

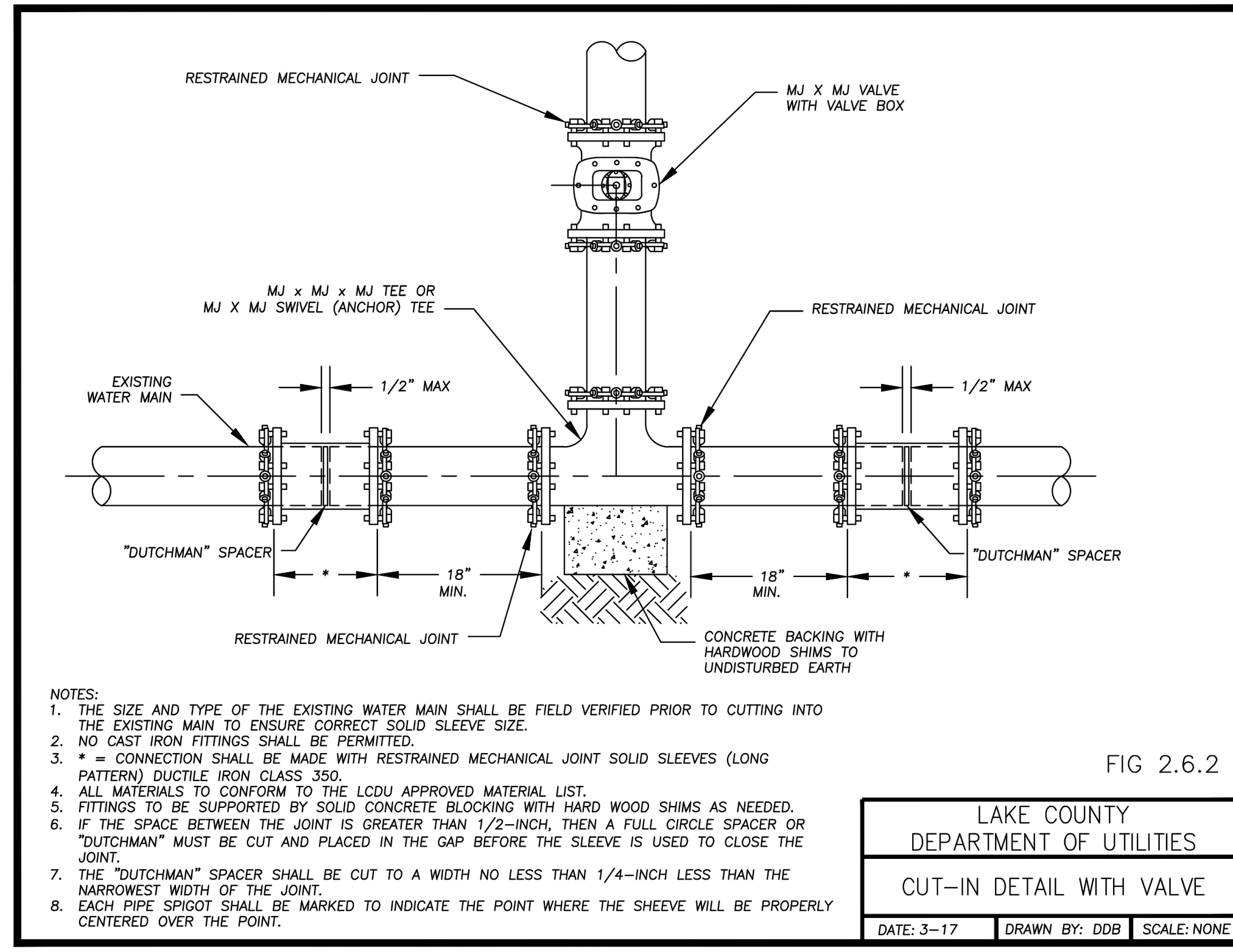
NO.	REVISION	DATE

ISSUED FOR: UTILITY COORD.	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
	08/28/18	AS SHOWN	MPC	MPC/JPL	XXX

ERIE STREET WATER LINE REPLACEMENT
LAKE COUNTY DEPARTMENT OF UTILITIES
 - WILLOUGHBY -

CONSTRUCTION DETAILS 2

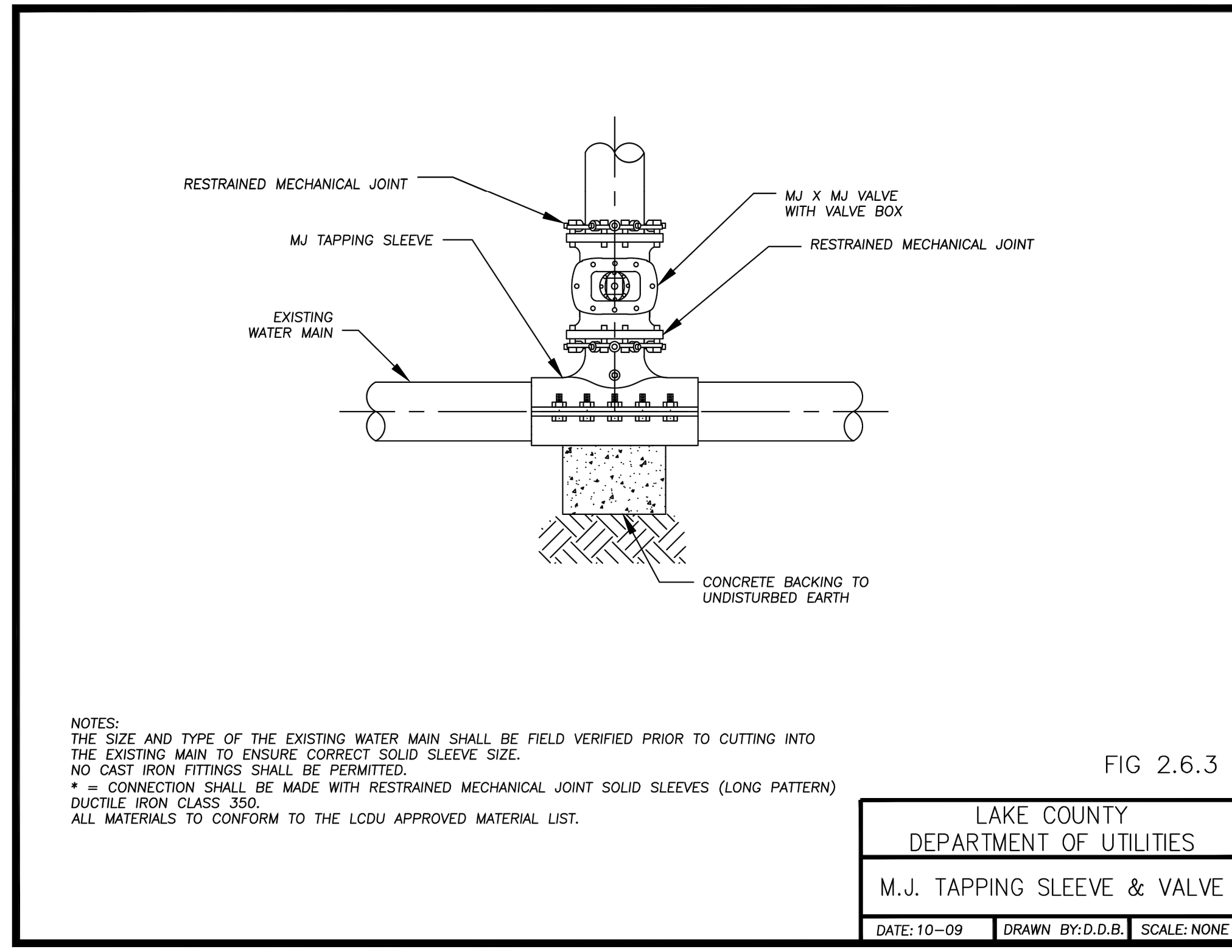
PROJECT NO.	180608
DISCIPLINE	CIVIL
SHEET NAME	CD-02
SHEET	OF
15	20



NOTES:

- THE SIZE AND TYPE OF THE EXISTING WATER MAIN SHALL BE FIELD VERIFIED PRIOR TO CUTTING INTO THE EXISTING MAIN TO ENSURE CORRECT SOLID SLEEVE SIZE.
- NO CAST IRON FITTINGS SHALL BE PERMITTED.
- * = CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES (LONG PATTERN) DUCTILE IRON CLASS 350.
- ALL MATERIALS TO CONFORM TO THE LCDU APPROVED MATERIAL LIST.
- FITTINGS TO BE SUPPORTED BY SOLID CONCRETE BLOCKING WITH HARD WOOD SHIMS AS NEEDED.
- IF THE SPACE BETWEEN THE JOINT IS GREATER THAN 1/2-INCH, THEN A FULL CIRCLE SPACER OR "DUTCHMAN" MUST BE CUT AND PLACED IN THE GAP BEFORE THE SLEEVE IS USED TO CLOSE THE JOINT.
- THE "DUTCHMAN" SPACER SHALL BE CUT TO A WIDTH NO LESS THAN 1/4-INCH LESS THAN THE NARROWEST WIDTH OF THE JOINT.
- EACH PIPE SPIGOT SHALL BE MARKED TO INDICATE THE POINT WHERE THE SLEEVE WILL BE PROPERLY CENTERED OVER THE POINT.

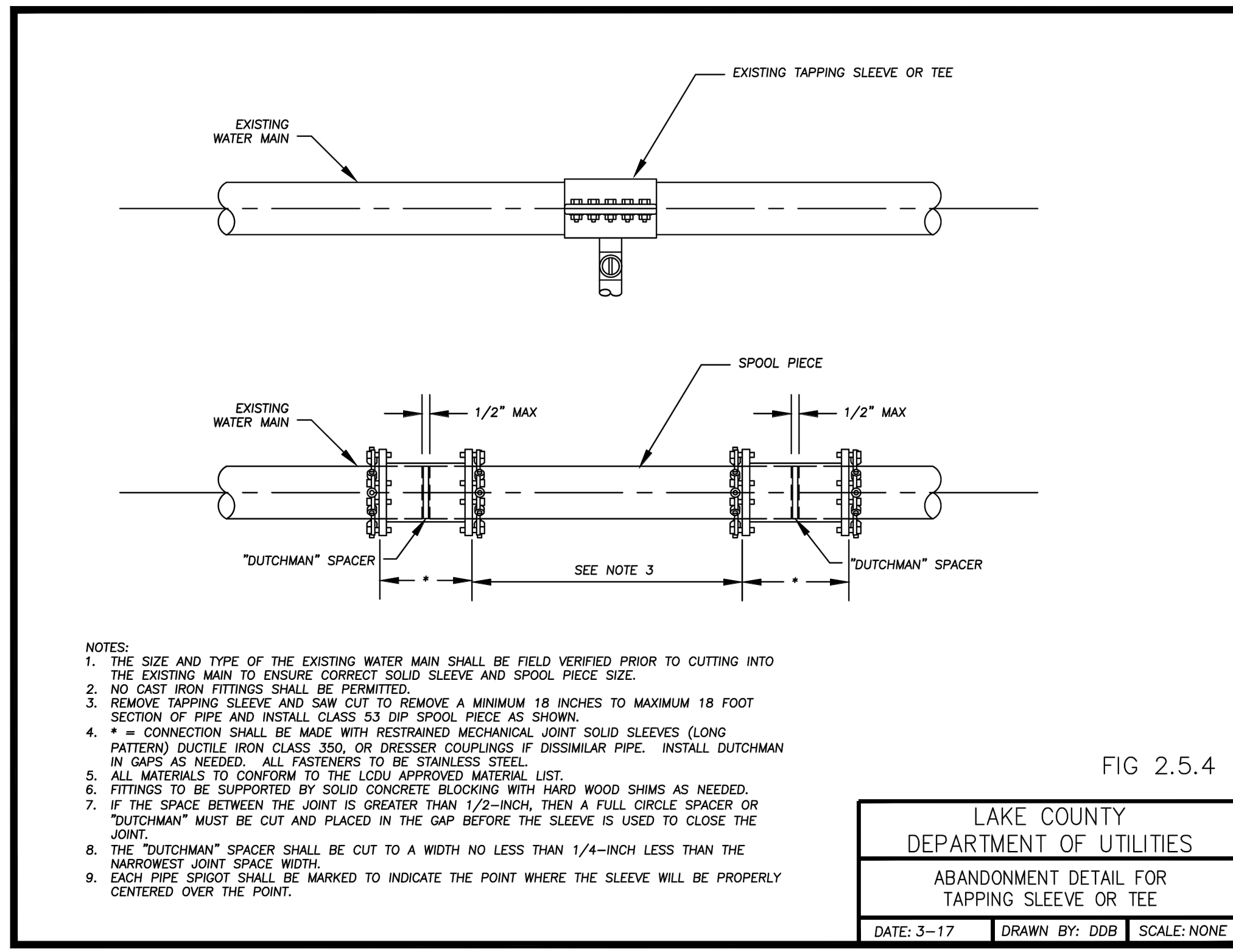
LAKE COUNTY DEPARTMENT OF UTILITIES
CUT-IN DETAIL WITH VALVE
 DATE: 3-17 DRAWN BY: DDB SCALE: NONE



NOTES:

- THE SIZE AND TYPE OF THE EXISTING WATER MAIN SHALL BE FIELD VERIFIED PRIOR TO CUTTING INTO THE EXISTING MAIN TO ENSURE CORRECT SOLID SLEEVE SIZE.
- NO CAST IRON FITTINGS SHALL BE PERMITTED.
- * = CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES (LONG PATTERN) DUCTILE IRON CLASS 350.
- ALL MATERIALS TO CONFORM TO THE LCDU APPROVED MATERIAL LIST.

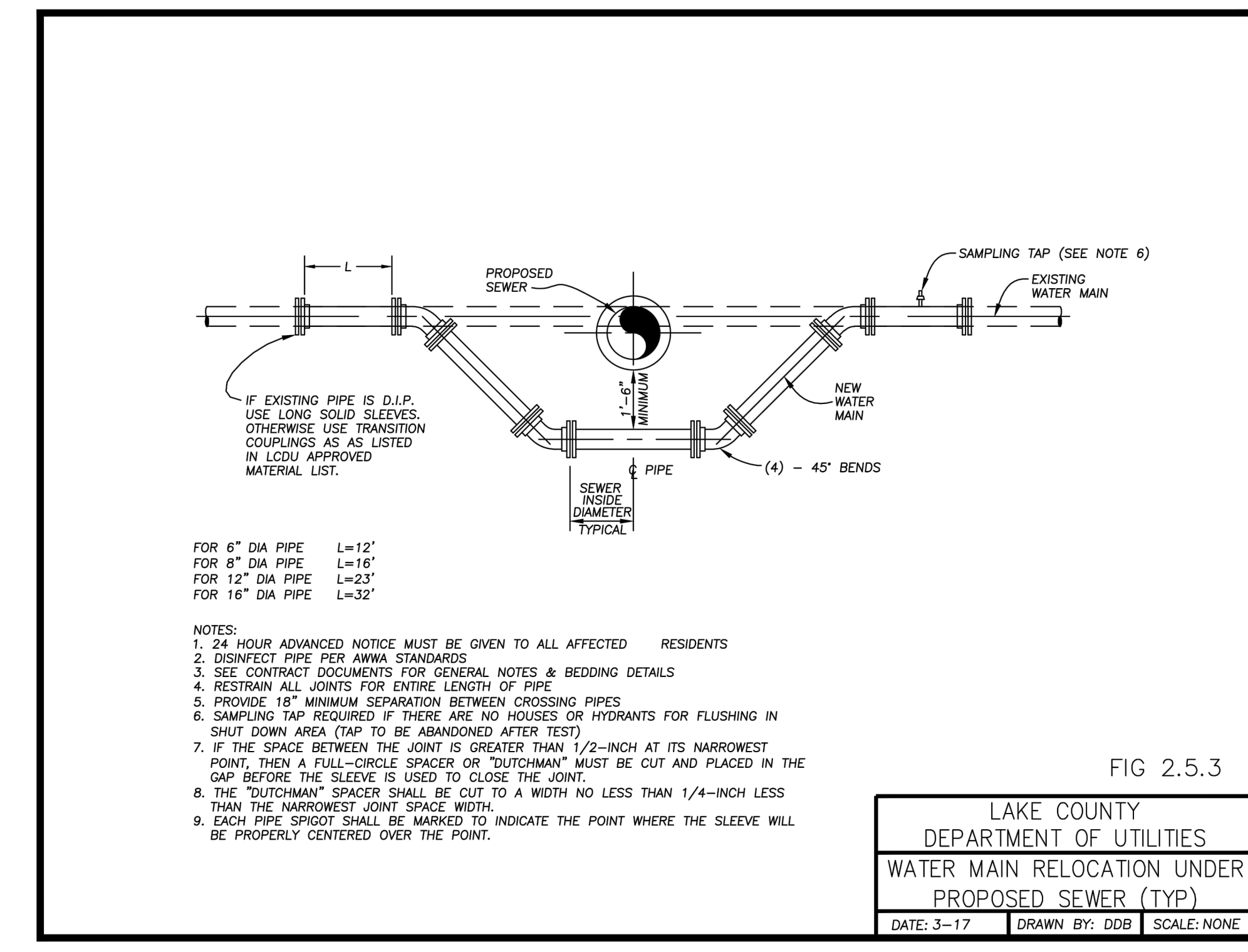
LAKE COUNTY DEPARTMENT OF UTILITIES
M.J. TAPPING SLEEVE & VALVE
 DATE: 10-09 DRAWN BY: D.D.B. SCALE: NONE



NOTES:

- THE SIZE AND TYPE OF THE EXISTING WATER MAIN SHALL BE FIELD VERIFIED PRIOR TO CUTTING INTO THE EXISTING MAIN TO ENSURE CORRECT SOLID SLEEVE AND SPOOL PIECE SIZE.
- NO CAST IRON FITTINGS SHALL BE PERMITTED.
- REMOVE TAPPING SLEEVE AND SAW CUT TO REMOVE A MINIMUM 18 INCHES TO MAXIMUM 18 FOOT SECTION OF PIPE AND INSTALL CLASS 53 DIP SPOOL PIECE AS SHOWN.
- * = CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES (LONG PATTERN) DUCTILE IRON CLASS 350, OR DRESSER COUPLINGS IF DISSIMILAR PIPE. INSTALL DUTCHMAN IN GAPS AS NEEDED. ALL FASTENERS TO BE STAINLESS STEEL.
- ALL MATERIALS TO CONFORM TO THE LCDU APPROVED MATERIAL LIST.
- FITTINGS TO BE SUPPORTED BY SOLID CONCRETE BLOCKING WITH HARD WOOD SHIMS AS NEEDED.
- IF THE SPACE BETWEEN THE JOINT IS GREATER THAN 1/2-INCH, THEN A FULL CIRCLE SPACER OR "DUTCHMAN" MUST BE CUT AND PLACED IN THE GAP BEFORE THE SLEEVE IS USED TO CLOSE THE JOINT.
- THE "DUTCHMAN" SPACER SHALL BE CUT TO A WIDTH NO LESS THAN 1/4-INCH LESS THAN THE NARROWEST JOINT SPACE WIDTH.
- EACH PIPE SPIGOT SHALL BE MARKED TO INDICATE THE POINT WHERE THE SLEEVE WILL BE PROPERLY CENTERED OVER THE POINT.

LAKE COUNTY DEPARTMENT OF UTILITIES
ABANDONMENT DETAIL FOR TAPPING SLEEVE OR TEE
 DATE: 3-17 DRAWN BY: DDB SCALE: NONE



NOTES:

- 24 HOUR ADVANCED NOTICE MUST BE GIVEN TO ALL AFFECTED RESIDENTS
- DISINFECT PIPE PER AWWA STANDARDS
- SEE CONTRACT DOCUMENTS FOR GENERAL NOTES & BEDDING DETAILS
- RESTRAIN ALL JOINTS FOR ENTIRE LENGTH OF PIPE
- PROVIDE 18" MINIMUM SEPARATION BETWEEN CROSSING PIPES
- SAMPLING TAP REQUIRED IF THERE ARE NO HOUSES OR HYDRANTS FOR FLUSHING IN SHUT DOWN AREA (TAP TO BE ABANDONED AFTER TEST)
- IF THE SPACE BETWEEN THE JOINT IS GREATER THAN 1/2-INCH AT ITS NARROWEST POINT, THEN A FULL-CIRCLE SPACER OR "DUTCHMAN" MUST BE CUT AND PLACED IN THE GAP BEFORE THE SLEEVE IS USED TO CLOSE THE JOINT.
- THE "DUTCHMAN" SPACER SHALL BE CUT TO A WIDTH NO LESS THAN 1/4-INCH LESS THAN THE NARROWEST JOINT SPACE WIDTH.
- EACH PIPE SPIGOT SHALL BE MARKED TO INDICATE THE POINT WHERE THE SLEEVE WILL BE PROPERLY CENTERED OVER THE POINT.

LAKE COUNTY DEPARTMENT OF UTILITIES
WATER MAIN RELOCATION UNDER PROPOSED SEWER (TYP)
 DATE: 3-17 DRAWN BY: DDB SCALE: NONE