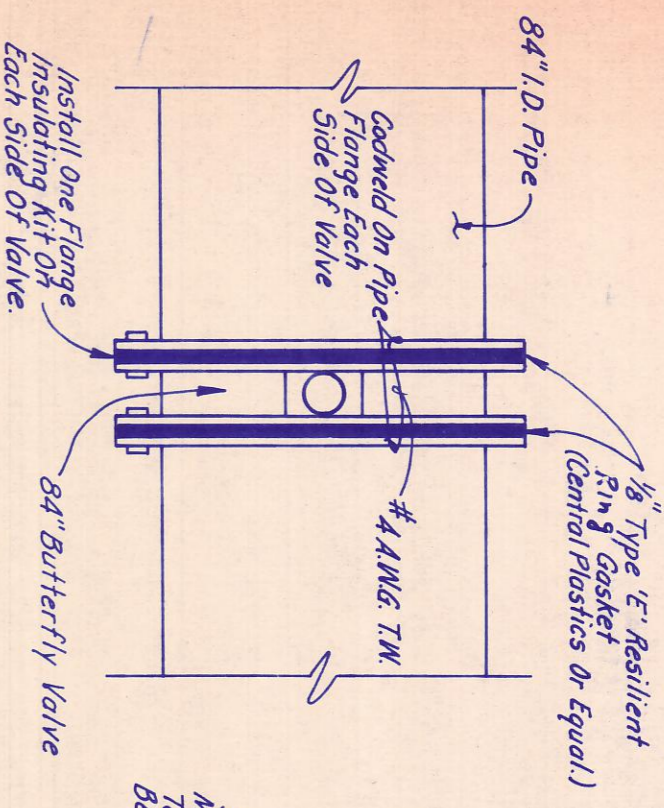


- These Dimensions are used for 5.8 ft. Recommendation by U.S. Dept. of Interior, Insufficient Risk These Values are Applied Only for Unobstructed Risk
- All Thrust Block Excavations should have Clean Unobstructed Sides with the Best Fill on the Lead Carrying Sides Thrust Block Excavations should be filled with Concrete as soon as possible to avoid deterioration in the Lead Carrying Sides
- Width of Lead Sides shall be as vertical as possible.
- Concrete for blocking shall be Class B Concrete.
- Concrete to be placed against unobstructed Rock.
- Dimensions may vary due to Field Conditions may Change as Directed by Construction Engineer.
- The Volume of Concrete Blocking shall not be less than shown here.



NOTE: See Plan & Profile Sheets for Butterfly Valve Installation Details.

Horizontal & Combination Bends for 84" inside diameter pipe

Station	D.H.	D.V.	Thrust (total)	A (feet)	B (feet)	C (feet)	Vol. (cu ft)
C12+00	9'-30" 00"	1'-18" 35"	79	11	7.2	4.58	8.20
08+09.28	16'-24" 00"		132	8	5	7.40	
12+19.523	20'-48" 21"		230	12	8	21.23	
16+29.766	29'-12" 50"		233	12	8	21.23	

TYPICAL HORIZONTAL THRUST BLOCK

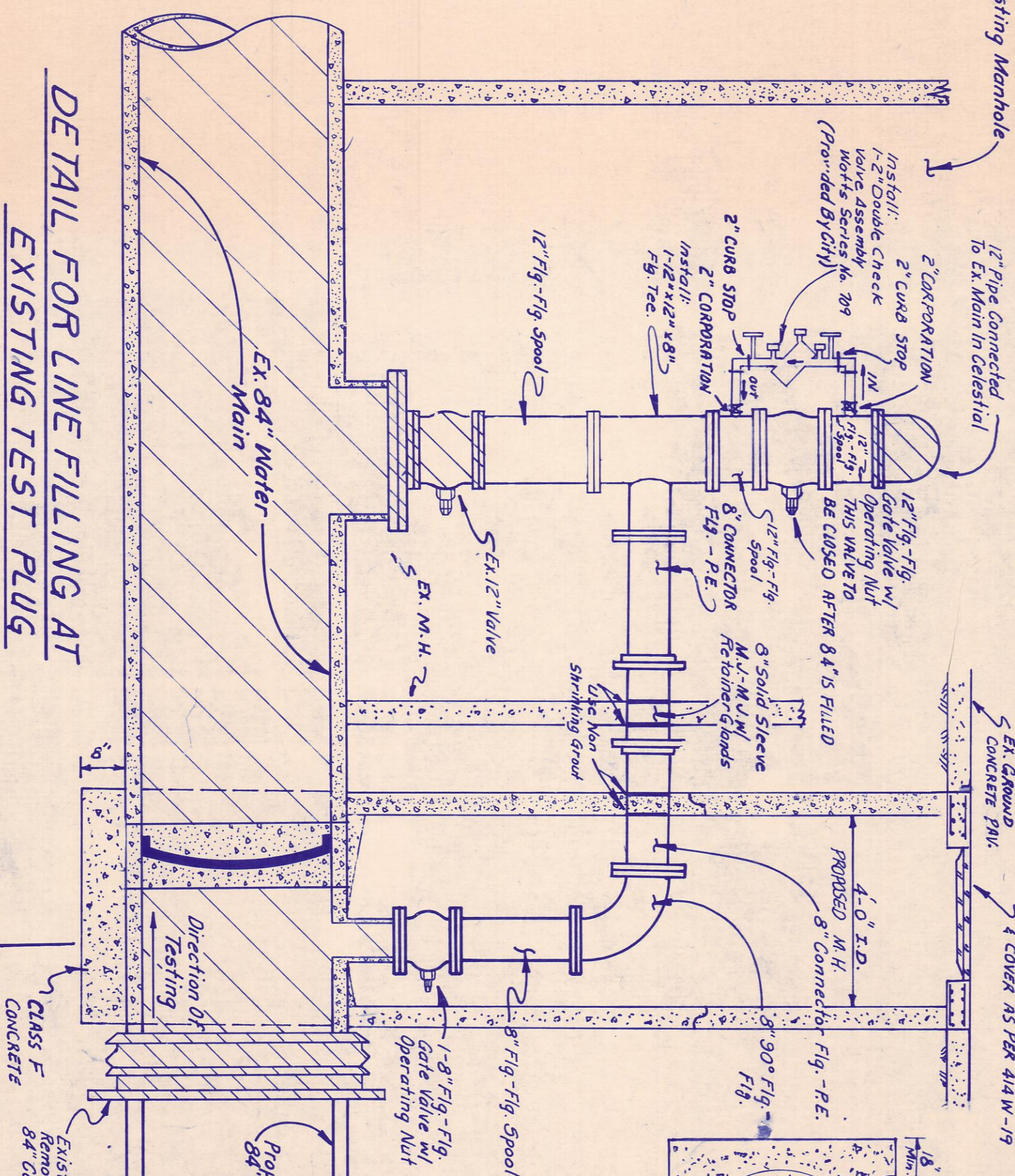
SECTION X-X

EXIST CONC. PM

SECTION C-C

SECTION B-B

SECTION A-A



DETAIL FOR LINE FILLING AT EXISTING TEST PLUG

TYPICAL UPWARD VERTICAL THRUST OR COMBINATION BEND BLOCKING DETAILS

Vertical Bends & Bends for 84" inside diameter pipe

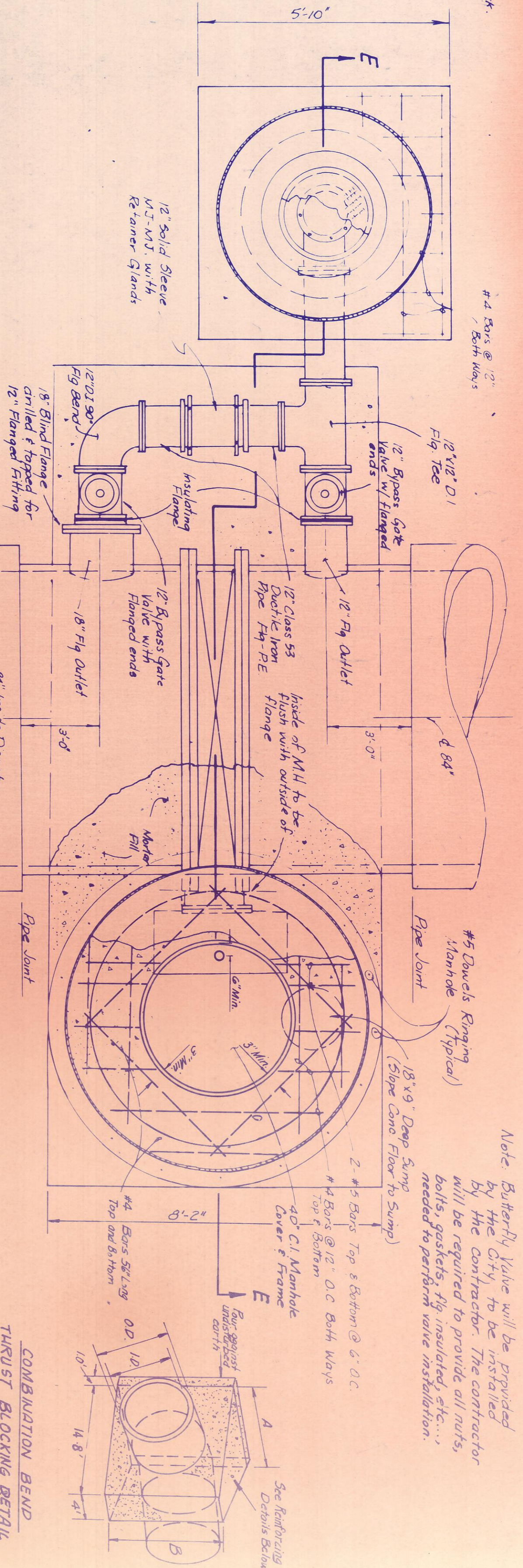
Station	D.V.	Thrust Direction	Thrust (total)	C (feet)	Min. Vol. (cu ft)
C12+00	3'-40" 30"	UP	21	10.48	
C12+40	17'-48" 00"	DOWN	85	12.46	
C13+40	22'-30" 00"	UP	180	7	
T1+47	22'-30" 00"	DOWN	180	66.50	
T2+10	14'-05" 00"	DOWN	113		
T4+25	15'-47" 00"	DOWN	127		

TYPICAL BUTTERFLY VALVE INSTALLATION

PLAN

COMBINATION BEND BLOCKING - PLAN

SECTION V-V



Note Butterfly Valve will be provided by the City. To be installed by the contractor. The contractor will be required to provide all nuts, bolts, gaskets, flywheels, etc. needed for perfect valve installation.

SECTION E-E

SECTION C-C

SECTION A-A

SECTION B-B

TYPICAL DOWNWARD VERTICAL THRUST BLOCKING DETAIL

Vertical Bends & Bends for 84" inside diameter pipe

Station	D.V.	Thrust Direction	Thrust (total)	C (feet)	Min. Vol. (cu ft)
C12+00	3'-40" 30"	UP	21	10.48	
C12+40	17'-48" 00"	DOWN	85	12.46	
C13+40	22'-30" 00"	UP	180	7	
T1+47	22'-30" 00"	DOWN	180	66.50	
T2+10	14'-05" 00"	DOWN	113		
T4+25	15'-47" 00"	DOWN	127		

REINFORCED CONCRETE SUPPORT DETAIL

SECTION E-E

SECTION C-C

SECTION A-A

SECTION B-B

TYPICAL DOWNWARD VERTICAL THRUST BLOCKING DETAIL

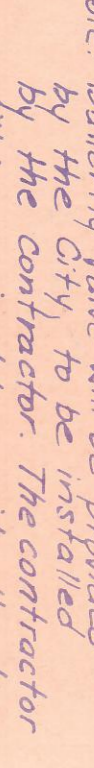
Vertical Bends & Bends for 84" inside diameter pipe

Vertical Bends & Bends for 84" inside diameter pipe

TYPICAL DOWNWARD VERTICAL THRUST BLOCKING DETAIL

Vertical Bends & Bends for 84" inside diameter pipe

Vertical Bends & Bends for 84" inside diameter pipe



84" WATER MAIN  
MISCELLANEOUS DETAILS  
SPRING VALLEY RD. TO DALLAS PKWY.  
DALLAS WATER UTILITIES DEPT.  
CITY OF DALLAS, TEXAS

SHEET  
14-A

DESIGN	DATE	SCALE	NOTES	FILE	NO.
DAMVN	APRIL 1984	NO SCALE		685 W	660 B

Steel Pipe = 110"  
Concrete Pipe = 12.85"

CONT. #84-45

14-A