

APPENDIX A:

Table 1. Will County Stormwater Technical Guidance Manual Rainfall Depths and Intensities														
Updated Bulletin 70 (March 2019) - Rainfall Depths and Intensities for NE Illinois Section														
	Frequency													
Duration	2-year		5-year		10-year		25-year		50-year		100-year		500-year	
	(in)	(in/hr)	(in)	(in)	(in)	(in/hr)	(in)	(in/hr)	(in)	(in/hr)	(in)	(in/hr)	(in)	(in/hr)
5 min	<i>0.40</i>	<i>4.80</i>	<i>0.52</i>	<i>6.24</i>	<i>0.62</i>	<i>7.44</i>	<i>0.77</i>	<i>9.24</i>	<i>0.90</i>	<i>10.80</i>	<i>1.03</i>	<i>12.36</i>	<i>1.35</i>	<i>16.20</i>
10 min	<i>0.70</i>	<i>4.20</i>	<i>0.90</i>	<i>5.40</i>	<i>1.08</i>	<i>6.48</i>	<i>1.35</i>	<i>8.10</i>	<i>1.58</i>	<i>9.48</i>	<i>1.80</i>	<i>10.80</i>	<i>2.36</i>	<i>14.16</i>
15 min	<i>0.90</i>	<i>3.60</i>	<i>1.16</i>	<i>4.64</i>	<i>1.39</i>	<i>5.56</i>	<i>1.74</i>	<i>6.96</i>	<i>2.03</i>	<i>8.12</i>	<i>2.31</i>	<i>9.24</i>	<i>3.03</i>	<i>12.12</i>
30 min	<i>1.24</i>	<i>2.48</i>	<i>1.59</i>	<i>3.18</i>	<i>1.91</i>	<i>3.82</i>	<i>2.39</i>	<i>4.78</i>	<i>2.78</i>	<i>5.56</i>	<i>3.17</i>	<i>6.34</i>	<i>4.16</i>	<i>8.32</i>
1 hour	1.57	1.57	2.02	2.02	2.42	2.42	3.03	3.03	3.53	3.53	4.03	4.03	5.28	5.28
2 hour	1.94	0.97	2.49	1.25	2.99	1.50	3.74	1.87	4.35	2.18	4.97	2.49	6.52	3.26
3 hour	2.14	0.71	2.75	0.92	3.30	1.10	4.13	1.38	4.80	1.60	5.49	1.83	7.20	2.40
6 hour	2.51	0.42	3.23	0.54	3.86	0.64	4.84	0.81	5.63	0.94	6.43	1.07	8.43	1.41
12 hour	2.91	0.24	3.74	0.31	4.48	0.37	5.61	0.47	6.53	0.54	7.46	0.62	9.78	0.82
18 hour	3.14	0.17	4.04	0.22	4.84	0.27	6.06	0.34	7.05	0.39	8.06	0.45	10.57	0.59
24 hour	3.34	0.14	4.30	0.18	5.15	0.21	6.45	0.27	7.50	0.31	8.57	0.36	11.24	0.47
48 hour	3.66	0.08	4.71	0.10	5.62	0.12	6.99	0.15	8.13	0.17	9.28	0.19	12.10	0.25
72 hour	3.97	0.06	5.08	0.07	6.05	0.08	7.49	0.10	8.64	0.12	9.85	0.14	12.81	0.18
120 hour	4.42	0.04	5.63	0.05	6.68	0.06	8.16	0.07	9.39	0.08	10.66	0.09	13.81	0.12
240 hour	5.60	0.02	7.09	0.03	8.25	0.03	9.90	0.04	11.26	0.05	12.65	0.05	16.00	0.07

Note: Value in italics and shard for the 5-30 min durations are derived suing 1989/2019 Bulletin 70 ratios (X-hr/24-hr), since the ratios are the same for the updated 2019 Bulletin 70 as the old. These were derived because Tables 4 and 5 contained in the ISWS Contract Report 2019-05 "Frequency Distributions of Heavy Precipitation in Illinois-Updated Bulletin 70" did not include them.