

17 Attachment 4

Borough of Elizabethtown

APPENDIX NO. 4

RAINFALL INTENSITY-DURATION-FREQUENCY CHART						
LANCASTER COUNTY, PENNSYLVANIA						
Storm Event	2 yrs.	5yrs.	10 yrs.	25 yrs.	50 yrs.	100 yrs.
Time of Concentration (minutes)	Rainfall Intensity (inches/hour)					
5	4.63	5.40	6.02	6.70	7.51	8.19
6	4.34	5.15	5.70	6.39	7.22	7.90
7	4.12	4.95	5.42	6.10	6.95	7.62
8	3.92	4.70	5.17	5.85	6.70	7.36
9	3.75	4.50	4.95	5.62	6.47	7.12
10	3.59	4.30	4.75	5.41	6.26	6.90
11	3.45	4.15	4.58	5.22	6.07	6.70
12	3.32	4.0	4.42	5.05	5.88	6.50
13	3.21	3.85	4.27	4.89	5.71	6.33
14	3.10	3.70	4.13	4.74	5.55	6.16
15	3.00	3.55	4.0	4.60	5.40	6.00
16	2.91	3.46	3.89	4.47	5.27	5.85
17	2.83	3.37	3.78	4.35	5.13	5.71
18	2.75	3.28	3.68	4.24	5.01	5.58
19	2.67	3.19	3.58	4.13	4.89	5.46
20	2.60	3.10	3.50	4.03	4.78	5.34
21	2.54	3.01	3.41	3.94	4.68	5.23
22	2.48	2.92	3.33	3.85	4.58	5.12
23	2.42	2.83	3.26	3.77	4.48	5.01
24	2.36	2.74	3.19	3.68	4.39	4.92
25	2.31	2.65	3.15	3.61	4.30	4.83
26	2.26	2.61	3.05	3.53	4.22	4.74
27	2.22	2.57	2.99	3.47	4.14	4.65
28	2.17	2.53	2.93	3.40	4.06	4.57
29	2.13	2.49	2.88	3.33	3.99	4.49
30	2.09	2.45	2.82	3.27	3.92	4.41
35	1.91	2.25	2.59	3.00	3.61	4.08
40	1.76	2.05	2.39	2.78	3.34	3.79
45	1.63	1.91	2.22	2.58	3.12	3.54
50	1.53	1.77	2.08	2.42	2.92	3.33
55	1.43	1.69	1.96	2.28	2.75	3.15
60	1.35	1.60	1.85	2.15	2.60	2.98

Source: Pennsylvania Department of Transportation, Region 5 Intensity-Duration Chart, developed by Penn State University, Department of Engineering, October 1986.