



Administrative Policy

Title: City of Corona Design Policy				
Administered By: Public Works				
New Policy No.	Issue Date (Last Revised)	Renumber Date	Department Head Approved	City Manager Approved
09100.505	UNKNOWN (N/A)	01-03-17	<i>Richard N. N.</i>	<i>[Signature]</i>

This Policy had been issued without a known Policy Number. Effective on the Renumber Date noted above, this Policy is hereby renumbered as the Policy Number noted above.

The latest version of the Policy is attached hereto and incorporated herein by reference.

Attachment: Policy (UNKNOWN #)
Issued: UNKNOWN
Revised: N/A



CITY OF CORONA DESIGN POLICY

STREET DESIGN

- Grades to be 0.60% minimum and 12.0% maximum
- Grade Breaks to be 0.50% maximum otherwise a vertical curve is required
- Profile grade adjacent to a cross gutter shall be 2.50%
- Change in profile grades shall not exceed 6:1 (6% to 1%)
- See City Standard 100 for additional requirements

STREET CROSS SLOPE

- Grades to be 1.0% minimum and 3.5% maximum. 1.7% standard
- Grade Breaks to be 1.5% maximum

STREET ALIGNMENT

- Minimum horizontal radius to be 1800' for major arterial, 1100' for secondary arterial and collectors, 500' for locals and industrial 250' for cul-de-sac and 150' for all others
- Intersections to be as close to 90° as possible
- See City Standard 100 for additional requirements

STORM DRAINS

- Reinforced Concrete Pipe (RCP) is the only acceptable material for use in the public right-of-way
- Minimum lateral size shall be 18" and minimum mainline size shall be 24"
- Minimum slope to be 0.50% or allow for 4 feet per second velocity.
- Maximum slope to be 10% or allow for 20 feet per second velocity otherwise thick wall RCP will be required
- Maximum velocity for thick wall RCP is 45 feet per second.
- Manhole cleanouts to be spaced at 300' or at angle points and grade breaks
- Refer to Riverside County Flood Control and Water Conservation District design manual for additional requirements.

MONUMENTATION

- Parcel Maps require a minimum 3/4" iron pipe with surveyor tag, at all lots and along the boundary.
- Tract Maps require a 1-1/2" iron pipe for the boundary and 3/4" iron pipe at all lot corners, street centerline intersections, beginning and end of curves, and all other control points.
- A nail and brass tag shall also be placed at the top of curb on the property line prolongation for all tract lots.
- Centerline tie sheets are required at the completion of tract projects (8-1/2' x 11')

CURB RETURNS

- Minimum radius shall be 25'
- Elevations shall be shown at B.C.R. , 1/4Δ, 1/2Δ, 3/4Δ, & E.C.R

SEWER LINES

- Alignment shall be straight, no curved sewer lines permitted
- Minimum size shall be 8" diameter
- Material shall be P.V.C. (V.C.P. for industrial uses)
- Minimum slope shall be 0.40% or allow for 2 feet per second velocity
- Maximum slope to be 5.0% or allow for no more than 8 feet per second velocity
- Manholes shall be spaced at 350' and at all changes in grade or alignment
- Elevation drop through a manhole shall be 0.10' and 0.20' through right angle bends
- Minimum distance from adjacent water lines shall be 10' horizontal and 3' vertical
- Cleanouts are only permitted on a case by case basis

GRADING PLANS

- Grading plans shall show all existing and proposed elevations and contours, adjacent elevations, pad elevation for houses, lot corners, invert elevations for swales and high and low spot elevations
- Minimum slope for graded swales around houses is 1.5% otherwise a pipe & inlet system is required
- Common yard swales are not permitted.
- Property lines to be located at top of slope unless otherwise permitted by the Public Works Director
- All slope sections and retaining wall details, including top of wall and top of footing shall be shown
- All manufactured slopes with a slope grade of 4:1 or steeper shall be irrigated and landscaped within 45 days of completion of grading.
- Refer to City of Corona Grading Ordinance for additional requirements.

CITY OF CORONA
 ROADS DESIGN CRITERIA GUIDELINE_(ip)

	MAJOR ^a	SECONDARY	COLLECTOR	LOCAL				
				Local ^b	Low Volume Local ^c	Industrial	Hillside ^d	Private ^d
R/W Width	120'	88'	68'	64'	60'	64'	50' ^e	
Curb-to-Curb Width	102' ^d	64'	44'	40'	36'	44' ^f	36'	
Sidewalk Width ^g	5'	5'	5'	4'	4'	5'		4' ^e
Curb Height	8"	8"	8"	6"	6"	8"	6"	6"
Max. Cul-de-Sac Length	N/A	N/A	N/A	500'	500'	500'	750'(40 DU or less) 1000(20 DU or less)	500'
Likely Posted Speed (mph)	45 mph	35 mph	35 mph	25 mph	25 mph	25 mph	25 mph	None
Min. Design Speed (mph)	55 ^h	45	45	35	30	35	25	20
Min CL Radius ^k	1800' ^q w/o super	1100' ^q w/o super	1100' ^q w/o super	500' ^q	500' ^q	500' ^q	245' ^q	150' ^q
Min. Stopping Sight Distance	500'	360'	360'	250'	200'	250'	150'	150'
Min. Vertical Curve Length ^k	200	200	150	100	100	100	50	50
Min. FL Grade	-----.6%-----							
Max. CL Grade (Max. Length) ^l	6% (650')	8% (550')	8% (600')	10% (425')	10% (450')	8% (400')	10% (500')	10% (450')
Mnt. Terrain	8% (500')	9% (450')	10% (400')	12% (400')	14% (375')	N/A		15% (375')
1/2% Max. Grade Break								
Min. Distance between ⁿ	50'	50'	40'	15'	15'	15'	10'	10'
CL Grade Intersecting a Xgutter	-----X-GUTTERS NOT PERMITTED----->			2 TO 2.5%	2 TO 3.5%	2 TO 2.5%	2 TO 2.4%	2 TO 4%
Traffic Index ^m	9.5 to 11.0	9.0 to 10.5	7.5 to 9	5.5	5.5	8.0	5.5 (Min)	5.0
Min. Width of Dry Lane in a 10-Yr. Flood Event	6' + Median + 6'	12'	6'	-0-	-0-	-0-	-0-	-0-
St. Lights Spacing per Std.	502-0	502-0	502-0	501-0	501-0	501-0	501-0	501-0
Driveway Access	Restricted to commercial/industrial & multi-resid. prohibited to single family residential							
Min. tangent required between reverse curves (ft)	-----300'----->		-----150'----->	-----75'----->			-----50'----->	

*Note: Tight horizontal curves shall not be introduced at end of crest or sag vertical curves.

FOOTNOTES

- a. See Std. 100-B for variations.
- b. May be used for hillside collector streets (see "a" above).
- c. Residential cul-de-sacs and short residential streets with approval of City Engineer only.
- d. See separate special standards for more details.
- e. A 5' P.U.E. is required on both sides.
- f. A 5' sidewalk shall be placed next to the back of curb on local industrial streets with fire hydrants & street trees located behind sidewalk, and flaired sidewalk around any street lights to provide 4' clear sidewalk for pedestrians.
- g. Construct solid sidewalk with tree wells within commercial zones.
- h. Delete
- i. Delete
- j. Delete
- k. Use Caltrans' Highway Design Manual table - Fig. 201.4, 201.5, 201.6, and 202.5.
- l. Use Caltrans' Highway Design Manual table (w/10 mph truck speed reduction per Fig. 204.5).
- m. Traffic indexes would be provided by Land Development Section, and would be reflected on approved Sheet Improvement Plans. Minimum pavement section is .30' A.C. over .50' Class II AB.
- n. No more than 2 consecutive grade breaks are permitted. A vertical curve to be designed instead.
- p. These are City minimum. The design engineer may recommend higher.
- q. Center Line radius may only be reduced by prior approval by the City Engineer and submittal of superelevation and sight distance calculations justifying the reduction.

Insert a: Local streets with lengths equal to, or greater than 1600' and/or ADT of greater than 1200 shall be designed for collector street standards (except for street widths).