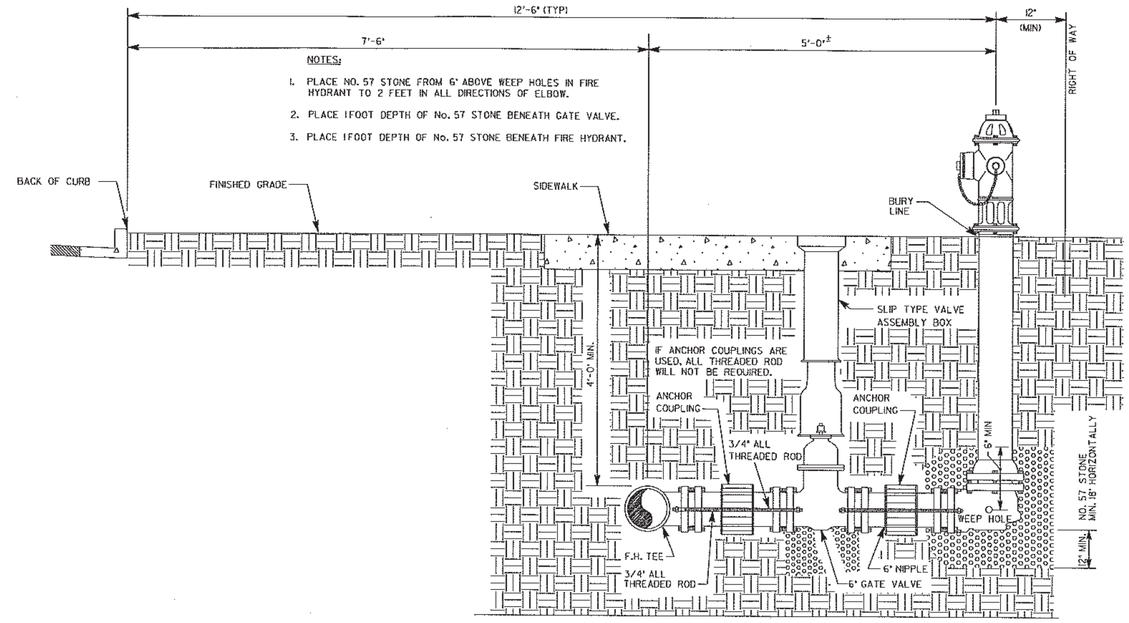
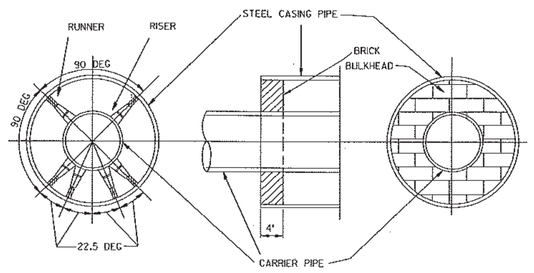


NOTES:

1. PLACE NO. 57 STONE FROM 6" ABOVE WEEP HOLES IN FIRE HYDRANT TO 2 FEET IN ALL DIRECTIONS OF ELBOW.
2. PLACE 1FOOT DEPTH OF No. 57 STONE BENEATH GATE VALVE.
3. PLACE 1FOOT DEPTH OF No. 57 STONE BENEATH FIRE HYDRANT.

FIRE HYDRANT



TYPICAL LAYOUT STAINLESS STEEL CASING SPACER DETAIL

BULKHEAD DETAIL

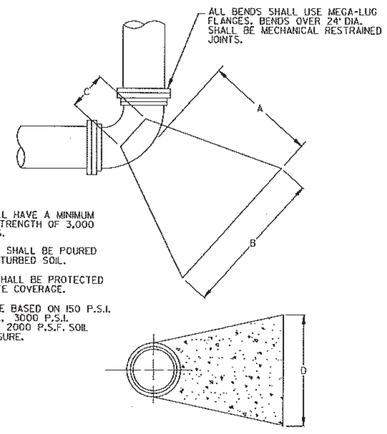
CASING

NOTES:

1. SPACER SHELL MUST BE A MINIMUM 14 GA. T 304 STAINLESS STEEL ALL SURFACES ARE FULLY CHEMICALLY PASSIVATED.
2. CASING PIPE UP TO 20" SHALL HAVE A THICKNESS OF .375 INCH
3. CASING PIPE OVER 20" SHALL HAVE A THICKNESS OF .5 INCH
4. SPACER LINER MUST BE PVC - .90 THICK, 85-90 DUROMETER (ASTM D1706-61T) (ASTM - B117) (ASTM - D149-61)
5. RUNNERS MUST BE ULTRA HIGH MOLECULAR WEIGHT POLYMER. WITH HIGH RESISTANCE TO ABRASION AND SLIDE WEAR, LOW DEFLECTION UNDER COMPRESSION AND DIELECTRIC INSULATION.
6. SPACER FASTENERS MUST BE 5/16" T304 STAINLESS STEEL
7. SPACER RISERS MINIMUN 10 GA. T 304 STAINLESS STEEL, MUST BE REINFORCED IF OVER 6".

MINIMUM DIMENSIONS FOR CONCRETE BLOCKING

BEND	PIPE SIZE	A	B	C	D
11 1/4°	6"	1.0'	1.0'	7"	1.0'
	8"	1.0'	1.25'	7"	1.0'
	12"	1.0'	2.0'	11"	2.0'
	16"	2.0'	3.0'	15"	2.0'
	20"	2.0'	3.0'	19"	3.0'
	24"	3.0'	4.0'	22"	3.0'
	36"	4.0'	7.0'	33"	4.0'
22 1/2°	6"	1.0'	1.5'	7"	1.0'
	8"	1.0'	2.0'	7"	2.0'
	12"	2.0'	3.0'	11"	2.0'
	16"	2.0'	4.0'	15"	3.0'
	20"	3.0'	5.0'	19"	3.0'
	24"	4.0'	6.0'	22"	4.0'
	36"	5.0'	10.0'	33"	5.0'
45°	6"	1.5'	2.0'	7"	1.5'
	8"	2.0'	3.0'	7"	2.0'
	12"	2.0'	4.0'	11"	3.0'
	16"	3.0'	5.0'	15"	4.0'
	20"	4.0'	6.0'	19"	5.0'
	24"	5.0'	8.0'	22"	6.0'
	36"	6.0'	13.0'	33"	7.0'
90°	6"	1.5'	2.5'	7"	2.0'
	8"	2.0'	3.0'	7"	3.0'
	12"	4.0'	6.0'	11"	4.0'
	16"	4.0'	7.0'	15"	5.0'
	20"	8.0'	8.0'	19"	7.0'
	24"	6.0'	10.0'	22"	8.0'
	36"	7.0'	16.0'	33"	10.0'
TEES AND PLUGS	6"	1.5'	2.0'	7"	2.0'
	8"	2.0'	3.0'	7"	2.0'
	12"	2.0'	4.0'	11"	4.0'
	16"	3.0'	5.0'	15"	5.0'
	20"	4.0'	7.0'	19"	6.0'
	24"	5.0'	8.0'	22"	7.0'
	36"	7.0'	10.0'	33"	8.0'



SECTION

NOTES:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
2. THRUST BLOCK SHALL BE POURED AGAINST UNDISTURBED SOIL.
3. BOLTS/NUTS SHALL BE PROTECTED FROM CONCRETE COVERAGE.
4. DIMENSIONS ARE BASED ON 150 P.S.I. LINE PRESSURE, 3000 P.S.I. CONCRETE AND 2000 P.S.F. SOIL BEARING PRESSURE.

THRUST BLOCK DIMENSIONS

BLACK & VEATCH
Building a world of difference.

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT 7

FORSYTH COUNTY
WATER LINE RELOCATION
DETAILS
(2 OF 3)

DRAWING No. 44-06

3/1/2007 GPLN