

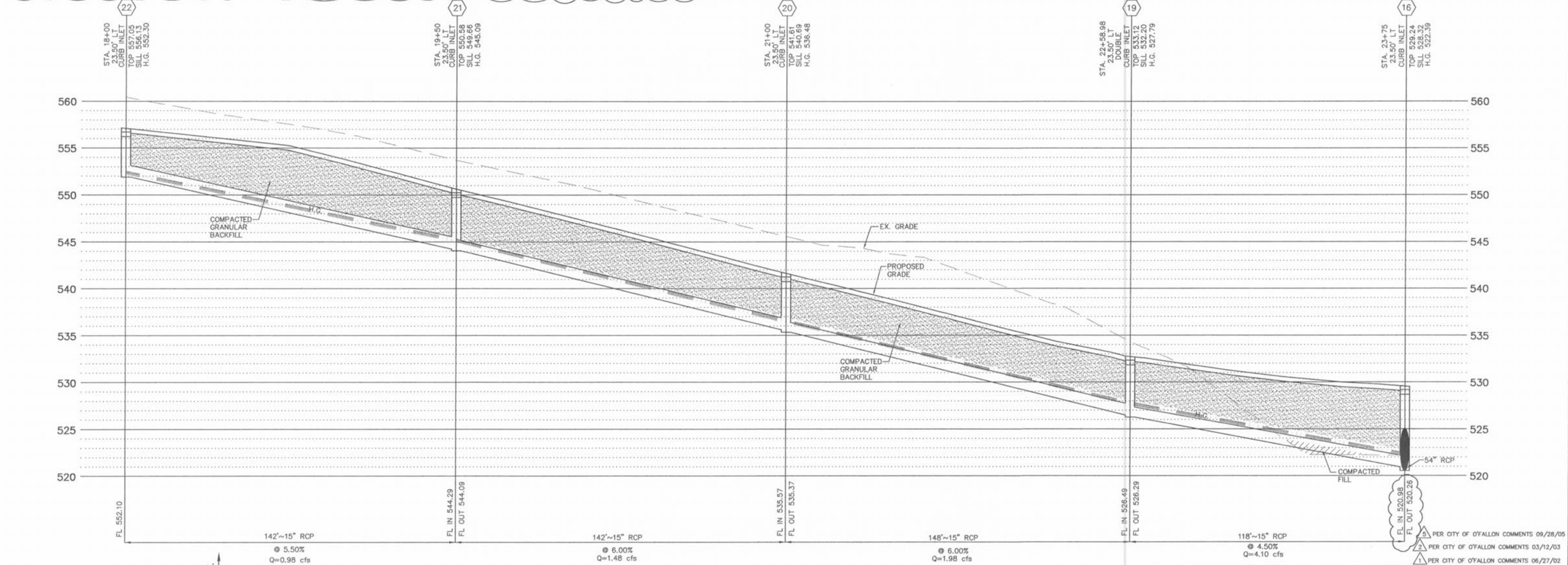
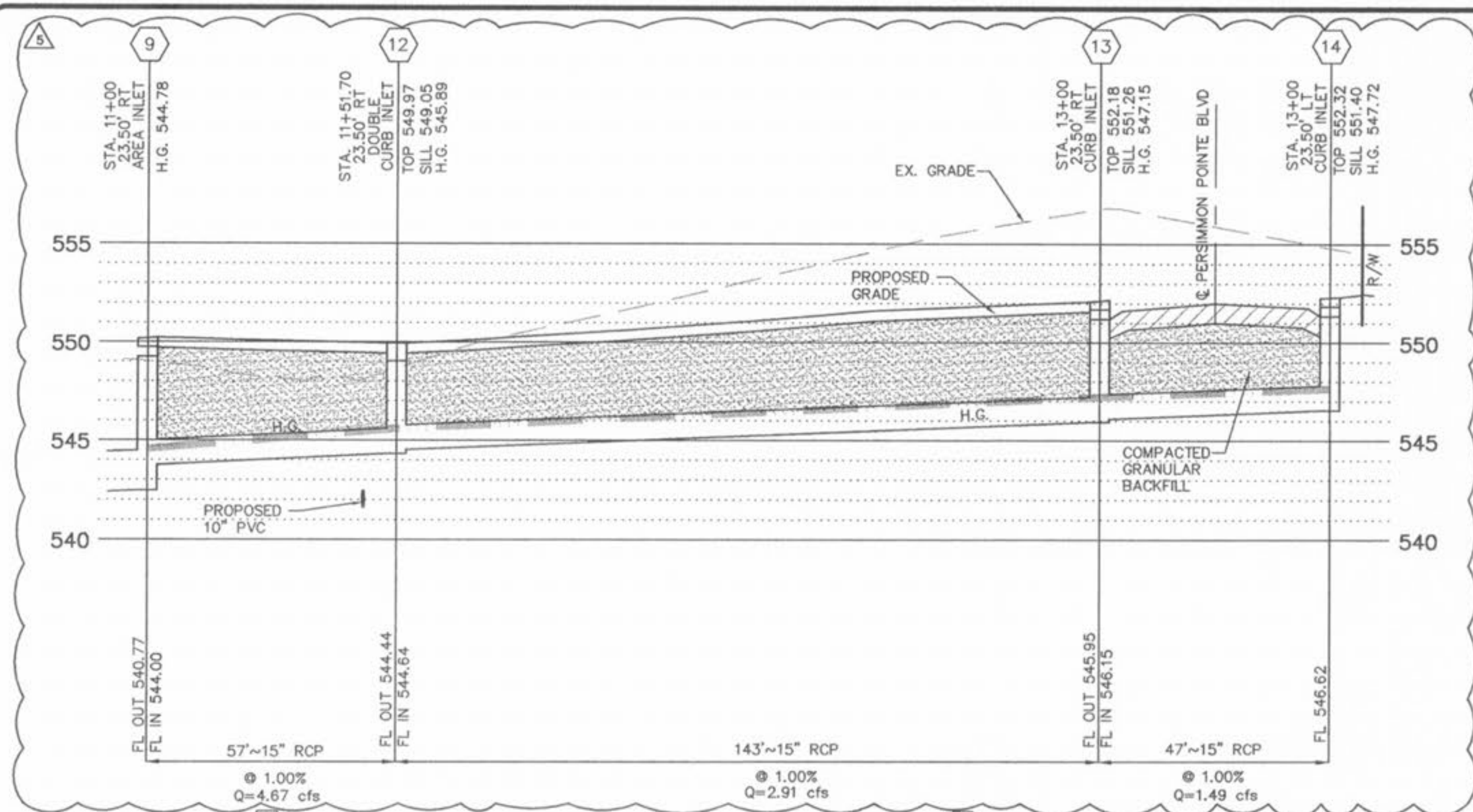
J.R. GRIMES CONSULTING ENGINEERS, INC.

PERSIMMON POINTE BLVD

CALC. BY: J. WHISLER  
DATE: 4/18/2002  
REVISED: 9/28/2005

VER. 2.0

STRUCTURE	UPR	LOWER	FLOWLINE LENGTH FT.	GRADE FT. / FT.	PIPE SIZE	"n"	Q c.f.s.	TOTAL Q	V ft/s	Vh ft	PIPE LOSSES (ft.)			STRUCTURE LOSSES (ft.)			HYD. ELEV.		HYD. GRADE ft. / ft.	LOWEST OPENING	FREEBOARD	PIPE CAPACITY	Q/CAP.	DEPTH IN PIPE	FULL FLOW VELOCITY ft/s	GIVEN LOWER HYD. ELEV.
											FRICT. LOSS	CURVE LOSS	TOTAL PIPE LOSSES	JUNC. LOSS	BEND LOSS	TOTAL STRUC. LOSSES	UPPER	LOWER								
HYDRAULIC DATA 15 YEAR STORM																										
2	1	568.35	568.00	35	0.0100	15	0.013	1.07	2.47	4.90	0.37	0.30	0.00	0.30	0.31	0.15	0.46	569.34	568.53	0.0087	571.83	2.49	6.46	0.38	0.53	5.27
4	3	569.02	568.55	47	0.0100	15	0.013	1.40	1.40	4.08	0.26	0.28	0.00	0.28	0.00	0.00	0.00	569.62	569.34	0.0060	571.83	2.21	6.46	0.22	0.38	5.27
5	4	556.80	544.00	128	0.1000	36	0.013	29.68	31.01	20.75	6.68	6.19	0.00	6.19	0.00	0.00	0.00	557.55	544.75	0.0484	570.00	12.45	210.92	0.15	0.75	29.85
6	5	561.50	560.87	21	0.0300	15	0.013	1.33	1.33	5.75	0.51	0.25	0.00	0.25	0.00	0.00	0.00	561.76	561.13	0.0119	566.67	4.91	11.19	0.12	0.26	9.12
8	7	539.38	539.00	38	0.0100	48	0.013	0.00	64.95	4.94	0.38	0.07	0.00	0.07	0.11	0.11	0.23	541.41	540.80	0.0019	552.00	10.59	143.64	0.45	1.80	5.17
9	8	540.05	539.58	47	0.0100	48	0.013	2.18	64.95	4.94	0.38	0.09	0.00	0.09	0.12	0.12	0.23	542.08	541.41	0.0019	549.47	7.39	143.64	0.45	1.80	5.17
10	9	540.77	540.25	52	0.0100	48	0.013	58.10	58.10	4.35	0.29	0.08	0.00	0.08	0.00	0.00	0.00	542.53	542.08	0.0014	543.20	0.67	143.64	0.40	1.76	4.83
12	9	544.32	543.75	57	0.0100	15	0.013	1.76	4.67	5.74	0.51	0.68	0.00	0.68	0.42	0.04	0.46	545.56	544.53	0.0119	549.05	3.49	6.46	0.72	0.78	5.27
13	12	545.95	544.52	143	0.0100	15	0.013	1.42	2.91	5.03	0.39	1.31	0.00	1.31	0.44	0.19	0.63	547.14	545.56	0.0091	551.28	4.14	6.46	0.45	0.56	5.27
14	13	546.82	546.15	47	0.0100	15	0.013	1.49	1.49	4.21	0.28	0.30	0.00	0.30	0.25	0.00	0.25	547.70	547.14	0.0064	551.40	3.70	6.46	0.23	0.39	5.27
16	15	520.26	520.00	52	0.0050	54	0.013	0.86	56.07	8.22	1.05	0.23	0.00	0.23	0.15	0.00	0.15	522.39	521.98	0.0044	528.32	5.93	139.05	0.40	1.98	8.75
17	16	520.70	520.46	47	0.0051	54	0.013	0.13	51.31	8.09	1.02	0.20	0.00	0.20	0.12	0.00	0.12	522.69	522.39	0.0043	528.32	5.63	140.52	0.37	1.87	8.84
18	17	521.13	520.90	46	0.0050	54	0.013	48.21	48.21	7.87	0.96	0.19	0.00	0.19	0.00	0.00	0.00	522.93	522.70	0.0041	526.00	3.07	139.05	0.35	1.80	8.75
19	16	526.29	520.98	118	0.0450	15	0.013	2.12	4.10	9.55	1.42	3.89	0.00	3.89	0.93	0.13	1.05	527.79	522.39	0.0329	532.20	4.41	13.70	0.30	0.45	11.17
20	19	535.37	526.49	148	0.0600	15	0.013	0.50	1.98	8.58	1.14	3.93	0.00	3.93	0.60	0.22	0.82	536.48	527.79	0.0266	540.69	4.21	15.82	0.13	0.29	12.90
21	20	544.09	535.57	142	0.0600	15	0.013	0.50	1.48	7.80	0.95	3.12	0.00	3.12	0.59	0.16	0.75	545.09	536.48	0.0220	549.66	4.57	15.82	0.09	0.25	12.90
22	21	552.10	544.29	142	0.0550	15	0.013	0.98	0.98	6.67	0.69	2.28	0.00	2.28	0.00	0.00	0.00	552.30	545.09	0.0161	556.13	3.83	15.15	0.06	0.20	12.35
23	17	522.87	521.39	148	0.0100	15	0.013	1.68	2.97	5.03	0.39	1.35	0.00	1.35	0.30	0.03	0.32	524.36	522.69	0.0091	526.88	2.52	6.46	0.46	0.56	5.27
24	23	523.77	523.07	70	0.0100	15	0.013	1.29	1.29	3.98	0.25	0.40	0.00	0.40	0.00	0.00	0.00	524.76	524.36	0.0057	527.61	2.85	6.46	0.20	0.36	5.27
25A	25	520.18	502.00	300	0.0606	15	0.013	0.00	1.88	8.17	1.04	7.22	0.00	7.22	0.00	0.00	0.00	520.44	502.26	0.0241	525.75	5.31	15.90	0.12	0.26	12.96
26	25A	532.50	520.38	200	0.0606	15	0.013	1.88	1.88	8.17	1.04	4.82	0.00	4.82	0.00	0.00	0.00	532.76	520.64	0.0241	537.00	4.24	15.90	0.12	0.26	12.96



PREPARED FOR:  
HENNESSEY DEVELOPMENT  
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ST. LOUIS, MO. 63124  
PH. (314) 991-1248  
FAX (314) 991-0964

CITY OF O'FALLON FILE NO.  
31.01.01

NOTE: ALL CURB INLET TOP TO HAVE A 2% CROSS SLOPE AND A LONGITUDINAL SLOPE TO MATCH THE CENTERLINE GRADE OF THE ROAD



**CRUSHER ROAD**  
**STORM SEWER PROFILES**

**J. R. GRIMES**  
**CONSULTING ENGINEERS, INC.**

12300 OLD TESSON ROAD  
SUITE 3000  
ST. LOUIS, MO. 63128  
PH. (314) 849-6100  
FAX (314) 849-6010

DRAWN BY: JLW	DATE: 11/07/01	CHECKED BY: JRG	DATE: 11/07/01	JOB NUMBER: 675E	SHEET: C10
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