

PROFILE 20-26

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HORIZ.  
SCALE:

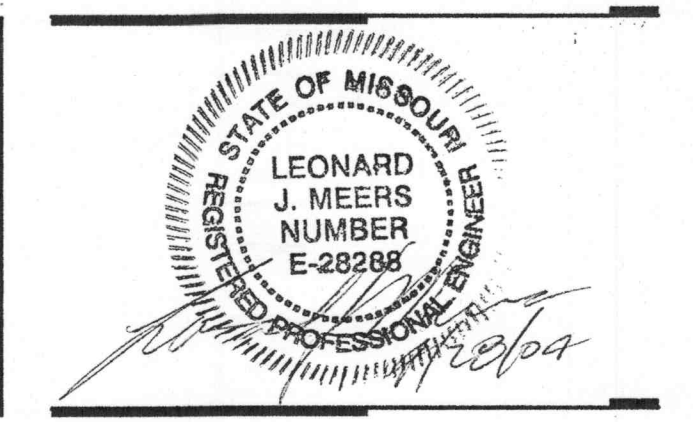
J.R. GRIMES  
CONSULTING ENGINEERS, INC. LABOURE' CENTRE

CALC. BY: J. WHISLER  
DATE: 02/09/2004  
REVISED:

VER. 2.0

STRUCTURE	UPR	LOWER	FLOWLINE	UPR	LOWER	LENGTH	GRADE	PIPE	"n"	Q	TOTAL	V	Vh	PIPE LOSSES (ft.)			STRUCTURE LOSSES (ft.)			HYD. ELEV	HYD	LOWEST	PIPE	DEPTH	FULL FLOW	GIVEN	
														FRICT.	CURVE	TOTAL PIPE	JUNC.	BEND	TOTAL STRUC.								UPPER
HYDRAULIC DATA 100 YEAR STORM PER DETENTION ROUTING REPORT																											
CB 2-2	FES 2-1	530.68	530.38	30	0.0100	30	0.013	1.37	24.91	5.33	0.44	0.12	0.00	0.12	0.24	0.07	0.31	534.22	533.79	0.00407	537.61	3.39	41.02	0.61	1.39	5.07	533.79
MH 2-3	CB 2-2	531.18	530.68	50	0.0100	24	0.013	0.00	23.54	8.58	1.14	0.71	0.00	0.71	0.00	0.17	0.17	535.10	534.22	0.0142	538.31	3.21	22.62	1.04	1.70	7.49	
CB 2-4	MH 2-3	534.33	531.18	105	0.0300	24	0.013	6.03	23.54	7.87	0.96	1.25	0.00	1.25	1.36	0.00	1.36	536.80	535.10	0.01194	544.61	7.81	39.18	0.60	1.11	7.49	
MH 2-5	CB 2-4	537.66	534.33	111	0.0300	18	0.013	5.06	17.51	11.35	2.00	4.04	0.00	4.04	0.62	0.16	0.78	541.63	536.80	0.03643	551.61	9.98	18.19	0.96	1.18	9.91	
1	MH 2-5	539.40	537.66	58	0.0300	18	0.013	3.12	12.45	7.61	0.90	0.95	0.00	0.95	0.31	0.30	0.61	543.19	541.63	0.01639	544.50	1.31	18.19	0.68	0.90	7.05	
2	1	541.19	539.60	106	0.0150	18	0.01	0.00	9.33	5.39	0.45	0.51	0.00	0.51	0.00	0.12	0.12	543.83	543.19	0.00486	549.00	5.17	16.72	0.56	0.78	5.28	
3	2	545.00	541.39	166	0.0217	18	0.01	9.33	9.33	5.17	0.42	0.74	0.00	0.74	0.00	0.00	0.00	545.71	543.83	0.00448	546.00	0.29	20.14	0.46	0.71	5.28	
HYDRAULIC DATA 15 YEAR STORM PER DETENTION ROUTING REPORT @ 12.20 HRS. WHEN HYDROGRAPHS COMBINES FOR MAXIMUM OUTFALL																											
5	4	547.95	547.00	39	0.0244	21	0.013	0.89	10.55	4.19	0.27	0.16	0.00	0.16	0.00	0.02	0.02	553.50	553.33	0.00404	559.90	6.40	24.73	0.43	0.79	4.39	553.33
6	5	550.05	548.15	190	0.0100	21	0.013	1.02	9.66	4.22	0.28	0.78	0.00	0.78	0.33	0.00	0.33	554.61	553.50	0.0041	564.80	10.19	15.85	0.61	0.97	4.02	
7	6	551.92	550.25	167	0.0100	18	0.013	2.55	8.64	5.48	0.47	1.42	0.00	1.42	0.13	0.00	0.13	556.16	554.61	0.00849	564.75	8.59	10.50	0.82	1.02	4.89	
8	7	554.43	552.12	231	0.0100	18	0.013	2.76	6.09	3.55	0.20	0.82	0.00	0.82	0.00	0.00	0.00	556.98	556.16	0.00357	564.75	7.77	10.50	0.58	0.80	3.45	
9	8	557.50	554.63	287	0.0100	15	0.013	3.33	3.33	2.71	0.11	0.76	0.00	0.76	0.00	0.00	0.00	558.13	556.98	0.00266	563.50	5.38	6.46	0.52	0.63	2.71	
11	10	548.21	547.80	41	0.0100	30	0.013	0.00	22.94	4.77	0.35	0.13	0.00	0.13	0.26	0.24	0.50	553.96	553.33	0.00325	561.50	7.54	41.02	0.56	1.30	4.67	553.33
12	11	549.41	548.41	100	0.0100	30	0.013	0.60	22.94	4.77	0.35	0.33	0.00	0.33	0.06	0.03	0.09	554.38	553.96	0.00325	564.50	10.12	41.02	0.56	1.30	4.67	
13	12	552.56	549.61	295	0.0100	30	0.013	6.58	21.40	4.40	0.30	0.82	0.00	0.82	0.27	0.00	0.27	555.46	554.38	0.00278	561.00	5.54	41.02	0.52	1.28	4.36	
14	13	554.02	552.76	126	0.0100	24	0.013	3.02	14.82	5.02	0.39	0.61	0.00	0.61	0.04	0.02	0.07	556.14	555.46	0.00487	561.00	4.86	22.62	0.66	1.16	4.72	
15	14	555.48	554.22	126	0.0100	21	0.013	3.15	7.18	2.88	0.13	0.24	0.00	0.24	0.18	0.06	0.24	556.53	556.14	0.00191	561.00	4.47	15.85	0.45	0.81	2.99	
16	15	556.66	555.68	98	0.0100	15	0.013	3.23	4.03	3.46	0.19	0.42	0.00	0.42	0.00	0.00	0.00	557.37	556.53	0.00433	561.75	4.38	6.46	0.62	0.71	3.28	
17	16	559.29	556.86	243	0.0100	12	0.013	0.80	0.80	0.81	0.01	0.08	0.00	0.08	0.00	0.00	0.00	559.61	557.37	0.00032	564.50	4.89	3.56	0.22	0.32	1.02	
18	12	557.00	556.05	19	0.0500	12	0.013	0.94	0.94	0.75	0.01	0.01	0.00	0.01	0.00	0.00	0.00	557.21	556.26	0.00028	565.00	7.79	7.97	0.12	0.21	1.20	554.38
19	14	556.47	554.22	45	0.0500	12	0.013	4.62	4.62	6.06	0.57	0.80	0.00	0.80	0.00	0.00	0.00	557.00	556.14	0.01784	562.50	5.50	7.97	0.58	0.53	5.88	556.14
20	15-FES2	546.49	542.48	186	0.0216	30	0.013	10.92	29.06	5.86	0.53	0.92	0.00	0.92	0.10	0.02	0.12	547.82	544.98	0.00492	549.50	1.68	60.23	0.48	1.21	5.92	544.98
21	20	549.74	546.69	305	0.0100	18	0.013	2.61	4.81	2.63	0.11	0.60	0.00	0.60	0.00	0.00	0.00	550.43	547.82	0.00195	555.75	5.32	10.50	0.46	0.69	2.72	
22	21	557.78	549.94	196	0.0400	15	0.013	2.20	2.20	1.30	0.03	0.12	0.00	0.12	0.00	0.00	0.00	558.12	550.43	0.00061	563.75	5.63	12.92	0.17	0.34	1.79	
23	20	549.31	546.69	262	0.0100	21	0.013	3.39	13.33	6.21	0.60	2.33	0.00	2.33	0.00	0.00	0.00	550.54	547.92	0.00888	557.25	6.72	15.85	0.84	1.23	5.54	547.82
24	23	552.78	549.51	327	0.0100	18	0.013	9.94	9.94	6.41	0.64	3.81	0.00	3.81	0.00	0.00	0.00	554.47	550.67	0.01164	557.00	2.53	10.50	0.95	1.16	5.62	

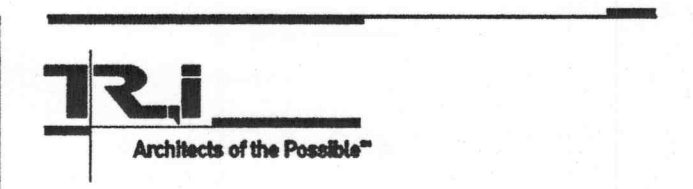
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DATE: 02/13/04

REVISIONS	PER CITY, DUCKETT CREEK	& MODOT COMMENTS	PER CITY COMMENTS
		04/06/04	01/28/04

DWG. BY: J.W  
PROJECT NO. 1004B  
SHEET NO.

**C8.4**  
STORM SEWER PROFILES

P&Z FILE # 0704/0704.01

J:\1004\1004B\PLANS\CB\_4-STORM-PRO.dwg Tue Apr 27 17:59:05 2004 JTW-H