

J.R. GRIMES
CONSULTING ENGINEERS, INC.

PERSIMMON POINTE MARKET

CALC. BY: K. NURNBERGER
DATE: 09/09/2003
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		PIPE	FULL FLOW	GIVEN			
														FRICT.	CURVE	TOTAL	JUNC.	BEND	TOTAL	UPPER	LOWER	GRADE	LOWEST	DEPTH	VELOCITY				LOWER		
			FT.	FT.	FT.	FT.	FT.	SIZE	FACTOR	c.f.s.	Q	ft.	ft.	LOSS	LOSS	LOSSES	LOSS	LOSS	LOSSES	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS	
HYDRAULIC DATA 15 YEAR STORM																															
1	EX2	543.30	542.20	186	0.0059	36	0.013	0.00	0.00	31.37	4.66	0.34	0.45	0.00	0.45	0.24	0.24	0.47	546.12	545.20	0.00244	550.00	3.88	51.29	0.61	1.67	4.44	545.20			
2	1	543.71	543.30	82	0.0050	24	0.013	1.47	17.55	6.28	0.61	0.62	0.00	0.62	0.61	0.00	0.61	546.35	545.12	0.00755	546.00	16.00	1.10	1.82	5.59						
4	3	546.43	546.24	19	0.0100	24	0.013	1.98	16.08	5.53	0.47	0.11	0.00	0.11	0.00	0.00	0.00	551.19	551.08	0.00589	560.50	9.31	22.62	0.71	1.22	5.12	551.08				
9	4	550.91	549.27	164	0.0100	18	0.013	0.79	11.32	7.30	0.83	2.48	0.00	2.48	0.47	0.39	0.86	553.91	550.58	0.01509	564.00	10.09	10.50	1.08	1.31	6.41					
10	9	553.05	551.11	194	0.0100	18	0.013	0.62	10.53	6.85	0.73	2.58	0.00	2.58	0.14	0.26	0.39	555.31	552.33	0.01329	564.15	8.84	10.50	1.00	1.22	5.96					
11	10	554.19	553.25	94	0.0100	12	0.013	0.40	7.24	9.22	1.32	3.88	0.00	3.88	0.46	0.30	0.77	558.84	554.19	0.04129	565.25	6.41	3.56	2.03	0.94	9.22					
12	11	555.66	554.39	127	0.0100	12	0.013	0.54	6.84	8.71	1.18	4.68	0.00	4.68	1.15	0.72	1.86	561.87	555.33	0.03686	565.15	3.28	3.56	1.92	0.94	8.71					
8	12	557.21	555.86	135	0.0100	12	0.013	0.56	2.65	3.71	0.21	0.90	0.00	0.90	0.12	0.00	0.12	557.97	556.50	0.00669	565.15	7.18	3.56	0.74	0.64	3.37					
7	8	558.35	557.41	94	0.0100	12	0.013	1.07	2.09	2.77	0.12	0.35	0.00	0.35	0.12	0.07	0.19	559.08	557.96	0.00372	564.00	4.92	3.56	0.59	0.55	2.66					
6	7	560.00	558.55	145	0.0100	12	0.013	1.02	1.02	1.11	0.02	0.09	0.00	0.09	0.02	0.00	0.02	560.38	558.91	0.00060	564.00	3.62	3.56	0.29	0.36	1.30					
13	12	561.25	560.61	64	0.0100	12	0.010	1.46	3.65	5.16	0.41	0.49	0.00	0.49	0.39	0.29	0.68	562.59	561.27	0.00765	565.90	3.31	4.63	0.79	0.66	4.65	556.86				
14	13	562.20	561.45	75	0.0100	12	0.010	2.19	2.19	2.73	0.12	0.16	0.00	0.16	0.12	0.00	0.12	562.79	561.93	0.00215	566.20	3.41	4.63	0.47	0.48	2.79					
17	16	558.00	556.29	72	0.0238	18	0.013	2.03	2.94	1.26	0.02	0.03	0.00	0.03	0.02	0.00	0.02	558.45	556.72	0.00045	561.00	2.55	16.19	0.18	0.43	1.66	FES				
18	17	565.38	558.20	518	0.0139	12	0.013	0.91	0.91	0.90	0.01	0.20	0.00	0.20	0.01	0.00	0.01	565.69	558.50	0.00039	566.38	0.69	4.19	0.22	0.30	1.16					
5	4	555.75	554.74	101	0.0100	12	0.013	2.78	2.78	3.93	0.24	0.76	0.00	0.76	0.24	0.00	0.24	556.65	555.40	0.00750	559.75	3.10	3.56	0.78	0.66	3.54	551.15				

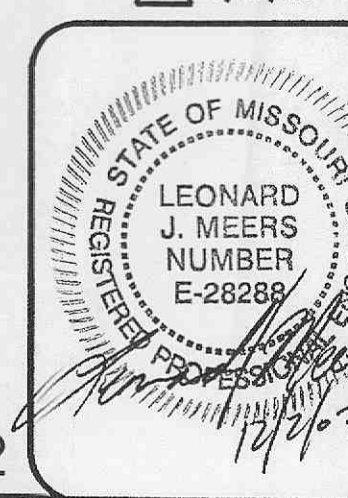
NOTE: STORM FLOWS ARE FOR 15-YR. DESIGN STORM.

J. R. GRIMES CONSULTING ENGINEERS, INC. AND THE UNDERSIGNED ENGINEER HAVE NO RESPONSIBILITY FOR SERVICES PROVIDED BY OTHERS TO IMPLEMENT THE IMPROVEMENTS SHOWN ON THIS PLAN AND ALL OTHER DRAWINGS WHERE THE UNDERSIGNED ENGINEER'S SEAL APPEARS. THE CONSTRUCTION MEANS AND METHODS ARE THE SOLE RESPONSIBILITY OF THE OWNER AND CONTRACTOR. J. R. GRIMES CONSULTING ENGINEERS, INC. HAS NO RESPONSIBILITY TO VERIFY FINAL IMPROVEMENTS AS SHOWN ON THIS PLAN UNLESS SPECIFICALLY ENGAGED AND AUTHORIZED TO DO SO BY THE OWNER OR CONTRACTOR.

- 3 11/20/03 PER MODOT COMMENTS
- 2 10/27/03 PER DESIGN REVISIONS
- 1 10/03/03 PER D.C.S.D. COMMENTS

PREPARED FOR:
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P&Z FILE # 3101.02



PERSIMMON POINTE MARKET
SEWER PROFILES

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DRAWN BY:	DATE:	CHECKED BY:	DATE:	JOB NUMBER:	SHEET:
KAN	09/12/03	LJM	09/12/03	6751	C8