

INLET DESIGN CALCULATIONS			PROJECT NAME		DALTON RANCH		BY		N.K.							
			LINE NAME		N/A		DATE		7/25/05							
No.	Inlet Location/Comments	Design Storm Frequency (yrs.)	AREA RUNOFF Q = CIA					Carry-Over From Upstream Inlet (c.f.s.)	Total Gutter Flow (c.f.s.)	Gutter Capacity (c.f.s.)	Gutter Slope (%)	Crown Type	SELECTED INLET			Carry-Over To Downstream Inlet (c.f.s.)
			Time of Conc. (min.)	Intensity I (in./hr.)	Runoff Coeff. "c"	Area (ac.)	"q" (c.f.s.)						Length "L" (Feet)	Inlet Capacity (c.f.s.)	Type	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1A	STA. 1+25.29 ALLEY "4" (6.5' RT.)	100	10	9.8	0.50	0.59	2.89	0	2.89	-	SAG	5" INVERT	5	6.80	C.I.	0
1B	STA. 3+10 ALLEY "4" (6.50' RT.)	100	10	9.8	0.50	1.15	5.64	0	5.64	-	SAG	5" INVERT	5	6.80	COM	0
1C	STA. 5+13.60 ALLEY "4" (6.50' LT.)	100	10	9.8	0.50	0.96	4.70	0	4.70	11.30	2.30	5" INVERT	10	6.80	C.I.	0
1D	STA. 9+35.22 PANHANDLE DRIVE (22.5' LT.)	100	10	9.8	0.50	1.68	8.23	0	8.23	-	SAG	6" PARABOLIC	5	10.50	C.I.	0
1E	STA. 9+35.51 PANHANDLE DRIVE (22.5' RT.)	100	10	9.8	0.50	2.73	13.38	2.57	15.95	-	SAG	6" PARABOLIC	10	21.00	C.I.	0
1F	STA. 13+16.76 LIMESTONE WAY (27.0' LT.)	100	10	9.8	0.50	0.86	4.21	0.29	4.50	22.0	0.53	1/4" / FT	10	6.25	C.I.	0
1G	STA. 13+16.76 LIMESTONE WAY (27.0' RT.)	100	10	9.8	0.50	1.80	8.82	0	8.82	22.0	0.53	1/4" / FT	10	6.25	C.I.	2.57
1H	STA. 16+14.26 LIMESTONE WAY (14.5' RT.)	100	10	9.8	0.50	1.04	5.10	0	5.10	9.35	0.53	6" PARABOLIC	10	6.40	C.I.	0
1I	STA. 16+16.76 LIMESTONE WAY (14.5' LT.)	100	10	9.8	0.50	1.44	7.06	0	7.06	9.35	0.53	6" PARABOLIC	15	10.50	C.I.	0
2A	STA. 11+37.31 PANHANDLE DRIVE (34.5' LT.)	100	10	9.8	0.50	1.40	6.86	0	6.86	22.0	0.50	1/4" / FT	15	10.50	C.I.	0
2B	STA. 15+47.53 PANHANDLE DRIVE (22.5' LT.)	100	10	9.8	0.50	0.77	3.77	0	3.77	16.08	0.60	6" PARABOLIC	10	7.00	C.I.	0
2C	STA. 0+87.08 NORTH COUNTRY LANE (34.50' LT.)	100	10	9.8	0.63	2.39	14.75	0	25.13	18.10	1.35	6" PARABOLIC	20	17.50	C.I.	0
2D	STA. 0+87.08 NORTH COUNTRY LANE (34.50' RT.)	100	10	9.8	0.75	1.68	12.35	0	25.13	18.10	1.35	6" PARABOLIC	20	17.50	C.I.	0
3A	STA. 8+13.26 BARTON SPRINGS (14.5' LT.)	100	10	9.8	0.50	1.81	8.87	0	8.87	9.93	0.60	6" PARABOLIC	15	12.00	C.I.	0
3B	STA. 5+21.06 BARTON SPRINGS (14.5' LT.)	100	10	9.8	0.50	0.96	4.70	0	4.70	9.93	0.60	6" PARABOLIC	10	7.05	C.I.	0
3C	STA. 3+19.93 BARTON SPRINGS (14.31' RT.)	100	10	9.8	0.50	1.85	9.07	0	9.07	9.93	0.60	6" PARABOLIC	15	12.00	C.I.	0
4A	STA. 9+15.76 BARTON SPRINGS (14.5' LT.)	100	10	9.8	0.50	1.59	7.79	0	7.79	9.07	0.50	6" PARABOLIC	10	7.50	C.I.	0.29
4B	STA. 10+72.00 BARTON SPRINGS (14.5' LT.)	100	10	9.8	0.50	0.61	2.99	0	2.99	9.07	0.50	6" PARABOLIC	10	7.50	C.I.	0
4C	STA. 11+19.96 BARTON SPRINGS (14.5' RT.)	100	10	9.8	0.50	1.67	8.18	0	8.18	9.07	0.50	6" PARABOLIC	15	13.00	C.I.	0
4D	STA. 12+50.42 BARTON SPRINGS (14.5' LT.)	100	10	9.8	0.50	1.85	9.07	0	9.07	9.07	0.50	6" PARABOLIC	15	13.00	C.I.	0
4E	STA. 14+21.07 BARTON SPRINGS (14.5' RT.)	100	10	9.8	0.50	1.27	6.22	0	6.22	9.07	0.50	6" PARABOLIC	10	7.50	C.I.	0
5A	STA. 5+69.35 CHUCK WAGON (14.5' LT.)	100	10	9.8	0.50	1.68	8.23	0	8.23	23.50	3.36	6" PARABOLIC	15	9.80	C.I.	0
5B	STA. 5+69.35 CHUCK WAGON (14.5' RT.)	100	10	9.8	0.50	1.91	9.36	0	9.36	23.50	3.36	6" PARABOLIC	15	9.80	C.I.	0
5C	STA. 10+84.52 TRAIL DRIVE (14.5' RT.)	100	10	9.8	0.50	0.91	4.46	0	4.46	13.33	1.08	6" PARABOLIC	10	7.00	C.I.	0
5D	STA. 10+84.52 TRAIL DRIVE (14.5' LT.)	100	10	9.8	0.50	2.46	12.05	0	12.05	13.33	1.08	6" PARABOLIC	20	17.20	C.I.	0
6A	STA. 4+75.13 ALLEY "5" (6.50' LT.)	100	10	9.8	0.50	1.08	5.29	0	5.29	10.37	1.94	5" INVERT	15	9.50	C.I.	0
6B	STA. 19+66.44 PAINTED PONY (14.5' LT.)	100	10	9.8	0.50	2.71	13.28	0	13.28	15.81	1.52	6" PARABOLIC	20	16.50	C.I.	0
6C	STA. 19+70.59 PAINTED PONY (14.5' RT.)	100	10	9.8	0.50	2.22	10.88	0	10.88	15.81	1.52	6" PARABOLIC	20	16.50	C.I.	0
7A	STA. 6+01.59 LIMESTONE WAY (14.5' LT.)	100	10	9.8	0.50	1.73	8.48	0	8.48	-	SAG	6" PARABOLIC	5	12.80	C.I.	0
7B	STA. 6+01.59 LIMESTONE WAY (14.5' RT.)	100	10	9.8	0.50	0.39	1.91	0	1.91	-	SAG	6" PARABOLIC	5	12.80	C.I.	0
7C	STA. 0+56.46 BROKEN SPOKE (14.5' RT.)	100	10	9.8	0.50	2.19	10.73	0	10.73	25.55	3.97	6" PARABOLIC	20	13.90	C.I.	0
7D	STA. 0+55.75 BROKEN SPOKE (14.5' LT.)	100	10	9.8	0.50	2.61	12.79	0	12.79	25.55	3.97	6" PARABOLIC	20	13.90	C.I.	0
8A	STA. 9+87.22 CHUCK WAGON (14.5' LT.)	100	10	9.8	0.50	2.38	11.66	0	11.66	-	SAG	6" PARABOLIC	10	21.00	C.I.	0
8B	STA. 9+85.12 CHUCK WAGON (14.5' RT.)	100	10	9.8	0.50	2.93	14.36	3.82	18.18	-	SAG	6" PARABOLIC	10	21.00	C.I.	0
8C	STA. 4+17.30 PANHANDLE DRIVE (22.5' LT.)	100	10	9.8	0.50	0.42	2.06	0	2.06	27.78	1.65	6" PARABOLIC	5	2.64	C.I.	0
8D	STA. 4+08.65 PANHANDLE DRIVE (22.5' RT.)	100	10	9.8	0.50	1.60	7.84	0	7.84	27.78	1.65	6" PARABOLIC	15	10.40	C.I.	0
12A	STA. 1+15.58 LONGHORN LANE (14.5' LT.)	100	10	9.8	0.50	1.65	8.09	0	8.09	9.07	0.50	6" PARABOLIC	15	13.00	C.I.	0
12B	STA. 3+75.52 LONGHORN LANE (14.50' RT.)	100	10	9.8	0.50	1.15	5.64	0	5.64	9.93	0.60	6" PARABOLIC	10	7.50	C.I.	0
12C	STA. 3+94.78 LONGHORN LANE (14.50' LT.)	100	10	9.8	0.50	1.48	7.25	0	7.25	9.93	0.60	6" PARABOLIC	10	7.50	C.I.	0
12D	STA. 2+04.91 SADLE HORN CIR. (47.05' LT.)	100	10	9.8	0.50	2.10	10.29	0	10.29	-	SAG	6" PARABOLIC	10	25.00	C.I.	0

- NOTE:
- 100-YR DESIGN FREQUENCY SHALL NOT EXCEED A DEPTH OF 1 1/2" OVER TOP OF CURB IN STREET.
 - 100-YR DESIGN FREQUENCY SHALL NOT EXCEED THE CAPACITY OF ALLEY PAVEMENT.
 - PONDING DEPTH OF CURB INLET AT LOW POINT ON STREET IS 0.62'
 - PONDING DEPTH OF CURB INLET AT LOW POINT ON ALLEY IS 0.42'

BENCHMARK 1 USGS Monument-stamped Boren 1986
 Located approximately 1.25 miles east of Rockwall at the Rockwall Municipal Airport, in the north end of a circular grass area at the end of a taxiway.
 ELEVATION = 574.77

BENCHMARK 2 USGS Monument-5" cap stamped N 1495/1986
 Located 24.6 feet west of the center of a paved road leading to the Rockwall Municipal Airport, 16.4 feet south of a utility pole with a transformer and light, 2 feet west of the north leg of a sign. Access to datum point is through a 5 inch logo cap.
 ELEVATION = 567.44

AS BUILT
 To the best of our knowledge "Winkelmann and Associates, Inc." hereby states that this plan is "As-Built". The information is based on surveying conducted at the site and modification information provided by "the Contractor".

W. Naum Uddin Khan 9/25/07
 WINKELMANN & ASSOCIATES, INC. DATE

THESE CONSTRUCTION PLANS WERE PREPARED UNDER THE RESPONSIBLE SUPERVISION OF JOHN M. GLASS, P.E., REGISTERED PROFESSIONAL ENGINEER NO. 87776
 THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MD. NAUM UDDIN KHAN, P.E. #87776

REVISIONS: 5-31-07
 NO. DATE
 APPROVED: [Signature]
 DATE: 5/31/07

WINKELMANN & ASSOCIATES, INC.
 CONSULTING CIVIL ENGINEERS & SURVEYORS
 6750 HILGERT PLAZA, SUITE 100
 DALLAS, TEXAS 75249
 (972) 482-7090
 (972) 482-7099 FAX

JOHN M. GLASS SURVEY ABSTRACT NO. 88
 CHAIRMAN
 ROCKWALL COUNTY, TEXAS
 D. R. HORTON
 4306 MILLER ROAD, SUITE A
 ROWLETT, TEXAS 75088
 214-607-4244

DRAINAGE CALCULATIONS
 SHEET 2 OF 45
 Scale: H. 1"=100' Date: 09/11/06
 Designed By: RS
 Drawn By: RS
 Checked By: NK
 File: 40709DAM.dwg | View:
 Project No.: 40709.00