



- ① For new pipe connections, provide cored opening with flexible pipe connector.
- ② For existing pipe connections, provide an arched opening with a diameter up to 6 inches larger than outside diameter of pipe. Install waterstop around existing pipe. Fill void between pipe and opening with non-shrink grout.
- ③ For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- ④ 12 inch minimum riser height above all pipe openings.

Manhole Diameter (inches)	Maximum Pipe Diameter (inches) for 2 Pipes	
	At 180° Separation	At 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

TYPICAL SECTION

FIGURE 6010.303 SHEET 1 OF 1

SUDAS	Iowa Department of Transportation	REVISION
		NEW 04-21-09
FIGURE 6010.303	STANDARD ROAD PLAN	SW-303
		SHEET 1 of 1
REVISIONS: New. Replaces SUDAS Type "1" Manhole.		
<i>[Signature]</i> SUDAS DIRECTOR	<i>[Signature]</i> DESIGN METHODS ENGINEER	
SANITARY SEWER MANHOLE OVER EXISTING SEWER		