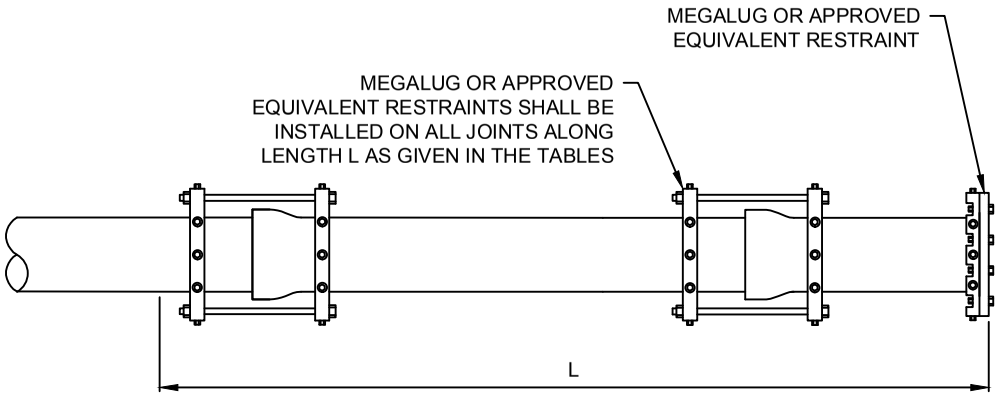
SPANISH FORK CITY
40 SOUTH MAIN STREET
SPANISH FORK, UT 84660
(801) 804-4550

STANDARD DRAWING

MECHANICAL RESTRAINING DEVICES FOR PRESSURE PIPE DEAD ENDS



PVC PIPE

MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR DEAD ENDS ON SPECIFIED DIAMETERS					
SOIL CONDITION & DEPTH OF PIPE	12"	10"	8"	6"	4"
CLASS A NATIVE SOIL - 2' BURY	180	153	128	98	70
CLASS A NATIVE SOIL - 4' BURY	113	95	79	60	42
CLASS B NATIVE SOIL - 2' BURY	231	197	166	127	91
CLASS B NATIVE SOIL - 4' BURY	123	104	87	66	47

DUCTILE IRON PIPE

MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR DEAD ENDS ON SPECIFIED DIAMETERS					
SOIL CONDITION & DEPTH OF PIPE	12"	10"	8"	6"	4"
CLASS A NATIVE SOIL - 2' BURY	110	94	79	60	43
CLASS A NATIVE SOIL - 4' BURY	72	51	42	32	23
CLASS B NATIVE SOIL - 2' BURY	143	123	103	80	57
CLASS B NATIVE SOIL - 4' BURY	79	67	56	42	30

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

NOTES:

1. ALL RESTRAINING DEVICES SHALL BE INSTALLED ACCORDING TO THESE REQUIREMENTS OR MANUFACTURER SPECIFICATIONS, WHICHEVER IS MOST CONSERVATIVE.
2. FOR DEAD ENDS WITH BOTH PVC AND DUCTILE IRON PIPE USE THE PVC TABLE.
3. MECHANICAL RESTRAINTS FOR PIPE LARGER THAN 12" IN DIAMETER MUST BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER.
4. MECHANICAL RESTRAINTS MAY ONLY BE USED ON PVC OR DUCTILE IRON PIPE.

DRAWN:	JLR
DESIGN:	CJP
CHECK:	CMT
DATE:	6/22/16

SCALE: NONE

STANDARD 8