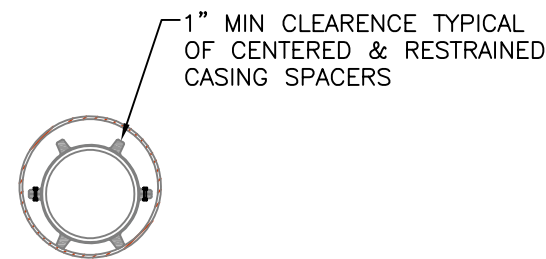
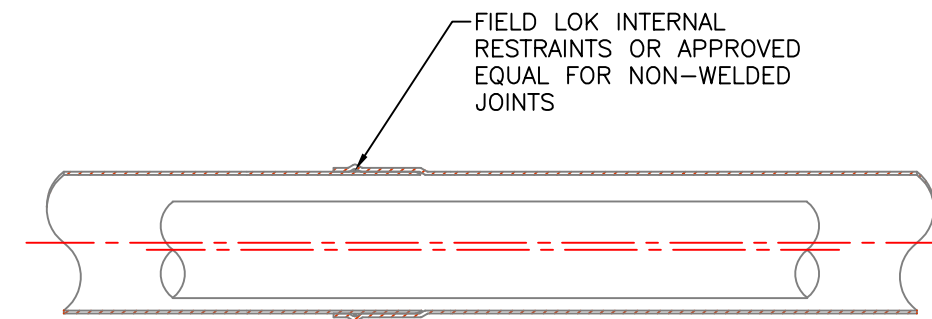


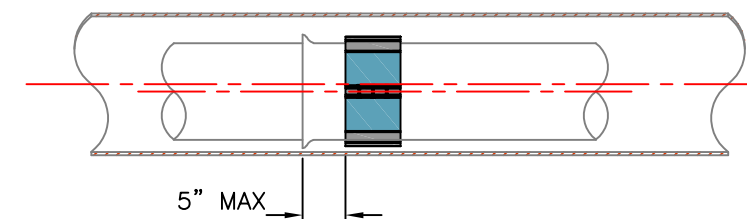
**NOTES:**

1. CARRIER PIPE SHALL BE USED AS REQUIRED WITHIN CITY RIGHT-OF-WAY.
2. ALL IRRIGATION PIPE LOCATED WITHIN CITY RIGHT-OF-WAY SHALL BE PVC C900 OR APPROVED EQUAL
3. ALL JOINTS THROUGHOUT CASING SHALL BE RESTRAINED WITH FIELD LOC INTERNAL RESTRAINTS OR APPROVED EQUAL.
4. RESTRAIN CARRIER PIPE ONE JOINT BEYOND END SEALS.
5. MANUFACTURED CASING SPACER INTERVAL PER MANUFACTURER'S SPECIFICATIONS BUT NOT MORE THAN 10- FEET. MINIMUM 3 SPACERS PER PIPE LENGTH.
6. CASING SHALL BE WELDED STEEL OR DUCTILE IRON FOR INSTALLATIONS LESS THAN 3- FEET BELOW ROAD GRADE. CPE MAY BE SUBSTITUTED FOR AREAS OUTSIDE OF PAVED ROADWAY.
7. CASING PIPE LENGTHS SHALL BE OF THE LONGEST AVAILABLE LENGTH OF PIPE FROM MANUFACTURER
8. NON- WELDED STEEL CASING SHALL BE EXTERNALLY RESTRAINED AT ALL JOINTS.
9. 3M MARKER BALL TO BE PLACED DIRECTLY ABOVE JOINT RESTRAINT AT END OF PIPE.
10. DETECTABLE MARKER TAPE TO BE INSTALLED 12- INCHES TO 14- INCHES ABOVE PIPE CASING. COLOR SHOULD BE ACCORDING TO APWA UNIFORM COLOR CODE FOR MARKING UNDERGROUND UTILITIES. DETECTABLE MARKING TAPE SHALL CONSIST OF INERT POLYETHYLENE PLASTIC THAT IS IMPERVIOUS TO ALL KNOWN ALKALIS, ACIDS, CHEMICAL REAGENTS, AND SOLVENTS LIKELY TO BE ENCOUNTERED IN THE SOIL, WITH A METALLIC FOIL CORE TO PROVIDE FOR THE MOST POSITIVE DETECTION AND PIPELINE LOCATION. DETECTABLE MARKING TAPE SHALL BE NO LESS THAN 2- INCHES WIDE, TYPE OF BURIED UTILITY SHOULD BE CLEARLY MARKED CONTINUOUSLY ALONG THE LENGTH OF THE RIBBON WITH MINIMUM 1- 1/2 INCH LETTERS IN THE FOLLOWING FORMAT: "CAUTION BURIED (UTILITY TYPE) LINE"



**CASING SPACERS DETAIL**  
NTS

**NON WELDED JOINT DETAIL**  
NTS



**SPACER DISTANCE FROM BELL DETAIL**  
NTS

**STANDARD DETAIL  
CARRIER PIPE**



REVISIONS	DATE	INITIAL	BY	CAW
	12/29/2017		JBY	
	10/27/2020		CAW	

DATE DRAWN	2/21/2006	CHECKED	SK	DATE APPROVED	
DESIGNED	JBY	APPROVED BY		STANDARD SPECIFICATIONS	