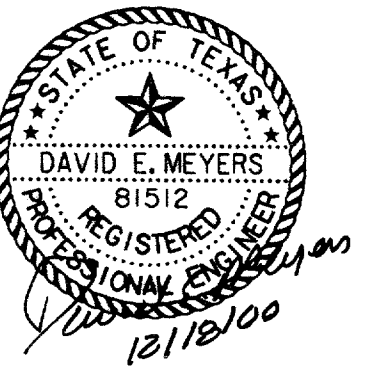


**HYDRAULIC CALCULATIONS**

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"	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"													
<b>LINE 'E'</b>																				
875.00	844.96	30.04	E-10	0.54	0.90	0.49	0.49	10.00	8.74	4.2	0.0007	21	1.77	0.28	10.28	0.05	631.05	631.03		
844.96	836.87	8.09	"E-9.1,9.2"	0.25	0.90	0.23	0.71	10.28	8.67	6.2	0.0004	27	1.55	0.09	10.37	0.04	631.04	631.03		
836.87	671.50	165.37	"E-8.1,8.2,8.3"	2.42	0.90	2.18	2.89	10.37	8.65	25.0	0.0065	27	6.28	0.44	10.81	0.61	630.46	629.38		
671.50	601.50	70.00	LN. H & E-7	6.43	0.90	5.79	8.68	11.19	8.44	73.3	0.0079	39	8.83	0.13	11.32	1.21	628.32	627.77		
601.50	567.12	34.38	E-6	0.33	0.90	0.30	8.97	11.32	8.41	75.5	0.0084	39	9.10	0.06	11.39	1.29	626.79	625.02		
567.12	406.54	160.58	E-5	1.86	0.90	1.67	10.65	11.39	8.40	89.4	0.0117	39	10.78	0.25	11.63	1.80	624.50	622.62		
406.54	365.35	41.19	E-4	0.82	0.90	0.74	11.39	11.63	8.34	94.9	0.0089	42	9.87	0.07	11.70	1.51	622.77	622.40		
365.35	311.78	53.57	E-3	0.33	0.90	0.30	11.68	11.70	8.32	97.2	0.0093	42	10.11	0.09	11.79	1.59	622.33	621.83		
311.78	258.78	53.00	E-2	1.08	0.90	0.97	12.65	11.79	8.30	105.1	0.0075	45	9.51	0.09	11.88	1.41	621.92	621.52		
258.78	53.60	205.18	E-1	0.46	0.90	0.41	13.07	11.88	8.28	108.2	0.0080	45	9.80	0.35	12.23	1.49	621.43	619.79		
53.60	44.73	8.87	EXIST. OFFSITE	0.53	0.90	0.48	13.55	12.23	8.21	111.1	0.0084	45	10.06	0.01	12.25	1.57	619.71	619.63		
44.73	0.00	44.73	EXIST. OFFSITE	0.21	0.90	0.19	13.73	12.25	8.20	112.6	0.0087	45	10.20	0.07	12.32	1.62	619.59	619.20		
<b>LAT. 'E-1'</b>																				
31.47	0.00	31.47	E-1	0.46	0.90	0.41	0.41	10.00	8.74	3.6	0.0012	18	2.05	0.26	10.26	0.07	622.89	622.86	622.98	
<b>LAT. 'E-2'</b>																				
26.89	0.00	26.89	E-2	1.08	0.90	0.97	0.97	10.00	8.74	8.5	0.0029	21	3.53	0.13	10.13	0.19	623.21	623.13	623.45	
<b>LAT. 'E-3'</b>																				
14.88	0.00	14.88	E-3	0.33	0.90	0.30	0.30	10.00	8.74	2.6	0.0006	18	1.47	0.17	10.17	0.03	623.89	623.88		
<b>LAT. 'E-4'</b>																				
44.00	0.00	44.00	E-4	0.82	0.90	0.74	0.74	10.00	8.74	6.5	0.0017	21	2.68	0.27	10.27	0.11	624.24	624.17	624.38	
<b>LAT. 'E-5'</b>																				
30.44	0.00	30.44	E-5	1.86	0.50	0.93	0.93	10.00	8.74	8.1	0.0004	30	1.66	0.31	10.31	0.04	626.28	626.27	626.33	
<b>LAT. 'E-6'</b>																				
27.50	0.00	27.50	E-6	0.33	0.90	0.30	0.30	10.00	8.74	2.6	0.0006	18	1.47	0.31	10.31	0.03	628.06	628.04	628.10	
<b>LAT. 'E-7'</b>																				
110.00	0.00	110.00	E-7	2.58	0.90	2.32	2.32	10.00	8.74	20.3	0.0081	24	6.46	0.28	10.28	0.65	629.77	628.89	630.58	
<b>LAT. 'E-8.1'</b>																				
31.75	0.00	31.75	"E-8.1,8.2,8.3"	2.42	0.90	2.18	2.18	10.00	8.74	19.0	0.0144	21	7.92	0.07	10.07	0.97	630.74	630.28	631.95	
<b>LAT. 'E-8.3'</b>																				
5.00	0.00	5.00	E-8.3	2.17	0.90	1.95	1.95	10.00	8.74	17.1	0.0116	21	7.10	0.01	10.01	0.78				
<b>LAT. 'E-9.1'</b>																				
15.59	0.00	15.59	"E-9.1,9.2"	0.25	0.90	0.23	0.23	10.00	8.74	2.0	0.0004	18	1.11	0.23	10.23	0.02	631.06	631.05	631.08	
<b>LAT. 'E-10'</b>																				
37.50	0.00	37.50	E-10	0.54	0.90	0.49	0.49	10.00	8.74	4.2	0.0016	18	2.40	0.26	10.26	0.09	631.09	631.03		
<b>LINE 'H'</b>																				
537.61	480.00	57.61	H-7	1.57	0.90	1.41	1.41	10.00	8.74	12.4	0.0061	21	5.14	0.19	10.19	0.41	632.76	632.41		PARTIAL FLOW
480.00	446.62	33.38	H-6	0.14	0.90	0.13	1.54	10.19	8.69	13.4	0.0071	21	5.56	0.10	10.29	0.48	632.34	632.10		PARTIAL FLOW
446.62	287.45	159.17	H-5	0.29	0.90	0.26	1.80	10.29	8.67	15.6	0.0048	24	4.97	0.53	10.82	0.38	632.15	631.39		PARTIAL FLOW
287.45	180.00	107.45	H-4 & H-8	0.62	0.90	0.56	2.36	10.82	8.53	20.1	0.0079	24	6.40	0.28	11.10	0.64	631.14	630.29		
180.00	159.71	20.29	H-3	0.55	0.90	0.50	2.85	11.10	8.46	24.1	0.0061	27	6.07	0.06	11.16	0.57	630.32	630.20		
159.71	151.62	8.09	H-2	0.52	0.90	0.47	3.32	11.16	8.45	28.1	0.0082	27	7.06	0.02	11.18	0.77	630.00	629.93		
151.62	100.00	51.62	H-1	0.16	0.90	0.14	3.47	11.18	8.45	29.3	0.0089	27	7.36	0.12	11.29	0.84	629.86	629.40		
<b>LAT. 'H-1'</b>																				
31.75	0.00	31.75	H-1	0.16	0.90	0.14	0.14	10.00	8.74	1.3	0.0001	18	0.71	0.74	10.74	0.01	630.70	630.69	630.71	
<b>LAT. 'H-2'</b>																				
47.92	0.00	47.92	H-2	0.52	0.90	0.47	0.47	10.00	8.74	4.1	0.0015	18	2.32	0.34	10.34	0.08	630.76	630.69	630.86	
<b>LAT. 'H-3'</b>																				
36.35	0.00	36.35	H-3	0.55	0.90	0.50	0.50	10.00	8.74	4.3	0.0017	18	2.45	0.25	10.25	0.09	630.86	630.80		
<b>LAT. 'H-4'</b>																				
20.19	0.00	20.19	H-4 & H-8	0.62	0.90	0.56	0.56	10.00	8.74	4.9	0.0022	18	2.76	0.12	10.12	0.12				PARTIAL FLOW
<b>LAT. 'H-5'</b>																				
31.75	0.00	31.75	H-5	0.29	0.90	0.26	0.26	10.00	8.74	2.3	0.0005	18	1.29	0.41	10.41	0.03				PARTIAL FLOW
<b>LAT. 'H-6'</b>																				
27.14	0.00	27.14	H-6	0.14	0.90	0.13	0.13	10.00	8.74	1.1	0.0001	18	0.62	0.73	10.73	0.01				PARTIAL FLOW
<b>LAT. 'H-7'</b>																				
15.01	0.00	15.01	H-7	1.57	0.90	1.41	1.41	10.00	8.74	12.4	0.0061	21	5.14	0.05	10.05	0.41				PARTIAL FLOW

**RECORD DRAWING**

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



DATE	DESCRIPTION	REF. NO.
6/23/99	ISSUED FOR CONSTRUCTION	N/A
5/17/99	ISSUED FOR BID	N/A
<b>STORM WATER CALCULATIONS HYDRAULIC CALCULATIONS</b>		
<b>ADDISON CIRCLE</b>		
<b>PHASE II-B PUBLIC INFRASTRUCTURE</b>		
<b>TOWN OF ADDISON, TEXAS</b>		
DESIGN	DRAWN	APPR.
HZI	HZI	DEM
SCALE	DATE	PROJECT NO.
N.T.S.	MAR. 99	01-1822-50
NO.		<b>SW3</b>