15 Year-20 Minute Storm Hydraulic Calculations (Rev. 2)

LineNo.	LineID	Pipe Length (ft)	Pipe Size (in)	Invert Down (ft)	Invert Up (ft)	Slope (%)	n Value	Top El Down (ft)	Top El Up (ft)	HGL (Down) (ft)	HGL (Up) (ft)	Juntion Loss	Velocity Average (ft/s)	Deflec. Angle (Deg)	Energy Loss (ft)	Known Q (cfs)	Flow Rate (cfs)	Minor Loss (ft)	Capacity (Full) (cfs)	Free-board (ft)
1	FE 01 to OS 03	68	30	492.00	493.02	1.50	0.013	494.50	499.90	494.27	495.29	1.00	10.22	-9.00	0.81	47.89	47.89	1.62	50.23	4.61
2	FE 04 to MH 05	66	30	498.00	498.66	1.00	0.013	500.50	505.01	499.84	500.50	0.75	7.83	51.40	0.45	0.00	30.30	0.71	41.01	4.51
3	MH 05 to 2CI 06	132	30	498.66	504.65	4.54	0.013	505.01	511.59	501.21	506.44	1.50	6.75	-34.70	0.76	3.22	28.77	1.36	87.36	5.15
4	2CI 06 to MH 07	182	24	504.65	506.60	1.07	0.013	511.59	515.81	507.80	508.88	0.15	5.54	86.30	1.08	0.00	17.39	0.07	23.41	6.93
5	MH 07 to CI 08	78	24	506.60	507.43	1.06	0.013	515.81	516.66	508.95	509.38	0.70	5.55	-9.10	0.44	1.18	17.39	0.34	23.33	7.28
6	CI 08 to MH 09	46	24	507.43	507.93	1.09	0.013	516.66	518.44	509.72	509.93	1.00	5.16	-14.60	0.23	0.00	16.21	0.41	23.58	8.51
7	MH 09 to MH 10	168	24	507.93	509.73	1.07	0.013	518.44	521.80	510.34	510.98	1.00	5.02	-10.50	0.76	0.00	12.53	0.57	23.41	10.82
8	MH 10 to CI 11	164	18	513.51	519.37	3.57	0.013	521.80	524.58	514.20	520.49	1.50	8.45	-91.10	3.58	1.12	8.63	0.87	19.85	4.09
9	CI 11 to CI 12	208	15	519.37	526.77	3.56	0.013	524.58	531.98	521.36	527.78	1.50	5.61	0.00	2.06	0.65	6.39	0.84	12.18	4.20
10	CI 12 to MH 13	52	15	526.77	527.72	1.83	0.013	531.98	535.44	528.62	528.92	1.00	4.18	0.00	0.30	0.00	5.09	0.28	8.73	6.52
11	MH 13 to AI 14	132	12	527.72	530.12	1.82	0.013	535.44	534.62	529.19	530.74	1.50	3.42	90.00	0.71	0.71	2.11	0.40	4.80	3.88
12	AI 14 to AI 15	156	12	530.12	533.24	2.00	0.013	534.62	540.71	531.14	533.74	0.50	2.67	-90.00	0.60	0.72	1.40	0.10	5.04	6.97
13	AI 15 to AI 16	190	12	536.61	543.47	3.61	0.013	540.71	547.90	536.83	543.82	1.00	4.13	-3.30	3.86	0.68	0.68	0.12	6.77	4.08
14	MH 13 to CI 17	65	12	530.93	532.88	3.00	0.013	535.44	537.84	531.42	533.61	1.50	6.29	0.00	1.25	0.56	2.98	0.55	6.17	4.23
15	CI 17 to CI 18A	36	12	532.88	533.59	1.97	0.013	537.84	537.84	534.16	534.25	1.50	3.73	-90.00	0.22	0.46	2.42	0.45	5.00	3.59
16	CI 18A to CI 18B	91	12	533.59	537.90	4.74	0.013	537.84	542.31	534.70	538.49	1.25	3.26	90.00	0.45	0.63	1.96	0.32	7.75	3.82
17	CI 18B to CI 18C	37	12	537.90	538.63	1.97	0.013	542.31	542.70	538.81	539.12	1.00	2.63	75.00	0.13	1.33	1.33	0.19	5.00	3.58
18	CI 12 to CI 19	36	12	526.77	527.48	1.97	0.013	531.98	531.98	528.62	528.63	1.00	0.83	-90.00	0.01	0.65	0.65	0.01	5.00	3.35
19	CI 11 to CI 20	36	12	519.37	520.08	1.97	0.013	524.58	524.58	521.36	521.39	1.00	1.43	-90.00	0.04	1.12	1.12	0.03	5.00	3.19
20	MH 10 to CI 21	39	18	509.73	510.18	1.15	0.013	521.80	521.51	511.55	511.60	1.50	2.23	0.70	0.05	0.29	3.90	0.12	11.28	9.91
21	CI 21 to CI 22	36	18	510.18	510.59	1.14	0.013	521.51	521.51	511.72	511.73	1.50	2.27	-91.90	0.05	0.68	3.61	0.15	11.21	9.78
22	CI 22 to MH 23	71	15	510.59	511.30	1.00	0.013	521.51	522.95	511.88	511.99	0.85	3.31	78.10	0.29	0.00	2.93	0.24	6.46	10.96
23	MH 23 to AI 24	118	15	511.30	512.48	1.00	0.013	522.95	523.29	512.22	513.17	0.50	3.63	-66.30	0.51	0.13	2.93	0.14	6.46	10.12
24	AI 24 to 2AI 25	44	15	512.48	512.92	1.00	0.013	523.29	517.75	513.31	513.59	1.00	3.72	8.30	0.20	2.80	2.80	0.27	6.46	4.16
25	MH 09 to CI 26	35	15	509.87	510.57	2.00	0.013	518.44	517.50	510.42	511.34	0.50	5.83	-101.30	0.46	1.69	3.68	0.17	9.13	6.16
26	CI 26 to AI 27	157	12	510.57	513.70	1.99	0.013	517.50	518.20	511.51	514.30	0.50	3.33	-0.40	0.76	1.04	1.99	0.13	5.03	3.90
27	AI 27 to AI 28	176	12	513.70	520.47	3.85	0.013	518.20	524.97	514.43	520.88	1.00	2.33	0.00	0.57	0.95	0.95	0.15	6.98	4.09
28	2CI 06 to 2CI 29	35	24	504.65	505.15	1.43	0.013	511.59	511.59	507.80	507.85	0.50	2.60	-3.30	0.05	2.67	8.16	0.05	27.03	3.74
29	2CI 29 to AI 30	125	24	505.15	506.92	1.42	0.013	511.59	511.58	507.90	507.94	1.50	2.57	10.00	0.17	1.87	5.49	0.27	26.91	3.64
30	AI 30 to AI 31	136	12	506.92	515.77	6.51	0.013	511.58	523.23	508.21	516.35	1.10	3.17	-48.20	0.65	0.85	1.87	0.27	9.08	6.88
31	AI 31 to AI 32	203	12	515.77	528.98	6.51	0.013	523.23	534.52	516.62	529.41	1.00	2.31	41.60	0.65	1.02	1.02	0.16	9.08	5.11
32	AI 30 to AI 33	18	12	506.92	507.27	1.94	0.013	511.58	511.58	508.21	508.25	1.00	2.23	-100.00	0.04	1.75	1.75	0.08	4.97	3.33
33	MH 05 to AI 34	68	12	498.66	500.10	2.12	0.013	505.01	505.04	501.21	501.34	0.50	1.95	52.50	0.13	0.83	1.53	0.03	5.18	3.70
34	AI 34 to MH 35	170	12	500.10	503.70	2.12	0.013	505.04	509.00	501.37	504.05	0.45	1.85	-2.20	0.48	0.00	0.70	0.06	5.18	4.95
35	MH 35 to AI 36	68	12	503.70	505.14	2.12	0.013	509.00	509.64	504.11	505.49	1.00	2.56	-18.50	0.29	0.70	0.70	0.12	5.18	4.15
36	FE 37 to AI 38	166	24	498.00	506.65	5.21	0.013	500.00	514.15	499.52	507.90	1.50	5.43	-0.50	0.78	1.00	12.40	0.84	51.63	6.25
37	AI 38 to MH 39	105	24	506.65	508.75	2.00	0.013	514.15	518.10	508.74	509.95	0.45	4.72	89.20	0.43	0.00	11.40	0.24	31.99	8.15
38	MH 39 to CI 40	28	18	508.75	509.31	2.00	0.013	518.10	516.72	510.18	510.60	0.70	6.80	-11.70	0.30	1.25	11.40	0.54	14.85	6.12
39	CI 40 to CI 41	36	18	509.31	510.02	1.97	0.013	516.72	516.72	511.14	511.43	1.50	5.82	14.00	0.31	0.91	10.15	0.81	14.75	5.29
40	CI 41 to CI 42A	152	18	510.02	518.00	5.25	0.013	516.72	523.73	512.24	519.16	1.50	5.76	-79.30	1.25	0.50	9.24	0.93	24.06	4.57
41	CI 42A to CI 42B	124	15	518.00	524.65	5.36	0.013	523.73	531.24	520.09	525.73	1.50	6.19	5.20	1.51	0.50	7.26	0.97	14.95	5.51
42	CI 42B to CI 43A	108	15	524.65	530.42	5.34	0.013	531.24	537.77	526.70	531.42	1.50	5.52	4.00	1.04	0.50	6.26	0.82	14.93	6.35
43	CI 43A to CI 43B	100	12	530.42	538.73	8.31	0.013	537.77	543.69	532.24	539.61	1.50	5.75	3.50	1.42	0.64	4.35	0.83	10.27	4.08
44	CI 43B to CI 44	203	12	538.73	543.87	2.53	0.013	543.69	549.06	540.43	544.61	1.25	4.36	4.10	1.65	1.24	3.02	0.46	5.67	4.45
45	CI 44 to CI 45	37	12	543.87	544.60	1.97	0.013	549.06	549.10	545.07	545.17	1.00	3.08	-74.30	0.17	1.78	1.78	0.23	5.00	3.93
46	CI 43B to CI 43C	35	12	538.73	539.44	2.03	0.013	543.69	543.69	540.43	540.44	1.00	0.88	-88.20	0.01	0.69	0.69	0.01	5.07	3.25
47	CI 43A to CI 46	36	12	530.42	530.77	0.97	0.013	537.77	537.77	532.24	532.30	0.50	1.80	-88.20	0.06	0.50	1.41	0.03	3.51	5.47
48	CI 46 to AI 47	138	12	530.77	532.15	1.00	0.013	537.77	536.15	532.33	532.58	1.00	2.00	0.00	0.36	0.91	0.91	0.13	3.56	3.57
49	CI 42B to CI 42C	36	12	526.73	527.45	2.00	0.013	531.24	531.70	526.94	527.75	1.00	3.30	-75.70	0.45	0.50	0.50	0.10	5.04	3.95
50	CI 42A to MH 48	34	12	518.00	518.35	1.03	0.013	523.73	524.54	520.09	520.14	1.00	1.88	-87.00	0.06	0.00	1.48	0.06	3.61	4.40
51	MH 48 to CI 49	32	12	518.35	518.67	1.00	0.013	524.54	525.64	520.20	520.26	1.50	1.88	88.20	0.06	0.50	1.48	0.08	3.56	5.38
52	CI 49 to AI 50	132	12	518.67	519.99	1.00	0.013	525.64	523.99	520.34	520.50	1.00	1.83	-87.10	0.23	0.98	0.98	0.09	3.56	3.49

200 Year-20 Minute Storm Hydraulic Calculations (Rev. 2)

LineNo.	LineID	Pipe Length (ft)	Pipe Size (in)	Invert Down (ft)	Invert Up (ft)	Slope (%)	n Value	Top El Down (ft)	Top El Up (ft)	HGL (Down) (ft)	HGL (Up) (ft)	Juntion Loss	Velocity Average (ft/s)	Deflec. Angle (Deg)	Energy Loss (ft)	Known Q (cfs)	Flow Rate (cfs)	Minor Loss (ft)	Capacity (Full) (cfs)	Free-board (ft)
1	FE 01 to OS 03	68	30	492.00	493.02	1.50	0.013	494.50	499.90	494.44	496.32	1.00	14.19	-9.00	1.84	69.44	69.44	3.11	50.23	3.58
2	FE 04 to MH 05	66	30	498.00	498.66	1.00	0.013	500.50	505.01	500.93	501.69	0.75	8.95	51.40	0.76	0.00	43.93	0.93	41.01	3.32
3	MH 05 to 2CI 06	132	30	498.66	504.65	4.54	0.013	505.01	511.59	502.62	506.82	1.50	8.86	-34.70	1.31	4.67	41.71	1.98	87.36	4.77
4	2CI 06 to MH 07	182	24	504.65	506.60	1.07	0.013	511.59	515.81	508.80	511.06	0.15	8.03	86.30	2.26	0.00	25.21	0.15	23.41	4.75
5	MH 07 to CI 08	78	24	506.60	507.43	1.06	0.013	515.81	516.66	511.21	512.18	0.70	8.03	-9.10	0.97	1.71	25.21	0.70	23.33	4.48
6	CI 08 to MH 09	46	24	507.43	507.93	1.09	0.013	516.66	518.44	512.89	513.38	1.00	7.48	-14.60	0.50	0.00	23.50	0.87	23.58	5.06
7	MH 09 to MH 10	168	24	507.93	509.73	1.07	0.013	518.44	521.80	514.25	515.34	1.00	5.78	-10.50	1.08	0.00	18.16	0.52	23.41	6.46
8	MH 10 to CI 11	164	18	513.51	519.37	3.57	0.013	521.80	524.58	515.86	520.71	1.50	7.29	-91.10	2.19	1.62	12.50	1.32	19.85	3.87
9	CI 11 to CI 12	208	15	519.37	526.77	3.56	0.013	524.58	531.98	522.02	527.94	1.50	7.66	0.00	3.99	0.94	9.26	1.41	12.18	4.04
10	CI 12 to MH 13	52	15	526.77	527.72	1.83	0.013	531.98	535.44	529.34	530.02	1.00	6.01	0.00	0.68	0.00	7.38	0.56	8.73	5.42
11	MH 13 to AI 14	132	12	527.72	530.12	1.82	0.013	535.44	534.62	530.59	531.56	1.50	3.90	90.00	0.98	1.03	3.06	0.35	4.80	3.06
12	AI 14 to AI 15	156	12	530.12	533.24	2.00	0.013	534.62	540.71	531.92	533.84	0.50	3.34	-90.00	0.80	1.04	2.03	0.13	5.04	6.87
13	AI 15 to AI 16	190	12	536.61	543.47	3.61	0.013	540.71	547.90	536.87	543.89	1.00	4.62	-3.30	3.89	0.99	0.99	0.15	6.77	4.01
14	MH 13 to CI 17	65	12	530.93	532.88	3.00	0.013	535.44	537.84	531.55	533.76	1.50	7.20	0.00	1.40	0.81	4.32	0.82	6.17	4.08
15	CI 17 to CI 18A	36	12	532.88	533.59	1.97	0.013	537.84	537.84	534.57	534.92	1.50	4.47	-90.00	0.35	0.67	3.51	0.47	5.00	2.92
16	CI 18A to CI 18B	91	12	533.59	537.90	4.74	0.013	537.84	542.31	535.39	538.61	1.25	4.17	90.00	0.68	0.91	2.84	0.43	7.75	3.70
17	CI 18B to CI 18C	37	12	537.90	538.63	1.97	0.013	542.31	542.70	539.05	539.22	1.00	3.23	75.00	0.18	1.93	1.93	0.25	5.00	3.48
18	CI 12 to CI 19	36	12	526.77	527.48	1.97	0.013	531.98	531.98	529.34	529.37	1.00	1.20	-90.00	0.03	0.94	0.94	0.02	5.00	2.61
19	CI 11 to CI 20	36	12	519.37	520.08	1.97	0.013	524.58	524.58	522.02	522.10	1.00	2.06	-90.00	0.08	1.62	1.62	0.07	5.00	2.48
20	MH 10 to CI 21	39	18	509.73	510.18	1.15	0.013	521.80	521.51	515.86	515.97	1.50	3.20	0.70	0.11	0.42	5.66	0.24	11.28	5.54
21	CI 21 to CI 22	36	18	510.18	510.59	1.14	0.013	521.51	521.51	516.21	516.30	1.50	2.97	-91.90	0.09	0.99	5.24	0.21	11.21	5.21
22	CI 22 to MH 23	71	15	510.59	511.30	1.00	0.013	521.51	522.95	516.50	516.81	0.85	3.46	78.10	0.31	0.00	4.25	0.16	6.46	6.14
23	MH 23 to AI 24	118	15	511.30	512.48	1.00	0.013	522.95	523.29	516.97	517.48	0.50	3.46	-66.30	0.51	0.19	4.25	0.09	6.46	5.81
24	AI 24 to 2AI 25	44	15	512.48	512.92	1.00	0.013	523.29	517.75	517.57	517.75	1.00	3.31	8.30	0.17	4.06	4.06	0.17	6.46	0.00
25	MH 09 to CI 26	35	15	509.87	510.57	2.00	0.013	518.44	517.50	514.25	514.49	0.50	4.35	-101.30	0.24	2.45	5.34	0.15	9.13	3.01
26	CI 26 to AI 27	157	12	510.57	513.70	1.99	0.013	517.50	518.20	514.64	515.67	0.50	3.68	-0.40	1.03	1.51	2.89	0.11	5.03	2.53
27	AI 27 to AI 28	176	12	513.70	520.47	3.85	0.013	518.20	524.97	515.78	520.97	1.00	2.64	0.00	0.67	1.38	1.38	0.19	6.98	4.00
28	2CI 06 to 2CI 29	35	24	504.65	505.15	1.43	0.013	511.59	511.59	508.80	508.90	0.50	3.77	-3.30	0.10	3.87	11.83	0.11	27.03	2.69
29	2CI 29 to AI 30	125	24	505.15	506.92	1.42	0.013	511.59	511.58	509.01	509.16	1.50	2.53	10.00	0.16	2.71	7.96	0.15	26.91	2.42
30	AI 30 to AI 31	136	12	506.92	515.77	6.51	0.013	511.58	523.23	509.31	516.47	1.10	4.04	-48.20	0.96	1.23	2.71	0.37	9.08	6.76
31	AI 31 to AI 32	203	12	515.77	528.98	6.51	0.013	523.23	534.52	516.83	529.50	1.00	2.75	41.60	0.81	1.48	1.48	0.20	9.08	5.02
32	AI 30 to AI 33	18	12	506.92	507.27	1.94	0.013	511.58	511.58	509.31	509.40	1.00	3.23	-100.00	0.09	2.54	2.54	0.16	4.97	2.18
33	MH 05 to AI 34	68	12	498.66	500.10	2.12	0.013	505.01	505.04	502.62	502.89	0.50	2.83	52.50	0.26	1.20	2.22	0.06	5.18	2.15
34	AI 34 to MH 35	170	12	500.10	503.70	2.12	0.013	505.04	509.00	502.95	504.13	0.45	2.24	-2.20	0.55	0.00	1.02	0.07	5.18	4.87
35	MH 35 to AI 36	68	12	503.70	505.14	2.12	0.013	509.00	509.64	504.20	505.57	1.00	2.89	-18.50	0.30	1.02	1.02	0.16	5.18	4.07
36	FE 37 to AI 38	166	24	498.00	506.65	5.21	0.013	500.00	514.15	500.93	508.15	1.50	6.42	-0.50	1.16	1.45	18.01	1.18	51.63	6.00
37	AI 38 to MH 39	105	24	506.65	508.75	2.00	0.013	514.15	518.10	509.33	510.19	0.45	6.05	89.20	0.65	0.00	16.56	0.33	31.99	7.91
38	MH 39 to CI 40	28	18	508.75	509.31	2.00	0.013	518.10	516.72	510.52	511.21	0.70	9.37	-11.70	0.70	1.81	16.56	0.96	14.85	5.51
39	CI 40 to CI 41	36	18	509.31	510.02	1.97	0.013	516.72	516.72	512.17	512.88	1.50	8.35	14.00	0.71	1.32	14.75	1.62	14.75	3.84
40	CI 41 to CI 42A	152	18	510.02	518.00	5.25	0.013	516.72	523.73	514.51	519.37	1.50	7.78	-79.30	2.33	0.73	13.43	1.47	24.06	4.36
41	CI 42A to CI 42B	124	15	518.00	524.65	5.36	0.013	523.73	531.24	520.84	525.85	1.50	8.66	5.20	3.09	0.73	10.55	1.78	14.95	5.39
42	CI 42B to CI 43A	108	15	524.65	530.42	5.34	0.013	531.24	537.77	527.62	531.58	1.50	7.53	4.00	2.00	0.73	9.09	1.36	14.93	6.19
43	CI 43A to CI 43B	100	12	530.42	538.73	8.31	0.013	537.77	543.69	532.95	539.69	1.50	8.08	3.50	2.94	0.93	6.31	1.54	10.27	4.00
44	CI 43B to CI 44	203	12	538.73	543.87	2.53	0.013	543.69	549.06	541.23	544.75	1.25	5.78	4.10	2.92	1.80	4.38	0.70	5.67	4.31
45	CI 44 to CI 45	37	12	543.87	544.60	1.97	0.013	549.06	549.10	545.45	545.60	1.00	3.29	-74.30	0.19	2.58	2.58	0.17	5.00	3.50
46	CI 43B to CI 43C	35	12	538.73	539.44	2.03	0.013	543.69	543.69	541.23	541.26	1.00	1.27	-88.20	0.03	1.00	1.00	0.03	5.07	2.43
47	CI 43A to CI 46	36	12	530.42	530.77	0.97	0.013	537.77	537.77	532.95	533.06	0.50	2.61	-88.20	0.12	0.73	2.05	0.05	3.51	4.71
48	CI 46 to AI 47	138	12	530.77	532.15	1.00	0.013	537.77	536.15	533.12	533.31	1.00	1.68	0.00	0.19	1.32	1.32	0.04	3.56	2.84
49	CI 42B to CI 42C	36	12	526.73	527.45	2.00	0.013	531.24	531.70	527.62	527.81	1.00	1.91	-75.70	0.10	0.73	0.73	0.13	5.04	3.89
50	CI 42A to MH 48	34	12	518.00	518.35	1.03	0.013	523.73	524.54	520.84	520.96	1.00	2.74	-87.00	0.12	0.00	2.15	0.12	3.61	3.58
51	MH 48 to CI 49	32	12	518.35	518.67	1.00	0.013	524.54	525.64	521.08	521.20	1.50	2.74	88.20	0.12	0.73	2.15	0.17	3.56	4.44
52	CI 49 to AI 50	132	12	518.67	519.99	1.00	0.013	525.64	523.99	521.37	521.58	1.00	1.81	-87.10	0.21	1.42	1.42	0.05	3.56	2.41

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Authority #203

STATE OF MISSOURI
7/1/25
TIMOTHY JOHN MEYER
NUMBER E-24665
PROFESSIONAL ENGINEER
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

STORM SEWER
HYDAULIC CALCULATIONS

PARCEL ID: 2-0119-1766-00-0024.5
CITY OF O'FALLON
PERMIT No: RSP24-00001
PROJECT #23444

8265 MEXICO ROAD
O'FALLON, MO 63376

07-01-25

C15

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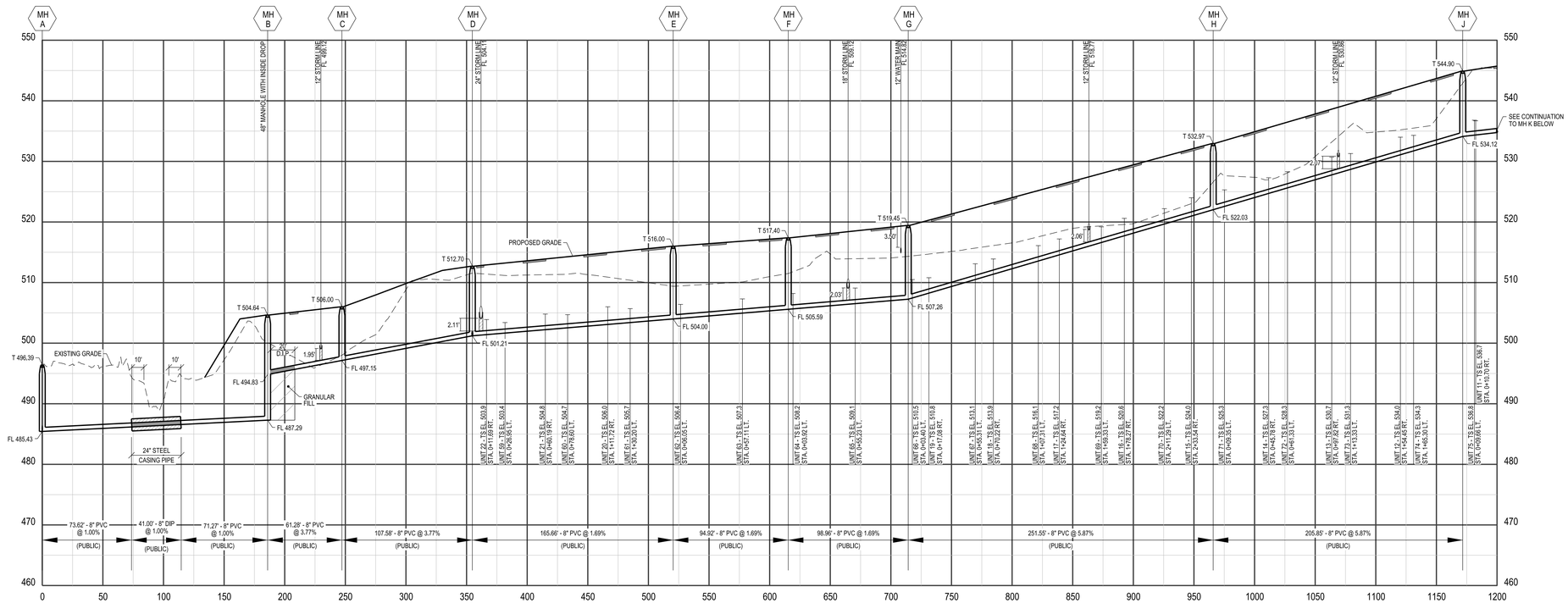
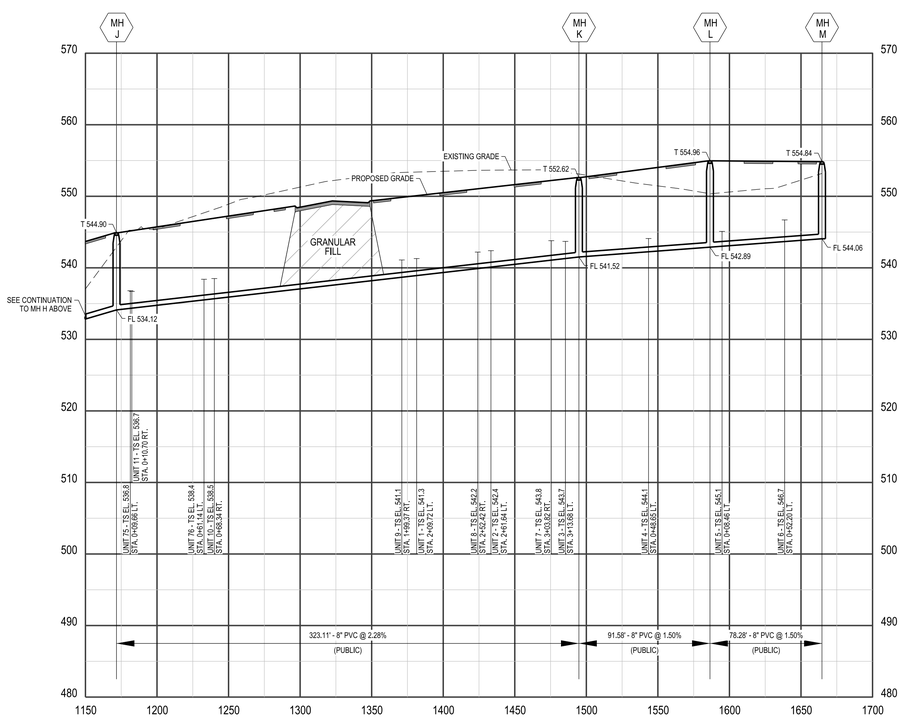


SANITARY PROFILE: MH A - MH M

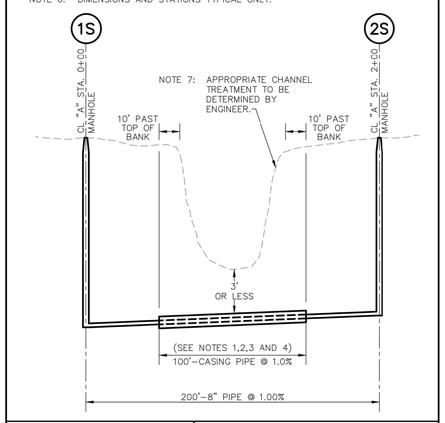
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'



SANITARY PROFILE: MH A - MH M

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'

NOTE 1: CASING PIPE, MINIMUM 24" DIA. OR MAX. CARRIER PIPE OD+2".
NOTE 2: STEEL CASING PIPE SHALL MEET THE REQUIREMENTS OF ASTM A-139, STANDARD SPECIFICATION FOR ELECTRIC-FUSION ARC WELDED STEEL PIPE (NPS-4 AND OVER), GRADE B.
NOTE 3: FACTORY MANUFACTURED CASING SPACERS AND END CAPS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
NOTE 4: NO CASING PIPE SHALL BE REQUIRED WHERE THERE IS MORE THAN 3' COVER UNLESS OTHERWISE DIRECTED BY PROJECT PLANS.
NOTE 5: DETAIL FOR OPEN CUT INSTALLATIONS ONLY. TRENCHLESS INSTALLATIONS SHALL COMPLY WITH APPLICABLE DISTRICT SPECIFICATIONS.
NOTE 6: DIMENSIONS AND STATIONS TYPICAL ONLY.



CREEK CROSSING	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. R.G.W. Ch. K.D.W.	2021	SHEET 66

GENERAL NOTES

1. PROVIDE GRANULAR BACKFILL TO ALL STORM SEWER, SANITARY SEWER, SANITARY LATERALS, WATER MAIN, AND/OR WATER SERVICE LINE TRENCHES THAT CROSS THE PAVEMENT, LIE WITHIN TEN (10) FEET OF THE EDGE OF PAVEMENT AND/OR THE 1:1 SHEAR PLANE OF THE ROAD.
2. WHEN A STORM SEWER CROSSES ABOVE A SANITARY SEWER PIPE, THE UPPER RCP SHALL BE CONCRETE CRADLED ACROSS THE FULL WIDTH OF THE SANITARY SEWER TRENCH. GRANULAR FILL SHALL BE PLACED IN THE TRENCH BETWEEN THE LOWER SANITARY SEWER PIPE AND THE UPPER STORM SEWER PIPE.
3. ALL SANITARY SEWER LATERALS SHALL BE CONSTRUCTED OF SCHEDULE 40 PVC WITH A MINIMUM SLOPE OF 2.0%.
4. ANY SANITARY MANHOLE BUILT WITHIN THE 100 YEAR FLOOD PLAIN LIMITS MUST HAVE LOCK-TYPE WATERTIGHT MANHOLE COVERS. (100 YEAR HWL: 493.56)

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STATE OF MISSOURI
7/1/25
TIMOTHY JOHN MEYER
NUMBER E-24665
PROFESSIONAL ENGINEER

TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

SANITARY PROFILES: SHEET 1

PARCEL ID: 2-0119-1789-00-N0024.5
CITY OF O'FALLON
PERMIT NO. RPSD-2025-0001

8265 MEXICO ROAD
O'FALLON, MO 63376

PROJECT #23444

07-01-25

C16

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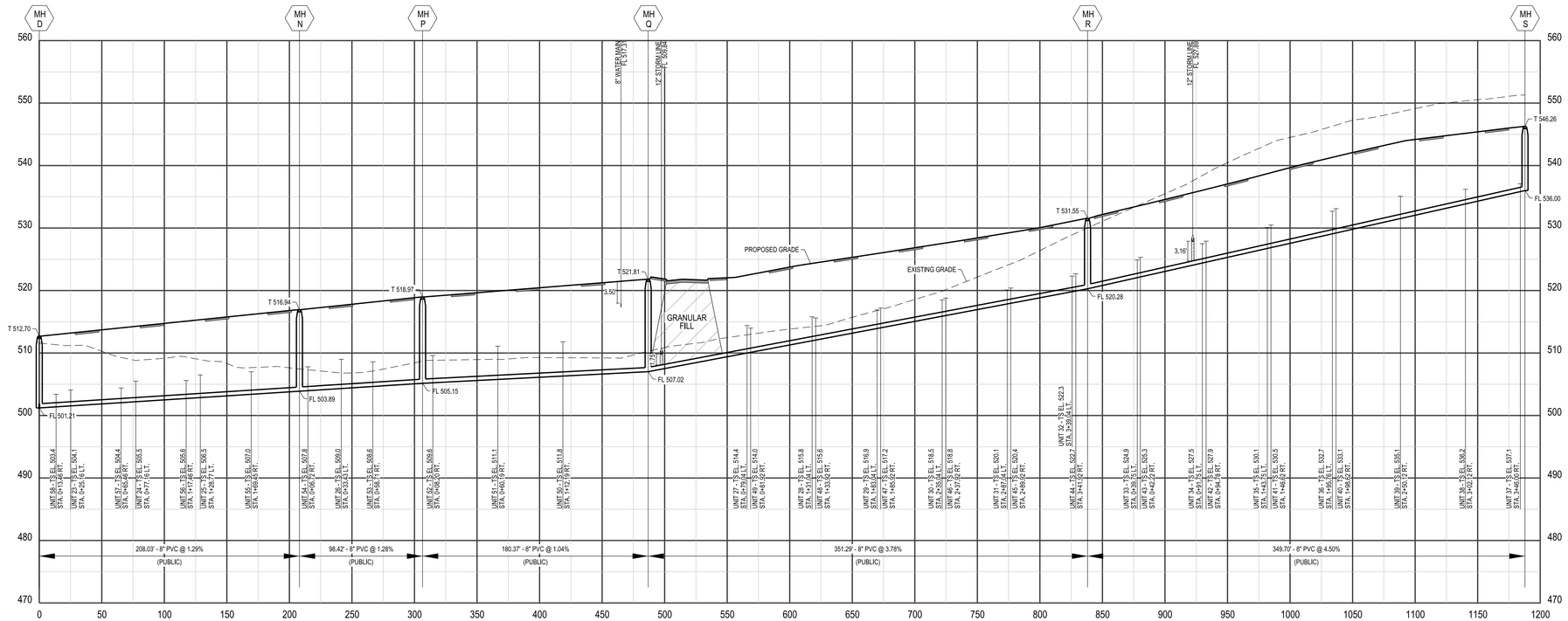

SANITARY PROFILE: MH D - MH S

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'

UNIT	TOP OF FOUNDATION	BASEMENT FLOOR ELEVATION	TAIL-STAKE ELEVATION	LATERAL STATION & DIRECTION	DOWNSTREAM MANHOLE	ADDRESS (O'FALLON, MO 63376)
1	552.31	543.31	541.3	2+09.72 LT.	MH J	71 STRAWBERRY FARMS CT.
2	553.35	544.35	542.4	2+61.64 LT.	MH J	73 STRAWBERRY FARMS CT.
3	554.71	545.71	543.7	3+13.68 LT.	MH J	75 STRAWBERRY FARMS CT.
4	555.61	546.61	544.1	0+48.65 LT.	MH K	77 STRAWBERRY FARMS CT.
5	556.60	547.60	545.1	0+08.46 LT.	MH L	79 STRAWBERRY FARMS CT.
6	558.19	549.19	546.7	0+52.20 LT.	MH L	81 STRAWBERRY FARMS CT.
7	554.77	545.77	543.8	3+03.82 RT.	MH J	76 STRAWBERRY FARMS CT.
8	553.15	544.15	542.2	2+52.42 RT.	MH J	74 STRAWBERRY FARMS CT.
9	552.10	543.10	541.1	1+99.37 RT.	MH J	72 STRAWBERRY FARMS CT.
10	549.46	540.46	538.5	0+68.34 RT.	MH J	374 STRAWBERRY GROVE DR.
11	547.73	538.73	536.7	0+10.70 RT.	MH J	372 STRAWBERRY GROVE DR.
12	545.00	536.00	534.0	1+54.45 RT.	MH H	370 STRAWBERRY GROVE DR.
13	541.65	532.65	530.7	0+97.82 RT.	MH H	368 STRAWBERRY GROVE DR.
14	538.30	529.30	527.3	0+45.78 RT.	MH H	366 STRAWBERRY GROVE DR.
15	534.95	525.95	524.0	2+33.54 RT.	MH G	364 STRAWBERRY GROVE DR.
16	531.60	522.60	520.6	1+78.27 RT.	MH G	362 STRAWBERRY GROVE DR.
17	528.24	519.24	517.2	1+24.64 RT.	MH G	360 STRAWBERRY GROVE DR.
18	524.89	515.89	513.9	0+70.22 RT.	MH G	358 STRAWBERRY GROVE DR.
19	521.83	512.83	510.8	0+17.08 RT.	MH G	356 STRAWBERRY GROVE DR.
20	517.00	508.00	506.0	1+11.72 RT.	MH D	334 STRAWBERRY GROVE DR.
21	515.80	506.80	504.8	0+60.19 RT.	MH D	332 STRAWBERRY GROVE DR.
22	514.90	505.90	503.9	0+11.69 RT.	MH D	330 STRAWBERRY GROVE DR.
23	515.10	506.10	504.1	0+25.16 LT.	MH D	326 STRAWBERRY GROVE DR.
24	516.48	507.48	505.5	0+77.16 LT.	MH D	324 STRAWBERRY GROVE DR.
25	517.50	508.50	506.5	1+28.77 LT.	MH D	322 STRAWBERRY GROVE DR.
26	520.03	511.03	509.0	0+33.43 LT.	MH N	316 STRAWBERRY GROVE DR.
27	525.40	516.40	514.4	0+79.04 LT.	MH Q	227 STRAWBERRY FARMS DR.
28	526.83	517.83	515.8	1+31.04 LT.	MH Q	225 STRAWBERRY FARMS DR.
29	528.42	519.42	516.9	1+83.04 LT.	MH Q	223 STRAWBERRY FARMS DR.
30	530.00	521.00	518.5	2+35.04 LT.	MH Q	221 STRAWBERRY FARMS DR.
31	531.64	522.64	520.1	2+87.04 LT.	MH Q	219 STRAWBERRY FARMS DR.
32	533.85	524.85	522.3	3+39.04 LT.	MH Q	217 STRAWBERRY FARMS DR.
33	536.45	527.45	524.9	0+39.75 LT	MH R	215 STRAWBERRY FARMS DR.
34	539.05	530.05	527.5	0+91.75 LT.	MH R	213 STRAWBERRY FARMS DR.
35	541.65	532.65	530.1	1+43.75 LT.	MH R	211 STRAWBERRY FARMS DR.
36	544.25	535.25	532.7	1+95.76 LT.	MH R	209 STRAWBERRY FARMS DR.
37	548.14	539.14	537.1	3+46.00 RT.	MH R	204 STRAWBERRY FARMS DR.
38	547.23	538.23	536.2	3+02.12 RT.	MH R	206 STRAWBERRY FARMS DR.

UNIT	TOP OF FOUNDATION	BASEMENT FLOOR ELEVATION	TAIL-STAKE ELEVATION	LATERAL STATION & DIRECTION	DOWNSTREAM MANHOLE	ADDRESS (O'FALLON, MO 63376)
39	546.09	537.09	535.1	2+50.12 RT.	MH R	208 STRAWBERRY FARMS DR.
40	544.06	535.06	533.1	1+98.62 RT.	MH R	210 STRAWBERRY FARMS DR.
41	541.46	532.46	530.5	1+46.62 RT.	MH R	212 STRAWBERRY FARMS DR.
42	538.86	529.86	527.9	0+94.78 RT.	MH R	214 STRAWBERRY FARMS DR.
43	536.26	527.26	525.3	0+42.22 RT.	MH R	216 STRAWBERRY FARMS DR.
44	533.66	524.66	522.7	3+41.92 RT.	MH Q	218 STRAWBERRY FARMS DR.
45	531.42	522.42	520.4	2+89.92 RT.	MH Q	220 STRAWBERRY FARMS DR.
46	529.77	520.77	518.8	2+37.92 RT.	MH Q	222 STRAWBERRY FARMS DR.
47	528.18	519.18	517.2	1+85.92 RT.	MH Q	224 STRAWBERRY FARMS DR.
48	526.59	517.59	515.6	1+33.92 RT.	MH Q	226 STRAWBERRY FARMS DR.
49	525.01	516.01	514.0	0+81.92 RT.	MH Q	228 STRAWBERRY FARMS DR.
50	523.28	514.28	511.8	1+12.19 RT.	MH P	305 STRAWBERRY GROVE DR.
51	522.56	513.56	511.1	0+60.19 RT.	MH P	307 STRAWBERRY GROVE DR.
52	521.12	512.12	509.6	0+08.20 RT.	MH P	309 STRAWBERRY GROVE DR.
53	520.14	511.14	508.6	0+58.71 RT.	MH N	313 STRAWBERRY GROVE DR.
54	519.30	510.30	507.8	0+06.72 RT.	MH N	317 STRAWBERRY GROVE DR.
55	518.51	509.51	507.0	1+69.45 RT.	MH D	321 STRAWBERRY GROVE DR.
56	517.07	508.07	505.6	1+17.46 RT.	MH D	323 STRAWBERRY GROVE DR.
57	515.90	506.90	504.4	0+65.46 RT.	MH D	325 STRAWBERRY GROVE DR.
58	514.86	505.86	503.4	0+13.46 RT.	MH D	327 STRAWBERRY GROVE DR.
59	514.86	505.86	503.4	0+26.95 LT.	MH D	331 STRAWBERRY GROVE DR.
60	516.23	507.23	504.7	0+78.60 LT.	MH D	333 STRAWBERRY GROVE DR.
61	517.17	508.17	505.7	1+30.20 LT.	MH D	337 STRAWBERRY GROVE DR.
62	517.91	508.91	506.4	0+06.05 LT.	MH E	341 STRAWBERRY GROVE DR.
63	518.82	509.82	507.3	0+57.11 LT.	MH E	345 STRAWBERRY GROVE DR.
64	519.65	510.65	508.2	0+03.92 LT.	MH F	349 STRAWBERRY GROVE DR.
65	520.06	511.06	509.1	0+55.23 LT.	MH F	353 STRAWBERRY GROVE DR.
66	521.49	512.49	510.5	0+03.40 LT.	MH G	355 STRAWBERRY GROVE DR.
67	524.12	515.12	513.1	0+55.31 LT.	MH G	357 STRAWBERRY GROVE DR.
68	527.14	518.14	516.1	1+07.31 LT.	MH G	359 STRAWBERRY GROVE DR.
69	530.18	521.18	519.2	1+59.33 LT.	MH G	361 STRAWBERRY GROVE DR.
70	533.21	524.21	522.2	2+11.29 LT.	MH G	363 STRAWBERRY GROVE DR.
71	536.25	527.25	525.3	0+09.35 LT.	MH H	365 STRAWBERRY GROVE DR.
72	539.28	530.28	528.3	0+61.33 LT.	MH H	367 STRAWBERRY GROVE DR.
73	542.28	533.28	531.3	1+13.33 LT.	MH H	369 STRAWBERRY GROVE DR.
74	545.32	536.32	534.3	1+65.30 LT.	MH H	371 STRAWBERRY GROVE DR.
75	547.79	538.79	536.8	0+09.66 LT.	MH J	373 STRAWBERRY GROVE DR.
76	549.39	540.39	538.4	0+61.14 LT.	MH J	375 STRAWBERRY GROVE DR.

GENERAL NOTES

1. PROVIDE GRANULAR BACKFILL TO ALL STORM SEWER, SANITARY SEWER, SANITARY LATERALS, WATER MAIN, AND/OR WATER SERVICE LINE TRENCHES THAT CROSS THE PAVEMENT, LIE WITHIN TEN (10) FEET OF THE EDGE OF PAVEMENT AND/OR THE 1:1 SHEAR PLANE OF THE ROAD.
2. WHEN A STORM SEWER CROSSES ABOVE A SANITARY SEWER PIPE, THE UPPER RCP SHALL BE CONCRETE CRADLED ACROSS THE FULL WIDTH OF THE SANITARY SEWER TRENCH. GRANULAR FILL SHALL BE PLACED IN THE TRENCH BETWEEN THE LOWER SANITARY SEWER PIPE AND THE UPPER STORM SEWER PIPE.
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STRAWBERRY FARMS

SANITARY PROFILES: SHEET 2

PARCEL ID: 2-0119-7816-00-0024.5
CITY OF O'FALLON
PERMIT NO. RSP22-00001

8265 MEXICO ROAD,
O'FALLON, MO 63376

PROJECT #23444

07-01-25

C17

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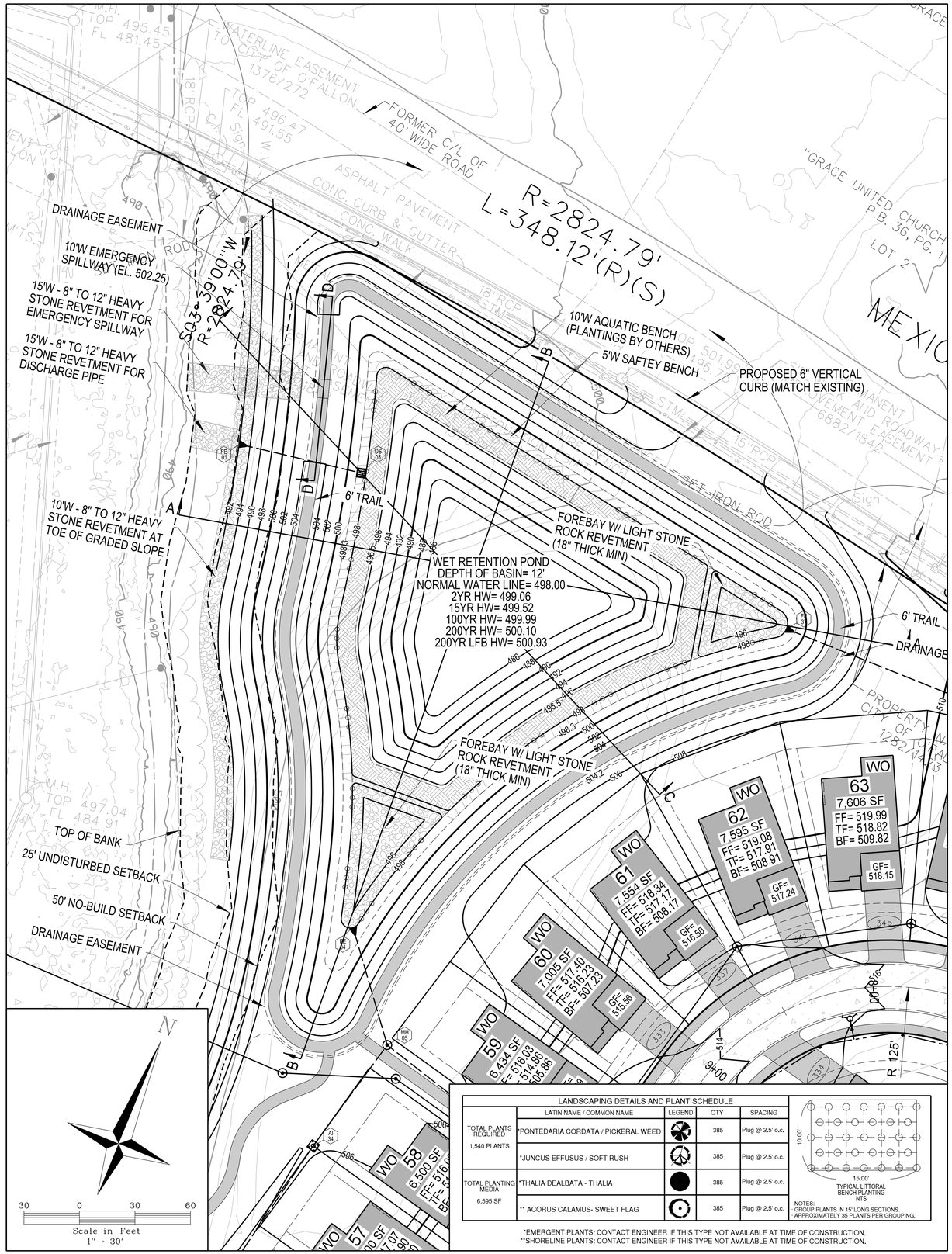
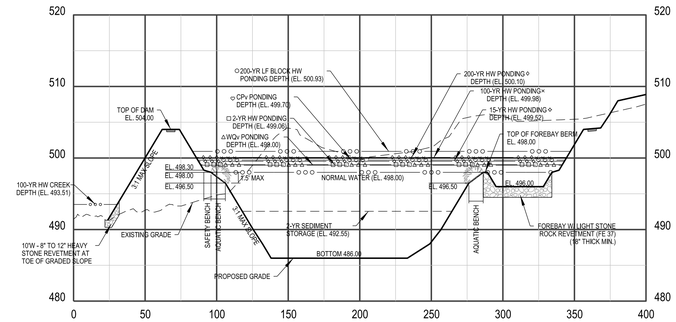


LANDSCAPING DETAILS AND PLANT SCHEDULE				
	LATIN NAME / COMMON NAME	LEGEND	QTY	SPACING
TOTAL PLANTS REQUIRED 1,540 PLANTS	*PONTEDARIA CORDATA / PICKERAL WEED		385	Plug @ 2.5' o.c.
	*JUNCUS EFFUSUS / SOFT RUSH		385	Plug @ 2.5' o.c.
TOTAL PLANTING MEDIA 6,595 SF	*THALIA DEALBATA - THALIA		385	Plug @ 2.5' o.c.
	** ACORUS CALAMUS- SWEET FLAG		385	Plug @ 2.5' o.c.

TYPICAL LITTORAL BENCH PLANTING
NTS

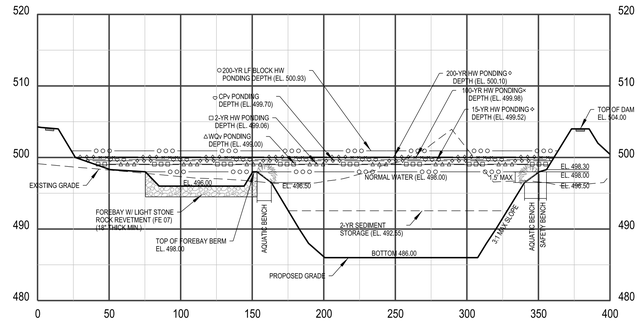
NOTES:
- GROUP PLANTS IN 15' LONG SECTIONS.
- APPROXIMATELY 35 PLANTS PER GROUPING.

*EMERGENT PLANTS: CONTACT ENGINEER IF THIS TYPE NOT AVAILABLE AT TIME OF CONSTRUCTION.
**SHORELINE PLANTS: CONTACT ENGINEER IF THIS TYPE NOT AVAILABLE AT TIME OF CONSTRUCTION.



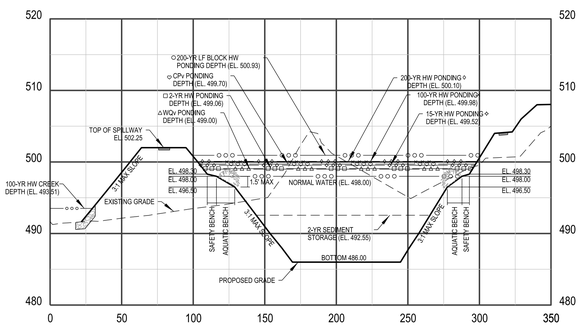
WET RETENTION POND: SECTION A-A

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=10'



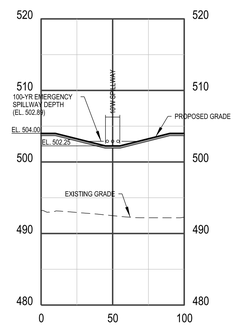
WET RETENTION POND: SECTION B-B

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=10'



WET RETENTION POND: SECTION C-C

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=10'



WET RETENTION POND: SECTION D-D

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=10'

GENERAL NOTES:

1. THE MINIMUM DEPTH OF THE RETENTION POND IS TO BE 10 FEET. ANY SEDIMENT ACCUMULATION WILL NEED TO BE REMOVED TO ENSURE THIS REQUIREMENT. THIS WILL BE DETERMINED WITH THE AS-BUILTS OF THE RETENTION BASIN.

Wet Retention Pond Design and As-built Verification Information Table

Basin ID	Design Overflow Sill Elev. (ft)*	As-built Overflow Sill Elev. (ft)*	Design Bypass/ Spill Point Elev. (ft)**	As-built Bypass/ Spill Point Elev. (ft)**	Required WQ Volume (ft^3)	Proposed WQ Volume (ft^3)	As-built WQ Volume (ft^3)	Required CP_v Volume (ft^3)	Proposed CP_v Volume (ft^3)	CP_v Provided (ft^3)
Wet Retention Pond (P-2 Wet Pond)	499.90		502.25		34,266	35,034 (El. 499.00)		61,976	62,529 (El. 499.70)	

* Overflow Sill Elevation = Maximum Water Quality Storage Elevation
** Bypass/Spill Point Elevation = Lowest adjacent elevation on the basin perimeter where overland flow would be directed.
As-built portion of table to be certified by a Professional Engineer or Professional Land Surveyor licensed in Missouri

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STATE OF MISSOURI
TIMOTHY JOHN MEYER
NUMBER E-24665
7/1/25
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

WET RETENTION POND PLAN & CROSS-SECTIONS

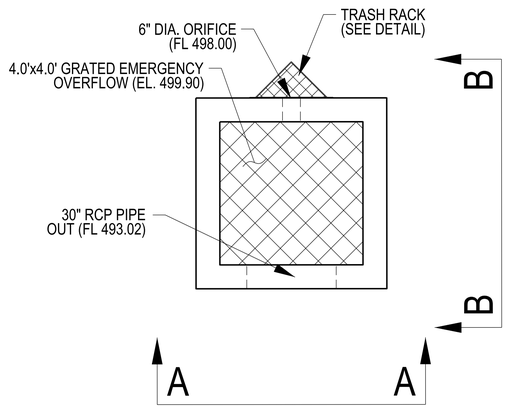
8265 MEXICO ROAD,
O'FALLON, MO 63376

PARCEL ID: 2-0119-1786-00-0024.5
CITY OF O'FALLON
PERMIT No. RSP24-0001
PROJECT #23444

07-01-25

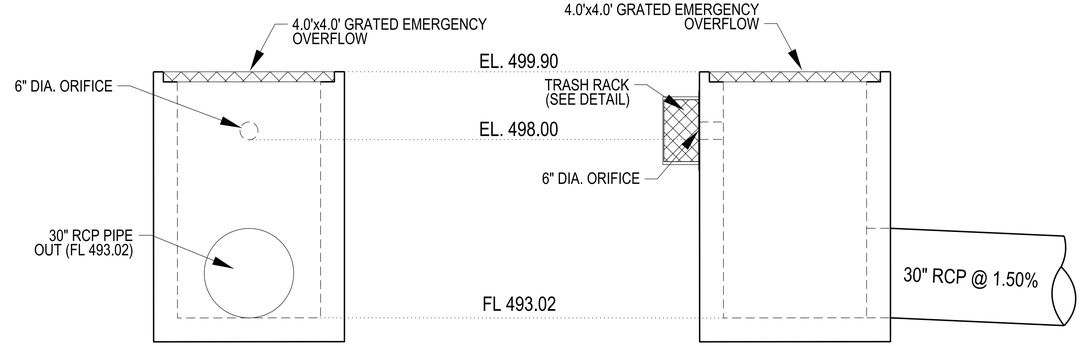
C18

H:\CAD\23400-23499\23444\Imp\Plans\Improvement Plans\23444 - C18 Wet Retention Pond Plan & Cross-Sections.dgn - Master Model 7/1/2025 10:40:01 AM Plotted by: ehermon Plot Scale: 50.000100 / in. Plot Driver: Volz15 PDF.pltcfg Pen Table: Volz15 Plot Full.tbl



OS 03 TOP VIEW

SCALE: 1" = 2'

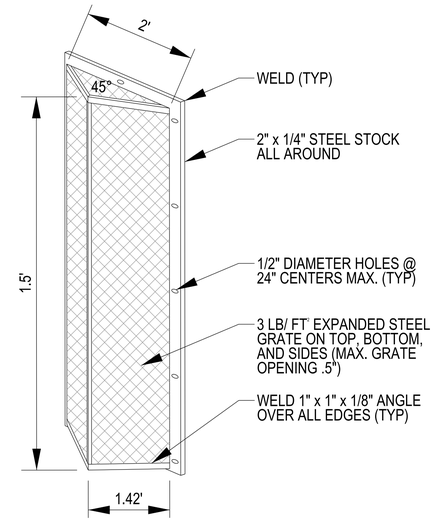


SECTION A-A

SCALE: 1" = 2'

SECTION B-B

SCALE: 1" = 2'



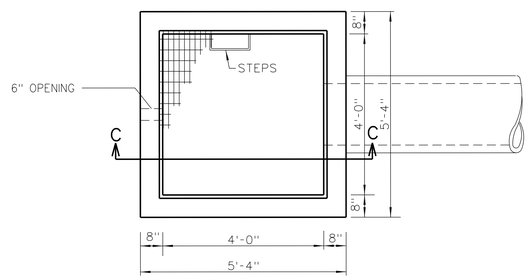
NOTES FOR TRASH RACK:

1. TRASH RACK SHALL BE CENTERED OVER OPENING.
2. STEEL TO CONFORM TO ASTM-36.
3. ALL SURFACES SHALL BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.
4. TRASH RACK SHALL BE FASTENED TO THE WALL WITH 1/2" MASONRY ANCHORS. TRASH RACK SHALL BE REMOVEABLE.

TRASH RACK DETAIL (OR APPROVED EQUAL)

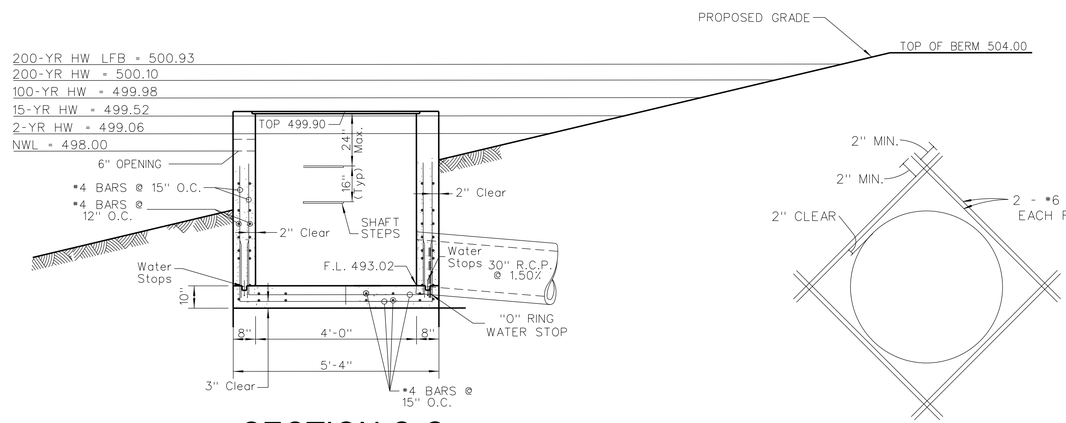
N.T.S.

SHOP DRAWING REQUIRED
PRIOR TO CONSTRUCTION



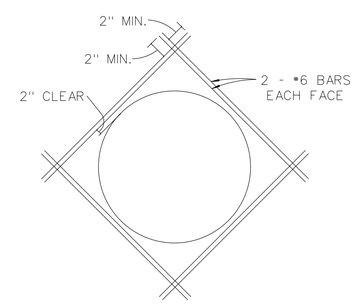
OS 03 TOP VIEW

N.T.S.



SECTION C-C
OS 03 REINFORCEMENT DETAIL

N.T.S.

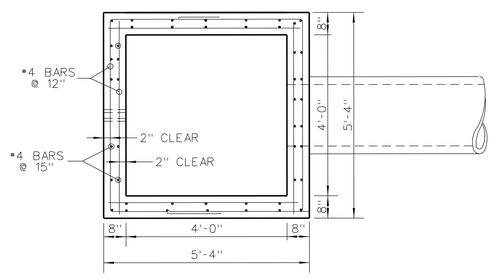


REINFORCEMENT AROUND OPENING

N.T.S.

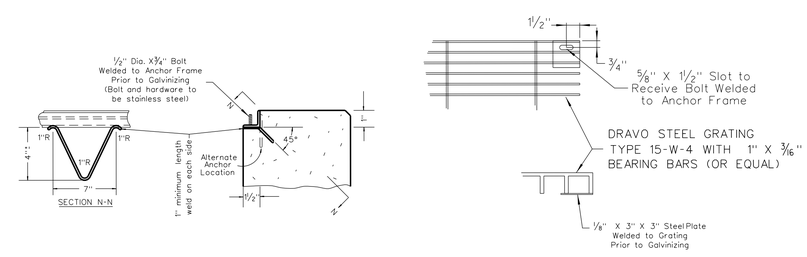
CONSTRUCTION NOTES:

1. Concrete for the structure shall be "air entrained" and contain at least 6 sacks Class "A" Portland Cement per cubic yard. The concrete shall be placed at a slump of 4 inches +-1/2 inch. The concrete shall be proportioned and transported in accordance with ASTM C-94.
2. Reinforcing steel shall conform to ASTM C-615-60 with deformations conforming to ASTM A-305 and shall have a minimum cover of 2 inches except for 3 inches where concrete is poured against earth.
3. Laps and/or splices in reinforcing steel shall be a minimum of 30 bar diameters.
4. Keyed joints shown are to be 2-inch x 2-inch keyed construction joints.
5. fs = 24,000 psi.
6. fc = 3,750 psi.
7. All exposed edges to have a 3/4-inch chamfer.
8. Contractor to provide for bypass of stormwater during construction of structure.
9. All soil specifications shall be directed by soils engineer.



OS 03 TOP VIEW
REINFORCEMENT DETAIL

N.T.S.



DETAIL OF CONTINUOUS ANCHOR FOR ANGLE SEAT & BOLT DOWN GRATE

N.T.S.

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OF STARTING WORK.

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THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND FIELD MARKINGS PROVIDED BY THE MEMBER UTILITIES OF THE MISSOURI ONE CALL SYSTEM (1-800-DIG-RITE), AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, CAPACITY, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES, NOR THE ABILITY TO SERVE THE EXISTING OR INTNEDED USES OF THIS OR ADJACENT SITES.THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

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Authority #203

STATE OF MISSOURI
7/11/25
TIMOTHY JOHN MEYER
NUMBER
E-24665
PROFESSIONAL ENGINEER
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

WET RETENTION POND
OUTFALL STRUCTURE

PARCEL ID: 2-0119-1786-00-00245
CITY OF O'FALLON
PERMIT No. RSP2-L-00001

8265 MEXICO ROAD,
O'FALLON, MO 63376

PROJECT #23444

07-01-25

C19

H:\CAD\23400-23499\23444\Imp Plans\Improvement Plans\23444 - C19 Wet Retention Pond Outfall Structure.dgn : Master Model 7/1/2025 10:40:03 AM Plotted by: ehermon Plot Scale: 50.000100 ' / in. Plot Driver: Volz15 PDF.pltcfg Pen Table: Volz15 Plot Full.tbl

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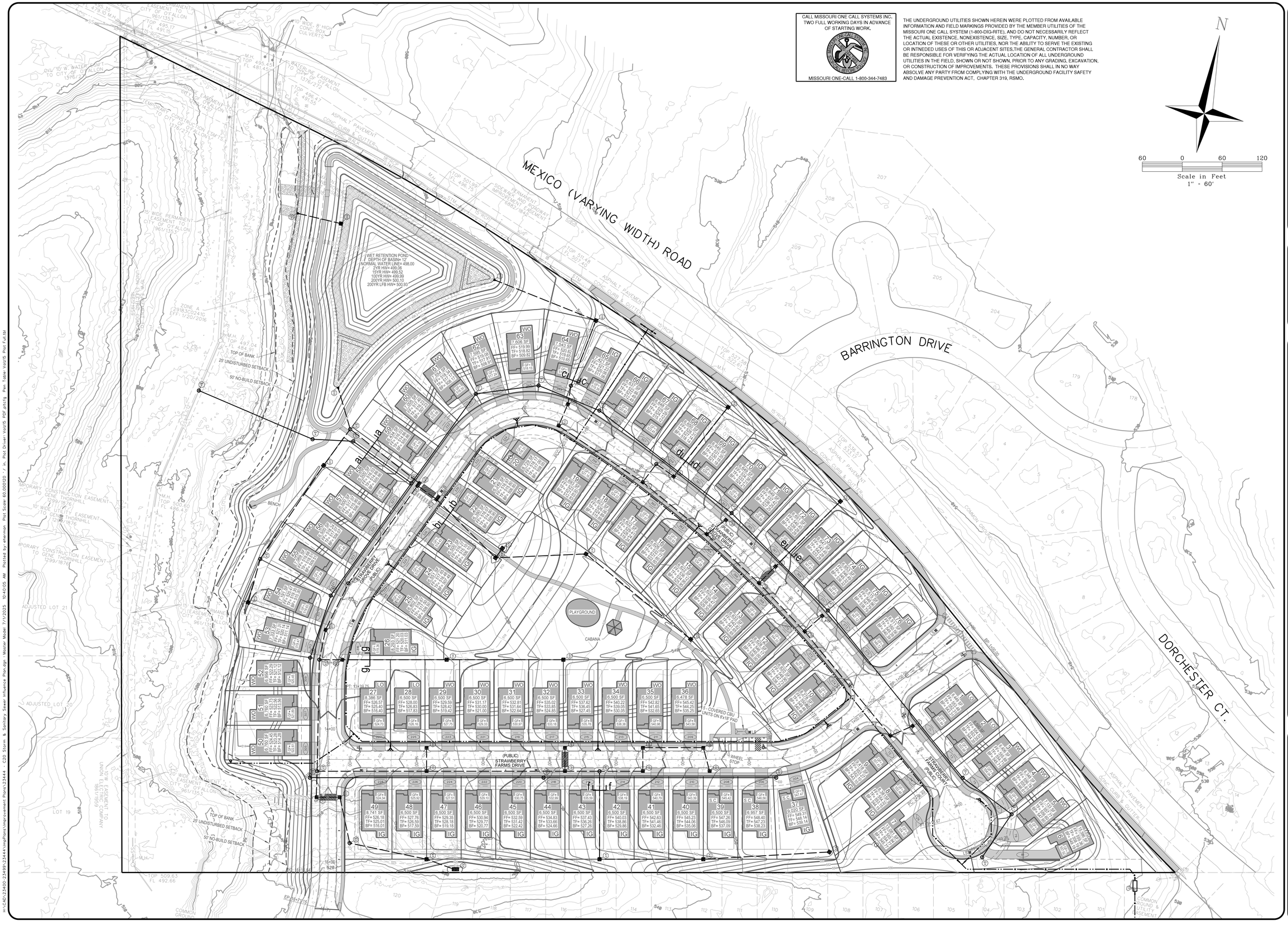
THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND FIELD MARKINGS PROVIDED BY THE MEMBER UTILITIES OF THE MISSOURI ONE CALL SYSTEM (1-800-DIG-RITE), AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, CAPACITY, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES, NOR THE ABILITY TO SERVE THE EXISTING OR INTNEDED USES OF THIS OR ADJACENT SITES.THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

N

60 0 60 120
Scale in Feet
1" = 60'



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Authority #203

STATE OF MISSOURI
7/1/25
TIMOTHY JOHN MEYER
NUMBER
E-24665
PROFESSIONAL ENGINEER

TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

STORM & SANITARY SEWER INFLUENCE PLAN

07-01-25

C20

PARCEL ID: 2-0119-1766-00-0024.5
CITY OF O'FALLON
PERMIT No: RSP24-00001

8265 MEXICO ROAD
O'FALLON, MO 63376

PROJECT #23444

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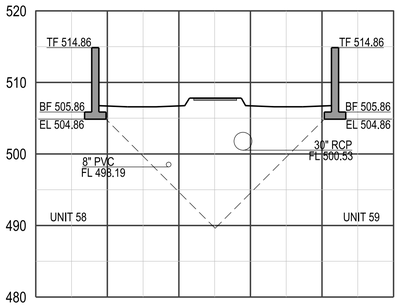
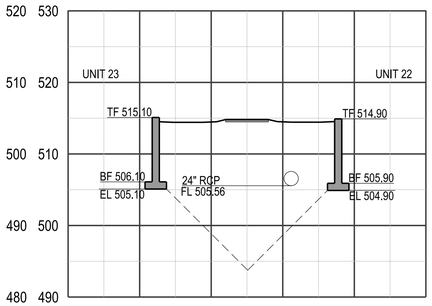


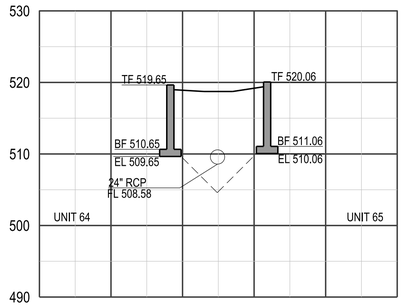
SECTION a-a: UNIT 58 & UNIT 59

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'



SECTION b-b: UNIT 22 & UNIT 23

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'



SECTION c-c: UNIT 64 & UNIT 65

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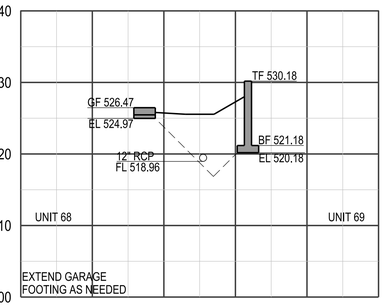
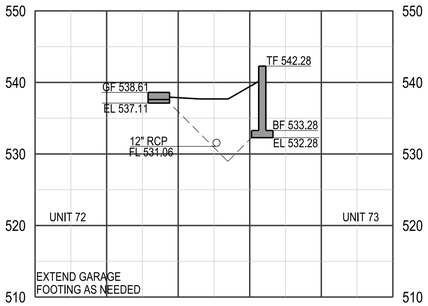
VERTICAL SCALE: 1" = 10'



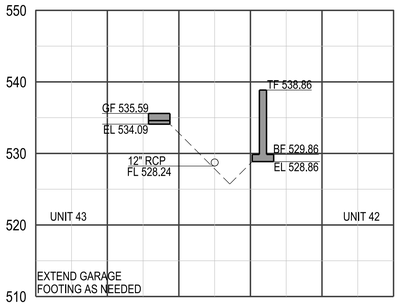
SECTION d-d: UNIT 68 & UNIT 69

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'



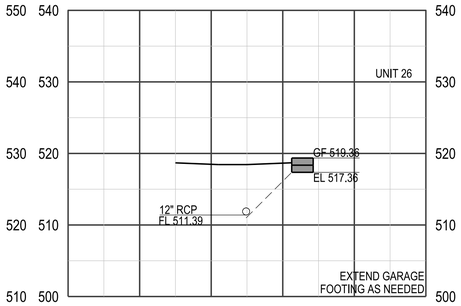
SECTION e-e: UNIT 72 & UNIT 73

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'



SECTION f-f: UNIT 42 & UNIT 43

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'



SECTION g-g: UNIT 26

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'

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Authority #203

STATE OF MISSOURI
7/1/25
TIMOTHY JOHN MEYER
NUMBER
E-24665
PROFESSIONAL ENGINEER

TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

STORM & SANITARY SEWER INFLUENCE PROFILES

PARCEL ID: 2-0119-7816-00-0024.5
CITY OF O'FALLON
PERMIT NO: RSP2024-0001
PROJECT: #23444

8265 MEXICO ROAD,
O'FALLON, MO 63376

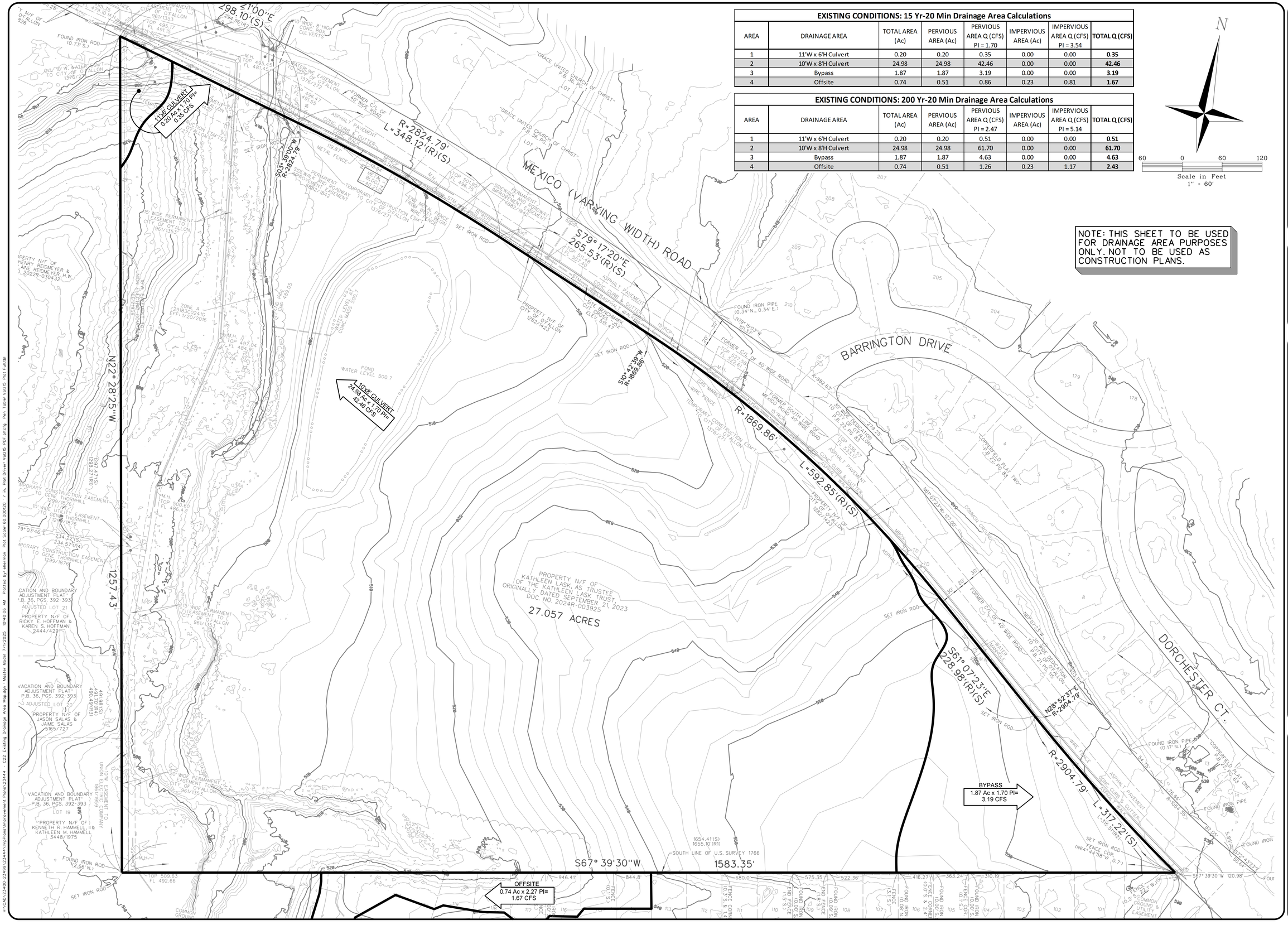
07-01-25

C21

H:\CAD\23400-23499\23444\ImpPlans\Improvement Plans\23444 - C21 Storm & Sanitary Sewer Influence Profiles.dgn : Master Model 7/1/2025 10:40:06 AM Plotted by: eherman Plot Scale: 50.000100 / in. Plot Driver: Volz15.PDF.pltcfg Pen Table: Volz15 Plot Full.tbl

EXISTING CONDITIONS: 15 Yr-20 Min Drainage Area Calculations							
AREA	DRAINAGE AREA	TOTAL AREA (Ac)	PERVIOUS AREA (Ac)	PERVIOUS AREA Q (CFS) PI = 1.70	IMPERVIOUS AREA (Ac)	IMPERVIOUS AREA Q (CFS) PI = 3.54	**TOTAL Q (CFS)**
1	11'W x 6'H Culvert	0.20	0.20	0.35	0.00	0.00	**0.35**
2	10'W x 8'H Culvert	24.98	24.98	42.46	0.00	0.00	**42.46**
3	Bypass	1.87	1.87	3.19	0.00	0.00	**3.19**
4	Offsite	0.74	0.51	0.86	0.23	0.81	**1.67**

EXISTING CONDITIONS: 200 Yr-20 Min Drainage Area Calculations							
AREA	DRAINAGE AREA	TOTAL AREA (Ac)	PERVIOUS AREA (Ac)	PERVIOUS AREA Q (CFS) PI = 2.47	IMPERVIOUS AREA (Ac)	IMPERVIOUS AREA Q (CFS) PI = 5.14	**TOTAL Q (CFS)**
1	11'W x 6'H Culvert	0.20	0.20	0.51	0.00	0.00	**0.51**
2	10'W x 8'H Culvert	24.98	24.98	61.70	0.00	0.00	**61.70**
3	Bypass	1.87	1.87	4.63	0.00	0.00	**4.63**
4	Offsite	0.74	0.51	1.26	0.23	1.17	**2.43**



NOTE: THIS SHEET TO BE USED FOR DRAINAGE AREA PURPOSES ONLY. NOT TO BE USED AS CONSTRUCTION PLANS.

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STATE OF MISSOURI
7/11/25
TIMOTHY JOHN MEYER
NUMBER
E-24665
PROFESSIONAL ENGINEER
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

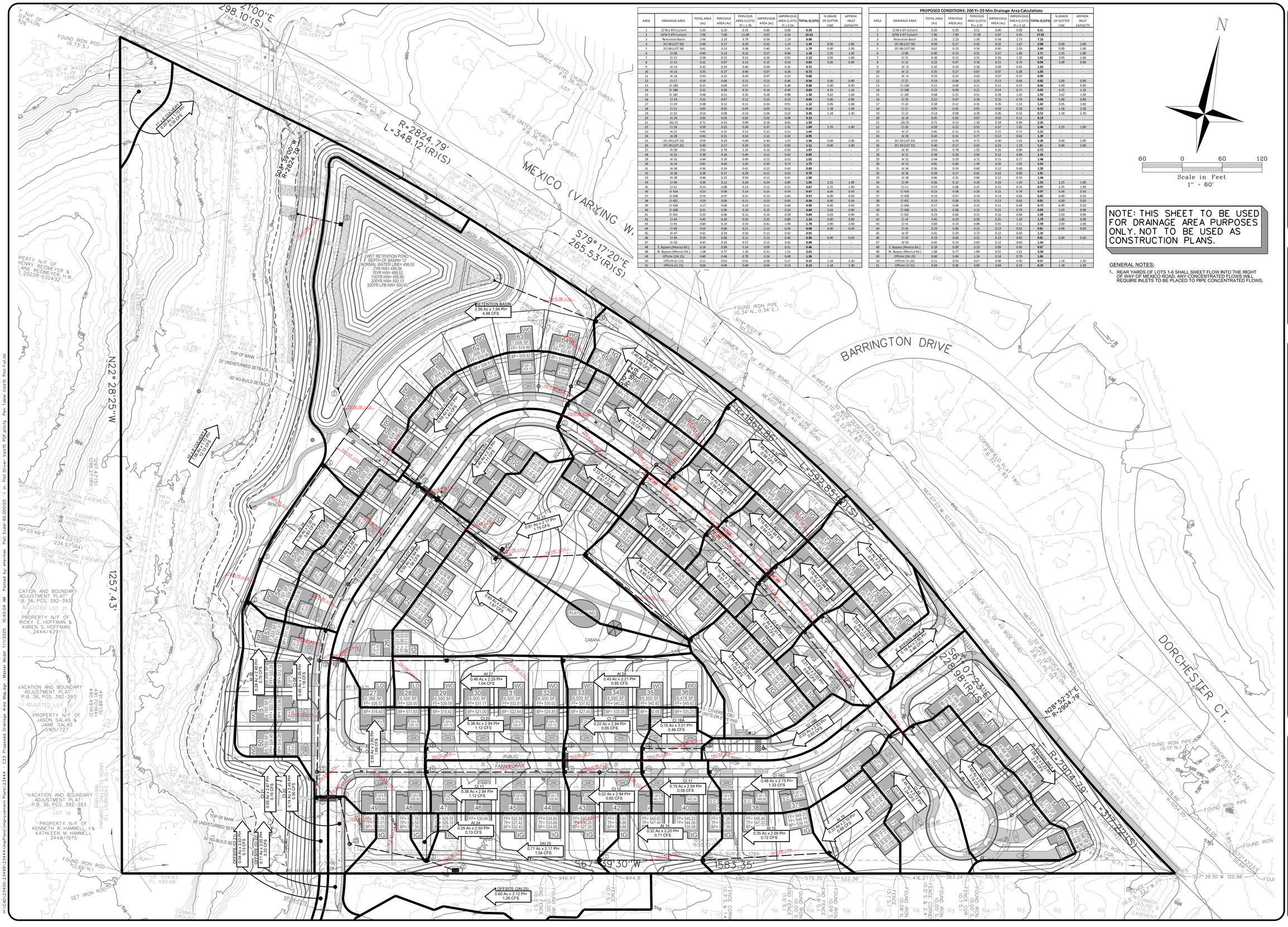
EXISTING DRAINAGE AREA MAP

07-01-25

C22

PARCEL ID: 20119-1796-00-00245
PERMIT No: RSP24-00001
8265 MEXICO ROAD
O'FALLON, MO 63376
PROJECT #23444

H:\CAD\23400-23499\23444\ImpPlans\Improvement Plans\23444 - C22 Existing Drainage Area Map.dgn : Master Model 7/1/2025 10:40:06 AM Plotted by: ehermon Plot Scale: 60.00000 ' / in. Plot Driver: Volz15 PDF.pltcfg Pen Table: Volz15 Plot Full.tbl



AREA	DRAINAGE AREA	TOTAL AREA (Ac)	PERVIOUS AREA (Ac)	PERVIOUS AREA Q (CFS) PI= 1.70	IMPERVIOUS AREA (Ac)	IMPERVIOUS AREA Q (CFS) PI= 3.54	TOTAL Q (CFS)	% GRADE OF GUTTER LINE	APPROX. INLET CAPACITY
1	11'W x 6'H Culvert	0.20	0.20	0.35	0.00	0.00	**0.35**	-	-
2	10'W X 8'H Culvert	7.06	7.00	11.89	0.07	0.24	**12.13**	-	-
3	Retention Basin	2.56	2.23	3.79	0.34	1.19	**4.98**	-	-
4	2C1 06 (LOT 59)	0.49	0.17	0.29	0.32	1.15	**1.43**	0.00	2.00
5	2C1 06 (LOT 58)	0.62	0.23	0.38	0.40	1.41	**1.79**	0.00	2.00
6	CI 08	0.40	0.13	0.22	0.27	0.96	**1.18**	2.25	1.90
7	CI 11	0.38	0.12	0.21	0.26	0.91	**1.12**	3.05	1.60
8	CI 12	0.22	0.07	0.12	0.15	0.53	**0.65**	5.00	0.90
9	AI 14	0.32	0.24	0.40	0.09	0.31	**0.71**	-	-
10	AI 15	0.35	0.27	0.46	0.07	0.26	**0.72**	-	-
11	AI 16	0.33	0.25	0.43	0.07	0.25	**0.68**	-	-
12	CI 17	0.19	0.06	0.11	0.13	0.46	**0.56**	5.00	0.90
13	CI 18A	0.15	0.04	0.07	0.11	0.38	**0.46**	5.00	0.90
14	CI 18B	0.22	0.09	0.15	0.14	0.49	**0.65**	4.25	1.30
15	CI 18C	0.48	0.21	0.35	0.28	0.98	**1.33**	3.62	1.40
16	CI 19	0.22	0.07	0.12	0.15	0.53	**0.65**	5.00	0.90
17	CI 20	0.38	0.12	0.21	0.26	0.91	**1.12**	3.05	1.60
18	CI 21	0.05	0.02	0.03	0.03	0.12	**0.16**	1.18	2.30
19	CI 22	0.14	0.08	0.14	0.06	0.22	**0.36**	1.18	2.30
20	AI 24	0.05	0.03	0.05	0.02	0.08	**0.13**	-	-
21	2AI 25	0.71	0.53	0.89	0.18	0.65	**1.54**	-	-
22	CI 26	0.59	0.22	0.38	0.37	1.31	**1.69**	2.25	1.90
23	AI 27	0.46	0.31	0.53	0.15	0.52	**1.04**	-	-
24	AI 28	0.43	0.31	0.53	0.12	0.42	**0.95**	-	-
25	2CI 29 (LOT 23)	0.59	0.29	0.49	0.30	1.07	**1.56**	0.00	2.00
26	2CI 29 (LOT 22)	0.40	0.17	0.29	0.23	0.82	**1.11**	0.00	2.00
27	AI 30	0.93	0.78	1.32	0.16	0.55	**1.87**	-	-
28	AI 31	0.38	0.26	0.44	0.12	0.42	**0.85**	-	-
29	AI 32	0.44	0.29	0.49	0.15	0.53	**1.02**	-	-
30	AI 33	0.81	0.60	1.02	0.20	0.73	**1.75**	-	-
31	AI 34	0.36	0.24	0.41	0.12	0.42	**0.83**	-	-
32	AI 36	0.28	0.17	0.28	0.12	0.42	**0.70**	-	-
33	AI 38	0.46	0.35	0.59	0.12	0.41	**1.00**	-	-
34	CI 40	0.36	0.12	0.20	0.24	0.85	**1.05**	2.25	1.90
35	CI 41	0.23	0.08	0.14	0.15	0.52	**0.67**	2.25	1.90
36	CI 42A	0.23	0.08	0.14	0.15	0.54	**0.67**	6.00	0.50
37	CI 42B	0.19	0.07	0.11	0.13	0.45	**0.57**	6.00	0.50
38	CI 42C	0.19	0.06	0.11	0.13	0.45	**0.56**	6.00	0.50
39	CI 43A	0.17	0.06	0.10	0.11	0.40	**0.50**	6.00	0.50
40	CI 43B	0.21	0.06	0.10	0.15	0.54	**0.64**	5.03	0.90
41	CI 43C	0.23	0.06	0.11	0.16	0.58	**0.69**	5.03	0.90
42	CI 44	0.45	0.20	0.35	0.25	0.89	**1.24**	2.00	0.90
43	CI 45	0.60	0.19	0.33	0.41	1.46	**1.78**	2.00	2.00
44	CI 46	0.19	0.06	0.11	0.13	0.45	**0.56**	6.00	0.50
45	AI 47	0.41	0.29	0.50	0.12	0.42	**0.91**	-	-
46	CI 49	0.19	0.06	0.11	0.13	0.45	**0.56**	6.00	0.50
47	AI 50	0.45	0.33	0.57	0.12	0.42	**0.98**	-	-
48	E. Bypass (Mexico Rd.)	0.18	0.09	0.16	0.09	0.31	**0.46**	-	-
48	W. Bypass (Mexico Rd.)	1.08	0.77	1.30	0.31	1.11	**2.41**	-	-
49	Offsite (2AI 25)	0.60	0.46	0.78	0.14	0.48	**1.26**	-	-
50	Offsite (CI 21)	0.11	0.03	0.05	0.08	0.27	**0.32**	1.18	2.30
51	Offsite (CI 21)	0.04	0.00	0.00	0.04	0.13	**0.13**	1.18	2.30

PROPOSED CONDITIONS: 200 Yr-20 Min Drainage Area Calculations

AREA	DRAINAGE AREA	TOTAL AREA (Ac)	PERVIOUS AREA (Ac)	PERVIOUS AREA Q (CFS) PI= 2.47	IMPERVIOUS AREA (Ac)	IMPERVIOUS AREA Q (CFS) PI= 5.14	TOTAL Q (CFS)	% GRADE OF GUTTER LINE	APPROX. INLET CAPACITY
1	11'W x 6'H Culvert	0.20	0.20	0.51	0.00	0.00	**0.51**	-	-
2	10'W X 8'H Culvert	7.06	7.00	17.28	0.07	0.35	**17.62**	-	-
3	Retention Basin	2.56	2.23	5.50	0.34	1.73	**7.23**	-	-
4	2C1 06 (LOT 59)	0.49	0.17	0.42	0.32	1.67	**2.08**	0.00	2.00
5	2C1 06 (LOT 58)	0.62	0.23	0.56	0.40	2.05	**2.60**	0.00	2.00
6	CI 08	0.40	0.13	0.31	0.27	1.40	**1.71**	2.25	1.90
7	CI 11	0.38	0.12	0.31	0.26	1.32	**1.62**	3.05	1.60
8	CI 12	0.22	0.07	0.18	0.15	0.76	**0.94**	5.00	0.90
9	AI 14	0.32	0.24	0.58	0.09	0.45	**1.03**	-	-
10	AI 15	0.35	0.27	0.67	0.07	0.38	**1.05**	-	-
11	AI 16	0.33	0.25	0.63	0.07	0.37	**0.99**	-	-
12	CI 17	0.19	0.06	0.15	0.13	0.66	**0.82**	5.00	0.90
13	CI 18A	0.15	0.04	0.11	0.11	0.55	**0.66**	5.00	0.90
14	CI 18B	0.22	0.09	0.21	0.14	0.71	**0.92**	4.25	1.10
15	CI 18C	0.48	0.21	0.51	0.28	1.42	**1.93**	3.62	1.40
16	CI 19	0.22	0.07	0.18	0.15	0.76	**0.94**	5.00	0.90
17	CI 20	0.38	0.12	0.31	0.26	1.32	**1.62**	3.05	1.60
18	CI 21	0.05	0.02	0.05	0.03	0.18	**0.23**	1.18	2.30
19	CI 22	0.14	0.08	0.20	0.06	0.32	**0.52**	1.18	2.30
20	AI 24	0.05	0.03	0.07	0.02	0.11	**0.19**	-	-
21	2AI 25	0.71	0.53	1.30	0.18	0.94	**2.24**	-	-
22	CI 26	0.59	0.22	0.55	0.37	1.91	**2.46**	2.25	1.90
23	AI 27	0.46	0.31	0.76	0.15	0.75	**1.52**	-	-
24	AI 28	0.43	0.31	0.77	0.12	0.62	**1.39**	-	-
25	2CI 29 (LOT 23)	0.59	0.29	0.71	0.30	1.55	**2.26**	0.00	2.00
26	2CI 29 (LOT 22)	0.40	0.17	0.42	0.23	1.19	**1.61**	0.00	2.00
27	AI 30	0.93	0.78	1.92	0.16	0.80	**2.72**	-	-
28	AI 31	0.38	0.26	0.64	0.12	0.60	**1.24**	-	-
29	AI 32	0.44	0.29	0.71	0.15	0.77	**1.48**	-	-
30	AI 33	0.81	0.60	1.49	0.20	1.05	**2.54**	-	-
31	AI 34	0.36	0.24	0.60	0.12	0.60	**1.20**	-	-
32	AI 36	0.28	0.17	0.41	0.12	0.60	**1.01**	-	-
33	AI 38	0.46	0.35	0.86	0.12	0.59	**1.46**	-	-
34	CI 40	0.36	0.12	0.29	0.24	1.24	**1.53**	2.25	1.90
35	CI 41	0.23	0.08	0.21	0.15	0.76	**0.97**	2.25	1.90
36	CI 42A	0.23	0.08	0.20	0.15	0.78	**0.97**	6.00	0.50
37	CI 42B	0.19	0.07	0.16	0.13	0.66	**0.82**	6.00	0.50
38	CI 42C	0.19	0.06	0.15	0.13	0.65	**0.81**	6.00	0.50
39	CI 43A	0.17	0.06	0.15	0.11	0.58	**0.73**	6.00	0.50
40	CI 43B	0.21	0.06	0.15	0.15	0.79	**0.93**	5.03	0.90
41	CI 43C	0.23	0.06	0.15	0.16	0.84	**1.00**	5.03	0.90
42	CI 44	0.45	0.20	0.50	0.25	1.29	**1.79**	2.00	0.90
43	CI 45	0.60	0.19	0.48	0.41	2.11	**2.59**	2.00	2.00
44	CI 46	0.19	0.06	0.15	0.13	0.65	**0.81**	6.00	0.50
45	AI 47	0.41	0.29	0.72	0.12	0.60	**1.32**	-	-
46	CI 49	0.19	0.06	0.15	0.13	0.65	**0.81**	6.00	0.50
47	AI 50	0.45	0.33	0.82	0.12	0.60	**1.43**	-	-
48	E. Bypass (Mexico Rd.)	0.18	0.09	0.23	0.09	0.45	**0.67**	-	-
48	W. Bypass (Mexico Rd.)	1.08	0.77	1.89	0.31	1.61	**3.50**	-	-
49	Offsite (2AI 25)	0.60	0.46	1.14	0.14	0.70	**1.84**	-	-
50	Offsite (CI 21)	0.11	0.03	0.07	0.08	0.40	**0.47**	1.18	2.80
51	Offsite (CI 21)	0.04	0.00	0.00	0.04	0.19	**0.19**	1.18	2.30

N

60 0 60 120

Scale in Feet
1" = 60'

NOTE: THIS SHEET TO BE USED FOR DRAINAGE AREA PURPOSES ONLY. NOT TO BE USED AS CONSTRUCTION PLANS.

GENERAL NOTES:

1. REAR YARDS OF LOTS 1-6 SHALL SHEET FLOW INTO THE RIGHT OF WAY OF MEXICO ROAD. ANY CONCENTRATED FLOWS WILL REQUIRE INLETS TO BE PLACED TO PIPE CONCENTRATED FLOWS.

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Authority #203

STATE OF MISSOURI
TIMOTHY JOHN MEYER
NUMBER E-24665
PROFESSIONAL ENGINEER
7/1/25

TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

PROPOSED DRAINAGE AREA MAP

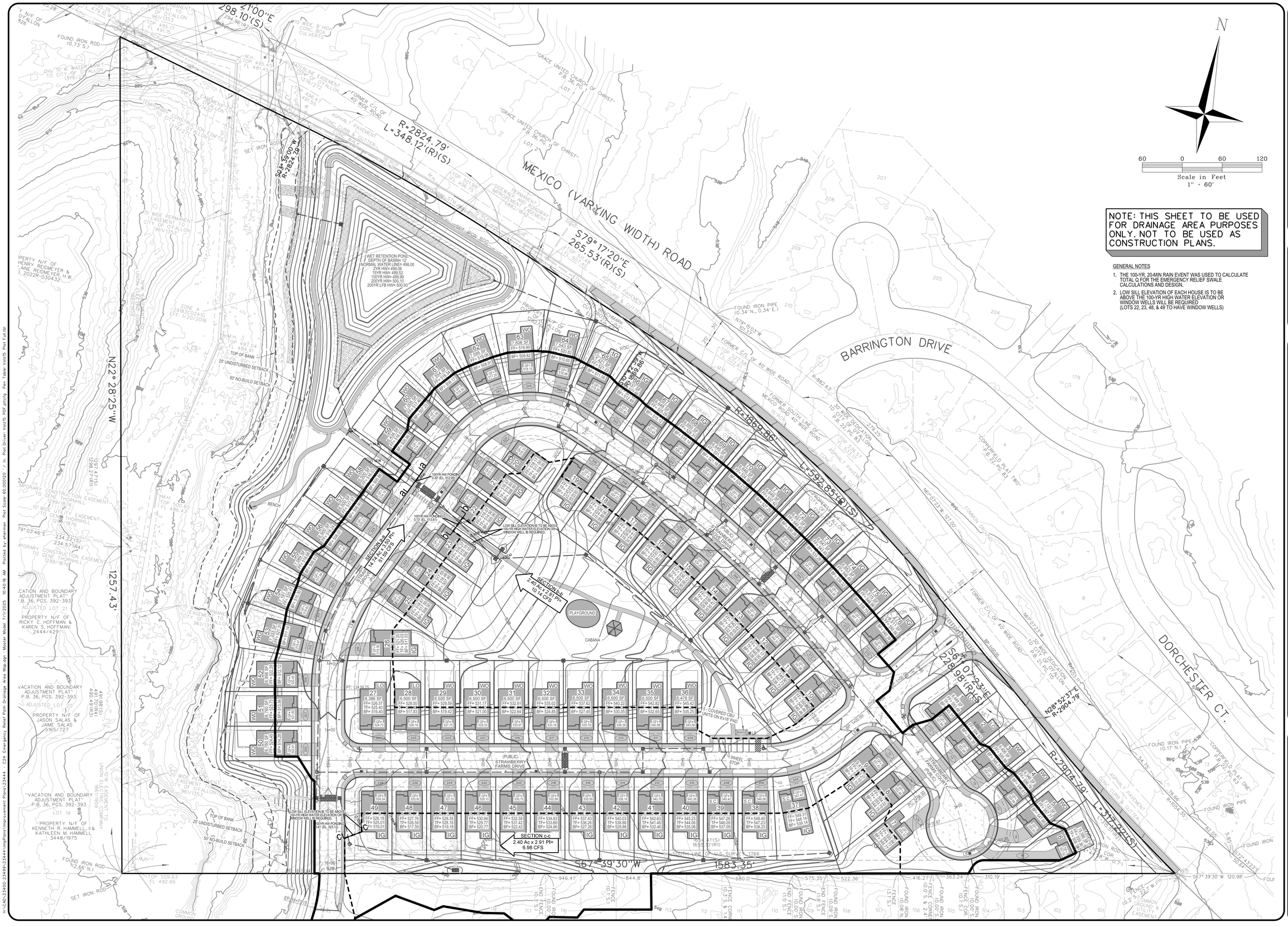
07-01-25
C23

PARCEL ID: 2-0119-1766-00-0024.5
CITY OF O'FALLON
PERMIT No: RSP24-00001

8265 MEXICO ROAD
O'FALLON, MO 63376

PROJECT #23444

H:\CAD\23400-23499\23444\VmpPlans\Improvement Plans\23444 - C23 Proposed Drainage Area Map.dgn : Master Model 7/1/2025 10:40:09 AM Plotted by: ehermon Plot Scale: 60.000120 ' / in. Plot Driver: Volz15.PDF.pltcfg Pen Table: Volz15 Plot Full.tbl



NOTE: THIS SHEET TO BE USED FOR DRAINAGE AREA PURPOSES ONLY. NOT TO BE USED AS CONSTRUCTION PLANS.

GENERAL NOTES

1. THE 100-YR, 20-MIN RAIN EVENT WAS USED TO CALCULATE TOTAL Q FOR THE EMERGENCY RELIEF SWALE CALCULATIONS AND DESIGN.
2. LOW SILL ELEVATION OF EACH HOUSE IS TO BE ABOVE THE 100-YR HIGH WATER ELEVATION OR WINDOW WELLS WILL BE REQUIRED (LOTS 22, 23, 48, & 49 TO HAVE WINDOW WELLS)

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Authority #203

STATE OF MISSOURI
7/11/25
TIMOTHY JOHN MEYER
NUMBER
E-24665
PROFESSIONAL ENGINEER
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

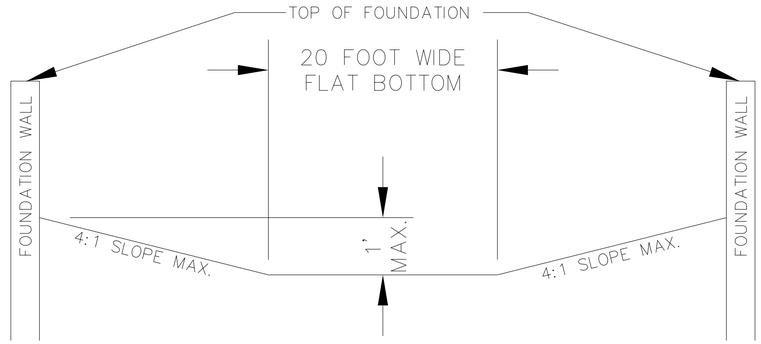
EMERGENCY RELIEF PATH DRAINAGE AREA MAP

8265 MEXICO ROAD
O'FALLON, MO 63376

PARCEL ID: 2-0119-1766-00-0024.5
CITY OF O'FALLON
PERMIT No: RSP24-00001
PROJECT #23444

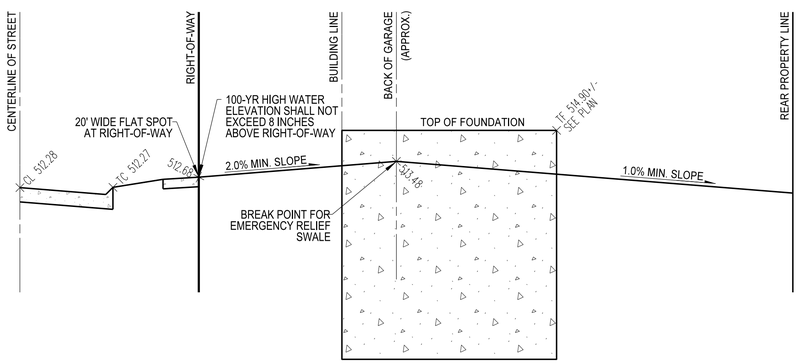
07-01-25

C24



EMERGENCY RELIEF PATH SECTION

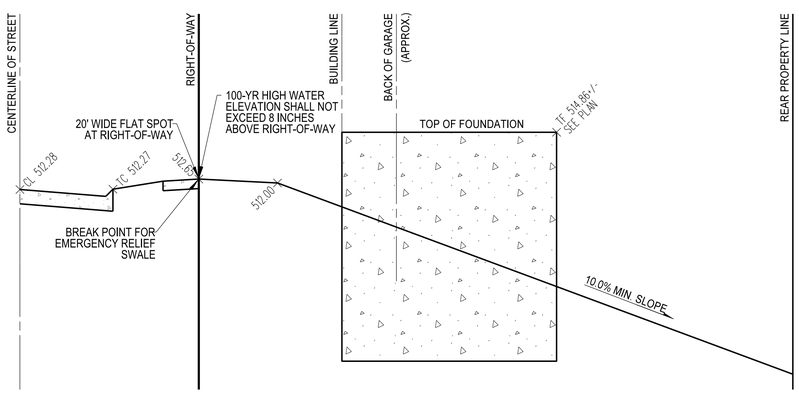
N.T.S.



EMERGENCY RELIEF PATH PROFILE

IN-GRADE LOT

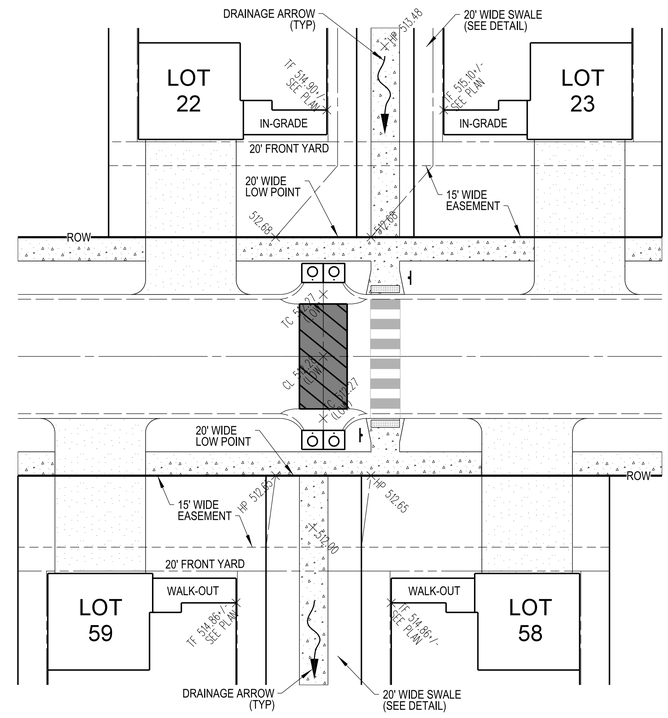
N.T.S.



EMERGENCY RELIEF PATH PROFILE

WALK-OUT LOT

N.T.S.



EMERGENCY RELIEF SWALE DETAIL

PLAN VIEW

N.T.S.

GENERAL NOTES:

1. THE 100 YEAR STORM WATER FLOW SHALL NOT EXCEED THE LOW SILL ELEVATION OF THE HOUSE OR WINDOW WELLS WILL BE REQUIRED.
2. TYPICAL SIDE YARD SWALES BETWEEN HOUSES SHALL BE 6" DEEP AND GENERALLY LOCATED ALONG THE PROPERTY LINE BETWEEN THE HOUSES.

CALL MISSOURI ONE CALL SYSTEMS INC. TWO FULL WORKING DAYS IN ADVANCE OF STARTING WORK.

MISSOURI ONE-CALL 1-800-344-7483

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND FIELD MARKINGS PROVIDED BY THE MEMBER UTILITIES OF THE MISSOURI ONE CALL SYSTEM (1-800-DIG-RITE), AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, CAPACITY, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES, NOR THE ABILITY TO SERVE THE EXISTING OR INTNEDED USES OF THIS OR ADJACENT SITES,THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

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Authority #203

7/1/25
TIMOTHY JOHN MEYER
NUMBER E-24665
MISSOURI
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

EMERGENCY RELIEF PATH DETAILS

PARCEL ID: 2-2019-1786-00-00245

CITY OF O'FALLON
PERMIT No: REPS-0001

PROJECT #23444

8265 MEXICO ROAD
O'FALLON, MO 63376

07-01-25

C25

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Cross Section for Section a-a

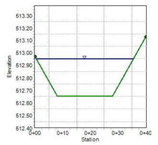
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.02000	ft/ft
Normal Depth	0.30	ft
Discharge	51.59	ft³/s

Cross Section Image



Worksheet for Section a-a

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.02000	ft/ft
Discharge	51.59	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	512.97
0+08	512.65
0+28	512.65
0+40	513.13

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 512.97)	(0+40, 513.13)	0.013

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.30	ft
Elevation Range	512.65 to 513.13 ft	
Flow Area	8.33	ft²
Wetted Perimeter	35.12	ft
Hydraulic Radius	0.24	ft
Top Width	35.11	ft
Normal Depth	0.30	ft
Critical Depth	0.48	ft
Critical Slope	0.00344	ft/ft

Worksheet for Section a-a

Results

Velocity	6.19	ft/s
Velocity Head	0.60	ft
Specific Energy	0.90	ft
Froude Number	2.24	
Flow Type	Supercritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.30	ft
Critical Depth	0.48	ft
Channel Slope	0.02000	ft/ft
Critical Slope	0.00344	ft/ft

Cross Section for Section b-b

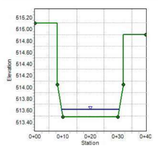
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.02000	ft/ft
Normal Depth	0.13	ft
Discharge	10.14	ft³/s

Cross Section Image



Worksheet for Section b-b

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.02000	ft/ft
Discharge	10.14	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	515.10
0+08	515.10
0+08	514.04
0+10	513.48
0+30	513.48
0+32	514.04
0+32	514.90
0+40	514.90

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 515.10)	(0+08, 514.04)	0.013
(0+08, 514.04)	(0+10, 513.48)	0.030
(0+10, 513.48)	(0+30, 513.48)	0.013
(0+30, 513.48)	(0+32, 514.04)	0.030
(0+32, 514.04)	(0+40, 514.90)	0.013

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.13	ft

Worksheet for Section b-b

Results

Elevation Range	513.48 to 515.10 ft	
Flow Area	2.70	ft²
Wetted Perimeter	20.98	ft
Hydraulic Radius	0.13	ft
Top Width	20.94	ft
Normal Depth	0.13	ft
Critical Depth	0.20	ft
Critical Slope	0.00516	ft/ft
Velocity	3.76	ft/s
Velocity Head	0.22	ft
Specific Energy	0.35	ft
Froude Number	1.85	
Flow Type	Supercritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.13	ft
Critical Depth	0.20	ft
Channel Slope	0.02000	ft/ft
Critical Slope	0.00516	ft/ft

Cross Section for Section c-c

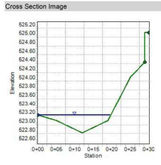
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.01000	ft/ft
Normal Depth	0.41	ft
Discharge	6.98	ft³/s

Cross Section Image



Worksheet for Section c-c

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.01000	ft/ft
Discharge	6.98	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	523.12
0+05	523.00
0+12	522.71
0+19	523.00
0+25	524.00
0+29	524.34
0+29	525.01
0+30	525.01

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 523.12)	(0+29, 524.34)	0.030
(0+29, 524.34)	(0+30, 525.01)	0.013

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.41	ft
Elevation Range	522.71 to 525.01 ft	
Flow Area	4.05	ft²
Wetted Perimeter	19.73	ft

Worksheet for Section c-c

Results

Hydraulic Radius	0.21	ft
Top Width	19.71	ft
Normal Depth	0.41	ft
Critical Depth	0.35	ft
Critical Slope	0.02348	ft/ft
Velocity	1.72	ft/s
Velocity Head	0.05	ft
Specific Energy	0.46	ft
Froude Number	0.67	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.41	ft
Critical Depth	0.35	ft
Channel Slope	0.01000	ft/ft
Critical Slope	0.02348	ft/ft

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STATE OF MISSOURI
7/1/25
TIMOTHY JOHN MEYER
NUMBER
E-24665
PROFESSIONAL ENGINEER

TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

EMERGENCY RELIEF PATH
CROSS-SECTIONS

8265 MEXICO ROAD,
O'FALLON, MO 63376

PARCEL ID: 2-0119-1786-00-0024.5
CITY OF O'FALLON
PERMIT No: RSP25-0001
PROJECT #23444

07-01-25

C26

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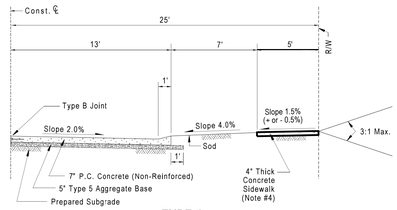

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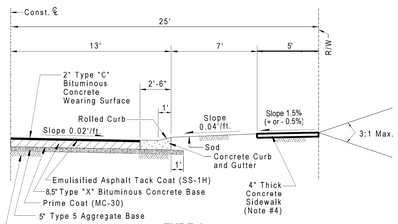


TYPE 2

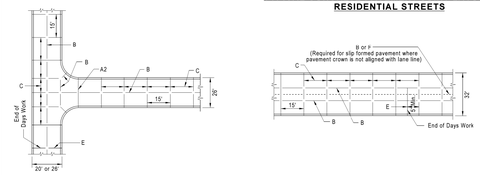
GENERAL NOTES

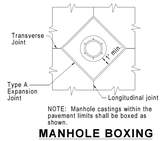
1) Do not scale drawings, follow dimensions.
2) Sections shown are symmetrical about construction line.
3) All necessary pavement markings shall be as required by St. Louis County. For details refer to "Guide Lines for Pavement Markings and Lane Striping", Standard Drawing C902.10.
4) Sidewalk thickness increases to 6" at through driveway entrances and for the first section of sidewalk on each side of the driveway entrance.
5) Easements, when required, shall be established as a "Permanent Roadway Improvement, Maintenance, Utility, Sewer and Sidewalk Easement," and dedicated to St. Louis County.

THE CITY OF O'FALLON FOLLOWS ST. LOUIS COUNTY REQUIREMENTS FOR 7" PAVEMENT.

EDGE DATE 03/06/2020 REVISIONS	THIS IS NOT A CERTIFIED DOCUMENT	Saint Louis COUNTY TRANSPORTATION 41G NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63132	STANDARD DRAWING RESIDENTIAL STREET (50' R/W - 26' PVMT.) (TYPE 1 & TYPE 2)		
			EFFECTIVE 05/01/2020	SHEET 1 OF 1	DRAWING C203.82

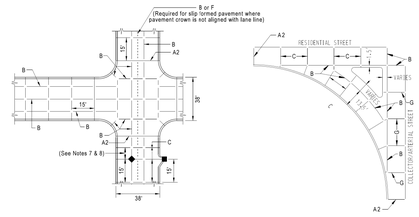
TYPICAL CONCRETE PAVEMENT JOINT LAYOUT FOR RESIDENTIAL STREETS





NOTE: Manhole castings within the pavement limits shall be boxed as shown.

MANHOLE BOXING



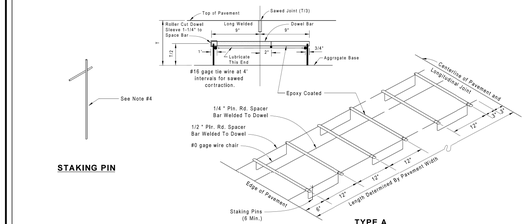
GENERAL NOTES

1) Do not scale drawing, follow dimensions.
2) The joint layouts shown correspond with the Department's standard typical sections. The actual locations of longitudinal construction joints shall be set to align with the lane lines of the approved construction plan.
3) Joint layout within intersections shall be adjusted as necessary to accomodate the intersection channelization details in the approved construction plan.
4) Construction joints and tie bars associated with curb construction may be omitted when curb is poured monolithic with pavement.
5) For joint and bar requirements refer to the "Pavement Construction Details - Joints" (Standard Drawing C502.13) and "Pavement Construction Details - Curbs" (Standard Drawing C502.14). Note that the width and location may change the type of joint required.
6) Transverse or longitudinal construction joints in slip formed pavements may be made with a groover or tool, if such device has been approved in advance by the Department.
7) When a joint falls within 5ft. of, or contacts inlets, manholes, or other structures, shorten one or more panels either side of opening to permit joint to fall on round structures and a/ or between corners of rectangular structures.
8) All street inlets shall be separated from the pavement and curb by expansion joint material extending completely through curb and slab. Manhole casting within the pavement limits shall be boxed as shown.

EDGE DATE 03/06/2020 REVISIONS	THIS IS NOT A CERTIFIED DOCUMENT	Saint Louis COUNTY TRANSPORTATION 41G NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63132	PAVEMENT CONSTRUCTION DETAILS CONCRETE PAVEMENT JOINT LAYOUT RESIDENTIAL STREETS		
			EFFECTIVE 05/01/2020	SHEET 1 OF 1	DRAWING C502.01

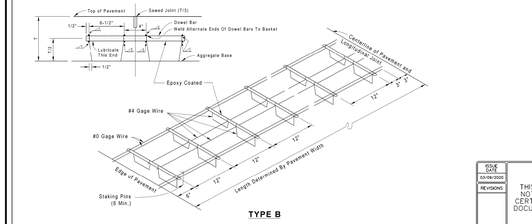
GENERAL NOTES

1) Do not scale drawings, follow dimensions.
2) Approved for use with transverse joints.
3) The cowell supporting units shall be factory assembled and capable of holding the dowels in their required positions. In the completed joint installation, no dowels shall vary from its required position more than 1 inch in 36 inches.
4) The cowell bar spacing shall be 12 inches on centers, beginning 6 inches from outer edge of the pavement.
5) Basket staking pins shall be fabricated from #1/0 gauge (0.306 inch) wire with suitable welded hook. Staking pins shall have a minimum length of 12 inches. Type A or Type B assemblies shall be provided unless approved in advance by the engineer. Staking pins shall be placed at each corner of the basket assembly and at the mid-point of each side of the basket assembly.
6) Wires, bars, or clips shall be used as necessary to strengthen the assemblies.
7) Minor variations in the configuration of the support units will be allowed.
8) The free end of the dowel bar for a length of at least 11 inches shall be coated with an approved graphite grease conforming to Section 1057.3.1 of the St. Louis County Standard Specifications or may substitute compacted basket units pre-dipped in an approved bond breaker solution conforming to Section 1057.3.2.



STAKING PIN

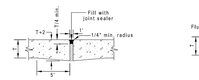
TYPE A



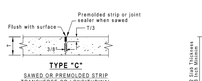
TYPE B

DOWEL BARS - EPOXY COATED		
PAVEMENT THICKNESS*	BAR SIZE	
	DIAMETER	LENGTH
7 inches	1 inch	18 inches
8 inches	1 inch	18 inches
9 inches	1-1/4 inches	18 inches
10 inches	1-1/4 inches	18 inches
11 inches or Greater	1-1/2 inches	18 inches

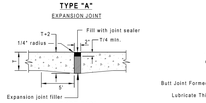
EDGE DATE 03/06/2020 REVISIONS	THIS IS NOT A CERTIFIED DOCUMENT	Saint Louis COUNTY TRANSPORTATION 41G NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63132	PAVEMENT CONSTRUCTION DETAILS DOWEL SUPPORTING UNITS		
			EFFECTIVE 05/01/2020	SHEET 1 OF 1	DRAWING C502.11



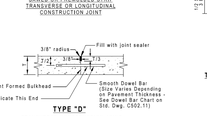
TYPE "A"
EXPANSION JOINT



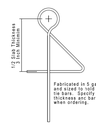
TYPE "C"
SAWED OR PREMOLDED STRIP TRANSVERSE OR LONGITUDINAL CONSTRUCTION JOINT



TYPE "A2"
EXPANSION JOINT



TYPE "D"
TRANSVERSE CONSTRUCTION JOINT



TYPE "FS" STAKING PIN DETAIL

JOINT FILLER AND SEALING MATERIAL SHALL MEET THE FOLLOWING:	
Material	Standard Specification
Hot-Poured Elastic Joint Sealant	Section 1057.5
Backer Rod Material for Hot-Poured Elastic Joint Sealant [1]	Section 1057.5.3
Polyurethane Elastomeric Joint Sealant	Section 1057.6
Preformed Fiber Expansion Joint Filler [2]	Section 1057.5.2
Preformed Sponge Rubber Expansion Joint Filler [2]	Section 1057.7.4
Silicone Joint Sealer for Saw Cut and Formed Joints	Section 1057.11
Backer Rod Material for Silicone Joint Sealant [1]	Section 1057.12

[1] Backer rod required for joint width ≥ 0.25 inch.

[2] The joint filler material thickness shall be 2 inches across for concrete pavement Type AA expansion joints, 1 inch across the intersection of concrete sidewalk and concrete entrances and at Type A or AA expansion joints, 3/4-inch across street inlet sumps, 1/2-inch across concrete sidewalk or of the joint thickness specified. The joint filler material shall be of a width equal to the full depth of the pavement less the depth of the joint sealer and of a length no less than across the width of the face of the inlet, sidewalk or no less than the pavement section width.

GENERAL NOTES

1) Do not scale drawing, follow dimensions.
2) All deformed bars for joints and curbs shall be in accordance with section 1057.4 of the "St. Louis County Standard Specifications" manual.
3) Transverse or longitudinal construction joints in slip formed pavements may be made with a groover or tool, if such device as been approved in advance by the Department.

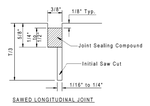
SAW CUTTING

When a standard (water cooled diamond bladed) concrete saw is used to cut the transverse or longitudinal joint when the pavement reaches 950 psi compressive strength (before final set) the following applies:

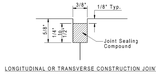
- For pavement < 7 inches thick, saw the joint to a minimum depth of one-fourth (T/4) the specified pavement thickness.
- For pavements > 7 inches thick, saw the joint to a minimum depth of one-third (T/3) the specified pavement thickness.
- Saw joints 3/8 inch + 1/16 inch wide as measured at the time of sawing.

When using early-entry (dry cut, light weight) saws, only use saw blades and skid plates as recommended by the manufacturer. Perform the early entry sawing reaches 750 psi compressive strength (after initial set and before final set) as follows:

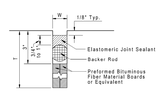
- Saw the joint 2-1/4 to 2-1/2 inches deep.
- Saw joints approximately 1/8 inch + 1/16 inch wide as measured at the time of sawing.



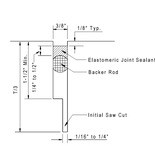
SAWED LONGITUDINAL JOINT



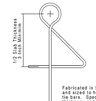
LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT



TRANSVERSE FORMED EXPANSION JOINT

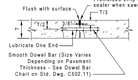


TRANSVERSE SAWED CONTRACTION JOINT

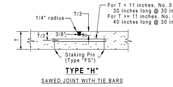


TYPE "FS" STAKING PIN DETAIL

Fabricated in 5 gauge wire and sized to hold sheet or tie bars. Specify slab thickness and bar diameter when ordering.



TYPE "G"
SAWED OR PREMOLDED STRIP TRANSVERSE CONSTRUCTION JOINT



TYPE "H"
SAWED JOINT WITH TIE BARS

JOINT FILLER AND SEALING MATERIAL SHALL MEET THE FOLLOWING:	
Material	Standard Specification
Hot-Poured Elastic Joint Sealant	Section 1057.5
Backer Rod Material for Hot-Poured Elastic Joint Sealant [1]	Section 1057.5.3
Polyurethane Elastomeric Joint Sealant	Section 1057.6
Preformed Fiber Expansion Joint Filler [2]	Section 1057.5.2
Preformed Sponge Rubber Expansion Joint Filler [2]	Section 1057.7.4
Silicone Joint Sealer for Saw Cut and Formed Joints	Section 1057.11
Backer Rod Material for Silicone Joint Sealant [1]	Section 1057.12

[1] Backer rod required for joint width ≥ 0.25 inch.

[2] The joint filler material thickness shall be 2 inches across for concrete pavement Type AA expansion joints, 1 inch across the intersection of concrete sidewalk and concrete entrances and at Type A or AA expansion joints, 3/4-inch across street inlet sumps, 1/2-inch across concrete sidewalk or of the joint thickness specified. The joint filler material shall be of a width equal to the full depth of the pavement less the depth of the joint sealer and of a length no less than across the width of the face of the inlet, sidewalk or no less than the pavement section width.

GENERAL NOTES

1) Do not scale drawing, follow dimensions.
2) All deformed bars for joints and curbs shall be in accordance with section 1057.4 of the "St. Louis County Standard Specifications" manual.
3) Transverse or longitudinal construction joints in slip formed pavements may be made with a groover or tool, if such device as been approved in advance by the Department.

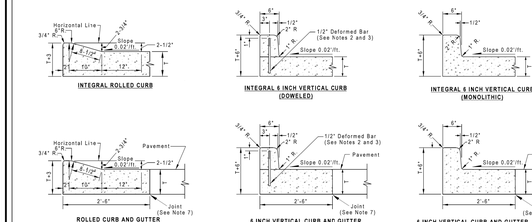
SAW CUTTING

When a standard (water cooled diamond bladed) concrete saw is used to cut the transverse or longitudinal joint when the pavement reaches 950 psi compressive strength (before final set) the following applies:

- For pavement < 7 inches thick, saw the joint to a minimum depth of one-fourth (T/4) the specified pavement thickness.
- For pavements > 7 inches thick, saw the joint to a minimum depth of one-third (T/3) the specified pavement thickness.
- Saw joints 3/8 inch + 1/16 inch wide as measured at the time of sawing.

When using early-entry (dry cut, light weight) saws, only use saw blades and skid plates as recommended by the manufacturer. Perform the early entry sawing reaches 750 psi compressive strength (after initial set and before final set) as follows:

- Saw the joint 2-1/4 to 2-1/2 inches deep.
- Saw joints approximately 1/8 inch + 1/16 inch wide as measured at the time of sawing.



INTEGRAL ROLLED CURB

INTEGRAL 6 INCH VERTICAL CURB (DOWELED)

INTEGRAL 6 INCH VERTICAL CURB (MONOLITHIC)

INTEGRAL 6 INCH MOUNTABLE CURB (See Note 10)

ROLLED CURB AND GUTTER (2'-6" WIDE)

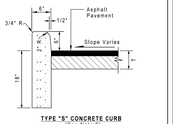
6 INCH VERTICAL CURB AND GUTTER (DOWLED 2'-6" WIDE)

6 INCH VERTICAL CURB AND GUTTER (MONOLITHIC 2'-6" WIDE)

6 INCH MOUNTABLE CURB AND GUTTER (2'-6" WIDE) (See Note 10)

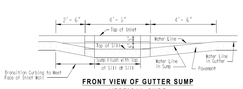
NOTES

1) Do not scale drawing, follow dimensions.
2) Construction joint and tie bars may be omitted when curb is poured integral with pavement.
3) Length of the tie bars shall be equal to the thickness of pavement plus the height of curb less 3 inches. Tie bars shall be placed at 24 inch centers.
4) All deformed bars for joints and curbs shall be in accordance with section 1057.4 of the "St. Louis County Standard Specifications" manual.
5) Transverse or longitudinal construction joints in slip formed pavements may be made with a groover or tool, if such device as been approved in advance by the Department.
6) Certain streets will be required to overlay the gutter with 2 inched of asphalt as directed by the Department. Curb height shall be adjusted to maintain the standard curb height. Asphalt overlay type to be determined by the Department.
7) Type "B" joint required for concrete pavement.
8) If the Contractor elects to construct concrete pavement by slip-form methods in accordance with Section 502.17, the width of the aggregate base shown on the plans shall be increased to provide a 3-foot width outside the edge of the pavement being placed.
9) Type "S" curb shall only be used where repair of existing Type "S" curb is required, and only with Departmental approval.
10) 6" mountable curb shall only be used where repair of existing 6" mountable curb is required. Use of 6" mountable curb for other applications requires Departmental approval.

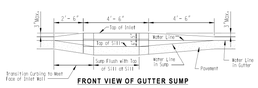


TYPE "S" CONCRETE CURB (See Note 9)

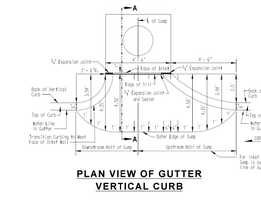
EDGE DATE 03/06/2020 REVISIONS	THIS IS NOT A CERTIFIED DOCUMENT	Saint Louis COUNTY TRANSPORTATION 41G NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63132	STANDARD DRAWING CONCRETE CURB DETAILS		
			EFFECTIVE 05/01/2020	SHEET 1 OF 1	DRAWING C502.14



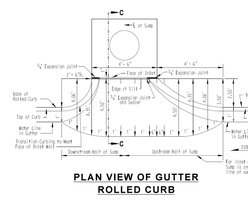
FRONT VIEW OF GUTTER SUMP VERTICAL CURB



FRONT VIEW OF GUTTER SUMP ROLLED CURB



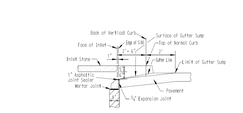
PLAN VIEW OF GUTTER VERTICAL CURB



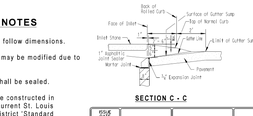
PLAN VIEW OF GUTTER ROLLED CURB

GENERAL NOTES

1) Do not scale drawing, follow dimensions.
4) Curb and inlet sumps may be modified due to field conditions.
3) All expansion joints shall be sealed.
4) Inlet structure shall be constructed in accordance with the current St. Louis Metropolitan Sewer District 'Standard Construction Specifications for Sewer and Drainage Facilities' manual.

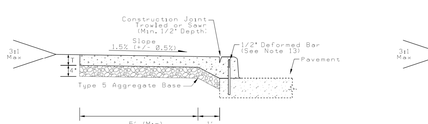


SECTION A - A

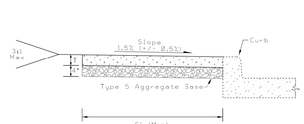


SECTION C - C

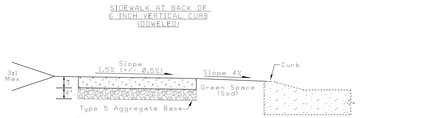
EDGE DATE 03/06/2020 REVISIONS	THIS IS NOT A CERTIFIED DOCUMENT	Saint Louis COUNTY TRANSPORTATION 41G NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63132	STANDARD DRAWING SEWER CONSTRUCTION DETAILS - STREET INLET SUMPS		
			EFFECTIVE 05/01/2020	SHEET 1 OF 2	DRAWING C604.36



SIDEWALK AT BACK OF 6 INCH VERTICAL CURB (DOWELED)



SIDEWALK AT BACK OF INTEGRAL 6 INCH VERTICAL CURB (MONOLITHIC)



SIDEWALK WITH GREEN SPACE

Minimum Sidewalk Width Requirements

With Green Space	
Residential Streets	4 ft. x 4 ft.
Collector Road	5 ft. x 5 ft.
Arterial/Road	5 ft. x 5 ft.
At Back of Vertical Curb	6
All Road Classifications	6 ft. x 6 ft.

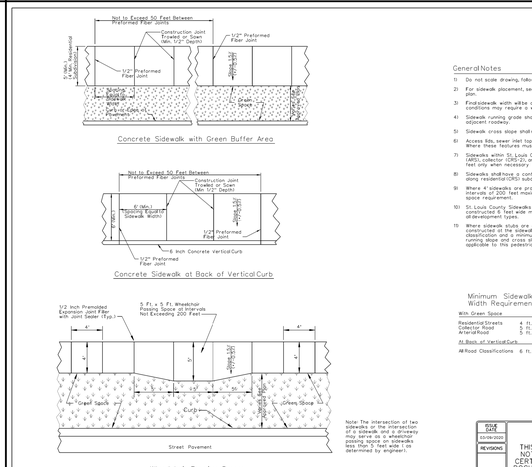
Minimum Sidewalk Concrete Thickness Requirements

Location	Thickness (T)
Adjacent to driveway	Match Drive Thickness
Adjacent to Wall Where Inset Is Part of The Pedestrian Route	7"
Through Driveway Approach	Match Drive Thickness
Through Intersection	Match Pavement Thickness
All Other Locations	4"

General Notes

1) Do not scale drawing, follow dimensions.
2) For sidewalk placement, see the appropriate typical section standard drawing or approved plan.
3) Curb and joint dimensions shown in Pavement Construction Details for "Concrete Curb Details".
4) Final sidewalk width will be determined by the engineer during the plan review process. Site conditions may require a wider sidewalk width than the minimums shown on this drawing.
5) Sidewalk running grade shall not exceed 5% except where matching the running grade of the adjacent roadway.
6) Sidewalk cross slope shall not exceed 1.52' (+/-0.5%) in the direction of pedestrian travel.
7) Access lids, sewer inlet tops, pullboxes, etc. should be avoided in the sidewalk surface. Where these features must be placed in the sidewalk, said feature must be ADA compliant.
8) Sidewalks within St.Louis County right of way shall be 5 feet wide minimum. for arterial (ARS), collector (CRS-2), and non-residential(CRS) roads. Clear width may be reduced to 4 feet only when necessary to avoid obstacles which cannot be practically relocated.
9) Sidewalks shall have a continuous and unobstructed clear width of 4 feet wide minimum along residential(CRS) subdivision streets.
10) Where 4' sidewalks are provided, 5 foot x 5 foot passing spaces shall be provided at intervals of 200 feet maximum. Driveway approaches may be used to meet the passing space requirement.
11) St. Louis County Sidewalks located within 2 feet of the back of curb are to be constructed 6 feet wide minimum and constructed adjacent to the back of the curb for all development types.
12) Where sidewalk shute are constructed with no pedestrian outlet, a turning space shall be constructed at the sidewalk terminus with a minimum width as defined by the road classification and a minimum length of 4 feet. The turning space shall have a maximum running slope and cross slope of 1.52' (+/- 0.5%) percent. The Road Grade Exception is not applicable to this pedestrian access route feature.
13) Length of the tie bar shall be equal to the thickness of pavement plus the height of curb less 3 inches. Tie bars shall be placed at 24" centers.

EDGE DATE 03/06/2020 REVISIONS	THIS IS NOT A CERTIFIED DOCUMENT	Saint Louis COUNTY TRANSPORTATION 41G NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63132	STANDARD DRAWING SIDEWALK		
			EFFECTIVE 05/01/2020	SHEET 1 OF 3	DRAWING C608.43



General Notes

1) Do not scale drawing, follow dimensions.
2) For sidewalk placement, see the appropriate typical section standard drawing or approved plan.
3) Curb and joint dimensions shown in Pavement Construction Details for "Concrete Curb Details".
4) Final sidewalk width will be determined by the engineer during the plan review process. Site conditions may require a wider sidewalk width than the minimums shown on this drawing.
5) Sidewalk running grade shall not exceed 5% except where matching the running grade of the adjacent roadway.
6) Sidewalk cross slope shall not exceed 1.52' (+/-0.5%) in the direction of pedestrian travel.
7) Access lids, sewer inlet tops, pullboxes, etc. should be avoided in the sidewalk surface. Where these features must be placed in the sidewalk, said feature must be ADA compliant.
8) Sidewalks within St.Louis County right of way shall be 5 feet wide minimum. for arterial (ARS), collector (CRS-2), and non-residential(CRS) roads. Clear width may be reduced to 4 feet only when necessary to avoid obstacles which cannot be practically relocated.
9) Sidewalks shall have a continuous and unobstructed clear width of 4 feet wide minimum along residential(CRS) subdivision streets.
10) Where 4' sidewalks are provided, 5 foot x 5 foot passing spaces shall be provided at intervals of 200 feet maximum. Driveway approaches may be used to meet the passing space requirement.
11) St. Louis County Sidewalks located within 2 feet of the back of curb are to be constructed 6 feet wide minimum and constructed adjacent to the back of the curb for all development types.
12) Where sidewalk shute are constructed with no pedestrian outlet, a turning space shall be constructed at the sidewalk terminus with a minimum width as defined by the road classification and a minimum length of 4 feet. The turning space shall have a maximum running slope and cross slope of 1.52' (+/- 0.5%) percent. The Road Grade Exception is not applicable to this pedestrian access route feature.
13) Length of the tie bar shall be equal to the thickness of pavement plus the height of curb less 3 inches. Tie bars shall be placed at 24" centers.

Minimum Sidewalk Width Requirements

With Green Space	
Residential Streets	4 ft. x 4 ft.
Collector Road	5 ft. x 5 ft.
Arterial/Road	5 ft. x 5 ft.
At Back of Vertical Curb	6
All Road Classifications	6 ft. x 6 ft.

Note: The intersection of two sidewalks or the intersection of a sidewalk and a driveway shall not have a wheelchair passing space on sidewalks less than 5 feet wide (as determined by engineer).

EDGE DATE 03/06/2020 REVISIONS	THIS IS NOT A CERTIFIED DOCUMENT	Saint Louis COUNTY TRANSPORTATION 41G NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63132	STANDARD DRAWING SIDEWALK		
			EFFECTIVE 05/01/2020	SHEET 2 OF 3	DRAWING C608.43

GENERAL NOTES

1. ALL NON-REINFORCED CONCRETE SHALL BE 4,000 PSI AT 28 DAYS.

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www.volzinc.com
Authority #203

STATE OF MISSOURI
7/11/25
TIMOTHY JOHN MEYER
NUMBER E-24665
PROFESSIONAL ENGINEER
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

CONSTRUCTION DETAILS: SHEET 1

8265 MEXICO ROAD
O'FALLON, MO 63376

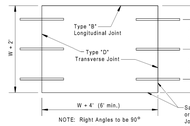
PARCEL ID: 2-0119-1766-00-00245
CITY OF O'FALLON
PERMIT No: RSP24-00001
PROJECT #23444

07-01-25

C27

H:\CAD\23400-23499\23444\Vwp\Plans\Improvement Plans\23444 - C27 Construction Details Sheet 1.dgn : Default 7/1/2025 10:40:32 AM Plotted by: ehermon Plot Scale: 1.0000 s / in. Plot Driver: Volz15 PDF.pltcfg Pen Table: Volz15 PDF.ctb

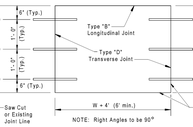
BITUMINOUS OVER CONCRETE PAVEMENT CUT



NOTE: Right Angles to be 90°

CUT PLAN "A"

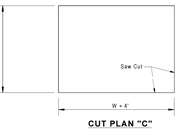
CONCRETE PAVEMENT CUT



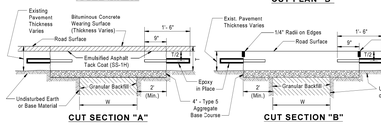
NOTE: Right Angles to be 90°

CUT PLAN "B"

BITUMINOUS CONCRETE PAVEMENT CUT

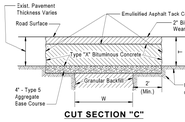


CUT PLAN "C"



CUT SECTION "A"

CUT SECTION "B"



CUT SECTION "C"

GENERAL NOTES

1) Refer to Standard Drawing C502.13 "Concrete Joints" for joint details.
2) Longitudinal and transverse joints: Do not drill concrete pavement less than 7 inches thick.
3) A gang-mounted drill shall be used for drilling holes in existing pavement for longitudinal joints.
4) Tie bars shall be installed no closer than 15 inches from transverse joints.
5) For trenching operations on roadways with an asphalt wearing surface, restoration of asphalt pavement shall be required as follows. The contractor shall mill and overlay the full width of the impacted lane(s) or shoulder(s) for trench excavations that exceed 50-ft longitudinally. When 5-ft or less of pavement remains between the excavation and the nearest joint or pavement edge, the contractor shall mill and overlay to the joint or pavement edge.
6) Epoxy Anchoring Material in accordance with Section 1039.30, "Epoxy or Polyester Bonding Agents for Dowels".

MINIMUM PAVEMENT COMPRESS STRENGTH REQUIREMENTS:

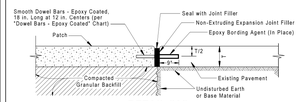
COMPRESSIVE STRENGTH FOR OPENING TO TRAFFIC, PSI		
PAVEMENT REPAIR THICKNESS INCHES	PAVEMENT REPAIR LENGTH 6 - 10 FEET	PAVEMENT REPAIR LENGTH > 10 FEET
Ts 8	3,000	3,600
8<Ts 9	2,400	2,700
9<T<10	2,200	2,300
T≥10	2,000	2,000

MINIMUM DOWEL BAR REQUIREMENTS:

DOWEL BARS - EPOXY COATED		
PAVEMENT THICKNESS*	BAR SIZE DIAMETER	BAR SIZE LENGTH
7 inches	1 inch	18 inches
8 inches	1 inch	18 inches
9 inches	1-1/4 inches	18 inches
10 inches	1-1/4 inches	18 inches
11 inches or Greater	1-1/2 inches	18 inches

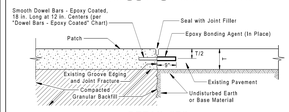
ISSUE DATE 03/06/2020	THIS IS NOT A CERTIFIED DOCUMENT	St. Louis COUNTY TRANSPORTATION 7979 NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63123	PAVEMENT CONSTRUCTION DETAILS CONSTRUCTION DETAILS OF FULL DEPTH PAVEMENT REPAIR
REVISIONS			EFFECTIVE 05/01/2020 · SHEET 1 OF 1 · DRAWING C613.00

PATCH CONSTRUCTION DETAILS



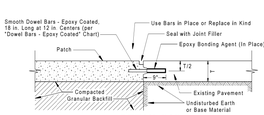
DETAIL "A"

To be Used Where Patch is Adjacent to Transverse Joints - See Patch Types 1 2 and 3 on Standard Drawing C613.02.



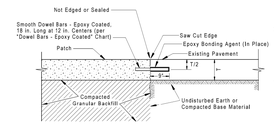
DETAIL "B"

To be used where patch is adjacent to transverse joints- See Patch Types 1 2 and 3 on Standard Drawing C613.02.



DETAIL "C"

To be used where patch is adjacent to longitudinal keyed joint - See Patch Type 3 on Standard Drawing C613.02.



DETAIL "D"

To be used where patch is adjacent to existing concrete where no joint is located - See Patch Type 4 on Standard Drawing C613.02. Use Detail "D" at transverse joint and Detail "C" at longitudinal joint.

GENERAL NOTES

1) For additional details refer to Standard Drawings C613.02; and Standard Specifications for Highway Construction Manual, Section 613.
2) Longitudinal and transverse joints: Do not drill 6 inch thick concrete pavement. For all other pavement thicknesses, install longitudinal bars by drilling holes with a gang-mounted drill, supplying epoxy in accordance with Section 1039.3, and cleaning hole, installing epoxy and tie bar in accordance with epoxy manufacturer's guidelines. Tie bars are to be installed no closer than 15 inches from transverse joint. Tie bar size and length shall be as follows:
   Epoxy-Coated Tie Bars. For Pavement Thicknesses:
   Less than 11 inches, use No. 5 deformed bars, 30-inches long at 30 inch centers.
   Greater than or equal to 11 inches, use No. 6 deformed bars, 40-inches long at 30 inch centers.
3) Where base material exists under pavements, replacement will be made with 4 inches of Type 5 aggregate base course, granular backfill and base materials will be compacted and installed per St. Louis County Specifications.
4) Wherever tie bars, tie bolts, dowels or other load transfer devices are found in a joint, the exposed ends will be cleaned and left in place. All smooth slip dowels should be straightened if necessary and greased prior to placing in patch.
5) Refer to Standard Drawing C502.13, Type "D" joint at transverse joints.

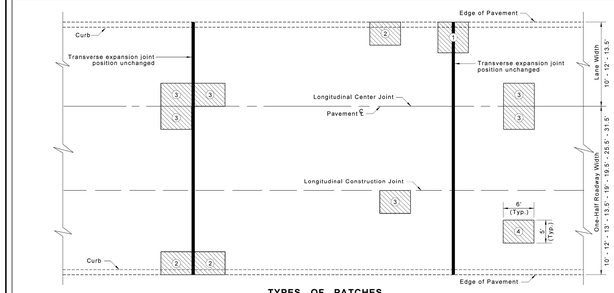
MINIMUM PAVEMENT COMPRESS STRENGTH REQUIREMENTS:

COMPRESSIVE STRENGTH FOR OPENING TO TRAFFIC, PSI		
PAVEMENT REPAIR THICKNESS INCHES	PAVEMENT REPAIR LENGTH 6 - 10 FEET	PAVEMENT REPAIR LENGTH > 10 FEET
Ts 8	3.000	3.600
8<Ts 9	2.400	2.700
9<T<10	2.200	2.300
T≥10	2.000	2.000

MINIMUM DOWEL BAR REQUIREMENTS:

DOWEL BARS - EPOXY COATED		
PAVEMENT THICKNESS*	BAR SIZE DIAMETER	BAR SIZE LENGTH
7 inches	1 inch	18 inches
8 inches	1 inch	18 inches
9 inches	1-1/4 inches	18 inches
10 inches	1-1/4 inches	18 inches
11 inches or Greater	1-1/2 inches	18 inches

ISSUE DATE 03/06/2020	THIS IS NOT A CERTIFIED DOCUMENT	St. Louis COUNTY TRANSPORTATION 7979 NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63123	PAVEMENT CONSTRUCTION DETAILS CONSTRUCTION JOINT DETAILS FOR CONCRETE CONSTRUCTION PATCHES
REVISIONS			EFFECTIVE 05/01/2020 · SHEET 1 OF 1 · DRAWING C613.01



TYPES OF PATCHES

(CLASSIFIED ACCORDING TO THEIR POSITION IN THE PAVEMENT)

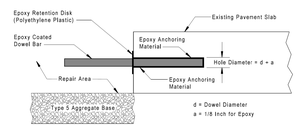
GENERAL NOTES

1) For additional details refer to Standard Drawings C613.00, C613.01 and C613.04.
2) The position of transverse expansion joints with respect to patches is not important; but all transverse expansion joints must be reproduced in their original position through patches of Types 1 2 and 3.
3) If the repair exceeds 5 ft. x 6 ft. in size, full slab replacement will be required.
4) Full depth sawcut required on all sides.
5) If patch is within 2 feet of joint, extend patch to joint.
6) A minimum distance of 6 feet from repair joint to nearest transverse crack or joint.
7) No longitudinal sawcutting of slabs will be permitted.
8) Half slab replacement not allowed on slabs less than 30 feet.

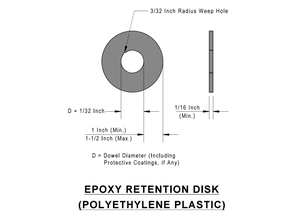
LEGEND

1. Exterior edge patch across joint
2. Exterior edge patch
3. Interior edge patch
4. Interior patch

ISSUE DATE 03/06/2020	THIS IS NOT A CERTIFIED DOCUMENT	St. Louis COUNTY TRANSPORTATION 7979 NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63123	PAVEMENT CONSTRUCTION DETAILS CONSTRUCTION DETAILS FOR CONCRETE REPAIR
REVISIONS			EFFECTIVE 05/01/2020 · SHEET 1 OF 1 · DRAWING C613.02



DOWEL BAR INSTALLATION



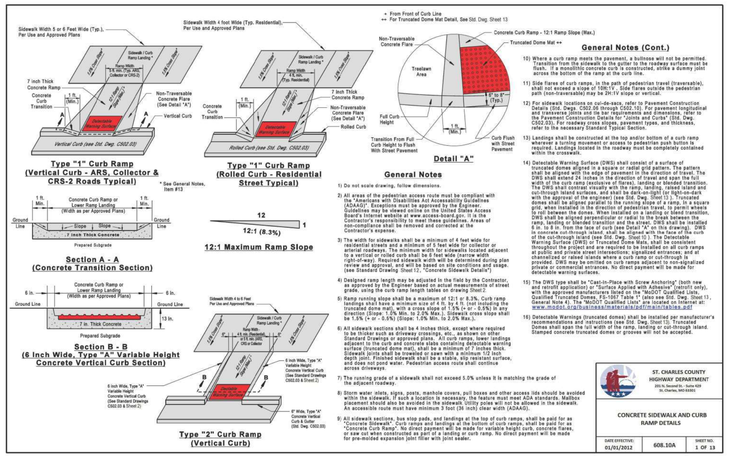
EPOXY RETENTION DISK (POLYETHYLENE PLASTIC)

GENERAL NOTES

1) Do not scale drawing, follow dimensions.
2) For additional details refer to Standard Drawings C613.00, C613.01 and C613.02.
3) EPOXY RETENTION DISK - Use lightweight polyethylene plastic epoxy retention disks, 1/8 inch thick, of sufficient diameter to prevent epoxy from seeping from the dowel holes and entering the joint. The hole in the center of the disk must have a diameter 1/32 inch larger than the dowel used.
4) CLEANING HOLES - Follow the anchoring material Manufacturer's written recommendations for cleaning the dowel bar holes. Provide those recommendations to the Engineer. As a minimum, clean the drilled holes with oil-free and moisture-free compressed air. The Engineer will check the compressed air stream purity with a clean white cloth. Use a compressor that delivers air at a minimum of 120 cubic feet per minute and develops a minimum nozzle pressure of 90 PSI. Insert the nozzle to the back of the hole to force out all of the dust and debris.
5) DOWEL INSTALLATION - When using new cartridges of epoxy anchoring material, ensure that the initial material exiting the nozzle appears uniformly mixed. If it is not uniformly mixed, waste the material until uniformly mixed material extrudes. Place the anchoring material at the back of the hole using a nozzle of sufficient length. Push the dowel into the hole while twisting such that the air pocket within the hole is heard to burst and the anchoring material is evenly distributed around the dowel. Use sufficient amounts of epoxy anchoring material such that it slightly extrudes out of the hole as the dowel is inserted. Place a grout retention disk over the dowel and tight against the exposed concrete face such that the epoxy anchoring material does not enter the joint.
6) When tie-bars are required, use Item #3 in "General Notes" above ("Epoxy Retention Disks"), for drilling and epoxy anchoring.
7) Epoxy Anchoring Material in accordance with Standard Specifications Manual, Section 1039.30, "Epoxy or Polyester Bonding Agents for Dowels".

DOWEL BARS - EPOXY COATED		
PAVEMENT THICKNESS*	BAR SIZE DIAMETER	BAR SIZE LENGTH
6 inches or Less	NO BAR REQUIRED	
7 inches	1 inch	18 inches
8 inches	1 inch	18 inches
9 inches	1-1/4 inches	18 inches
10 inches	1-1/4 inches	18 inches
11 inches or Greater	1-1/2 inches	18 inches

ISSUE DATE 03/06/2020	THIS IS NOT A CERTIFIED DOCUMENT	St. Louis COUNTY TRANSPORTATION 7979 NORTH LINDBERGH BLVD ST. LOUIS, MISSOURI 63123	PAVEMENT CONSTRUCTION DETAILS CONSTRUCTION DETAILS OF DOWEL INSTALLATION AND EPOXY RETENTION DISK
REVISIONS			EFFECTIVE 05/01/2020 · SHEET 1 OF 1 · DRAWING C613.04



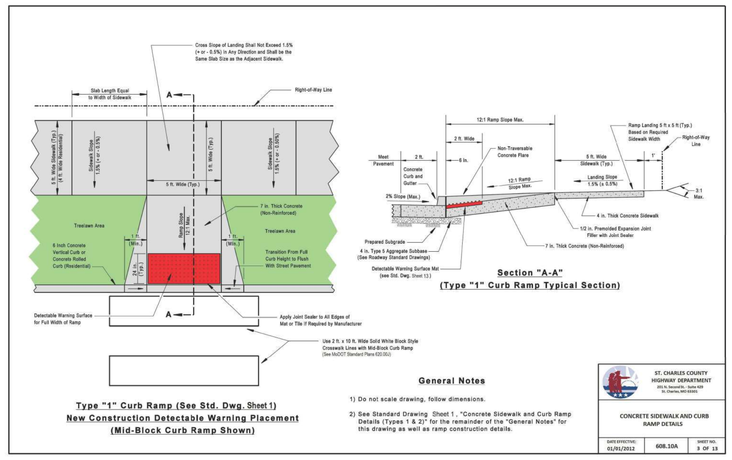
General Notes (Cont.)

10) Where a curb ramp meets the pavement, a bullnose will not be permitted. Flare the curb ramp sides to meet the curb face at a minimum of 45 degrees flush. If a monolithic concrete curb is constructed, strike a dummy joint across the bottom of the ramp at the curb line.
11) Side flares of curb ramps, in the path of pedestrian travel (traversable), shall not exceed a slope of 10H:1V. Side flares outside the pedestrian path (non-traversable) may be 2H:1V slope or vertical.
12) For sidewalk locations on cul-de-sacs, refer to Pavement Construction Details (Std. Dwgs. C613.00 through C613.02). For pavement longitudinal joints, refer to Pavement Construction Details (Std. Dwg. C613.00). For Pavement Construction Details for "Joints and Curbs" (Std. Dwg. C502.03). For roadway cross slopes, pavement types, and thickness, refer to the necessary Standard Typical Section.
13) Landings shall be constructed at the top and/or bottom of a curb ramp wherever a turning movement or access to pedestrian push button is required or where adjacent to the roadway must be completely contained within the crosswalk.
14) Detectable Warning Surface (DWS) shall consist of a surface of truncated domes aligned in a square or radial grid pattern. The pattern shall be aligned with the edge of pavement in the direction of travel. The DWS shall extend 24 inches in the direction of travel and span the full width of the curb ramp (exclusive of flares), landing or blended transition. The DWS shall contrast visually with the ramp or landing surface (dark-on-light surface, or light-on-dark surface). The pattern shall be aligned perpendicular or radial to the break between the ramp, landing or blended transition and the street. DWS shall be installed in the direction of pedestrian travel, to permit wheels to roll between the domes. DWS shall be installed on a landing or blend transition, DWS shall be aligned perpendicular or radial to the break between the ramp, landing or blended transition and the street. DWS shall be installed in the direction of pedestrian travel, to permit wheels to roll between the domes. DWS shall be installed on the face of the curb of the cut-through island (see Std. Dwg. Sheet 10.). The Detectable Warning Surface (DWS) shall be installed on all curb ramps at crosswalks throughout the project and are required to be installed on all curb ramps at public and private street intersections; signalized entrances; and at all channelized and raised islands where a curb ramp or cut-through is provided. DWS may be omitted on curb ramps adjacent to non-signalized private or commercial entrances. No direct payment will be made for detectable warning surfaces.
15) The DWS type shall be "Cast-In-Place with Screw Anchoring" (both new and retrofit application) or "Surface Applied with Adhesive" (retrofit only), with the approved manufacturers listed on the "MoDOT Qualified Lists, Qualified Truncated Domes, FIS-1087 Table 1" (also see MoDOT Std. Dwg. C608.10N). The MoDOT "Qualified Lists" are located on the Internet at: www.modot.org/businessmaterials/pdf/main/tables.pdf
16) Detectable Warnings (truncated domes) shall be installed per manufacturer's recommendations and instructions (see Std. Dwg. Sheet 10). Truncated domes shall be installed on the ramp, landing, blended transition and cut-through island. Stamped concrete truncated domes or grooves will not be accepted.

General Notes

1) Do not scale drawing, follow dimensions.
2) Refer to Standard Drawing Sheet 1 "Concrete Sidewalk and Curb Ramp Details (Types 1 & 2)" for the remainder of the "General Notes" for this drawing as well as ramp construction details.

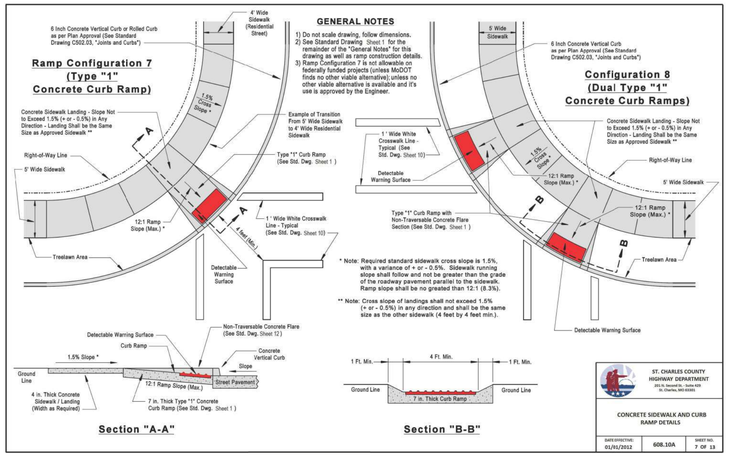
ST. CHARLES COUNTY HIGHWAY DEPARTMENT 203 N. Second St. - Suite 420 St. Charles, MO 63301	CONCRETE SIDEWALK AND CURB RAMP DETAILS	
DATE EFFECTIVE: 01/01/2012	608.10A	SHEET NO. 1 OF 13



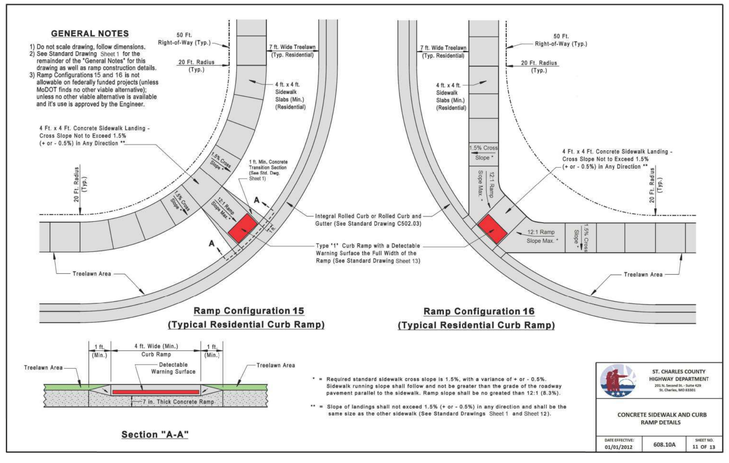
General Notes

1) Do not scale drawing, follow dimensions.
2) See Standard Drawing Sheet 1 , "Concrete Sidewalk and Curb Ramp Details (Types 1 & 2)" for the remainder of the "General Notes" for this drawing as well as ramp construction details.

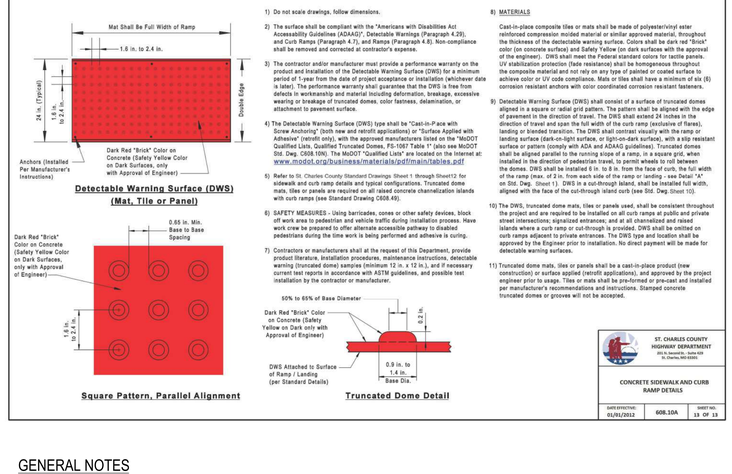
ST. CHARLES COUNTY HIGHWAY DEPARTMENT 203 N. Second St. - Suite 420 St. Charles, MO 63301	CONCRETE SIDEWALK AND CURB RAMP DETAILS	
DATE EFFECTIVE: 01/01/2012	608.10A	SHEET NO. 9 OF 13



ST. CHARLES COUNTY HIGHWAY DEPARTMENT 203 N. Second St. - Suite 420 St. Charles, MO 63301	CONCRETE SIDEWALK AND CURB RAMP DETAILS	
DATE EFFECTIVE: 01/01/2012	608.10A	SHEET NO. 7 OF 13



ST. CHARLES COUNTY HIGHWAY DEPARTMENT 203 N. Second St. - Suite 420 St. Charles, MO 63301	CONCRETE SIDEWALK AND CURB RAMP DETAILS	
DATE EFFECTIVE: 01/01/2012	608.10A	SHEET NO. 11 OF 13



General Notes

1) Do not scale drawings, follow dimensions.
2) The surface shall be compliant with the "Americans with Disabilities Act Accessability Guidelines (ADAAG)", Detectable Warnings (Paragraph 4.29), and Curb Ramps (Paragraph 4.7), and Ramps (Paragraph 4.8). Non-compliance shall be removed and corrected at contractor's expense.
3) The contractor and/or manufacturer must provide a performance warranty on the product and installation of the Detectable Warning Surface (DWS) for a minimum period of 1 year from the date of project acceptance or installation (whichever date is later). The performance warranty shall guarantee that the DWS is free from defects in workmanship and material including deformation, breakage, excessive wearing or breakage of truncated domes, color fastness, delamination, or attachment to pavement surface.
4) The Detectable Warning Surface (DWS) type shall be "Cast-In-Place with Screw Anchoring" (both new and retrofit applications) or "Surface Applied with Adhesive" (retrofit only), with the approved manufacturers listed on the "MoDOT Qualified Lists, Qualified Truncated Domes, FIS-1087 Table 1" (also see MoDOT Std. Dwg. C608.10N). The MoDOT "Qualified Lists" are located on the Internet at: www.modot.org/businessmaterials/pdf/main/tables.pdf
5) Refer to St. Charles County Standard Drawings Sheet 1 through Sheet12 for sidewalk and curb ramp details and typical configurations. Truncated dome mats, tiles or panels are required on all raised concrete channelization islands with curb ramps (see Standard Drawing C608.49).
6) SAFETY MEASURES - Using barricades, cones or other safety devices, block off work area to pedestrian and vehicle traffic during installation process. Have work crew be prepared to offer alternate accessible pathway to disabled pedestrians during the time work is being performed and adhesive is curing.
7) Contractors or manufacturers shall at the request of this Department, provide product literature, installation procedures, maintenance instructions, detectable warning (truncated dome) samples (minimum 12 in. x 12 in.), and if necessary current test reports in accordance with ASTM guidelines, and possible test installation by the contractor or manufacturer.
8) MATERIALS
   Cast-in-place composite tiles or mats shall be made of polyester/vinyl ester reinforced compression molded material or similar approved material, throughout the thickness of the detectable warning surface. Colors shall be dark red "Brick" color (on concrete surface) and Safety Yellow (on dark surfaces with the approval of the engineer). DWS shall meet the Federal standard colors for tactile panels. UV stabilization protection (fade resistance) shall be homogeneous throughout the composite material and not rely on any type of painted or coated surface to achieve color or UV code compliance. Mats or tiles shall have a minimum of six (6) corrosion resistant anchors with color coordinated corrosion resistant fasteners.
9) Detectable Warning Surface (DWS) shall consist of a surface of truncated domes aligned in a square or radial grid pattern. The pattern shall be aligned with the edge of pavement in the direction of travel. The DWS shall extend 24 inches in the direction of travel and span the full width of the curb ramp (exclusive of flares), landing or blended transition. The DWS shall contrast visually with the ramp or landing surface (dark-on-light surface, or light-on-dark surface), with a slip resistant surface or pattern (comply with ADA and ADAAG guidelines). Truncated domes shall be aligned parallel to the running slope of a ramp, in a square grid, when installed in the direction of pedestrian travel, to permit wheels to roll between the domes. DWS shall be installed 6 in. to 8 in. from the face of curb, the full width of the ramp (max. of 3 in. from each side of the ramp or landing - see Detail "A" on Std. Dwg. Sheet 1). DWS in a cut-through island, shall be installed full width, aligned with the face of the cut-through island curb (see Std. Dwg. Sheet 10).
10) The DWS, truncated dome mats, tiles or panels used, shall be consistent throughout the project and are required to be installed on all curb ramps at public and private street intersections; signalized entrances; and at all channelized and raised islands where a curb ramp or cut-through is provided. DWS shall be omitted on curb ramps adjacent to private entrances. The DWS type and location shall be approved by the Engineer prior to installation. No direct payment will be made for detectable warning surfaces.
11) Truncated dome mats, tiles or panels shall be a cast-in-place product (new construction) or surface applied (retrofit applications), and approved by the project engineer prior to usage. Tiles or mats shall be pre-formed or pre-cast and installed per manufacturer's recommendations and instructions. Stamped concrete truncated domes or grooves will not be accepted.

ST. CHARLES COUNTY HIGHWAY DEPARTMENT 203 N. Second St. - Suite 420 St. Charles, MO 63301	CONCRETE SIDEWALK AND CURB RAMP DETAILS	
DATE EFFECTIVE: 01/01/2012	608.10A	SHEET NO. 13 OF 13

GENERAL NOTES

1. ALL NON-REINFORCED CONCRETE SHALL BE 4,000 PSI AT 28 DAYS.

MCKELVEY HOMES
Building A Tradition Of Excellence Since 1986
424 S. WOODS MILL RD., SUITE 110
TOWN & COUNTRY, MISSOURI 63017

VOLZ Incorporated
10849 Indian Head Ind'l. Blvd.
St. Louis, Missouri 63132
314.890.1250 Voice
314.890.1250 Fax
www.volzinc.com
Authority #203

MISSOURI PROFESSIONAL ENGINEER
7/11/25
TIMOTHY JOHN MEYER
NUMBER E-24665
TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

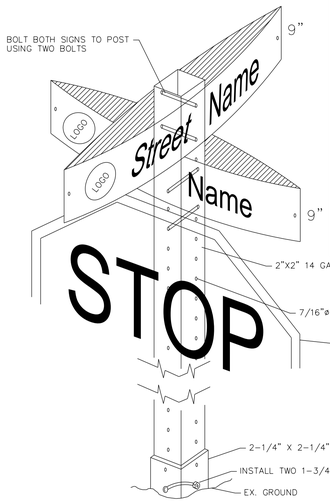
CONSTRUCTION DETAILS: SHEET 2

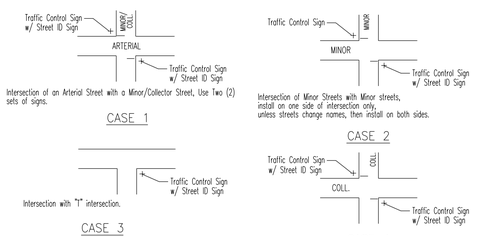
PARCEL ID: 2-0119-1766-00-0024.5
CITY OF O'FALLON
PERMIT No. RSP25-0001
8265 MEXICO ROAD, O'FALLON, MO 63376
PROJECT #23444

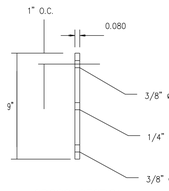
07-01-25

C28

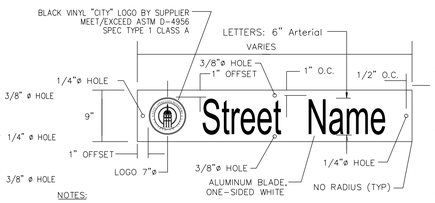
H:\CAD\23400-23499\23444\Imp\Plans\Improvement Plans\23444 - C28 Construction Details Sheet 2.dgn : Default 7/1/2025 10:41:03 AM Plotted by: ehermon Plot Scale: 1.0000 si / in. Plot Driver: Volz15.PDF.pltcfg Pen Table: Volz15.tbl







CROSS SECTION
FLAT SIGN BLADE
(ARTERIAL)

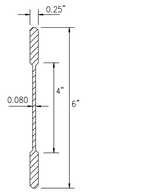


NOTES:
FOR ALL BOLT-TOGETHER SIGNS, DO NOT PAINT THE BACK SIDE BLACK.

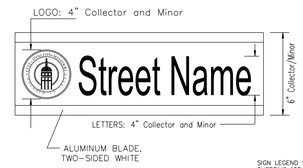
ELEVATION VIEW
FLAT SIGN BLADE

GENERAL NOTES:

1. ALL SIGN POST AND BACK OF SIGNS THAT ARE TO BE PAINTED BLACK SHALL USE A PAINT SYSTEM THAT PROVIDES A MINIMUM 7 YEAR LIFE EXPECTANCY. MAY USE:
   a) "CARBOLINE RUSTBOND" BASE AT 1-2 MILS THICK, "CARBOLINE 893 SG" MID-LAYER AT 3-5 MILS THICK, "CARBOLINE 133 HB" TOP COAT, OR
   b) ELECTROSTATIC APPLIED, BLACK POWDER COATED AND BAKED ON PAINT SYSTEM AT 2-3 MILS THICKNESS, OR
   c) APPROVED EQUAL.
2. ALL SIGN LOCATIONS AND SIZES MUST BE APPROVED BY THE ENGINEERING DIVISION PRIOR TO INSTALLATION.
3. STREET NAME SIGN PLATES SHALL BE 9 INCHES WIDE FLAT, BOLT TOGETHER FOR ANY ARTERIAL INTERSECTIONS AND 6 INCHES WIDE EXTRUDED ALUMINUM PANELS FOR ALL MINOR AND COLLECTOR ROADS. TYPICAL LENGTHS FOR MINOR AND COLLECTOR SIGNS SHALL BE 24, 30 & 36 INCH LENGTHS, OR LONGER AS NEEDED, TO ACCOMODATE STREET NAME.
4. SIGN LEGEND SHALL BE 7 INCH 3M ENGINEER GRADE SHEETING (OR APPROVED EQUAL) WHITE REFLECTIVE WITH THE CITY OF O'FALLON LOGO WITH 6 IN. BLACK NON-REFLECTIVE LETTERS FOR ARTERIALS AND 4 IN. SIGN LEGEND FOR MINOR AND COLLECTOR ROADS WITH 4 IN. LETTERS. ALL REFLECTIVE SHEETING SHALL MEET AND OR EXCEED ASTM D 4956 SPEC, TYPE 3 OR HIGHER (HIGH INTENSITY OR DIAMOND GRADE).
5. "CLEARVIEW" FONT SHALL BE USED ON ALL STREET SIGNS.
6. SIGN POSTS SHALL BE HEAVY "U" CHANNEL (2 LBS/FT) PAINTED BLACK STEEL POSTS FOR COLLECTOR/MINOR STREETS. ARTERIAL STREETS SHALL HAVE 2" SQUARE POSTS WITH BREAKAWAY ASSEMBLY.
7. SIGN POSTS SHALL EXTEND A MINIMUM OF 30 INCHES IN THE GROUND AND PLUM.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN OR NOT SHOWN. PLEASE CONTACT CITY FOR LOCATION OF CITY UTILITIES NOT FOUND BY DIG-RITE SERVICES.
9. SIGNS SHALL NOT CREATE A SITE DISTANCE PROBLEM OR CONFLICT WITH PEDESTRIAN TRAFFIC.
10. SPEED LIMIT SIGNS MUST BE AT EVERY ENTRANCE TO A SUBDIVISION ALONG THE LOT LINE BETWEEN FIRST AND SECOND LOT AND APPROXIMATELY EVERY TWO THOUSAND (2,000) FEET THERE AFTER. ALSO, EVERY CONNECTING SIDE STREET MUST HAVE ONE SPEED LIMIT SIGN APPROXIMATELY FIFTY FEET FROM INTERSECTION AND APPROXIMATELY EVERY TWO THOUSAND FEET (2,000) THERE AFTER.
11. ALL SIGNS UNLESS OTHERWISE STATED, SHOULD BE CONSTRUCTED AND INSTALLED PER MUTCD.



CROSS SECTION
EXTRUDED SIGN BLADE
(COLLECTOR/MINOR)



ELEVATION VIEW
EXTRUDED SIGN BLADE

SIGN LEGEND SHALL BE 7 INCH 3M ENGINEER GRADE SHEETING (OR APPROVED EQUAL) WHITE REFLECTIVE WITH THE CITY OF O'FALLON LOGO WITH 6 IN. BLACK NON-REFLECTIVE LETTERS FOR ARTERIALS AND 4 IN. SIGN LEGEND FOR MINOR AND COLLECTOR ROADS WITH 4 IN. LETTERS. ALL REFLECTIVE SHEETING SHALL MEET AND OR EXCEED ASTM D 4956 SPEC, TYPE 3 OR HIGHER (HIGH INTENSITY OR DIAMOND GRADE).

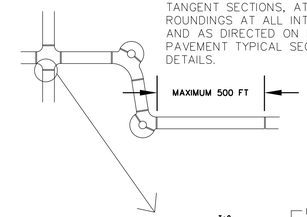
CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

ARTERIAL SIGNS

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

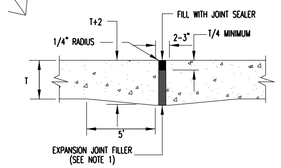
SIGNS, DETAILS AND LOCATIONS

JOINT LOCATION



AT PC AND PT OF CURVED PAVEMENT, MAXIMUM 500 FT SPACING ON TANGENT SECTIONS, AT ENTRANCE ROUNDINGS AT ALL INTERSECTIONS, AND AS DIRECTED ON INTEGRAL CURB PAVEMENT TYPICAL SECTIONS AND DETAILS.

MAXIMUM 500 FT



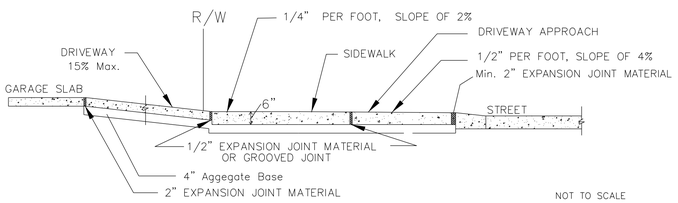
TYPE A2
CONSTRUCTION JOINT

NOTES:

1. JOINT FILLER COMPOSED OF CELLULAR FIBERS, ASTM D-1751, MAY BE USED AT DRIVEWAY, SIDEWALK, AND SEWER INLET AND MANHOLE LOCATIONS.
2. SEE "INTEGRAL CURB DETAIL "B" AT DRIVEWAYS" FOR EXPANSION JOINT REQUIREMENTS AT DRIVEWAY CONNECTIONS TO THE STREET AND THE GARAGE.

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

PAVEMENT CONSTRUCTION DETAIL



NOT TO SCALE

NOTES:

1: All driveway entrances shall be six (6) inches P.C.C. in depth from the curb to the property line.

2: All driveway approaches constructed in conjunction with sidewalk shall give the appearance that the sidewalk is continuous. That portion of the driveway approach that doubles as a sidewalk shall have a one-fourth (1/4) inch per foot cross slope the same as the abutting sidewalk.

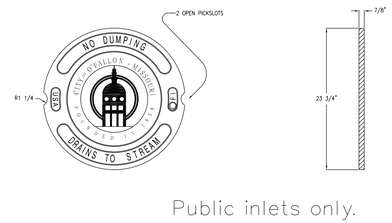
3: A two (2) inch expansion joint is required between the street and driveway approach. One (1) additional two (2) inch expansion joint is required between the garage floor and the termination of the driveway.

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

Integral Curb Detail "B" at Driveway

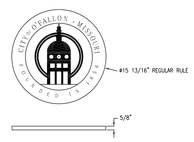
SECTION NO. 405.210 (G)

* All other Storm or Sanitary Sewer Details will be by M.S.D. Standards and Specifications.
** All inlets shall have 5/8" trash bar centered with the opening(s).



Public inlets only.

Also available at East Jordan foundry

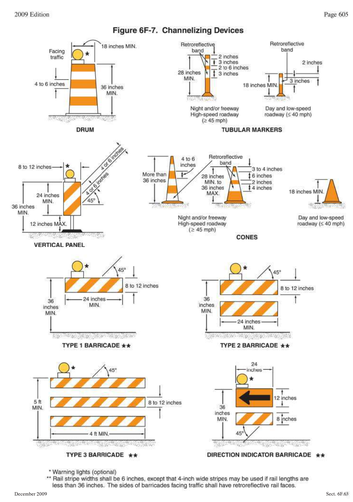


MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT UNLESS SPECIFIED ON PURCHASE ORDER
WEIGHT: 85 LBS.

DR. KBH	SCALE 1/8"=1'	TITLE 4580 COVER	
CH.			
APP.	NEENAH FOUNDRY		
DATE 11/21/2013	NEENAH WISCONSIN 54956 PHONE 920.725.7000	NF-4580-2727	B
www.neenahfoundry.com	LINCOLN NEBRASKA 68529 PHONE 800.247.7468		

DWG. REF: 4580-2727.DWG-1

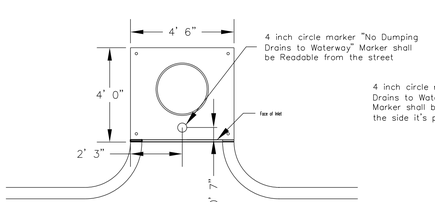
CAD



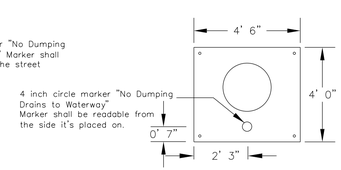
* The City of O'Fallon must be provided with a symbol/medallion for review and approval prior to installation. Contact the City if any information is needed.

Size	Style	Adhesive	Message (Part #)
3 7/8" TO 4"	Crystal Cap or Standard Style	Epoxy	No Dumping Drains to Waterway

City will also allow the precast inlet stone with a similar message as an approved alternate to the marker.



PLAN VIEW OF CURB INLET



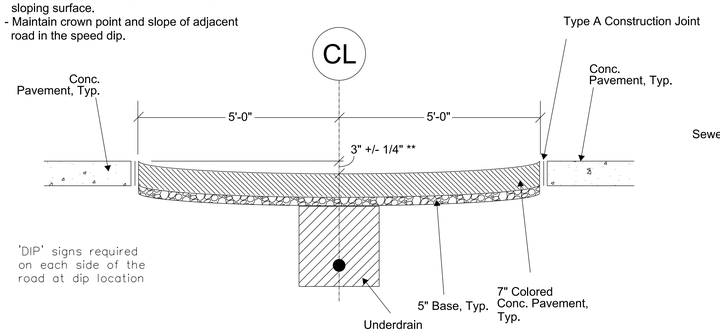
PLAN VIEW OF AREA INLET

Public or Private Inlets

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

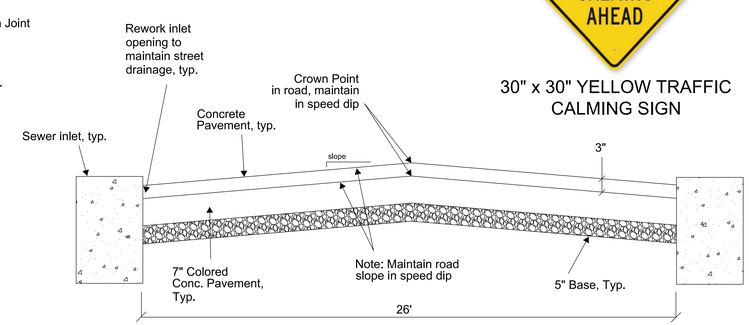
STORM DRAIN MARKER LOCATION

** NOTE **
- 3" depression in concrete is a concave surface. DO NOT construct with a linear sloping surface.
- Maintain crown point and slope of adjacent road in the speed dip.



TRAFFIC CALMING 'DIP' - PROFILE VIEW

30" x 30" YELLOW TRAFFIC CALMING SIGN



TRAFFIC CALMING 'DIP' - FRONT VIEW

McKELVEY HOMES
Building A Tradition Of Excellence Since 1986
424 S. WOODS MILL RD., SUITE 110
TOWN & COUNTRY, MISSOURI 63017

VOLZ Incorporated
10849 Indian Head Ind'l. Blvd.
St. Louis, Missouri 63132
314.994.7200 314.890.1250 Fax
www.volzinc.com
Authority #203

STATE OF MISSOURI
7/1/25
TIMOTHY JOHN MEYER
NUMBER E-24665
PROFESSIONAL ENGINEER

TIMOTHY J MEYER
Professional Engineer
MO E-24665

STRAWBERRY FARMS

CONSTRUCTION DETAILS: SHEET 3

8265 MEXICO ROAD,
O'FALLON, MO 63376

PARCEL ID: 2-0119-7816-00-0024.5
CITY OF O'FALLON
PERMIT NO: RSP24-00001
PROJECT #23444

07-01-25

C29

H:\CAD\23400-23499\23444\Imp Plans\Improvement Plans\23444 - C29 Construction Details Sheet 3.dgn : Default 7/1/2025 10:41:42 AM Plotted by: ehrman Plot Scale:1.0000 pt / in. Plot Driver: Volz15 PDF.pltcfg Pen Table: Volz15 Plot Full.tbl