

Section 3 FLOOD CONTROL AND STORM DRAIN FACILITIES

INDEX

<u>TITLE</u>	<u>AGENCY⁽¹⁾</u>	<u>NUMBER</u>	<u>COMMENTS</u>
<u>Catch Basin:</u>			
Curb Opening Catch Basin	APWA	300-2	Stencil or sign is required per Std. Detail 385.
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Grating Catch Basin – Alley (Longitudinal)	APWA	304-2	Stencil or sign is required per Std. Detail 385.
Grating Catch Basin – Alley (Transverse)	APWA	305-2	Stencil or sign is required per Std. Detail 385.
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Curb Opening Catch Basin with Manhole in Street.....	APWA	307-2	Stencil or sign is required per Std. Detail 385.
Monolithic Catch Basin Connection.....	APWA	308-1	
Catch Basin Reinforcement	APWA	309-1	
Catch Basin Face Plate Assembly and Protection Bar	APWA	310-2	
Frame and Grating for Catch Basins.....	APWA	311-2	Note 6 is revised to delete references to Std. Plans 301, 302 and 303.

<u>TITLE</u>	<u>AGENCY⁽¹⁾</u>	<u>NUMBER</u>	<u>COMMENTS</u>
Catch Basin Manhole Frame and Cover	APWA	312-2	Covers shall be cast with the letter "D" for storm drain. Agency identification is not required. For Note 6, inspections prior to shipment will not be required. A compliance certification delivered to the Engineer from the supplier will be acceptable.
Local Depressions at Catch Basins.....	COA	313	
Modifications for Side Opening Catch Basins.....	APWA	314-2	Delete rear culvert entrance from Case 1. Refer to Std. Detail 350 for rear culvert entrance detail.

Manholes and Junction Structures:

Manhole Pipe to Pipe Main Line ID=900 mm (36") or Larger	APWA	320-1	Manhole backfill from the top of pipe bedding to roadway subgrade shall be either sand compacted to 95% or structural backfill.
Manhole Pipe to Pipe (One or Both Main Line ID's 825mm (33") or Smaller.....	APWA	321-1	Manhole backfill from the top of pipe bedding to roadway subgrade shall be either sand compacted to 95% or structural backfill.
Manhole Pipe to Pipe (Large Side Inlet).....	APWA	322-1	Manhole backfill from the top of pipe bedding to roadway subgrade shall be either sand compacted to 95% or structural backfill. Delete 12" and 15" sizes from Table for Values of T on sheet 2. For Note 12b, "300 mm (12")" is modified to "450mm (18)".
Manhole – Concrete Box Storm Drain.....	APWA	323-1	
Manhole Shaft with Eccentric Reducer.....	APWA	324-1	

Manhole Shaft 900 mm (36") without Reducer	APWA	326-1	Steps shall apply to special manhole shaft with grade rings.
Manhole for Existing RCB	APWA	327-1	
Pressure Manhole Shaft with Eccentric Reducer	APWA	328-1	
Pressure Manhole Shaft and Pressure Plate Detail 914mm (36") without Reducer.....	APWA	329-1	
Manhole Shaft Safety Ledge	APWA	330-1	
Junction Structure – Pipe to Pipe Inlet ID ≥ 600 mm (24") or ID > ½ Main Line ID	APWA	331-2	Delete 12" and 15" sizes from Table for Values of T on sheet 1.
Junction Structure – Pipe to Pipe [ID ≤ 600 mm (24")].	APWA	332-1	Delete Note 7 and all references to CSP materials. This standard only applies to private storm drains (not public storm drains). Connection openings to existing facilities shall be core drilled.
Junction Structure – Pipe to RCB.....	APWA	333-1	Delete 12" and 15" sizes from Table on sheet 1.
Junction Structure – Pipe to RCB Inlet ID ≤ 750 mm (30")	APWA	334-1	Delete Note 2 and all references to CSP materials.
Pipe Connections to Existing Storm Drains ...	APWA	335-1	Delete Notes 4 and 5 and all references to CSP materials. This standard only applies to private storm drains (not public storm drains). Connection openings to existing facilities shall be core drilled.

Transition Structures:

Transition Structure Pipe to Pipe.....	APWA	340-1
Transition Structure Single RCB to Single RCB	APWA	341-1
Transition Structure RCB to Pipe	APWA	342-1
Transition Structure Single RCB to Double RCB.....	APWA	343-1

<u>TITLE</u>	<u>AGENCY⁽¹⁾</u>	<u>NUMBER</u>	<u>COMMENTS</u>
Transition Structure Double RCB to Double RCB.....	APWA	344-1	
Transition Structure Double RCB to Triple RCB.....	APWA	345-1	
Transition Structure Triple RCB to Triple RCB.....	APWA	346-1	

Inlets:

Private / On-Site Pipe Connection to Catch Basin.....	COA	350-A	
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Protection Barriers:

Sloped Protection Barrier.....	APWA	360-1	
Trash Rack (Inclined).....	APWA	361-1	

Miscellaneous Drainage Facilities:

Concrete Collar for RCP 300 mm (12") through 1800 mm (72")	APWA	380-3	For Note 9, "525 mm (21")" is modified to "450 mm (18")."
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Abandonment Seals for Manholes and Inlets.....	APWA	381-1	
Window Details for Multiple RCB Structures.....	APWA	382-1	
Velocity Control Ring Precast RCP Section ..	APWA	383-1	
Energy Dissipator – Impact Basin with Vertical Baffle Wall	APWA	384-2	
Stencil and Sign for Drainage Inlet.....	COA	385	

On-Site Drainage Facilities:

Lot Grading and Drainage.....	COA	390	
Interceptor Drain.....	COA	391	
Terrace Drain.....	COA	392	
Down Drain.....	COA	393	
Down Drain Intersections and Outlets.....	COA	394	
Down Drain to Pipe Transition	COA	395	
Riprap Protection	COA	396	
French Drain.....	COA	397	

(1) APWA: American Public Works Association, Southern California Chapter – "Standard Plans for Public Works Construction" 2006 Edition.
COA: City of Anaheim Standard Details