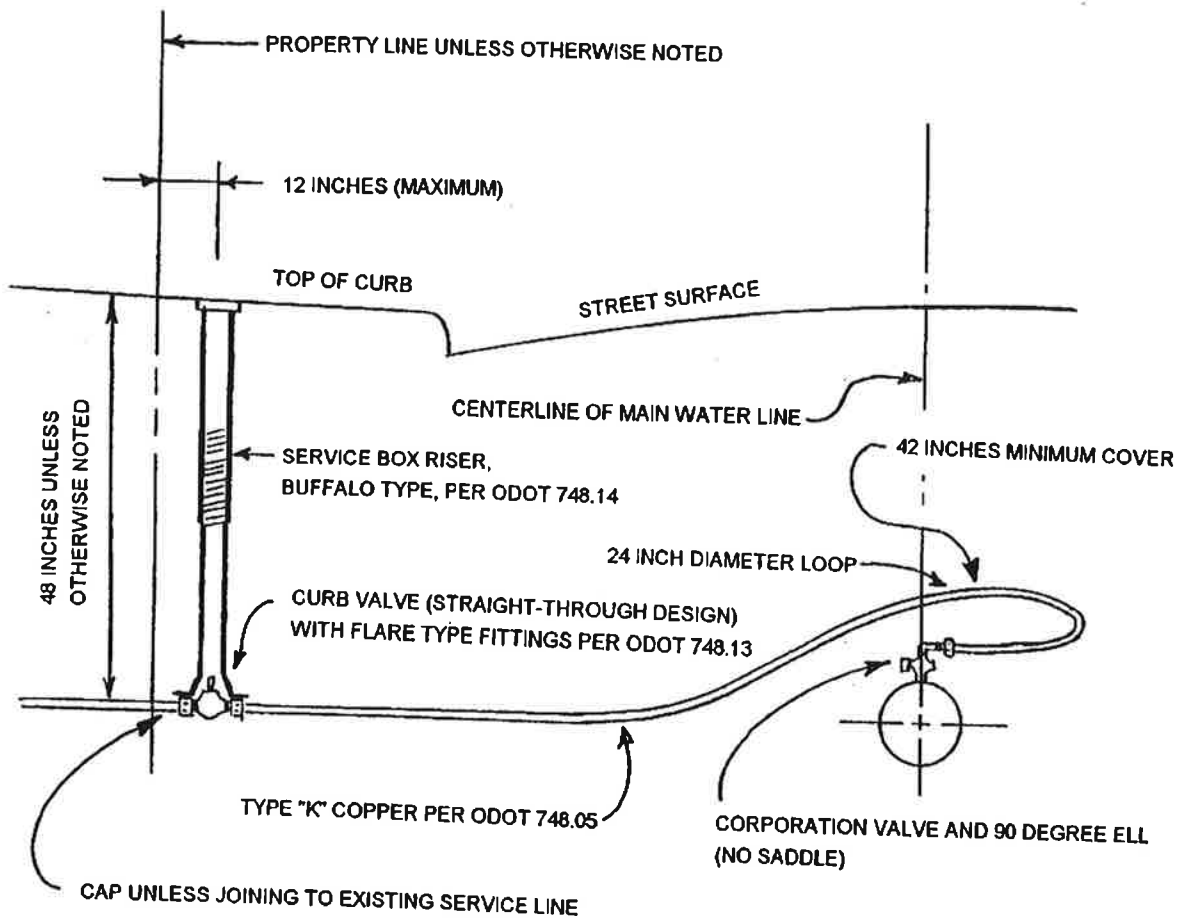


Standard Details - Water
City of Steubenville - Public Works



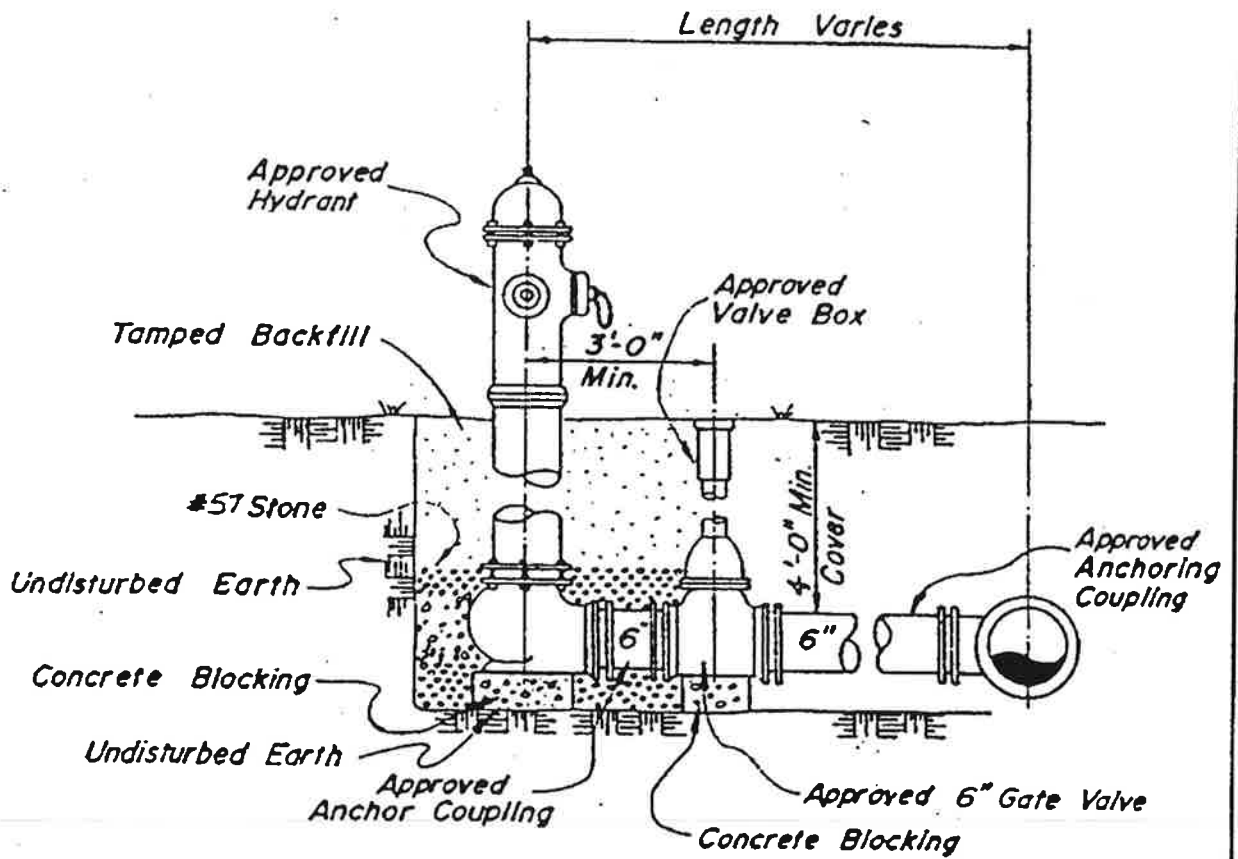
NOTES:

1. SERVICE LINES SHALL BE CONSTRUCTED ON STRAIGHT LINES AND GRADES BETWEEN CONTROL POINTS.
2. SERVICE LINE AND FITTINGS TO MEET AWWA C800 STANDARD AND ODOT SPECIFICATIONS.
3. PIPE BEDDING SHALL CONSIST OF 6 INCHES OF NATURAL OR MANUFACTURED SAND (NO SLAG) BELOW AND ABOVE THE PIPE.

TYPICAL - HOUSE CONNECTION for WATER SERVICE LINE

CITY OF STEUBENVILLE - Department of Public Works - Division of Engineering & Building
 238 South Lake Erie Avenue - Steubenville, Ohio 43952-2158

SURVEY	FIELD BK	DESIGN	DRAWN	CHECK	DATE	SCALE	DWG. NO.
			DTS		11/21/96	N.T.S	ST-262



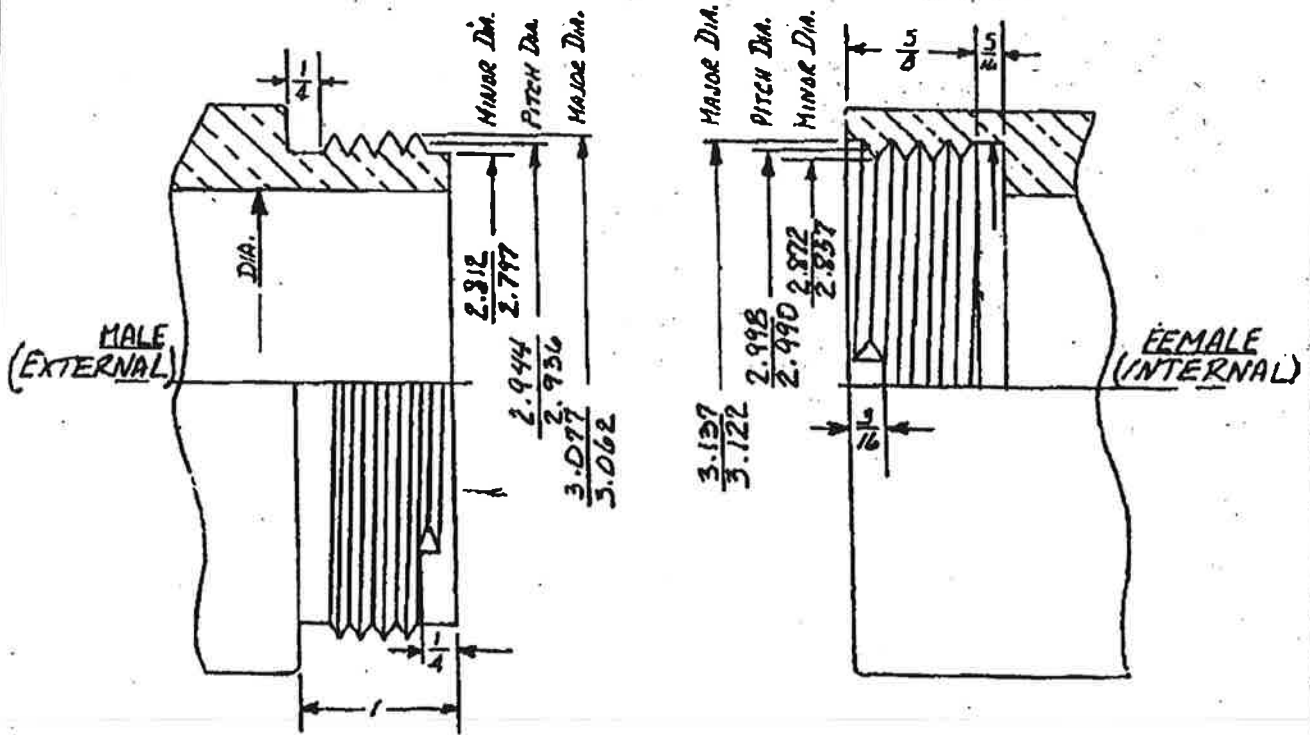
Nozzles: 2 Each - 2.5 inch, 1 Each - 4.5 inch
use Pittsburgh Thread.

Cap and Operating Nuts: Pentagon Nuts - Counterclockwise
Open - 1.75 inches from flat to point.

TYPICAL HYDRANT INSTALLATION

CITY OF STEUBENVILLE - DIV. OF ENGINEERING & BUILDING
238 SOUTH LAKE ERIE AVENUE STEUBENVILLE, OHIO 43952

SURVEY	DESIGN	DRAWN	CHECK	DATE	FIELD BOOK	SCALE	DWG. NO.
		AOH	DTS	5-15-95		NTS	ST-238



THREADS PER INCH: 6

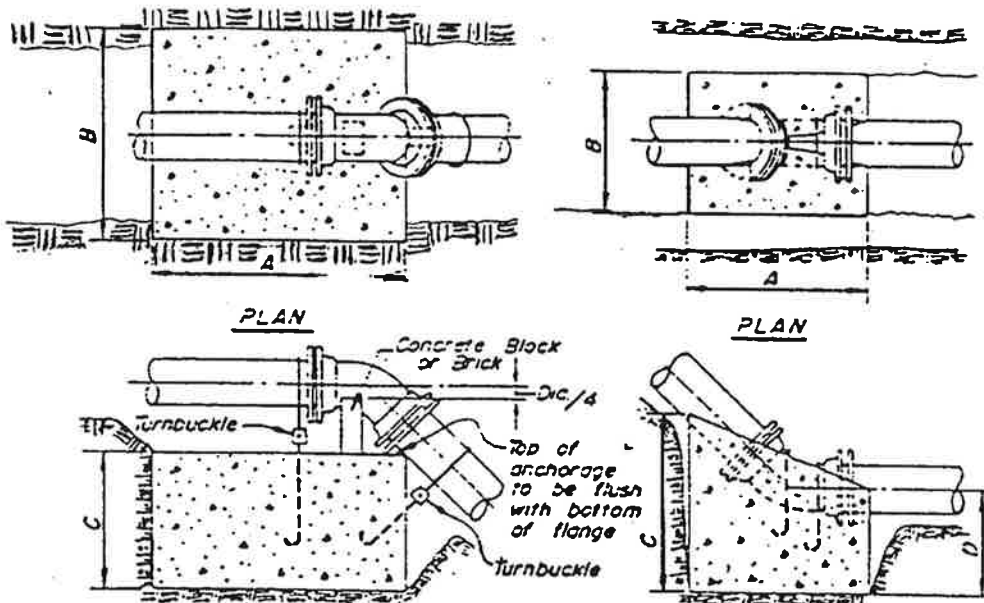
THREAD FORM: SV

COMMONLY KNOWN AS: Pittsburgh 6

DETAIL - STEUBENVILLE FIRE HYDRANT THREAD, 2.5 INCH HOSE

CITY OF STEUBENVILLE - Department of Public Works - Division of Engineering & Building
 238 South Lake Erie Avenue - Steubenville, Ohio 43952-2158

SURVEY	FIELD BK	DESIGN	DRAWN	CHECK	DATE	SCALE	DWG. NO.
					10/01/96	N.T.S.	ST-257



ELEVATION

NOTE

6" to 8" 1-1/4" x 1-1/8" Strip
 10" to 12" 2-1/4" x 1-1/4" "
 14" to 16" 2-3/8" x 1-1/2" "
 18" to 20" 2-1/2" x 1-3/4" "

ELEVATION

TYPE A

TYPE B

VERTICAL BENDS

TYPE	SIZE	TYPE A			TYPE B			
		A	B	C	A	B	C	D
2000 P.S.F. SOIL	6"	36"	30"	24"	24"	24"	24"	16"
	8"	42"	36"	24"	30"	24"	30"	18"
	10"	48"	42"	30"	36"	30"	33"	18"
	12"	54"	48"	36"	36"	36"	36"	21"
	14"	54"	48"	60"	42"	42"	42"	24"
	16"	60"	54"	60"	48"	48"	44"	24"
	20"	72"	60"	72"	60"	60"	54"	30"

NOTE:

Based on 100 P.S.I. static pressure plus A.W.W.A. water hammer

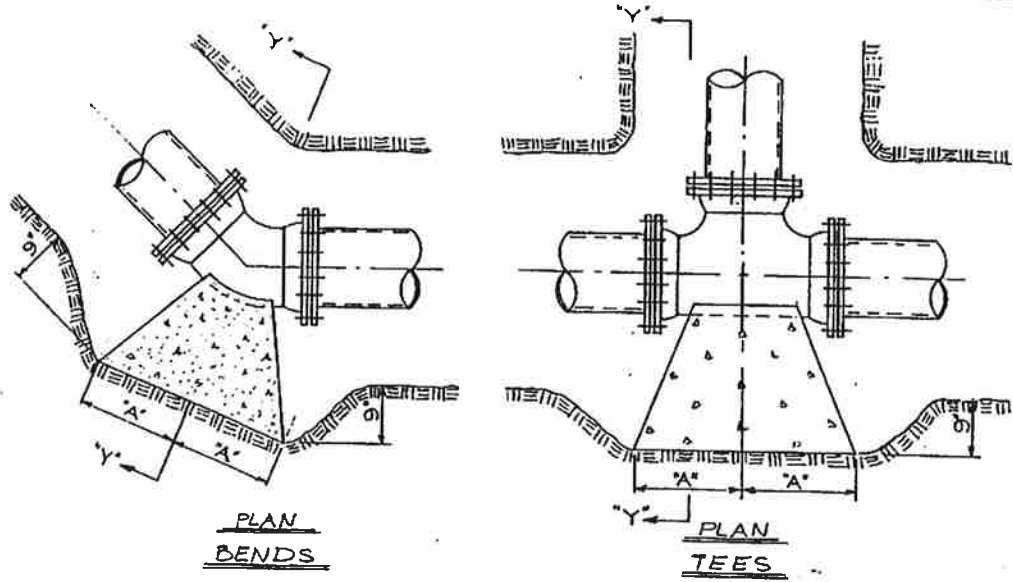
All bearing surfaces to be carried to undisturbed ground.

Type A Bend assumes 4 Ft. of soil Above Pipe (100 pcf.)

THRUST BLOCK DETAILS - VERTICAL BENDS

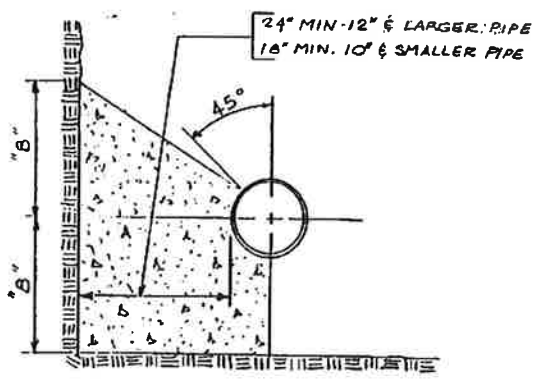
CITY OF STEUBENVILLE - DIV. OF ENGINEERING & BUILDING
 238 SOUTH LAKE ERIE AVENUE STEUBENVILLE, OHIO 43952

SURVEY	DESIGN	DRAWN	CHECK	DATE	FIELD BOOK	SCALE	DWG. NO.
		AOH	DTS	5-15-95		NTS	ST-239

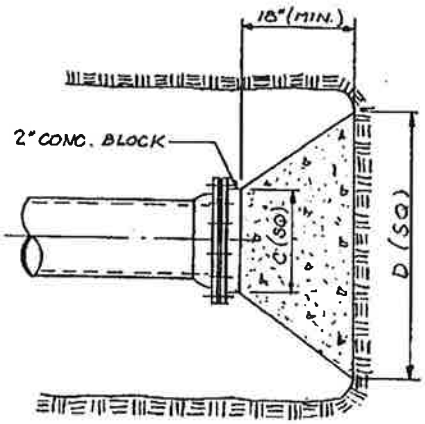


PLAN BENDS

PLAN TEES



SECTION - "Y-Y"
BENDS & TEES



PLAN & ELEVATIONS
PLUGS

TYPE	SIZE	90° BENDS		45° BENDS		22.5° BENDS		11.25° BENDS		TEES		PLUGS	
		A	B	A	B	A	B	A	B	A	B	C	D
2000 PSI SC/L	6"	16"	10"	9"	10"	6"	8"	4"	6"	10"	12"	10"	21"
	8"	22"	13"	12"	13"	8"	10"	5"	8"	13"	16"	12"	29"
	10"	25"	17"	14"	17"	10"	13"	6"	10"	16"	20"	14"	36"
	12"	29"	21"	16"	21"	11"	16"	7"	13"	18"	24"	16"	41"
	14"	34"	24"	19"	24"	12"	20"	7"	16"	22"	27"	18"	48"
	16"	36"	30"	21"	27"	12"	24"	8"	20"	24"	32"	20"	54"
	20"	45"	35"	25"	36"	15"	30"	9"	25"	30"	39"	24"	68"

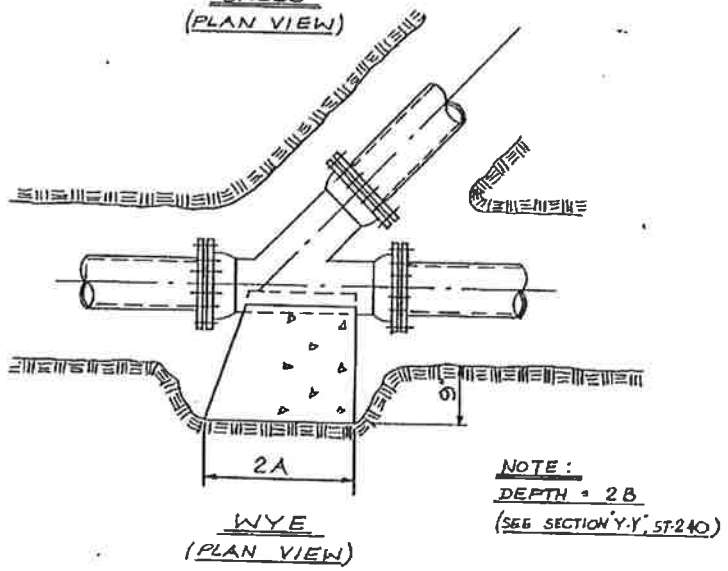
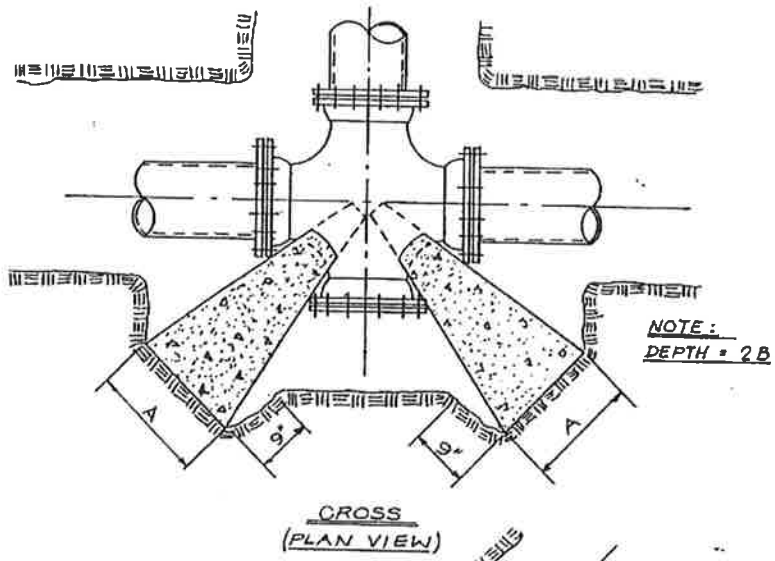
NOTE: Based on 100 PSI static pressure plus 100 PSI water hammer.
Assumed soil bearing capacity - 2000 psf
All bearing surfaces to be carried to undisturbed soil.

**THRUST BLOCK DETAILS
BENDS, TEES AND PLUGS**

CITY OF STEUBENVILLE - Department of Public Works - Div. of Engineering & Building
238 South Lake Erie Avenue
Steubenville, Ohio 43952

SURVEY	FIELD BK	DESIGN	DRAWN	CHECK	DATE	SCALE	DWG. NO.
		DTS	AOH	07/24/95	07/24/95	N.T.S.	ST - 240

h:a



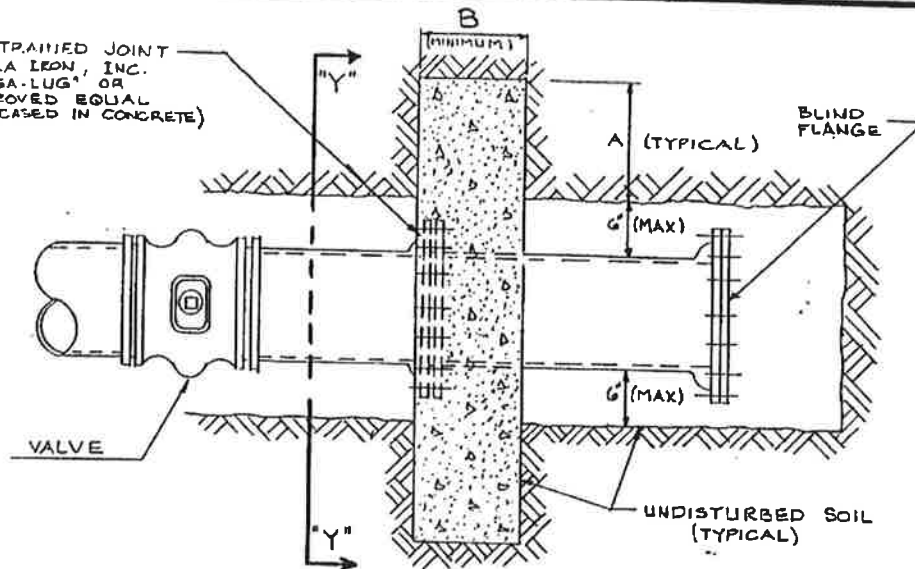
TYPE	SIZE	CROSS		WYE	
		A	B	A	B
2000 PSI SOIL	6"	10"	12"	9"	10"
	8"	13"	16"	12"	13"
	10"	16"	20"	14"	17"
	12"	18"	24"	16"	21"
	14"	22"	27"	19"	24"
	16"	24"	32"	21"	27"
	20"	30"	39"	25"	36"

NOTE: Based on 100 PSI static pressure plus 100 PSI water hammer.
 Assumed soil bearing capacity - 2000 psf
 All bearing surfaces to be carried to undisturbed soil.

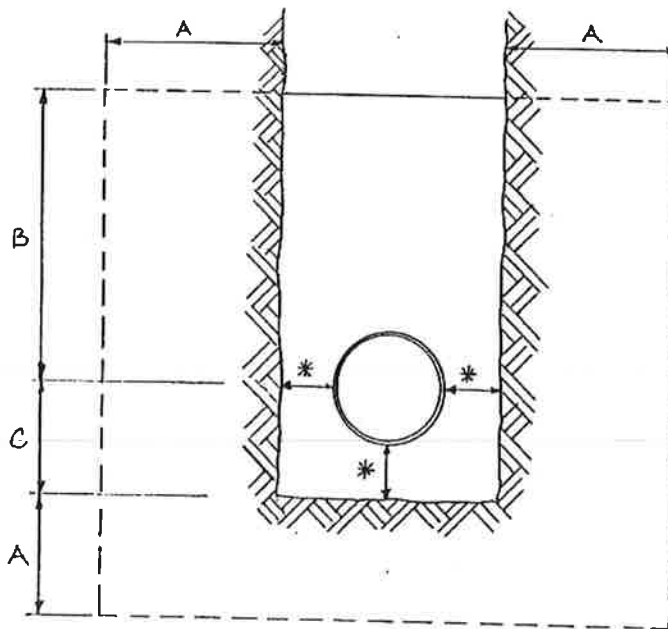
**THRUST BLOCK DETAILS
 CROSS AND WYE FITTINGS**

CITY OF STEUBENVILLE - Department of Public Works - Div. of Engineering & Building							
238 South Lake Erie Avenue				Steubenville, Ohio 43952			
SURVEY	FIELD BK	DESIGN	DRAWN	CHECK	DATE	SCALE	DWG. NO.
		DTS	AOH	07/24/95	07/24/95	N.T.S.	ST - 241

RESTRAINED JOINT
 F.B.A.A. IRON, INC.
 "MEGA-LUG" OR
 APPROVED EQUAL
 (ENCASED IN CONCRETE)



PLAN



SECTION "Y-Y" * G (MAXIMUM)

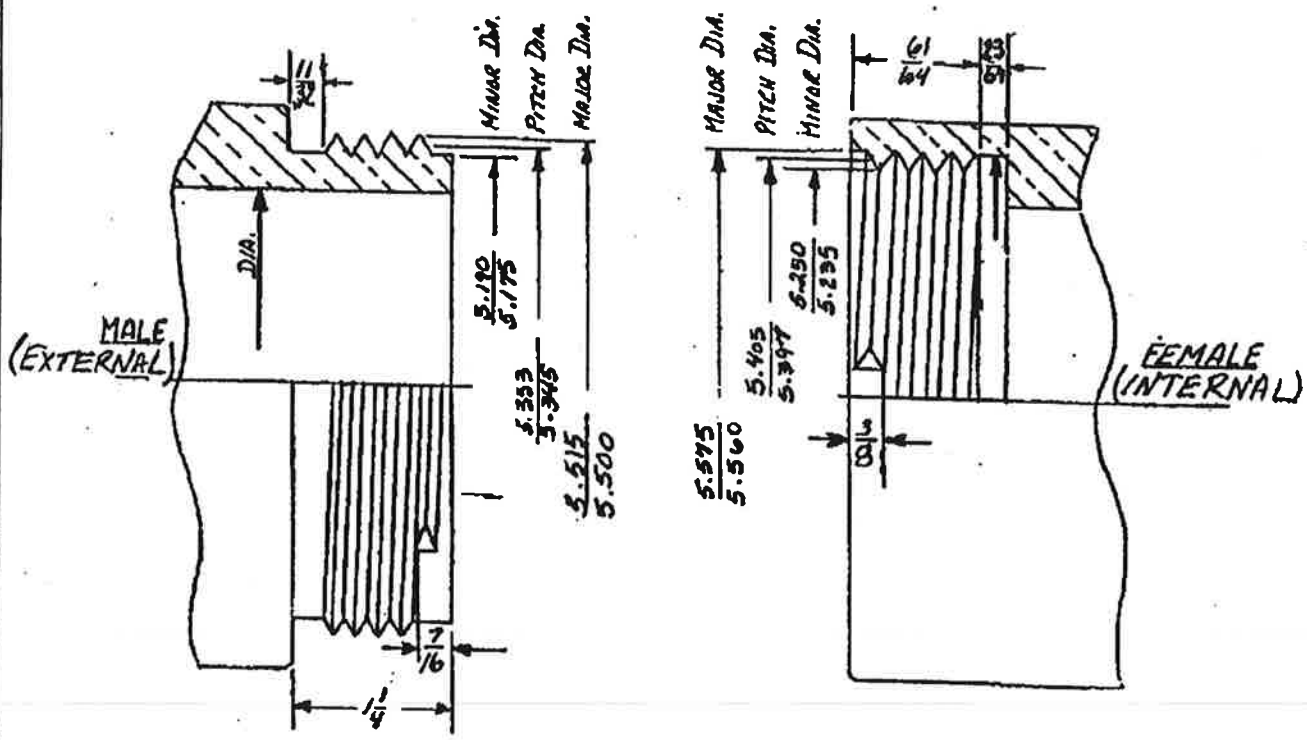
PIPE SIZE	A	B	C
6	11"	20"	9"
8	14"	24"	10"
10	16"	27"	11"
12	19"	31"	12"
14	22"	35"	13"
16	25"	39"	14"
20	30"	46"	16"

NOTE: Based on 100 PSI static pressure plus 100 PSI water hammer.
 Assumed soil bearing capacity - 2000 psf
 All bearing surfaces to be carried to undisturbed soil.

THRUST BLOCK DETAIL - TEMPORARY PLUG

CITY OF STEUBENVILLE - Department of Public Works - Div. of Engineering & Building
 238 South Lake Erie Avenue
 Steubenville, Ohio 43952

SURVEY	FIELD BK	DESIGN	DRAWN	CHECK	DATE	SCALE	DWG. NO.
		DTS	AOH		07/20/95	N.T.S.	ST - 244



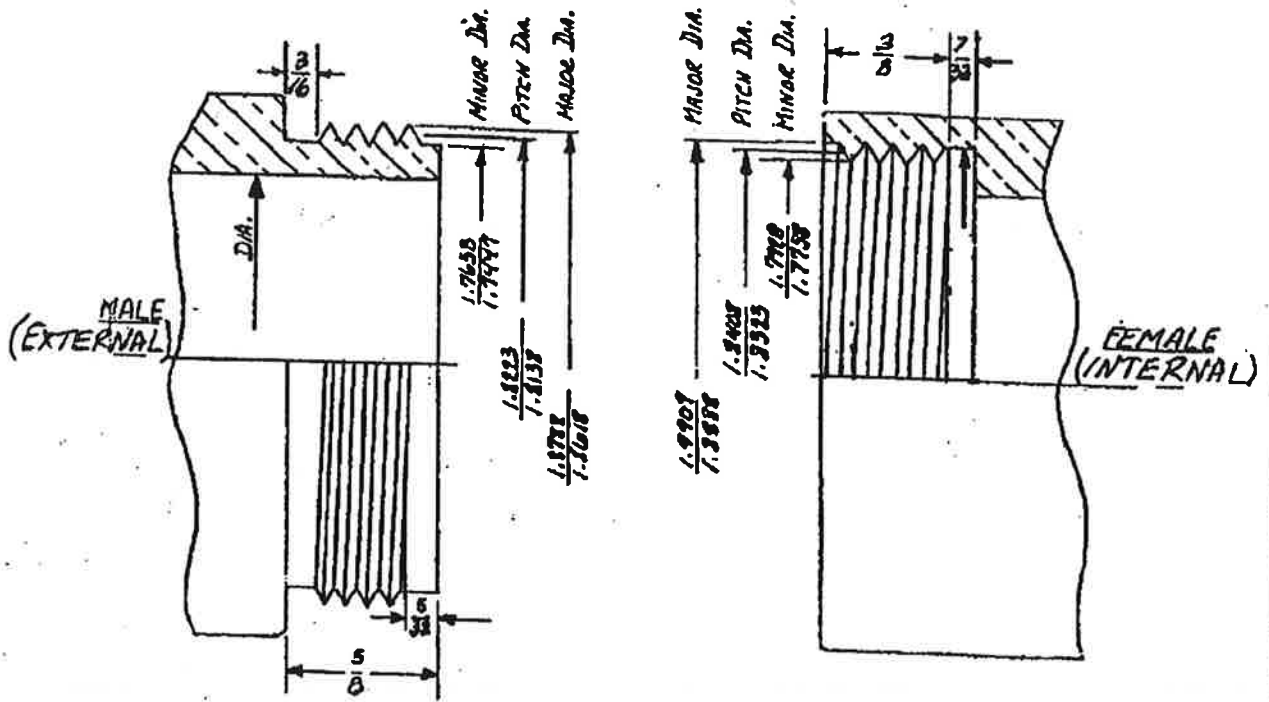
THREADS PER INCH: 4

THREAD FORM: NF

DETAIL - STEUBENVILLE FIRE HYDRANT THREAD, 4.5 INCH STEAMER

CITY OF STEUBENVILLE - Department of Public Works - Division of Engineering & Building
 238 South Lake Erie Avenue - Steubenville, Ohio 43952-2158

SURVEY	FIELD BK	DESIGN	DRAWN	CHECK	DATE	SCALE	DWG. NO.
					09/27/96	N.T.S.	ST-256



THREADS PER INCH: 11.5

THREAD FORM: NF

COMMONLY KNOWN AS: NPSH

DETAIL - STEUBENVILLE FIRE HOSE THREAD, 1.5 INCH HOSE

CITY OF STEUBENVILLE - Department of Public Works - Division of Engineering & Building
 238 South Lake Erie Avenue - Steubenville, Ohio 43952-2158

SURVEY	FIELD BK	DESIGN	DRAWN	CHECK	DATE	SCALE	DWG. NO.
					10/01/96	N.T.S.	ST-258