

1. "SPECIAL CONSTRUCTION" IS REQUIRED WHENEVER:

- a. SEWER MAINS RUN PARALLEL TO WATER MAINS WITH BETWEEN 6 FEET AND 10 FEET OF HORIZONTAL SEPARATION AND LESS THAN 18 INCHES VERTICAL SEPARATION BELOW WATER MAINS OR LATERALS
  - b. SEWER SERVICE LATERALS RUN PARALLEL TO WATER MAINS OR WATER SERVICE LATERALS WITH LESS THAN 4 FEET OF HORIZONTAL SEPARATION AND LESS THAN 12 INCHES VERTICAL SEPARATION BELOW WATER MAINS OR LATERALS
  - c. SEWER MAINS CROSSING WATER MAINS OR WATER SERVICE LATERALS WITH SEWER ABOVE THE WATER BY ANY DISTANCE OR SEWER BELOW WATER BY LESS THAN 18 INCHES
  - d. SEWER SERVICE LATERALS CROSSING WATER MAINS OR WATER SERVICE LATERALS WITH SEWER ABOVE WATER BY ANY DISTANCE OR SEWER BELOW WATER BY LESS THAN 12 INCHES
- \*THE TERM "SEWER" IS INCLUSIVE OF STORM SEWER AND SANITARY SEWER FOR THE CONDITIONS LISTED ABOVE


2. WHEN "SPECIAL CONSTRUCTION" IS REQUIRED, THE FOLLOWING MEASURES ARE TO BE FOLLOWED:

- a. WATER MAINS: ONE STICK OF WATER MAIN PIPE IS TO BE CENTERED OVER THE CROSSING WITH MECHANICAL RESTRAINTS INSTALLED ON ALL JOINTS WITHIN 10 FEET OF THE CROSSING.
- b. WATER LATERALS: WATER LATERAL PIPE SHALL NOT CONTAIN SPLICES OR JOINTS WITHIN 10 FEET OF THE CROSSING.
- c. SANITARY SEWER: SANITARY SEWER MAIN AND LATERAL PIPES ARE TO BE CENTERED OVER THE CROSSING WITH MITIGATION TO ALL JOINTS WITHIN 10 FEET OF THE CROSSING. PIPE JOINTS ARE TO BE MECHANICALLY RESTRAINED, FUSED OR WELDED, OR MEET ASTM D3212. WHERE THE SEWER MAIN IS TO REMAIN AS EXISTING, JOINTS MAY BE CONCRETE ENCASED IN LIEU OF THE OTHER MITIGATION METHODS LISTED.
- d. STORM SEWER: STORM SEWER PIPE IS TO BE CENTERED OVER THE CROSSING WITH MITIGATION TO ALL JOINTS WITHIN 10 FEET OF THE CROSSING. PIPE JOINTS ARE TO HAVE INTERNAL OR EXTERNAL JOINT SEALANT, BE WATER TIGHT, MEET ASTM D3212, OR BE MECHANICALLY RESTRAINED. WHERE THE STORM DRAIN PIPE IS TO REMAIN AS EXISTING, JOINTS MAY BE CONCRETE ENCASED IN LIEU OF OTHER MITIGATION METHODS LISTED.
- e. WHEN WATER QUALITY PIPE CONFORMING TO AWWA REQUIREMENTS IS USED FOR BOTH INTERSECTING PIPES, NO ADDITIONAL MITIGATION IS REQUIRED FOR EITHER PIPE.

3. 6 INCHES MINIMUM VERTICAL SEPARATION IS TO BE MAINTAINED IN ALL CASES.

4. 6 FEET HORIZONTAL SEPARATION IS TO BE MAINTAINED IN ALL CASES FOR SEWER MAINS IN PARALLEL WITH WATER MAINS. 4 FEET HORIZONTAL SEPARATION IS TO BE MAINTAINED IN ALL CASES FOR SEWER LATERALS IN PARALLEL WITH WATER MAINS.

5. REFERENCE NDEP GUIDANCE FOR AREAS REQUIRING MITIGATION FOR WATER AND SEWER SEPARATION EDITION 1.1, DATED NOVEMBER 2018 FOR ADDITIONAL GUIDANCE ON MITIGATION REQUIREMENTS.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
			<b>WATER/SEWER SEPARATION NOTES</b>	CARSON CITY
				DRAWING NO.
				C-3.1.2.1
				DATE
APPROVED BY: 		3/22		MAR 2022