

GENERAL NOTES FOR ALL THRUST BLOCKS:

- CONCRETE FOR BLOCKING SHALL BE CLASS "B".
- ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 PSI FOR DUCTILE IRON, P.V.C., AND 150 PSI FOR CONCRETE PIPE.
- VOLUMES OF THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. THE CORRESPONDING WEIGHT OF CONCRETE (CLASS "B") IS EQUAL TO OR GREATER THAN THE VERTICAL COMPONENT OF THE THRUST ON THE VERTICAL BEND.
- WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
- POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.
- DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
- THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND 2000 LBS./S.F. IN ROCK.
- USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND, TEE, OR PLUG TO PREVENT THE CONCRETE FROM STICKING TO IT.
- CONCRETE SHALL NOT EXTEND BEYOND JOINTS.

RECORD DRAWING THIS IS TO CERTIFY THAT CHANGES AND CORRECTIONS HAVE BEEN MADE TO CONFORM TO THE CONTRACTOR'S RECORD OF THIS PROJECT.

SIGN: *Cheryl Ann...*

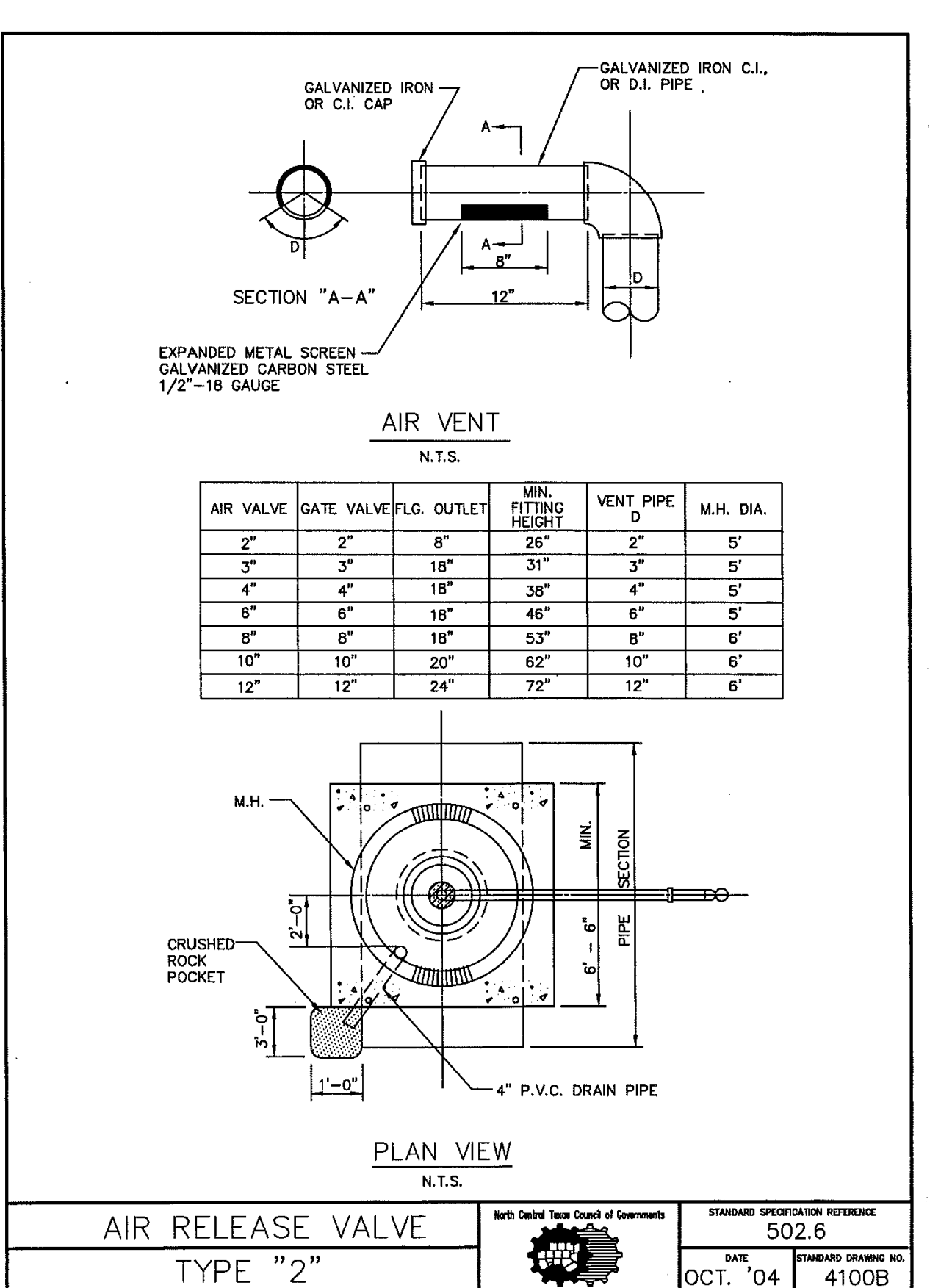
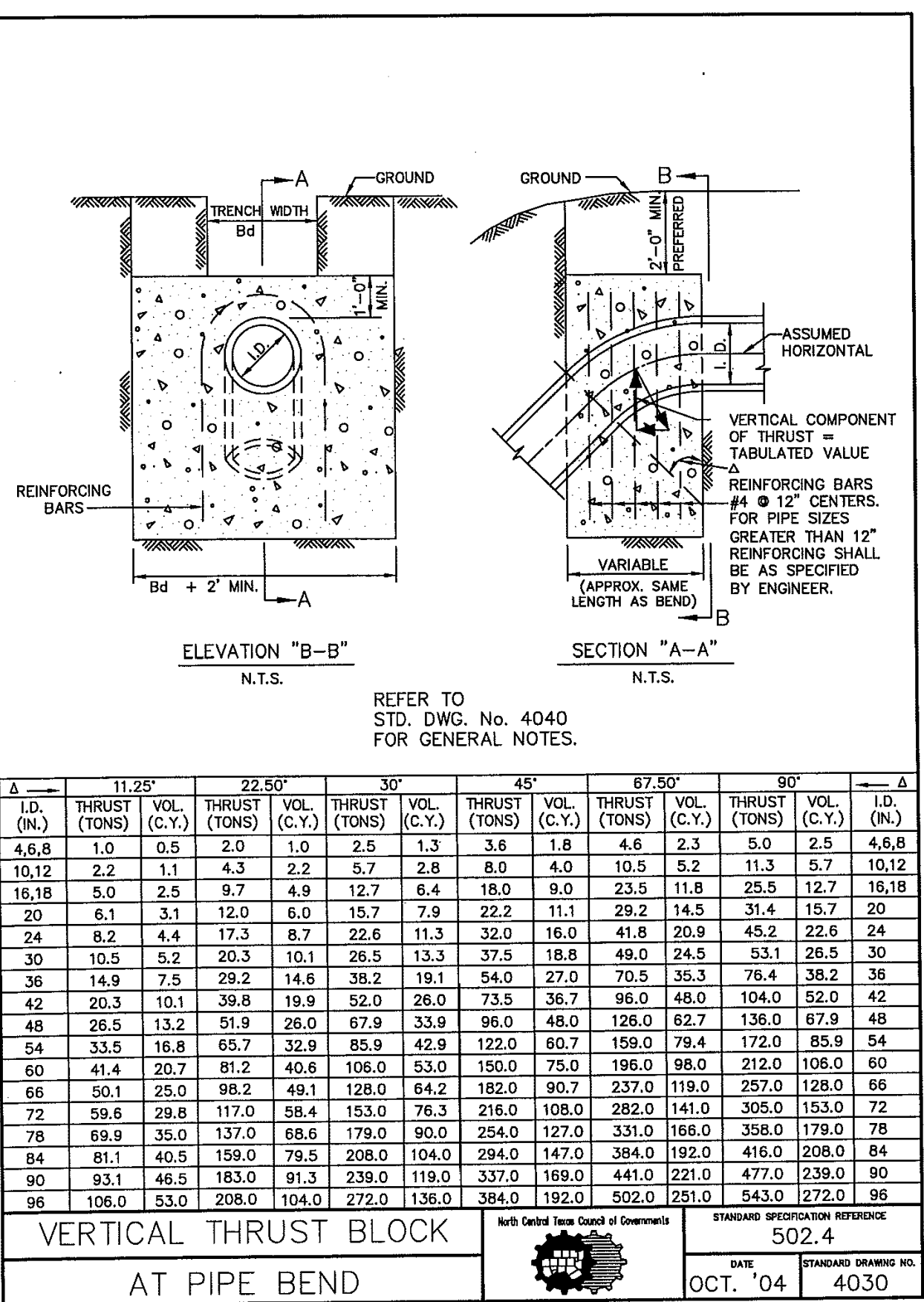
DATE: 06/01/2020

Glenn Engineering Corporation

THRUST BLOCK GENERAL NOTES

North Central Texas Council of Governments STANDARD SPECIFICATION REFERENCE 502.4

DATE OCT. '04 STANDARD DRAWING NO. 4040



TABLES OF DIMENSIONS AND QUANTITIES

I.D. (IN.)	G. THRUST (TONS)	EARTH		ROCK	
		A (FT.)	B (FT.)	A (FT.)	B (FT.)
4.6,8	0.4	1.0	1.5	1.0	1.5
10,12	0.6	1.5	2.0	1.5	2.0
16,18	0.8	2.0	2.5	2.0	2.5
20	0.9	2.5	3.0	2.5	3.0
24	1.1	3.0	3.5	3.0	3.5
28	1.3	3.5	4.0	3.5	4.0
30	1.4	4.0	4.5	4.0	4.5
36	1.7	4.5	5.0	4.5	5.0
42	1.9	5.0	5.5	5.0	5.5
48	2.2	5.5	6.0	5.5	6.0
54	2.5	6.0	6.5	6.0	6.5
60	2.7	6.5	7.0	6.5	7.0
66	3.0	7.0	7.5	7.0	7.5
72	3.3	7.5	8.0	7.5	8.0
78	3.6	8.0	8.5	8.0	8.5
84	3.8	8.5	9.0	8.5	9.0
90	4.1	9.0	9.5	9.0	9.5
96	4.4	9.5	10.0	9.5	10.0

HORIZONTAL THRUST BLOCK AT PIPE BEND

North Central Texas Council of Governments STANDARD SPECIFICATION REFERENCE 502.4

DATE OCT. '04 STANDARD DRAWING NO. 4010B

TABLES OF DIMENSIONS AND QUANTITIES

I.D. (IN.)	G. THRUST (TONS)	EARTH		ROCK	
		A (FT.)	B (FT.)	A (FT.)	B (FT.)
4.6,8	2.1	5.6	3.0	2.0	1.5
10,12	3.1	12.6	5.5	2.5	0.8
16,18	4.7	28.3	7.5	4.0	1.9
20	5.2	34.9	9.0	4.0	2.3
24	6.2	50.3	11.5	4.5	3.5
30	7.8	58.9	12.0	5.0	4.8
36	9.4	84.9	14.5	6.0	8.2
42	10.9	115.0	17.0	7.0	12.8
48	12.5	150.9	19.0	8.0	18.4
54	14.0	191.0	21.5	9.0	25.0
60	15.6	235.8	24.0	10.0	32.6
66	17.1	285.3	26.0	11.0	40.2
72	18.7	339.5	28.5	12.0	47.8
78	20.2	399.5	31.0	13.0	55.4
84	21.8	462.1	33.5	14.0	62.9
90	23.3	530.5	35.5	15.0	70.4
96	24.9	603.6	38.0	16.0	77.9

HORIZONTAL THRUST BLOCK AT PIPE BEND

North Central Texas Council of Governments STANDARD SPECIFICATION REFERENCE 502.4

DATE OCT. '04 STANDARD DRAWING NO. 4010C



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Consultants

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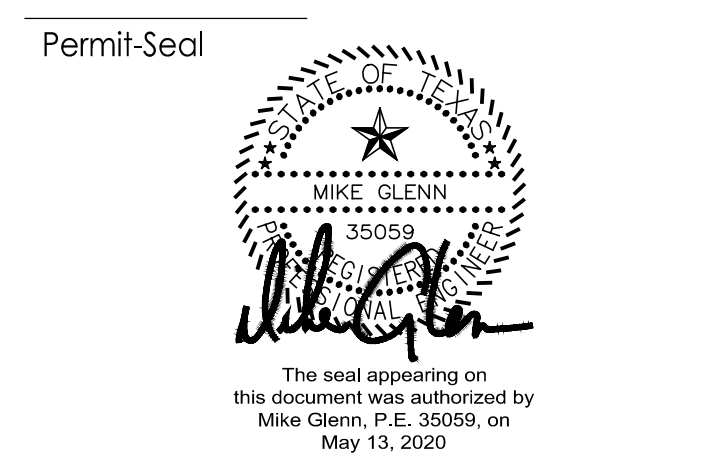


Revision

Revision	By	Appd	DATE
8 - RH #40	RAH	CMG	2020.05.13
7 - RH #79 - FC 20 - REV	RAH	CMG	2020.03.13
6 - RH #116 AND #117	RAH	CMG	2020.01.13
5 - RH #20 AND #21	RAH	CMG	2019.07.23
4 - RH #16	RAH	CMG	2019.07.12
3 - CITY COMMENTS	RAH	CMG	2019.04.30
2 - ASI #1 - CITY COMMENTS	RAH	CMG	2019.04.02

100%CD - For Bidding and Construction

By Appd YYYMM.DD



Client/Project

Rockwall ISD

Elementary School # 15

2911 Greenway Drive
Rockwall, TX 75087

Title

WATER DETAILS 1

Project No. 214000654 Scale AS SHOWN

Revision Drawing No.

C05.07