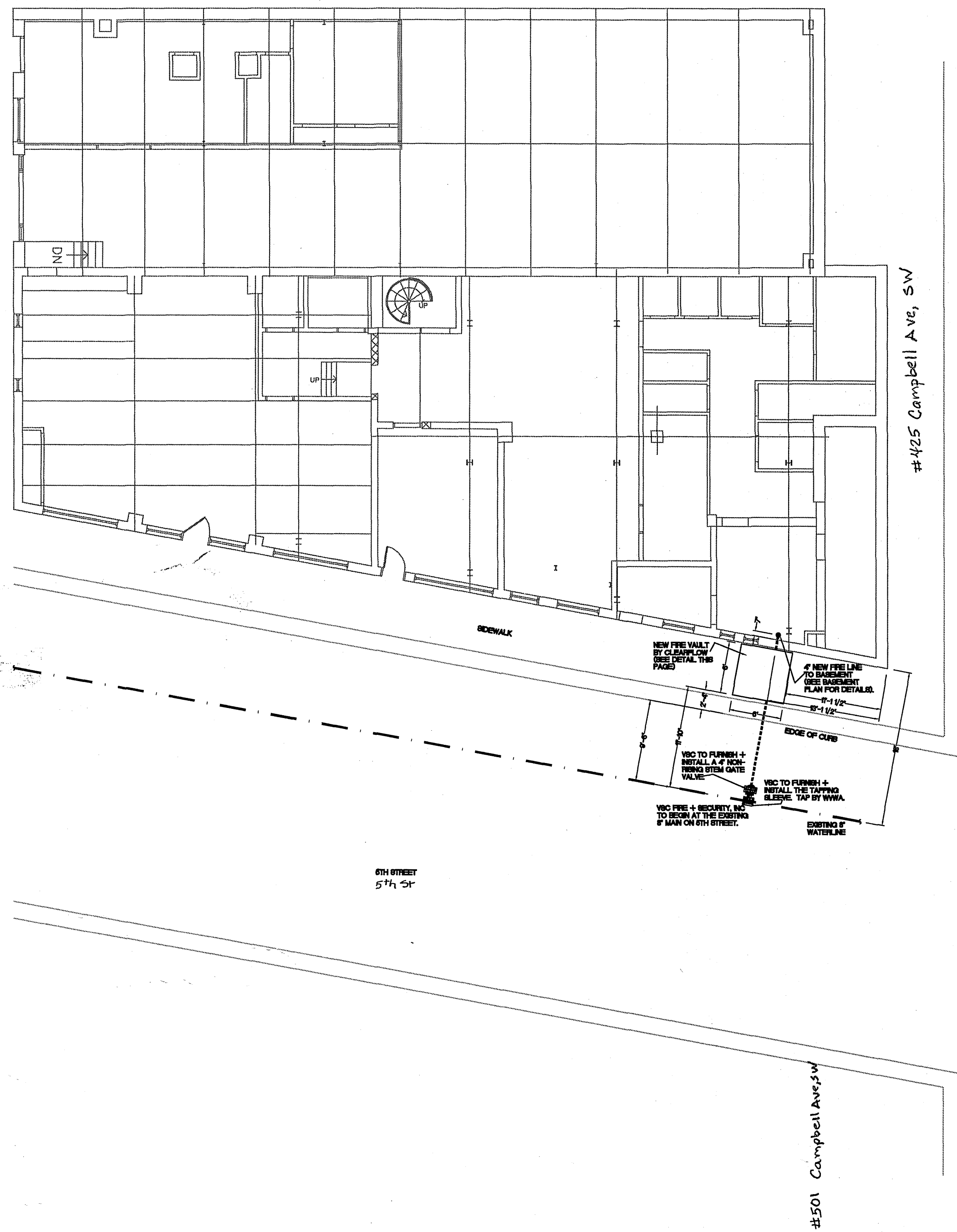
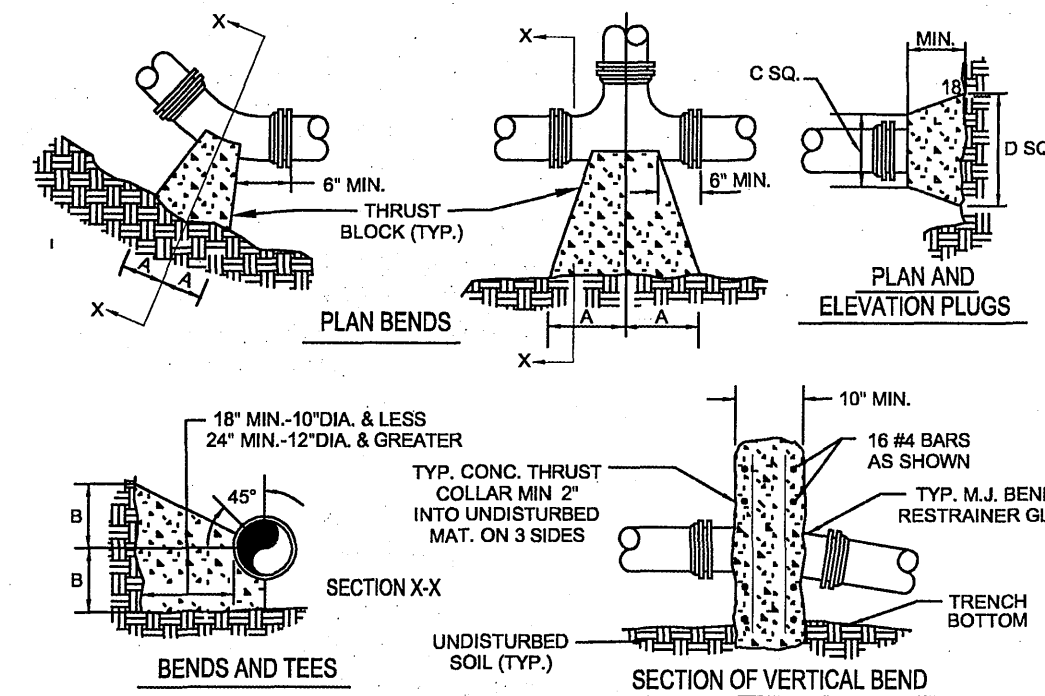


# VAULT PLAN

1/8"=1'-0"



1. TAPPING SLEEVE SHALL BE POWERSEAL MODEL 3490 TYPE 304 STAINLESS STEEL WITH CARBON STEEL FLANGE, ROMAC'S MODEL SST III, FORD MODEL FTSS WITH CARBON STEEL FLANGE OR APPROVED EQUIVALENT. SLEEVE SHALL BE RATED AT 250 PSI AND MUST HAVE A TEST PLUG.
2. TAPPING VALVE SHALL BE AVK RESILIENT SEATED GATE VALVE SERIES 25 MJFL OR MUELLER T-2360 RESILIENT WEDGE TAPPING VALVE WITH MJFL. VALVE SHALL BE RATED AT 250 PSI.
3. TAPPING SLEEVE AND VALVE SHALL BE FULL PORT TO ACCEPT FULL SIZE SHELL CUTTER.
4. STEEL FLANGE SHALL MEET AWWA C207.



- NOTES:
1. FOR VERT. BEND DOWN IN EXCESS OF 11 1/4\"/>

PRESSURE = 200 psi  
BEARING = 2000 psf  
FACTOR OF SAFETY = 1.5

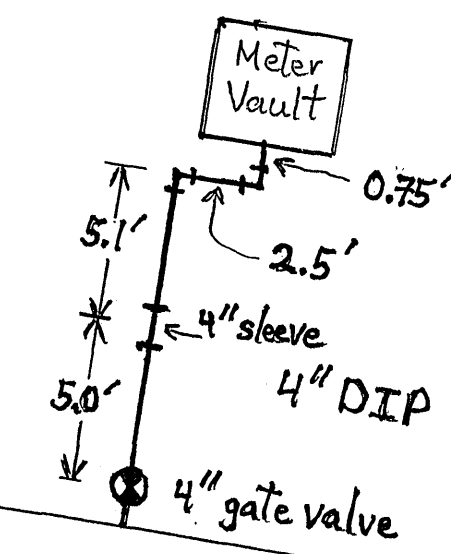
PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	TEE	PLUG
4"	12'	8'	6'	6'	11'	6'
6"	18'	12'	10'	8'	17'	10'
8"	24'	18'	14'	12'	23'	14'
10"	30'	24'	18'	16'	29'	18'
12"	36'	28'	22'	20'	35'	22'
14"	42'	34'	28'	24'	41'	28'
16"	48'	40'	34'	30'	47'	34'
18"	54'	46'	40'	36'	53'	40'
20"	60'	52'	46'	42'	59'	46'
22"	66'	58'	52'	48'	65'	52'
24"	72'	64'	58'	54'	71'	58'
26"	78'	70'	64'	60'	77'	64'
28"	84'	76'	70'	66'	83'	70'
30"	90'	82'	76'	72'	89'	76'

FACTOR OF SAFETY = 1.5

PIPE SIZE	PIPE MAT'L	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	VALVE	TEE	REDUCER	VERT. 45°	VERT. 22 1/2°	VERT. 11 1/4°
6"	D.I.	28'	12'	6'	3'	36'	34'	20'	23'	11'	5'
8"	D.I.	37'	15'	7'	4'	51'	47'	21'	30'	15'	7'
10"	D.I.	45'	19'	9'	4'	61'	57'	20'	37'	18'	9'
12"	D.I.	53'	22'	11'	5'	73'	69'	38'	43'	21'	10'
6"	PVC	30'	12'	6'	3'	56'	58'	29'	35'	17'	8'
8"	PVC	40'	16'	8'	4'	74'	56'	31'	46'	22'	11'
10"	PVC	47'	20'	9'	5'	89'	62'	30'	56'	27'	13'
12"	PVC	56'	23'	11'	6'	106'	88'	56'	66'	32'	16'

1. ALL JOINTS SHALL BE RESTRAINED ON BOTH SIDES OF THE FITTING FOR THE LENGTH SHOWN UNLESS OTHERWISE INDICATED.
2. REDUCER IS ONE SIZE SMALLER THAN PIPE LISTED. RESTRAINED LENGTH IS UPSTREAM ON THE LARGE SIDE OF THE REDUCER.
3. IF UNDER 100 PSI WORKING PRESSURE, RESTRAINT JOINT(S) ARE TO BE USED. IF EQUAL TO OR OVER 100 PSI WORKING PRESSURE, BOTH THRUST BLOCK AND RESTRAINT JOINTS SHALL BE USED.

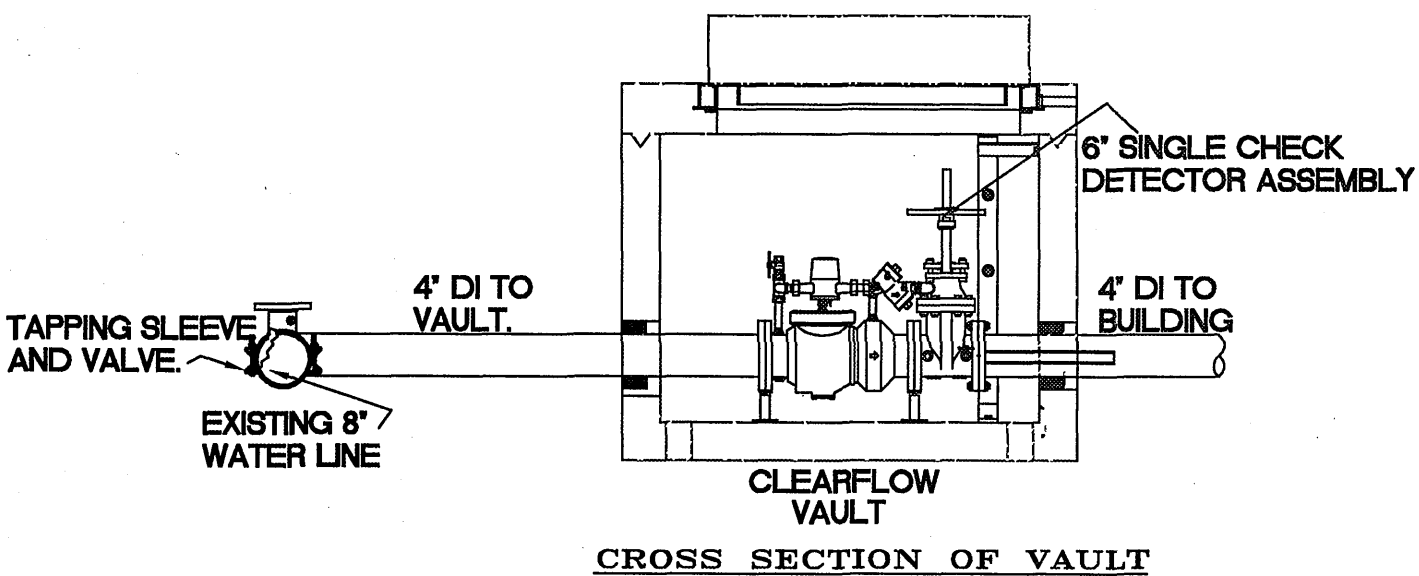
Not to Scale



Existing 8" Waterline

**WESTERN VIRGINIA WATER AUTHORITY NOTES**  
 -VSC FIRE + SECURITY, INC. TO FURNISH AND INSTALL TAPPING SLEEVE AND VALVE, TAP TO BE MADE BY WVA. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION AND SHORING PER OSHA REGULATIONS.  
 -ALL WATER CONNECTIONS SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.  
 -ALL WATER AND SANITARY SEWER FACILITIES ARE TO BE INSTALLED ACCORDING TO WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS.

**NOTES:**  
 -425 CAMPBELL IS AN EXISTING BUILDING LOCATED IN ROANOKE, VA.  
 -VSC FIRE + SECURITY, INC. IS TO BEGIN AT THE 4\"/>



- NOTES:
1. CLEAR FLOW VAULT SHIPPED ASSEMBLED WEIGHING APPROX. 16,000 LBS.
  2. 4\"/>

## BACKFLOW VAULT BY CLEARFLOW

1/4"=1'-0"

**SUBMITTAL**  
 1/8" GRAPHIC SCALE  
 NOTES:  
 -PIPE PAINTING IS NOT REQUIRED.  
 -PIPE SLEEVES ARE NOT REQUIRED.  
 -PIPE SLEEVES ARE NOT REQUIRED.

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JOB No.	RC0395	DATE	4/21/14	DESIGNER	J. POTVIN	SCALE	1/8" NOTED
VAULT PLAN AND DETAILS							SHEET No.
425 CAMPBELL 425 CAMPBELL AVE. ROANOKE, VA 24018-3828							2 of 2

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