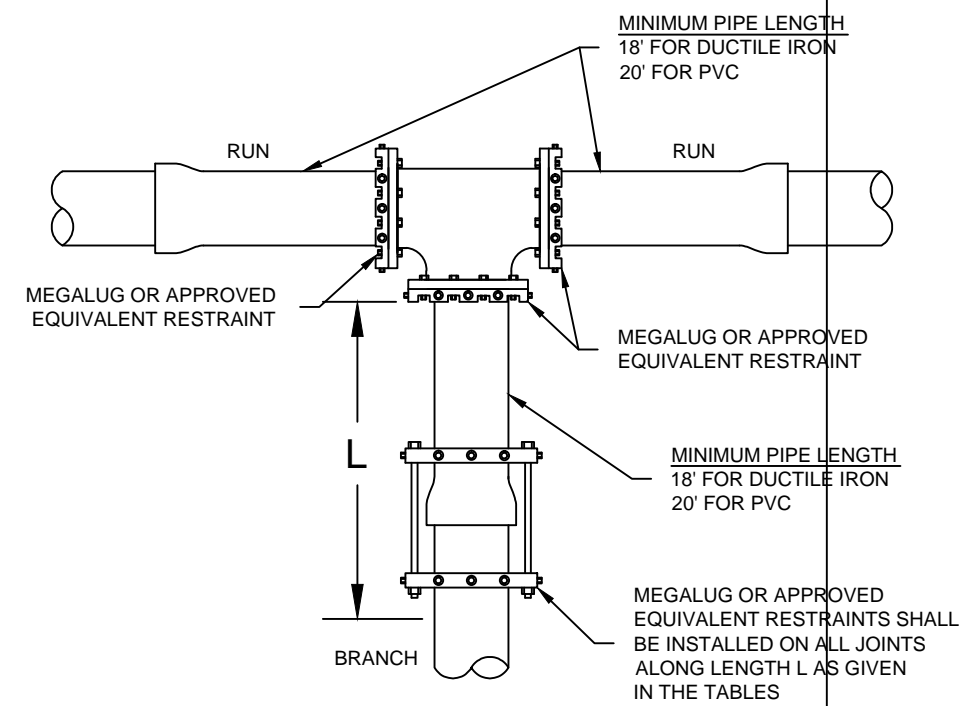


UTILITY DETAILS WATER

PIPE RESTRAINTS FOR PVC & DIP AT BENDS

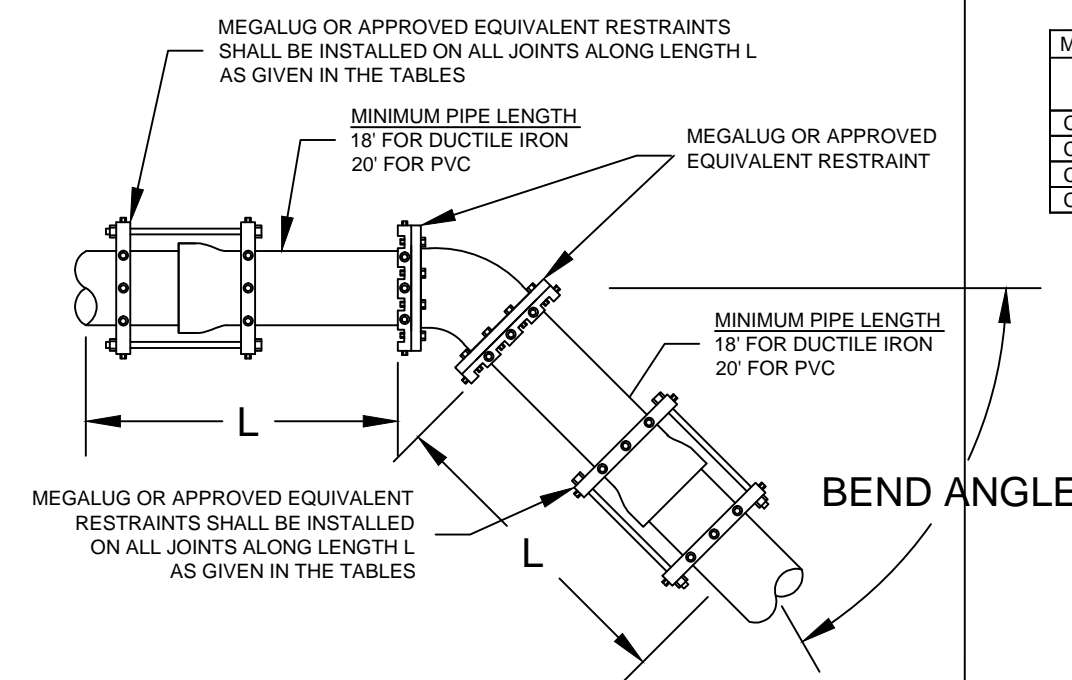
NOT TO SCALE



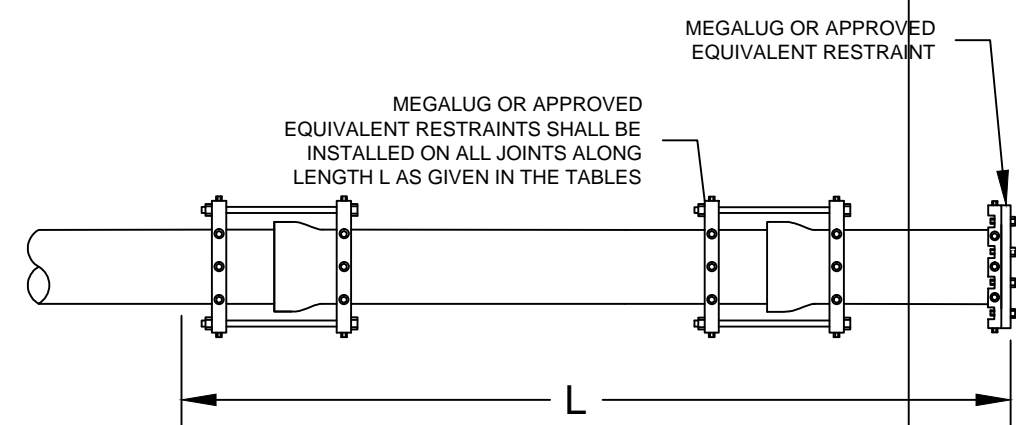
CLASS A SOILS
 GW: WELL GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
 SW: WELL GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
 GC: CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
 SC: CLAYEY SANDS, SAND-CLAY MIXTURES

CLASS B SOILS
 GP: POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
 SP: POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
 GM: SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
 SM: SILTY SANDS, SAND SILT MIXTURES
 CL: INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY LAYS, LEAN CLAYS
 ML: INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS

MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET	SOIL CONDITION & DEPTH OF PIPE	
	8" PVC	6" DIP
CLASS A NATIVE SOIL - 2' BURY	60	39
CLASS A NATIVE SOIL - 4' BURY	20	18
CLASS B NATIVE SOIL - 2' BURY	81	60
CLASS B NATIVE SOIL - 4' BURY	40	27



MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR BENDS ON 8" DIA. PIPE	SOIL CONDITION & DEPTH OF PIPE							
	FFFB		GFB		I		J	
	DIP	PVC	DIP	PVC	DIP	PVC	DIP	PVC
CLASS A NATIVE SOIL - 2' BURY	20	18	20	18	20	18	40	33
CLASS A NATIVE SOIL - 4' BURY	20	18	20	18	20	18	24	20
CLASS B NATIVE SOIL - 2' BURY	20	18	20	18	21	18	50	42
CLASS B NATIVE SOIL - 4' BURY	20	18	20	18	20	18	34	28



MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR DEAD ENDS ON 8" DIAMETER	SOIL CONDITION & DEPTH OF PIPE	
	PVC	DIP
CLASS A NATIVE SOIL - 2' BURY	128	79
CLASS A NATIVE SOIL - 4' BURY	79	42
CLASS B NATIVE SOIL - 2' BURY	168	103
CLASS B NATIVE SOIL - 4' BURY	87	56

GENERAL NOTES

- 1) ALL WATER MAIN PIPE SHALL BE 8" C900 PVC DR25 @ 165 PSI.
- 2) ALL WATERLINES SHALL BE INSTALLED TO A MINIMUM COVER OF THIRTY-SIX (36) INCHES UNLESS OTHERWISE NOTED.
- 3) CONTRACTOR SHALL NOT CONNECT TO THE EXISTING SYSTEM UNTIL ALL TESTING AND DISINFECTION IS COMPLETE AND SHALL OBTAIN WRITTEN PERMISSION FROM THE ENGINEER TO PROCEED WITH CONNECTION TO THE EXISTING SYSTEM.
- 4) THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AND ELEVATIONS TO AVOID POTENTIAL CONFLICTS.
- 5) THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES AND OWNER WITH REGARD TO RELOCATING, ADJUSTING, REPLACING AND/OR REPAIRING UTILITIES DURING CONSTRUCTION.
- 6) THE CONTRACTOR SHALL POT HOLE AND HAND DIG IN ALL AREAS WHERE THE NEW WATERLINE IS SHOWN IN CLOSE PROXIMITY (MIN. 2 FT) TO ALL UTILITIES. EXTRA PRECAUTION SHALL E TAKEN AT THESE LOCATIONS.