

## **CITY OF FONTANA STANDARDS DESIGN GUIDELINES**

The City of Fontana's Standard Plans for Public Work Construction represents a comprehensive and easy to follow approach for use in conjunction with the Standard Specifications for Public Works Construction, "Greenbook", latest edition, required by the City for proposed public works projects.

The City has a wide option of standard drawings and specifications to choose for preparing the project design plans for their projects using the most current edition as appropriate.

The Design Engineer assumes full responsibility for use of these standards when preparing plans. The Design Engineer assumes that these standards will meet all project requirements. When the City of Fontana Standard Plans do not meet the project requirements and other standards are used they must be shown on the plans.

However, the following standards drawings are recognized for used within the City:

1. San Bernardino County Department of Public Works and Flood Control Standards and Specifications
2. Caltrans Standard Plans and Specifications
3. **Standard Plans and Specifications for Public Works Construction**

Any other Agency Standard Plans or Specifications or the use of an Agency's Standard or Specifications over the City Standards must have approval from the City Engineer.

## DESIGN STANDARDS

### **SECTION 400 – STREET DESIGN**

400	Typical Undivided Street Sections – Local, Collector, Collector Industrial, and Secondary Highway (Level and Tilted Sections) – <b>Revised 12/03/07</b>
401	Typical Divided Street Sections – Primary and Major (Level and Tilted Sections) – <b>Revised 12/03/07</b>
402	Street Design Requirements
403 (2 Sheets)	Cross Gutter (Standard)
404 (2 Sheets)	Street Lights – <b>Revised 12/12/11</b>
405	Cul – De – Sac
406	Offset Cul – De – Sac
407	Standard Knuckle (Intersection and “L” Shape Design)

### **SECTION 700 – TRAFFIC**

700 (3 Sheets)	Intersection Sight Distance
701	Access Management Requirements

### **SECTION 900 – MISCELLANEOUS**

900 (2 Sheets)	Sewer and Storm Drain Easement Widths
901	Underground Utility Location

## CONSTRUCTION STANDARDS

### SECTION 1000 – STREET IMPROVEMENTS

1000	Curb and Gutter
1001 (2 Sheets)	Residential/Commercial/Industrial Driveway with Curb Adjacent Sidewalks – <b>Revised 07/29/08</b>
1002 (2 Sheets)	Residential/Commercial/Industrial Driveway with Parkway Sidewalks
1003 (2 Sheets)	Standard Curb Return Access Ramp – <b>Revised 12/12/11</b>
1004 (2 Sheets)	Modified Curb Return Access Ramp – <b>Revised 09/14/10</b>
1005	Standard Bus Bay – <b>Revised 12/03/07</b>
1006 (2 Sheets)	Sidewalks
1007	Asphalt Concrete Dike
1008 (2 Sheets)	Standard Trench Repair – <b>Revised 12/03/07</b>
1009	Plate Bridging

### SECTION 2000 – SEWER

2000	Standard Manhole Frame and Cover and Reinforced Concrete Collar
2001 (2 Sheets)	Standard Cast in Place Manhole for Sewer – <b>Revised 12/03/07</b>
2002	Standard Drop Manhole for 6” to 36” Pipe
2003	Typical Sewer Manhole Bases
2004	Sewer Terminal Cleanout
2005	Sewer Lateral House Cleanout – <b>Revised 12/15/14</b>
2006	Concrete Sewer Cleanout Box
2007	Plastic Sewer Cleanout Box
2008 (2 Sheets)	Sewer Saddle
2009	Sewer Lateral House Cleanout Vertical Access – <b>Added 07/22/08</b>

## CONSTRUCTION STANDARDS

### SECTION 3000 – STORM DRAIN

3000	Discharge Structure
3001	Under Sidewalk Drain
3002	Residential Curb Drain
3003 (3 Sheets)	Local Depressions at Catch Basins
3004 (2 Sheets)	Curb Opening Catch Basin
3005 (2 Sheets)	Monolithic Catch Basin Connection
3006 (2 Sheets)	Grate Catch Basin Reinforcement
3007 (6 Sheets)	Catch Basin Face Plate Assembly and Protection Bar
3008 (2 Sheets)	Catch Basin Manhole Frame and Cover
3009 (2 Sheets)	Junction Structure – Pipe to Pipe (ID ≤ 24")
3010 (2 Sheets)	Junction Structure – Pipe to Pipe Inlet ID ≥ 24" or OD ≥ 1/ 2 Main Line ID
3011 (4 Sheets)	Manhole Pipe to Pipe (Large Side Inlet)
3012 (4 Sheets)	Manhole Pipe to Pipe Mainline (ID = 36" or Larger)
3013 (3 Sheets)	Manhole Pipe o Pipe (One or Both Main Line ID's 33" or Smaller)
3014 (2 Sheets)	Manhole Shaft with Eccentric Reducer
3015 (2 Sheets)	Manhole Shaft 36" Without Reducer
3016 (2 Sheets)	Pressure Manhole Shaft with Eccentric Reducer
3017 (2 Sheets)	Pressure Manhole Shaft and Pressure Plate Detail 36" Without Reducer
3018 (2 Sheets)	Manhole Frame and Cover Pressure Type
3019 (2 Sheets)	24" Manhole Frame and Cover
3020	Headwall – Wing Type
3021 (3 Sheets)	Trash Rack Inclined

## CONSTRUCTION STANDARDS

### **SECTION 3000 – STORM DRAIN (cont'd)**

3022 (2 Sheets)	Concrete Collar for RCP 12" Through 72"
3023 (2 Sheets)	36" Manhole Frame and Cover
3024 (2 Sheets)	Steel Step
3025 (3 Sheets)	Pipe Connections to Existing Storm Drains
3026 (2 Sheets)	Transition Structure Pipe to Pipe

### **SECTION 4000 – TRAFFIC**

4000	Standard Barricade
4001	Type R Controller Cabinet Foundation Detail -- <b>Revised 12/10/15</b>
4002	Type 1-A Foundation Detail
4003 (4 Sheets)	Sign Installation Details – <b>Revised 02/02/16</b>
4004	Autoscope Solopro Installation Detail – <b>Revised 01/07/13</b>
4005 (6 Sheets)	Overhead Reflective Street Name Sign Details – <b>Revised 02/02/16</b>
4006	Pullbox Conduit Entry Detail – <b>Revised 12/10/15</b>
4007	CCTV Camera/Cable Installation and Orientation

### **SECTION 5000 – LANDSCAPING**

5001	Typical House Connection
5002	Control Placement Detail
5003	Rain Sensor
5004	Rain Guard
5005 (3 Sheets)	Irrigation Controller – <b>Revised 06/22/15</b>
5006	Tipping Bucket
5007	Typical Backflow - <b>Revised 06/10/2015</b>

## CONSTRUCTION STANDARDS

### SECTION 5000 – LANDSCAPING (Cont'd)

5008	Typical Backflow “Private”
5009	Typical Backflow
5010	Flow Meter/Master Valve – <b>Revised 04/23/14</b>
5011	Typical Brass Remote Control Valve Detail
5012	Automatic Antisiphon Valve
5013	Wire Connector
5014	Wire Connection
5015	Trenching Detail
5016	Piping and Wiring
5017	Splice Box Assembly
5018	Sleeving Detail
5019	Gate Valve
5020	Thrust Block Assembly
5021	Quick Coupler
5022	Swing Joint
5023	Lawn/4”, 6”, 8” Shrub Pop-up Head
5024	Hi Pop Shrub Head
5025	Shrub Spray Head
5026	Bubbler Head
5027	Shrub Rotor
5028	Irrigation at Top of Slope
5029	Shrub Rotor on Slope
5030	Oscillation Head Assembly

## CONSTRUCTION STANDARDS

### SECTION 5000 – LANDSCAPING (Cont'd)

5031	Tree Staking
5032	Tree Guying
5033	Tree Placement
5034	Palm Tree Installation
5035	Shrub Planting
5036	Shrub on Slope
5037	Vine Planting
5038	Automatic Drip Valve
5039	Emitter
5040	Emitter Layout
5041	Pot Irrigation
5042	Drip Emitter
5043	Redwood Headerboard
5044	Concrete Mow Curb
5045	Typical Rock Treatment
5046 (3 Sheets)	Tree Grates – <b>Revised 01/14/15</b>

### SECTION 6000 – MISCELLANEOUS

6000	Typical Gate Valve Adjustments
6001 (4 Sheets)	“Blue Dot” Marker Placement
6002 (2 Sheets)	Storm Drain Inlet Signage