



# Design Guidelines for Water and Sewer Facilities

## MASTER TABLE OF CONTENTS

SECTION	SECTION NAME	APPROVAL DATE	PAGES
	Introduction	02/01/2008	1
	Signatory Agencies	02/01/2008	1
	Technical Review	09/07/2004	1
	Standard Terms and Definitions	09/07/2004	3
<b>1.0</b>	<b>GENERAL</b>		
1.1	Drafting Guidelines	09/07/2004	11
1.2	AutoCAD Guidelines	09/07/2004	10
1.3	MicroStation Guidelines	Future Release	
1.4	Land Acquisition and Disposition	05/02/2006	5
1.5	Easements and Encroachments	01/11/2012	6
1.6	Survey Standards Guideline	09/07/2004	5
1.7	Record Drawing Guidelines	09/07/2004	3
<b>2.0</b>	<b>PRIVATE DEVELOPMENT PROJECTS</b>		
2.1	Procedural Guidelines	09/28/2009	6
2.2	Development Plan and Permit Processing Procedures	09/28/2009	13
2.3	Water Facility Guidelines	09/07/2004	4
2.4	Sewer Facility Guidelines	09/07/2004	4
2.5	Recycled Water Facility Guidelines	09/07/2004	11
<b>3.0</b>	<b>AGENCY IMPROVEMENT PROJECTS</b>		
3.1	Agency Capital Improvement Projects	09/07/2004	2
3.2	Design Project Progress Submittals	09/07/2004	6
3.3	Submittals (Shop)	09/07/2004	3
3.4	Project Cost Estimates	05/02/2006	13
3.5	Technical Specifications	09/07/2004	4
<b>4.0</b>	<b>PLANNING</b>		
4.1	Water Planning	09/28/2009	13
4.2	Sewer Planning	09/07/2004	8
4.3	Recycled Water Planning	09/07/2004	5
4.4	Sub-Area Master Plan Development	09/07/2004	6
4.5	Environmental Review	09/07/2004	11
4.6	National Pollutant Elimination System (NPDES)	09/07/2004	5
4.7	Other Agency Permits	05/02/2006	5



## Design Guidelines for Water and Sewer Facilities

### MASTER TABLE OF CONTENTS CONTINUED

SECTION	SECTION NAME	APPROVAL DATE	PAGES
<b>5.0</b>	<b>WATER PIPELINE DESIGN</b>		
5.1	Pressure Pipeline Design	01/11/2012	7
5.2	Thrust Restraint and Anchor Blocks	01/11/2012	8
5.3	Line Valves Selection and Placement	09/26/2007	5
5.4	Fire Hydrants and Fire Services	09/07/2004	4
5.5	Air Valves	09/07/2004	4
5.6	Blowoffs	09/07/2004	4
5.7	Water Services and Test Stations	09/07/2004	6
<b>6.0</b>	<b>SEWER PIPELINE DESIGN</b>		
6.1	Gravity Sewer Pipeline Design	09/07/2004	5
6.2	Sewer Manholes and Cleanouts	09/07/2004	5
6.3	Sewer Laterals	09/07/2004	4
6.4	Pressure Systems (Force Mains)	05/02/2006	5
<b>7.0</b>	<b>RESERVOIR DESIGN</b>		
7.1	Storage Facilities	05/02/2006	32
7.2	Seismic Sensing Devices	Future release	
<b>8.0</b>	<b>CONTROL VALVES</b>		
8.1	Pressure/Flow Control Stations	05/02/2006	6
8.2	Vaults	09/28/2009	3
8.3	Agency Interconnections	01/11/2012	3
<b>9.0</b>	<b>WATER PUMP STATION DESIGN</b>		
9.1	Water Pump Station Design	05/01/2007	37
9.2	Structural Guidelines	05/01/2007	12
9.3	Noise Control Guidelines	05/01/2007	18
<b>10.0</b>	<b>SEWAGE PUMP STATION DESIGN</b>		
10.1	Sewage Pump (Lift) Station Design	02/01/2008	23
10.2	Surge Control/Analysis	02/01/2008	2



# Design Guidelines for Water and Sewer Facilities

## MASTER TABLE OF CONTENTS CONTINUED

SECTION	SECTION NAME	APPROVAL DATE	PAGES
<b>11.0</b>	<b>CORROSION CONTROL</b>		
11.1	Corrosion Control	02/01/2008	16
11.2	Corrosion Control Design	02/01/2008	11
<b>12.0</b>	<b>SPECIALIZED DESIGN</b>		
12.1	Bridge Crossings	05/02/2006	8
12.2	Trenchless Construction	09/28/2009	9
12.3	Pipe Bursting	05/02/2006	8
12.4	Railroad and Freeway Crossings	05/02/2006	2
12.5	Pipe Rehabilitation	05/01/2007	8
12.6	Temporary Above Ground Piping (Water)	05/02/2006	5
12.7	Temporary Bypass Requirements (Sewer)	05/02/2006	3
12.8	Facility Security Guidelines	09/12/2008	3
12.9	Quagga Mussel	01/11/2012	3
<b>13.0</b>	<b>APPENDICES</b>		
A	Revisions	09/07/2004	3
B	Units of Measurement	09/07/2004	5