

## INLET DESIGN CALCULATIONS

No.	INLET Location	Design Storm Frequency (yrs)	AREA RUNOFF					Carry-Over From Inlet (cfs)	Total Gutter Flow (cfs)	Gutter Capacity (cfs)	Gutter Slope (ft/100 ft)	Crown Type	SELECTED INLET		Carry-Over To Downstream Inlet (cfs)
			Time of Conc. (min)	Intensity I (in/hr)	Runoff Coeff. "C"	Area (ac)	"Q" (cfs)						Length "L" (feet)	Type	
<b>SITE 2</b>															
	Rockbrook at Lakeshore (N)	100	10	9.8	0.5	1.51	7.4	0.0	7.4	26	5%	Parabolic	6+8	Curb	0.0
	Rockbrook at Lakeshore (S)	100	10	9.8	0.5	1.69	8.3	0.0	8.3	26	5%	Parabolic	6+8	Curb	0.2
	Russwood at Lakeshore (N)	100	10	9.8	0.5	1.38	6.8	0.0	6.8	26	5%	Parabolic	6+6	Curb	0.0
	Russwood at Lakeshore (S)	100	10	9.8	0.5	1.64	8.1	0.0	8.1	26	5%	Parabolic	6+8	Curb	0.0
	Stonecrest at Lakeshore	100	15	9.0	0.5	23.88	107.5	0.0	107.5	26	5%	Parabolic	6-20	Curb	30.7
	Dartbrook at Lakeshore (N)	100	10	9.8	0.5	2.39	11.7	0.0	11.7	26	5%	Parabolic	6-10	Curb	1.9
	Dartbrook at Lakeshore (S)	100	10	9.8	0.5	1.95	9.6	0.0	9.6	26	5%	Parabolic	6-10	Curb	0.0
	Meadowdale at Lakeshore (N)	100	10	9.8	0.5	1.85	9.1	0.0	9.1	26	5%	Parabolic	6-10	Curb	0.0
	Meadowdale at Lakeshore (S)	100	10	9.8	0.5	1.62	7.9	0.0	7.9	26	5%	Parabolic	6+8	Curb	0.0
	Lakeshore at Russwood	100	10	9.8	0.5	2.56	12.5	0.2	12.7	16*	5%	Parabolic	3-6	Curb	0.0
	Lakeshore at Meadowdale	100	15	9.0	0.5	15.65	52.8**	0.0	52.8	16*	5%	Parabolic	6+2-10	Curb	33.8
	Lakeshore at Dartbrook	100	10	9.8	0.5	4.01	18.0	33.8	51.8	16*	5%	Parabolic	2-6+12	Curb	34.1
	Lakeshore at Stonecrest	100	10	9.8	0.5	6.77	30.5	64.8	95.3	--	LP	Parabolic	3-6-5-10	Curb	0.0
<b>SITE 5</b>															
5-1	South of Heath	100	15	9.0	0.5	20.79	93.6	0.0	--	--	--	--	5x3	Hdwl	0.0
5-2	Heath West of Fannin	100	10	9.8	0.5	8.34	40.9	0.0	40.9	--	LP	Parabolic	10+2-14	Curb	0.0
<b>SITE 8</b>															
8-1	Carriage S. of Westway (W)	100	10	9.8	0.5	0.55	2.7	9.6	12.3	20	2.5%	Parabolic	10+14	Curb	0.0
8-2	Carriage N. of Westway (E)	100	10	9.8	0.5	4.04	19.8	0.0	19.8	30	7%	Parabolic	14	Curb	11.9
8-3	Westway at Carriage (N)	100	10	9.8	0.5	3.93	19.3	0.0	19.3	26	5%	Parabolic	20	Curb	6.5
8-4	Carriage S. of Westway (E)	100	10	9.8	0.5	0.73	3.6	8.8	12.4	20	2.5%	Parabolic	16	Curb	1.9
<b>SITE 11</b>															
	Alley between Summit Ridge & Glenn	100	10	9.8	0.5	2.20	10.8	0.0	10.8	--	LP	Parabolic	3x3	Drop	0.0
<b>SITE 20</b>															
20-1	Austin at Heath	100	10	9.8	0.5	6.24	30.6	0.0	30.6	28*	1.25%	Parabolic	2-20	Curb	0.0
20-2	Heath E. of Austin	100	10	9.8	0.5	7.86	38.5	0.0	38.5	--	LP	Parabolic	10.2-15+2x2	Curb & Drop	0.0

\* Full street capacity with flow to top of curb.  
 \*\* 17.6 cfs assumed to flow out of drainage basin.

*This record drawing is a completion of the sealed engineering drawing for this project, modified by addenda, change orders and information furnished by the contractor. The information shown on the record drawings that was provided by the contractor or others not associated with the design engineer cannot be verified for accuracy or completeness. This original sealed drawings are on file at the offices of Birkhoff, Hendricks & Conway, LLP.*

BY RVC DATE 5/12/09

**BIRKHOFF, HENDRICKS & CONWAY, L.L.P.**  
 CONSULTING ENGINEERS  
 7502 Greenville Ave., Suite 220  
 Dallas, Texas  
 (214) 361-7900



*Ronald V. Conway*  
 1/31/07

**CITY OF ROCKWALL, TEXAS**  
 NEIGHBORHOOD DRAINAGE IMPROVEMENTS  
**INLET DESIGN CALCULATIONS**

BHC PROJECT NO. 2006-182  
 SHEET NO. 7  
 JANUARY, 2007