

PROJECT NAME : SYSTEM K Inlets
JOB NUMBER :
PROJECT DESCRIPTION :
DESIGN FREQUENCY : 25 Years
MEASUREMENT UNITS: ENGLISH

COMPUTATION SHEETS

- THIS OUTPUT FILE SHOWS RESULTS FOR ROCKWALL'S 25-YR DISCHARGE CONDITIONS TO SIZE AND PLACE INLETS.
- ALL COMPUTATIONS ARE BASED ON EXISTING WATERSHED CONDITIONS
- MAXIMUM ALLOWABLE PONDED WIDTH USED FOR DESIGN IS 14' PER CITY OF ROCKWALL VARIANCE.

OUTPUT FOR DESIGN FREQUENCY of: 25 Years
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Runoff Computation for Design Frequency.

ID	C Value	Area (acre)	Tc (min)	Tc Used (min)	Intensity (in/hr)	Supply Q (cfs)	Total Q (cfs)
K-1	0.9	0.57	10.00	10.00	8.25	0.000	4.209
K-2	0.9	0.59	10.00	10.00	8.25	0.000	4.346
K-3	0.9	0.30	10.00	10.00	8.25	0.000	2.256
K-4	0.9	0.56	10.00	10.00	8.25	0.000	4.174
K-5	0.9	0.59	10.00	10.00	8.25	0.000	4.347
K-6	0.9	0.32	10.00	10.00	8.25	0.000	2.347
K-7	0.9	0.75	10.00	10.00	8.25	0.000	5.543
K-8	0.9	0.78	10.00	10.00	8.25	0.000	5.821

On Grade Inlet Configuration Data

Inlet ID	Inlet Type	Inlet Length (ft)	Slopes Long (%)	Slopes Trans (%)	Gutter n	Gutter Depr. (ft)	Grate Width (ft)	Grate Type	Pond Width Allowed (ft)	Critic Elev. (ft)
K-1	Curb	15.00	0.60	2.00	0.016	0.25	n/a	n/a	14.00	501.42
K-2	Curb	15.00	0.60	2.00	0.016	0.25	n/a	n/a	14.00	498.88
K-4	Curb	15.00	0.60	2.00	0.016	0.25	n/a	n/a	14.00	501.42
K-5	Curb	15.00	0.60	2.00	0.016	0.25	n/a	n/a	14.00	498.88
K-7	Curb	15.00	1.22	2.00	0.016	0.25	n/a	n/a	14.00	498.81
K-8	Curb	15.00	1.22	2.00	0.016	0.25	n/a	n/a	14.00	498.81

On Grade Inlets Computation Data.

Inlet ID	Inlet Type	Total Q (cfs)	Intercept Capacity (cfs)	Q Bypass Allow (cfs)	Q Bypass Actual (cfs)	To Inlet ID	Inlet Length (ft)	Required Length (ft)	Actual Length (ft)	Ponded Width (ft)
K-1	Curb	4.209	4.209	0.000	0.000	K-2	12.31	15.00	13.60	
K-2	Curb	4.346	4.346	0.000	0.000	K-3	12.54	15.00	13.75	
K-4	Curb	4.174	4.174	0.000	0.000	K-5	12.25	15.00	13.55	
K-5	Curb	4.347	4.347	0.000	0.000	K-6	12.54	15.00	13.75	
K-7	Curb	5.543	5.434	0.000	0.108	K-3	16.90	15.00	13.20	
K-8	Curb	5.821	5.659	0.000	0.162	K-6	17.38	15.00	13.45	

Sag Inlets Configuration Data.

Inlet ID	Inlet Type	Inlet Length (ft)	Grate Area (sf)	Left-Slope (%)	Right-Slope (%)	Long Trans (%)	Gutter n	Gutter DeprW (ft)	Depth Allowed (ft)	Critic Elev. (ft)	
K-3	Curb	15.00	n/a	0.20	2.00	0.20	2.00	0.016	2.00	0.42	498.26
K-6	Curb	15.00	n/a	0.20	2.00	0.20	2.00	0.016	2.00	0.42	498.26

Sag Inlets Computation Data.



Inlet ID	Inlet Type	Inlet Length (ft)	Grate Perim (ft)	Grate Area (sf)	Total Q (cfs)	Inlet Capacity (cfs)	Total Head (ft)	Ponded Left (ft)	Ponded Right (ft)	Width (ft)
K-3	Curb	15.00	n/a	n/a	2.365	11.503	0.145	10.40	10.40	
K-6	Curb	15.00	n/a	n/a	2.509	11.503	0.151	10.60	10.60	

=====END=====

NORMAL TERMINATION OF WINSTORM.

RECORD DRAWING
This drawing is a compilation of the original sealed engineering drawing and modifications by addenda, change orders and information furnished by the contractor. Information shown that was provided by the contractor and others not associated with the design engineer cannot be verified for accuracy or completeness. Original sealed drawing is on file at the office of AECOM USA Group, Inc., TBPE REG. NO. F-3082

ORIGINAL DRAWING SEALED & SIGNED BY
T.H. Gaertner, P.E.
TX NO. 37124

2	DELETE P INLETS	THG	2/11/08
1	REVISED DRAINAGE LINE	MLA	10/22/07
NO.	REVISION	BY	DATE
 City of Rockwall, Texas			
205 BYPASS PHASE 6			
HYDRAULIC DATA SYSTEM K INLETS - 25-YR FLOWS			
2 OF 10			
		TCB INC. WWW.TCB.AECOM.COM 17300 DALLAS PARKWAY, SUITE 1010 DALLAS, TEXAS 75248	
Unit	PW-DAL-FW	Scale	Horz: AS SHOWN Vert: AS SHOWN
Designed	RI	Checked	TCB
Drawn	FG	Approved	TCB
Date	11/24/2009	Project No.	60004153
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