> <p>DATE 9/27/85</p> <p>PAGE 348-360</p>	<p>SCALE</p> <p>PLAN HORIZ. 1" = 20'</p> <p>PROFILE HORIZ. 1" = 20'</p> <p>VERT. 1" = 5'</p>	<p>DEPARTMENT OF PUBLIC WORKS AND UTILITIES</p> <p>ENGINEERING DIVISION</p> <p>CITY OF GRAND JUNCTION, COLORADO</p>	<p>SANITARY SEWER REPLACEMENT</p> <p>HWY. 340 ACROSS THE COLORADO RIVER</p> <p>CONSTRUCTION PLAN & PROFILE</p>	<p>SHEET NO. 6</p> <p>OF</p> <p>FILE NO.</p>
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STEEL CASING PIPE DETAIL
SCALE 1\"/>



PIPE HANGER DETAIL
SCALE 1/2\"/>



SECTION C-C
SCALE 1\"/>

MATERIAL WEIGHTS

12" Dia. Yalomite Class 160 Pipe	15.33 #/L.F.
1 1/2" Polyurethane Insulation	0.93 #/L.F.
0.046" Aluminum Jacketing	0.92 #/L.F.
Water	49.92 #/L.F.
Total	67.10 #/L.F.
Double Roller Hanger	87.57 #/Ea.
Single Roller Hanger	55.16 #/Ea.

REVISION	DESCRIPTION	DATE
REVISION A	As per Addendum #1	08-12-05
REVISION B		
REVISION C		
REVISION D		

DRAWN BY	L. J. B. / J. A. B.	DATE	9-30-05
CHECKED BY	J. L. B. / J. A. B.	DATE	9-28-05
APPROVED BY	J. L. B.	DATE	9-28-05
FIELD BOOK NO.		PAGE	

SCALE	
PLAN	PROFILE
HORIZ. 1/8" = 1'-0"	HORIZ. 1/8" = 1'-0"
VERT. 1/8" = 1'-0"	VERT. 1/8" = 1'-0"

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION
CITY OF GRAND JUNCTION, COLORADO

SANITARY SEWER REPLACEMENT
HWY. 340 ACROSS THE COLORADO RIVER
DETAIL SHEET

SHEET NO.	7
OF	
FILE NO.	

SUMMARY OF APPROXIMATE QUANTITIES

Item No.	Ref. No.	Contract Item	Unit	Quantity														Totals
1.	203	Exploratory Excavation	Lump Sum	Lump Sum														
2.	604	Furnish & Install 12" Dia. Yelomine Pipe with fittings	L.F.	836														
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6.	604	Furnish & Install 12" Dia. Class 200 PVC Pipe with fittings	L. F.	361														
7.	716	Furnish & Install 8" Dia. M.J. Plug	Each	2														
8.	716	Furnish & Install 10" FL. by M.J. Gate Valve	Each	1														
9.	716	8" Diameter Clean-Out including 12" x 8" Reducer 90° Bend & Class 200 PVC Pipe	Each	2														
10.	614	Traffic Control	Lump Sum	Lump Sum														
11.		Rip-Rap Restoration (under bridge)	Lump Sum	Lump Sum														
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