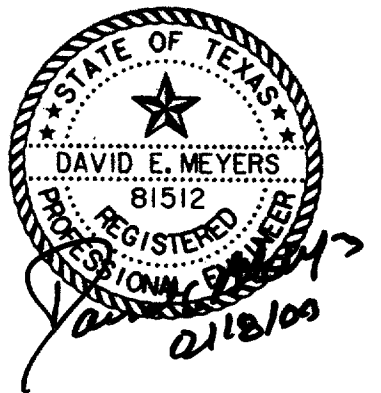


**HYDRAULIC CALCULATIONS**

COLLECTION POINT INLETS OR MANHOLES		DISTANCE BETWEEN COLLECTION POINTS	INCREMENTAL DRAINAGE AREA				TIME @ UPSTREAM STATION (MIN.)	INTENSITY "I-100" (IN./HR)	100 YR. STORM RUNOFF "Q" (CFS)	SLOPE OF HYDRAULIC GRADIENT (FT./FT.)	STORM SEWER SIZE	VELOCITY "V" (F.P.S.)	FLOW TIME IN SEWER (MIN.)	TIME @ DOWNSTREAM STATION (MIN.)	VELOCITY HEAD (FEET)	HYDRAULIC GRADE AT UPSTREAM STATION	HYDRAULIC GRADE AT DOWNSTREAM STATION	HYDRAULIC GRADE AT INLETS	COMMENTS	
UPSTREAM STATION	DOWNSTREAM STATION		INCREM. AREA NO.	AREA "A" (AC.)	RUNOFF COEFF. "C"	INCREM. "CA"														ACCUM. "CA"
LINE 'S'																				
440.31	297.13	143.18	S-4	0.17	0.90	0.15	0.15	10.00	8.74	1.3	0.0002	18	0.76	3.15	13.15	0.01	606.19	606.17		
297.13	224.29	72.84	S-3	0.29	0.90	0.26	0.41	13.15	8.01	3.3	0.0010	18	1.88	0.65	13.80	0.05	606.12	606.05		
224.29	160.00	64.29	S-2	0.11	0.90	0.10	0.51	13.80	7.88	4.0	0.0015	18	2.29	0.47	14.27	0.08	606.03	605.93	PARTIAL FLOW	
160.00	134.27	25.73	NA	0.00	0.00	0.00	0.51	14.27	7.79	4.0	0.0014	18	2.26	0.19	14.46	0.08	604.68	604.64	PARTIAL FLOW	
134.27	100.00	34.27	S-1	0.15	0.90	0.14	0.65	14.46	7.76	5.0	0.0023	18	2.85	0.20	14.66	0.13	604.60	604.52		
LAT. 'S-1'																				
21.37	0.00	21.37	S-1	0.15	0.90	0.14	0.14	10.00	8.74	1.2	0.0001	18	0.67	0.53	10.53	0.01	604.72	604.72	604.73	PARTIAL FLOW
LAT. 'S-2'																				
15.59	0.00	15.59	S-2	0.13	0.90	0.12	0.12	10.00	8.74	1.0	0.0001	18	0.58	0.45	10.45	0.01	604.76	604.76	604.76	PARTIAL FLOW
LAT. 'S-3'																				
15.59	0.00	15.59	S-3	0.29	0.90	0.26	0.26	10.00	8.74	2.3	0.0005	18	1.29	0.20	10.20	0.03	606.16	606.15	606.19	PARTIAL FLOW
LAT. 'S-4'																				
440.31	297.13	143.18	S-4	0.17	0.90	0.15	0.15	10.00	8.74	1.3	0.0002	18	0.76	3.15	13.15	0.01	606.22	606.19	606.23	PARTIAL FLOW
LINE 'P'																				
1490.35	1467.86	22.49	LINE 'R'	114.65	0.90	03.19	103.19	19.59	6.95	717.0	0.0009	2-8'X8	5.60	0.07	19.66	0.49	597.52	597.50		FUT. LATERAL
1467.86	1447.86	20.00	LINE 'A'	75.62	0.88	66.55	169.73	19.66	6.94	1177.8	0.0026	2-8'X8	9.20	0.04	19.69	1.31	596.67	596.62		
1447.86	1396.00	51.86	LINE 'Q'	4.66	0.90	4.19	173.92	19.69	6.93	1206.1	0.0027	2-8'X8	9.42	0.09	19.78	1.38	596.55	596.41		
1396.00	1218.00	178.00	BEND	NA	0.90	0.00	173.92	19.78	6.92	1203.9	0.0027	2-8'X8	9.41	0.32	20.10	1.37	595.93	595.46		
1218.00	1176.00	42.00	STH. TOLLWA	46.79	0.90	42.11	216.04	20.10	6.88	1486.3	0.0041	2-8'X8	11.61	0.06	20.16	2.09	594.74	594.57		
1176.00	1121.00	55.00	BEND	NA	0.90	0.00	216.04	20.16	6.87	1484.6	0.0041	2-8'X8	11.60	0.08	20.24	2.09	593.83	593.61		
1121.00	1018.00	103.00	WTH. TOLLWA	67.90	0.90	61.11	277.15	20.24	6.86	1901.6	0.0030	3-8'X8	9.90	0.17	20.41	1.52	593.89	593.59		
1018.00	1000.00	18.00	BEND	NA	0.90	0.00	277.15	20.41	6.84	1895.3	0.0029	3-8'X8	9.87	0.03	20.44	1.51	593.05	593.00		

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DAVID E. MEYERS, P.E. 81512



**RECORD DRAWING**

DATE	DESCRIPTION	REF. NO.
10/3/97	ISSUED FOR CONSTRUCTION	N/A
7/14/97	ISSUED FOR BID	N/A

**STORM WATER CALCULATIONS  
HYDRAULIC CALCULATIONS  
ADDISON CIRCLE  
PHASE II PUBLIC INFRASTRUCTURE  
TOWN OF ADDISON, TEXAS**

Hui11-Zollars, Inc./Engineering/Architecture  
Dallas, Fort Worth, Houston, El Paso, Phoenix, Tustin, Ontario

DESIGN	DRAWN	APPR.	SCALE	DATE	PROJECT NO.	NO.
HZ1	HZ1	DEM	N.T.S.	OCT. 97	01-1822-21	SW9