



RESTRAINED JOINT LENGTHS, L _T , FOR TEES, (FT.) ALL JOINTS AT THE TEE MUST BE RESTRAINED.		
SIZE	RUN	BRANCH
12x12x6	3	19
8x8x8	9	20
8x8x6	5	17
8x8x4	2	15
6x6x6	6	20
6x6x4	2	20

THIS TABLE IS BASED UPON THE FOLLOWING CRITERIA:
DEPTH OF BURY: 3.0 FT. MINIMUM
FACTOR OF SAFETY: 1.25
MATERIAL: PVC PIPE
SOIL TYPE: GM/SM - SILTY GRAVELS
AND SILTY SANDS, GRAVEL-SAND-SILT MIXTURES.
TEST PRESSURE: 150 PSI
TRENCH TYPE 4: PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH MINIMUM; BACKFILL COMPACTED TO TOP OF PIPE.

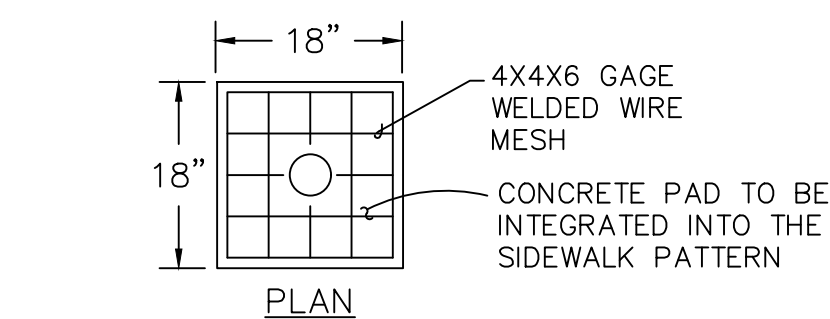
DIFFERENT CRITERIA, E.G., DUCTILE IRON PIPE, GREATER DEPTH OF BURY, ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY ABCWUA.

RESTRAINED JOINT LENGTHS FOR WATERLINE FITTINGS

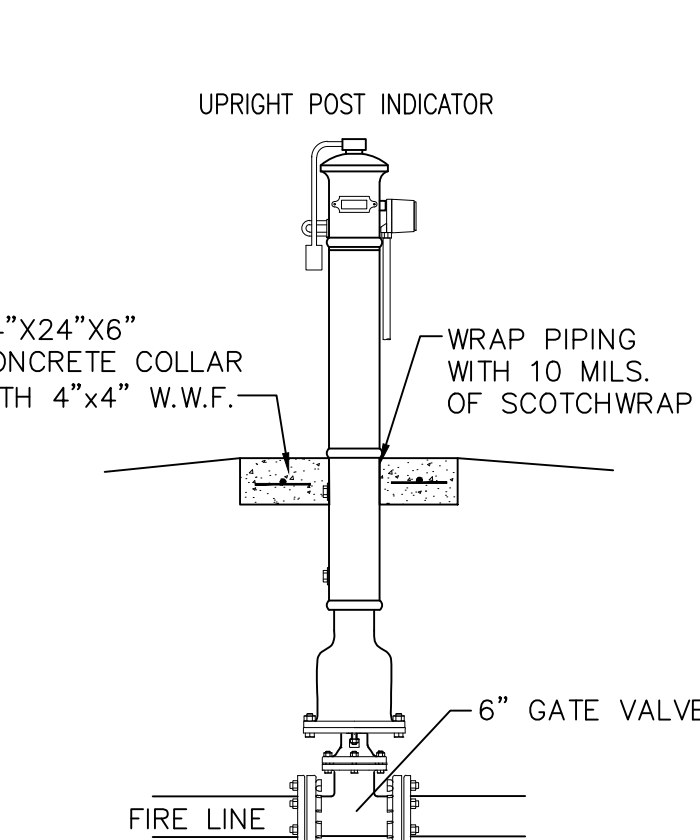
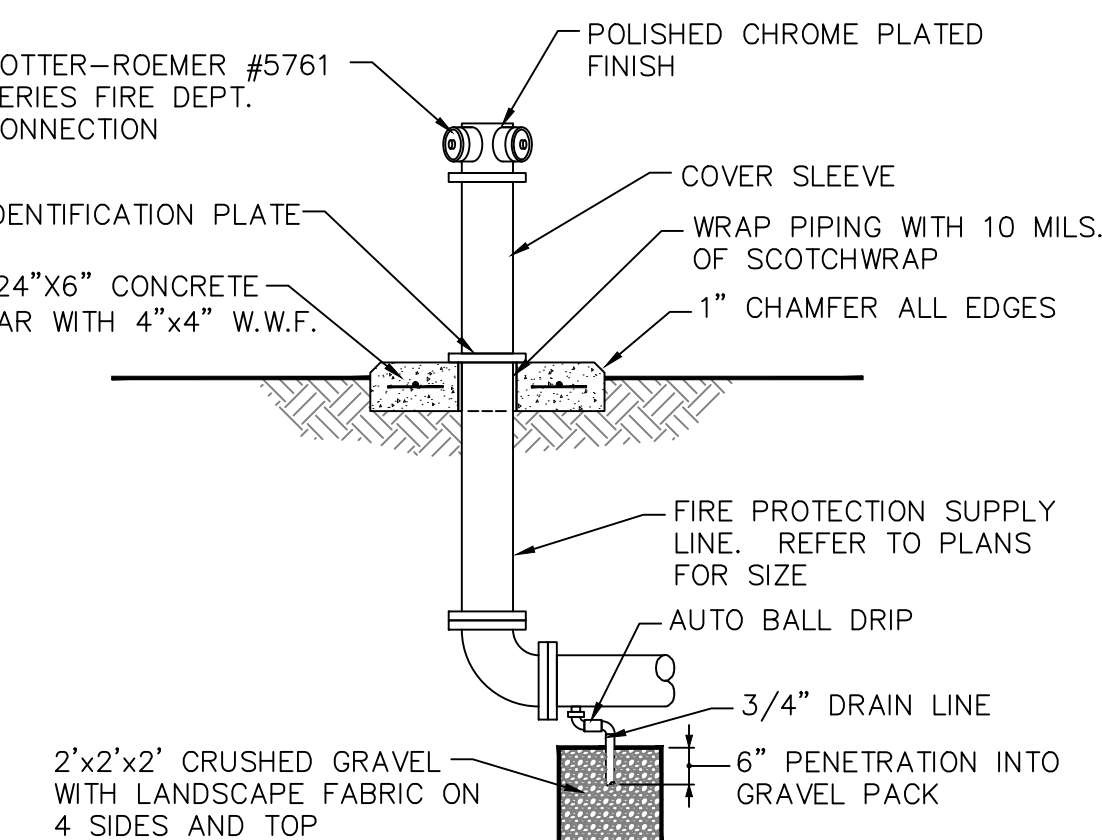
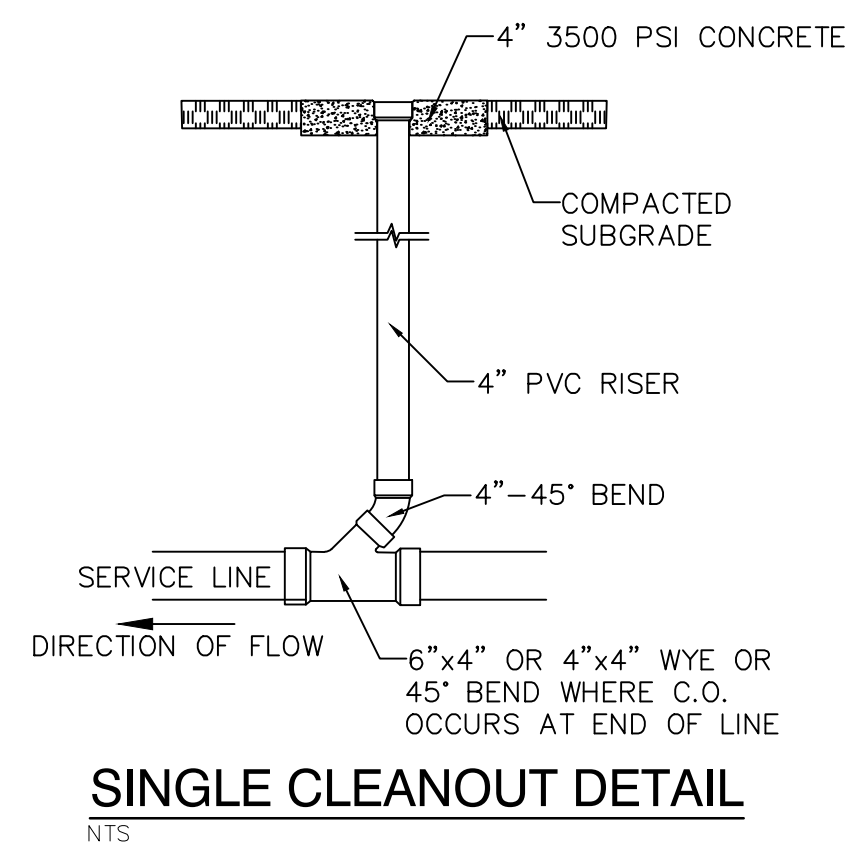
RESTRAINED JOINT LENGTHS, L _T , FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS, (FT.)					
SIZE	HORZ. BENDS				VALVES & DEAD ENDS
	90°	45°	22 1/2°	11 1/4°	
12	30	12	6	3	85
8	22	9	4	2	60
6	17	7	3	2	46
4	12	5	2	1	32

RESTRAINED JOINT LENGTHS, L_T , FOR REDUCERS, (FT.) MINIMUM UNOBSTRUCTED, STRAIGHT-RUN LENGTH: RESTRAIN EITHER LARGE PIPE, OR SMALL PIPE.					
SIZE	LARGE SIDE		SIZE	SMALL SIDE	
	12x6	8x6		12x4	8x4
12x6	62	121	8x4	43	83
8x6	25	33	6x4	24	35

- NOTES:
- ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
 - THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ON THIS SHEET.
 - THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.



CONCRETE PAD FOR SAS CLEANOUT



LEGEND

- WL— EXISTING WATERLINE
- SAS— EXISTING SEWER LINE
- NEW WATERLINE
- NEW SEWER LINE
- NEW WATER METER
- SAS SINGLE CLEANOUT

GENERAL NOTES

- EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. ALL UTILITIES SHOULD BE FIELD VERIFIED AND LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES.
- CONTRACTOR SHALL NOT USE VIBRATORY COMPACTION EQUIPMENT OR HEAVY VEHICLES OVER EXISTING UTILITIES.
- SITE STORM DRAIN, ELECTRIC LINES & TRANSFORMERS AND GAS LINES ARE SHOWN FOR GENERAL INFORMATION ONLY TO PROVIDE AN OVERVIEW OF SITE UTILITIES AND POTENTIAL CONFLICTS. SEE MECHANICAL PLANS FOR GAS LINE SIZING. SEE CG-101 FOR STORM DRAIN DESIGN.
- ALL WATER FITTINGS SHALL HAVE JOINT RESTRAINTS (LT). SEE RESTRAINED JOINT CRITERIA NOTES THIS SHEET. (LT) LENGTH SHOWN ON KEYED NOTES.

KEYED NOTES

WATER KEYED NOTES

- NEW 2" WATER SERVICE CONNECTION TO EXISTING 8" MAIN. PER ABCWUA STD DWG 236X
- METER BOX PER ABCWUA STD DWG 2367.
- 2" WATER SERVICE
- 3/4" IRRIGATION STUB.
- 4" WATERLINE
- 6" WATERLINE
- 6" 90° BEND.
- 8"x6" TEE.
- 6" GATE VALVE.
- 6" 45° BEND.
- 4" 45° BEND.
- FIRE HYDRANT.
- FIRE DEPARTMENT CONNECTION (FDC).
- POST INDICATOR VALVE (PIV).
- 3" CONDUIT FROM PIV TO FIRE ROOM WITH PULL CORD. IN SAME TRNCH WITH FIRE SPRINKLER LINE.

SEWER

- CONNECTION TO EXISTING SEWER MAIN PER ABCWUA STD DWG 2125.
- 8" x 6" WYE.
- 6" - 45° BEND.
- 6" x 4" WYE.
- 4" - 45° BEND.
- 4" x 4" WYE.
- 6" SANITARY SEWER SERVICE LINE AT 2% MIN. SLOPE.
- 4" SANITARY SEWER LINE AT 2% MIN. SLOPE.
- SINGLE CLEANOUT.

GAS & ELECTRIC

- GAS METER AND SERVICE LINE TO BE COORDINATED WITH NM GAS CO.
- EMERGENCY SEISMIC GAS SHUTOFF VALVE (SGV) AS REQUIRED BY NM GAS CO.
- 2" GAS SERVICE
- ELECTRIC TRANSFORMER.
- ELECTRIC METER AND MAIN DISCONNECT.