

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-100-01	JUNC-79-02	56.03	0.43	0.74	1.39	1.68	> 50yr	Minimal Risk
JUNC-100-02	JUNC-100-01	67.40	0.35	0.58	1.11	1.35	> 50yr	Minimal Risk
JUNC-100-03	JUNC-100-02	27.06	0.35	0.59	1.12	1.35	> 50yr	Minimal Risk
JUNC-100-04	JUNC-100-03	4.44	0.09	0.31	0.83	1.07	> 50yr	Minimal Risk
JUNC-100-04	JUNC-100-03	0.18	0.26	0.27	0.28	0.29	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-11-03	JUNC-11-02	136.84	1.98	3.83	10.67	13.68	> 50yr	Minimal Risk
JUNC-11-04	JUNC-11-03	146.96	1.87	3.70	10.30	13.23	> 50yr	Minimal Risk
JUNC-11-05	JUNC-11-04	141.93	0.84	1.72	4.59	5.68	> 50yr	Minimal Risk
JUNC-11-06	JUNC-11-05	0.17	0.36	0.38	0.39	0.39	< 50yr	Low Risk
JUNC-11-06	JUNC-11-05	24.49	0.43	1.29	4.08	5.14	< 50yr	Low Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-16-01	JUNC-2-04	67.39	1.61	2.60	4.98	6.07	> 50yr	Minimal Risk
JUNC-16-02	JUNC-16-01	0.43	0.46	0.47	0.50	0.51	> 50yr	Minimal Risk
JUNC-16-02	JUNC-16-01	5.91	1.15	2.12	4.48	5.56	> 50yr	Minimal Risk
JUNC-16-03	JUNC-16-02	0.51	0.51	0.51	0.50	0.50	< 2yr	Very High Risk
JUNC-16-03	JUNC-16-02	6.59	0.78	1.54	3.18	3.95	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-19-03	JUNC-19-02	1.78	0.40	0.72	1.80	2.34	> 50yr	Minimal Risk
JUNC-19-04	JUNC-19-03	0.04	0.16	0.16	0.16	0.16	< 2yr	Very High Risk
JUNC-19-04	JUNC-19-03	2.03	0.46	0.78	1.83	2.35	> 50yr	Minimal Risk
JUNC-20-01	JUNC-2-08	155.04	1.47	2.37	5.45	7.75	> 50yr	Minimal Risk
JUNC-20-02	JUNC-57-01	0.31	0.42	0.41	0.40	0.40	< 2yr	Very High Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-2-02	JUNC-2-01	3640.90	188.96	299.35	711.35	983.04	> 50yr	Minimal Risk
JUNC-2-03	JUNC-2-02	3639.21	188.91	299.22	710.94	982.59	> 50yr	Minimal Risk
JUNC-2-04	JUNC-2-03	3639.24	188.92	299.22	710.92	982.59	> 50yr	Minimal Risk
JUNC-2-05	JUNC-2-04	3638.60	188.88	299.16	710.79	982.42	> 50yr	Minimal Risk
JUNC-2-06	JUNC-2-05	3634.93	188.63	298.76				

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-2-28	JUNC-2-27	6252.32	179.66	283.33	675.61	937.85	> 50yr	Minimal Risk
JUNC-2-29	JUNC-2-28	6252.02	179.64	283.35	675.58	937.80	> 50yr	Minimal Risk
JUNC-2-30	JUNC-2-29	6223.07	178.51	281.88	672.16	933.46	> 50yr	Minimal Risk
JUNC-23-01	JUNC-2-12	47.06	2.25	3.99	9.22	11.77	> 50yr	Minimal Risk
JUNC-23-02	JUNC-23-01	0.61	0.59	0.60	0.65	0.66	> 50yr	Minimal Risk
JUNC-23-02	JUNC-23-01	31.61	1.53	3.10	7.81	10.11	< 20yr	Medium Risk
JUNC-23-03	JUNC-23-02	0.71	0.74	0.75	0.75	0.74	< 2yr	Very High Risk
JUNC-23-03	JUNC-57-03	0.46	0.64	0.65	0.63	0.63	< 2yr	Very High Risk
JUNC-23-03	JUNC-23-02	35.45	1.54	3.23	7.98	10.28	< 20yr	Medium Risk
JUNC-23-03	JUNC-57-03	7.53	1.04	2.17	5.37	6.93	< 10yr	Medium to High Risk
JUNC-23-04	JUNC-23-03	0.40	0.75	0.76	0.76	0.78	< 2yr	Very High Risk
JUNC-23-04	JUNC-23-03	18.74	1.91	3.35	7.82	10.12	< 10yr	Medium to High Risk
JUNC-23-05	JUNC-23-04	0.19	0.38	0.38	0.38	0.38	< 2yr	Very High Risk
JUNC-23-05	JUNC-23-04	9.77	2.17	3.43	7.35	9.38	< 5yr	High Risk
JUNC-23-06	JUNC-23-05	0.34	0.39	0.38	0.36	0.35	< 2yr	Very High Risk
JUNC-23-06	JUNC-23-05	15.31	2.04	2.93	5.51	6.89	< 5yr	High Risk
JUNC-23-07	JUNC-23-06	0.36	0.37	0.36	0.36	0.36	< 2yr	Very High Risk
JUNC-23-07	JUNC-23-06	16.36	1.97	2.89	5.50	6.87	< 5yr	High Risk
JUNC-23-08	JUNC-23-07	16.55	1.90	2.83	5.41	6.79	< 10yr	Medium to High Risk
JUNC-23-08	JUNC-23-07	0.35	0.37	0.36	0.36	0.36	< 2yr	Very High Risk
JUNC-23-09	JUNC-23-08	0.79	0.71	0.74	0.72	0.69	< 2yr	Very High Risk
JUNC-23-09	JUNC-23-08	24.74	1.26	2.21	4.59	5.69	< 20yr	Medium Risk
JUNC-2-31	JUNC-2-30	6156.77	176.31	277.76	664.30	923.52	> 50yr	Minimal Risk
JUNC-23-10	JUNC-23-09	0.77	0.77	0.77	0.76	0.76	< 2yr	Very High Risk
JUNC-23-10	JUNC-23-09	8.27	1.17	2.12	4.47	5.54	< 5yr	High Risk
JUNC-23-11	JUNC-23-10	0.79	0.85	0.85	0.85	0.86	< 2yr	Very High Risk
JUNC-23-11	JUNC-23-10	8.73	1.15	2.12	4.44	5.50	< 5yr	High Risk
JUNC-23-12	JUNC-23-11	0.78	0.76	0.77	0.76	0.76	< 5yr	High Risk
JUNC-23-12	JUNC-23-11	8.67	0.11	0.59	1.48	1.91	< 10yr	Medium to High Risk
JUNC-23-13	JUNC-23-12	8.57	0.10	0.58	1.46	1.89	< 20yr	Medium Risk
JUNC-23-13	JUNC-23-12	0.78	0.82	0.84	0.82	0.82	< 5yr	High Risk
JUNC-23-14	JUNC-23-13	8.09	0.34	0.69	1.31	1.62	< 20yr	Medium Risk
JUNC-23-14	JUNC-23-13	0.33	0.52	0.51	0.52	0.52	< 5yr	High Risk
JUNC-23-15	JUNC-23-14	0.34	0.39	0.39	0.39	0.39	< 2yr	Very High Risk
JUNC-23-15	JUNC-23-14	8.55	0.35	0.69	1.32	1.63	< 20yr	Medium Risk
JUNC-23-16	JUNC-23-15	0.34	0.19	0.27	0.31	0.31	< 2yr	Very High Risk
JUNC-23-16	JUNC-23-15	9.10	0.00	0.00	0.06	0.18	> 50yr	Minimal Risk
JUNC-23-17	JUNC-23-16	0.34	0.19	0.27	0.34	0.34	< 20yr	Medium Risk
JUNC-23-17	JUNC-23-16	7.00	0.00	0.00	0.03	0.14	> 50yr	Minimal Risk
JUNC-23-18	JUNC-23-17	0.34	0.19	0.27	0.35	0.36	< 20yr	Medium Risk
JUNC-23-18	JUNC-23-17	7.45	0.00	0.00	0.04	0.15	> 50yr	Minimal Risk
JUNC-23-19	JUNC-23-18	0.35	0.19	0.27	0.36	0.37	< 20yr	Medium Risk
JUNC-23-19	JUNC-23-18	7.25	0.00	0.00	0.03	0.15	> 50yr	Minimal Risk
JUNC-2-32	JUNC-2-31	8396.29	176.90	278.31	664.56	923.59	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-23-20	JUNC-23-19	7.75	0.00	0.00	0.05	0.16	> 50yr	Minimal Risk
JUNC-23-20	JUNC-23-19	0.34	0.19	0.27	0.37	0.37	< 50yr	Low Risk
JUNC-2-33	JUNC-2-32	2064.57	61.21	104.95	287.99	412.91	> 50yr	Minimal Risk
JUNC-2-34	JUNC-2-33	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-24-01	JUNC-2-13	53.55	0.34	0.44	0.86	1.07	> 50yr	Minimal Risk
JUNC-24-02	JUNC-24-01	0.01	0.34	0.41	0.43	0.44	> 50yr	Minimal Risk
JUNC-24-02	JUNC-24-01	0.13	0.00	0.03	0.42	0.63	> 50yr	Minimal Risk
JUNC-25-01	JUNC-2-14	55.80	0.16	0.27	0.47	0.56	> 50yr	Minimal Risk
JUNC-25-02	JUNC-25-01	0.95	0.16	0.27	0.47	0.56	> 50yr	Minimal Risk
JUNC-26-01	JUNC-2-15	157.43	6.35	11.50	29.52	39.36	> 50yr	Minimal Risk
JUNC-26-02	JUNC-26-01	160.64	5.44	9.80	25.22	33.73	> 50yr	Minimal Risk
JUNC-26-03	JUNC-26-02	159.04	5.32	9.62	24.95	33.40	> 50yr	Minimal Risk
JUNC-26-04	JUNC-26-03	81.33	5.32	9.62	24.92	33.35	> 50yr	Minimal Risk
JUNC-26-05	JUNC-26-04	150.80	5.36	9.71	26.07	34.68	> 50yr	Minimal Risk
JUNC-26-06	JUNC-26-05	31.12	3.68	6.97	22.02	29.56	> 50yr	Minimal Risk
JUNC-26-07	JUNC-26-06	69.75	3.80	7.09	20.20	27.20	> 50yr	Minimal Risk
JUNC-27-01	JUNC-2-19	97.89	3.10	5.23	12.22	15.66	> 50yr	Minimal Risk
JUNC-27-02	JUNC-27-01	0.40	0.51	0.54	0.61	0.61	< 50yr	Low Risk
JUNC-27-02	JUNC-27-01	31.80	2.59	4.69	11.53	14.95	< 10yr	Medium to High Risk
JUNC-27-03	JUNC-27-02	0.70	0.70	0.70	0.70	0.70	< 2yr	Very High Risk
JUNC-27-03	JUNC-27-02	30.25	2.01	3.47	7.90	9.98	< 5yr	High Risk
JUNC-27-04	JUNC-27-03	0.67	0.67	0.67	0.67	0.67	< 2yr	Very High Risk
JUNC-27-04	JUNC-27-03	28.02	1.56	2.78	6.44	8.13	< 20yr	Medium Risk
JUNC-27-05	JUNC-27-04	0.66	0.67	0.67	0.67	0.67	< 2yr	Very High Risk
JUNC-27-05	JUNC-27-04	27.07	1.56	2.78	6.44	8.12	< 20yr	Medium Risk
JUNC-27-06	JUNC-27-05	0.67	0.65	0.65	0.65	0.65	< 2yr	Very High Risk
JUNC-27-06	JUNC-27-05	8.07	0.28	0.50	1.35	1.53	< 10yr	Medium to High Risk
JUNC-27-07	JUNC-27-06	0.67	0.67	0.67	0.68	0.68	< 2yr	Very High Risk
JUNC-27-07	JUNC-70-01	7.83	1.23	2.20	5.10	6.42	< 5yr	High Risk
JUNC-27-08	JUNC-27-07	8.51	1.29	2.27	5.22	6.56	< 5yr	High Risk
JUNC-27-08	JUNC-27-07	0.64	1.25	1.26	1.15	1.03	< 2yr	Very High Risk
JUNC-27-09	JUNC-27-08	9.19	1.26	2.24	5.19	6.53	< 5yr	High Risk
JUNC-27-09	JUNC-27-08	0.68	0.98	0.97	0.93	0.89	< 2yr	Very High Risk
JUNC-27-10	JUNC-27-09	9.39	1.22	2.20	5.14	6.48	< 5yr	High Risk
JUNC-27-10	JUNC-27-09	0.72	0.97	0.97	0.93	0.89	< 2yr	Very High Risk
JUNC-27-11	JUNC-27-10	0.71	0.55	0.68	0.68	0.68	< 5yr	High Risk
JUNC-27-11	JUNC-27-10	10.04	0.00	0.21	1.26	1.71	< 20yr	Medium Risk
JUNC-27-12	JUNC-27-11	0.52	0.55	0.55	0.55	0.55	< 5yr	High Risk
JUNC-27-12	JUNC-27-11	7.36	0.00	0.36	1.39	1.84	< 20yr	Medium Risk
JUNC-27-13	JUNC-27-12	0.75	0.55	0.77	0.80	0.78	< 5yr	High Risk
JUNC-27-13	JUNC-27-12	8.49	0.00	0.21	1.25	1.70	< 50yr	Low Risk
JUNC-27-14	JUNC-27-13	0.70	0.56	0.71	0.71	0.71	< 5yr	High Risk
JUNC-27-14	JUNC-27-13	9.58	0.00	0.24	1.28	1.72	< 50yr	Low Risk
JUNC-27-15	JUNC-27-14	6.51	0.04	0.48	1.51	1.95	< 20yr	Medium Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-27-15	JUNC-27-14	0.46	0.57	0.57	0.57	0.57	< 5yr	High Risk
JUNC-27-16	JUNC-27-15	12.45	0.00	0.15	1.17	1.62	< 50yr	Low Risk
JUNC-27-16	JUNC-27-15	0.89	0.65	0.88	0.88	0.88	< 10yr	Medium to High Risk
JUNC-27-17	JUNC-27-16	10.83	0.00	0.17	1.18	1.62	< 50yr	Low Risk
JUNC-27-17	JUNC-27-16	0.87	0.65	0.91	0.93	0.90	< 10yr	Medium to High Risk
JUNC-28-01	JUNC-2-20	74.77	1.39	1.88	3.65	4.49	> 50yr	Minimal Risk
JUNC-28-02	JUNC-28-01	0.41	0.72	0.73	0.77	0.78	> 50yr	Minimal Risk
JUNC-28-02	JUNC-28-01	5.16	0.67	1.15	2.88	3.71	< 5yr	High Risk
JUNC-28-03	JUNC-28-02	8.11	0.00	0.29	1.48	2.03	< 10yr	Medium to High Risk
JUNC-28-03	JUNC-28-02	1.05	0.97	1.02	1.02	1.02	< 5yr	High Risk
JUNC-28-04	JUNC-28-03	0.90	1.04	1.08	1.08	1.07	< 10yr	Medium to High Risk
JUNC-28-04	JUNC-28-03	9.68	0.00	0.58	1.68	2.23	< 20yr	Medium Risk
JUNC-28-05	JUNC-28-04	6.00	0.59	1.04	1.94	2.40	< 10yr	Medium to High Risk
JUNC-28-05	JUNC-28-04	0.23	0.31	0.31	0.31	0.31	< 5yr	High Risk
JUNC-28-06	JUNC-28-05	4.48	0.80	1.20	2.10	2.55	< 5yr	High Risk
JUNC-28-06	JUNC-28-05	0.09	0.16	0.16	0.16	0.16	< 2yr	Very High Risk
JUNC-28-07	JUNC-28-06	4.69	0.49	0.76	1.34	1.64	< 5yr	High Risk
JUNC-28-07	JUNC-28-06	0.09	0.10	0.10	0.10	0.10	< 2yr	Very High Risk
JUNC-28-08	JUNC-28-07	10.04	0.23	0.50	1.10	1.41	< 20yr	Medium Risk
JUNC-28-08	JUNC-28-07	0.19	0.18	0.18	0.18	0.18	< 2yr	Very High Risk
JUNC-28-08	JUNC-28-07	0.19	0.18	0.18	0.18	0.18	< 2yr	Very High Risk
JUNC-29-01	JUNC-2-21	25.69	7.20	11.36	34.42	42.14	> 50yr	Minimal Risk
JUNC-29-02	JUNC-29-01	91.23	0.00	3.09	25.27	33.75	> 50yr	Minimal Risk
JUNC-29-02	JUNC-29-01	4.80	7.22	8.22	8.32	8.22	< 50yr	Low Risk
JUNC-29-03	JUNC-29-02	7.51	6.85	8.09	8.12	8.11	< 10yr	Medium to High Risk
JUNC-29-03	JUNC-75-01	71.56	0.00	3.03	24.30	32.92	< 20yr	Medium Risk
JUNC-29-04	JUNC-29-03	11.01	6.85	8.83	9.33	9.47	< 10yr	Medium to High Risk
JUNC-29-04	JUNC-29-03	53.16	0.00	2.27	22.89	31.37	< 20yr	Medium Risk
JUNC-29-05	JUNC-29-04	50.53	0.00	2.67	23.73	32.34	< 20yr	Medium Risk
JUNC-29-05	JUNC-29-04	8.35	6.85	8.44	8.55	8.51	< 10yr	Medium to High Risk
JUNC-29-06	JUNC-29-05	6.57	6.85	8.48	8.51	8.67	< 10yr	Medium to High Risk
JUNC-29-06	JUNC-29-05	33.49	0.00	3.58	23.79	32.15	< 20yr	Medium Risk
JUNC-29-07	JUNC-29-06	7.98	4.93	6.63	6.64	6.62	< 10yr	Medium to High Risk
JUNC-29-07	JUNC-29-06	27.56	0.00	1.23	15.83	21.50	< 20yr	Medium Risk
JUNC-29-08	JUNC-29-07	8.18	4.70	8.12	8.28	8.34	< 20yr	Medium Risk
JUNC-29-08	JUNC-29-07	52.05	0.00	0.00	13.80	19.26	< 20yr	Medium Risk
JUNC-29-09	JUNC-29-08	7.76	4.47	7.86	9.90	9.62	< 20yr	Medium Risk
JUNC-29-09	JUNC-29-08	45.02	0.00	0.00	13.63	18.91	< 50yr	Low Risk
JUNC-29-10	JUNC-29-09	3.21	4.47	6.28	6.30	6.30	< 20yr	Medium Risk
JUNC-29-10	JUNC-29-09	27.46	0.00	1.59	16.99	22.24	< 20yr	Medium Risk
JUNC-29-11	JUNC-29-10	4.41	3.00	4.28	4.20	4.15	< 10yr	Medium to High Risk
JUNC-29-11	JUNC-29-10	18.09	0.00	1.76	8.90	11.58	< 10yr	Medium to High Risk
JUNC-29-12	JUNC-29-11	21.00	0.00	0.27	7.03	9.87	< 20yr	Medium Risk
JUNC-29-12	JUNC-29-11	6.53	2.97	5.48	5.73	5.61	< 10yr	Medium to High Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-29-13	JUNC-29-12	28.74	0.00	0.00	2.37	4.31	< 50yr	Low Risk
JUNC-29-13	JUNC-29-12	7.07	2.42	4.64	6.72	6.71	< 10yr	Medium to High Risk
JUNC-29-14	JUNC-29-13	8.50	1.70	3.52	7.39	8.33	< 50yr	Low Risk
JUNC-29-14	JUNC-29-13	11.58	0.00	0.00	0.00	0.58	> 50yr	Minimal Risk
JUNC-29-15	JUNC-29-14	8.51	1.43	2.79	5.97	7.32	> 50yr	Minimal Risk
JUNC-29-15	JUNC-29-14	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-30-01	JUNC-2-22	126.55	0.74	1.12	2.08	2.53	> 50yr	Minimal Risk
JUNC-30-02	JUNC-30-01	14.30	0.05	0.07	0.12	0.14	> 50yr	Minimal Risk
JUNC-30-03	JUNC-30-02	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-30-03	JUNC-30-02	0.11	0.07	0.10	0.15	0.18	> 50yr	Minimal Risk
JUNC-3-01	JUNC-1-03	57.08	1.14	1.98	5.44	7.42	> 50yr	Minimal Risk
JUNC-3-02	JUNC-3-01	0.37	0.39	0.47	0.50	0.51	> 50yr	Minimal Risk
JUNC-3-02	JUNC-3-01	18.72	0.00	0.27	1.74	2.62	> 50yr	Minimal Risk
JUNC-3-03	JUNC-3-02	0.29	0.39	0.43	0.44	0.44	< 10yr	Medium to High Risk
JUNC-3-03	JUNC-3-02	14.92	0.00	0.45	1.94	2.83	> 50yr	Minimal Risk
JUNC-3-04	JUNC-3-03	0.20	0.30	0.29	0.29	0.29	< 5yr	High Risk
JUNC-3-04	JUNC-3-03	10.50	0.10	0.49	1.78	2.52	< 50yr	Low Risk
JUNC-3-05	JUNC-3-04	11.60	0.20	0.61	1.89	2.67	< 50yr	Low Risk
JUNC-3-05	JUNC-3-04	0.22	0.30	0.30	0.30	0.30	< 2yr	Very High Risk
JUNC-3-06	JUNC-3-05	#DIV/0!	0.01	0.01	0.01	0.01	< 5yr	High Risk
JUNC-3-06	JUNC-3-05	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-31-01	JUNC-2-23	89.40	2.50	4.23	9.27	11.62	> 50yr	Minimal Risk
JUNC-31-02	JUNC-31-01	28.27	2.77	4.65	9.76	12.16	> 50yr	Minimal Risk
JUNC-31-03	JUNC-31-02	49.98	1.49	2.66	6.33	8.00	> 50yr	Minimal Risk
JUNC-31-04	JUNC-31-03	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-31-04	JUNC-31-03	0.58	0.21	0.32	0.52	0.62	> 50yr	Minimal Risk
JUNC-32-01	JUNC-2-24	40.83	4.00	7.79	21.57	24.50	> 50yr	Minimal Risk
JUNC-32-02	JUNC-32-01	25.03	4.20	7.99	21.62	24.53	> 50yr	Minimal Risk
JUNC-32-03	JUNC-32-02	93.08	4.25	8.08	21.95	29.79	> 50yr	Minimal Risk
JUNC-32-04	JUNC-32-03	154.50	0.53	0.77	1.27	1.55	> 50yr	Minimal Risk
JUNC-32-05	JUNC-32-04	13.93	0.00	0.00	0.16	0.42	> 50yr	Minimal Risk
JUNC-32-05	JUNC-32-04	1.08	0.53	0.77	1.12	1.13	> 50yr	Minimal Risk
JUNC-32-06	JUNC-32-05	8.54	0.20	0.44	1.10	1.37	> 50yr	Minimal Risk
JUNC-32-06	JUNC-32-05	0.17	0.33	0.33	0.33	0.33	< 10yr	Medium to High Risk
JUNC-32-07	JUNC-32-06	13.19	0.29	0.53	1.06	1.32	> 50yr	Minimal Risk
JUNC-32-07	JUNC-32-06	0.24	0.26	0.26	0.26	0.26	< 2yr	Very High Risk
JUNC-33-01	JUNC-2-24	41.87	0.72	1.12	2.06	2.93	> 50yr	Minimal Risk
JUNC-33-02	JUNC-33-01	37.65	1.10	1.72	3.12	3.77	> 50yr	Minimal Risk
JUNC-33-03	JUNC-33-02	55.53	1.16	1.81	3.23	3.89	> 50yr	Minimal Risk
JUNC-33-04	JUNC-33-03	13.53	0.89	1.55	2.98	3.65	< 10yr	Medium to High Risk
JUNC-33-04	JUNC-33-03	0.26	0.28	0.29	0.30	0.30	< 50yr	Low Risk
JUNC-33-05	JUNC-33-04	31.33	0.71	1.07	1.83	2.19	> 50yr	Minimal Risk
JUNC-33-06	JUNC-33-05	0.24	0.37	0.38	0.39	0.39	> 50yr	Minimal Risk
JUNC-33-06	JUNC-33-05	12.03	0.33	0.69	1.44	1.80	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-33-07	JUNC-33-06	12.26	0.47	0.84	1.60	1.96	> 50yr	Minimal Risk
JUNC-33-07	JUNC-33-06	0.23	0.30	0.30	0.30	0.30	< 2yr	Very High Risk
JUNC-33-08	JUNC-33-07	13.60	0.11	0.24	0.53	0.68	> 50yr	Minimal Risk
JUNC-33-08	JUNC-33-07	0.24	0.24	0.24	0.24	0.24	< 5yr	High Risk
JUNC-34-01	JUNC-2-27	434.01	7.55	14.38	38.41	52.08	> 50yr	Minimal Risk
JUNC-34-02	JUNC-34-01	10.27	2.81	9.55	32.96	46.54	< 50yr	Low Risk
JUNC-34-02	JUNC-34-01	0.48	4.83	5.13	5.67	5.80	> 50yr	Minimal Risk
JUNC-34-03	JUNC-34-02	279.68	7.39	13.71	37.25	50.34	> 50yr	Minimal Risk
JUNC-34-04	JUNC-34-03	178.65	6.47	11.83	32.63	44.66	> 50yr	Minimal Risk
JUNC-34-05	JUNC-34-04	338.83	6.27	11.51	31.86	44.05	> 50yr	Minimal Risk
JUNC-34-06	JUNC-34-05	240.20	6.12	11.18	31.10	43.24	> 50yr	Minimal Risk
JUNC-34-07	JUNC-34-06	196.36	6.11	11.18	31.07	43.20	> 50yr	Minimal Risk
JUNC-34-08	JUNC-34-07	17.58	0.26	0.41	0.72	0.88	> 50yr	Minimal Risk
JUNC-34-09	JUNC-34-08	10.28	0.00	0.00	0.24	0.41	> 50yr	Minimal Risk
JUNC-34-09	JUNC-34-08	0.07	0.14	0.21	0.25	0.25	< 50yr	Low Risk
JUNC-34-09	JUNC-34-08	0.07	0.14	0.21	0.25	0.25	< 50yr	Low Risk
JUNC-35-01	JUNC-2-29	121.35	2.09	3.16	5.79	7.28	> 50yr	Minimal Risk
JUNC-35-02	JUNC-35-01	88.84	1.78	2.70	4.91	6.22	> 50yr	Minimal Risk
JUNC-35-03	JUNC-35-02	98.08	1.50	2.19	3.89	4.90	> 50yr	Minimal Risk
JUNC-35-04	JUNC-35-03	217.10	1.28	1.87	3.48	4.34	> 50yr	Minimal Risk
JUNC-35-05	JUNC-35-04	194.10	1.14	1.67	3.13	3.88	> 50yr	Minimal Risk
JUNC-35-06	JUNC-35-05	1.39	0.10	0.14	0.25	0.31	> 50yr	Minimal Risk
JUNC-35-06	JUNC-35-05	39.77	1.05	1.53	2.88	3.58	> 50yr	Minimal Risk
JUNC-35-07	JUNC-35-06	1.36	0.92	1.21	1.72	1.74	> 50yr	Minimal Risk
JUNC-35-07	JUNC-35-06	33.53	0.00	0.00	0.49	1.01	> 50yr	Minimal Risk
JUNC-35-08	JUNC-35-07	1.29	0.92	1.21	1.63	1.64	< 50yr	Low Risk
JUNC-35-08	JUNC-35-07	36.08	0.00	0.00	0.90	1.44	> 50yr	Minimal Risk
JUNC-35-09	JUNC-35-08	1.00	0.92	1.18	1.18	1.18	< 50yr	Low Risk
JUNC-35-09	JUNC-35-08	29.00	0.00	0.09	1.20	1.74	> 50yr	Minimal Risk
JUNC-35-10	JUNC-35-09	1.26	0.92	1.31	1.38	1.39	< 20yr	Medium Risk
JUNC-35-10	JUNC-35-09	38.13	0.00	0.00	1.05	1.53	> 50yr	Minimal Risk
JUNC-35-11	JUNC-35-10	1.25	0.45	0.66	1.06	1.27	> 50yr	Minimal Risk
JUNC-35-12	JUNC-35-11	0.51	0.45	0.73	1.06	1.27	> 50yr	Minimal Risk
JUNC-35-12	JUNC-35-11	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-35-13	JUNC-35-12	1.52	0.18	0.26	0.41	0.49	> 50yr	Minimal Risk
JUNC-35-13	JUNC-35-12	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-36-01	JUNC-2-29	46.45	0.54	1.03	5.86	9.29	> 50yr	Minimal Risk
JUNC-36-02	JUNC-36-01	48.98	0.57	1.03	6.18	9.80	> 50yr	Minimal Risk
JUNC-36-03	JUNC-36-02	9.41	0.00	0.00	4.84	8.37	< 50yr	Low Risk
JUNC-36-03	JUNC-36-02	0.34	0.68	1.03	1.34	1.43	> 50yr	Minimal Risk
JUNC-36-04	JUNC-36-03	80.39	0.30	1.50	6.29	8.84	> 50yr	Minimal Risk
JUNC-36-05	JUNC-36-04	0.26	0.30	0.44	0.48	0.48	< 50yr	Low Risk
JUNC-36-05	JUNC-36-04	16.97	0.00	1.10	5.97	8.48	< 20yr	Medium Risk
JUNC-36-06	JUNC-36-05	0.27	0.30	0.32	0.32	0.32	< 5yr	High Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-36-06	JUNC-36-05	19.30	0.00	1.26	6.17	8.69	< 20yr	Medium Risk
JUNC-36-07	JUNC-36-06	0.24	0.30	0.30	0.31	0.31	< 5yr	High Risk
JUNC-36-07	JUNC-36-06	16.43	0.00	1.29	6.19	8.71	< 20yr	Medium Risk
JUNC-36-08	JUNC-36-07	95.11	0.95	2.01	5.81	7.61	> 50yr	Minimal Risk
JUNC-37-01	JUNC-2-30	67.87	11.73	19.35	49.15	78.05	> 50yr	Minimal Risk
JUNC-37-02	JUNC-37-01	42.41	11.74	19.37	49.16	59.80	< 50yr	Low Risk
JUNC-37-02	JUNC-37-01	125.51	0.00	0.00	0.00	11.30	> 50yr	Minimal Risk
JUNC-37-03	JUNC-37-02	83.87	11.52	18.98	48.31	67.10	> 50yr	Minimal Risk
JUNC-37-04	JUNC-37-03	46.53	0.00	0.00	4.36	24.66	< 50yr	Low Risk
JUNC-37-04	JUNC-37-03	13.53	11.53	22.58	44.47	47.64	> 50yr	Minimal Risk
JUNC-37-05	JUNC-37-04	175.17	11.86	18.91	48.70	68.32	> 50yr	Minimal Risk
JUNC-38-01	JUNC-2-30	33.50	0.00	0.01	0.27	0.34	> 50yr	Minimal Risk
JUNC-39-01	JUNC-2-32	2078.98	169.26	254.85	566.18	769.22	> 50yr	Minimal Risk
JUNC-40-01	JUNC-2-33	4107.02	185.82	284.94	656.76	903.55	> 50yr	Minimal Risk
JUNC-4-01	JUNC-1-04	45.87	1.24	2.60	6.88	8.72	> 50yr	Minimal Risk
JUNC-4-02	JUNC-4-01	64.68	0.92	2.02	5.60	7.12	> 50yr	Minimal Risk
JUNC-4-03	JUNC-4-02	189.58	0.95	2.15	6.01	7.58	> 50yr	Minimal Risk
JUNC-41-01	JUNC-3-05	9.81	0.22	0.44	1.31	1.86	< 50yr	Low Risk
JUNC-41-01	JUNC-3-05	0.19	0.20	0.21	0.20	0.20	< 2yr	Very High Risk
JUNC-41-02	JUNC-41-01	3.83	0.31	0.58	1.54	2.15	< 50yr	Low Risk
JUNC-41-02	JUNC-58-01	0.28	0.27	0.29	0.33	0.32	< 2yr	Very High Risk
JUNC-41-02	JUNC-41-01	0.07	0.25	0.24	0.22	0.22	< 2yr	Very High Risk
JUNC-41-03	JUNC-41-02	0.36	0.44	0.43	0.40	0.39	< 2yr	Very High Risk
JUNC-41-03	JUNC-41-02	16.80	0.74	1.25	2.81	3.70	< 20yr	Medium Risk
JUNC-41-04	JUNC-41-03	0.44	0.44	0.44	0.43	0.43	< 5yr	High Risk
JUNC-41-04	JUNC-41-03	4.82	0.16	0.41	1.31	1.83	< 10yr	Medium to High Risk
JUNC-41-05	JUNC-41-04	12.35	0.00	0.00	0.82	1.36	< 50yr	Low Risk
JUNC-41-05	JUNC-41-04	1.07	0.64	0.92	1.03	1.03	< 5yr	High Risk
STOR-41-06	JUNC-41-05	5.07	0.22	0.35	0.66	0.81	> 50yr	Minimal Risk
JUNC-42-01	JUNC-41-05	11.88	0.00	0.15	0.45	0.59	> 50yr	Minimal Risk
JUNC-42-01	JUNC-41-05	0.22	0.24	0.24	0.24	0.23	< 5yr	High Risk
JUNC-42-02	JUNC-42-01	13.85	0.00	0.14	0.42	0.55	> 50yr	Minimal Risk
JUNC-42-02	JUNC-42-01	0.27	0.26	0.29	0.28	0.27	< 5yr	High Risk
JUNC-42-03	JUNC-42-02	12.43	0.19	0.33	0.61	0.75	> 50yr	Minimal Risk
JUNC-42-03	JUNC-42-02	0.08	0.09	0.09	0.09	0.09	< 5yr	High Risk
JUNC-42-04	JUNC-42-03	12.72	0.21	0.35	0.62	0.76	> 50yr	Minimal Risk
JUNC-42-04	JUNC-42-03	0.08	0.10	0.10	0.10	0.09	< 2yr	Very High Risk
JUNC-43-01	JUNC-5-07	28.99	0.96	2.14	5.78	7.25	> 50yr	Minimal Risk
JUNC-43-02	JUNC-43-01	62.16	0.97	2.20	5.97	7.46	> 50yr	Minimal Risk
JUNC-44-01	JUNC-6-01	72.50	0.18	0.29	0.59	0.73	> 50yr	Minimal Risk
JUNC-44-02	JUNC-44-01	0.13	0.18	0.28	0.30	0.30	> 50yr	Minimal Risk
JUNC-44-02	JUNC-44-01	7.18	0.00	0.01	0.30	0.43	> 50yr	Minimal Risk
JUNC-44-03	JUNC-44-02	0.11	0.17	0.17	0.17	0.17	< 5yr	High Risk
JUNC-44-03	JUNC-44-02	6.16	0.02	0.18	0.49	0.62	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-45-01	JUNC-7-02	0.28	0.18	0.28	0.30	0.30	< 50yr	Low Risk
JUNC-45-01	JUNC-7-02	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-45-02	JUNC-45-01	0.27	0.18	0.28	0.30	0.30	< 50yr	Low Risk
JUNC-45-02	JUNC-45-01	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-45-03	JUNC-45-02	12.80	0.11	0.17	0.31	0.38	< 5yr	High Risk
JUNC-45-04	JUNC-45-03	0.04	0.11	0.17	0.20	0.20	> 50yr	Minimal Risk
JUNC-45-04	JUNC-45-03	1.85	0.00	0.00	0.11	0.19	> 50yr	Minimal Risk
JUNC-46-01	JUNC-8-06	5.27	0.40	0.63	1.12	1.37	< 10yr	Medium to High Risk
JUNC-47-01	JUNC-8-05	13.80	0.31	0.48	1.00	1.24	< 10yr	Medium to High Risk
JUNC-47-02	JUNC-47-01	0.04	0.11	0.11	0.11	0.12	> 50yr	Minimal Risk
JUNC-47-02	JUNC-47-01	2.31	0.21	0.37	0.89	1.13	< 10yr	Medium to High Risk
JUNC-47-03	JUNC-47-02	0.03	0.10	0.10	0.09	0.09	< 2yr	Very High Risk
JUNC-47-03	JUNC-47-02	1.47	0.30	0.48	1.00	1.25	< 5yr	High Risk
JUNC-47-04	JUNC-47-03	0.06	0.08	0.07	0.07	0.07	< 2yr	Very High Risk
JUNC-47-04	JUNC-47-03	2.92	0.21	0.34	0.70	0.88	< 5yr	High Risk
JUNC-48-01	JUNC-8-10	10.17	0.33	0.51	0.85	1.02	< 2yr	Very High Risk
JUNC-48-02	JUNC-48-01	13.13	0.10	0.28	0.62	0.79	> 50yr	Minimal Risk
JUNC-48-02	JUNC-48-01	0.25	0.23	0.24	0.24	0.24	> 50yr	Minimal Risk
JUNC-48-03	JUNC-48-02	15.65	0.00	0.00	0.18	0.31	> 50yr	Minimal Risk
JUNC-48-03	JUNC-48-02	0.54	0.27	0.43	0.53	0.53	< 10yr	Medium to High Risk
JUNC-49-01	JUNC-9-04	12.22	0.12	0.48	1.28	1.59	< 20yr	Medium Risk
JUNC-49-01	JUNC-9-04	0.24	0.22	0.23	0.23	0.23	< 2yr	Very High Risk
JUNC-49-02	JUNC-49-01	11.31	0.13	0.49	1.28	1.58	< 50yr	Low Risk
JUNC-49-02	JUNC-49-01	0.21	0.21	0.21	0.21	0.21	< 2yr	Very High Risk
JUNC-50-01	JUNC-11-01	24.10	0.23	0.36	0.61	0.72	> 50yr	Minimal Risk
JUNC-50-02	JUNC-50-01	0.31	0.23	0.37	0.38	0.39	> 50yr	Minimal Risk
JUNC-50-02	JUNC-50-01	34.60	0.00	0.00	0.23	0.35	> 50yr	Minimal Risk
JUNC-5-01	JUNC-1-05	182.64	4.35	9.24	26.37	34.70	> 50yr	Minimal Risk
JUNC-5-02	JUNC-5-01	183.15	4.12	8.73	25.05	32.97	> 50yr	Minimal Risk
JUNC-5-03	JUNC-5-02	1.01	1.75	1.83	1.88	1.88	< 50yr	Low Risk
JUNC-5-03	JUNC-5-02	259.65	2.37	6.90	23.22	31.16	> 50yr	Minimal Risk
JUNC-5-04	JUNC-5-03	266.73	3.14	7.75	24.09	32.01	> 50yr	Minimal Risk
JUNC-5-04	JUNC-5-03	0.97	1.40	1.40	1.40	1.39	< 2yr	Very High Risk
JUNC-5-05	JUNC-5-04	201.08	3.35	7.95	24.26	32.17	> 50yr	Minimal Risk
JUNC-5-05	JUNC-5-04	0.76	1.21	1.21	1.21	1.21	< 2yr	Very High Risk
JUNC-5-06	JUNC-5-05	106.36	4.13	8.74	25.06	32.97	> 50yr	Minimal Risk
JUNC-5-07	JUNC-5-06	48.51	4.13	8.74	25.07	32.99	> 50yr	Minimal Risk
JUNC-5-08	JUNC-5-07	55.05	2.75	5.83	17.28	23.12	> 50yr	Minimal Risk
JUNC-5-09	JUNC-5-08	99.12	2.81	5.91	17.79	23.79	> 50yr	Minimal Risk
JUNC-51-01	JUNC-11-01	31.93	0.73	1.63	4.12	5.11	> 50yr	Minimal Risk
JUNC-51-02	JUNC-51-01	0.26	0.37	0.38	0.39	0.39	< 20yr	Medium Risk
JUNC-51-02	JUNC-51-01	41.03	0.07	0.63	2.26	2.87	> 50yr	Minimal Risk
JUNC-52-01	JUNC-11-02	56.50	0.33	0.55	0.95	1.13	> 50yr	Minimal Risk
JUNC-52-02	JUNC-52-01	0.22	0.26	0.27	0.28	0.28	< 2yr	Very High Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-52-02	JUNC-52-01	42.30	0.07	0.28	0.67	0.85	> 50yr	Minimal Risk
JUNC-53-01	JUNC-11-03	54.50	0.17	0.26	0.45	0.55	> 50yr	Minimal Risk
JUNC-53-02	JUNC-53-01	0.18	0.17	0.26	0.29	0.29	< 2yr	Very High Risk
JUNC-53-02	JUNC-53-01	25.50	0.00	0.00	0.17	0.26	> 50yr	Minimal Risk
JUNC-54-01	JUNC-11-04	89.36	1.09	2.16	6.08	8.04	> 50yr	Minimal Risk
JUNC-54-02	JUNC-54-01	0.04	0.24	0.25	0.26	0.26	< 2yr	Very High Risk
JUNC-54-02	JUNC-54-01	5.52	0.02	0.17	0.50	0.66	> 50yr	Minimal Risk
JUNC-55-01	JUNC-11-06	0.10	0.14	0.14	0.14	0.14	< 2yr	Very High Risk
JUNC-55-01	JUNC-11-06	15.87	0.35	1.03	3.17	3.97	> 50yr	Minimal Risk
JUNC-55-02	JUNC-55-01	0.05	0.10	0.10	0.10	0.10	< 2yr	Very High Risk
JUNC-55-02	JUNC-55-01	8.28	0.25	0.91	2.78	3.48	> 50yr	Minimal Risk
JUNC-55-03	JUNC-55-02	0.33	0.31	0.33	0.33	0.33	< 2yr	Very High Risk
JUNC-55-03	JUNC-55-02	54.00	0.00	0.67	2.54	3.24	> 50yr	Minimal Risk
JUNC-55-04	JUNC-55-03	29.75	0.46	1.06	2.87	3.57	< 5yr	High Risk
JUNC-56-01	JUNC-17-10	6.71	0.00	0.00	0.39	0.67	> 50yr	Minimal Risk
JUNC-56-01	JUNC-17-10	0.27	0.39	0.47	0.70	0.69	< 2yr	Very High Risk
JUNC-56-02	JUNC-56-01	7.99	0.00	0.04	0.50	0.72	> 50yr	Minimal Risk
JUNC-56-02	JUNC-56-01	0.30	0.37	0.44	0.45	0.45	< 2yr	Very High Risk
JUNC-56-03	JUNC-56-02	16.70	0.00	0.00	0.14	0.33	> 50yr	Minimal Risk
JUNC-56-03	JUNC-56-02	0.71	0.37	0.50	0.71	0.71	< 2yr	Very High Risk
JUNC-56-04	JUNC-56-03	11.44	0.00	0.00	0.38	0.57	> 50yr	Minimal Risk
JUNC-56-04	JUNC-56-03	0.46	0.37	0.51	0.54	0.54	< 10yr	Medium to High Risk
JUNC-56-05	JUNC-56-04	0.62	0.37	0.53	0.62	0.62	< 2yr	Very High Risk
JUNC-56-05	JUNC-56-04	14.77	0.00	0.00	0.26	0.44	> 50yr	Minimal Risk
JUNC-56-06	JUNC-56-05	14.05	0.00	0.16	0.66	0.84	> 50yr	Minimal Risk
JUNC-56-06	JUNC-56-05	0.22	0.37	0.37	0.37	0.37	< 2yr	Very High Risk
JUNC-57-01	JUNC-17-04	7.78	1.28	2.45	5.34	5.84	> 50yr	Minimal Risk
JUNC-57-01	JUNC-17-04	0.47	0.45	0.45	0.45	0.45	< 2yr	Very High Risk
JUNC-57-02	JUNC-20-02	0.61	0.60	0.60	0.60	0.60	< 2yr	Very High Risk
JUNC-57-02	JUNC-20-02	10.17	0.89	2.02	5.25	6.82	> 50yr	Minimal Risk
JUNC-57-03	JUNC-57-02	0.53	0.63	0.64	0.61	0.61	< 2yr	Very High Risk
JUNC-57-03	JUNC-57-02	8.92	0.96	2.09	5.31	6.87	< 5yr	High Risk
JUNC-57-04	JUNC-23-03	8.67	0.85	2.31	5.89	7.45	> 50yr	Minimal Risk
JUNC-57-04	JUNC-23-03	0.58	0.77	0.73	0.63	0.61	< 2yr	Very High Risk
JUNC-57-05	JUNC-57-04	0.83	0.81	0.82	0.82	0.82	< 2yr	Very High Risk
JUNC-57-05	JUNC-57-04	8.90	0.59	2.07	5.65	7.21	> 50yr	Minimal Risk
JUNC-57-06	JUNC-57-05	1.02	0.92	0.94	0.94	0.94	< 2yr	Very High Risk
JUNC-57-06	JUNC-57-05	10.00	0.48	1.95	5.54	7.10	< 10yr	Medium to High Risk
JUNC-57-07	JUNC-57-06	7.91	0.59	2.07	5.65	7.20	< 10yr	Medium to High Risk
JUNC-57-07	JUNC-63-02	0.64	0.05	0.27	0.95	1.26	> 50yr	Minimal Risk
JUNC-57-07	JUNC-57-06	0.79	0.81	0.81	0.82	0.83	< 2yr	Very High Risk
JUNC-57-08	JUNC-57-07	9.48	0.63	2.34	6.57	8.44	> 50yr	Minimal Risk
JUNC-57-08	JUNC-23-11	0.29	0.29	0.29	0.30	0.30	< 5yr	High Risk
JUNC-57-08	JUNC-57-07	0.86	0.98	0.97	0.94	0.95	< 2yr	Very High Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-58-01	JUNC-41-02	13.76	0.46	0.91	2.48	3.44	< 20yr	Medium Risk
JUNC-58-01	JUNC-17-04	12.49	0.44	0.91	2.53	3.50	> 50yr	Minimal Risk
JUNC-58-01	JUNC-17-04	0.24	0.21	0.22	0.22	0.22	< 2yr	Very High Risk
JUNC-59-01	JUNC-57-08	13.07	1.01	2.56	5.72	7.19	> 50yr	Minimal Risk
JUNC-59-01	JUNC-57-08	0.86	0.97	0.96	0.97	0.98	< 2yr	Very High Risk
JUNC-59-02	JUNC-59-01	9.43	1.32	2.78	5.57	6.89	> 50yr	Minimal Risk
JUNC-59-02	JUNC-59-01	0.39	0.66	0.66	0.66	0.66	< 2yr	Very High Risk
JUNC-59-03	JUNC-59-02	8.53	1.35	2.77	5.59	6.91	> 50yr	Minimal Risk
JUNC-59-03	JUNC-59-02	0.36	0.58	0.58	0.58	0.58	< 2yr	Very High Risk
JUNC-59-04	JUNC-59-03	0.33	0.56	0.56	0.55	0.55	< 2yr	Very High Risk
JUNC-59-04	JUNC-59-03	7.43	1.37	2.77	5.60	6.91	> 50yr	Minimal Risk
JUNC-59-05	JUNC-59-04	0.37	0.45	0.45	0.45	0.45	< 2yr	Very High Risk
JUNC-59-05	JUNC-59-04	9.35	1.35	2.73	5.60	6.92	> 50yr	Minimal Risk
JUNC-59-06	JUNC-59-05	0.17	0.22	0.22	0.22	0.22	< 2yr	Very High Risk
JUNC-59-06	JUNC-59-05	9.24	1.54	2.93	5.79	7.11	> 50yr	Minimal Risk
JUNC-59-07	JUNC-59-06	0.17	0.21	0.21	0.21	0.21	< 2yr	Very High Risk
JUNC-59-07	JUNC-59-06	8.36	1.55	2.95	5.79	7.11	> 50yr	Minimal Risk
JUNC-59-08	JUNC-59-07	0.17	0.21	0.21	0.21	0.21	< 2yr	Very High Risk
JUNC-59-08	JUNC-59-07	8.36	1.55	2.92	5.79	7.11	> 50yr	Minimal Risk
JUNC-59-09	JUNC-59-08	0.16	0.17	0.17	0.17	0.17	< 2yr	Very High Risk
JUNC-59-09	JUNC-59-08	8.77	1.37	2.60	5.22	6.41	> 50yr	Minimal Risk
JUNC-59-10	JUNC-59-09	0.16	0.17	0.17	0.17	0.17	< 2yr	Very High Risk
JUNC-59-10	JUNC-59-09	8.78	1.38	2.60	5.22	6.41	< 5yr	High Risk
JUNC-59-11	JUNC-59-10	7.18	1.38	2.57	5.21	6.39	> 50yr	Minimal Risk
JUNC-59-11	JUNC-59-10	0.15	0.18	0.18	0.18	0.18	< 2yr	Very High Risk
JUNC-59-12	JUNC-59-11	8.89	1.39	2.60	5.22	6.40	> 50yr	Minimal Risk
JUNC-59-12	JUNC-59-11	0.16	0.17	0.17	0.17	0.17	< 2yr	Very High Risk
JUNC-59-13	JUNC-59-12	8.22	0.95	1.85	3.88	4.77	> 50yr	Minimal Risk
JUNC-59-13	JUNC-59-12	0.16	0.16	0.16	0.16	0.16	< 2yr	Very High Risk
JUNC-59-14	JUNC-59-13	8.34	0.94	1.84	3.87	4.76	> 50yr	Minimal Risk
JUNC-59-14	JUNC-59-13	0.16	0.17	0.17	0.17	0.17	< 2yr	Very High Risk
JUNC-59-15	JUNC-59-14	0.27	0.27	0.27	0.27	0.27	< 2yr	Very High Risk
JUNC-59-15	JUNC-59-14	14.53	0.85	1.73	3.77	4.65	< 10yr	Medium to High Risk
JUNC-59-16	JUNC-59-15	14.45	0.83	1.71	3.74	4.63	> 50yr	Minimal Risk
JUNC-59-16	JUNC-59-15	0.29	0.30	0.30	0.30	0.30	< 2yr	Very High Risk
JUNC-59-17	JUNC-59-16	15.38	1.27	2.01	4.04	4.92	< 2yr	Very High Risk
JUNC-59-18	JUNC-59-17	15.10	0.52	0.75	1.25	1.51	< 50yr	Low Risk
JUNC-59-19	JUNC-59-18	12.35	0.26	0.49	0.98	1.24	> 50yr	Minimal Risk
JUNC-59-19	JUNC-59-18	0.47	0.27	0.27	0.28	0.29	> 50yr	Minimal Risk
JUNC-60-01	STOR-21-04	161.84	0.16	1.12	15.59	19.42	> 50yr	Minimal Risk
JUNC-6-01	JUNC-1-06	27.00	1.10	2.15	5.19	6.48	> 50yr	Minimal Risk
JUNC-6-02	JUNC-6-01	98.55	0.61	1.35	3.22	3.94	> 50yr	Minimal Risk
JUNC-6-03	JUNC-6-02	0.33	0.35	0.36	0.39	0.39	> 50yr	Minimal Risk
JUNC-6-03	JUNC-6-02	71.30	0.27	0.99	2.84	3.57	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-6-04	JUNC-6-03	0.34	0.37	0.39	0.36	0.35	< 2yr	Very High Risk
JUNC-6-04	JUNC-6-03	51.61	0.28	1.02	2.89	3.61	> 50yr	Minimal Risk
JUNC-6-05	JUNC-6-04	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-61-01	JUNC-21-03	24.43	0.00	0.44	2.08	2.93	> 50yr	Minimal Risk
JUNC-61-01	JUNC-21-03	0.56	0.84	1.03	0.93	0.83	< 5yr	High Risk
JUNC-62-01	JUNC-21-06	26.21	2.50	5.22	15.74	20.97	> 50yr	Minimal Risk
JUNC-62-02	JUNC-62-01	0.22	0.29	0.29	0.29	0.29	< 2yr	Very High Risk
JUNC-62-02	JUNC-62-01	34.43	2.22	4.95	15.46	20.66	> 50yr	Minimal Risk
JUNC-62-03	JUNC-62-02	0.16	0.19	0.19	0.19	0.19	< 2yr	Very High Risk
JUNC-62-03	JUNC-62-02	26.84	2.34	5.06	15.50	20.67	> 50yr	Minimal Risk
JUNC-62-04	JUNC-62-03	0.23	0.23	0.23	0.23	0.23	< 2yr	Very High Risk
JUNC-62-04	JUNC-62-03	36.37	2.12	4.75	14.96	20.01	> 50yr	Minimal Risk
JUNC-62-05	JUNC-62-04	0.22	0.22	0.22	0.22	0.22	< 2yr	Very High Risk
JUNC-62-05	JUNC-62-04	35.72	2.13	4.75	14.96	20.00	> 50yr	Minimal Risk
JUNC-62-06	JUNC-62-05	0.22	0.23	0.23	0.23	0.23	< 2yr	Very High Risk
JUNC-62-06	JUNC-62-05	34.97	2.13	4.75	14.92	19.93	> 50yr	Minimal Risk
JUNC-62-07	JUNC-62-06	87.44	2.35	4.98	15.12	20.11	< 2yr	Very High Risk
JUNC-63-01	JUNC-23-04	4.62	0.00	0.09	0.78	1.11	> 50yr	Minimal Risk
JUNC-63-01	JUNC-23-04	0.23	0.05	0.19	0.19	0.19	< 2yr	Very High Risk
JUNC-63-02	JUNC-63-01	2.89	0.00	0.22	0.90	1.21	> 50yr	Minimal Risk
JUNC-63-02	JUNC-63-01	0.04	0.05	0.09	0.09	0.08	< 2yr	Very High Risk
JUNC-64-01	JUNC-23-08	4.57	0.22	0.42	0.91	1.23	> 50yr	Minimal Risk
JUNC-64-01	JUNC-23-08	0.27	0.26	0.26	0.26	0.26	< 2yr	Very High Risk
JUNC-64-02	JUNC-64-01	7.76	0.00	0.00	0.53	0.85	> 50yr	Minimal Risk
JUNC-64-02	JUNC-64-01	0.73	0.53	0.68	0.71	0.71	< 2yr	Very High Risk
JUNC-64-03	JUNC-64-02	21.30	0.00	0.00	0.52	0.85	> 50yr	Minimal Risk
JUNC-64-03	JUNC-64-02	0.70	0.54	0.77	0.75	0.76	< 2yr	Very High Risk
JUNC-64-04	JUNC-64-03	6.92	0.02	0.36	1.19	1.52	> 50yr	Minimal Risk
JUNC-64-04	JUNC-64-03	0.28	0.52	0.53	0.53	0.53	< 2yr	Very High Risk
JUNC-64-05	JUNC-64-04	7.28	0.23	0.52	1.20	1.53	> 50yr	Minimal Risk
JUNC-64-05	JUNC-64-04	0.30	0.45	0.45	0.45	0.45	< 2yr	Very High Risk
JUNC-64-06	JUNC-64-05	7.35	0.14	0.34	0.85	1.10	> 50yr	Minimal Risk
JUNC-64-06	JUNC-64-05	0.29	0.33	0.33	0.32	0.32	< 5yr	High Risk
JUNC-64-07	JUNC-64-06	0.13	0.29	0.29	0.29	0.29	< 2yr	Very High Risk
JUNC-64-07	JUNC-64-06	6.99	0.30	0.50	1.00	1.26	< 50yr	Low Risk
JUNC-64-08	JUNC-64-07	6.29	0.30	0.50	1.00	1.26	> 50yr	Minimal Risk
JUNC-64-08	JUNC-64-07	0.14	0.26	0.26	0.26	0.26	< 2yr	Very High Risk
JUNC-64-09	JUNC-64-08	7.43	0.31	0.50	1.01	1.26	> 50yr	Minimal Risk
JUNC-64-09	JUNC-64-08	0.14	0.17	0.17	0.17	0.17	< 2yr	Very High Risk
JUNC-64-10	JUNC-64-09	5.52	0.02	0.07	0.21	0.28	> 50yr	Minimal Risk
JUNC-64-10	JUNC-64-09	0.11	0.10	0.10	0.10	0.10	< 2yr	Very High Risk
JUNC-64-11	JUNC-64-10	5.48	0.02	0.07	0.21	0.27	> 50yr	Minimal Risk
JUNC-64-11	JUNC-64-10	0.11	0.11	0.11	0.11	0.11	< 2yr	Very High Risk
JUNC-65-01	JUNC-23-11	0.31	0.27	0.30	0.30	0.31	< 2yr	Very High Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-65-01	JUNC-23-11	1.63	0.00	0.15	0.73	1.00	> 50yr	Minimal Risk
JUNC-66-01	JUNC-23-15	0.09	0.11	0.11	0.11	0.11	< 2yr	Very High Risk
JUNC-66-01	JUNC-23-15	7.34	0.48	0.74	1.32	1.61	> 50yr	Minimal Risk
JUNC-67-01	JUNC-26-01	35.10	0.11	0.17	0.29	0.35	> 50yr	Minimal Risk
JUNC-67-02	JUNC-67-01	0.08	0.11	0.17	0.19	0.20	> 50yr	Minimal Risk
JUNC-67-02	JUNC-67-01	3.95	0.00	0.00	0.10	0.16	> 50yr	Minimal Risk
JUNC-68-01	JUNC-26-01	31.98	1.03	1.90	5.10	6.72	> 50yr	Minimal Risk
JUNC-68-02	JUNC-68-01	0.27	0.14	0.21	0.40	0.39	< 20yr	Medium Risk
JUNC-68-02	JUNC-68-01	11.80	0.00	0.00	0.00	0.12	> 50yr	Minimal Risk
JUNC-68-03	JUNC-68-02	0.11	0.14	0.21	0.25	0.25	< 20yr	Medium Risk
JUNC-68-03	JUNC-68-02	4.86	0.00	0.00	0.28	0.39	> 50yr	Minimal Risk
JUNC-69-01	JUNC-26-02	52.00	0.14	0.21	0.42	0.52	> 50yr	Minimal Risk
JUNC-69-02	JUNC-69-01	0.16	0.14	0.21	0.34	0.35	> 50yr	Minimal Risk
JUNC-69-02	JUNC-69-01	5.80	0.00	0.00	0.08	0.17	> 50yr	Minimal Risk
JUNC-69-03	JUNC-69-02	0.09	0.14	0.21	0.22	0.22	< 10yr	Medium to High Risk
JUNC-69-03	JUNC-69-02	4.21	0.00	0.00	0.32	0.42	> 50yr	Minimal Risk
JUNC-70-01	JUNC-27-05	0.16	0.24	0.23	0.19	0.17	< 2yr	Very High Risk
JUNC-70-01	JUNC-27-05	23.20	1.34	2.47	5.87	7.43	< 20yr	Medium Risk
JUNC-70-02	JUNC-70-01	31.43	0.21	0.45	1.01	1.26	> 50yr	Minimal Risk
JUNC-70-02	JUNC-70-01	0.18	0.22	0.21	0.19	0.18	< 2yr	Very High Risk
JUNC-7-01	JUNC-1-07	38.00	5.93	9.93	7.77	9.12	< 2yr	Very High Risk
JUNC-7-02	JUNC-7-01	37.99	1.30	2.68	7.08	9.12	> 50yr	Minimal Risk
JUNC-7-03	JUNC-7-02	29.54	0.88	1.93	5.66	7.38	> 50yr	Minimal Risk
JUNC-7-04	JUNC-7-03	58.19	0.88	1.97	5.81	7.57	> 50yr	Minimal Risk
JUNC-71-01	JUNC-27-02	0.35	0.28	0.33	0.33	0.33	< 2yr	Very High Risk
JUNC-71-01	JUNC-27-02	8.98	0.00	0.30	1.51	2.07	> 50yr	Minimal Risk
JUNC-71-02	JUNC-71-01	0.34	0.28	0.36	0.37	0.36	< 2yr	Very High Risk
JUNC-71-02	JUNC-71-01	8.08	0.00	0.28	1.47	2.02	> 50yr	Minimal Risk
JUNC-71-03	JUNC-71-02	0.13	0.20	0.20	0.20	0.20	< 2yr	Very High Risk
JUNC-71-03	JUNC-71-02	3.78	0.10	0.49	1.68	2.23	< 10yr	Medium to High Risk
JUNC-71-04	JUNC-71-03	8.97	0.18	0.53	1.77	2.33	> 50yr	Minimal Risk
JUNC-71-04	JUNC-71-03	0.16	0.23	0.25	0.23	0.22	< 2yr	Very High Risk
JUNC-71-05	JUNC-71-04	6.57	0.11	0.32	1.05	1.38	> 50yr	Minimal Risk
JUNC-71-05	JUNC-71-04	0.12	0.15	0.16	0.14	0.14	< 2yr	Very High Risk
JUNC-72-01	JUNC-27-10	5.95	0.97	1.69	3.52	4.40	> 50yr	Minimal Risk
JUNC-72-01	JUNC-27-10	0.43	0.52	0.52	0.52	0.52	< 2yr	Very High Risk
JUNC-72-02	JUNC-72-01	6.70	0.52	1.00	2.17	2.75	> 50yr	Minimal Risk
JUNC-72-02	JUNC-72-01	0.48	0.48	0.48	0.48	0.48	< 2yr	Very High Risk
JUNC-72-03	JUNC-72-02	0.14	0.24	0.24	0.24	0.24	< 2yr	Very High Risk
JUNC-72-03	JUNC-72-02	7.41	0.90	1.41	2.59	3.19	> 50yr	Minimal Risk
JUNC-72-04	JUNC-72-03	0.12	0.20	0.20	0.20	0.20	< 2yr	Very High Risk
JUNC-72-04	JUNC-72-03	6.52	0.92	1.43	2.61	3.20	> 50yr	Minimal Risk
JUNC-73-01	JUNC-27-15	0.90	0.04	0.05	0.04	0.04	< 2yr	Very High Risk
JUNC-74-01	JUNC-29-02	12.23	0.00	0.00	0.26	0.73	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-74-01	JUNC-29-02	0.83	0.23	0.38	0.45	0.43	< 5yr	High Risk
JUNC-75-01	JUNC-29-02	70.22	0.05	3.04	24.26	33.00	> 50yr	Minimal Risk
JUNC-75-02	JUNC-29-06	2.48	1.87	3.08	3.08	3.08	< 2yr	Very High Risk
JUNC-75-02	JUNC-29-06	33.73	0.00	1.30	8.29	11.47	> 50yr	Minimal Risk
JUNC-75-03	JUNC-75-02	3.06	1.87	3.04	3.07	3.06	< 2yr	Very High Risk
JUNC-75-03	JUNC-75-02	34.89	0.00	0.81	7.40	10.47	> 50yr	Minimal Risk
JUNC-75-04	JUNC-75-03	2.74	1.87	2.93	2.93	2.93	< 2yr	Very High Risk
JUNC-75-04	JUNC-75-03	29.65	0.00	1.12	7.66	10.67	> 50yr	Minimal Risk
JUNC-75-05	JUNC-75-04	31.21	1.48	2.99	8.50	11.24	> 50yr	Minimal Risk
JUNC-75-06	JUNC-75-05	57.30	0.21	0.30	0.48	0.57	> 50yr	Minimal Risk
JUNC-75-07	JUNC-75-06	1.82	0.22	0.31	0.50	0.60	< 5yr	High Risk
JUNC-76-01	JUNC-29-02	13.03	0.03	0.26	0.82	1.04	> 50yr	Minimal Risk
JUNC-76-01	JUNC-29-02	0.25	0.23	0.24	0.19	0.17	< 5yr	High Risk
JUNC-77-01	JUNC-29-10	0.98	1.04	1.04	1.04	1.04	< 2yr	Very High Risk
JUNC-77-01	JUNC-29-10	38.98	0.54	2.50	8.11	10.52	> 50yr	Minimal Risk
JUNC-77-02	JUNC-77-01	0.30	1.01	1.02	1.01	1.01	< 2yr	Very High Risk
JUNC-77-02	JUNC-77-01	11.95	1.08	2.92	8.37	10.76	> 50yr	Minimal Risk
JUNC-77-03	JUNC-77-02	5.23	1.31	2.94	5.01	5.02	< 20yr	Medium Risk
JUNC-77-03	JUNC-77-02	35.79	0.00	0.00	3.10	5.37	> 50yr	Minimal Risk
JUNC-77-04	JUNC-77-03	1.22	0.95	1.55	1.57	1.57	< 20yr	Medium Risk
JUNC-77-04	JUNC-77-03	16.68	0.00	0.43	4.39	6.01	> 50yr	Minimal Risk
JUNC-78-01	JUNC-31-02	14.92	0.00	0.00	0.00	0.75	> 50yr	Minimal Risk
JUNC-78-01	JUNC-31-02	0.83	0.52	0.75	0.94	0.98	> 50yr	Minimal Risk
JUNC-78-02	JUNC-78-01	23.89	0.42	0.58	1.35	2.39	> 50yr	Minimal Risk
JUNC-78-03	JUNC-78-02	7.35	0.05	0.08	0.12	0.15	> 50yr	Minimal Risk
JUNC-78-03	JUNC-78-02	0.20	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-78-04	JUNC-78-03	15.10	0.06	0.08	0.13	0.15	> 50yr	Minimal Risk
JUNC-78-05	JUNC-78-04	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-78-05	JUNC-78-04	0.29	0.06	0.08	0.13	0.15	> 50yr	Minimal Risk
JUNC-78-06	JUNC-78-05	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-78-06	JUNC-78-05	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-79-01	JUNC-32-03	26.33	1.50	3.02	7.83	10.00	> 50yr	Minimal Risk
JUNC-79-02	JUNC-79-01	32.42	0.50	0.85	1.61	1.95	> 50yr	Minimal Risk
JUNC-79-03	JUNC-79-02	33.70	0.10	0.17	0.29	0.34	> 50yr	Minimal Risk
JUNC-79-04	JUNC-79-03	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-79-04	JUNC-79-03	0.33	0.10	0.18	0.29	0.34	> 50yr	Minimal Risk
JUNC-80-01	JUNC-34-02	78.55	0.87	1.11	1.54	1.57	> 50yr	Minimal Risk
JUNC-80-02	JUNC-80-01	0.19	0.30	0.30	0.30	0.30	< 5yr	High Risk
JUNC-80-02	JUNC-80-01	4.85	0.15	0.38	0.91	1.16	> 50yr	Minimal Risk
JUNC-8-01	JUNC-1-08	222.59	12.84	13.81	18.39	22.26	< 20yr	Medium Risk
JUNC-8-02	JUNC-8-01	0.53	0.65	0.69	0.68	0.67	< 5yr	High Risk
JUNC-8-02	JUNC-8-01	453.05	0.35	1.64	7.30	9.06	> 50yr	Minimal Risk
JUNC-8-03	JUNC-8-02	0.24	0.26	0.26	0.26	0.26	< 2yr	Very High Risk
JUNC-8-03	JUNC-8-02	40.25	0.67	1.93	7.25	8.86	< 50yr	Low Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-8-04	JUNC-8-03	48.94	0.63	1.89	7.23	8.81	> 50yr	Minimal Risk
JUNC-8-04	JUNC-8-03	0.30	0.30	0.30	0.30	0.30	< 2yr	Very High Risk
JUNC-8-05	JUNC-8-04	0.16	0.26	0.26	0.25	0.25	< 2yr	Very High Risk
JUNC-8-05	JUNC-8-04	25.13	0.67	1.91	6.86	8.29	> 50yr	Minimal Risk
JUNC-8-06	JUNC-8-05	0.25	0.25	0.25	0.25	0.25	< 2yr	Very High Risk
JUNC-8-06	JUNC-8-05	41.08	0.31	1.46	5.79	6.98	< 20yr	Medium Risk
JUNC-8-07	JUNC-8-06	11.64	0.32	1.25	4.22	5.00	> 50yr	Minimal Risk
JUNC-8-08	JUNC-8-07	0.05	0.15	0.16	0.19	0.19	< 2yr	Very High Risk
JUNC-8-08	JUNC-8-07	9.61	0.17	1.10	4.02	4.80	> 50yr	Minimal Risk
JUNC-8-09	JUNC-8-10	0.05	0.14	0.15	0.15	0.14	< 2yr	Very High Risk
JUNC-8-09	JUNC-8-08	3.91	0.29	1.08	3.50	4.18	< 2yr	Very High Risk
JUNC-8-10	JUNC-8-09	9.73	0.25	1.04	3.48	4.18	> 50yr	Minimal Risk
JUNC-81-01	JUNC-34-02	25.00	0.20	0.34	0.63	0.75	> 50yr	Minimal Risk
JUNC-81-02	JUNC-81-01	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-81-02	JUNC-81-01	2.21	0.14	0.20	0.32	0.38	< 50yr	Low Risk
JUNC-8-11	JUNC-8-10	27.49	0.66	1.33	2.93	3.57	< 2yr	Very High Risk
JUNC-8-12	JUNC-8-11	16.12	0.08	0.52	1.65	2.10	> 50yr	Minimal Risk
JUNC-8-12	JUNC-8-11	0.31	0.27	0.28	0.29	0.29	> 50yr	Minimal Risk
JUNC-82-01	JUNC-34-03	60.06	1.03	1.90	4.78	6.01	> 50yr	Minimal Risk
JUNC-82-02	JUNC-82-01	2.96	1.03	1.90	3.90	3.96	< 2yr	Very High Risk
JUNC-82-02	JUNC-82-01	40.94	0.00	0.00	0.88	2.05	> 50yr	Minimal Risk
JUNC-82-03	JUNC-82-02	1.15	0.88	1.69	1.76	1.76	< 2yr	Very High Risk
JUNC-82-03	JUNC-82-02	7.28	0.00	0.04	3.48	4.59	> 50yr	Minimal Risk
JUNC-82-04	JUNC-82-03	0.07	0.21	0.21	0.21	0.21	< 2yr	Very High Risk
JUNC-82-04	JUNC-82-03	8.73	0.53	1.50	3.93	4.89	> 50yr	Minimal Risk
JUNC-82-05	JUNC-82-04	0.25	0.23	0.23	0.23	0.23	< 2yr	Very High Risk
JUNC-82-05	JUNC-82-04	13.32	0.14	0.32	0.66	0.80	> 50yr	Minimal Risk
JUNC-82-06	JUNC-82-05	0.25	0.09	0.12	0.19	0.20	< 2yr	Very High Risk
JUNC-82-06	JUNC-82-05	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-82-07	JUNC-82-06	0.30	0.09	0.12	0.19	0.23	< 2yr	Very High Risk
JUNC-82-07	JUNC-82-06	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-83-01	JUNC-34-04	36.67	0.24	0.41	0.99	1.10	> 50yr	Minimal Risk
JUNC-83-02	JUNC-83-01	0.12	0.17	0.18	0.20	0.20	< 20yr	Medium Risk
JUNC-83-02	JUNC-83-01	4.91	0.06	0.24	0.57	0.74	> 50yr	Minimal Risk
JUNC-83-03	JUNC-83-02	0.10	0.18	0.19	0.18	0.17	< 2yr	Very High Risk
JUNC-83-03	JUNC-83-02	3.88	0.14	0.32	0.66	0.82	> 50yr	Minimal Risk
JUNC-84-01	JUNC-34-05	37.70	0.16	0.39	0.93	1.13	> 50yr	Minimal Risk
JUNC-85-01	JUNC-34-07	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-86-01	JUNC-34-07	34.04	6.07	10.92	30.60	44.25	> 50yr	Minimal Risk
JUNC-86-02	JUNC-86-01	0.32	3.49	3.51	3.51	3.51	< 2yr	Very High Risk
JUNC-86-02	JUNC-86-01	100.45	2.49	7.51	27.53	39.18	> 50yr	Minimal Risk
JUNC-86-03	JUNC-86-02	2.57	2.67	2.67	2.67	2.67	< 2yr	Very High Risk
JUNC-86-03	JUNC-86-02	75.87	3.33	8.25	27.85	39.45	> 50yr	Minimal Risk
JUNC-86-04	JUNC-86-03	1.11	0.48	0.42	0.47	0.47	< 2yr	Very High Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-86-04	JUNC-86-03	9.61	0.75	1.94	6.23	8.17	> 50yr	Minimal Risk
JUNC-86-05	JUNC-86-04	0.30	0.33	0.32	0.32	0.35	< 2yr	Very High Risk
JUNC-86-05	JUNC-86-04	26.59	0.78	2.04	6.34	8.24	> 50yr	Minimal Risk
JUNC-86-06	JUNC-86-05	0.12	0.27	0.27	0.27	0.27	< 2yr	Very High Risk
JUNC-86-06	JUNC-86-05	9.48	0.81	1.97	6.07	7.87	> 50yr	Minimal Risk
JUNC-86-07	JUNC-86-06	0.37	0.34	0.34	0.34	0.34	< 2yr	Very High Risk
JUNC-86-07	JUNC-86-06	55.41	0.59	1.78	5.94	7.76	> 50yr	Minimal Risk
JUNC-87-01	JUNC-35-01	20.99	0.42	0.71	1.37	1.68	> 50yr	Minimal Risk
JUNC-87-02	JUNC-87-01	1.23	0.29	0.48	0.81	0.97	> 50yr	Minimal Risk
JUNC-87-02	JUNC-87-01	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-87-03	JUNC-87-02	0.26	0.29	0.32	0.33	0.33	< 20yr	Medium Risk
JUNC-87-03	JUNC-87-02	9.34	0.00	0.16	0.49	0.65	> 50yr	Minimal Risk
JUNC-87-04	JUNC-87-03	0.27	0.29	0.30	0.30	0.30	< 5yr	High Risk
JUNC-87-04	JUNC-87-03	10.00	0.00	0.21	0.54	0.70	> 50yr	Minimal Risk
JUNC-87-05	JUNC-87-04	0.28	0.31	0.33	0.32	0.32	< 5yr	High Risk
JUNC-87-05	JUNC-87-04	11.77	0.02	0.21	0.54	0.71	> 50yr	Minimal Risk
JUNC-88-01	JUNC-35-02	5.18	0.21	0.31	0.52	0.62	> 50yr	Minimal Risk
JUNC-88-02	JUNC-88-01	0.11	0.19	0.20	0.20	0.20	< 50yr	Low Risk
JUNC-88-02	JUNC-88-01	6.54	0.02	0.13	0.35	0.46	> 50yr	Minimal Risk
JUNC-88-03	JUNC-88-02	0.19	0.20	0.21	0.20	0.20	< 5yr	High Risk
JUNC-88-03	JUNC-88-02	9.60	0.04	0.16	0.37	0.48	> 50yr	Minimal Risk
JUNC-89-01	JUNC-35-03	13.00	0.27	0.37	0.65	0.78	> 50yr	Minimal Risk
JUNC-89-02	JUNC-89-01	0.30	0.27	0.37	0.38	0.38	> 50yr	Minimal Risk
JUNC-89-02	JUNC-89-01	19.80	0.00	0.00	0.27	0.40	> 50yr	Minimal Risk
JUNC-89-03	JUNC-89-02	0.16	0.27	0.30	0.30	0.30	< 10yr	Medium to High Risk
JUNC-89-03	JUNC-89-02	8.77	0.00	0.21	0.48	0.61	> 50yr	Minimal Risk
JUNC-90-01	JUNC-35-04	2.00	0.15	0.25	0.41	0.50	> 50yr	Minimal Risk
JUNC-90-02	JUNC-90-01	0.27	0.15	0.25	0.41	0.43	< 2yr	Very High Risk
JUNC-90-02	JUNC-90-01	7.30	0.00	0.00	0.00	0.07	> 50yr	Minimal Risk
JUNC-90-03	JUNC-90-02	0.25	0.15	0.25	0.33	0.33	< 2yr	Very High Risk
JUNC-90-03	JUNC-90-02	12.35	0.00	0.00	0.15	0.25	> 50yr	Minimal Risk
JUNC-9-01	JUNC-1-10	30.64	0.92	1.60	3.04	3.68	> 50yr	Minimal Risk
JUNC-9-02	JUNC-9-01	0.21	0.20	0.21	0.21	0.22	< 2yr	Very High Risk
JUNC-9-02	JUNC-9-01	11.17	0.72	1.39	2.83	3.46	> 50yr	Minimal Risk
JUNC-9-03	JUNC-9-02	0.27	0.27	0.27	0.27	0.27	< 2yr	Very High Risk
JUNC-9-03	JUNC-9-02	14.84	0.65	1.33	2.77	3.41	> 50yr	Minimal Risk
JUNC-9-04	JUNC-9-03	0.22	0.28	0.28	0.28	0.28	< 2yr	Very High Risk
JUNC-9-04	JUNC-9-03	11.94	0.70	1.38	2.82	3.46	< 10yr	Medium to High Risk
JUNC-9-05	JUNC-9-04	7.10	0.48	0.81	1.51	1.85	> 50yr	Minimal Risk
JUNC-9-05	JUNC-9-04	0.13	0.15	0.15	0.15	0.15	< 2yr	Very High Risk
JUNC-9-06	JUNC-9-05	10.10	0.66	0.98	1.67	2.02	> 50yr	Minimal Risk
JUNC-9-06	JUNC-9-05	0.03	0.04	0.04	0.04	0.04	< 2yr	Very High Risk
JUNC-91-01	JUNC-35-10	2.41	0.07	0.10	0.16	0.19	> 50yr	Minimal Risk
JUNC-91-02	JUNC-91-01	0.25	0.08	0.10	0.17	0.20	> 50yr	Minimal Risk

Table 6.2: Existing Storm Water Drainage System Hydraulic Capacity Analysis and Assessment Results

Node Reference		Capacity (m ³ /s)	Peak Flow Rates (m ³ /s)				Risk Analysis	Risk Assessment
Upstream Node	Downstream Node		1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr		
JUNC-91-03	JUNC-91-02	0.25	0.08	0.10	0.17	0.20	> 50yr	Minimal Risk
JUNC-92-01	JUNC-35-06	0.20	0.17	0.18	0.18	0.19	< 2yr	Very High Risk
JUNC-92-01	JUNC-35-06	10.63	0.09	0.30	0.77	0.96	> 50yr	Minimal Risk
JUNC-92-02	JUNC-92-01	0.20	0.25	0.26	0.24	0.22	< 2yr	Very High Risk
JUNC-92-02	JUNC-92-01	10.01	0.11	0.34	0.80	1.00	> 50yr	Minimal Risk
JUNC-93-01	JUNC-36-03	45.22	0.98	1.67	3.34	4.07	> 50yr	Minimal Risk
JUNC-93-02	JUNC-93-01	0.30	0.14	0.21	0.32	0.38	< 5yr	High Risk
JUNC-93-02	JUNC-93-01	#DIV/0!	0.00	0.00	0.00	0.00	> 50yr	Minimal Risk
JUNC-93-03	JUNC-93-02	0.31	0.14	0.21	0.32	0.35	< 2yr	Very High Risk
JUNC-93-03	JUNC-93-02	#DIV/0!	0.00	0.00	0.00	0.05	> 50yr	Minimal Risk
JUNC-94-01	JUNC-36-07	8.75	0.21	0.33	0.58	0.70	> 50yr	Minimal Risk
JUNC-94-02	JUNC-94-01	12.58	0.23	0.37	0.63	0.76	> 50yr	Minimal Risk
JUNC-95-01	JUNC-41-05	0.22	0.21	0.29	0.29	0.29	< 2yr	Very High Risk
JUNC-95-01	JUNC-41-05	3.82	0.00	0.01	0.41	0.61	> 50yr	Minimal Risk
JUNC-95-02	JUNC-95-01	0.35	0.24	0.36	0.39	0.38	< 2yr	Very High Risk
JUNC-95-02	JUNC-95-01	3.81	0.00	0.00	0.36	0.57	> 50yr	Minimal Risk
JUNC-95-03	JUNC-95-02	0.57	0.24	0.38	0.57	0.57	< 2yr	Very High Risk
JUNC-95-03	JUNC-95-02	7.52	0.00	0.00	0.23	0.45	> 50yr	Minimal Risk
JUNC-96-01	JUNC-59-17	13.41	0.77	1.31	2.86	3.49	< 10yr	Medium to High Risk
JUNC-96-02	JUNC-96-01	16.10	0.54	1.07	2.60	3.22	> 50yr	Minimal Risk
JUNC-96-02	JUNC-96-01	0.38	0.24	0.25	0.27	0.28	< 2yr	Very High Risk
JUNC-96-03	JUNC-96-02	19.25	0.55	1.08	2.64	3.27	> 50yr	Minimal Risk
JUNC-96-03	JUNC-96-02	0.23	0.23	0.23	0.23	0.23	< 2yr	Very High Risk
JUNC-96-04	JUNC-96-03	17.70	0.00	0.00	0.36	0.53	> 50yr	Minimal Risk
JUNC-96-04	JUNC-96-03	0.45	0.38	0.45	0.45	0.45	< 2yr	Very High Risk
JUNC-97-01	JUNC-64-09	8.57	0.30	0.46	0.84	1.03	> 50yr	Minimal Risk
JUNC-97-01	JUNC-64-09	0.05	0.12	0.12	0.12	0.12	< 2yr	Very High Risk
JUNC-98-01	JUNC-75-01	8.10	0.06	0.09	0.14	0.16	> 50yr	Minimal Risk
JUNC-98-02	JUNC-98-01	0.18	0.03	0.04	0.07	0.08	> 50yr	Minimal Risk
JUNC-98-02	JUNC-98-01	0.20	0.03	0.05	0.07	0.09	> 50yr	Minimal Risk
JUNC-99-01	JUNC-78-02	11.88	0.01	0.14	0.44	0.59	> 50yr	Minimal Risk
JUNC-99-01	JUNC-78-02	0.21	0.37	0.37	0.39	0.39	> 50yr	Minimal Risk