

5000

ENGINEER \_\_\_\_\_ JOB No. 94-306 DATE 8-29-96 PROJECT CHERRYWOOD PARC-PLAT FOUR

HYDRAULIC COMPUTATIONS

LINE		PIPE CHARACTERISTICS					STRUCT. TOPS		DEPTH HYD. GRADE	ELEV. HYD. GRD		HYD. GRADE	FRICT. HEAD LOSS	VEL.	$\frac{V^2}{2g}$	VHL	TURN LOSS	INLETS		FLOW REQUIREMENTS				PIPE CAP.	
UPPER	LOWER	LENGTH	SIZE	F.L. GRADE	F.L. UPPER	F.L. LOWER	UPPER	LOWER		UPPER	LOWER						STREET GRADE	CAPACITY	DRNG. AREA	P.I.	Q	TOTAL Q			
AI	MH										569.19														
4-18	4-17	90.00	18" ADS	0.01	567.40	566.50	572.5	571.5	3.31	568.62	568.00	0.0069	0.62	4.93	0.38	0.30	50° 19'	4-SIDES	11.0	0.68	2.64	1.80	6.92	8.72	11.38
MH	CI																								
4-17	4-16	17.37	18" ADS	0.01	566.30	566.11	571.5	571.14	3.50	567.74	567.61	0.0069	0.15	4.93	0.38	0	50° 19'	—	—	—	—	—	8.72	10.51	
CI	CI																								
4-16	4-15	34.00	18" RCP	0.01	565.91	565.57	571.14	571.14	3.53	567.38	567.07	0.0090	0.31	5.65	0.50	0.22	0° 0'	Low	4.0	0.48	2.64	1.27	9.99	10.51	
CI	AI																								
4-15	4-14	116.51	18" ADS	0.02	565.37	563.04	571.14	568.0	4.07	565.76	564.54	0.1049	1.22	6.24	0.60	0.20	65° 35'	Low	4.0	0.39	2.64	1.03	11.02	16.09	
AI	AI																								
4-14	4-13	101.07	18" ADS	0.0203	562.84	560.79	568.0	567.3	3.46	563.99	562.29	0.118	1.20	6.47	0.65	0.10	90° 14'	3-SIDES	8.25	0.14	2.64	0.42	11.44	16.21	
AI	AI																								
4-13	4-12	119.45	18" ADS	0.069	560.59	552.35	567.3	558.0	5.01	556.09	554.24	0.0155	1.85	7.40	0.85	0.37	36° 30'	3-SIDES	8.25	0.62	2.64	1.64	13.08	29.89	
AI	AI																								
4-12	4-11	127.27	42" RCP	0.028	551.60	548.04	558.0	556.0	3.76	552.88	551.54	0.0105	1.34	10.73	1.79	1.34	0° 0'	3-SIDES	8.25	T.Q. FROM FE 4-27 0.49	2.64	88.86 1.29	103.23	168.34	
AI	AI																								
4-11	4-10	112.96	42" RCP	0.028	548.04	544.88	556.0	554.2	4.46	549.66	548.38	0.113	1.28	11.14	1.93	0.27	25° 05'	3-SIDES	8.25	T.Q. FROM CI 4-26 0.73	2.64	2.01 1.93	107.17	168.34	
AI	AI																								
4-10	4-9	119.81	42" RCP	0.028	544.88	541.53	554.2	551.8	5.82	546.78	545.34	0.0120	1.44	11.47	2.04	0.22	30° 21'	3-SIDES	8.25	1.19	2.64	3.14	110.31	168.34	
AI	AI																								
4-9	4-8	176.03	42" RCP	0.0314	541.53	535.37	551.8	545.5	6.46	544.83	542.54	0.0127	2.47	11.79	2.16	0.23	10° 35'	3-SIDES	8.25	1.18	2.64	3.12	113.43	178.26	
AI	AI																								
4-8	4-7	171.10	42" RCP	0.015	535.37	532.71	545.5	542.3	3.16	541.07	538.45	0.0148	2.62	12.72	2.51	0.64	20° 15'	3-SIDES	8.25	T.Q. FROM CI 4-22 0.77	2.64	6.94 2.03	122.40	123.21	
AI	AI																								
4-7	4-6	145.69	48" RCP	0.01	532.71	531.25	542.3	540.5	3.85	538.45	537.29	0.0079	1.16	10.18	1.59	0	0° 0'	3-SIDES	8.25	2.11	2.64	5.57	127.97	143.60	
AI	PC																								
4-6	PC	19.26	48" RCP	0.01	531.25	531.06	540.5	—	3.21	536.84	536.66	0.0092	0.18	10.75	1.86	0.45	0° 0'	2-SIDES	5.50	T.Q. FROM CI 4-19 0.48	2.64	8.34 1.27	137.58	143.60	
PC	AI																								
2-5	2-4	63.07	48" RAO	0.01	531.06	530.43	—	539.2	—	536.46	535.89	0.0092	0.57	10.75	1.86	0	0° 0'	—	—	—	—	—	137.58	143.60	
AI	EXMH																								
2-5	2-4A	70.23	54" RAO	0.0096	530.43	529.76	539.2	538.8	3.31	535.73	535.39	0.0051	0.36	8.82	1.21	0	0° 0'	4-SIDES	11.00	1.05	2.64	2.77	140.35	192.73	

