

REQUIRED LENGTH (FT) OF RESTRAINED JOINT PIPE							
	PIPE SIZE						
	4"	6"	8"	10"	12"	16"	24"
PLUG OR DEAD END CAP	48	68	88	82	96	124	175

**GENERAL NOTES:**

1. PIPE JOINTS SHALL BE RESTRAINED WITH FIELD LOK 350 GASKETS OR APPROVED EQUAL.
2. TOTAL LENGTH OF RESTRAINED PIPE SHALL BE EQUAL TO OR GREATER THAN SHOWN IN TABLE.
3. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED USING "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" BY DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA). THE FOLLOWING CONDITIONS WERE USED:
  - LAYING CONDITION IS TYPE 4
  - SOIL DESIGNATION IS GOOD SAND & GRAVEL
  - DEPTH OF COVER IS 3 FT FOR PIPE LESS THAN 10" DIAMETER
  - DEPTH OF COVER IS 4 FT FOR PIPE 10" DIAMETER AND GREATER
  - DESIGN PRESSURE IS 250 PSI
  - SAFETY FACTOR IS 1.5
4. RESTRAINED PIPE LENGTHS SHALL BE RECALCULATED WHERE SITE SPECIFIC CONDITIONS VARY FROM THE ABOVE CONDITIONS, AS REQUIRED BY THE DISTRICT.
5. RESTRAINED PIPE BLOCKING SHALL BE INSTALLED WHERE INDICATED ON THE APPROVED WATER LINE PLANS.
6. RESTRAINED PIPE BLOCKING MAY NOT BE SUBSTITUTED FOR CONCRETE THRUST BLOCKING UNLESS SPECIFICALLY APPROVED BY THE DISTRICT IN WRITING.
7. ALL FITTINGS SHALL HAVE CONCRETE BLOCKING PER STANDARD DETAIL W-1A, UNLESS SPECIFICALLY APPROVED BY THE DISTRICT IN WRITING.

SHEET 3 OF 3



## RESTRAINED PIPE LENGTH DETAIL

REVISION DATE APRIL 21, 2023	SCALE NTS	DISTRICT APPROVAL <i>Gregory G. Hill, P.E.</i>	DATE APPROVED APRIL 27, 2023
FILE NAME W-1C.DWG			DWG. NO.   <b>W-1C</b>