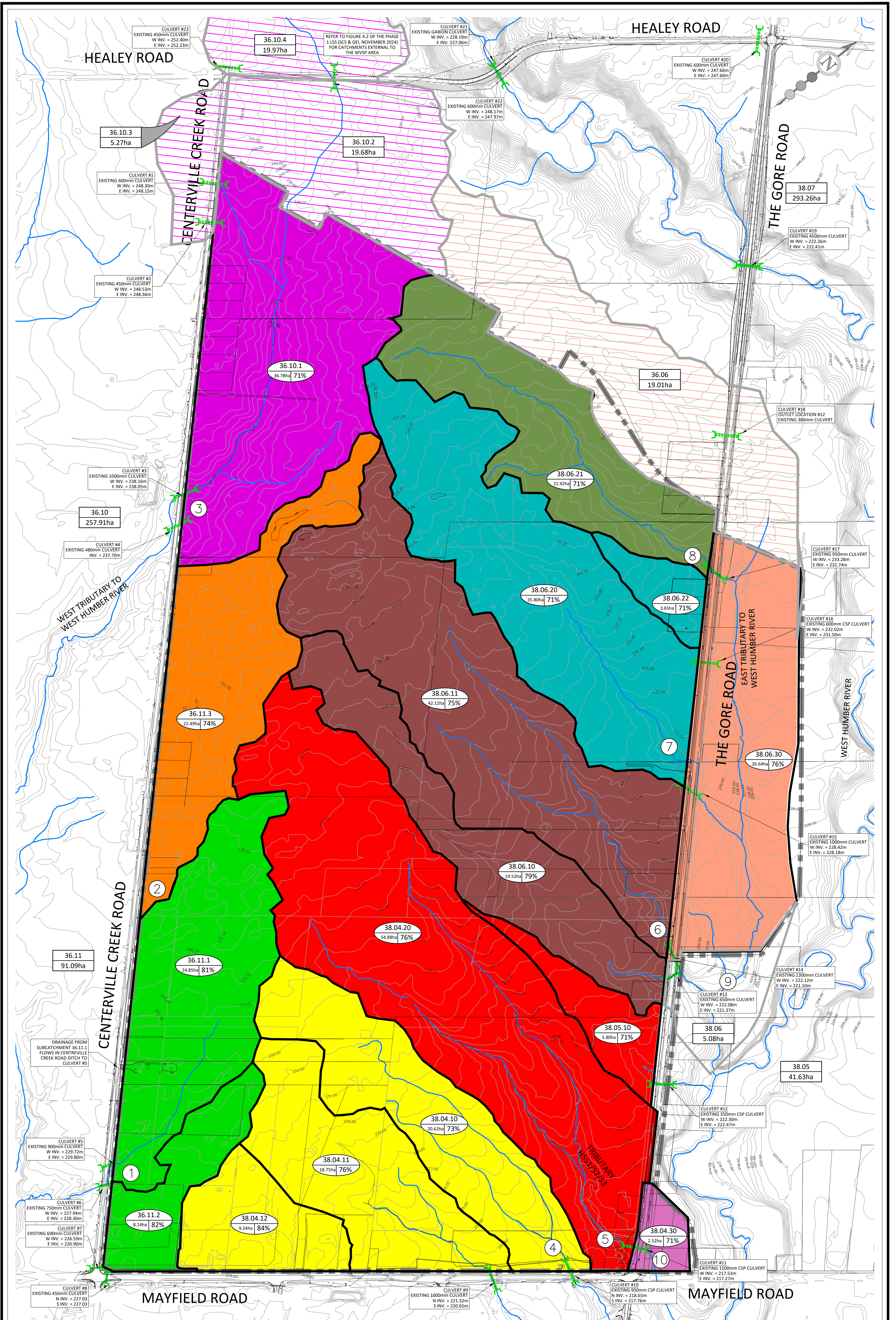

APPENDIX D

SECTION 4: SURFACE WATER

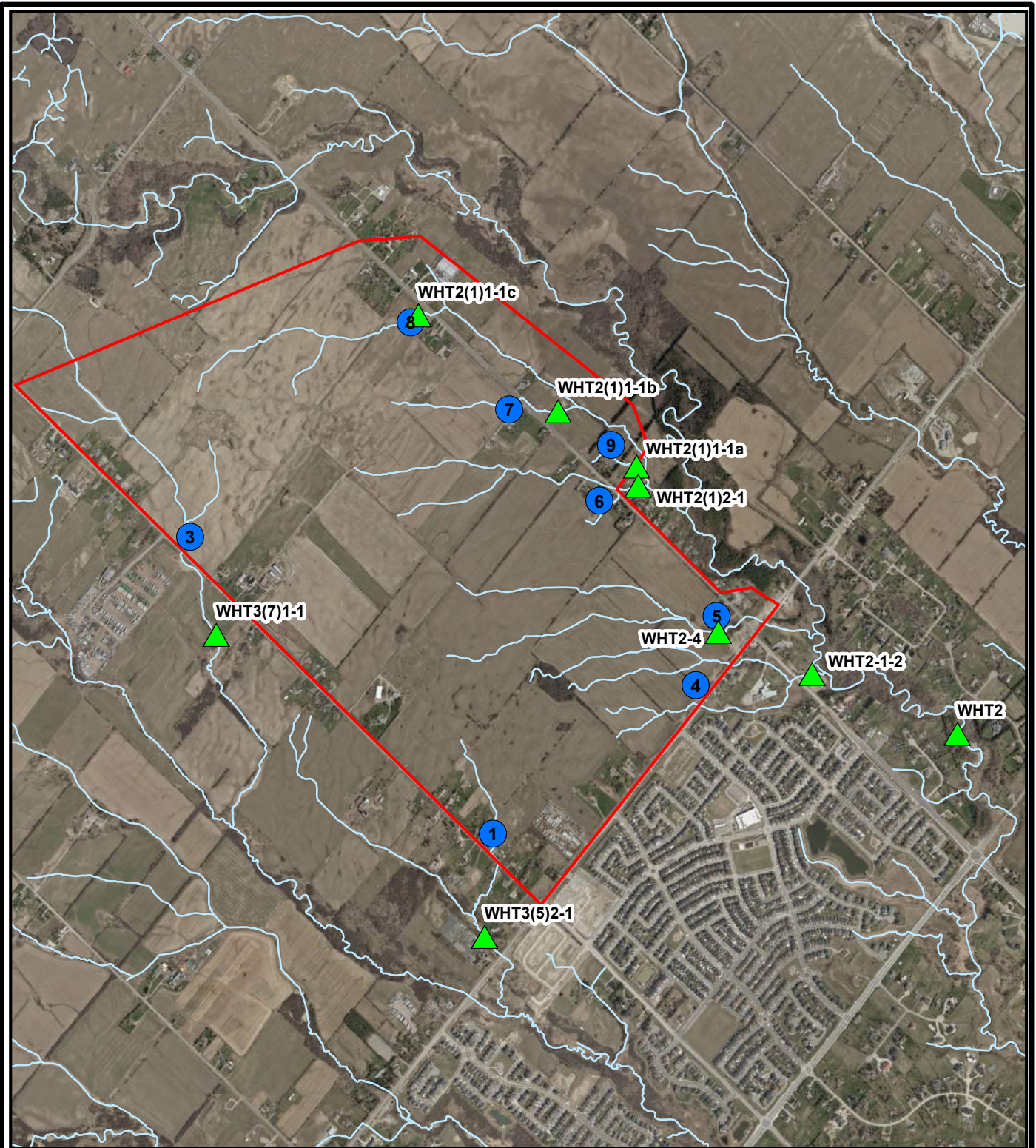
APPENDIX D1

FIGURES



*NOTE: LAYOUT IS SCHEMATIC ONLY, DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE

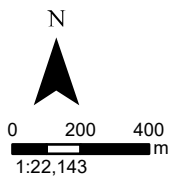
<p>30 CENTURIAN DRIVE, SUITE 100 MARKHAM, ONTARIO L3R 8B8 TEL: (905) 475-1900 FAX: (905) 475-8335</p>	LEGEND: LIMIT OF DEVELOPMENT STORM DRAINAGE BOUNDARY EXISTING CULVERT EXTERNAL STORM DRAINAGE BOUNDARY		DRAINAGE AREAS OUTLET 1 OUTLET 2 OUTLET 3 OUTLET 4 OUTLET 5		OUTLET 6 OUTLET 7 OUTLET 8 OUTLET 9 OUTLET 10		OUTLET 3 EXTERNAL OUTLET 9 EXTERNAL OUTLET ID		CATCHMENT ID EXTERNAL DRAINAGE AREA (HECTARES) CATCHMENT ID PERCENT (%) IMPERVIOUS DRAINAGE AREA (HECTARES)	
	WILDFIELD VILLAGE DESIGNED BY: A.T. CHECKED BY: A.R.K. SCALE: 1:4000 DATE: JANUARY 2025		PROPOSED CONDITIONS STORM DRAINAGE PLAN PROJECT No: 2630 FIGURE No: 4.1							



NOTES:
 1. Coordinate System: NAD 1983 UTM Zone 17N.
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2024.
 3. Digital Terrain Model (DTM) used to create cross sections for some Erosion Threshold Locations was retrieved from the Land Information Ontario Database (MNRF 2024)

Legend

- Watercourses (TRCA)
- Study Area
- Erosion Threshold Locations
- Prop. Outfall Locations (By SCS)



Fluvial Geomorphology
Wildfield

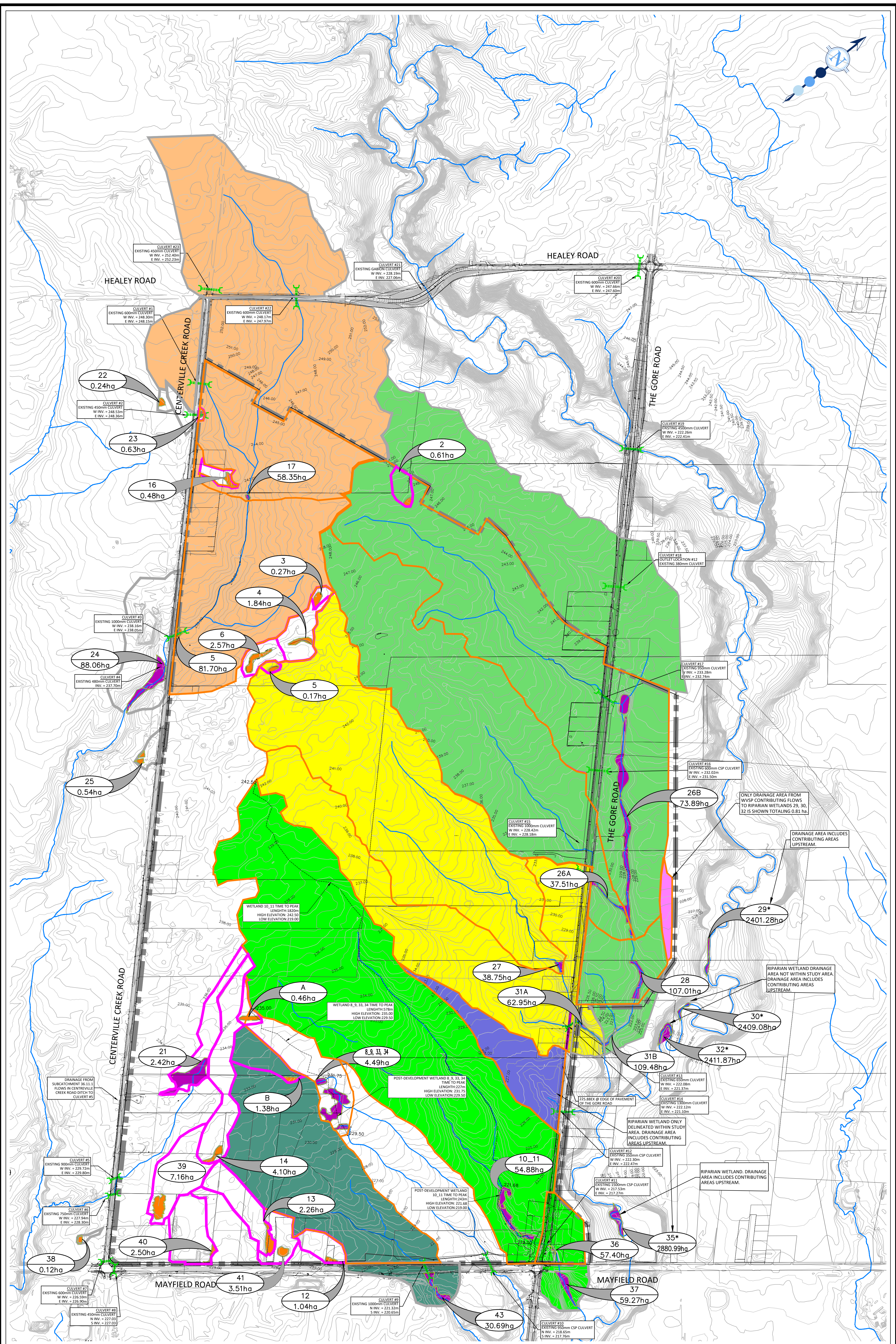
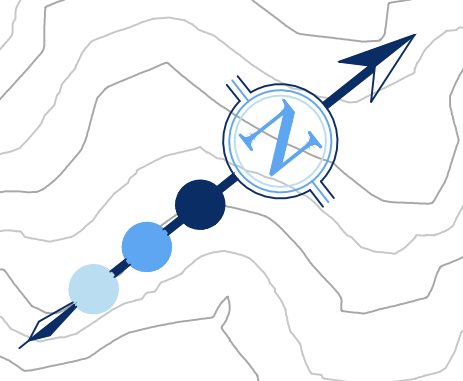
Wildfield Village Landowners
Group Inc.



Project 2100463

FIGURE 4.2
EROSION THRESHOLD
ANALYSIS LOCATIONS

December 2024



<p>30 CENTURVILLE DRIVE, SUITE 100 MARKHAM, ONTARIO L3R 8B8 TEL: (905) 475-1900 FAX: (905) 475-8335</p>	LEGEND: WILDFIELD VILLAGE SECONDARY PLAN (WVSP) AREA LIMITS WATERCOURSE (GEI, 2024) WETLAND DRAINAGE AREA RIPARIAN WETLAND DRAINAGE AREA EXTERNAL WETLAND DRAINAGE AREA WETLAND (GEI, 2024) RIPARIAN WETLAND (GEI, 2024) RIPARIAN WETLAND 24 DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 29, 30, 32 DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 31A DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 31B DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 37 DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 35 DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 43 DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 318 DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 37 DRAINAGE AREA (GEI, 2024) RIPARIAN WETLAND 35 DRAINAGE AREA (GEI, 2024)		WILDFIELD VILLAGE DESIGNED BY: A.T. CHECKED BY: A.R.K. SCALE: 1:5000 DATE: DECEMBER 2024	EXISTING CONDITIONS WETLAND DRAINAGE AREA PROJECT No: 2630 FIGURE No: 4.3
	WETLAND 10, 11 TIME TO PEAK LENGTH: 18.20m HIGH ELEVATION: 242.50 LOW ELEVATION: 219.00 WETLAND 8, 9, 33, 34 TIME TO PEAK LENGTH: 15.30m HIGH ELEVATION: 235.00 LOW ELEVATION: 225.50 POST-DEVELOPMENT WETLAND 10, 11 TIME TO PEAK LENGTH: 1.24m HIGH ELEVATION: 231.74 LOW ELEVATION: 228.00 POST-DEVELOPMENT WETLAND 8, 9, 33, 34 TIME TO PEAK LENGTH: 2.27m HIGH ELEVATION: 237.74 LOW ELEVATION: 229.50	ONLY WETLAND DRAINAGE AREA WITHIN WVSP SHOWN ONLY DRAINAGE AREA FROM WVSP CONTRIBUTING FLOWS TO RIPARIAN WETLANDS 29, 30, 32 IS SHOWN TOTALING 0.81 ha DRAINAGE AREA INCLUDES CONTRIBUTING AREAS UPSTREAM. RIPARIAN WETLAND DRAINAGE AREA NOT WITHIN STUDY AREA. DRAINAGE AREA INCLUDES CONTRIBUTING AREAS UPSTREAM. RIPARIAN WETLAND DRAINAGE AREA INCLUDES CONTRIBUTING AREAS UPSTREAM.	43 23.33ha CATCHMENT ID DRAINAGE AREA (HECTARES)	PROJECT No: 2630 FIGURE No: 4.3

APPENDIX D2

TABLES

Table 4.1 – Proposed Drainage Area Summary

Outlet ID	Area ID	Area (ha)	Percent Imperviousness	Runoff Coefficient
1	36.11.1	24.85	81%	0.77
	36.11.2	8.14	82%	0.77
2	36.11.3	22.49	74%	0.72
3	36.10.1	36.78	71%	0.70
	36.10.2 (External)	19.68	-	0.20
	36.10.3 (External)	5.27	-	0.20
	36.10.4 (External)	19.97	-	0.20
4	38.04.10	20.62	73%	0.71
	38.04.11	18.75	76%	0.73
	38.04.12	9.24	84%	0.79
5	38.04.20	54.88	76%	0.73
	38.05.10	5.80	71%	0.70
6	38.06.10	19.52	79%	0.75
	38.06.11	42.12	75%	0.73
7	38.06.20	35.80	71%	0.70
	38.06.22	3.65	71%	0.70
8	38.06.21	21.92	71%	0.70
9	38.06.30	26.64	76%	0.73
	36.06 (External)	19.01		
10	38.04.30	2.52	71%	0.70

Table 4.2 – Existing Catchment Total Peak Flows (m³/s)

Outlet ID	36.10		36.11		38.04		38.05		38.06	
Area (ha)	339.61		146.57		142.38		47.43		173.74	
	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr
2 year	0.233	0.326	0.229	0.296	0.251	0.322	0.090	0.115	0.134	0.185
5 year	0.450	0.573	0.444	0.524	0.483	0.567	0.174	0.202	0.259	0.325
10 year	0.621	0.764	0.615	0.702	0.667	0.757	0.240	0.270	0.357	0.434
25 year	0.861	1.025	0.854	0.946	0.923	1.016	0.333	0.362	0.495	0.582
50 year	1.055	1.232	1.049	1.140	1.131	1.221	0.408	0.435	0.606	0.699
100 year	1.257	1.449	1.252	1.345	1.346	1.437	0.485	0.512	0.723	0.823
Regional	23.674		10.904		10.896		5.139		12.867	

Table 4.3 – Proposed Catchment Total Peak Flows – Uncontrolled (m³/s)

Outlet ID	36.10		36.11		38.04		38.05		38.06	
Area (ha)	339.61		146.57		148.18		41.63		173.74	
	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr
2 year	2.660	1.596	3.926	1.588	7.419	2.959	0.245	0.255	9.614	3.878
5 year	4.188	3.204	5.567	3.524	10.606	6.693	0.481	0.477	13.820	8.777
10 year	5.288	4.012	6.668	4.174	12.757	7.910	0.668	0.643	16.636	10.388
25 year	6.769	5.093	8.169	5.003	15.600	9.451	0.931	0.873	20.298	12.461
50 year	7.940	5.964	9.345	5.617	17.688	10.592	1.144	1.056	23.197	14.048
100 year	9.140	6.839	10.466	6.233	19.754	11.778	1.367	1.249	26.263	15.589
Regional	24.022		12.364		18.006		4.511		23.613	

Table 4.4 – Existing to Uncontrolled Proposed Peak Flow Comparison

Outlet ID	36.10		36.11		38.04		38.05		38.06	
Area (ha)	0%		0%		4%		-12%		0%	
	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr
2 year	1042%	390%	1614%	436%	2856%	819%	172%	122%	7075%	1996%
5 year	831%	459%	1154%	573%	2096%	1080%	176%	136%	5236%	2601%
10 year	752%	425%	984%	495%	1813%	945%	178%	138%	4560%	2294%
25 year	686%	397%	857%	429%	1590%	830%	180%	141%	4001%	2041%
50 year	653%	384%	791%	393%	1464%	767%	180%	143%	3728%	1910%
100 year	627%	372%	736%	363%	1368%	720%	182%	144%	3533%	1794%
Regional	1%		13%		65%		-12%		84%	

Table 4.5 – Existing and Uncontrolled Future Nodal Flow Comparison – Regional Storm Event

Node	NHYD ID	Location	Existing Regional Peak Flows (m³/s)	Proposed (Uncontrolled) Regional Peak Flows (m³/s)	Change
A	1939	Mayfield Road	178.62	161.00	-9.9%
B	1935	The Gore Road	186.27	160.54	-13.8%
C	1456	Confluence of Tributary and West Humber River	250.84	232.37	-7.4%
D	1776	Castlemore Road	367.59	374.12	1.8%
E	1366	Cottrelle Boulevard	369.28	378.84	2.6%
F	869	McVean Drive	369.04	382.50	3.6%
G	720	Queen Street	708.15	780.83	10.3%
H	1442	Highway 407	954.53	1074.57	12.6%
I	2074	Highway 427	952.87	1083.31	13.7%
J	1971	Highway 27	969.62	1107.41	14.2%
K	1028	Islington Avenue	1013.55	1152.45	13.7%
L	1005	Albion Road	1870.78	2258.04	20.7%
M	975	Eglington Avenue	1919.92	2284.33	19.0%
N	1000	Lake Ontario	2496.74	2832.03	13.4%

Table 4.6 – Proposed (Climate Change) Uncontrolled Peak Flows (m³/s)

Outlet ID	36.10		36.11		38.04		38.05		38.06	
Area (ha)	339.61		146.57		148.18		41.63		173.74	
	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr
2 year	2.890	2.346	4.221	2.816	7.948	5.330	0.281	0.312	10.305	6.965
5 year	4.763	3.842	6.149	4.042	11.748	7.658	0.578	0.608	15.307	10.059
10 year	6.220	4.974	7.652	4.916	14.544	9.287	0.833	0.848	18.963	12.242
25 year	8.592	6.665	9.977	6.112	18.817	11.554	1.265	1.210	24.700	15.288
50 year	10.803	8.074	11.759	7.080	22.444	13.346	1.646	1.524	29.640	17.703
100 year	13.670	10.037	14.158	8.394	27.235	15.756	2.192	1.968	35.955	20.950

Table 4.7 – Proposed Peak Flow to Proposed (Climate Change) Peak Flow Comparison

Outlet ID	36.10		36.11		38.04		38.05		38.06	
	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr	6-hr	12hr
2 year	9%	47%	8%	77%	7%	80%	15%	22%	7%	80%
5 year	14%	20%	10%	15%	11%	14%	20%	27%	11%	15%
10 year	18%	24%	15%	18%	14%	17%	25%	32%	14%	18%
25 year	27%	31%	22%	22%	21%	22%	36%	39%	22%	23%
50 year	36%	35%	26%	26%	27%	26%	44%	44%	28%	26%
100 year	50%	47%	35%	35%	38%	34%	60%	58%	37%	34%

Table 4.8 – Detailed Geomorphic Assessment Results, Tributaries of the West Humber River

Parameter	WHT2	WHT2-1-1	WHT2-2	WHT2(1)1-1c	WHT3(7)1-1	WHT2-4	WHT3(5)2-1	WHT2(1)1-1b	WHT2(1)1-1a	WHT2(1)2-1	WHT2(1)1-1	WHT2-1-2
Channel gradient (%)	0.2	2.8	4.6	1.1	0.6	1.0	1.4	1.8	2.8	3.6	1.5	1.4
Average bankfull width (m)	9.04	3.87	2.58	N/A	3.97	2.73	1.58	N/A	N/A	N/A	N/A	N/A
Average bankfull depth (m)	1.08	0.40	0.55	N/A	0.27	0.26	0.26	N/A	N/A	N/A	N/A	N/A
Maximum bankfull depth (m)	1.61	0.61	0.83	N/A	0.34	0.32	0.36	N/A	N/A	N/A	N/A	N/A
Average hydraulic radius (m)	1.01	0.28	0.38	N/A	0.19	0.19	0.21	N/A	N/A	N/A	N/A	N/A
Manning's roughness	0.04	0.04	0.04	0.035	0.04	0.04	0.04	0.040	0.040	0.040	0.040	0.040
Bankfull velocity (m/s)	1.41	1.79	2.81	N/A	0.67	0.92	1.02	N/A	N/A	N/A	N/A	N/A
Bankfull discharge (m ³ /s)	14.48	2.19	3.89	N/A	0.53	0.56	0.43	N/A	N/A	N/A	N/A	N/A
Shear stress (N/m ²)	37.95	169.28	369.59	N/A	21.03	31.76	47.90	N/A	N/A	N/A	N/A	N/A

Table 4.9 – Erosion Threshold, Tributaries of the West Humber River

* SL = silt loam, OFL = ordinary firm loam, from Julien (1998).

Parameter	WHT2	WHT2-1-1	WHT2-2	WHT2(1)1-1c	WHT3(7)1-1	WHT2-4	WHT3(5)2-1	WHT2(1)1-1b	WHT2(1)1-1a	WHT2(1)2-1	WHT2(1)1-1	WHT2-1-2
Repr. Particle Size (mm)	51 (D ₇₅)	OFL	4.6	SL	SL	SL	OFL	OFL	OFL	OFL	OFL	OFL
Critical velocity (m/s)	1.21	0.76	0.76	0.61	0.61	0.61	0.76	0.76	0.76	0.76	0.76	0.76
Maximum water depth* (m)	1.23	0.13	0.11	N/A	0.28	0.24	0.21	0.20	0.12	0.10	0.23	0.24
Average water depth* (m)	0.89	0.10	0.09	N/A	0.21	0.17	0.17	0.12	0.09	0.08	0.13	0.16
Shear stress (N/m ²)	20.95	26.39	39.97	N/A	12.74	16.58	23.34	20.96	24.54	27.08	19.91	22.81
Critical discharge (m ³ /s)	8.52	0.06	0.04	N/A	0.36	0.25	0.14	0.40	0.19	0.09	0.86	0.14
Critical Fraction	0.59	0.03	0.01	N/A	0.70	0.60	0.37	N/A	N/A	N/A	N/A	N/A

Table 4.10 – Exceedance Analysis Results, Tributaries of the West Humber River

Location	Reach	Condition	Number of Exceedances	Duration	Cumulative Effective Velocity	Cumulative Effective Discharge	Cumulative Effective Shear Stress	Cumulative Effective Work Index
ETL-1	WHT3(5)2-1	Pre	31	79	81	22	4.13 x 10 ³	4.43 x 10 ⁶
		Post	971	1833	2104	805	8.75 x 10 ⁴	1.72 x 10 ⁸
		% Change	3032	2220	2492	3533	2018	3780
ETL-3	WHT3(7)1-1	Pre	53	86	61	61	1.90 x 10 ³	1.30 x 10 ⁶
		Post	323	442	319	325	9.83 x 10 ³	7.04 x 10 ⁶
		% Change	509	414	423	431	417	441
ETL-4	WHT2-1-2	Pre	79	132	138	36	1.18 x 10 ⁴	1.23 x 10 ⁷
		Post	942	1716	1995	697	1.09 x 10 ⁵	2.15 x 10 ⁸
		% Change	1092	1200	1348	1853	818	1647
ETL-5	WHT2-4	Pre	28	79	0	36	3.25 x 10 ⁵	1.26 x 10 ⁸
		Post	746	1245	4	795	4.49 x 10 ⁵	1.75 x 10 ⁸
		% Change	2564	1476	N/A*	2117	38	39
ETL-6	WHT2(1)2-1	Pre	112	245	255	51	1.89 x 10 ⁴	2.67 x 10 ⁷
		Post	1179	2581	3204	960	1.83 x 10 ⁵	4.93 x 10 ⁸
		% Change	953	953	1155	1767	868	1748
ETL-7	WHT2(1)1-1b	Pre	6	8	6	4	5.21 x 10 ²	2.83 x 10 ⁵
		Post	256	324	271	235	1.94 x 10 ⁴	1.59 x 10 ⁷
		% Change	4167	3950	4154	5209	3633	5521
ETL-9	WHT2(1)1-1	Pre	99	202	207	87	2.13 x 10 ⁴	2.62 x 10 ⁷
		Post	1008	1957	2216	1226	1.48 x 10 ⁵	3.04 x 10 ⁸
		% Change	918	869	968	1303	596	1060
ETL-10	WHT2	Pre	11	54	49	642	1.42 x 10 ³	5.72 x 10 ⁵
		Post	43	87	79	1060	2.35 x 10 ³	9.98 x 10 ⁵
		% Change	291	61	60	65	66	74

* N/A due to a pre-development value of 0

Wildfields Village Secondary Plan (WVSP)

Table 4.11a Existing Conditions Wetland Drainage Areas

Wetland ID	Total Drainage Area (ha)	Drainage Area Within WVSP Area (ha)	Drainage Area Outside WVSP Area (ha)	Wetland Located External to WVSP Area (Y/N)	Riparian Wetland (Y/N)	Contributing Areas from Upstream Wetlands for Riparian Wetlands	Notes
A	0.46	0.46	0	N	N	N/A	
B	1.38	1.38	0	N	N	N/A	
2	0.61	0.61	0	N	N	N/A	
3	0.27	0.27	0	N	N	N/A	
4	1.84	1.84	0	N	N	N/A	
5	0.17	0.17	0	N	N	N/A	
6	2.57	2.57	0	N	N	N/A	
7	81.7	36.78	44.92	N	N	N/A	
8_9, 33 and 34	4.49	4.49	0	N	N	N/A	Wetland Cluster lumped together as one drainage area
10_11	54.88	54.88	0	N	Y	N/A	
12	1.04	1.04	0	N	N	N/A	Upstream of culvert under Mayfield Road
13	2.26	2.26	0	N	N	N/A	
14	4.10	4.1	0	N	N	N/A	
16	0.48	0.48	0	N	N	N/A	
17	58.35	13.01	45.34	N	Y	External north of WVSP	Includes future drainage from Highway 413
21	2.42	2.42	0	N	Y	N/A	
22	0.24	0	0.24	Y	N	N/A	No surface water impact from WVSP
23	0.63	0.06	0.57	N	N	N/A	Downstream of culvert under Centreville Creek Road
24	88.06	36.78	51.28	Y	Y	Wetland 17	Includes future drainage from Highway 413
25	0.54	0	0.54	Y	N	N/A	No surface water impact from WVSP
26A	37.51	37.51	0	N	Y	N/A	
26B	73.89	44.88	29.01	N	Y	External north of WVSP	Includes future drainage from Highway 413
27	38.75	38.75	0	N	Y	N/A	
28	107.01	76.74	30.27	N	Y	Wetland 26A and 26B + External	Includes future drainage from Highway 413
29	2401.28	0.89	2400.39	Y	Y	Area within WVSP and West Humber River catchments upstream	Refer to Humber River Hydrologic Model NHYD 3962 for Drainage Area. Area between NHYD outlet and wetland is subtracted.
30	2409.08	0.89	2408.19	Y	Y	West Humber River catchments upstream	Refer to Humber River Hydrologic Model NHYD 3962 for Drainage Area. Area between NHYD outlet and wetland is subtracted.
31A	62.95	61.6	1.35	Y	Y	Wetland 27	
31B	109.48	79.28	30.2	Y	Y	Wetlands 28, 26A and 26B	Includes future drainage from Highway 413
32	2411.87	0.89	2410.98	Y	Y	West Humber River catchments upstream	Refer to Humber River Hydrologic Model NHYD 3962 for Drainage Area. Area between NHYD outlet and wetland is subtracted.
35	2880.99	148.41	2732.58	Y	Y	Area within WVSP and West Humber River catchments upstream	Refer to Humber River Hydrologic Model NHYD 3967 for Drainage Area. Area between NHYD outlet and wetland is subtracted.
36	57.4	57.4	0	N	Y	Wetland 10_11	
37	59.27	57.4	1.87	Y	Y	Wetland 36 and 10_11	
38	0.12	0	0.12	Y	N	N/A	No surface water impact from WVSP
39	7.16	7.16	0	N	N	N/A	
40	2.50	2.50	0.00	N	N	N/A	
41	3.51	3.51	0	N	N	N/A	
43	30.69	27.99	2.7	Y	N	External from South of WVSP	

Table 4.11.b Wetland Water Balance Risk Evaluation Summary

Wetland ID No.	Location	ELC Vegetation Community	Magnitude of Hydrological Change	Sensitivity of Wetland	Risk Assessment
WETLAND-22	Wetlands on 120 m adjacent lands	Shallow Marsh (MAS2)	Low	Full data not Available - assume High	Low
WETLAND-24	Wetlands on 120 m adjacent lands	Reed Canary Grass Mineral Meadow Marsh, Disturbed and Meadow Marsh (MAM2-2/DIST/MAM2)	High	Full data not Available - assume High	High
WETLAND-25	Wetlands on 120 m adjacent lands	Meadow Marsh (MAM2/MAM2)	Low	Full data not Available - assume High	Low
WETLAND-29	Wetlands on 120 m adjacent lands	Open Aquatic (OA)	Low	Full data not Available - assume High	Low
WETLAND-30	Wetlands on 120 m adjacent lands	Open Aquatic (OA)	Low	Full data not Available - assume High	Low
WETLAND-31	Wetlands on 120 m adjacent lands	Meadow Marsh (MAM2)	High	Full data not Available - assume High	High
WETLAND-32	Wetlands on 120 m adjacent lands	Open Aquatic (OA)	Low	Full data not Available - assume High	Low
WETLAND-8_9	Within Participating Property	Silver Maple Deciduous Swamp (SWD3-2)	High	High	High

Wetland ID No.	Location	ELC Vegetation Community	Magnitude of Hydrological Change	Sensitivity of Wetland	Risk Assessment
WETLAND-33	Within Study Area (Not Participating)	Shallow Aquatic	High	Full data not Available - assume High	High
WETLAND-34	Within Participating Property	Cattail Mineral Shallow Marsh (MAS2-1)	High	High	High
WETLAND-35	Wetlands on 120 m adjacent lands	Cultural Meadow and Open Aquatic (CUM1/OA)	High	Full data not Available - assume High	High
WETLAND-37	Wetlands on 120 m adjacent lands	Meadow Marsh (MAM2)	High	Full data not Available - assume High	High
WETLAND-38	Wetlands on 120 m adjacent lands	Open Aquatic (OA)	High	Full data not Available - assume High	Low
WETLAND-43	Wetlands on 120 m adjacent lands	Meadow Marsh (MAM2)	High	Full data not Available - assume High	High
WETLAND-10_11	Within Participating Property	Forb Mineral Meadow Marsh and Reed Canary Meadow Marsh (MAM2-10/MAM2-2)	High	Medium	Medium

Table 4.12 – Annual Runoff Volume Comparison for Wetland 8_9, 33, 34

Year	Existing Annual Runoff (m³)	Proposed Annual Runoff (m³)	% Change
1986	3,572,334	2,036,787	-43%
1987	652,981	372,301	-43%
1988	796,840	454,323	-43%
1989	1,369,630	780,902	-43%
1990	1,131,705	645,248	-43%
1991	1,472,316	839,450	-43%
1992	2,454,638	1,399,526	-43%
1993	1,796,359	1,024,205	-43%
1994	616,567	351,539	-43%
1995	2,193,904	1,250,867	-43%
1996	4,518,197	2,576,077	-43%
1997	783,909	446,950	-43%
1998	943,349	537,856	-43%
1999	1,851,317	1,055,539	-43%
2000	5,198,073	2,963,712	-43%
2001	1,541,462	878,874	-43%
2002	383,626	218,726	-43%
2003	1,704,314	971,725	-43%
2004	772,280	440,320	-43%
2005	236,174	134,656	-43%
2006	1,477,614	842,470	-43%
2007	570,230	325,120	-43%

Table 4.13 – Annual Runoff Volume Comparison for Wetland 10_11

Year	Existing Annual Runoff (m³)	Proposed Annual Runoff (m³)	% Change
1986	43,663,626	708,102	-98%
1987	7,981,198	129,433	-98%
1988	9,739,554	157,948	-98%
1989	16,740,595	271,486	-98%
1990	13,832,504	224,325	-98%
1991	17,995,701	291,840	-98%
1992	30,002,347	486,554	-98%
1993	21,956,390	356,071	-98%
1994	7,536,122	122,215	-98%
1995	26,815,466	434,872	-98%
1996	5,224,646	895,589	-98%
1997	9,581,499	155,385	-98%
1998	11,530,288	186,989	-98%
1999	22,628,122	366,965	-98%
2000	63,534,576	1,030,353	-98%
2001	18,840,853	305,546	-98%
2002	4,688,947	76,042	-98%
2003	20,831,350	337,826	-98%
2004	9,439,360	153,080	-98%
2005	2,886,688	46,814	-98%
2006	18,060,459	292,890	-98%
2007	6,969,760	113,030	-98%

APPENDIX D3

**EVENT BASED HYDROLOGIC MODELLING
(2 – 100 YEAR AND REGIONAL)**

Visual OTTHymo Hydrologic Modelling Files

<https://filesafecloud.scsconsultinggroup.com/url/mgry3xs2ytwikihn>


**2 – 100 YEAR EXISTING CONDITIONS
HYDROLOGIC MODELLING OUTPUTS**



Existing Conditions Hydrologic Modelling Schematic




560
36.10
AREA [ha] - 339.610




579
38.06
AREA [ha] - 173.740



578
38.05
AREA [ha] - 47.430



577
38.04
AREA [ha] - 142.380



561
36.11
AREA [ha] - 146.570

 ** SIMULATION:1.1 2 Year 6 Hour AES (Bloor, TRCA) **

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-----
| CALIB |
| NASHYD ( 0560) | Area (ha)= 339.61 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
-----
| U.H. Tp(hrs)= 5.27
  
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 0.233 (i)
 TIME TO PEAK (hrs)= 8.667
 RUNOFF VOLUME (mm)= 5.408
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.150

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.2 5 Year 6 Hour AES (Bloor, TRCA) **

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-----
| CALIB |
| NASHYD ( 0560) | Area (ha)= 339.61 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
-----
| U.H. Tp(hrs)= 5.27
  
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 0.450 (i)

TIME TO PEAK (hrs)= 8.583
 RUNOFF VOLUME (mm)= 10.447
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.219

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.3 10 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 0.621 (i)
 TIME TO PEAK (hrs)= 8.500
 RUNOFF VOLUME (mm)= 14.424
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.259

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.4 25 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31

1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 0.861 (i)
 TIME TO PEAK (hrs)= 8.500
 RUNOFF VOLUME (mm)= 19.982
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.305

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.5 50 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 1.055 (i)
 TIME TO PEAK (hrs)= 8.500
 RUNOFF VOLUME (mm)= 24.489
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.335

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.6 100 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61

0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 1.257 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 29.183
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.363

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.1 2 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 0.326 (i)
 TIME TO PEAK (hrs)= 12.417
 RUNOFF VOLUME (mm)= 7.812
 TOTAL RAINFALL (mm)= 42.000
 RUNOFF COEFFICIENT = 0.186

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.2 5 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 0.573 (i)
 TIME TO PEAK (hrs)= 12.333
 RUNOFF VOLUME (mm)= 13.726
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.252

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.3 10 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63

0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 0.764 (i)
 TIME TO PEAK (hrs)= 12.250
 RUNOFF VOLUME (mm)= 18.298
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.292

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.4 25 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73

1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 1.025 (i)
 TIME TO PEAK (hrs)= 12.250
 RUNOFF VOLUME (mm)= 24.540
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.5 50 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	9.33	0.81	
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 1.232 (i)

TIME TO PEAK (hrs)= 12.250
 RUNOFF VOLUME (mm)= 29.505
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.365

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.6 100 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0560)	Area (ha)= 339.61	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 5.27		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.100

PEAK FLOW (cms)= 1.449 (i)
 TIME TO PEAK (hrs)= 12.250
 RUNOFF VOLUME (mm)= 34.708
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.1 2 Year 6 Hour AES (Bloor, TRCA) **

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| CALIB |
| NASHYD ( 0561) | Area (ha)= 146.57 Curve Number (CN)= 71.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 2.09
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.229 (i)
 TIME TO PEAK (hrs)= 5.917
 RUNOFF VOLUME (mm)= 5.207
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.145

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.2 5 Year 6 Hour AES (Bloor, TRCA) **

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| CALIB |
| NASHYD ( 0561) | Area (ha)= 146.57 Curve Number (CN)= 71.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 2.09
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.444 (i)

TIME TO PEAK (hrs)= 5.750
 RUNOFF VOLUME (mm)= 10.092
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.211

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.3 10 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.615 (i)
 TIME TO PEAK (hrs)= 5.667
 RUNOFF VOLUME (mm)= 13.961
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.251

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.4 25 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31

1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.854 (i)
 TIME TO PEAK (hrs)= 5.583
 RUNOFF VOLUME (mm)= 19.382
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.295

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.5 50 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 1.049 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 23.787
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.326

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.6 100 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61

0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 1.252 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 28.383
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.353

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.1 2 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.296 (i)
 TIME TO PEAK (hrs)= 8.750
 RUNOFF VOLUME (mm)= 7.538
 TOTAL RAINFALL (mm)= 42.000
 RUNOFF COEFFICIENT = 0.179

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.2 5 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.524 (i)
 TIME TO PEAK (hrs)= 8.583
 RUNOFF VOLUME (mm)= 13.288
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.3 10 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63

0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.702 (i)
 TIME TO PEAK (hrs)= 8.500
 RUNOFF VOLUME (mm)= 17.746
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.4 25 Year 12 Hour AES (Bloor, TRCA) **

CALIB	Area (ha)= 146.57	Curve Number (CN)= 71.0
NASHYD (0561)	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73

1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 0.946 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 23.848
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.326

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.5 50 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	9.33	0.81	
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 1.140 (i)

TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 28.712
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.355

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.6 100 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0561)	Area (ha)= 146.57	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.197

PEAK FLOW (cms)= 1.345 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 33.817
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.1 2 Year 6 Hour AES (Bloor, TRCA) **

 | READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | Ptotal= 36.00 mm | 11be636c-e5b1-4e96-8486-86883a088f9d\aoF810e3
 | | Comments: 2 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	12.24	3.50	5.04	5.25	0.72
0.25	0.72	2.00	12.24	3.75	2.88	5.50	0.72
0.50	0.72	2.25	33.12	4.00	2.88	5.75	0.72
0.75	0.72	2.50	33.12	4.25	1.44	6.00	0.72
1.00	0.72	2.75	9.36	4.50	1.44		
1.25	4.32	3.00	9.36	4.75	0.72		
1.50	4.32	3.25	5.04	5.00	0.72		

 | CALIB |
 | NASHYD (0577) | Area (ha)= 142.38 Curve Number (CN)= 73.0
 | ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 | | U.H. Tp(hrs)= 1.99

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 0.251 (i)
 TIME TO PEAK (hrs)= 5.667
 RUNOFF VOLUME (mm)= 5.632
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.156

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.2 5 Year 6 Hour AES (Bloor, TRCA) **

 | READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | Ptotal= 47.81 mm | 11be636c-e5b1-4e96-8486-86883a088f9d\6277beea
 | | Comments: 5 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	16.25	3.50	6.69	5.25	0.96
0.25	0.96	2.00	16.25	3.75	3.82	5.50	0.96
0.50	0.96	2.25	43.98	4.00	3.82	5.75	0.96
0.75	0.96	2.50	43.98	4.25	1.91	6.00	0.96
1.00	0.96	2.75	12.43	4.50	1.91		
1.25	5.74	3.00	12.43	4.75	0.96		
1.50	5.74	3.25	6.69	5.00	0.96		

CALIB
 NASHYD (0577)
 ID= 1 DT= 5.0 min

Area (ha)= 142.38 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 U.H. Tp(hrs)= 1.99

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 0.483 (i)
 TIME TO PEAK (hrs)= 5.583
 RUNOFF VOLUME (mm)= 10.843
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.227

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.3 10 Year 6 Hour AES (Bloor, TRCA) **

READ STORM
 Ptotal= 55.69 mm

Filename: C:\Users\rbrockie\AppData
 Local\Temp\
 11be636c-e5b1-4e96-8486-86883a088f9d\35fee964
 Comments: 10 Year 6 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	1.75	18.94	3.50	7.80	5.25	1.11
0.25	1.11	2.00	18.94	3.75	4.46	5.50	1.11
0.50	1.11	2.25	51.24	4.00	4.46	5.75	1.11
0.75	1.11	2.50	51.24	4.25	2.23	6.00	1.11
1.00	1.11	2.75	14.48	4.50	2.23		
1.25	6.68	3.00	14.48	4.75	1.11		
1.50	6.68	3.25	7.80	5.00	1.11		

CALIB
 NASHYD (0577)
 ID= 1 DT= 5.0 min

Area (ha)= 142.38 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 U.H. Tp(hrs)= 1.99

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11

0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 0.667 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 14.940
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.4 25 Year 6 Hour AES (Bloor, TRCA) **

READ STORM	Filename: C:\Users\rbrockie\AppData\Local\Temp\11be636c-e5b1-4e96-8486-86883a088f9d\3e4e6076
Ptotal= 65.59 mm	Comments: 25 Year 6 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	1.75	22.30	3.50	9.18	5.25	1.31
0.25	1.31	2.00	22.30	3.75	5.25	5.50	1.31
0.50	1.31	2.25	60.35	4.00	5.25	5.75	1.31
0.75	1.31	2.50	60.35	4.25	2.62	6.00	1.31
1.00	1.31	2.75	17.06	4.50	2.62		
1.25	7.87	3.00	17.06	4.75	1.31		
1.50	7.87	3.25	9.18	5.00	1.31		

CALIB	Area (ha)= 142.38	Curve Number (CN)= 73.0
NASHYD (0577)	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 1.99	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 0.923 (i)

TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 20.651
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.315

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.5 50 Year 6 Hour AES (Bloor, TRCA) **

 READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | | 11be636c-e5b1-4e96-8486-86883a088f9d\fdaad26a
 Ptotal= 73.00 mm | Comments: 50 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	24.82	3.50	10.22	5.25	1.46
0.25	1.46	2.00	24.82	3.75	5.84	5.50	1.46
0.50	1.46	2.25	67.16	4.00	5.84	5.75	1.46
0.75	1.46	2.50	67.16	4.25	2.92	6.00	1.46
1.00	1.46	2.75	18.98	4.50	2.92		
1.25	8.76	3.00	18.98	4.75	1.46		
1.50	8.76	3.25	10.22	5.00	1.46		

 CALIB |
 NASHYD (0577) | Area (ha)= 142.38 Curve Number (CN)= 73.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 U.H. Tp(hrs)= 1.99

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 1.131 (i)
 TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 25.271
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.346

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.6 100 Year 6 Hour AES (Bloor, TRCA) **

 READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | | 11be636c-e5b1-4e96-8486-86883a088f9d\5d0a47de
 Ptotal= 80.31 mm | Comments: 100 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
------	------	------	------	------	------	------	------

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	27.30	3.50	11.24	5.25	1.61
0.25	1.61	2.00	27.30	3.75	6.42	5.50	1.61
0.50	1.61	2.25	73.88	4.00	6.42	5.75	1.61
0.75	1.61	2.50	73.88	4.25	3.21	6.00	1.61
1.00	1.61	2.75	20.88	4.50	3.21		
1.25	9.64	3.00	20.88	4.75	1.61		
1.50	9.64	3.25	11.24	5.00	1.61		

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| CALIB |
| NASHYD ( 0577) | Area (ha)= 142.38 Curve Number (CN)= 73.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
|-----|
| U.H. Tp(hrs)= 1.99 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 1.346 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 30.075
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.374

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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** SIMULATION:2.1 2 Year 12 Hour AES (Bloor, TRCA) **
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| READ STORM |
| Ptotal= 42.00 mm |
|-----|
| Filename: C:\Users\rbrockie\AppData |
| ata\Local\Temp\ |
| 11be636c-e5b1-4e96-8486-86883a088f9d\2bd245c3 |
| Comments: 2 Year 12 Hour AES (Bloor, TRCA) |

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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	7.14	6.50	2.94	9.75	0.42
0.25	0.42	3.50	7.14	6.75	2.94	10.00	0.42
0.50	0.42	3.75	7.14	7.00	2.94	10.25	0.42
0.75	0.42	4.00	7.14	7.25	1.68	10.50	0.42
1.00	0.42	4.25	19.32	7.50	1.68	10.75	0.42
1.25	0.42	4.50	19.32	7.75	1.68	11.00	0.42
1.50	0.42	4.75	19.32	8.00	1.68	11.25	0.42
1.75	0.42	5.00	19.32	8.25	0.84	11.50	0.42
2.00	0.42	5.25	5.46	8.50	0.84	11.75	0.42
2.25	2.52	5.50	5.46	8.75	0.84	12.00	0.42
2.50	2.52	5.75	5.46	9.00	0.84		
2.75	2.52	6.00	5.46	9.25	0.42		
3.00	2.52	6.25	2.94	9.50	0.42		

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| CALIB |

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NASHYD (0577) | Area (ha)= 142.38 Curve Number (CN)= 73.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 ----- U.H. Tp(hrs)= 1.99

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 0.322 (i)
 TIME TO PEAK (hrs)= 8.583
 RUNOFF VOLUME (mm)= 8.125
 TOTAL RAINFALL (mm)= 42.000
 RUNOFF COEFFICIENT = 0.193

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.2 5 Year 12 Hour AES (Bloor, TRCA) **

READ STORM	Filename: C:\Users\rbrockie\AppData ata\Local\Temp\ 11be636c-e5b1-4e96-8486-86883a088f9d\369eff41
Ptotal= 54.38 mm	Comments: 5 Year 12 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	9.25	6.50	3.81	9.75	0.54
0.25	0.54	3.50	9.25	6.75	3.81	10.00	0.54
0.50	0.54	3.75	9.25	7.00	3.81	10.25	0.54
0.75	0.54	4.00	9.25	7.25	2.18	10.50	0.54
1.00	0.54	4.25	25.02	7.50	2.18	10.75	0.54
1.25	0.54	4.50	25.02	7.75	2.18	11.00	0.54
1.50	0.54	4.75	25.02	8.00	2.18	11.25	0.54
1.75	0.54	5.00	25.02	8.25	1.09	11.50	0.54
2.00	0.54	5.25	7.07	8.50	1.09	11.75	0.54
2.25	3.26	5.50	7.07	8.75	1.09	12.00	0.54
2.50	3.26	5.75	7.07	9.00	1.09		
2.75	3.26	6.00	7.07	9.25	0.54		
3.00	3.26	6.25	3.81	9.50	0.54		

CALIB
 NASHYD (0577)
 ID= 1 DT= 5.0 min

Area (ha)= 142.38 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 U.H. Tp(hrs)= 1.99

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 0.567 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 14.229
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.262

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.3 10 Year 12 Hour AES (Bloor, TRCA) **

READ STORM
 Ptotal= 62.71 mm
 Filename: C:\Users\rbrockie\AppData\Local\Temp\11be636c-e5b1-4e96-8486-86883a088f9d\23cb3106
 Comments: 10 Year 12 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	10.66	6.50	4.39	9.75	0.63
0.25	0.63	3.50	10.66	6.75	4.39	10.00	0.63
0.50	0.63	3.75	10.66	7.00	4.39	10.25	0.63
0.75	0.63	4.00	10.66	7.25	2.51	10.50	0.63
1.00	0.63	4.25	28.84	7.50	2.51	10.75	0.63
1.25	0.63	4.50	28.84	7.75	2.51	11.00	0.63
1.50	0.63	4.75	28.84	8.00	2.51	11.25	0.63
1.75	0.63	5.00	28.84	8.25	1.25	11.50	0.63

2.00	0.63	5.25	8.15	8.50	1.25	11.75	0.63
2.25	3.76	5.50	8.15	8.75	1.25	12.00	0.63
2.50	3.76	5.75	8.15	9.00	1.25		
2.75	3.76	6.00	8.15	9.25	0.63		
3.00	3.76	6.25	4.39	9.50	0.63		

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CALIB
NASHYD ( 0577) | Area (ha)= 142.38 Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
                   | U.H. Tp(hrs)= 1.99
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

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----- TRANSFORMED HYETOGRAPH -----

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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 0.757 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 18.931
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.302

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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*****
** SIMULATION:2.4 25 Year 12 Hour AES (Bloor, TRCA) **
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READ STORM |
| Ptotal= 73.10 mm |
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Filename: C:\Users\rbrockie\AppData\Local\Temp\
          11be636c-e5b1-4e96-8486-86883a088f9d\2c6efae9
Comments: 25 Year 12 Hour AES (Bloor, TRCA)
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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	12.43	6.50	5.12	9.75	0.73
0.25	0.73	3.50	12.43	6.75	5.12	10.00	0.73
0.50	0.73	3.75	12.43	7.00	5.12	10.25	0.73

0.75	0.73	4.00	12.43	7.25	2.92	10.50	0.73
1.00	0.73	4.25	33.63	7.50	2.92	10.75	0.73
1.25	0.73	4.50	33.63	7.75	2.92	11.00	0.73
1.50	0.73	4.75	33.63	8.00	2.92	11.25	0.73
1.75	0.73	5.00	33.63	8.25	1.46	11.50	0.73
2.00	0.73	5.25	9.50	8.50	1.46	11.75	0.73
2.25	4.39	5.50	9.50	8.75	1.46	12.00	0.73
2.50	4.39	5.75	9.50	9.00	1.46		
2.75	4.39	6.00	9.50	9.25	0.73		
3.00	4.39	6.25	5.12	9.50	0.73		

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CALIB
NASHYD ( 0577) | Area (ha)= 142.38 | Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 1.50
U.H. Tp(hrs)= 1.99
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 1.016 (i)
TIME TO PEAK (hrs)= 8.333
RUNOFF VOLUME (mm)= 25.335
TOTAL RAINFALL (mm)= 73.100
RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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*****
** SIMULATION:2.5 50 Year 12 Hour AES (Bloor, TRCA) **
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READ STORM | Filename: C:\Users\rbrockie\AppData
            | ata\Local\Temp\
            | 11be636c-e5b1-4e96-8486-86883a088f9d\4a30faeb
Ptotal= 80.82 mm | Comments: 50 Year 12 Hour AES (Bloor, TRCA)
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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	13.74	6.50	5.66	9.75	0.81
0.25	0.81	3.50	13.74	6.75	5.66	10.00	0.81
0.50	0.81	3.75	13.74	7.00	5.66	10.25	0.81
0.75	0.81	4.00	13.74	7.25	3.23	10.50	0.81
1.00	0.81	4.25	37.17	7.50	3.23	10.75	0.81
1.25	0.81	4.50	37.17	7.75	3.23	11.00	0.81
1.50	0.81	4.75	37.17	8.00	3.23	11.25	0.81
1.75	0.81	5.00	37.17	8.25	1.62	11.50	0.81
2.00	0.81	5.25	10.50	8.50	1.62	11.75	0.81
2.25	4.85	5.50	10.50	8.75	1.62	12.00	0.81
2.50	4.85	5.75	10.50	9.00	1.62		
2.75	4.85	6.00	10.50	9.25	0.81		
3.00	4.85	6.25	5.66	9.50	0.81		

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CALIB
NASHYD ( 0577) | Area (ha)= 142.38 | Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 1.50
U.H. Tp(hrs)= 1.99
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 1.221 (i)
TIME TO PEAK (hrs)= 8.250
RUNOFF VOLUME (mm)= 30.419
TOTAL RAINFALL (mm)= 80.820
RUNOFF COEFFICIENT = 0.376

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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*****
** SIMULATION:2.6 100 Year 12 Hour AES (Bloor, TRCA) **
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READ STORM
Ptotal= 88.54 mm

Filename: C:\Users\rbrockie\AppData
ata\Local\Temp\
11be636c-e5b1-4e96-8486-86883a088f9d\eb7441f0
Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	15.05	6.50	6.20	9.75	0.89
0.25	0.89	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	3.54	10.50	0.89
1.00	0.89	4.25	40.71	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	1.77	11.50	0.89
2.00	0.89	5.25	11.51	8.50	1.77	11.75	0.89
2.25	5.31	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77		
2.75	5.31	6.00	11.51	9.25	0.89		
3.00	5.31	6.25	6.20	9.50	0.89		

CALIB
NASHYD (0577)
ID= 1 DT= 5.0 min

Area (ha)= 142.38 Curve Number (CN)= 73.0
Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
U.H. Tp(hrs)= 1.99

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.222

PEAK FLOW (cms)= 1.437 (i)
TIME TO PEAK (hrs)= 8.250
RUNOFF VOLUME (mm)= 35.737
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.404

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.1 2 Year 6 Hour AES (Bloor, TRCA) **

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| CALIB |
| NASHYD ( 0578) | Area (ha)= 47.43 Curve Number (CN)= 73.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 1.82
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.090 (i)
 TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 5.631
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.156

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.2 5 Year 6 Hour AES (Bloor, TRCA) **

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| CALIB |
| NASHYD ( 0578) | Area (ha)= 47.43 Curve Number (CN)= 73.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 1.82
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.174 (i)

TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 10.841
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.227

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.3 10 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)= 47.43	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.240 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 14.938
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.4 25 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)= 47.43	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31

1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.333 (i)
 TIME TO PEAK (hrs)= 5.167
 RUNOFF VOLUME (mm)= 20.649
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.315

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.5 50 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)= 47.43	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.408 (i)
 TIME TO PEAK (hrs)= 5.167
 RUNOFF VOLUME (mm)= 25.268
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.346

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.6 100 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)= 47.43	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61

0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.485 (i)
 TIME TO PEAK (hrs)= 5.167
 RUNOFF VOLUME (mm)= 30.072
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.374

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.1 2 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)=	47.43	Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)=	1.82	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.115 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 8.124
 TOTAL RAINFALL (mm)= 42.000
 RUNOFF COEFFICIENT = 0.193

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.2 5 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)= 47.43	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.202 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 14.227
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.262

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.3 10 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)= 47.43	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63

0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.270 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 18.929
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.302

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.4 25 Year 12 Hour AES (Bloor, TRCA) **

CALIB	Area (ha)= 47.43	Curve Number (CN)= 73.0
NASHYD (0578)	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 1.82	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73

1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.362 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 25.333
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.5 50 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)=	47.43	Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)=	1.82	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	9.33	0.81	
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.435 (i)

TIME TO PEAK (hrs)= 8.167
 RUNOFF VOLUME (mm)= 30.415
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.376

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.6 100 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0578)	Area (ha)= 47.43	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.445

PEAK FLOW (cms)= 0.512 (i)
 TIME TO PEAK (hrs)= 8.167
 RUNOFF VOLUME (mm)= 35.734
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.404

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.1 2 Year 6 Hour AES (Bloor, TRCA) **

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| CALIB |
| NASHYD ( 0579) | Area (ha)= 173.74 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 4.68
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.134 (i)
 TIME TO PEAK (hrs)= 8.083
 RUNOFF VOLUME (mm)= 5.413
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.150

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.2 5 Year 6 Hour AES (Bloor, TRCA) **

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| CALIB |
| NASHYD ( 0579) | Area (ha)= 173.74 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 4.68
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.259 (i)

TIME TO PEAK (hrs)= 8.000
 RUNOFF VOLUME (mm)= 10.457
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.219

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.3 10 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.357 (i)
 TIME TO PEAK (hrs)= 8.000
 RUNOFF VOLUME (mm)= 14.438
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.259

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.4 25 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31

1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.495 (i)
 TIME TO PEAK (hrs)= 7.917
 RUNOFF VOLUME (mm)= 20.001
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.305

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.5 50 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.606 (i)
 TIME TO PEAK (hrs)= 7.917
 RUNOFF VOLUME (mm)= 24.513
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.6 100 Year 6 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61

0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.723 (i)
 TIME TO PEAK (hrs)= 7.917
 RUNOFF VOLUME (mm)= 29.211
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.364

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.1 2 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.185 (i)
 TIME TO PEAK (hrs)= 12.167
 RUNOFF VOLUME (mm)= 7.821
 TOTAL RAINFALL (mm)= 42.000
 RUNOFF COEFFICIENT = 0.186

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.2 5 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.325 (i)
 TIME TO PEAK (hrs)= 11.833
 RUNOFF VOLUME (mm)= 13.743
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.3 10 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63

0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.434 (i)
 TIME TO PEAK (hrs)= 11.667
 RUNOFF VOLUME (mm)= 18.320
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.292

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.4 25 Year 12 Hour AES (Bloor, TRCA) **

CALIB	Area (ha)= 173.74	Curve Number (CN)= 72.0
NASHYD (0579)	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 4.68	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73

1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.582 (i)
 TIME TO PEAK (hrs)= 11.583
 RUNOFF VOLUME (mm)= 24.569
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.5 50 Year 12 Hour AES (Bloor, TRCA) **

CALIB			
NASHYD (0579)	Area (ha)= 173.74	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 4.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.699 (i)

TIME TO PEAK (hrs)= 11.500
 RUNOFF VOLUME (mm)= 29.540
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.366

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.6 100 Year 12 Hour AES (Bloor, TRCA) **

CALIB	Area (ha)= 173.74	Curve Number (CN)= 72.0
NASHYD (0579)	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 4.68	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.634

PEAK FLOW (cms)= 0.823 (i)
 TIME TO PEAK (hrs)= 11.417
 RUNOFF VOLUME (mm)= 34.750
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.


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V  V  I  SSSSS  U  U  A  L  (v 6.2.2017)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA  L
V  V  I  SS    U  U  A  A  L
VV   I  SSSSS  UUUUU  A  A  LLLLL

  000  TTTTT  TTTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O
  000  T  T  H  H  Y  M  M  000

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
 Output filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\7aa6b71d-3
 Summary filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\7aa6b71d-3

DATE: 01-16-2025 TIME: 03:23:49

USER:

COMMENTS: _____

 ** SIMULATION : Hazel **

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| READ STORM |
| Ptotal=212.00 mm |
|-----|
| Filename: C:\Users\rbrockie\AppData\Local\Temp\fe9c0d00-a07f-4108-a664-12ea69b7e73a\7713d240 |
| Comments: |

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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	6.00	3.00	13.00	6.00	23.00	9.00	53.00
1.00	4.00	4.00	17.00	7.00	13.00	10.00	38.00
2.00	6.00	5.00	13.00	8.00	13.00	11.00	13.00

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| CALIB |
| NASHYD ( 0578) |
| ID= 1 DT= 5.0 min |
|-----|
| Area (ha)= 47.43 |
| Ia (mm)= 10.00 |
| U.H. Tp(hrs)= 0.82 |
| Curve Number (CN)= 96.0 |
| # of Linear Res.(N)= 2.50 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00

1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 1.888

PEAK FLOW (cms)= 5.139 (i)
 TIME TO PEAK (hrs)= 11.000
 RUNOFF VOLUME (mm)= 191.909
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.905

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0577)	Area (ha)= 142.38	Curve Number (CN)= 96.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 2.335

PEAK FLOW (cms)= 10.896 (i)
 TIME TO PEAK (hrs)= 11.917
 RUNOFF VOLUME (mm)= 191.940

TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.905

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 NASHYD (0579) | Area (ha)= 173.74 Curve Number (CN)= 95.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 2.11

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 2.687

PEAK FLOW (cms)= 12.867 (i)
 TIME TO PEAK (hrs)= 12.083
 RUNOFF VOLUME (mm)= 189.459
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.894

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 NASHYD (0561) | Area (ha)= 146.57 Curve Number (CN)= 95.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 2.09

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00

0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 2.289

PEAK FLOW (cms)= 10.904 (i)
 TIME TO PEAK (hrs)= 12.000
 RUNOFF VOLUME (mm)= 189.459
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.894

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (0560) | Area (ha)= 339.61 | Curve Number (CN)= 95.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 2.38

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00

2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 4.657

PEAK FLOW (cms)= 23.674 (i)
 TIME TO PEAK (hrs)= 12.250
 RUNOFF VOLUME (mm)= 189.460
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.894

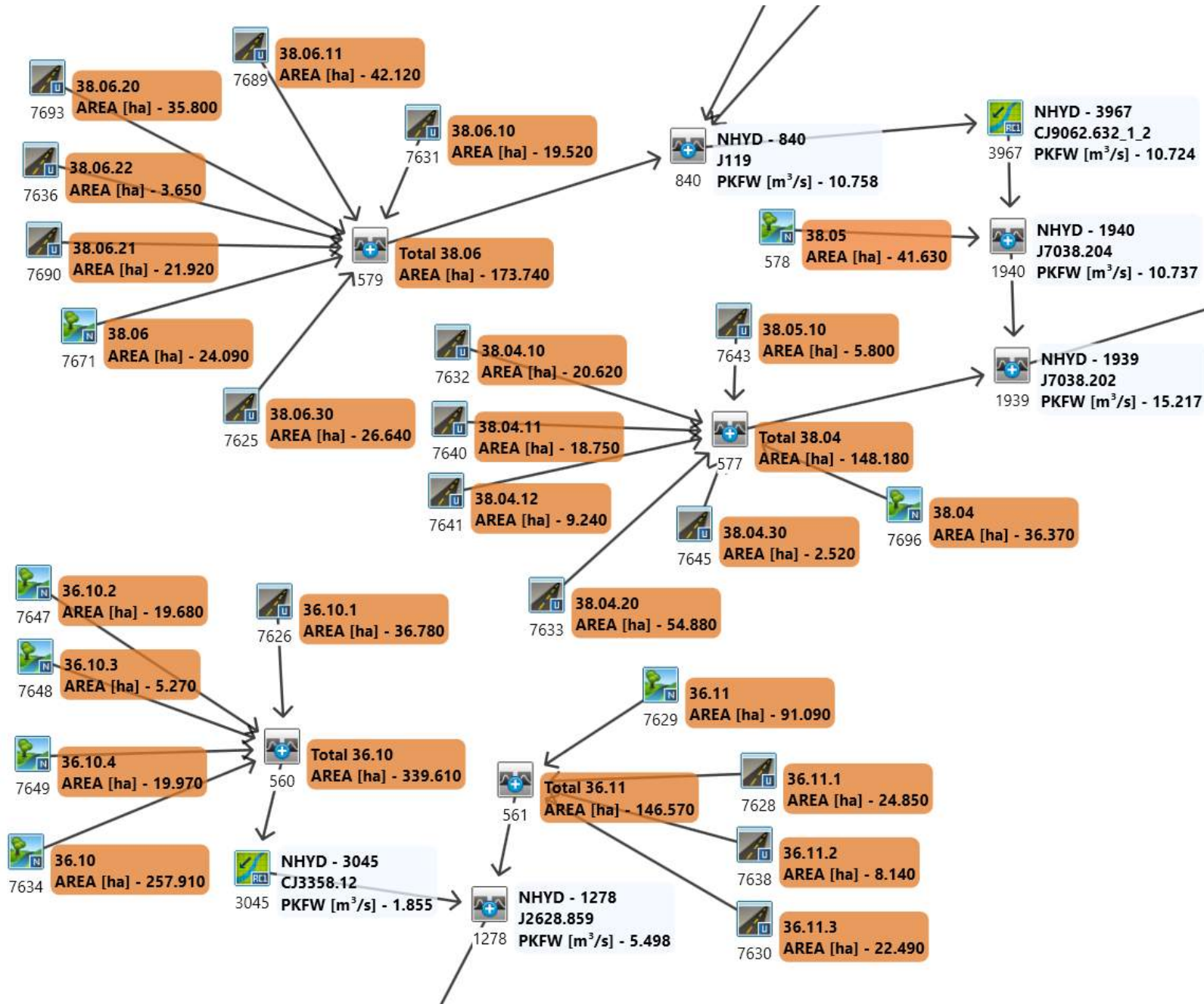
(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 FINISH
 =====

**2 – 100 YEAR & REGIONAL PROPOSED CONDITIONS
HYDROLOGIC MODELLING OUTPUTS**



Phase 2 - Proposed Conditions Visual OTTHymo Modeling Schematic





Proposed Conditions VO Parameter Summary

Wildfield Village
Project Number: 2630
Date: December 2024
Designer Initials: R.B

NASHYD

Name	36.10	36.10.2	36.10.3	36.10.4	38.06	36.11	38.04	38.05
Number	7634	7647	7648	7649	7671	7629	7696	578
Description								
DT(min)	5	5	5	5	5	5	5	5
Area (ha)	257.91	19.68	5.27	19.97	24.09	91.09	36.37	41.63
CN*	72	72	72	72	72	71	73	73
CN _{III} *	95	95	95	95	95	95	96	96
IA(mm)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
TP (hr)	2.38	0.20	0.15	0.31	0.86	2.09	1.99	0.82

* *Italicized numbers are from TRCA Existing Conditions Modelling*

STANDHYD

Name	36.10.1	38.06.10	38.06.11	38.06.20	38.06.21	38.06.22	38.06.30	36.11.1	36.11.2	36.11.3	38.04.10	38.04.11	38.04.12	38.04.20	38.04.30	38.05.10
Number	7626	7631	7689	7693	7690	7636	7625	7628	7638	7630	7632	7640	7641	7633	7645	7643
Description																
DT(min)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Area (ha)	36.78	19.52	42.12	35.80	21.92	3.65	26.64	24.85	8.14	22.49	20.62	18.75	9.24	54.88	2.52	5.80
TIMP ²	0.71	0.79	0.75	0.71	0.71	0.71	0.76	0.81	0.82	0.73	0.73	0.76	0.84	0.76	0.71	0.71
XIMP ^{1,2}	0.57	0.64	0.60	0.57	0.57	0.57	0.61	0.64	0.66	0.59	0.59	0.61	0.67	0.61	0.57	0.57
CN*	80	88	82	80	80	80	84	88	90	82	82	84	92	84	80	80
CN _{III} *	91	95	92	91	91	91	93	95	96	92	92	93	97	93	91	91
IA(mm)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
SLPP(%)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LGP(m)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
MNP	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
DPSI (mm)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SLPI(%)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
LGI(m)	495.18	360.74	529.91	488.54	382.27	155.99	421.43	407.02	232.95	387.21	370.76	353.55	248.19	604.87	129.61	196.64
MNI	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013

¹Note that where there is NO directly connected area (ie: roof runoff to grassed areas), the hydrology program does not accept XIMP=0%, therefore, XIMP = 1% has been used

²Note that where there is NO pervious area, the hydrology program does not accept TIMP and XIMP=100%, therefore, TIMP and XIMP = 99% has been used

Total Area = 849.7 ha

CATCHMENT 36.10



 ** SIMULATION:1.1 2yr-6hr **

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-----
| CALIB |
| NASHYD ( 7634) | Area (ha)= 257.91 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
-----
| U.H. Tp(hrs)= 2.38
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 0.674 (i)
 TIME TO PEAK (hrs)= 5.750
 RUNOFF VOLUME (mm)= 5.418
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.150

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-----
| CALIB |
| NASHYD ( 7647) | Area (ha)= 19.68 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
-----
| U.H. Tp(hrs)= 0.20
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.238 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 5.380
 TOTAL RAINFALL (mm)= 36.000

RUNOFF COEFFICIENT = 0.149

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-----
| CALIB                                     |
| NASHYD ( 7648) | Area (ha)= 5.27   Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00  # of Linear Res.(N)= 2.50
|-----| U.H. Tp(hrs)= 0.15

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.073 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 5.338
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.148

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-----
| CALIB                                     |
| NASHYD ( 7649) | Area (ha)= 19.97  Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00  # of Linear Res.(N)= 2.50
|-----| U.H. Tp(hrs)= 0.31

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.188 (i)
 TIME TO PEAK (hrs)= 3.000

RUNOFF VOLUME (mm)= 5.406
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.150

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7626) ID= 1 DT= 5.0 min	Area (ha)= 36.78 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max. Eff. Inten. (mm/hr)=	33.12	26.24
over (min)	10.00	25.00
Storage Coeff. (min)=	10.38 (ii)	22.43 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.11	0.05

PEAK FLOW (cms)=	1.83	0.48	*TOTALS*
TIME TO PEAK (hrs)=	2.75	3.00	2.208 (iii)
RUNOFF VOLUME (mm)=	35.00	15.50	2.75
TOTAL RAINFALL (mm)=	36.00	36.00	26.61
RUNOFF COEFFICIENT =	0.97	0.43	36.00
			0.74

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R. V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	2.208	2.75	26.61
+ ID2= 2 (7634):	257.91	0.674	5.75	5.42
=====				
ID = 3 (0560):	294.69	2.239	2.75	8.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R. V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	2.239	2.75	8.06
+ ID2= 2 (7647):	19.68	0.238	2.83	5.38

=====
ID = 1 (0560): 314.37 2.456 2.75 7.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0560) |
1 + 2 = 3
ID1= 1 (0560): 314.37 2.456 2.75 7.90
+ ID2= 2 (7648): 5.27 0.073 2.75 5.34

ID = 3 (0560): 319.64 2.529 2.75 7.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0560) |
3 + 2 = 1
ID1= 3 (0560): 319.64 2.529 2.75 7.85
+ ID2= 2 (7649): 19.97 0.188 3.00 5.41

ID = 1 (0560): 339.61 2.660 2.75 7.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.2 5yr-6hr **

| CALIB |
| NASHYD (7634) | Area (ha)= 257.91 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
| U.H. Tp(hrs)= 2.38

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 1.309 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 10.466
TOTAL RAINFALL (mm)= 47.810
RUNOFF COEFFICIENT = 0.219

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| NASHYD (7647) | Area (ha)= 19.68 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
| U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.488 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 10.394
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.217

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.15	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.150 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 10.313
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.216

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7649)	Area (ha)=	19.97	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.31	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.384 (i)
 TIME TO PEAK (hrs)= 3.000
 RUNOFF VOLUME (mm)= 10.443
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.218

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min
 Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 41.92
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.27 (ii) 19.26 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
 PEAK FLOW (cms)= 2.47 0.82 3.196 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 46.81 24.18 37.08
 TOTAL RAINFALL (mm)= 47.81 47.81 47.81

RUNOFF COEFFICIENT = 0.98 0.51 0.78

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):		36.78	3.196	2.75	37.08
+ ID2= 2 (7634):		257.91	1.309	5.58	10.47
=====					
ID = 3 (0560):		294.69	3.278	2.75	13.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		294.69	3.278	2.75	13.79
+ ID2= 2 (7647):		19.68	0.488	2.83	10.39
=====					
ID = 1 (0560):		314.37	3.739	2.75	13.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):		314.37	3.739	2.75	13.58
+ ID2= 2 (7648):		5.27	0.150	2.75	10.31
=====					
ID = 3 (0560):		319.64	3.890	2.75	13.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		319.64	3.890	2.75	13.52
+ ID2= 2 (7649):		19.97	0.384	3.00	10.44
=====					
ID = 1 (0560):		339.61	4.188	2.75	13.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.3 10yr-6hr **

CALIB		Area	Curve Number
NASHYD (7634)	(ha)=	257.91	(CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11

1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 1.812 (i)
 TIME TO PEAK (hrs)= 5.583
 RUNOFF VOLUME (mm)= 14.450
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.259

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)= 19.68	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.686 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 14.350
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.258

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)= 5.27	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.15		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11

0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.211 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 14.238
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.256

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7649)	Area (ha)= 19.97	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.31		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.541 (i)
 TIME TO PEAK (hrs)= 3.000
 RUNOFF VOLUME (mm)= 14.418
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.259

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7626)	Area (ha)= 36.78	Dir. Conn.(%)= 57.00	
ID= 1 DT= 5.0 min	Total Imp(%)= 71.00		

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11

0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 52.25
over (min) 10.00 20.00
Storage Coeff. (min)= 8.72 (ii) 17.87 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 2.90 1.06 3.852 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 54.69 30.39 44.24
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.55 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):	36.78	3.852	2.75	44.24
+ ID2= 2 (7634):	257.91	1.812	5.58	14.45
=====				
ID = 3 (0560):	294.69	3.980	2.75	18.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	3.980	2.75	18.17
+ ID2= 2 (7647):	19.68	0.686	2.83	14.35
=====				
ID = 1 (0560):	314.37	4.639	2.75	17.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):	314.37	4.639	2.75	17.93
+ ID2= 2 (7648):	5.27	0.211	2.75	14.24
=====				
ID = 3 (0560):	319.64	4.850	2.75	17.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	319.64	4.850	2.75	17.87
+ ID2= 2 (7649):	19.97	0.541	3.00	14.42
=====				
ID = 1 (0560):	339.61	5.288	2.75	17.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25yr-6hr **

CALIB			
NASHYD (7634)	Area (ha)= 257.91	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 2.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 2.514 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 20.019
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.305

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)= 19.68	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.963 (i)

TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 19.880
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.303

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 NASHYD (7648) Area (ha)= 5.27 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.296 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 19.725
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.301

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 NASHYD (7649) Area (ha)= 19.97 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.767 (i)
 TIME TO PEAK (hrs)= 2.917
 RUNOFF VOLUME (mm)= 19.974
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.305

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7626) ID= 1 DT= 5.0 min	Area (ha)= 36.78 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	65.58
over (min)	10.00	20.00
Storage Coeff. (min)=	8.16 (ii)	16.52 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.13	0.06

			TOTALS
PEAK FLOW (cms)=	3.43	1.37	4.699 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	64.59	38.55	53.39
TOTAL RAINFALL (mm)=	65.59	65.59	65.59
RUNOFF COEFFICIENT =	0.98	0.59	0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	4.699	2.75	53.39
+ ID2= 2 (7634):	257.91	2.514	5.50	20.02
=====				
ID = 3 (0560):	294.69	4.899	2.75	24.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1				

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	4.899	2.75	24.18
+ ID2= 2 (7647):	19.68	0.963	2.83	19.88
=====				
ID = 1 (0560):	314.37	5.836	2.75	23.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0560):	314.37	5.836	2.75	23.91
+ ID2= 2 (7648):	5.27	0.296	2.75	19.72
=====				
ID = 3 (0560):	319.64	6.132	2.75	23.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0560):	319.64	6.132	2.75	23.85
+ ID2= 2 (7649):	19.97	0.767	2.92	19.97
=====				
ID = 1 (0560):	339.61	6.769	2.75	23.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.5 50yr-6hr **

CALIB			
NASHYD (7634)			
ID= 1 DT= 5.0 min			
Area	(ha)=	257.91	Curve Number (CN)= 72.0
Ia	(mm)=	10.00	# of Linear Res.(N)= 2.50
U.H. Tp	(hrs)=	2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 3.086 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 24.533
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)			
ID= 1 DT= 5.0 min			
Area	(ha)=	19.68	Curve Number (CN)= 72.0
Ia	(mm)=	10.00	# of Linear Res.(N)= 2.50
U.H. Tp	(hrs)=	0.20	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.188 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 24.364
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.334

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.15	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.365 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 24.173
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.331

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7649)	Area (ha)=	19.97	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50

U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.952 (i)
 TIME TO PEAK (hrs)= 2.917
 RUNOFF VOLUME (mm)= 24.479
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.335

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min

Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 75.74
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.82 (ii) 15.71 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.07

PEAK FLOW (cms)= 3.83 1.62 *TOTALS* 5.346 (iii)

TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 72.00 44.85 60.32
 TOTAL RAINFALL (mm)= 73.00 73.00 73.00
 RUNOFF COEFFICIENT = 0.99 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	5.346	2.75	60.32
+ ID2= 2 (7634):	257.91	3.086	5.50	24.53
=====				
ID = 3 (0560):	294.69	5.609	2.75	29.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	5.609	2.75	29.00
+ ID2= 2 (7647):	19.68	1.188	2.83	24.36
=====				
ID = 1 (0560):	314.37	6.773	2.75	28.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	6.773	2.75	28.71
+ ID2= 2 (7648):	5.27	0.365	2.75	24.17
=====				
ID = 3 (0560):	319.64	7.138	2.75	28.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	7.138	2.75	28.64
+ ID2= 2 (7649):	19.97	0.952	2.92	24.48
=====				
ID = 1 (0560):	339.61	7.940	2.75	28.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.6 100yr-6hr **

CALIB	Area (ha)= 257.91	Curve Number (CN)= 72.0
NASHYD (7634)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61

0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 3.681 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 29.236
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.364

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (7647)	Area (ha)=	19.68	Curve Number (CN)=	72.0			
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50			
	U.H. Tp(hrs)=	0.20					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.422 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 29.034
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.362

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)=	72.0			
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50			
	U.H. Tp(hrs)=	0.15					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61

0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.437 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 28.807
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.359

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7649)	Area (ha)= 19.97	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.31		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 1.145 (i)
 TIME TO PEAK (hrs)= 2.917
 RUNOFF VOLUME (mm)= 29.172
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.363

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7626)	Area (ha)= 36.78	Dir. Conn.(%)= 57.00	
ID= 1 DT= 5.0 min	Total Imp(%)= 71.00		

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 85.88
over (min) 10.00 20.00
Storage Coeff. (min)= 7.53 (ii) 15.03 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.07

TOTALS
PEAK FLOW (cms)= 4.22 1.88 5.994 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 79.31 51.19 67.22
TOTAL RAINFALL (mm)= 80.31 80.31 80.31
RUNOFF COEFFICIENT = 0.99 0.64 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	5.994	2.75	67.22
+ ID2= 2 (7634):	257.91	3.681	5.50	29.24
=====				
ID = 3 (0560):	294.69	6.325	2.75	33.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	6.325	2.75	33.98
+ ID2= 2 (7647):	19.68	1.422	2.83	29.03
=====				
ID = 1 (0560):	314.37	7.727	2.75	33.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	7.727	2.75	33.67
+ ID2= 2 (7648):	5.27	0.437	2.75	28.81
=====				
ID = 3 (0560):	319.64	8.164	2.75	33.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	8.164	2.75	33.59

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+ ID2= 2 ( 7649):    19.97    1.145    2.92    29.17
=====
ID = 1 ( 0560):    339.61    9.140    2.75    33.33

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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*****
** SIMULATION:2.1 2yr-12hr **
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| CALIB |
| NASHYD ( 7634) | Area (ha)= 257.91 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----|
| U.H. Tp(hrs)= 2.38 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24

5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 0.841 (i)
 TIME TO PEAK (hrs)= 13.250
 RUNOFF VOLUME (mm)= 10.120
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.215

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7647) | Area (ha)= 19.68 | Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24

4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.182 (i)
 TIME TO PEAK (hrs)= 10.250
 RUNOFF VOLUME (mm)= 10.050
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.213

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7648)
 ID= 1 DT= 5.0 min

Area (ha)= 5.27	Curve Number (CN)= 72.0
Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
U.H. Tp(hrs)= 0.15	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24

3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.050 (i)
 TIME TO PEAK (hrs)= 10.250
 RUNOFF VOLUME (mm)= 9.972
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.212

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7649) | Area (ha)= 19.97 | Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24

2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.171 (i)
 TIME TO PEAK (hrs)= 10.250
 RUNOFF VOLUME (mm)= 10.098
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.214

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min
 Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24

0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 10.52
over (min) 15.00 35.00
Storage Coeff. (min)= 16.24 (ii) 33.62 (ii)
Unit Hyd. Tpeak (min)= 15.00 35.00
Unit Hyd. peak (cms)= 0.07 0.03

PEAK FLOW (cms)= 0.63 0.27 *TOTALS* 0.894 (iii)
TIME TO PEAK (hrs)= 10.25 10.33 10.25
RUNOFF VOLUME (mm)= 46.08 23.62 36.42
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.50 0.77

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)

- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):		36.78	0.894	10.25	36.42
+ ID2= 2 (7634):		257.91	0.841	13.25	10.12
=====					
ID = 3 (0560):		294.69	1.194	10.33	13.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		294.69	1.194	10.33	13.40
+ ID2= 2 (7647):		19.68	0.182	10.25	10.05
=====					
ID = 1 (0560):		314.37	1.376	10.25	13.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):		314.37	1.376	10.25	13.19
+ ID2= 2 (7648):		5.27	0.050	10.25	9.97
=====					
ID = 3 (0560):		319.64	1.426	10.25	13.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		319.64	1.426	10.25	13.14
+ ID2= 2 (7649):		19.97	0.171	10.25	10.10
=====					
ID = 1 (0560):		339.61	1.596	10.25	12.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.2 5yr-12hr **

CALIB					
NASHYD (7634)	Area (ha)=	257.91	Curve Number (CN)=	72.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50	
	U.H. Tp(hrs)=	2.38			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54

1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 1.481 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 13.758
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.253

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7647) | Area (ha)= 19.68 | Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.433 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 13.663
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.251

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7648) | Area (ha)= 5.27 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.124 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 13.556
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.249

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7649) | Area (ha)= 19.97 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54

0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.376 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 13.728
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.252

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min

Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	26.11	10.67
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	495.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54

1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)=	25.02	25.59	
over (min)	10.00	25.00	
Storage Coeff. (min)=	11.61 (ii)	23.79 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.10	0.05	
			TOTALS
PEAK FLOW (cms)=	1.45	0.60	2.038 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	53.38	29.34	43.04
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.54	0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):	36.78	2.038	5.25	43.04
+ ID2= 2 (7634):	257.91	1.481	8.33	13.76
=====				
ID = 3 (0560):	294.69	2.285	5.25	17.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	2.285	5.25	17.41
+ ID2= 2 (7647):	19.68	0.433	5.25	13.66
=====				
ID = 1 (0560):	314.37	2.717	5.25	17.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):	314.37	2.717	5.25	17.18
+ ID2= 2 (7648):	5.27	0.124	5.25	13.56
=====				
ID = 3 (0560):	319.64	2.841	5.25	17.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	319.64	2.841	5.25	17.12
+ ID2= 2 (7649):	19.97	0.376	5.33	13.73
=====				

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.3 10yr-12hr **

CALIB			
NASHYD (7634)	Area (ha)= 257.91	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 2.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 1.982 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 18.340
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.292

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)= 19.68	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63

0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.578 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 18.213
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.290

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7648) | Area (ha)= 5.27 | Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63

2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.164 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 18.071
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.288

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB NASHYD (7649) ID= 1 DT= 5.0 min	Area (ha)= 19.97 Ia (mm)= 10.00 U.H. Tp(hrs)= 0.31	Curve Number (CN)= 72.0 # of Linear Res.(N)= 2.50
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.506 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 18.300
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.292

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min

Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	26.11	10.67
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	495.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	31.19
over (min)	10.00	25.00
Storage Coeff. (min)=	10.97 (ii)	22.22 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.11	0.05

TOTALS
 2.414 (iii)
 5.25
 50.71
 62.71
 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):	36.78	2.414	5.25	50.71
+ ID2= 2 (7634):	257.91	1.982	8.25	18.34
=====				
ID = 3 (0560):	294.69	2.778	5.25	22.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		294.69	2.778	5.25	22.38
+ ID2= 2 (7647):		19.68	0.578	5.25	18.21
=====					
ID = 1 (0560):		314.37	3.356	5.25	22.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):		314.37	3.356	5.25	22.12
+ ID2= 2 (7648):		5.27	0.164	5.25	18.07
=====					
ID = 3 (0560):		319.64	3.520	5.25	22.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		319.64	3.520	5.25	22.05
+ ID2= 2 (7649):		19.97	0.506	5.33	18.30
=====					
ID = 1 (0560):		339.61	4.012	5.25	21.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.4 25yr-12hr **

CALIB		Area	(ha)=	257.91	Curve Number	(CN)=	72.0
NASHYD (7634)		Ia	(mm)=	10.00	# of Linear Res.(N)=	2.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=		2.38			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73

2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 2.670 (i)
 TIME TO PEAK (hrs)= 8.167
 RUNOFF VOLUME (mm)= 24.596
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)= 19.68	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.774 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 24.426
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.334

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)= 5.27	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	

U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.218 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 24.235
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.332

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)= 19.97	Curve Number (CN)= 72.0
NASHYD (7649)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.31	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73

1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.684 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 24.542
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min | Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73

2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 38.34
over (min) 10.00 25.00
Storage Coeff. (min)= 10.32 (ii) 20.67 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
PEAK FLOW (cms)= 1.95 0.96 2.894 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 72.10 44.93 60.42
TOTAL RAINFALL (mm)= 73.10 73.10 73.10
RUNOFF COEFFICIENT = 0.99 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	2.894	5.25	60.42
+ ID2= 2 (7634):	257.91	2.670	8.17	24.60
=====				
ID = 3 (0560):	294.69	3.431	5.25	29.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	3.431	5.25	29.07
+ ID2= 2 (7647):	19.68	0.774	5.25	24.43
=====				
ID = 1 (0560):	314.37	4.205	5.25	28.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	4.205	5.25	28.78
+ ID2= 2 (7648):	5.27	0.218	5.25	24.24
=====				
ID = 3 (0560):	319.64	4.424	5.25	28.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	4.424	5.25	28.70
+ ID2= 2 (7649):	19.97	0.684	5.33	24.54
=====				
ID = 1 (0560):	339.61	5.093	5.25	28.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.5 50yr-12hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7634)	257.91	72.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)= 2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 3.217 (i)
 TIME TO PEAK (hrs)= 8.167
 RUNOFF VOLUME (mm)= 29.572
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.366

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)=	19.68	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.20	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81

1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.929 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 29.368
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.363

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)=	72.0	
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50	
	U.H. Tp(hrs)=	0.15			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.261 (i)

TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 29.138
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.361

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 NASHYD (7649)
 ID= 1 DT= 5.0 min

Area (ha)= 19.97
 Ia (mm)= 10.00
 U.H. Tp(hrs)= 0.31

Curve Number (CN)= 72.0
 # of Linear Res.(N)= 2.50

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.824 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 29.507
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.365

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min

Area (ha)= 36.78
 Total Imp(%)= 71.00
 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 44.08
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.91 (ii) 19.71 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.11 0.06

PEAK FLOW (cms)= 2.16 1.12 *TOTALS* 3.282 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 79.82 51.64 67.70
 TOTAL RAINFALL (mm)= 80.82 80.82 80.82
 RUNOFF COEFFICIENT = 0.99 0.64 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	3.282	5.25	67.70
+ ID2= 2 (7634):	257.91	3.217	8.17	29.57
=====				
ID = 3 (0560):	294.69	3.965	5.25	34.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	3.965	5.25	34.33
+ ID2= 2 (7647):	19.68	0.929	5.25	29.37
=====				
ID = 1 (0560):	314.37	4.893	5.25	34.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-----
| ADD HYD ( 0560) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0560):  314.37  4.893    5.25    34.02
+ ID2= 2 ( 7648):   5.27  0.261    5.25    29.14
=====
ID = 3 ( 0560):  319.64  5.154    5.25    33.94

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0560) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0560):  319.64  5.154    5.25    33.94
+ ID2= 2 ( 7649):   19.97  0.824    5.33    29.51
=====
ID = 1 ( 0560):  339.61  5.964    5.25    33.68

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.6 100yr-12hr **

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-----
| CALIB      |
| NASHYD ( 7634) |
| ID= 1 DT= 5.0 min |
-----
Area      (ha)= 257.91      Curve Number (CN)= 72.0
Ia        (mm)= 10.00      # of Linear Res.(N)= 2.50
U.H. Tp(hrs)= 2.38

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

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          ---- TRANSFORMED HYETOGRAPH ----
          TIME      RAIN      TIME      RAIN      TIME      RAIN      TIME      RAIN
          hrs      mm/hr     hrs      mm/hr     hrs      mm/hr     hrs      mm/hr
0.083      0.00     3.167     5.31     6.250    11.51     9.33      0.89
0.167      0.00     3.250     5.31     6.333     6.20     9.42      0.89
0.250      0.00     3.333    15.05     6.417     6.20     9.50      0.89
0.333      0.89     3.417    15.05     6.500     6.20     9.58      0.89
0.417      0.89     3.500    15.05     6.583     6.20     9.67      0.89
0.500      0.89     3.583    15.05     6.667     6.20     9.75      0.89
0.583      0.89     3.667    15.05     6.750     6.20     9.83      0.89
0.667      0.89     3.750    15.05     6.833     6.20     9.92      0.89
0.750      0.89     3.833    15.05     6.917     6.20    10.00     0.89
0.833      0.89     3.917    15.05     7.000     6.20    10.08     0.89
0.917      0.89     4.000    15.05     7.083     6.20    10.17     0.89
1.000      0.89     4.083    15.05     7.167     6.20    10.25     0.89
1.083      0.89     4.167    15.05     7.250     6.20    10.33     0.89
1.167      0.89     4.250    15.05     7.333     3.54    10.42     0.89
1.250      0.89     4.333    40.71     7.417     3.54    10.50     0.89
1.333      0.89     4.417    40.71     7.500     3.54    10.58     0.89
1.417      0.89     4.500    40.71     7.583     3.54    10.67     0.89
1.500      0.89     4.583    40.71     7.667     3.54    10.75     0.89
1.583      0.89     4.667    40.71     7.750     3.54    10.83     0.89
1.667      0.89     4.750    40.71     7.833     3.54    10.92     0.89
1.750      0.89     4.833    40.71     7.917     3.54    11.00     0.89
1.833      0.89     4.917    40.71     8.000     3.54    11.08     0.89
1.917      0.89     5.000    40.71     8.083     3.54    11.17     0.89
2.000      0.89     5.083    40.71     8.167     3.54    11.25     0.89
2.083      0.89     5.167    40.71     8.250     3.54    11.33     0.89
2.167      0.89     5.250    40.71     8.333     1.77    11.42     0.89
2.250      0.89     5.333    11.51     8.417     1.77    11.50     0.89
2.333      5.31     5.417    11.51     8.500     1.77    11.58     0.89
2.417      5.31     5.500    11.51     8.583     1.77    11.67     0.89
2.500      5.31     5.583    11.51     8.667     1.77    11.75     0.89
2.583      5.31     5.667    11.51     8.750     1.77    11.83     0.89
2.667      5.31     5.750    11.51     8.833     1.77    11.92     0.89
2.750      5.31     5.833    11.51     8.917     1.77    12.00     0.89
2.833      5.31     5.917    11.51     9.000     1.77    12.08     0.89
2.917      5.31     6.000    11.51     9.083     1.77    12.17     0.89
3.000      5.31     6.083    11.51     9.167     1.77    12.25     0.89
3.083      5.31     6.167    11.51     9.250     1.77

```

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 3.793 (i)
TIME TO PEAK (hrs)= 8.083
RUNOFF VOLUME (mm)= 34.788
TOTAL RAINFALL (mm)= 88.540

RUNOFF COEFFICIENT = 0.393

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB                                     |
| NASHYD ( 7647) | Area (ha)= 19.68 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----| U.H. Tp(hrs)= 0.20

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.089 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 34.547
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.390

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB                                     |
| NASHYD ( 7648) | Area (ha)= 5.27 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----| U.H. Tp(hrs)= 0.15

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89

0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.305 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 34.277
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.387

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7649)
 ID= 1 DT= 5.0 min

Area (ha)= 19.97	Curve Number (CN)= 72.0
Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
U.H. Tp(hrs)= 0.31	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89

2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.971 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 34.711
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min
 Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)= 40.71 49.48
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.56 (ii) 18.91 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 2.37 1.28
 TIME TO PEAK (hrs)= 5.25 5.25
 TOTALS
 3.646 (iii)
 5.25

RUNOFF VOLUME	(mm)=	87.54	58.47	75.04
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.66	0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (7626):	36.78	3.646	5.25	75.04
+	ID2= 2 (7634):	257.91	3.793	8.08	34.79
=====					
ID =	3 (0560):	294.69	4.488	5.25	39.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0560):	294.69	4.488	5.25	39.81
+	ID2= 2 (7647):	19.68	1.089	5.25	34.55
=====					
ID =	1 (0560):	314.37	5.577	5.25	39.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0560):	314.37	5.577	5.25	39.48
+	ID2= 2 (7648):	5.27	0.305	5.25	34.28
=====					
ID =	3 (0560):	319.64	5.882	5.25	39.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0560):	319.64	5.882	5.25	39.40
+	ID2= 2 (7649):	19.97	0.971	5.33	34.71
=====					
ID =	1 (0560):	339.61	6.839	5.25	39.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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V V I SSSSS U U A L (v 6.2.2017)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

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000 TTTTT TTTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
 Output filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a
 Summary filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a

DATE: 01-16-2025 TIME: 03:31:53

USER:

COMMENTS: _____

 ** SIMULATION : Hazel **

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| READ STORM | Filename: C:\Users\rbrockie\AppData
|             | ata\Local\Temp\
| Ptotal=212.00 mm | 22687e30-07c2-4062-bd55-1fd890e6839f\7713d240
|             | Comments:
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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	6.00	3.00	13.00	6.00	23.00	9.00	53.00
1.00	4.00	4.00	17.00	7.00	13.00	10.00	38.00
2.00	6.00	5.00	13.00	8.00	13.00	11.00	13.00

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| CALIB |
| NASHYD ( 7634) | Area (ha)= 257.91 Curve Number (CN)= 95.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|             | U.H. Tp(hrs)= 2.38
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00

1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 17.979 (i)
 TIME TO PEAK (hrs)= 12.250
 RUNOFF VOLUME (mm)= 189.459
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.894

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min | Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	26.11	10.67
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	495.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)=	53.00	77.82	
over (min)	10.00	20.00	
Storage Coeff.(min)=	8.60 (ii)	16.40 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	3.08	2.22	5.304 (iii)
TIME TO PEAK (hrs)=	10.00	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	194.97	204.11
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.92	0.96

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 91.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB                                     |
| NASHYD ( 0071) | Area (ha)= 19.97 Curve Number (CN)= 95.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----| U.H. Tp(hrs)= 0.31

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)=	2.748 (i)
TIME TO PEAK (hrs)=	10.083
RUNOFF VOLUME (mm)=	189.042
TOTAL RAINFALL (mm)=	212.000
RUNOFF COEFFICIENT =	0.892

- (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB                                     |
| NASHYD ( 0072) | Area (ha)= 5.27 Curve Number (CN)= 95.0

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ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 ----- U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.758 (i)
 TIME TO PEAK (hrs)= 10.000
 RUNOFF VOLUME (mm)= 186.679
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.881

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (0073) | Area (ha)= 19.68 Curve Number (CN)= 95.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 ----- U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00

1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 2.837 (i)
 TIME TO PEAK (hrs)= 10.000
 RUNOFF VOLUME (mm)= 188.149
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.887

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0071):	19.97	2.748	10.08	189.04
+ ID2= 2 (0072):	5.27	0.758	10.00	186.68
ID = 3 (0560):	25.24	3.505	10.00	188.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	25.24	3.505	10.00	188.55
+ ID2= 2 (0073):	19.68	2.837	10.00	188.15
ID = 1 (0560):	44.92	6.341	10.00	188.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	44.92	6.341	10.00	188.37
+ ID2= 2 (7626):	36.78	5.304	10.00	204.11
ID = 3 (0560):	81.70	11.645	10.00	195.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	81.70	11.645	10.00	195.46
+ ID2= 2 (7634):	257.91	17.979	12.25	189.46
ID = 1 (0560):	339.61	24.022	11.00	190.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH

CATCHMENT 36.11



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=====
V   V   I   SSSSS U   U   A   L           (v 6.2.2017)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV    I   SSSSS UUUUU A   A   LLLLL

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000   TTTTT TTTTT H   H   Y   Y   M   M   000   TM
O   O   T   T   H   H   Y   Y   MM  MM  O   O
O   O   T   T   H   H   Y   M   M   O   O
000   T   T   H   H   Y   M   M   000

```

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
 Output filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a
 Summary filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a

DATE: 01-16-2025 TIME: 03:33:25

USER:

COMMENTS: _____

 ** SIMULATION : Hazel **

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-----
| READ STORM | Filename: C:\Users\rbrockie\AppData\Local\Temp\2237089d-e6d3-4070-9feb-51a9fea8f4e1\7713d240
| Ptotal=212.00 mm | Comments:
-----

```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	6.00	3.00	13.00	6.00	23.00	9.00	53.00
1.00	4.00	4.00	17.00	7.00	13.00	10.00	38.00
2.00	6.00	5.00	13.00	8.00	13.00	11.00	13.00

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-----
| CALIB | Area (ha)= 22.49
| STANDHYD ( 7630) | Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00
| ID= 1 DT= 5.0 min |
-----

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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	387.21	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

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----- TRANSFORMED HYETOGRAPH -----

```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00

1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 79.89
over (min) 5.00 20.00
Storage Coeff. (min)= 7.42 (ii) 15.14 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

PEAK FLOW (cms)= 1.95 1.31 *TOTALS* 3.262 (iii)
TIME TO PEAK (hrs)= 10.00 10.00 10.00
RUNOFF VOLUME (mm)= 211.00 197.08 205.29
TOTAL RAINFALL (mm)= 212.00 212.00 212.00
RUNOFF COEFFICIENT = 1.00 0.93 0.97

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7628)
ID= 1 DT= 5.0 min
Area (ha)= 24.85
Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00

1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 100.23
over (min) 10.00 15.00
Storage Coeff. (min)= 7.65 (ii) 14.70 (ii)
Unit Hyd. Tpeak (min)= 10.00 15.00
Unit Hyd. peak (cms)= 0.13 0.08

PEAK FLOW (cms)= 2.34 1.29 *TOTALS*
TIME TO PEAK (hrs)= 10.00 10.00 3.629 (iii)
RUNOFF VOLUME (mm)= 211.00 204.12 208.52
TOTAL RAINFALL (mm)= 212.00 212.00 212.00
RUNOFF COEFFICIENT = 1.00 0.96 0.98

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 95.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (7629) Area (ha)= 91.09 Curve Number (CN)= 95.0
ID= 1 DT= 5.0 min Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
U.H. Tp(hrs)= 2.09

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 1.422

PEAK FLOW (cms)= 6.777 (i)
TIME TO PEAK (hrs)= 12.000
RUNOFF VOLUME (mm)= 189.459
TOTAL RAINFALL (mm)= 212.000
RUNOFF COEFFICIENT = 0.894

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min
Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

IMPERVIOUS PERVIOUS (i)
Surface Area (ha)= 6.67 1.47
Dep. Storage (mm)= 1.00 2.00
Average Slope (%)= 1.00 2.00
Length (m)= 232.95 40.00
Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 99.99
over (min) 5.00 15.00
Storage Coeff. (min)= 5.47 (ii) 12.53 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.20 0.08

PEAK FLOW (cms)= 0.79 0.40 1.194 (iii)
TIME TO PEAK (hrs)= 10.00 10.00 10.00
RUNOFF VOLUME (mm)= 211.00 205.48 209.12
TOTAL RAINFALL (mm)= 212.00 212.00 212.00
RUNOFF COEFFICIENT = 1.00 0.97 0.99

TOTALS

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 96.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7628):	24.85	3.629	10.00	208.52
+ ID2= 2 (7629):	91.09	6.777	12.00	189.46
=====				
ID = 3 (0561):	115.94	8.610	11.00	193.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):	115.94	8.610	11.00	193.54
+ ID2= 2 (7630):	22.49	3.262	10.00	205.29
=====				
ID = 1 (0561):	138.43	11.171	10.00	195.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	11.171	10.00	195.45
+ ID2= 2 (7638):	8.14	1.194	10.00	209.12
=====				
ID = 3 (0561):	146.57	12.364	10.00	196.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH

 ** SIMULATION:1.1 2yr-6hr **

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-----
| CALIB |
| NASHYD ( 7629) | Area (ha)= 91.09 Curve Number (CN)= 71.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
-----
| U.H. Tp(hrs)= 2.09
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.142 (i)
 TIME TO PEAK (hrs)= 5.917
 RUNOFF VOLUME (mm)= 5.207
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.145

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| STANDHYD ( 7628) | Area (ha)= 24.85
| ID= 1 DT= 5.0 min | Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	49.60	
over (min)	10.00	20.00	
Storage Coeff. (min)=	9.23 (ii)	18.57 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	1.41	0.45	1.826 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	35.00	22.94	30.66
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.64	0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7630) ID= 1 DT= 5.0 min	Area (ha)= 22.49	Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42		6.07
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	387.21		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	29.18	
over (min)	10.00	25.00	
Storage Coeff. (min)=	8.96 (ii)	20.51 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.12	0.05	
			TOTALS
PEAK FLOW (cms)=	1.18	0.31	1.433 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	35.00	16.85	27.56
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.47	0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14	Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
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IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 6.67 1.47
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 232.95 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 52.12
 over (min) 5.00 20.00
 Storage Coeff. (min)= 6.60 (ii) 15.76 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.18 0.07

TOTALS

PEAK FLOW (cms)= 0.49 0.16 0.639 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83
 RUNOFF VOLUME (mm)= 35.00 24.48 31.42
 TOTAL RAINFALL (mm)= 36.00 36.00 36.00
 RUNOFF COEFFICIENT = 0.97 0.68 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7628):	24.85	1.826	2.75	30.66
+ ID2= 2 (7629):	91.09	0.142	5.92	5.21
=====				
ID = 3 (0561):	115.94	1.854	2.75	10.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):	115.94	1.854	2.75	10.66
+ ID2= 2 (7630):	22.49	1.433	2.75	27.56
=====				
ID = 1 (0561):	138.43	3.287	2.75	13.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	3.287	2.75	13.41
+ ID2= 2 (7638):	8.14	0.639	2.75	31.42
=====				

ID = 3 (0561): 146.57 3.926 2.75 14.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.2 5yr-6hr **

CALIB			
NASHYD (7629)	Area (ha)=	91.09	Curve Number (CN)= 71.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)=	2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.276 (i)
 TIME TO PEAK (hrs)= 5.750
 RUNOFF VOLUME (mm)= 10.092
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.211

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7628)	Area (ha)=	24.85	
ID= 1 DT= 5.0 min	Total Imp(%)=	81.00	Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96

1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 70.92
over (min) 10.00 20.00
Storage Coeff. (min)= 8.24 (ii) 16.34 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 1.89 0.69 *TOTALS*
TIME TO PEAK (hrs)= 2.75 2.83 2.543 (iii)
RUNOFF VOLUME (mm)= 46.81 33.61 42.06
TOTAL RAINFALL (mm)= 47.81 47.81 47.81
RUNOFF COEFFICIENT = 0.98 0.70 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7630)	Area (ha)= 22.49		
ID= 1 DT= 5.0 min	Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	387.21	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 45.85
over (min) 10.00 20.00
Storage Coeff. (min)= 7.99 (ii) 17.64 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 1.58 0.53 *TOTALS*
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 46.81 25.98 38.27
TOTAL RAINFALL (mm)= 47.81 47.81 47.81
RUNOFF COEFFICIENT = 0.98 0.54 0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

STANDHYD (7638) | Area (ha)= 8.14
 ID= 1 DT= 5.0 min | Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	73.50
over (min)	5.00	15.00
Storage Coeff. (min)=	5.89 (ii)	13.88 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

PEAK FLOW (cms)=	0.65	0.24	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.83	0.894 (iii)
RUNOFF VOLUME (mm)=	46.81	35.43	2.75
TOTAL RAINFALL (mm)=	47.81	47.81	42.94
RUNOFF COEFFICIENT =	0.98	0.74	47.81
			0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7628):	24.85	2.543	2.75	42.06
+ ID2= 2 (7629):	91.09	0.276	5.75	10.09
ID = 3 (0561):	115.94	2.608	2.75	16.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0561):	115.94	2.608	2.75	16.94
+ ID2= 2 (7630):	22.49	2.064	2.75	38.27
ID = 1 (0561):	138.43	4.672	2.75	20.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
--	-----------	-------------	-------------	-----------

	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	4.672	2.75	20.41
+ ID2= 2 (7638):	8.14	0.894	2.75	42.94
=====				
ID = 3 (0561):	146.57	5.567	2.75	21.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.3 10yr-6hr **

CALIB	Area (ha)=	Curve Number (CN)=
NASHYD (7629)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.382 (i)
 TIME TO PEAK (hrs)= 5.667
 RUNOFF VOLUME (mm)= 13.961
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.251

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)=	Dir. Conn.(%)=
STANDHYD (7628)	24.85	64.00
ID= 1 DT= 5.0 min	Total Imp(%)= 81.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11

1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 85.23
over (min) 10.00 20.00
Storage Coeff. (min)= 7.75 (ii) 15.27 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.07

TOTALS
PEAK FLOW (cms)= 2.22 0.86 3.032 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 54.69 40.94 49.74
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.74 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (7630)	Area (ha)=	22.49		
ID= 1 DT= 5.0 min	Total Imp(%)=	73.00	Dir. Conn.(%)=	59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=		16.42	6.07
Dep. Storage (mm)=		1.00	2.00
Average Slope (%)=		1.00	2.00
Length (m)=		387.21	40.00
Mannings n =		0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 56.73
over (min) 10.00 20.00
Storage Coeff. (min)= 7.52 (ii) 16.37 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
PEAK FLOW (cms)= 1.85 0.68 2.479 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 54.69 32.46 45.57
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.58 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min

Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max. Eff. Inten. (mm/hr)=	51.24	87.78
over (min)	5.00	15.00
Storage Coeff. (min)=	5.54 (ii)	12.98 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.20	0.08

PEAK FLOW (cms)=	0.76	0.30	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.75	1.059 (iii)
RUNOFF VOLUME (mm)=	54.69	42.90	2.75
TOTAL RAINFALL (mm)=	55.69	55.69	50.68
RUNOFF COEFFICIENT =	0.98	0.77	55.69
			0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7628):	24.85	3.032	2.75	49.74
+ ID2= 2 (7629):	91.09	0.382	5.67	13.96
=====				
ID = 3 (0561):	115.94	3.129	2.75	21.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0561):	115.94	3.129	2.75	21.63
+ ID2= 2 (7630):	22.49	2.479	2.75	45.57
=====				
ID = 1 (0561):	138.43	5.608	2.75	25.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	5.608	2.75	25.52
+ ID2= 2 (7638):	8.14	1.059	2.75	50.68
=====				
ID = 3 (0561):	146.57	6.668	2.75	26.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25yr-6hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7629)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.531 (i)
 TIME TO PEAK (hrs)= 5.583
 RUNOFF VOLUME (mm)= 19.382
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.295

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)	Dir. Conn.(%)
STANDHYD (7628)	24.85	64.00
ID= 1 DT= 5.0 min	Total Imp(%)= 81.00	

	IMPERVIOUS (ha)	PERVIOUS (i)
Surface Area	20.13	4.72
Dep. Storage	1.00	2.00
Average Slope	1.00	2.00
Length	407.02	40.00
Mannings n	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31

0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)= 60.35 103.20
over (min) 5.00 15.00
Storage Coeff. (min)= 7.26 (ii) 14.23 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

TOTALS
PEAK FLOW (cms)= 2.64 1.10 3.732 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 64.59 50.29 59.44
TOTAL RAINFALL (mm)= 65.59 65.59 65.59
RUNOFF COEFFICIENT = 0.98 0.77 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min
Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)= 60.35 70.68
over (min) 5.00 20.00
Storage Coeff. (min)= 7.04 (ii) 15.15 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

TOTALS
PEAK FLOW (cms)= 2.20 0.88 3.025 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 64.59 40.90 54.88
TOTAL RAINFALL (mm)= 65.59 65.59 65.59
RUNOFF COEFFICIENT = 0.98 0.62 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

- CN* = 82.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14 Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max. Eff. Inten. (mm/hr)=	60.35	105.64	
over (min)	5.00	15.00	
Storage Coeff. (min)=	5.19 (ii)	12.10 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.21	0.09	
			TOTALS
PEAK FLOW (cms)=	0.90	0.37	1.267 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	64.59	52.40	60.44
TOTAL RAINFALL (mm)=	65.59	65.59	65.59
RUNOFF COEFFICIENT =	0.98	0.80	0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7628):	24.85	3.732	2.75	59.44
+ ID2= 2 (7629):	91.09	0.531	5.58	19.38
===== ID = 3 (0561):	115.94	3.877	2.75	27.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	3.877	2.75	27.97
+ ID2= 2 (7630):	22.49	3.025	2.75	54.88
=====				

ID = 1 (0561): 138.43 6.902 2.75 32.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	6.902	2.75	32.34
+ ID2= 2 (7638):	8.14	1.267	2.75	60.44
ID = 3 (0561):	146.57	8.169	2.75	33.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.5 50yr-6hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7629)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.652 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 23.787
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.326

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)	Dir. Conn.(%)
STANDHYD (7628)	24.85	64.00
ID= 1 DT= 5.0 min	Total Imp(%)= 81.00	

	IMPERVIOUS (ha)	PERVIOUS (i)
Surface Area	20.13	4.72
Dep. Storage	1.00	2.00
Average Slope	1.00	2.00
Length	407.02	40.00
Mannings n	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46

0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 116.61
over (min) 5.00 15.00
Storage Coeff. (min)= 6.95 (ii) 13.59 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

TOTALS

PEAK FLOW (cms)= 2.94 1.26 4.204 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 72.00 57.37 66.73
TOTAL RAINFALL (mm)= 73.00 73.00 73.00
RUNOFF COEFFICIENT = 0.99 0.79 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min

Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 81.25
over (min) 5.00 15.00
Storage Coeff. (min)= 6.75 (ii) 14.42 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

TOTALS

PEAK FLOW (cms)= 2.46 1.07 3.506 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 72.00 47.40 61.91
TOTAL RAINFALL (mm)= 73.00 73.00 73.00

RUNOFF COEFFICIENT = 0.99 0.65 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14 Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max. Eff. Inten. (mm/hr)=	67.16	118.95	
over (min)	5.00	10.00	
Storage Coeff. (min)=	4.98 (ii)	9.90 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.22	0.11	
			TOTALS
PEAK FLOW (cms)=	1.00	0.45	1.450 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	72.00	59.57	67.77
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.82	0.93

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7628):	24.85	4.204	2.75	66.73
+ ID2= 2 (7629):	91.09	0.652	5.50	23.79
=====				
ID = 3 (0561):	115.94	4.389	2.75	32.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0561)|

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0561):	115.94	4.389	2.75	32.99
+ ID2= 2 (7630):	22.49	3.506	2.75	61.91
=====				
ID = 1 (0561):	138.43	7.895	2.75	37.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0561):	138.43	7.895	2.75	37.69
+ ID2= 2 (7638):	8.14	1.450	2.75	67.77
=====				
ID = 3 (0561):	146.57	9.345	2.75	39.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.6 100yr-6hr **

CALIB NASHYD (7629) ID= 1 DT= 5.0 min	Area (ha)=	91.09	Curve Number (CN)=	71.0
	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
	U.H. Tp(hrs)=	2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.778 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 28.383
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.353

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7628) ID= 1 DT= 5.0 min	Area (ha)=	24.85	Dir. Conn.(%)=	64.00
	Total Imp(%)=	81.00		

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 129.81
over (min) 5.00 15.00
Storage Coeff. (min)= 6.69 (ii) 11.60 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.09

TOTALS
PEAK FLOW (cms)= 3.24 1.47 4.714 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 79.31 64.40 73.94
TOTAL RAINFALL (mm)= 80.31 80.31 80.31
RUNOFF COEFFICIENT = 0.99 0.80 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min
Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	387.21	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 91.76
over (min) 5.00 15.00
Storage Coeff. (min)= 6.50 (ii) 13.80 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

PEAK FLOW (cms)=	2.71	1.23	*TOTALS*	3.918 (iii)
TIME TO PEAK (hrs)=	2.75	2.83		2.75
RUNOFF VOLUME (mm)=	79.31	53.93		68.90
TOTAL RAINFALL (mm)=	80.31	80.31		80.31
RUNOFF COEFFICIENT =	0.99	0.67		0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14 Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)=	73.88	132.05
over (min)	5.00	10.00
Storage Coeff. (min)=	4.79 (ii)	9.53 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.22	0.12

PEAK FLOW (cms)=	1.10	0.50	*TOTALS*	1.605 (iii)
TIME TO PEAK (hrs)=	2.75	2.75		2.75
RUNOFF VOLUME (mm)=	79.31	66.68		75.02
TOTAL RAINFALL (mm)=	80.31	80.31		80.31
RUNOFF COEFFICIENT =	0.99	0.83		0.93

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7628):	24.85	4.714	2.75	73.94
+ ID2= 2 (7629):	91.09	0.778	5.50	28.38
=====	=====	=====	=====	=====
ID = 3 (0561):	115.94	4.943	2.75	38.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	4.943	2.75	38.15
+ ID2= 2 (7630):	22.49	3.918	2.75	68.90
=====				
ID = 1 (0561):	138.43	8.861	2.75	43.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	8.861	2.75	43.14
+ ID2= 2 (7638):	8.14	1.605	2.75	75.02
=====				
ID = 3 (0561):	146.57	10.466	2.75	44.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.1 2yr-12hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7629)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24

3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.195 (i)
 TIME TO PEAK (hrs)= 14.250
 RUNOFF VOLUME (mm)= 9.757
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.207

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7628)
 ID= 1 DT= 5.0 min | Area (ha)= 24.85
 Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.13	4.72
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	407.02	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24

2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 17.66
over (min) 15.00 30.00
Storage Coeff. (min)= 14.44 (ii) 28.56 (ii)
Unit Hyd. Tpeak (min)= 15.00 30.00
Unit Hyd. peak (cms)= 0.08 0.04

TOTALS

PEAK FLOW (cms)= 0.48 0.22 0.692 (iii)
TIME TO PEAK (hrs)= 10.25 10.25 10.25
RUNOFF VOLUME (mm)= 46.08 32.94 41.35
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.70 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min | Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

IMPERVIOUS PERVIOUS (i)
Surface Area (ha)= 16.42 6.07
Dep. Storage (mm)= 1.00 2.00
Average Slope (%)= 1.00 2.00
Length (m)= 387.21 40.00
Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 11.48
over (min) 15.00 35.00
Storage Coeff. (min)= 14.01 (ii) 30.79 (ii)
Unit Hyd. Tpeak (min)= 15.00 35.00
Unit Hyd. peak (cms)= 0.08 0.04

TOTALS

PEAK FLOW (cms)= 0.40 0.17 0.568 (iii)
 TIME TO PEAK (hrs)= 10.25 10.33 10.25
 RUNOFF VOLUME (mm)= 46.08 25.39 37.60
 TOTAL RAINFALL (mm)= 47.08 47.08 47.08
 RUNOFF COEFFICIENT = 0.98 0.54 0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7638) | Area (ha)= 8.14
 ID= 1 DT= 5.0 min | Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24

4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 18.26
over (min) 10.00 25.00
Storage Coeff. (min)= 10.33 (ii) 24.27 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

TOTALS

PEAK FLOW (cms)= 0.16 0.07 0.232 (iii)
TIME TO PEAK (hrs)= 10.25 10.25 10.25
RUNOFF VOLUME (mm)= 46.08 34.74 42.22
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.74 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7628):	24.85	0.692	10.25	41.35
+ ID2= 2 (7629):	91.09	0.195	14.25	9.76
=====				
ID = 3 (0561):	115.94	0.789	10.25	16.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0561):	115.94	0.789	10.25	16.53
+ ID2= 2 (7630):	22.49	0.568	10.25	37.60
=====				
ID = 1 (0561):	138.43	1.356	10.25	19.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0561):	138.43	1.356	10.25	19.95
+ ID2= 2 (7638):	8.14	0.232	10.25	42.22
=====				
ID = 3 (0561):	146.57	1.588	10.25	21.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.2 5yr-12hr **

CALIB				
NASHYD (7629)	Area (ha)=	91.09	Curve Number	(CN)= 71.0

ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 ----- U.H. Tp(hrs)= 2.09

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.326 (i)
 TIME TO PEAK (hrs)= 8.583
 RUNOFF VOLUME (mm)= 13.288
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.244

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7628) | Area (ha)= 24.85
 ID= 1 DT= 5.0 min | Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54

0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 41.91
over (min) 10.00 25.00
Storage Coeff. (min)= 10.32 (ii) 20.32 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
PEAK FLOW (cms)= 1.10 0.48 1.577 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 53.38 39.71 48.46
TOTAL RAINFALL (mm)= 54.38 54.38 54.38
RUNOFF COEFFICIENT = 0.98 0.73 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min | Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54

1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 27.78
over (min) 10.00 25.00
Storage Coeff. (min)= 10.02 (ii) 21.80 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
PEAK FLOW (cms)= 0.92 0.39 1.297 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 53.38 31.36 44.35
TOTAL RAINFALL (mm)= 54.38 54.38 54.38
RUNOFF COEFFICIENT = 0.98 0.58 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min | Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54

2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 43.10
over (min) 5.00 20.00
Storage Coeff. (min)= 7.39 (ii) 17.27 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.06

TOTALS

PEAK FLOW (cms)= 0.37 0.16 0.534 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 53.38 41.65 49.39
TOTAL RAINFALL (mm)= 54.38 54.38 54.38
RUNOFF COEFFICIENT = 0.98 0.77 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7628):	24.85	1.577	5.25	48.46
+ ID2= 2 (7629):	91.09	0.326	8.58	13.29
===== ID = 3 (0561):	115.94	1.692	5.25	20.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	1.692	5.25	20.83
+ ID2= 2 (7630):	22.49	1.297	5.25	44.35
===== ID = 1 (0561):	138.43	2.989	5.25	24.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	2.989	5.25	24.65
+ ID2= 2 (7638):	8.14	0.534	5.25	49.39
===== ID = 3 (0561):	146.57	3.524	5.25	26.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.3 10yr-12hr **

CALIB			
NASHYD (7629)	Area (ha)= 91.09	Curve Number (CN)= 71.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 2.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.436 (i)
 TIME TO PEAK (hrs)= 8.500
 RUNOFF VOLUME (mm)= 17.746
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7628) | Area (ha)= 24.85
 ID= 1 DT= 5.0 min | Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.13	4.72
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	407.02	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63

1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 49.45
over (min) 10.00 20.00
Storage Coeff. (min)= 9.75 (ii) 19.11 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.11 0.06

TOTALS

PEAK FLOW (cms)= 1.27 0.58 1.856 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 61.71 47.55 56.61
TOTAL RAINFALL (mm)= 62.71 62.71 62.71
RUNOFF COEFFICIENT = 0.98 0.76 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min | Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63

2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 33.63
over (min) 10.00 25.00
Storage Coeff. (min)= 9.46 (ii) 20.38 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.12 0.05

TOTALS

PEAK FLOW (cms)= 1.06 0.48 1.532 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 61.71 38.42 52.16
TOTAL RAINFALL (mm)= 62.71 62.71 62.71
RUNOFF COEFFICIENT = 0.98 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min | Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63

2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 50.59
over (min) 5.00 20.00
Storage Coeff. (min)= 6.98 (ii) 16.25 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.06

TOTALS

PEAK FLOW (cms)= 0.43 0.19 0.622 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 61.71 49.62 57.60
TOTAL RAINFALL (mm)= 62.71 62.71 62.71
RUNOFF COEFFICIENT = 0.98 0.79 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7628):		24.85	1.856	5.25	56.61
+ ID2= 2 (7629):		91.09	0.436	8.50	17.75
=====					
ID = 3 (0561):		115.94	2.019	5.25	26.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):		115.94	2.019	5.25	26.08
+ ID2= 2 (7630):		22.49	1.532	5.25	52.16
=====					
ID = 1 (0561):		138.43	3.551	5.25	30.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):		138.43	3.551	5.25	30.31
+ ID2= 2 (7638):		8.14	0.622	5.25	57.60
=====					
ID = 3 (0561):		146.57	4.174	5.25	31.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.4 25yr-12hr **

CALIB			
NASHYD (7629)	Area (ha)=	91.09	Curve Number (CN)= 71.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)=	2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73

0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.588 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 23.848
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.326

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7628)
 ID= 1 DT= 5.0 min | Area (ha)= 24.85
 Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.13	4.72
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	407.02	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73

2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 58.87
over (min) 10.00 20.00
Storage Coeff. (min)= 9.17 (ii) 17.89 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 1.48 0.71 2.193 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 72.10 57.46 66.83
TOTAL RAINFALL (mm)= 73.10 73.10 73.10
RUNOFF COEFFICIENT = 0.99 0.79 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min | Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	387.21	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73

2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 41.07
over (min) 10.00 20.00
Storage Coeff. (min)= 8.90 (ii) 18.98 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 1.24 0.61 1.845 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 72.10 47.49 62.01
TOTAL RAINFALL (mm)= 73.10 73.10 73.10
RUNOFF COEFFICIENT = 0.99 0.65 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min | Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 59.94
over (min) 5.00 20.00

Storage Coeff. (min)= 6.56 (ii) 15.22 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.18 0.07

TOTALS

PEAK FLOW (cms)= 0.50 0.23 0.733 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 72.10 59.67 67.87
 TOTAL RAINFALL (mm)= 73.10 73.10 73.10
 RUNOFF COEFFICIENT = 0.99 0.82 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7628):		24.85	2.193	5.25	66.83
+ ID2= 2 (7629):		91.09	0.588	8.42	23.85
=====					
ID = 3 (0561):		115.94	2.426	5.25	33.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):		115.94	2.426	5.25	33.06
+ ID2= 2 (7630):		22.49	1.845	5.25	62.01
=====					
ID = 1 (0561):		138.43	4.271	5.25	37.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):		138.43	4.271	5.25	37.76
+ ID2= 2 (7638):		8.14	0.733	5.25	67.87
=====					
ID = 3 (0561):		146.57	5.003	5.25	39.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.5 50yr-12hr **

CALIB		Area	(ha)=	91.09	Curve Number	(CN)=	71.0
NASHYD (7629)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp	(hrs)=	2.09			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81

1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.709 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 28.712
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.355

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7628)
 ID= 1 DT= 5.0 min | Area (ha)= 24.85
 Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81

2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 65.82
over (min) 10.00 20.00
Storage Coeff. (min)= 8.81 (ii) 17.15 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 1.64 0.80 2.442 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 79.82 64.89 74.45
TOTAL RAINFALL (mm)= 80.82 80.82 80.82
RUNOFF COEFFICIENT = 0.99 0.80 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630) Area (ha)= 22.49
ID= 1 DT= 5.0 min Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	387.21	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 46.97
over (min) 10.00 20.00

Storage Coeff. (min)= 8.55 (ii) 18.10 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 1.37 0.70 2.069 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 79.82 54.38 69.39
 TOTAL RAINFALL (mm)= 80.82 80.82 80.82
 RUNOFF COEFFICIENT = 0.99 0.67 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14 Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 66.83
 over (min) 5.00 15.00

Storage Coeff. (min)= 6.30 (ii) 14.60 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.19 0.08

TOTALS

PEAK FLOW (cms)= 0.55 0.26 0.816 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 79.82 67.18 75.52
 TOTAL RAINFALL (mm)= 80.82 80.82 80.82

RUNOFF COEFFICIENT = 0.99 0.83 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7628):		24.85	2.442	5.25	74.45
+ ID2= 2 (7629):		91.09	0.709	8.42	28.71
=====					
ID = 3 (0561):		115.94	2.732	5.25	38.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):		115.94	2.732	5.25	38.51
+ ID2= 2 (7630):		22.49	2.069	5.25	69.39
=====					
ID = 1 (0561):		138.43	4.801	5.25	43.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):		138.43	4.801	5.25	43.53
+ ID2= 2 (7638):		8.14	0.816	5.25	75.52
=====					
ID = 3 (0561):		146.57	5.617	5.25	45.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.6 100yr-12hr **

CALIB		Area	Curve Number
NASHYD (7629)	(ha)=	91.09	(CN)= 71.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)=	2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89

2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.836 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 33.817
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7628) | Area (ha)= 24.85
 ID= 1 DT= 5.0 min | Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max. Eff. Inten. (mm/hr)= 40.71 72.74
 over (min) 10.00 20.00

Storage Coeff. (min)= 8.50 (ii) 16.51 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 1.80 0.89 2.691 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 72.36 82.08
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.82 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7630) ID= 1 DT= 5.0 min	Area (ha)= 22.49 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	387.21	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)= 40.71 52.54
 over (min) 10.00 20.00

Storage Coeff. (min)= 8.25 (ii) 17.38 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 1.50 0.79 2.293 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 61.38 76.82
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54

RUNOFF COEFFICIENT = 0.99 0.69 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14 Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	73.70
over (min)	5.00	15.00
Storage Coeff. (min)=	6.08 (ii)	14.05 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

TOTALS

PEAK FLOW (cms)=	0.61	0.29	0.898 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	87.54	74.72	83.18
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.84	0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7628):		24.85	2.691	5.25	82.08
+ ID2= 2 (7629):		91.09	0.836	8.33	33.82
=====					
ID = 3 (0561):		115.94	3.042	5.25	44.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):		115.94	3.042	5.25	44.16
+ ID2= 2 (7630):		22.49	2.293	5.25	76.82
=====					
ID = 1 (0561):		138.43	5.335	5.25	49.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):		138.43	5.335	5.25	49.47
+ ID2= 2 (7638):		8.14	0.898	5.25	83.18
=====					
ID = 3 (0561):		146.57	6.233	5.25	51.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CATCHMENT 38.04



 ** SIMULATION:1.1 2yr-6hr **

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| CALIB |
| NASHYD ( 7696) | Area (ha)= 36.37 Curve Number (CN)= 73.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 1.99
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.064 (i)
 TIME TO PEAK (hrs)= 5.667
 RUNOFF VOLUME (mm)= 5.632
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.156

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| STANDHYD ( 7633) | Area (ha)= 54.88
| ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	34.58	
over (min)	10.00	25.00	
Storage Coeff. (min)=	11.70 (ii)	22.50 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.10	0.05	
			TOTALS
PEAK FLOW (cms)=	2.88	0.79	3.513 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	35.00	18.73	28.65
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.52	0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05		5.57
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	370.76		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	29.18	
over (min)	10.00	25.00	
Storage Coeff. (min)=	8.72 (ii)	20.28 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.12	0.05	
			TOTALS
PEAK FLOW (cms)=	1.09	0.29	1.318 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	35.00	16.85	27.56
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.47	0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 14.25 4.50
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 353.55 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 34.58
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.48 (ii) 19.27 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 1.02 0.29 *TOTALS*
 TIME TO PEAK (hrs)= 2.75 2.92 1.285 (iii)
 RUNOFF VOLUME (mm)= 35.00 18.73 28.65
 TOTAL RAINFALL (mm)= 36.00 36.00 36.00
 RUNOFF COEFFICIENT = 0.97 0.52 0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB STANDHYD (7641) Area (ha)= 9.24
 ID= 1 DT= 5.0 min Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 7.76 1.48
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 248.19 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72

1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 60.86
over (min) 5.00 20.00
Storage Coeff. (min)= 6.86 (ii) 15.47 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.18 0.07

TOTALS

PEAK FLOW (cms)= 0.57 0.19 0.747 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 35.00 26.83 32.30
TOTAL RAINFALL (mm)= 36.00 36.00 36.00
RUNOFF COEFFICIENT = 0.97 0.75 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (7643)	Area (ha)=	5.80		
ID= 1 DT= 5.0 min	Total Imp(%)=	71.00	Dir. Conn.(%)=	57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12		1.68
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	196.64		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 26.24
over (min) 5.00 20.00
Storage Coeff. (min)= 5.96 (ii) 18.02 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.19 0.06

TOTALS

PEAK FLOW (cms)= 0.30 0.08 0.377 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 35.00 15.50 26.61
TOTAL RAINFALL (mm)= 36.00 36.00 36.00
RUNOFF COEFFICIENT = 0.97 0.43 0.74

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min

Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	26.24
over (min)	5.00	20.00
Storage Coeff. (min)=	4.64 (ii)	16.70 (ii)
Unit Hyd. Tpeak (min)=	5.00	20.00
Unit Hyd. peak (cms)=	0.22	0.06

TOTALS
PEAK FLOW (cms)= 0.13 0.04 0.165 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 35.00 15.50 26.61
TOTAL RAINFALL (mm)= 36.00 36.00 36.00
RUNOFF COEFFICIENT = 0.97 0.43 0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)
1 + 2 = 3

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	1.318	2.75	27.56
+ ID2= 2 (7633):	54.88	3.513	2.75	28.65
=====				
ID = 3 (0577):	75.50	4.832	2.75	28.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)
3 + 2 = 1

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	4.832	2.75	28.35
+ ID2= 2 (7640):	18.75	1.285	2.75	28.65
=====				
ID = 1 (0577):	94.25	6.117	2.75	28.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	6.117	2.75	28.41
+ ID2= 2 (7641):		9.24	0.747	2.75	32.30
=====					
ID = 3 (0577):		103.49	6.864	2.75	28.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	6.864	2.75	28.76
+ ID2= 2 (7643):		5.80	0.377	2.75	26.61
=====					
ID = 1 (0577):		109.29	7.241	2.75	28.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	7.241	2.75	28.65
+ ID2= 2 (7645):		2.52	0.165	2.75	26.61
=====					
ID = 3 (0577):		111.81	7.406	2.75	28.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	7.406	2.75	28.60
+ ID2= 2 (7696):		36.37	0.064	5.67	5.63
=====					
ID = 1 (0577):		148.18	7.419	2.75	22.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.2 5yr-6hr **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=		1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.123 (i)
 TIME TO PEAK (hrs)= 5.583
 RUNOFF VOLUME (mm)= 10.842
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.227

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max. Eff. Inten. (mm/hr)= 43.98 53.09
 over (min) 10.00 20.00
 Storage Coeff. (min)= 10.45 (ii) 19.54 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.11 0.06

TOTALS

PEAK FLOW (cms)=	3.89	1.30	5.069 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	46.81	28.42	39.64
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.59	0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7632)
 ID= 1 DT= 5.0 min

Area (ha)= 20.62
 Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.05	5.57
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	370.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
------	------	------	------	------	------	------	------

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 45.85
over (min) 10.00 20.00
Storage Coeff. (min)= 7.79 (ii) 17.43 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
PEAK FLOW (cms)= 1.46 0.49 1.897 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 46.81 25.98 38.27
TOTAL RAINFALL (mm)= 47.81 47.81 47.81
RUNOFF COEFFICIENT = 0.98 0.54 0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7640)
ID= 1 DT= 5.0 min
Area (ha)= 18.75
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 53.09
over (min) 10.00 20.00
Storage Coeff. (min)= 7.57 (ii) 16.66 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)=	1.37	0.47	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.92	1.804 (iii)
RUNOFF VOLUME (mm)=	46.81	28.42	2.75
TOTAL RAINFALL (mm)=	47.81	47.81	39.64
RUNOFF COEFFICIENT =	0.98	0.59	47.81
			0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24	Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	84.16
over (min)	5.00	15.00
Storage Coeff. (min)=	6.12 (ii)	13.68 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

PEAK FLOW (cms)=	0.75	0.29	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.75	1.039 (iii)
RUNOFF VOLUME (mm)=	46.81	38.12	2.75
TOTAL RAINFALL (mm)=	47.81	47.81	43.94
RUNOFF COEFFICIENT =	0.98	0.80	47.81
			0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7643) ID= 1 DT= 5.0 min	Area (ha)= 5.80	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	196.64	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 41.92
 over (min) 5.00 20.00
 Storage Coeff. (min)= 5.32 (ii) 15.32 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.21 0.07

PEAK FLOW (cms)= 0.40 0.14 0.530 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 46.81 24.18 37.08
 TOTAL RAINFALL (mm)= 47.81 47.81 47.81
 RUNOFF COEFFICIENT = 0.98 0.51 0.78

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min
 Area (ha)= 2.52
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	41.92	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.15 (ii)	14.14 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.24	0.08	
			TOTALS
PEAK FLOW (cms)=	0.18	0.06	0.237 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	46.81	24.18	37.07
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.51	0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	1.897	2.75	38.27
+ ID2= 2 (7633):	54.88	5.069	2.75	39.64
=====				
ID = 3 (0577):	75.50	6.966	2.75	39.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	6.966	2.75	39.26
+ ID2= 2 (7640):	18.75	1.804	2.75	39.64
=====				
ID = 1 (0577):	94.25	8.770	2.75	39.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	94.25	8.770	2.75	39.34
+ ID2= 2 (7641):	9.24	1.039	2.75	43.94
=====				
ID = 3 (0577):	103.49	9.809	2.75	39.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	103.49	9.809	2.75	39.75
+ ID2= 2 (7643):	5.80	0.530	2.75	37.08
=====				
ID = 1 (0577):	109.29	10.338	2.75	39.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	109.29	10.338	2.75	39.61
+ ID2= 2 (7645):	2.52	0.237	2.75	37.07
=====				
ID = 3 (0577):	111.81	10.576	2.75	39.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ADD HYD (0577) 3 + 2 = 1				
ID1= 3 (0577):	111.81	10.576	2.75	39.55
+ ID2= 2 (7696):	36.37	0.123	5.58	10.84
=====				
ID = 1 (0577):	148.18	10.606	2.75	32.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.3 10yr-6hr **

CALIB		Area (ha)=	36.37	Curve Number (CN)=	73.0
NASHYD (7696)		Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=	1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.170 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 14.939
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB		Area (ha)=	54.88	Dir. Conn.(%)=	61.00
STANDHYD (7633)		Total Imp(%)=	76.00		
ID= 1 DT= 5.0 min					

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11

0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 65.06
over (min) 10.00 20.00
Storage Coeff. (min)= 9.83 (ii) 18.21 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.11 0.06

PEAK FLOW (cms)= 4.56 1.66 6.091 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 54.69 35.21 47.09
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.63 0.85

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632)
ID= 1 DT= 5.0 min
Area (ha)= 20.62
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 56.73
over (min) 5.00 20.00
Storage Coeff. (min)= 7.33 (ii) 16.18 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.06

PEAK FLOW (cms)= 1.71 0.62 2.289 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 54.69 32.46 45.57
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.58 0.82

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL

THAN THE STORAGE COEFFICIENT.
 (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	65.06
over (min)	5.00	20.00
Storage Coeff. (min)=	7.12 (ii)	15.50 (ii)
Unit Hyd. Tpeak (min)=	5.00	20.00
Unit Hyd. peak (cms)=	0.17	0.07

TOTALS

PEAK FLOW (cms)=	1.61	0.59	2.170 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	54.69	35.21	47.09
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.63	0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24 Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11

0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 99.65
over (min) 5.00 15.00
Storage Coeff. (min)= 5.76 (ii) 12.83 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.20 0.08

TOTALS

PEAK FLOW (cms)= 0.88 0.35 1.227 (iii)
TIME TO PEAK (hrs)= 2.75 2.75
RUNOFF VOLUME (mm)= 54.69 45.76 51.74
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.82 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min
Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 52.25
over (min) 5.00 15.00
Storage Coeff. (min)= 5.01 (ii) 14.16 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.21 0.08

TOTALS

PEAK FLOW (cms)= 0.47 0.19 0.650 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 54.69 30.39 44.24
TOTAL RAINFALL (mm)= 55.69 55.69 55.69

RUNOFF COEFFICIENT = 0.98 0.55 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7645) ID= 1 DT= 5.0 min	Area (ha)= 2.52 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	52.25
over (min)	5.00	15.00
Storage Coeff. (min)=	3.90 (ii)	13.05 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.25	0.08

			TOTALS
PEAK FLOW (cms)=	0.20	0.08	0.285 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	54.69	30.39	44.24
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.55	0.79

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7632):	20.62	2.289	2.75	45.57
+ ID2= 2 (7633):	54.88	6.091	2.75	47.09
=====				
ID = 3 (0577):	75.50	8.381	2.75	46.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0577) |

3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		75.50	8.381	2.75	46.68
+ ID2= 2 (7640):		18.75	2.170	2.75	47.09
=====					
ID = 1 (0577):		94.25	10.550	2.75	46.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	10.550	2.75	46.76
+ ID2= 2 (7641):		9.24	1.227	2.75	51.74
=====					
ID = 3 (0577):		103.49	11.777	2.75	47.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	11.777	2.75	47.21
+ ID2= 2 (7643):		5.80	0.650	2.75	44.24
=====					
ID = 1 (0577):		109.29	12.427	2.75	47.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	12.427	2.75	47.05
+ ID2= 2 (7645):		2.52	0.285	2.75	44.24
=====					
ID = 3 (0577):		111.81	12.712	2.75	46.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	12.712	2.75	46.98
+ ID2= 2 (7696):		36.37	0.170	5.50	14.94
=====					
ID = 1 (0577):		148.18	12.757	2.75	39.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25yr-6hr **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp	(hrs)=	1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31

1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.236 (i)
 TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 20.651
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.315

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
STANDHYD (7633)	Area (ha)=	54.88					
ID= 1 DT= 5.0 min	Total Imp(%)=	76.00	Dir. Conn.(%)=	61.00			

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	604.87	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	80.28
over (min)	10.00	20.00
Storage Coeff. (min)=	9.21 (ii)	16.91 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

			TOTALS
PEAK FLOW (cms)=	5.42	2.12	7.402 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	64.59	44.00	56.56
TOTAL RAINFALL (mm)=	65.59	65.59	65.59
RUNOFF COEFFICIENT =	0.98	0.67	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
STANDHYD (7632)	Area (ha)=	20.62					
ID= 1 DT= 5.0 min	Total Imp(%)=	73.00	Dir. Conn.(%)=	59.00			

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57	

Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 370.76 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max. Eff. Inten. (mm/hr)= 60.35 70.68
 over (min) 5.00 15.00
 Storage Coeff. (min)= 6.86 (ii) 14.97 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.18 0.08

TOTALS

PEAK FLOW (cms)= 2.02 0.84 2.840 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 64.59 40.90 54.88
 TOTAL RAINFALL (mm)= 65.59 65.59 65.59
 RUNOFF COEFFICIENT = 0.98 0.62 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7640)
 ID= 1 DT= 5.0 min

Area (ha)= 18.75
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 14.25 4.50
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 353.55 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31

1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)= 60.35 80.28
over (min) 5.00 15.00
Storage Coeff. (min)= 6.67 (ii) 14.38 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

TOTALS

PEAK FLOW (cms)= 1.90 0.79 2.679 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 64.59 44.00 56.56
TOTAL RAINFALL (mm)= 65.59 65.59 65.59
RUNOFF COEFFICIENT = 0.98 0.67 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min
Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)= 60.35 118.99
over (min) 5.00 15.00
Storage Coeff. (min)= 5.39 (ii) 10.27 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.21 0.09

TOTALS

PEAK FLOW (cms)= 1.04 0.44 1.476 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 64.59 55.43 61.57
TOTAL RAINFALL (mm)= 65.59 65.59 65.59
RUNOFF COEFFICIENT = 0.98 0.85 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	65.58
over (min)	5.00	15.00
Storage Coeff. (min)=	4.69 (ii)	13.05 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.22	0.08

PEAK FLOW (cms)=	0.55	0.24	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.83	0.790 (iii)
RUNOFF VOLUME (mm)=	64.59	38.55	2.75
TOTAL RAINFALL (mm)=	65.59	65.59	53.39
RUNOFF COEFFICIENT =	0.98	0.59	65.59
			0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min

Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31

0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)= 60.35 65.58
over (min) 5.00 15.00
Storage Coeff. (min)= 3.65 (ii) 12.01 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.25 0.09

PEAK FLOW (cms)= 0.24 0.11 0.346 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 64.59 38.55 53.39
TOTAL RAINFALL (mm)= 65.59 65.59 65.59
RUNOFF COEFFICIENT = 0.98 0.59 0.81

TOTALS

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	2.840	2.75	54.88
+ ID2= 2 (7633):	54.88	7.402	2.75	56.56
=====				
ID = 3 (0577):	75.50	10.241	2.75	56.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	10.241	2.75	56.10
+ ID2= 2 (7640):	18.75	2.679	2.75	56.56
=====				
ID = 1 (0577):	94.25	12.920	2.75	56.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	94.25	12.920	2.75	56.19
+ ID2= 2 (7641):	9.24	1.476	2.75	61.57
=====				
ID = 3 (0577):	103.49	14.397	2.75	56.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	103.49	14.397	2.75	56.67
+ ID2= 2 (7643):	5.80	0.790	2.75	53.39
=====				
ID = 1 (0577):	109.29	15.187	2.75	56.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0577) |

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0577):	109.29	15.187	2.75	56.50
+ ID2= 2 (7645):	2.52	0.346	2.75	53.39
=====				
ID = 3 (0577):	111.81	15.533	2.75	56.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ADD HYD (0577)				
3 + 2 = 1				
ID1= 3 (0577):	111.81	15.533	2.75	56.43
+ ID2= 2 (7696):	36.37	0.236	5.42	20.65
=====				
ID = 1 (0577):	148.18	15.600	2.75	47.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.5 50yr-6hr **

CALIB				
NASHYD (7696)	Area (ha)=	36.37	Curve Number (CN)=	73.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
	U.H. Tp(hrs)=	1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.289 (i)
 TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 25.271
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.346

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7633)	Area (ha)=	54.88	Dir. Conn.(%)= 61.00
ID= 1 DT= 5.0 min	Total Imp(%)=	76.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 91.74
over (min) 10.00 20.00
Storage Coeff. (min)= 8.82 (ii) 16.13 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 6.05 2.49 8.396 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 72.00 50.73 63.70
TOTAL RAINFALL (mm)= 73.00 73.00 73.00
RUNOFF COEFFICIENT = 0.99 0.69 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632)
ID= 1 DT= 5.0 min
Area (ha)= 20.62
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 81.25
over (min) 5.00 15.00
Storage Coeff. (min)= 6.58 (ii) 14.24 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

PEAK FLOW (cms)=	2.25	0.98	*TOTALS*	3.220 (iii)
TIME TO PEAK (hrs)=	2.75	2.83		2.75
RUNOFF VOLUME (mm)=	72.00	47.40		61.91
TOTAL RAINFALL (mm)=	73.00	73.00		73.00
RUNOFF COEFFICIENT =	0.99	0.65		0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75	Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max. Eff. Inten. (mm/hr)=	67.16	91.74
over (min)	5.00	15.00
Storage Coeff. (min)=	6.39 (ii)	13.70 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.18	0.08

PEAK FLOW (cms)=	2.12	0.92	*TOTALS*	3.030 (iii)
TIME TO PEAK (hrs)=	2.75	2.83		2.75
RUNOFF VOLUME (mm)=	72.00	50.73		63.70
TOTAL RAINFALL (mm)=	73.00	73.00		73.00
RUNOFF COEFFICIENT =	0.99	0.69		0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24	Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)=	67.16	133.40	
over (min)	5.00	10.00	
Storage Coeff. (min)=	5.17 (ii)	9.84 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.21	0.11	
			TOTALS
PEAK FLOW (cms)=	1.15	0.51	1.667 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	72.00	62.71	68.93
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.86	0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7643)	Area (ha)=	5.80	
ID= 1 DT= 5.0 min	Total Imp(%)=	71.00	Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=		4.12	1.68
Dep. Storage (mm)=		1.00	2.00
Average slope (%)=		1.00	2.00
Length (m)=		196.64	40.00
Mannings n =		0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)=	67.16	75.74	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.49 (ii)	12.38 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.23	0.08	
			TOTALS
PEAK FLOW (cms)=	0.62	0.28	0.896 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	72.00	44.85	60.32
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.61	0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7645) ID= 1 DT= 5.0 min	Area (ha)= 2.52		
	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)=	67.16	75.74	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.50 (ii)	11.39 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.26	0.09	
			TOTALS
PEAK FLOW (cms)=	0.27	0.13	0.393 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	72.00	44.85	60.32
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.61	0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| ADD HYD (0577) |

0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.344 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 30.075
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.374

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)=	54.88		
Total Imp(%)=	76.00	Dir. Conn.(%)=	61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71		13.17
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	604.87		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max. Eff. Inten. (mm/hr)= 73.88 103.07
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.49 (ii) 15.46 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.07

TOTALS
 PEAK FLOW (cms)= 6.68 2.85 9.387 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 79.31 57.45 70.78
 TOTAL RAINFALL (mm)= 80.31 80.31 80.31
 RUNOFF COEFFICIENT = 0.99 0.72 0.88

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)

- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632)
ID= 1 DT= 5.0 min

Area (ha)= 20.62
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.05	5.57
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	370.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max. Eff. Inten. (mm/hr)=	73.88	91.76
over (min)	5.00	15.00
Storage Coeff. (min)=	6.33 (ii)	13.63 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

TOTALS

PEAK FLOW (cms)=	2.48	1.13	3.599 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	79.31	53.93	68.90
TOTAL RAINFALL (mm)=	80.31	80.31	80.31
RUNOFF COEFFICIENT =	0.99	0.67	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7640)
ID= 1 DT= 5.0 min

Area (ha)= 18.75
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	14.25	4.50
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	353.55	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61

0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 103.07
over (min) 5.00 15.00
Storage Coeff. (min)= 6.15 (ii) 13.12 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.19 0.08

PEAK FLOW (cms)= 2.34 1.05 *TOTALS*
TIME TO PEAK (hrs)= 2.75 2.83 3.379 (iii)
RUNOFF VOLUME (mm)= 79.31 57.45 70.78
TOTAL RAINFALL (mm)= 80.31 80.31 80.31
RUNOFF COEFFICIENT = 0.99 0.72 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min

Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 147.57
over (min) 5.00 10.00
Storage Coeff. (min)= 4.98 (ii) 9.47 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.22 0.12

PEAK FLOW (cms)= 1.27 0.57 *TOTALS*
TIME TO PEAK (hrs)= 2.75 2.75 1.842 (iii)
RUNOFF VOLUME (mm)= 79.31 69.90 76.21

TOTAL RAINFALL (mm)= 80.31 80.31 80.31
 RUNOFF COEFFICIENT = 0.99 0.87 0.95

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7643) | Area (ha)= 5.80
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)=	73.88	85.88
over (min)	5.00	15.00
Storage Coeff. (min)=	4.33 (ii)	11.83 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.23	0.09

TOTALS

PEAK FLOW (cms)=	0.68	0.33	1.003 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	79.31	51.19	67.22
TOTAL RAINFALL (mm)=	80.31	80.31	80.31
RUNOFF COEFFICIENT =	0.99	0.64	0.84

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7645) | Area (ha)= 2.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 85.88
over (min) 5.00 15.00
Storage Coeff. (min)= 3.37 (ii) 10.87 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.26 0.09

PEAK FLOW (cms)= 0.29 0.14 *TOTALS*
TIME TO PEAK (hrs)= 2.75 2.75 0.439 (iii)
RUNOFF VOLUME (mm)= 79.31 51.19 67.22
TOTAL RAINFALL (mm)= 80.31 80.31 80.31
RUNOFF COEFFICIENT = 0.99 0.64 0.84

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	3.599	2.75	68.90
+ ID2= 2 (7633):	54.88	9.387	2.75	70.78
=====				
ID = 3 (0577):	75.50	12.986	2.75	70.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	12.986	2.75	70.27
+ ID2= 2 (7640):	18.75	3.379	2.75	70.78
=====				
ID = 1 (0577):	94.25	16.365	2.75	70.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	94.25	16.365	2.75	70.37
+ ID2= 2 (7641):	9.24	1.842	2.75	76.21
=====				
ID = 3 (0577):	103.49	18.207	2.75	70.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	18.207	2.75	70.89
+ ID2= 2 (7643):		5.80	1.003	2.75	67.22
=====					
ID = 1 (0577):		109.29	19.210	2.75	70.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	19.210	2.75	70.70
+ ID2= 2 (7645):		2.52	0.439	2.75	67.22
=====					
ID = 3 (0577):		111.81	19.649	2.75	70.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	19.649	2.75	70.62
+ ID2= 2 (7696):		36.37	0.344	5.33	30.08
=====					
ID = 1 (0577):		148.18	19.754	2.75	60.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.1 2yr-12hr **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=		1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24

3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.086 (i)
 TIME TO PEAK (hrs)= 14.250
 RUNOFF VOLUME (mm)= 10.486
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.223

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633) | Area (ha)= 54.88
 ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24

1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 13.26
over (min) 20.00 35.00
Storage Coeff. (min)= 18.32 (ii) 34.15 (ii)
Unit Hyd. Tpeak (min)= 20.00 35.00
Unit Hyd. peak (cms)= 0.06 0.03

TOTALS
PEAK FLOW (cms)= 1.00 0.43 1.426 (iii)
TIME TO PEAK (hrs)= 10.25 10.33 10.25
RUNOFF VOLUME (mm)= 46.08 27.80 38.95
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.59 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632)
ID= 1 DT= 5.0 min

Area (ha)= 20.62
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 15.05 5.57
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 370.76 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24

6.083 1.41 |12.167 3.06 |18.250 0.47 |

Max.Eff.Inten.(mm/hr)=	10.81	11.48	
over (min)	15.00	35.00	
Storage Coeff. (min)=	13.65 (ii)	30.43 (ii)	
Unit Hyd. Tpeak (min)=	15.00	35.00	
Unit Hyd. peak (cms)=	0.08	0.04	
			TOTALS
PEAK FLOW (cms)=	0.37	0.16	0.521 (iii)
TIME TO PEAK (hrs)=	10.25	10.33	10.25
RUNOFF VOLUME (mm)=	46.08	25.39	37.60
TOTAL RAINFALL (mm)=	47.08	47.08	47.08
RUNOFF COEFFICIENT =	0.98	0.54	0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75	Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	353.55	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24

3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 13.26
over (min) 15.00 30.00
Storage Coeff. (min)= 13.27 (ii) 29.11 (ii)
Unit Hyd. Tpeak (min)= 15.00 30.00
Unit Hyd. peak (cms)= 0.08 0.04

TOTALS

PEAK FLOW (cms)= 0.34 0.15 0.493 (iii)
TIME TO PEAK (hrs)= 10.25 10.33 10.25
RUNOFF VOLUME (mm)= 46.08 27.80 38.95
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.59 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min | Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24

1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 20.83
over (min) 10.00 25.00
Storage Coeff. (min)= 10.73 (ii) 23.95 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
PEAK FLOW (cms)= 0.19 0.08 0.269 (iii)
TIME TO PEAK (hrs)= 10.25 10.25 10.25
RUNOFF VOLUME (mm)= 46.08 37.42 43.22
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.79 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 4.12 1.68
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 196.64 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24

6.083 1.41 |12.167 3.06 |18.250 0.47 |

Max.Eff.Inten.(mm/hr)=	10.81	10.52	
over (min)	10.00	30.00	
Storage Coeff. (min)=	9.33 (ii)	26.71 (ii)	
Unit Hyd. Tpeak (min)=	10.00	30.00	
Unit Hyd. peak (cms)=	0.12	0.04	
			TOTALS
PEAK FLOW (cms)=	0.10	0.04	0.143 (iii)
TIME TO PEAK (hrs)=	10.25	10.33	10.25
RUNOFF VOLUME (mm)=	46.08	23.62	36.42
TOTAL RAINFALL (mm)=	47.08	47.08	47.08
RUNOFF COEFFICIENT =	0.98	0.50	0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min

Area (ha)=	2.52		
Total Imp(%)=	71.00	Dir. Conn.(%)=	57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24

3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 10.52
over (min) 5.00 25.00
Storage Coeff. (min)= 7.27 (ii) 24.64 (ii)
Unit Hyd. Tpeak (min)= 5.00 25.00
Unit Hyd. peak (cms)= 0.17 0.05

TOTALS
PEAK FLOW (cms)= 0.04 0.02 0.063 (iii)
TIME TO PEAK (hrs)= 9.75 10.25 10.25
RUNOFF VOLUME (mm)= 46.08 23.62 36.41
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.50 0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7632):	20.62	0.521	10.25	37.60
+ ID2= 2 (7633):	54.88	1.426	10.25	38.95
=====				
ID = 3 (0577):	75.50	1.947	10.25	38.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	75.50	1.947	10.25	38.58
+ ID2= 2 (7640):	18.75	0.493	10.25	38.95
=====				
ID = 1 (0577):	94.25	2.440	10.25	38.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	94.25	2.440	10.25	38.65
+ ID2= 2 (7641):	9.24	0.269	10.25	43.22
=====				
ID = 3 (0577):	103.49	2.709	10.25	39.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	2.709	10.25	39.06
+ ID2= 2 (7643):		5.80	0.143	10.25	36.42
=====					
ID = 1 (0577):		109.29	2.852	10.25	38.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	2.852	10.25	38.92
+ ID2= 2 (7645):		2.52	0.063	10.25	36.41
=====					
ID = 3 (0577):		111.81	2.915	10.25	38.86

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	2.915	10.25	38.86
+ ID2= 2 (7696):		36.37	0.086	14.25	10.49
=====					
ID = 1 (0577):		148.18	2.959	10.25	31.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.2 5yr-12hr **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=		1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54

2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.145 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 14.229
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.262

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633) | Area (ha)= 54.88
 ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 31.84
 over (min) 15.00 25.00
 Storage Coeff. (min)= 13.09 (ii) 24.25 (ii)
 Unit Hyd. Tpeak (min)= 15.00 25.00
 Unit Hyd. peak (cms)= 0.08 0.05

TOTALS
 PEAK FLOW (cms)= 2.30 0.95 3.231 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 53.38 34.07 45.85
 TOTAL RAINFALL (mm)= 54.38 54.38 54.38

RUNOFF COEFFICIENT = 0.98 0.63 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)=	25.02	27.78
over (min)	10.00	25.00
Storage Coeff. (min)=	9.76 (ii)	21.54 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.11	0.05

TOTALS

PEAK FLOW (cms)=	0.84	0.35	1.191 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	53.38	31.36	44.35
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.58	0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7640)
ID= 1 DT= 5.0 min

Area (ha)= 18.75
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	14.25	4.50
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	353.55	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)=	25.02	31.84
over (min)	10.00	25.00
Storage Coeff. (min)=	9.49 (ii)	20.64 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.12	0.05

TOTALS

PEAK FLOW (cms)=	0.79	0.34	1.125 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	53.38	34.07	45.85
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.63	0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min

Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 7.76 1.48
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 248.19 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 48.83
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.67 (ii) 17.07 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 0.43 0.19 0.617 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 53.38 44.49 50.45
 TOTAL RAINFALL (mm)= 54.38 54.38 54.38
 RUNOFF COEFFICIENT = 0.98 0.82 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7643)
 ID= 1 DT= 5.0 min | Area (ha)= 5.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 4.12 1.68
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 196.64 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 25.59
 over (min) 5.00 20.00
 Storage Coeff. (min)= 6.67 (ii) 18.85 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.18 0.06

TOTALS

PEAK FLOW (cms)= 0.23 0.10 0.331 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 53.38 29.34 43.04
 TOTAL RAINFALL (mm)= 54.38 54.38 54.38
 RUNOFF COEFFICIENT = 0.98 0.54 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min | Area (ha)= 2.52
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54

0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 25.59
over (min) 5.00 20.00
Storage Coeff. (min)= 5.20 (ii) 17.37 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.21 0.06

TOTALS
PEAK FLOW (cms)= 0.10 0.04 0.145 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 53.38 29.34 43.04
TOTAL RAINFALL (mm)= 54.38 54.38 54.38
RUNOFF COEFFICIENT = 0.98 0.54 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	1.191	5.25	44.35
+ ID2= 2 (7633):	54.88	3.231	5.25	45.85
=====				
ID = 3 (0577):	75.50	4.422	5.25	45.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	4.422	5.25	45.44
+ ID2= 2 (7640):	18.75	1.125	5.25	45.85
=====				
ID = 1 (0577):	94.25	5.546	5.25	45.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	94.25	5.546	5.25	45.52

+ ID2= 2 (7641):	9.24	0.617	5.25	50.45
ID = 3 (0577):	103.49	6.164	5.25	45.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	103.49	6.164	5.25	45.96
+ ID2= 2 (7643):	5.80	0.331	5.25	43.04
ID = 1 (0577):	109.29	6.495	5.25	45.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	109.29	6.495	5.25	45.80
+ ID2= 2 (7645):	2.52	0.145	5.25	43.04
ID = 3 (0577):	111.81	6.639	5.25	45.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	111.81	6.639	5.25	45.74
+ ID2= 2 (7696):	36.37	0.145	8.42	14.23
ID = 1 (0577):	148.18	6.693	5.25	38.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.3 10yr-12hr **

CALIB			
NASHYD (7696)	Area (ha)= 36.37	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50	
	U.H. Tp(hrs)= 1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63

2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.193 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 18.931
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.302

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 38.23
 over (min) 10.00 25.00
 Storage Coeff. (min)= 12.37 (ii) 22.74 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.10 0.05

TOTALS

PEAK FLOW	(cms)=	2.66	1.17	3.815 (iii)
TIME TO PEAK	(hrs)=	5.25	5.33	5.25
RUNOFF VOLUME	(mm)=	61.71	41.42	53.80
TOTAL RAINFALL	(mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT	=	0.98	0.66	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.05	5.57
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	370.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	33.63
over (min)	10.00	25.00
Storage Coeff. (min)=	9.22 (ii)	20.13 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.12	0.05

TOTALS

PEAK FLOW	(cms)=	0.97	0.44	1.406 (iii)
TIME TO PEAK	(hrs)=	5.25	5.33	5.25
RUNOFF VOLUME	(mm)=	61.71	38.42	52.16
TOTAL RAINFALL	(mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT	=	0.98	0.61	0.83

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

- CN* = 82.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	38.23
over (min)	10.00	20.00
Storage Coeff. (min)=	8.96 (ii)	19.33 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

TOTALS
1.334 (iii)
5.25
53.80
62.71
0.86

PEAK FLOW (cms)=	0.92	0.42
TIME TO PEAK (hrs)=	5.25	5.25
RUNOFF VOLUME (mm)=	61.71	41.42
TOTAL RAINFALL (mm)=	62.71	62.71
RUNOFF COEFFICIENT =	0.98	0.66

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

STANDHYD (7641) | Area (ha)= 9.24
 ID= 1 DT= 5.0 min | Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	248.19	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	56.94
over (min)	5.00	20.00
Storage Coeff. (min)=	7.25 (ii)	16.09 (ii)
Unit Hyd. Tpeak (min)=	5.00	20.00
Unit Hyd. peak (cms)=	0.17	0.06

TOTALS
 PEAK FLOW (cms)= 0.717 (iii)
 TIME TO PEAK (hrs)= 5.25
 RUNOFF VOLUME (mm)= 58.71
 TOTAL RAINFALL (mm)= 62.71
 RUNOFF COEFFICIENT = 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7643) | Area (ha)= 5.80
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 31.19
 over (min) 5.00 20.00
 Storage Coeff. (min)= 6.30 (ii) 17.55 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.19 0.06

TOTALS
 PEAK FLOW (cms)= 0.26 0.13 0.392 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 61.71 36.14 50.71
 TOTAL RAINFALL (mm)= 62.71 62.71 62.71
 RUNOFF COEFFICIENT = 0.98 0.58 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min | Area (ha)= 2.52
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr

0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 31.19
over (min) 5.00 20.00
Storage Coeff. (min)= 4.91 (ii) 16.16 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.22 0.06

TOTALS
PEAK FLOW (cms)= 0.12 0.06 0.171 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 61.71 36.14 50.71
TOTAL RAINFALL (mm)= 62.71 62.71 62.71
RUNOFF COEFFICIENT = 0.98 0.58 0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7632):	20.62	1.406	5.25	52.16
+ ID2= 2 (7633):	54.88	3.815	5.25	53.80
ID = 3 (0577):	75.50	5.221	5.25	53.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0577):	75.50	5.221	5.25	53.35
+ ID2= 2 (7640):	18.75	1.334	5.25	53.80
ID = 1 (0577):	94.25	6.555	5.25	53.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	6.555	5.25	53.44
+ ID2= 2 (7641):		9.24	0.717	5.25	58.71
=====					
ID = 3 (0577):		103.49	7.272	5.25	53.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	7.272	5.25	53.91
+ ID2= 2 (7643):		5.80	0.392	5.25	50.71
=====					
ID = 1 (0577):		109.29	7.664	5.25	53.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	7.664	5.25	53.74
+ ID2= 2 (7645):		2.52	0.171	5.25	50.71
=====					
ID = 3 (0577):		111.81	7.835	5.25	53.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	7.835	5.25	53.67
+ ID2= 2 (7696):		36.37	0.193	8.33	18.93
=====					
ID = 1 (0577):		148.18	7.910	5.25	45.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.4 25yr-12hr **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=		1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73

1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.259 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 25.335
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max. Eff. Inten. (mm/hr)= 33.63 46.60

Storage Coeff. over (min)=	10.00	25.00	
Unit Hyd. Tpeak (min)=	11.63 (ii)	21.21 (ii)	
Unit Hyd. peak (cms)=	0.10	0.05	
			TOTALS
PEAK FLOW (cms)=	3.11	1.45	4.549 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	72.10	50.82	63.80
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.70	0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62	Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
--	------------------	---------------------	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten. (mm/hr)=	33.63	41.07	
Storage Coeff. over (min)=	10.00	20.00	
Unit Hyd. Tpeak (min)=	8.67 (ii)	18.75 (ii)	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	1.14	0.56	1.693 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	72.10	47.49	62.01

TOTAL RAINFALL (mm)= 73.10 73.10 73.10
 RUNOFF COEFFICIENT = 0.99 0.65 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7640)
 ID= 1 DT= 5.0 min

Area (ha)= 18.75
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 46.60
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.43 (ii) 18.01 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 1.07 0.52 1.586 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 72.10 50.82 63.80
 TOTAL RAINFALL (mm)= 73.10 73.10 73.10
 RUNOFF COEFFICIENT = 0.99 0.70 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min

Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 67.06
over (min) 5.00 20.00
Storage Coeff. (min)= 6.82 (ii) 15.10 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.18 0.07

TOTALS

PEAK FLOW (cms)= 0.58 0.26 0.842 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 72.10 62.81 69.03
TOTAL RAINFALL (mm)= 73.10 73.10 73.10
RUNOFF COEFFICIENT = 0.99 0.86 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)=	33.63	38.34
over (min)	5.00	20.00
Storage Coeff. (min)=	5.93 (ii)	16.28 (ii)
Unit Hyd. Tpeak (min)=	5.00	20.00
Unit Hyd. peak (cms)=	0.19	0.06

TOTALS

PEAK FLOW (cms)=	0.31	0.16	0.469 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	72.10	44.93	60.42
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.61	0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)=	2.52
STANDHYD (7645)	Total Imp(%)=	71.00
ID= 1 DT= 5.0 min	Dir. Conn.(%)=	57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 38.34
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.62 (ii) 14.97 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.22 0.08

TOTALS
 PEAK FLOW (cms)= 0.13 0.07 0.206 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 72.10 44.93 60.41
 TOTAL RAINFALL (mm)= 73.10 73.10 73.10
 RUNOFF COEFFICIENT = 0.99 0.61 0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7632):	20.62	1.693	5.25	62.01
+ ID2= 2 (7633):	54.88	4.549	5.25	63.80
===== ID = 3 (0577):	75.50	6.242	5.25	63.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0577):	75.50	6.242	5.25	63.31
+ ID2= 2 (7640):	18.75	1.586	5.25	63.80

ID = 1 (0577): 94.25 7.828 5.25 63.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	94.25	7.828	5.25	63.41
+ ID2= 2 (7641):	9.24	0.842	5.25	69.03
=====				
ID = 3 (0577):	103.49	8.670	5.25	63.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	103.49	8.670	5.25	63.91
+ ID2= 2 (7643):	5.80	0.469	5.25	60.42
=====				
ID = 1 (0577):	109.29	9.139	5.25	63.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	109.29	9.139	5.25	63.72
+ ID2= 2 (7645):	2.52	0.206	5.25	60.41
=====				
ID = 3 (0577):	111.81	9.345	5.25	63.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	111.81	9.345	5.25	63.65
+ ID2= 2 (7696):	36.37	0.259	8.33	25.34
=====				
ID = 1 (0577):	148.18	9.451	5.25	54.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.5 50yr-12hr **

CALIB				
NASHYD (7696)				
ID= 1 DT= 5.0 min	Area (ha)=	36.37	Curve Number (CN)=	73.0
	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
	U.H. Tp(hrs)=	1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81

1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.312 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 30.419
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.376

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min | Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81

2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)=	37.17	52.59
over (min)	10.00	25.00
Storage Coeff. (min)=	11.18 (ii)	20.30 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.10	0.05

PEAK FLOW (cms)=	3.44	1.66	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.33	5.094 (iii)
RUNOFF VOLUME (mm)=	79.82	57.92	5.25
TOTAL RAINFALL (mm)=	80.82	80.82	71.28
RUNOFF COEFFICIENT =	0.99	0.72	80.82
			0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)=	20.62	
STANDHYD (7632)	Total Imp(%)=	73.00	Dir. Conn.(%)= 59.00
ID= 1 DT= 5.0 min			

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	370.76	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)=	37.17	46.97
over (min)	10.00	20.00
Storage Coeff. (min)=	8.33 (ii)	17.88 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00

Unit Hyd. peak (cms)=	0.13	0.06	
PEAK FLOW (cms)=	1.26	0.64	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	1.898 (iii)
RUNOFF VOLUME (mm)=	79.82	54.39	5.25
TOTAL RAINFALL (mm)=	80.82	80.82	69.39
RUNOFF COEFFICIENT =	0.99	0.67	80.82
			0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75	Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25		4.50
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	353.55		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)=	37.17	52.59	
over (min)	10.00	20.00	
Storage Coeff. (min)=	8.10 (ii)	17.22 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.13	0.06	
			TOTALS
PEAK FLOW (cms)=	1.18	0.59	1.774 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	79.82	57.92	71.28
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.72	0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24 Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)=	37.17	74.51
over (min)	5.00	15.00
Storage Coeff. (min)=	6.55 (ii)	14.49 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.18	0.08

PEAK FLOW (cms)=	0.64	0.30	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	0.936 (iii)
RUNOFF VOLUME (mm)=	79.82	70.41	5.25
TOTAL RAINFALL (mm)=	80.82	80.82	76.71
RUNOFF COEFFICIENT =	0.99	0.87	80.82
			0.95

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 44.08
over (min) 5.00 20.00
Storage Coeff. (min)= 5.69 (ii) 15.49 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.20 0.07

PEAK FLOW (cms)= 0.34 0.18 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 0.526 (iii)
RUNOFF VOLUME (mm)= 79.82 51.64 67.70
TOTAL RAINFALL (mm)= 80.82 80.82 80.82
RUNOFF COEFFICIENT = 0.99 0.64 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min

Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00

Average slope (%)= 1.00 2.00
 Length (m)= 129.61 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 44.08
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.43 (ii) 14.23 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.23 0.08

PEAK FLOW (cms)= 0.15 0.08 *TOTALS*
 TIME TO PEAK (hrs)= 5.17 5.25 0.231 (iii)
 RUNOFF VOLUME (mm)= 79.82 51.64 5.25
 TOTAL RAINFALL (mm)= 80.82 80.82 80.82
 RUNOFF COEFFICIENT = 0.99 0.64 0.84

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	1.898	5.25	69.39
+ ID2= 2 (7633):	54.88	5.094	5.25	71.28
=====				
ID = 3 (0577):	75.50	6.992	5.25	70.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | ADD HYD (0577) |

3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		75.50	6.992	5.25	70.76
+ ID2= 2 (7640):		18.75	1.774	5.25	71.28
=====					
ID = 1 (0577):		94.25	8.766	5.25	70.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	8.766	5.25	70.87
+ ID2= 2 (7641):		9.24	0.936	5.25	76.71
=====					
ID = 3 (0577):		103.49	9.703	5.25	71.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	9.703	5.25	71.39
+ ID2= 2 (7643):		5.80	0.526	5.25	67.70
=====					
ID = 1 (0577):		109.29	10.229	5.25	71.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	10.229	5.25	71.19
+ ID2= 2 (7645):		2.52	0.231	5.25	67.70
=====					
ID = 3 (0577):		111.81	10.459	5.25	71.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	10.459	5.25	71.11
+ ID2= 2 (7696):		36.37	0.312	8.25	30.42
=====					
ID = 1 (0577):		148.18	10.592	5.25	61.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.6 100yr-12hr **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp	(hrs)=	1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89

1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.367 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 35.737
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.404

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min
 Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89

2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)= 40.71 58.57
over (min) 10.00 20.00
Storage Coeff.(min)= 10.78 (ii) 19.52 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.11 0.06

PEAK FLOW (cms)= 3.77 1.91 *TOTALS* 5.680 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 87.54 65.11 78.79
TOTAL RAINFALL (mm)= 88.54 88.54 88.54
RUNOFF COEFFICIENT = 0.99 0.74 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632)
ID= 1 DT= 5.0 min

Area (ha)= 20.62
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	52.54	
over (min)	10.00	20.00	
Storage Coeff.(min)=	8.03 (ii)	17.16 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.13	0.06	
			TOTALS
PEAK FLOW (cms)=	1.38	0.73	2.104 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	87.54	61.38	76.82
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.69	0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75	Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	58.57	
over (min)	10.00	20.00	
Storage Coeff.(min)=	7.81 (ii)	16.55 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.13	0.06	
			TOTALS
PEAK FLOW (cms)=	1.29	0.67	1.962 (iii)

TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 65.11 78.79
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.74 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7641)
 ID= 1 DT= 5.0 min

Area (ha)= 9.24
 Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max. Eff. Inten. (mm/hr)= 40.71 81.95
 over (min) 5.00 15.00
 Storage Coeff. (min)= 6.31 (ii) 13.96 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.19 0.08

PEAK FLOW (cms)= 0.70 0.33 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.25 1.028 (iii)
 RUNOFF VOLUME (mm)= 87.54 78.03 84.40
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.88 0.95

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)

- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7643) ID= 1 DT= 5.0 min	Area (ha)= 5.80 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	196.64	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max. Eff. Inten. (mm/hr) over (min)	40.71	49.48
Storage Coeff. (min)	5.00	15.00
Unit Hyd. Tpeak (min)	5.49 (ii)	14.84 (ii)
Unit Hyd. peak (cms)	5.00	15.00
	0.20	0.08

PEAK FLOW (cms)	0.37	0.21	*TOTALS*
TIME TO PEAK (hrs)	5.25	5.25	0.587 (iii)
RUNOFF VOLUME (mm)	87.54	58.47	5.25
TOTAL RAINFALL (mm)	88.54	88.54	75.04
RUNOFF COEFFICIENT	0.99	0.66	88.54
			0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7645)	Area (ha)= 2.52
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten. (mm/hr)=	40.71	49.48
over (min)	5.00	15.00
Storage Coeff. (min)=	4.28 (ii)	13.63 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.23	0.08

PEAK FLOW (cms)=	0.16	0.09	*TOTALS*
TIME TO PEAK (hrs)=	5.17	5.25	0.256 (iii)
RUNOFF VOLUME (mm)=	87.54	58.47	5.25
TOTAL RAINFALL (mm)=	88.54	88.54	75.04
RUNOFF COEFFICIENT =	0.99	0.66	88.54
			0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7632):	20.62	2.104	5.25	76.82
+ ID2= 2 (7633):	54.88	5.680	5.25	78.79
=====	=====	=====	=====	=====
ID = 3 (0577):	75.50	7.784	5.25	78.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		75.50	7.784	5.25	78.25
+ ID2= 2 (7640):		18.75	1.962	5.25	78.79
=====					
ID = 1 (0577):		94.25	9.746	5.25	78.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	9.746	5.25	78.36
+ ID2= 2 (7641):		9.24	1.028	5.25	84.40
=====					
ID = 3 (0577):		103.49	10.774	5.25	78.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	10.774	5.25	78.90
+ ID2= 2 (7643):		5.80	0.587	5.25	75.04
=====					
ID = 1 (0577):		109.29	11.361	5.25	78.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	11.361	5.25	78.69
+ ID2= 2 (7645):		2.52	0.256	5.25	75.04
=====					
ID = 3 (0577):		111.81	11.618	5.25	78.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	11.618	5.25	78.61
+ ID2= 2 (7696):		36.37	0.367	8.25	35.74
=====					
ID = 1 (0577):		148.18	11.778	5.25	68.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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V V I SSSSS U U A L (v 6.2.2017)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

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O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
 Output filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a
 Summary filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a

DATE: 01-16-2025 TIME: 03:30:06

USER:

COMMENTS: _____

 ** SIMULATION : Hazel **

READ STORM	Filename: C:\Users\rbrockie\AppData\Local\Temp\3e99d3f9-6720-4adb-a851-93b8b2802530\7713d240
Ptotal=212.00 mm	Comments:

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	6.00	3.00	13.00	6.00	23.00	9.00	53.00
1.00	4.00	4.00	17.00	7.00	13.00	10.00	38.00
2.00	6.00	5.00	13.00	8.00	13.00	11.00	13.00

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00

1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 79.89
over (min) 5.00 15.00
Storage Coeff. (min)= 7.23 (ii) 14.95 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

PEAK FLOW (cms)= 1.79 1.21 *TOTALS*
TIME TO PEAK (hrs)= 10.00 10.00 2.999 (iii)
RUNOFF VOLUME (mm)= 211.00 197.08 205.29
TOTAL RAINFALL (mm)= 212.00 212.00 212.00
RUNOFF COEFFICIENT = 1.00 0.93 0.97

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| NASHYD ( 7696) | Area (ha)= 36.37 Curve Number (CN)= 96.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----| U.H. Tp(hrs)= 1.99

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00

2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 0.596

PEAK FLOW (cms)= 2.783 (i)
 TIME TO PEAK (hrs)= 11.917
 RUNOFF VOLUME (mm)= 191.940
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.905

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7640)
 ID= 1 DT= 5.0 min

Area (ha)= 18.75
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	14.25	4.50
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	353.55	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 85.70
 over (min) 5.00 15.00
 Storage Coeff. (min)= 7.03 (ii) 14.53 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.17 0.08

TOTALS
 PEAK FLOW (cms)= 1.68 1.05 2.734 (iii)
 TIME TO PEAK (hrs)= 10.00 10.00 10.00

RUNOFF VOLUME (mm)= 211.00 199.63 206.56
 TOTAL RAINFALL (mm)= 212.00 212.00 212.00
 RUNOFF COEFFICIENT = 1.00 0.94 0.97

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 93.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7641) | Area (ha)= 9.24
 ID= 1 DT= 5.0 min | Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	248.19	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max. Eff. Inten. (mm/hr)=	53.00	109.25
over (min)	5.00	15.00
Storage Coeff. (min)=	5.68 (ii)	12.49 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.20	0.08

TOTALS

PEAK FLOW (cms)=	0.91	0.44	1.355 (iii)
TIME TO PEAK (hrs)=	10.00	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	207.29	209.77
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.98	0.99

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 97.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7633)
ID= 1 DT= 5.0 min

Area (ha)= 54.88
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)=	53.00	85.70
over (min)	10.00	20.00
Storage Coeff. (min)=	9.70 (ii)	17.20 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.11	0.06

TOTALS

PEAK FLOW (cms)=	4.92	3.01	7.924 (iii)
TIME TO PEAK (hrs)=	10.00	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	199.63	206.56
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.94	0.97

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 93.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 4.12 1.68
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 196.64 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 77.82
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.94 (ii) 12.74 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.22 0.08

TOTALS
 PEAK FLOW (cms)= 0.49 0.36 0.846 (iii)
 TIME TO PEAK (hrs)= 10.00 10.00 10.00
 RUNOFF VOLUME (mm)= 211.00 194.97 204.11
 TOTAL RAINFALL (mm)= 212.00 212.00 212.00
 RUNOFF COEFFICIENT = 1.00 0.92 0.96

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 91.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7645) | Area (ha)= 2.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 1.79 0.73
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 129.61 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 77.82
 over (min) 5.00 15.00
 Storage Coeff. (min)= 3.85 (ii) 11.65 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.25 0.09

PEAK FLOW (cms)= 0.21 0.16 *TOTALS* 0.368 (iii)
 TIME TO PEAK (hrs)= 10.00 10.00 10.00
 RUNOFF VOLUME (mm)= 211.00 194.97 204.11
 TOTAL RAINFALL (mm)= 212.00 212.00 212.00
 RUNOFF COEFFICIENT = 1.00 0.92 0.96

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 91.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7632):	20.62	2.999	10.00	205.29
+ ID2= 2 (7633):	54.88	7.924	10.00	206.56
===== ID = 3 (0577):	75.50	10.923	10.00	206.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0577):	75.50	10.923	10.00	206.22
+ ID2= 2 (7640):	18.75	2.734	10.00	206.56
===== ID = 1 (0577):	94.25	13.657	10.00	206.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	13.657	10.00	206.29
+ ID2= 2 (7641):		9.24	1.355	10.00	209.77
=====					
ID = 3 (0577):		103.49	15.012	10.00	206.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	15.012	10.00	206.60
+ ID2= 2 (7643):		5.80	0.846	10.00	204.11
=====					
ID = 1 (0577):		109.29	15.858	10.00	206.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	15.858	10.00	206.46
+ ID2= 2 (7645):		2.52	0.368	10.00	204.11
=====					
ID = 3 (0577):		111.81	16.226	10.00	206.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	16.226	10.00	206.41
+ ID2= 2 (7696):		36.37	2.783	11.92	191.94
=====					
ID = 1 (0577):		148.18	18.006	10.00	202.86

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH

CATCHMENT 38.05



 ** SIMULATION:1.1 2yr-6hr **

 | READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | Ptotal= 36.00 mm | 7f776256-2198-4108-9535-f45e59a65007\aoF810e3
 | | Comments: 2 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	12.24	3.50	5.04	5.25	0.72
0.25	0.72	2.00	12.24	3.75	2.88	5.50	0.72
0.50	0.72	2.25	33.12	4.00	2.88	5.75	0.72
0.75	0.72	2.50	33.12	4.25	1.44	6.00	0.72
1.00	0.72	2.75	9.36	4.50	1.44		
1.25	4.32	3.00	9.36	4.75	0.72		
1.50	4.32	3.25	5.04	5.00	0.72		

 | CALIB |
 | NASHYD (0578) | Area (ha)= 41.63 Curve Number (CN)= 73.0
 | ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 | | U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.245 (i)
 TIME TO PEAK (hrs)= 3.917
 RUNOFF VOLUME (mm)= 5.635
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.157

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.2 5yr-6hr **

 | READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | Ptotal= 47.81 mm | 7f776256-2198-4108-9535-f45e59a65007\6277beea
 | | Comments: 5 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	16.25	3.50	6.69	5.25	0.96
0.25	0.96	2.00	16.25	3.75	3.82	5.50	0.96
0.50	0.96	2.25	43.98	4.00	3.82	5.75	0.96
0.75	0.96	2.50	43.98	4.25	1.91	6.00	0.96
1.00	0.96	2.75	12.43	4.50	1.91		
1.25	5.74	3.00	12.43	4.75	0.96		
1.50	5.74	3.25	6.69	5.00	0.96		

CALIB
 NASHYD (0578)
 ID= 1 DT= 5.0 min

Area (ha)= 41.63 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.481 (i)
 TIME TO PEAK (hrs)= 3.833
 RUNOFF VOLUME (mm)= 10.848
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.227

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.3 10yr-6hr **

READ STORM
 Ptotal= 55.69 mm

Filename: C:\Users\rbrockie\AppData
 Local\Temp\
 7f776256-2198-4108-9535-f45e59a65007\35fee964
 Comments: 10 Year 6 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	1.75	18.94	3.50	7.80	5.25	1.11
0.25	1.11	2.00	18.94	3.75	4.46	5.50	1.11
0.50	1.11	2.25	51.24	4.00	4.46	5.75	1.11
0.75	1.11	2.50	51.24	4.25	2.23	6.00	1.11
1.00	1.11	2.75	14.48	4.50	2.23		
1.25	6.68	3.00	14.48	4.75	1.11		
1.50	6.68	3.25	7.80	5.00	1.11		

CALIB
 NASHYD (0578)
 ID= 1 DT= 5.0 min

Area (ha)= 41.63 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11

0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.668 (i)
 TIME TO PEAK (hrs)= 3.750
 RUNOFF VOLUME (mm)= 14.947
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.268

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.4 25yr-6hr **

 READ STORM Filename: C:\Users\rbrockie\AppData
 ata\Local\Temp\
 7f776256-2198-4108-9535-f45e59a65007\3e4e6076
 Ptotal= 65.59 mm Comments: 25 Year 6 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	1.75	22.30	3.50	9.18	5.25	1.31
0.25	1.31	2.00	22.30	3.75	5.25	5.50	1.31
0.50	1.31	2.25	60.35	4.00	5.25	5.75	1.31
0.75	1.31	2.50	60.35	4.25	2.62	6.00	1.31
1.00	1.31	2.75	17.06	4.50	2.62		
1.25	7.87	3.00	17.06	4.75	1.31		
1.50	7.87	3.25	9.18	5.00	1.31		

 CALIB
 NASHYD (0578) Area (ha)= 41.63 Curve Number (CN)= 73.0
 ID= 1 DT= 5.0 min Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.931 (i)

TIME TO PEAK (hrs)= 3.750
 RUNOFF VOLUME (mm)= 20.662
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.315

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.5 50yr-6hr **

 READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | | 7f776256-2198-4108-9535-f45e59a65007\fdaad26a
 Ptotal= 73.00 mm | Comments: 50 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	24.82	3.50	10.22	5.25	1.46
0.25	1.46	2.00	24.82	3.75	5.84	5.50	1.46
0.50	1.46	2.25	67.16	4.00	5.84	5.75	1.46
0.75	1.46	2.50	67.16	4.25	2.92	6.00	1.46
1.00	1.46	2.75	18.98	4.50	2.92		
1.25	8.76	3.00	18.98	4.75	1.46		
1.50	8.76	3.25	10.22	5.00	1.46		

 CALIB |
 NASHYD (0578) | Area (ha)= 41.63 Curve Number (CN)= 73.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.144 (i)
 TIME TO PEAK (hrs)= 3.750
 RUNOFF VOLUME (mm)= 25.284
 TOTAL RAINFALL (mm)= 73.000
 RUNOFF COEFFICIENT = 0.346

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.6 100yr-6hr **

 READ STORM | Filename: C:\Users\rbrockie\AppData
 | | ata\Local\Temp\
 | | 7f776256-2198-4108-9535-f45e59a65007\5d0a47de
 Ptotal= 80.31 mm | Comments: 100 Year 6 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
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hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	27.30	3.50	11.24	5.25	1.61
0.25	1.61	2.00	27.30	3.75	6.42	5.50	1.61
0.50	1.61	2.25	73.88	4.00	6.42	5.75	1.61
0.75	1.61	2.50	73.88	4.25	3.21	6.00	1.61
1.00	1.61	2.75	20.88	4.50	3.21		
1.25	9.64	3.00	20.88	4.75	1.61		
1.50	9.64	3.25	11.24	5.00	1.61		

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CALIB
NASHYD ( 0578) | Area (ha)= 41.63 | Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
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U.H. Tp(hrs)= 0.82

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.367 (i)
TIME TO PEAK (hrs)= 3.667
RUNOFF VOLUME (mm)= 30.091
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.375

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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** SIMULATION:2.1 2yr-12hr **
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READ STORM | Filename: C:\Users\rbrockie\AppData
            | ata\Local\Temp\
            | 7f776256-2198-4108-9535-f45e59a65007\6fb9f58c
Ptotal= 47.08 mm | Comments: 2 Year 24 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	4.00	12.50	1.65	18.75	0.24
0.25	0.24	6.50	4.00	12.75	1.65	19.00	0.24
0.50	0.24	6.75	4.00	13.00	1.65	19.25	0.24
0.75	0.24	7.00	4.00	13.25	1.65	19.50	0.24
1.00	0.24	7.25	4.00	13.50	1.65	19.75	0.24
1.25	0.24	7.50	4.00	13.75	1.65	20.00	0.24
1.50	0.24	7.75	4.00	14.00	1.65	20.25	0.24
1.75	0.24	8.00	4.00	14.25	0.94	20.50	0.24
2.00	0.24	8.25	10.81	14.50	0.94	20.75	0.24
2.25	0.24	8.50	10.81	14.75	0.94	21.00	0.24
2.50	0.24	8.75	10.81	15.00	0.94	21.25	0.24
2.75	0.24	9.00	10.81	15.25	0.94	21.50	0.24
3.00	0.24	9.25	10.81	15.50	0.94	21.75	0.24
3.25	0.24	9.50	10.81	15.75	0.94	22.00	0.24
3.50	0.24	9.75	10.81	16.00	0.94	22.25	0.24
3.75	0.24	10.00	10.81	16.25	0.47	22.50	0.24
4.00	0.24	10.25	3.06	16.50	0.47	22.75	0.24
4.25	1.41	10.50	3.06	16.75	0.47	23.00	0.24

4.50	1.41	10.75	3.06	17.00	0.47	23.25	0.24
4.75	1.41	11.00	3.06	17.25	0.47	23.50	0.24
5.00	1.41	11.25	3.06	17.50	0.47	23.75	0.24
5.25	1.41	11.50	3.06	17.75	0.47	24.00	0.24
5.50	1.41	11.75	3.06	18.00	0.47		
5.75	1.41	12.00	3.06	18.25	0.24		
6.00	1.41	12.25	1.65	18.50	0.24		

CALIB							
NASHYD (0578)		Area (ha)=	41.63	Curve Number (CN)=	73.0		
ID= 1 DT= 5.0 min		Ia (mm)=	10.00	# of Linear Res.(N)=	2.50		
		U.H. Tp(hrs)=	0.82				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24

5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.255 (i)
 TIME TO PEAK (hrs)= 10.667
 RUNOFF VOLUME (mm)= 10.492
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.223

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.2 5yr-12hr **

 READ STORM Filename: C:\Users\rbrockie\AppData
 ata\Local\Temp\
 7f776256-2198-4108-9535-f45e59a65007\369eff41
 Ptotal= 54.38 mm Comments: 5 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	9.25	6.50	3.81	9.75	0.54
0.25	0.54	3.50	9.25	6.75	3.81	10.00	0.54
0.50	0.54	3.75	9.25	7.00	3.81	10.25	0.54
0.75	0.54	4.00	9.25	7.25	2.18	10.50	0.54
1.00	0.54	4.25	25.02	7.50	2.18	10.75	0.54
1.25	0.54	4.50	25.02	7.75	2.18	11.00	0.54
1.50	0.54	4.75	25.02	8.00	2.18	11.25	0.54
1.75	0.54	5.00	25.02	8.25	1.09	11.50	0.54
2.00	0.54	5.25	7.07	8.50	1.09	11.75	0.54
2.25	3.26	5.50	7.07	8.75	1.09	12.00	0.54
2.50	3.26	5.75	7.07	9.00	1.09		
2.75	3.26	6.00	7.07	9.25	0.54		
3.00	3.26	6.25	3.81	9.50	0.54		

 CALIB
 NASHYD (0578) Area (ha)= 41.63 Curve Number (CN)= 73.0
 ID= 1 DT= 5.0 min Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54

1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.477 (i)
 TIME TO PEAK (hrs)= 6.083
 RUNOFF VOLUME (mm)= 14.236
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.262

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.3 10yr-12hr **

READ STORM	Filename: C:\Users\rbrockie\AppData\Local\Temp\7f776256-2198-4108-9535-f45e59a65007\23cb3106
Ptotal= 62.71 mm	Comments: 10 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	10.66	6.50	4.39	9.75	0.63
0.25	0.63	3.50	10.66	6.75	4.39	10.00	0.63
0.50	0.63	3.75	10.66	7.00	4.39	10.25	0.63
0.75	0.63	4.00	10.66	7.25	2.51	10.50	0.63
1.00	0.63	4.25	28.84	7.50	2.51	10.75	0.63
1.25	0.63	4.50	28.84	7.75	2.51	11.00	0.63
1.50	0.63	4.75	28.84	8.00	2.51	11.25	0.63
1.75	0.63	5.00	28.84	8.25	1.25	11.50	0.63
2.00	0.63	5.25	8.15	8.50	1.25	11.75	0.63
2.25	3.76	5.50	8.15	8.75	1.25	12.00	0.63
2.50	3.76	5.75	8.15	9.00	1.25		
2.75	3.76	6.00	8.15	9.25	0.63		
3.00	3.76	6.25	4.39	9.50	0.63		

CALIB	Area (ha)= 41.63	Curve Number (CN)= 73.0
NASHYD (0578)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.82	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63

1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.643 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 18.941
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.302

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.4 25yr-12hr **

READ STORM	Filename: C:\Users\rbrockie\AppData
	ata\Local\Temp\
	7f776256-2198-4108-9535-f45e59a65007\2c6efae9
Ptotal= 73.10 mm	Comments: 25 Year 12 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	12.43	6.50	5.12	9.75	0.73
0.25	0.73	3.50	12.43	6.75	5.12	10.00	0.73
0.50	0.73	3.75	12.43	7.00	5.12	10.25	0.73
0.75	0.73	4.00	12.43	7.25	2.92	10.50	0.73
1.00	0.73	4.25	33.63	7.50	2.92	10.75	0.73
1.25	0.73	4.50	33.63	7.75	2.92	11.00	0.73
1.50	0.73	4.75	33.63	8.00	2.92	11.25	0.73
1.75	0.73	5.00	33.63	8.25	1.46	11.50	0.73
2.00	0.73	5.25	9.50	8.50	1.46	11.75	0.73
2.25	4.39	5.50	9.50	8.75	1.46	12.00	0.73
2.50	4.39	5.75	9.50	9.00	1.46		
2.75	4.39	6.00	9.50	9.25	0.73		
3.00	4.39	6.25	5.12	9.50	0.73		

CALIB			
NASHYD (0578)	Area (ha)= 41.63	Curve Number (CN)= 73.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.82		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73

1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.873 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 25.349
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.5 50yr-12hr **

READ STORM	Filename: C:\Users\rbrockie\AppData Local\Temp\ 7f776256-2198-4108-9535-f45e59a65007\4a30faeb
Ptotal= 80.82 mm	Comments: 50 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	13.74	6.50	5.66	9.75	0.81
0.25	0.81	3.50	13.74	6.75	5.66	10.00	0.81
0.50	0.81	3.75	13.74	7.00	5.66	10.25	0.81
0.75	0.81	4.00	13.74	7.25	3.23	10.50	0.81
1.00	0.81	4.25	37.17	7.50	3.23	10.75	0.81
1.25	0.81	4.50	37.17	7.75	3.23	11.00	0.81
1.50	0.81	4.75	37.17	8.00	3.23	11.25	0.81
1.75	0.81	5.00	37.17	8.25	1.62	11.50	0.81
2.00	0.81	5.25	10.50	8.50	1.62	11.75	0.81
2.25	4.85	5.50	10.50	8.75	1.62	12.00	0.81
2.50	4.85	5.75	10.50	9.00	1.62		
2.75	4.85	6.00	10.50	9.25	0.81		
3.00	4.85	6.25	5.66	9.50	0.81		

CALIB	Area (ha)= 41.63	Curve Number (CN)= 73.0
NASHYD (0578)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.82	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81

0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.056 (i)
 TIME TO PEAK (hrs)= 5.917
 RUNOFF VOLUME (mm)= 30.434
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.377

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.6 100yr-12hr **

READ STORM	Filename: C:\Users\rbrockie\AppData ata\Local\Temp\ 7f776256-2198-4108-9535-f45e59a65007\eb7441f0
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	15.05	6.50	6.20	9.75	0.89
0.25	0.89	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	3.54	10.50	0.89
1.00	0.89	4.25	40.71	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	1.77	11.50	0.89
2.00	0.89	5.25	11.51	8.50	1.77	11.75	0.89
2.25	5.31	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77		
2.75	5.31	6.00	11.51	9.25	0.89		
3.00	5.31	6.25	6.20	9.50	0.89		

CALIB	Area (ha)= 41.63	Curve Number (CN)= 73.0
NASHYD (0578)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.82	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89

0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.249 (i)
 TIME TO PEAK (hrs)= 5.917
 RUNOFF VOLUME (mm)= 35.756
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.404

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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V V I SSSSS U U A L (v 6.2.2017)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

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O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
 Output filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a
 Summary filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a

DATE: 01-16-2025 TIME: 03:30:58

USER:

COMMENTS: _____

 ** SIMULATION : Hazel **

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| READ STORM | Filename: C:\Users\rbrockie\AppData
|             | ata\Local\Temp\
| Ptotal=212.00 mm | eb7c0585-2a08-42bd-9cd9-a1e98d69f31f\7713d240
|             | Comments:
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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	6.00	3.00	13.00	6.00	23.00	9.00	53.00
1.00	4.00	4.00	17.00	7.00	13.00	10.00	38.00
2.00	6.00	5.00	13.00	8.00	13.00	11.00	13.00

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| CALIB |
| NASHYD ( 0578) | Area (ha)= 41.63 Curve Number (CN)= 96.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|             | U.H. Tp(hrs)= 0.82
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00

1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 1.657

PEAK FLOW (cms)= 4.511 (i)
 TIME TO PEAK (hrs)= 11.000
 RUNOFF VOLUME (mm)= 191.909
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.905

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 FINISH
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CATCHMENT 38.06



 ** SIMULATION:1.1 2yr-6hr **

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| CALIB |
| NASHYD ( 7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 0.86
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.081 (i)
 TIME TO PEAK (hrs)= 4.250
 RUNOFF VOLUME (mm)= 5.404
 TOTAL RAINFALL (mm)= 36.000
 RUNOFF COEFFICIENT = 0.150

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| STANDHYD ( 7693) | Area (ha)= 35.80
| ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	26.24	
over (min)	10.00	25.00	
Storage Coeff. (min)=	10.30 (ii)	22.35 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.11	0.05	
			TOTALS
PEAK FLOW (cms)=	1.79	0.47	2.152 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	35.00	15.50	26.61
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.43	0.74

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	382.27	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	26.24	
over (min)	10.00	25.00	
Storage Coeff. (min)=	8.89 (ii)	20.94 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.12	0.05	
			TOTALS
PEAK FLOW (cms)=	1.11	0.29	1.344 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	35.00	15.50	26.61
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.43	0.74

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689) ID= 1 DT= 5.0 min	Area (ha)= 42.12 Total Imp(%)= 75.00	Dir. Conn.(%)= 60.00
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IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 31.59 10.53
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 529.91 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 31.61
 over (min) 10.00 25.00
 Storage Coeff. (min)= 10.81 (ii) 22.00 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 2.20 0.58 *TOTALS*
 TIME TO PEAK (hrs)= 2.75 3.00 2.660 (iii)
 RUNOFF VOLUME (mm)= 35.00 17.35 2.75
 TOTAL RAINFALL (mm)= 36.00 36.00 27.94
 RUNOFF COEFFICIENT = 0.97 0.48 36.00
 0.78

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB STANDHYD (7625) Area (ha)= 26.64
 ID= 1 DT= 5.0 min Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 20.25 6.39
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 421.43 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72

1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 34.58
over (min) 10.00 25.00
Storage Coeff. (min)= 9.42 (ii) 20.22 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.12 0.05

TOTALS
PEAK FLOW (cms)= 1.44 0.40 1.764 (iii)
TIME TO PEAK (hrs)= 2.75 3.00 2.75
RUNOFF VOLUME (mm)= 35.00 18.73 28.65
TOTAL RAINFALL (mm)= 36.00 36.00 36.00
RUNOFF COEFFICIENT = 0.97 0.52 0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min | Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 43.48
over (min) 10.00 20.00
Storage Coeff. (min)= 8.58 (ii) 18.43 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 1.12 0.34 1.428 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 35.00 22.05 30.34
TOTAL RAINFALL (mm)= 36.00 36.00 36.00
RUNOFF COEFFICIENT = 0.97 0.61 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min

Area (ha)= 3.65
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 26.24
 over (min) 5.00 20.00
 Storage Coeff. (min)= 5.19 (ii) 17.24 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.21 0.06

PEAK FLOW (cms)= 0.19 0.05 0.238 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 35.00 15.50 26.61
 TOTAL RAINFALL (mm)= 36.00 36.00 36.00
 RUNOFF COEFFICIENT = 0.97 0.43 0.74

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)
 1 + 2 = 3

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	1.764	2.75	28.65
+ ID2= 2 (7631):	19.52	1.428	2.75	30.34
=====				
ID = 3 (0579):	46.16	3.192	2.75	29.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)
 3 + 2 = 1

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	3.192	2.75	29.37
+ ID2= 2 (7636):	3.65	0.238	2.75	26.61
=====				
ID = 1 (0579):	49.81	3.431	2.75	29.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		49.81	3.431	2.75	29.16
+ ID2= 2 (7671):		24.09	0.081	4.25	5.40
=====					
ID = 3 (0579):		73.90	3.458	2.75	21.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	3.458	2.75	21.42
+ ID2= 2 (7689):		42.12	2.660	2.75	27.94
=====					
ID = 1 (0579):		116.02	6.118	2.75	23.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	6.118	2.75	23.79
+ ID2= 2 (7690):		21.92	1.344	2.75	26.61
=====					
ID = 3 (0579):		137.94	7.462	2.75	24.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	7.462	2.75	24.24
+ ID2= 2 (7693):		35.80	2.152	2.75	26.61
=====					
ID = 1 (0579):		173.74	9.614	2.75	24.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.2 5yr-6hr **

CALIB		Area	(ha)=	Curve Number	(CN)=
NASHYD (7671)		24.09		72.0	
ID= 1 DT= 5.0 min		Ia (mm)= 10.00		# of Linear Res.(N)= 1.50	
		U.H. Tp(hrs)= 0.86			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.157 (i)

TIME TO PEAK (hrs)= 4.250
 RUNOFF VOLUME (mm)= 10.440
 TOTAL RAINFALL (mm)= 47.810
 RUNOFF COEFFICIENT = 0.218

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min | Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	41.92
over (min)	10.00	20.00
Storage Coeff. (min)=	9.19 (ii)	19.18 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

PEAK FLOW (cms)=	2.41	0.80	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.92	3.115 (iii)
RUNOFF VOLUME (mm)=	46.81	24.18	2.75
TOTAL RAINFALL (mm)=	47.81	47.81	37.08
RUNOFF COEFFICIENT =	0.98	0.51	47.81
			0.78

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7690)
 ID= 1 DT= 5.0 min | Area (ha)= 21.92
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.56	6.36
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	382.27	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr

0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 41.92
over (min) 10.00 20.00
Storage Coeff. (min)= 7.93 (ii) 17.93 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
PEAK FLOW (cms)= 1.49 0.50 1.940 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 46.81 24.18 37.08
TOTAL RAINFALL (mm)= 47.81 47.81 47.81
RUNOFF COEFFICIENT = 0.98 0.51 0.78

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min
Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 49.36
over (min) 10.00 20.00
Storage Coeff. (min)= 9.65 (ii) 19.01 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.11 0.06

TOTALS

PEAK FLOW (cms)= 2.96 0.97 3.836 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 46.81 26.63 38.74
 TOTAL RAINFALL (mm)= 47.81 47.81 47.81
 RUNOFF COEFFICIENT = 0.98 0.56 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7625) | Area (ha)= 26.64
 ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 53.09
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.41 (ii) 17.50 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 1.93 0.66 2.535 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 46.81 28.42 39.64
 TOTAL RAINFALL (mm)= 47.81 47.81 47.81
 RUNOFF COEFFICIENT = 0.98 0.59 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7631) | Area (ha)= 19.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)= 43.98 62.67
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.66 (ii) 16.17 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 1.50 0.52 *TOTALS* 1.990 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 46.81 32.55 41.67
 TOTAL RAINFALL (mm)= 47.81 47.81 47.81
 RUNOFF COEFFICIENT = 0.98 0.68 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min
 Area (ha)= 3.65
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	41.92	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.63 (ii)	14.63 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.22	0.08	
			TOTALS
PEAK FLOW (cms)=	0.25	0.09	0.343 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	46.81	24.18	37.08
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.51	0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```

-----
| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 7625): 26.64  2.535  2.75  39.64
+ ID2= 2 ( 7631): 19.52  1.990  2.75  41.67
=====
ID = 3 ( 0579): 46.16  4.524  2.75  40.50

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579): 46.16  4.524  2.75  40.50
+ ID2= 2 ( 7636):  3.65  0.343  2.75  37.08
=====
ID = 1 ( 0579): 49.81  4.867  2.75  40.25

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579): 49.81  4.867  2.75  40.25
+ ID2= 2 ( 7671): 24.09  0.157  4.25  10.44
=====
ID = 3 ( 0579): 73.90  4.929  2.75  30.53

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579): 73.90  4.929  2.75  30.53
+ ID2= 2 ( 7689): 42.12  3.836  2.75  38.74
=====
ID = 1 ( 0579): 116.02  8.765  2.75  33.51

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579): 116.02  8.765  2.75  33.51
+ ID2= 2 ( 7690): 21.92  1.940  2.75  37.08
=====
ID = 3 ( 0579): 137.94  10.705  2.75  34.08

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| ADD HYD ( 0579) |

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	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	137.94	10.705	2.75	34.08
+ ID2= 2 (7693):	35.80	3.115	2.75	37.08
=====				
ID = 1 (0579):	173.74	13.820	2.75	34.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.3 10yr-6hr **

CALIB	Area (ha)=	Curve Number (CN)=
NASHYD (7671)	24.09	72.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 0.86	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.217 (i)
 TIME TO PEAK (hrs)= 4.250
 RUNOFF VOLUME (mm)= 14.414
 TOTAL RAINFALL (mm)= 55.690
 RUNOFF COEFFICIENT = 0.259

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)=	Dir. Conn.(%)=
STANDHYD (7693)	35.80	57.00
ID= 1 DT= 5.0 min	Total Imp(%)= 71.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11

1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 52.25
over (min) 10.00 20.00
Storage Coeff. (min)= 8.65 (ii) 17.80 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 2.82 1.03 *TOTALS* 3.753 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 54.69 30.39 44.24
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.55 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 52.25
over (min) 5.00 20.00
Storage Coeff. (min)= 7.46 (ii) 16.61 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.06

PEAK FLOW (cms)= 1.76 0.64 *TOTALS* 2.346 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 54.69 30.39 44.24
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.55 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max. Eff. Inten. (mm/hr)= 51.24 60.91
over (min) 10.00 20.00
Storage Coeff. (min)= 9.08 (ii) 17.68 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

				TOTALS
PEAK FLOW	(cms)=	3.48	1.24	4.612 (iii)
TIME TO PEAK	(hrs)=	2.75	2.92	2.75
RUNOFF VOLUME	(mm)=	54.69	33.19	46.09
TOTAL RAINFALL	(mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT	=	0.98	0.60	0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min

Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11

0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 65.06
over (min) 10.00 20.00
Storage Coeff. (min)= 7.91 (ii) 16.29 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 2.26 0.83 3.039 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 54.69 35.21 47.09
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.63 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min
Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)= 51.24 75.61
over (min) 5.00 20.00
Storage Coeff. (min)= 7.21 (ii) 15.10 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

TOTALS

PEAK FLOW (cms)= 1.76 0.66 2.383 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 54.69 39.78 49.32
TOTAL RAINFALL (mm)= 55.69 55.69 55.69
RUNOFF COEFFICIENT = 0.98 0.71 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7636) ID= 1 DT= 5.0 min	Area (ha)= 3.65 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	52.25
over (min)	5.00	15.00
Storage Coeff. (min)=	4.36 (ii)	13.51 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.23	0.08

			TOTALS
PEAK FLOW (cms)=	0.30	0.12	0.411 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	54.69	30.39	44.24
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.55	0.79

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7625):	26.64	3.039	2.75	47.09
+ ID2= 2 (7631):	19.52	2.383	2.75	49.32
=====				
ID = 3 (0579):	46.16	5.421	2.75	48.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1				

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	5.421	2.75	48.04
+ ID2= 2 (7636):	3.65	0.411	2.75	44.24
=====				
ID = 1 (0579):	49.81	5.833	2.75	47.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	49.81	5.833	2.75	47.76
+ ID2= 2 (7671):	24.09	0.217	4.25	14.41
=====				
ID = 3 (0579):	73.90	5.925	2.75	36.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	73.90	5.925	2.75	36.89
+ ID2= 2 (7689):	42.12	4.612	2.75	46.09
=====				
ID = 1 (0579):	116.02	10.536	2.75	40.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	116.02	10.536	2.75	40.23
+ ID2= 2 (7690):	21.92	2.346	2.75	44.24
=====				
ID = 3 (0579):	137.94	12.883	2.75	40.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	137.94	12.883	2.75	40.87
+ ID2= 2 (7693):	35.80	3.753	2.75	44.24
=====				
ID = 1 (0579):	173.74	16.636	2.75	41.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25yr-6hr **

CALIB				
NASHYD (7671)				
ID= 1 DT= 5.0 min				
Area	(ha)=	24.09	Curve Number	(CN)= 72.0
Ia	(mm)=	10.00	# of Linear Res.	(N)= 1.50
U.H. Tp	(hrs)=	0.86		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31

1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.302 (i)
 TIME TO PEAK (hrs)= 4.167
 RUNOFF VOLUME (mm)= 19.969
 TOTAL RAINFALL (mm)= 65.590
 RUNOFF COEFFICIENT = 0.304

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7693) ID= 1 DT= 5.0 min	Area (ha)= 35.80 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	65.58
over (min)	10.00	20.00
Storage Coeff. (min)=	8.10 (ii)	16.45 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.13	0.06

		TOTALS
PEAK FLOW (cms)=	3.34	1.34
TIME TO PEAK (hrs)=	2.75	2.92
RUNOFF VOLUME (mm)=	64.59	38.55
TOTAL RAINFALL (mm)=	65.59	65.59
RUNOFF COEFFICIENT =	0.98	0.59
		4.578 (iii)
		2.75
		53.39
		65.59
		0.81

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

CN* = 80.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00

Average Slope (%)= 1.00 2.00
 Length (m)= 382.27 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max. Eff. Inten. (mm/hr)= 60.35 65.58
 over (min) 5.00 20.00
 Storage Coeff. (min)= 6.99 (ii) 15.35 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.17 0.07

TOTALS

PEAK FLOW (cms)= 2.08 0.84 2.856 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 64.59 38.55 53.39
 TOTAL RAINFALL (mm)= 65.59 65.59 65.59
 RUNOFF COEFFICIENT = 0.98 0.59 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689) ID= 1 DT= 5.0 min	Area (ha)= 42.12 Total Imp(%)= 75.00	Dir. Conn.(%)= 60.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31

1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	75.70		
over (min)	10.00	20.00		
Storage Coeff. (min)=	8.50 (ii)	16.39 (ii)		
Unit Hyd. Tpeak (min)=	10.00	20.00		
Unit Hyd. peak (cms)=	0.12	0.06		
				TOTALS
PEAK FLOW (cms)=	4.12	1.59	5.608 (iii)	
TIME TO PEAK (hrs)=	2.75	2.83	2.75	
RUNOFF VOLUME (mm)=	64.59	41.74	55.45	
TOTAL RAINFALL (mm)=	65.59	65.59	65.59	
RUNOFF COEFFICIENT =	0.98	0.64	0.85	

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (7625)	Area (ha)=	26.64		
ID= 1 DT= 5.0 min	Total Imp(%)=	76.00	Dir. Conn.(%)=	61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	421.43	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	80.28		
over (min)	5.00	20.00		
Storage Coeff. (min)=	7.41 (ii)	15.12 (ii)		
Unit Hyd. Tpeak (min)=	5.00	20.00		
Unit Hyd. peak (cms)=	0.17	0.07		
				TOTALS
PEAK FLOW (cms)=	2.69	1.07	3.701 (iii)	
TIME TO PEAK (hrs)=	2.75	2.83	2.75	
RUNOFF VOLUME (mm)=	64.59	44.00	56.56	
TOTAL RAINFALL (mm)=	65.59	65.59	65.59	
RUNOFF COEFFICIENT =	0.98	0.67	0.86	

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

STANDHYD (7631) | Area (ha)= 19.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max. Eff. Inten. (mm/hr)=	60.35	91.87
over (min)	5.00	15.00
Storage Coeff. (min)=	6.75 (ii)	14.05 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.18	0.08

TOTALS
 PEAK FLOW (cms)= 2.08 0.84 2.920 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 64.59 49.04 58.99
 TOTAL RAINFALL (mm)= 65.59 65.59 65.59
 RUNOFF COEFFICIENT = 0.98 0.75 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636) | Area (ha)= 3.65
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31

0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)= 60.35 65.58
over (min) 5.00 15.00
Storage Coeff. (min)= 4.08 (ii) 12.44 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.24 0.08

PEAK FLOW (cms)= 0.35 0.15 0.500 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 64.59 38.55 53.39
TOTAL RAINFALL (mm)= 65.59 65.59 65.59
RUNOFF COEFFICIENT = 0.98 0.59 0.81

TOTALS

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7625):	26.64	3.701	2.75	56.56
+ ID2= 2 (7631):	19.52	2.920	2.75	58.99
=====				
ID = 3 (0579):	46.16	6.620	2.75	57.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	46.16	6.620	2.75	57.59
+ ID2= 2 (7636):	3.65	0.500	2.75	53.39
=====				
ID = 1 (0579):	49.81	7.120	2.75	57.28

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	49.81	7.120	2.75	57.28
+ ID2= 2 (7671):	24.09	0.302	4.17	19.97
=====				
ID = 3 (0579):	73.90	7.256	2.75	45.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	73.90	7.256	2.75	45.12
+ ID2= 2 (7689):	42.12	5.608	2.75	55.45
=====				
ID = 1 (0579):	116.02	12.864	2.75	48.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)


```

ID1= 1 ( 0579): 116.02 12.864 2.75 48.87
+ ID2= 2 ( 7690): 21.92 2.856 2.75 53.39
=====
ID = 3 ( 0579): 137.94 15.720 2.75 49.59

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579): 137.94 15.720 2.75 49.59
+ ID2= 2 ( 7693): 35.80 4.578 2.75 53.39
=====
ID = 1 ( 0579): 173.74 20.298 2.75 50.37

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.5 50yr-6hr **

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-----
| CALIB |
| NASHYD ( 7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
-----
| U.H. Tp(hrs)= 0.86 |

```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 0.478

```

PEAK FLOW (cms)= 0.370 (i)
TIME TO PEAK (hrs)= 4.167
RUNOFF VOLUME (mm)= 24.472
TOTAL RAINFALL (mm)= 73.000
RUNOFF COEFFICIENT = 0.335

```

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-----
| CALIB |
| STANDHYD ( 7693) | Area (ha)= 35.80
| ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00
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          IMPERVIOUS      PERVIOUS (i)
Surface Area (ha)= 25.42 10.38
Dep. Storage (mm)= 1.00 2.00
Average Slope (%)= 1.00 2.00
Length (m)= 488.54 40.00
Mannings n = 0.013 0.250

```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46

0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 75.74
over (min) 10.00 20.00
Storage Coeff. (min)= 7.76 (ii) 15.65 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.07

TOTALS
PEAK FLOW (cms)= 3.73 1.58 5.208 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 72.00 44.85 60.32
TOTAL RAINFALL (mm)= 73.00 73.00 73.00
RUNOFF COEFFICIENT = 0.99 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min
Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 75.74
over (min) 5.00 15.00
Storage Coeff. (min)= 6.70 (ii) 14.58 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

TOTALS
PEAK FLOW (cms)= 2.31 1.03 3.319 (iii)

TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 72.00 44.85 60.32
 TOTAL RAINFALL (mm)= 73.00 73.00 73.00
 RUNOFF COEFFICIENT = 0.99 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7689)
 ID= 1 DT= 5.0 min

Area (ha)= 42.12
 Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)=	67.16	86.88	
over (min)	10.00	20.00	
Storage Coeff. (min)=	8.15 (ii)	15.61 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.13	0.07	
			TOTALS
PEAK FLOW (cms)=	4.60	1.88	6.366 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	72.00	48.29	62.52
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.66	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7625)
 ID= 1 DT= 5.0 min

Area (ha)= 26.64
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 91.74
over (min) 5.00 15.00
Storage Coeff. (min)= 7.10 (ii) 14.41 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

PEAK FLOW (cms)= 3.00 1.29 *TOTALS* 4.274 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 72.00 50.73 63.70
TOTAL RAINFALL (mm)= 73.00 73.00 73.00
RUNOFF COEFFICIENT = 0.99 0.69 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min

Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)= 67.16 104.02

Storage Coeff. over (min)=	5.00	15.00	
Unit Hyd. Tpeak (min)=	6.47 (ii)	13.42 (ii)	
Unit Hyd. peak (cms)=	5.00	15.00	
	0.18	0.08	
			TOTALS
PEAK FLOW (cms)=	2.32	0.97	3.290 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	72.00	56.06	66.26
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.77	0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7636) ID= 1 DT= 5.0 min	Area (ha)= 3.65	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	-----------------	---------------------	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Max.Eff.Inten.(mm/hr)=	67.16	75.74	
Storage Coeff. over (min)=	5.00	15.00	
Unit Hyd. Tpeak (min)=	3.91 (ii)	11.80 (ii)	
Unit Hyd. peak (cms)=	5.00	15.00	
	0.25	0.09	
			TOTALS
PEAK FLOW (cms)=	0.39	0.18	0.567 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	72.00	44.85	60.32
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.61	0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7625):	26.64	4.274	2.75	63.70

```

+ ID2= 2 ( 7631):   19.52   3.290   2.75   66.26
=====
ID = 3 ( 0579):   46.16   7.564   2.75   64.79

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579):   46.16   7.564   2.75   64.79
+ ID2= 2 ( 7636):    3.65   0.567   2.75   60.32
=====
ID = 1 ( 0579):   49.81   8.131   2.75   64.46

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579):   49.81   8.131   2.75   64.46
+ ID2= 2 ( 7671):   24.09   0.370   4.17   24.47
=====
ID = 3 ( 0579):   73.90   8.304   2.75   51.42

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579):   73.90   8.304   2.75   51.42
+ ID2= 2 ( 7689):   42.12   6.366   2.75   62.52
=====
ID = 1 ( 0579):  116.02  14.670   2.75   55.45

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579):  116.02  14.670   2.75   55.45
+ ID2= 2 ( 7690):   21.92   3.319   2.75   60.32
=====
ID = 3 ( 0579):  137.94  17.989   2.75   56.23

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579):  137.94  17.989   2.75   56.23
+ ID2= 2 ( 7693):   35.80   5.208   2.75   60.32
=====
ID = 1 ( 0579):  173.74  23.197   2.75   57.07

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.6 100yr-6hr **

```

| CALIB |
| NASHYD ( 7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
|-----| U.H. Tp(hrs)= 0.86

```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

```

----- TRANSFORMED HYETOGRAPH -----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
0.083 0.00 | 1.667 9.64 | 3.250 20.88 | 4.83 1.61
0.167 0.00 | 1.750 9.64 | 3.333 11.24 | 4.92 1.61
0.250 0.00 | 1.833 27.30 | 3.417 11.24 | 5.00 1.61

```

0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.442 (i)
 TIME TO PEAK (hrs)= 4.083
 RUNOFF VOLUME (mm)= 29.163
 TOTAL RAINFALL (mm)= 80.310
 RUNOFF COEFFICIENT = 0.363

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min
 Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 85.88
 over (min) 5.00 15.00
 Storage Coeff. (min)= 7.47 (ii) 14.97 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.17 0.08

PEAK FLOW (cms)= 4.14 1.91 6.002 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 79.31 51.19 67.22
 TOTAL RAINFALL (mm)= 80.31 80.31 80.31
 RUNOFF COEFFICIENT = 0.99 0.64 0.84

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.56	6.36
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	382.27	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max. Eff. Inten. (mm/hr)=	73.88	85.88
over (min)	5.00	15.00
Storage Coeff. (min)=	6.45 (ii)	13.95 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.18	0.08

TOTALS

PEAK FLOW (cms)=	2.55	1.19	3.716 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	79.31	51.19	67.22
TOTAL RAINFALL (mm)=	80.31	80.31	80.31
RUNOFF COEFFICIENT =	0.99	0.64	0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61

0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 97.98
over (min) 10.00 15.00
Storage Coeff. (min)= 7.84 (ii) 14.96 (ii)
Unit Hyd. Tpeak (min)= 10.00 15.00
Unit Hyd. peak (cms)= 0.13 0.08

TOTALS

PEAK FLOW (cms)= 5.08 2.24 7.273 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 79.31 54.87 69.54
TOTAL RAINFALL (mm)= 80.31 80.31 80.31
RUNOFF COEFFICIENT = 0.99 0.68 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min | Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 103.07
over (min) 5.00 15.00
Storage Coeff. (min)= 6.84 (ii) 13.81 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

TOTALS

PEAK FLOW (cms)= 3.31 1.47 4.768 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 79.31 57.45 70.78
TOTAL RAINFALL (mm)= 80.31 80.31 80.31
RUNOFF COEFFICIENT = 0.99 0.72 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7631) ID= 1 DT= 5.0 min	Area (ha)= 19.52 Total Imp(%)= 79.00	Dir. Conn.(%)= 64.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)=	73.88	115.99
over (min)	5.00	15.00
Storage Coeff. (min)=	6.23 (ii)	12.88 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

PEAK FLOW (cms)=	2.55	1.11	3.657 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	79.31	63.05	73.46
TOTAL RAINFALL (mm)=	80.31	80.31	80.31
RUNOFF COEFFICIENT =	0.99	0.79	0.91

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7636) ID= 1 DT= 5.0 min	Area (ha)= 3.65 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

0.083	0.00	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Max.Eff.Inten.(mm/hr)= 73.88 85.88
over (min) 5.00 15.00
Storage Coeff. (min)= 3.77 (ii) 11.27 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.25 0.09

TOTALS
PEAK FLOW (cms)= 0.43 0.21 0.634 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 79.31 51.19 67.22
TOTAL RAINFALL (mm)= 80.31 80.31 80.31
RUNOFF COEFFICIENT = 0.99 0.64 0.84

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	4.768	2.75	70.78
+ ID2= 2 (7631):	19.52	3.657	2.75	73.46
=====				
ID = 3 (0579):	46.16	8.425	2.75	71.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	8.425	2.75	71.91
+ ID2= 2 (7636):	3.65	0.634	2.75	67.22
=====				
ID = 1 (0579):	49.81	9.059	2.75	71.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	9.059	2.75	71.57
+ ID2= 2 (7671):	24.09	0.442	4.08	29.16
=====				
ID = 3 (0579):	73.90	9.272	2.75	57.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	73.90	9.272	2.75	57.75
+ ID2= 2 (7689):	42.12	7.273	2.75	69.54

=====
 ID = 1 (0579): 116.02 16.545 2.75 62.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | ADD HYD (0579) |
1 + 2 = 3
 AREA QPEAK TPEAK R.V.
 (ha) (cms) (hrs) (mm)
 ID1= 1 (0579): 116.02 16.545 2.75 62.03
 + ID2= 2 (7690): 21.92 3.716 2.75 67.22
 =====
 ID = 3 (0579): 137.94 20.261 2.75 62.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | ADD HYD (0579) |
3 + 2 = 1
 AREA QPEAK TPEAK R.V.
 (ha) (cms) (hrs) (mm)
 ID1= 3 (0579): 137.94 20.261 2.75 62.85
 + ID2= 2 (7693): 35.80 6.002 2.75 67.22
 =====
 ID = 1 (0579): 173.74 26.263 2.75 63.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.1 2yr-12hr **

 | CALIB |
 | NASHYD (7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
 | ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 | U.H. Tp(hrs)= 0.86

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24

3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.089 (i)
 TIME TO PEAK (hrs)= 11.667
 RUNOFF VOLUME (mm)= 10.095
 TOTAL RAINFALL (mm)= 47.080
 RUNOFF COEFFICIENT = 0.214

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24

1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 10.52
over (min) 15.00 35.00
Storage Coeff. (min)= 16.11 (ii) 33.48 (ii)
Unit Hyd. Tpeak (min)= 15.00 35.00
Unit Hyd. peak (cms)= 0.07 0.03

TOTALS
PEAK FLOW (cms)= 0.61 0.26 0.871 (iii)
TIME TO PEAK (hrs)= 10.25 10.33 10.25
RUNOFF VOLUME (mm)= 46.08 23.62 36.42
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.50 0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min
Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
Surface Area (ha)= 15.56 6.36
Dep. Storage (mm)= 1.00 2.00
Average Slope (%)= 1.00 2.00
Length (m)= 382.27 40.00
Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 10.52
over (min) 15.00 35.00
Storage Coeff. (min)= 13.91 (ii) 31.28 (ii)

Unit Hyd. Tpeak (min)=	15.00	35.00	
Unit Hyd. peak (cms)=	0.08	0.03	
			TOTALS
PEAK FLOW (cms)=	0.38	0.16	0.535 (iii)
TIME TO PEAK (hrs)=	10.25	10.33	10.25
RUNOFF VOLUME (mm)=	46.08	23.62	36.42
TOTAL RAINFALL (mm)=	47.08	47.08	47.08
RUNOFF COEFFICIENT =	0.98	0.50	0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689) ID= 1 DT= 5.0 min	Area (ha)= 42.12	Total Imp(%)= 75.00	Dir. Conn.(%)= 60.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24

4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 12.35
over (min) 15.00 35.00
Storage Coeff. (min)= 16.92 (ii) 33.21 (ii)
Unit Hyd. Tpeak (min)= 15.00 35.00
Unit Hyd. peak (cms)= 0.07 0.03

PEAK FLOW (cms)= 0.76 0.32 *TOTALS* 1.071 (iii)
TIME TO PEAK (hrs)= 10.25 10.33 10.25
RUNOFF VOLUME (mm)= 46.08 26.03 38.06
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.55 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min
Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24

1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 13.26
over (min) 15.00 35.00
Storage Coeff. (min)= 14.75 (ii) 30.58 (ii)
Unit Hyd. Tpeak (min)= 15.00 35.00
Unit Hyd. peak (cms)= 0.08 0.04

TOTALS
PEAK FLOW (cms)= 0.49 0.21 0.697 (iii)
TIME TO PEAK (hrs)= 10.25 10.33 10.25
RUNOFF VOLUME (mm)= 46.08 27.80 38.95
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.59 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min
Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

IMPERVIOUS PERVIOUS (i)
Surface Area (ha)= 15.42 4.10
Dep. Storage (mm)= 1.00 2.00
Average Slope (%)= 1.00 2.00
Length (m)= 360.74 40.00
Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24
4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 15.63
over (min) 15.00 30.00
Storage Coeff. (min)= 13.43 (ii) 28.26 (ii)

Unit Hyd. Tpeak (min)=	15.00	30.00	
Unit Hyd. peak (cms)=	0.08	0.04	
			TOTALS
PEAK FLOW (cms)=	0.38	0.16	0.540 (iii)
TIME TO PEAK (hrs)=	10.25	10.25	10.25
RUNOFF VOLUME (mm)=	46.08	31.88	40.97
TOTAL RAINFALL (mm)=	47.08	47.08	47.08
RUNOFF COEFFICIENT =	0.98	0.68	0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7636) ID= 1 DT= 5.0 min	Area (ha)= 3.65	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.41	12.250	3.06	18.33	0.24
0.167	0.00	6.250	1.41	12.333	1.65	18.42	0.24
0.250	0.00	6.333	4.00	12.417	1.65	18.50	0.24
0.333	0.24	6.417	4.00	12.500	1.65	18.58	0.24
0.417	0.24	6.500	4.00	12.583	1.65	18.67	0.24
0.500	0.24	6.583	4.00	12.667	1.65	18.75	0.24
0.583	0.24	6.667	4.00	12.750	1.65	18.83	0.24
0.667	0.24	6.750	4.00	12.833	1.65	18.92	0.24
0.750	0.24	6.833	4.00	12.917	1.65	19.00	0.24
0.833	0.24	6.917	4.00	13.000	1.65	19.08	0.24
0.917	0.24	7.000	4.00	13.083	1.65	19.17	0.24
1.000	0.24	7.083	4.00	13.167	1.65	19.25	0.24
1.083	0.24	7.167	4.00	13.250	1.65	19.33	0.24
1.167	0.24	7.250	4.00	13.333	1.65	19.42	0.24
1.250	0.24	7.333	4.00	13.417	1.65	19.50	0.24
1.333	0.24	7.417	4.00	13.500	1.65	19.58	0.24
1.417	0.24	7.500	4.00	13.583	1.65	19.67	0.24
1.500	0.24	7.583	4.00	13.667	1.65	19.75	0.24
1.583	0.24	7.667	4.00	13.750	1.65	19.83	0.24
1.667	0.24	7.750	4.00	13.833	1.65	19.92	0.24
1.750	0.24	7.833	4.00	13.917	1.65	20.00	0.24
1.833	0.24	7.917	4.00	14.000	1.65	20.08	0.24
1.917	0.24	8.000	4.00	14.083	1.65	20.17	0.24
2.000	0.24	8.083	4.00	14.167	1.65	20.25	0.24
2.083	0.24	8.167	4.00	14.250	1.65	20.33	0.24
2.167	0.24	8.250	4.00	14.333	0.94	20.42	0.24
2.250	0.24	8.333	10.81	14.417	0.94	20.50	0.24
2.333	0.24	8.417	10.81	14.500	0.94	20.58	0.24
2.417	0.24	8.500	10.81	14.583	0.94	20.67	0.24
2.500	0.24	8.583	10.81	14.667	0.94	20.75	0.24
2.583	0.24	8.667	10.81	14.750	0.94	20.83	0.24
2.667	0.24	8.750	10.81	14.833	0.94	20.92	0.24
2.750	0.24	8.833	10.81	14.917	0.94	21.00	0.24
2.833	0.24	8.917	10.81	15.000	0.94	21.08	0.24
2.917	0.24	9.000	10.81	15.083	0.94	21.17	0.24
3.000	0.24	9.083	10.81	15.167	0.94	21.25	0.24
3.083	0.24	9.167	10.81	15.250	0.94	21.33	0.24
3.167	0.24	9.250	10.81	15.333	0.94	21.42	0.24
3.250	0.24	9.333	10.81	15.417	0.94	21.50	0.24
3.333	0.24	9.417	10.81	15.500	0.94	21.58	0.24
3.417	0.24	9.500	10.81	15.583	0.94	21.67	0.24
3.500	0.24	9.583	10.81	15.667	0.94	21.75	0.24
3.583	0.24	9.667	10.81	15.750	0.94	21.83	0.24
3.667	0.24	9.750	10.81	15.833	0.94	21.92	0.24
3.750	0.24	9.833	10.81	15.917	0.94	22.00	0.24
3.833	0.24	9.917	10.81	16.000	0.94	22.08	0.24
3.917	0.24	10.000	10.81	16.083	0.94	22.17	0.24
4.000	0.24	10.083	10.81	16.167	0.94	22.25	0.24
4.083	0.24	10.167	10.81	16.250	0.94	22.33	0.24

4.167	0.24	10.250	10.81	16.333	0.47	22.42	0.24
4.250	0.24	10.333	3.06	16.417	0.47	22.50	0.24
4.333	1.41	10.417	3.06	16.500	0.47	22.58	0.24
4.417	1.41	10.500	3.06	16.583	0.47	22.67	0.24
4.500	1.41	10.583	3.06	16.667	0.47	22.75	0.24
4.583	1.41	10.667	3.06	16.750	0.47	22.83	0.24
4.667	1.41	10.750	3.06	16.833	0.47	22.92	0.24
4.750	1.41	10.833	3.06	16.917	0.47	23.00	0.24
4.833	1.41	10.917	3.06	17.000	0.47	23.08	0.24
4.917	1.41	11.000	3.06	17.083	0.47	23.17	0.24
5.000	1.41	11.083	3.06	17.167	0.47	23.25	0.24
5.083	1.41	11.167	3.06	17.250	0.47	23.33	0.24
5.167	1.41	11.250	3.06	17.333	0.47	23.42	0.24
5.250	1.41	11.333	3.06	17.417	0.47	23.50	0.24
5.333	1.41	11.417	3.06	17.500	0.47	23.58	0.24
5.417	1.41	11.500	3.06	17.583	0.47	23.67	0.24
5.500	1.41	11.583	3.06	17.667	0.47	23.75	0.24
5.583	1.41	11.667	3.06	17.750	0.47	23.83	0.24
5.667	1.41	11.750	3.06	17.833	0.47	23.92	0.24
5.750	1.41	11.833	3.06	17.917	0.47	24.00	0.24
5.833	1.41	11.917	3.06	18.000	0.47	24.08	0.24
5.917	1.41	12.000	3.06	18.083	0.47	24.17	0.24
6.000	1.41	12.083	3.06	18.167	0.47	24.25	0.24
6.083	1.41	12.167	3.06	18.250	0.47		

Max.Eff.Inten.(mm/hr)= 10.81 10.52
over (min) 10.00 30.00
Storage Coeff. (min)= 8.12 (ii) 25.49 (ii)
Unit Hyd. Tpeak (min)= 10.00 30.00
Unit Hyd. peak (cms)= 0.13 0.04

PEAK FLOW (cms)= 0.06 0.03 *TOTALS* 0.090 (iii)
TIME TO PEAK (hrs)= 10.00 10.33 10.25
RUNOFF VOLUME (mm)= 46.08 23.62 36.42
TOTAL RAINFALL (mm)= 47.08 47.08 47.08
RUNOFF COEFFICIENT = 0.98 0.50 0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	0.697	10.25	38.95
+ ID2= 2 (7631):	19.52	0.540	10.25	40.97
=====				
ID = 3 (0579):	46.16	1.236	10.25	39.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	1.236	10.25	39.80
+ ID2= 2 (7636):	3.65	0.090	10.25	36.42
=====				
ID = 1 (0579):	49.81	1.327	10.25	39.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	1.327	10.25	39.55
+ ID2= 2 (7671):	24.09	0.089	11.67	10.09
=====				
ID = 3 (0579):	73.90	1.401	10.25	29.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0579) |

3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	1.401	10.25	29.95
+ ID2= 2 (7689):		42.12	1.071	10.25	38.06
=====					
ID = 1 (0579):		116.02	2.472	10.25	32.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	2.472	10.25	32.90
+ ID2= 2 (7690):		21.92	0.535	10.25	36.42
=====					
ID = 3 (0579):		137.94	3.007	10.25	33.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	3.007	10.25	33.46
+ ID2= 2 (7693):		35.80	0.871	10.25	36.42
=====					
ID = 1 (0579):		173.74	3.878	10.25	34.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.2 5yr-12hr **

CALIB	Area (ha)=	24.09	Curve Number (CN)=	72.0
NASHYD (7671)	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)=	0.86		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54

3.083 3.26 | 6.167 7.07 | 9.250 1.09 |

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.165 (i)
 TIME TO PEAK (hrs)= 6.750
 RUNOFF VOLUME (mm)= 13.724
 TOTAL RAINFALL (mm)= 54.380
 RUNOFF COEFFICIENT = 0.252

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max. Eff. Inten. (mm/hr)= 25.02 25.59
 over (min) 10.00 25.00
 Storage Coeff. (min)= 11.52 (ii) 23.69 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.10 0.05

PEAK FLOW (cms)= 1.41 0.59 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.33 1.984 (iii)
 RUNOFF VOLUME (mm)= 53.38 29.34 43.04
 TOTAL RAINFALL (mm)= 54.38 54.38 54.38
 RUNOFF COEFFICIENT = 0.98 0.54 0.79

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)

- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max. Eff. Inten. (mm/hr)=	25.02	25.59
over (min)	10.00	25.00
Storage Coeff. (min)=	9.94 (ii)	22.12 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.11	0.05

PEAK FLOW (cms)=	0.87	0.37	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.33	1.224 (iii)
RUNOFF VOLUME (mm)=	53.38	29.34	5.25
TOTAL RAINFALL (mm)=	54.38	54.38	43.04
RUNOFF COEFFICIENT =	0.98	0.54	54.38
			0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689)	Area (ha)= 42.12
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ID= 1 DT= 5.0 min | Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max. Eff. Inten. (mm/hr)=	25.02	29.82
over (min)	10.00	25.00
Storage Coeff. (min)=	12.09 (ii)	23.54 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.10	0.05

			TOTALS
PEAK FLOW (cms)=	1.75	0.71	2.438 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	53.38	32.09	44.86
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.59	0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min | Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max. Eff. Inten. (mm/hr) = 25.02 31.84
 over (min) = 10.00 25.00
 Storage Coeff. (min) = 10.54 (ii) 21.70 (ii)
 Unit Hyd. Tpeak (min) = 10.00 25.00
 Unit Hyd. peak (cms) = 0.11 0.05

PEAK FLOW (cms) = 1.13 0.47 *TOTALS*
 TIME TO PEAK (hrs) = 5.25 5.33 1.591 (iii)
 RUNOFF VOLUME (mm) = 53.38 34.07 45.85
 TOTAL RAINFALL (mm) = 54.38 54.38 54.38
 RUNOFF COEFFICIENT = 0.98 0.63 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7631)
 ID= 1 DT= 5.0 min
 Area (ha) = 19.52
 Total Imp(%) = 79.00 Dir. Conn.(%) = 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha) =	15.42	4.10
Dep. Storage (mm) =	1.00	2.00
Average Slope (%) =	1.00	2.00
Length (m) =	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54

0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 36.98
over (min) 10.00 25.00
Storage Coeff. (min)= 9.60 (ii) 20.11 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 0.87 0.37 *TOTALS* 1.230 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 53.38 38.57 48.05
TOTAL RAINFALL (mm)= 54.38 54.38 54.38
RUNOFF COEFFICIENT = 0.98 0.71 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7636)
ID= 1 DT= 5.0 min
Area (ha)= 3.65
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54

0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)= 25.02 25.59
over (min) 5.00 20.00
Storage Coeff. (min)= 5.81 (ii) 17.98 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.20 0.06

PEAK FLOW (cms)= 0.14 0.06 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.33 0.209 (iii)
RUNOFF VOLUME (mm)= 53.38 29.34 43.04
TOTAL RAINFALL (mm)= 54.38 54.38 54.38
RUNOFF COEFFICIENT = 0.98 0.54 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	1.591	5.25	45.85
+ ID2= 2 (7631):	19.52	1.230	5.25	48.05
=====				
ID = 3 (0579):	46.16	2.821	5.25	46.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	2.821	5.25	46.78
+ ID2= 2 (7636):	3.65	0.209	5.25	43.04
=====				
ID = 1 (0579):	49.81	3.030	5.25	46.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	3.030	5.25	46.50
+ ID2= 2 (7671):	24.09	0.165	6.75	13.72
=====				
ID = 3 (0579):	73.90	3.131	5.25	35.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	3.131	5.25	35.82
+ ID2= 2 (7689):		42.12	2.438	5.25	44.86
=====					
ID = 1 (0579):		116.02	5.568	5.25	39.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	5.568	5.25	39.10
+ ID2= 2 (7690):		21.92	1.224	5.25	43.04
=====					
ID = 3 (0579):		137.94	6.792	5.25	39.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	6.792	5.25	39.73
+ ID2= 2 (7693):		35.80	1.984	5.25	43.04
=====					
ID = 1 (0579):		173.74	8.777	5.25	40.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.3 10yr-12hr **

CALIB	Area (ha)=	24.09	Curve Number (CN)=	72.0
NASHYD (7671)	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)=	0.86		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63

2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.222 (i)
 TIME TO PEAK (hrs)= 6.583
 RUNOFF VOLUME (mm)= 18.294
 TOTAL RAINFALL (mm)= 62.710
 RUNOFF COEFFICIENT = 0.292

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min
 Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max. Eff. Inten. (mm/hr)= 28.84 31.19
 over (min) 10.00 25.00
 Storage Coeff. (min)= 10.88 (ii) 22.13 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
 PEAK FLOW (cms)= 1.63 0.74 2.351 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 61.71 36.14 50.71
 TOTAL RAINFALL (mm)= 62.71 62.71 62.71
 RUNOFF COEFFICIENT = 0.98 0.58 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	31.19
over (min)	10.00	25.00
Storage Coeff. (min)=	9.39 (ii)	20.64 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.12	0.05

PEAK FLOW (cms)=	1.00	0.46	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.33	1.449 (iii)
RUNOFF VOLUME (mm)=	61.71	36.14	50.71
TOTAL RAINFALL (mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT =	0.98	0.58	0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 36.03
over (min) 10.00 25.00
Storage Coeff. (min)= 11.43 (ii) 22.04 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.10 0.05

PEAK FLOW (cms)= 2.02 0.88 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.33 2.878 (iii)
RUNOFF VOLUME (mm)= 61.71 39.22 52.71
TOTAL RAINFALL (mm)= 62.71 62.71 62.71
RUNOFF COEFFICIENT = 0.98 0.63 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min

Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39

Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 421.43 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max. Eff. Inten. (mm/hr)= 28.84 38.23
 over (min) 10.00 25.00
 Storage Coeff. (min)= 9.96 (ii) 20.33 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

TOTALS

PEAK FLOW (cms)=	1.30	0.58	1.873 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	61.71	41.42	53.80
TOTAL RAINFALL (mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT =	0.98	0.66	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7631)
 ID= 1 DT= 5.0 min

Area (ha)=	19.52
Total Imp(%)=	79.00
Dir. Conn.(%)=	64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max. Eff. Inten. (mm/hr) = 28.84 44.04
 over (min) = 10.00 20.00
 Storage Coeff. (min) = 9.07 (ii) 18.87 (ii)
 Unit Hyd. Tpeak (min) = 10.00 20.00
 Unit Hyd. peak (cms) = 0.12 0.06

PEAK FLOW (cms) = 1.00 0.45 *TOTALS* 1.449 (iii)
 TIME TO PEAK (hrs) = 5.25 5.25 5.25
 RUNOFF VOLUME (mm) = 61.71 46.33 56.17
 TOTAL RAINFALL (mm) = 62.71 62.71 62.71
 RUNOFF COEFFICIENT = 0.98 0.74 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min
 Area (ha) = 3.65
 Total Imp (%) = 71.00 Dir. Conn. (%) = 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha) =	2.59	1.06
Dep. Storage (mm) =	1.00	2.00
Average Slope (%) =	1.00	2.00
Length (m) =	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63

0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)= 28.84 31.19
over (min) 5.00 20.00
Storage Coeff. (min)= 5.49 (ii) 16.73 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.20 0.06

PEAK FLOW (cms)= 0.17 0.08 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 0.247 (iii)
RUNOFF VOLUME (mm)= 61.71 36.14 50.71
TOTAL RAINFALL (mm)= 62.71 62.71 62.71
RUNOFF COEFFICIENT = 0.98 0.58 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	1.873	5.25	53.80
+ ID2= 2 (7631):	19.52	1.449	5.25	56.17
=====				
ID = 3 (0579):	46.16	3.322	5.25	54.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	3.322	5.25	54.80
+ ID2= 2 (7636):	3.65	0.247	5.25	50.71
=====				
ID = 1 (0579):	49.81	3.569	5.25	54.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	3.569	5.25	54.50
+ ID2= 2 (7671):	24.09	0.222	6.58	18.29

=====
 ID = 3 (0579): 73.90 3.711 5.25 42.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

=====
 | ADD HYD (0579) |
3 + 2 = 1
 ID1= 3 (0579): AREA (ha) QPEAK (cms) TPEAK (hrs) R.V. (mm)
 + ID2= 2 (7689): 73.90 3.711 5.25 42.70
 42.12 2.878 5.25 52.71
 =====
 ID = 1 (0579): 116.02 6.588 5.25 46.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

=====
 | ADD HYD (0579) |
1 + 2 = 3
 ID1= 1 (0579): AREA (ha) QPEAK (cms) TPEAK (hrs) R.V. (mm)
 + ID2= 2 (7690): 116.02 6.588 5.25 46.33
 21.92 1.449 5.25 50.71
 =====
 ID = 3 (0579): 137.94 8.038 5.25 47.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

=====
 | ADD HYD (0579) |
3 + 2 = 1
 ID1= 3 (0579): AREA (ha) QPEAK (cms) TPEAK (hrs) R.V. (mm)
 + ID2= 2 (7693): 137.94 8.038 5.25 47.03
 35.80 2.351 5.25 50.71
 =====
 ID = 1 (0579): 173.74 10.388 5.25 47.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.4 25yr-12hr **

=====
 | CALIB |
 | NASHYD (7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
 | ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
 | U.H. Tp(hrs)= 0.86

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73

2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.301 (i)
 TIME TO PEAK (hrs)= 6.583
 RUNOFF VOLUME (mm)= 24.535
 TOTAL RAINFALL (mm)= 73.100
 RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max. Eff. Inten. (mm/hr)= 33.63 38.34
 over (min) 10.00 25.00
 Storage Coeff. (min)= 10.23 (ii) 20.59 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 1.90 0.93 *TOTALS* 2.818 (iii)

TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 72.10 44.93 60.42
 TOTAL RAINFALL (mm)= 73.10 73.10 73.10
 RUNOFF COEFFICIENT = 0.99 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7690)
 ID= 1 DT= 5.0 min | Area (ha)= 21.92
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.56	6.36
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	382.27	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max. Eff. Inten. (mm/hr)= 33.63 38.34
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.83 (ii) 19.19 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 1.17 0.59 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.33 1.752 (iii)
 RUNOFF VOLUME (mm)= 72.10 44.93 60.42
 TOTAL RAINFALL (mm)= 73.10 73.10 73.10
 RUNOFF COEFFICIENT = 0.99 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)

- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689) ID= 1 DT= 5.0 min	Area (ha)= 42.12 Total Imp(%)= 75.00	Dir. Conn.(%)= 60.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max. Eff. Inten. (mm/hr)=	33.63	44.24
over (min)	10.00	25.00
Storage Coeff. (min)=	10.74 (ii)	20.52 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.11	0.05

PEAK FLOW (cms)=	2.35	1.10	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.33	3.437 (iii)
RUNOFF VOLUME (mm)=	72.10	48.38	5.25
TOTAL RAINFALL (mm)=	73.10	73.10	62.61
RUNOFF COEFFICIENT =	0.99	0.66	73.10
			0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7625)	Area (ha)= 26.64
---------------------------	------------------

ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max. Eff. Inten. (mm/hr) over (min)	=	33.63	46.60
Storage Coeff. (min)	=	10.00	20.00
Unit Hyd. Tpeak (min)	=	9.36 (ii)	18.94 (ii)
Unit Hyd. peak (cms)	=	10.00	20.00
	=	0.12	0.06

PEAK FLOW (cms)	=	1.52	0.73	*TOTALS*	2.246 (iii)
TIME TO PEAK (hrs)	=	5.25	5.25		5.25
RUNOFF VOLUME (mm)	=	72.10	50.82		63.80
TOTAL RAINFALL (mm)	=	73.10	73.10		73.10
RUNOFF COEFFICIENT	=	0.99	0.70		0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min | Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max. Eff. Inten. (mm/hr)= 33.63 52.57
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.53 (ii) 17.66 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 1.17 0.55 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.25 1.714 (iii)
 RUNOFF VOLUME (mm)= 72.10 56.16 66.36
 TOTAL RAINFALL (mm)= 73.10 73.10 73.10
 RUNOFF COEFFICIENT = 0.99 0.77 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min
 Area (ha)= 3.65
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 2.59 1.06
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 155.99 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.39	6.250	9.50	9.33	0.73

0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)= 33.63 38.34
over (min) 5.00 20.00
Storage Coeff. (min)= 5.16 (ii) 15.51 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.21 0.07

PEAK FLOW (cms)= 0.19 0.10 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 0.296 (iii)
RUNOFF VOLUME (mm)= 72.10 44.93 60.42
TOTAL RAINFALL (mm)= 73.10 73.10 73.10
RUNOFF COEFFICIENT = 0.99 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	2.246	5.25	63.80
+ ID2= 2 (7631):	19.52	1.714	5.25	66.36
=====				
ID = 3 (0579):	46.16	3.960	5.25	64.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	3.960	5.25	64.88
+ ID2= 2 (7636):	3.65	0.296	5.25	60.42
=====				
ID = 1 (0579):	49.81	4.256	5.25	64.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0579) |

1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		49.81	4.256	5.25	64.56
+ ID2= 2 (7671):		24.09	0.301	6.58	24.53
=====					
ID = 3 (0579):		73.90	4.455	5.25	51.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579) 3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	4.455	5.25	51.51
+ ID2= 2 (7689):		42.12	3.437	5.25	62.61
=====					
ID = 1 (0579):		116.02	7.892	5.25	55.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579) 1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	7.892	5.25	55.54
+ ID2= 2 (7690):		21.92	1.752	5.25	60.42
=====					
ID = 3 (0579):		137.94	9.643	5.25	56.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579) 3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	9.643	5.25	56.32
+ ID2= 2 (7693):		35.80	2.818	5.25	60.42
=====					
ID = 1 (0579):		173.74	12.461	5.25	57.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.5 50yr-12hr **

CALIB		Area	Curve Number
NASHYD (7671)	(ha)=	24.09	(CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)=	0.86	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81

2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.363 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 29.499
 TOTAL RAINFALL (mm)= 80.820
 RUNOFF COEFFICIENT = 0.365

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max. Eff. Inten. (mm/hr)= 37.17 44.08
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.83 (ii) 19.63 (ii)

Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.11	0.06	
			TOTALS
PEAK FLOW (cms)=	2.10	1.09	3.196 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	79.82	51.64	67.70
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.64	0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56		6.36
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	382.27		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max. Eff. Inten. (mm/hr)=	37.17	44.08	
over (min)	10.00	20.00	
Storage Coeff. (min)=	8.49 (ii)	18.28 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	1.29	0.68	1.968 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	79.82	51.64	67.70
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.64	0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max. Eff. Inten. (mm/hr)=	37.17	50.11
over (min)	10.00	20.00
Storage Coeff. (min)=	10.32 (ii)	19.63 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.11	0.06

PEAK FLOW (cms)=	2.60	1.28	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	3.883 (iii)
RUNOFF VOLUME (mm)=	79.82	55.34	70.03
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.68	0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min

Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 52.59
over (min) 10.00 20.00
Storage Coeff. (min)= 9.00 (ii) 18.12 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 1.68 0.84 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 2.513 (iii)
RUNOFF VOLUME (mm)= 79.82 57.92 71.28
TOTAL RAINFALL (mm)= 80.82 80.82 80.82
RUNOFF COEFFICIENT = 0.99 0.72 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min

Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10

Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 360.74 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max. Eff. Inten. (mm/hr)= 37.17 58.87
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.20 (ii) 16.92 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
 PEAK FLOW (cms)= 1.29 0.62 1.910 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 79.82 63.54 73.96
 TOTAL RAINFALL (mm)= 80.82 80.82 80.82
 RUNOFF COEFFICIENT = 0.99 0.79 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min
 Area (ha)= 3.65
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 2.59 1.06
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 155.99 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)= 37.17 44.08
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.96 (ii) 14.75 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.22 0.08

PEAK FLOW (cms)= 0.21 0.12 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.25 0.334 (iii)
 RUNOFF VOLUME (mm)= 79.82 51.64 67.70
 TOTAL RAINFALL (mm)= 80.82 80.82 80.82
 RUNOFF COEFFICIENT = 0.99 0.64 0.84

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7625):	26.64	2.513	5.25	71.28
+ ID2= 2 (7631):	19.52	1.910	5.25	73.96
=====				
ID = 3 (0579):	46.16	4.422	5.25	72.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	46.16	4.422	5.25	72.41
+ ID2= 2 (7636):	3.65	0.334	5.25	67.70
=====				
ID = 1 (0579):	49.81	4.756	5.25	72.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0579):	49.81	4.756	5.25	72.07
+	ID2= 2 (7671):	24.09	0.363	6.50	29.50
ID = 3 (0579):		73.90	5.002	5.25	58.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0579):	73.90	5.002	5.25	58.19
+	ID2= 2 (7689):	42.12	3.883	5.25	70.03
ID = 1 (0579):		116.02	8.885	5.25	62.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0579):	116.02	8.885	5.25	62.49
+	ID2= 2 (7690):	21.92	1.968	5.25	67.70
ID = 3 (0579):		137.94	10.853	5.25	63.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0579):	137.94	10.853	5.25	63.32
+	ID2= 2 (7693):	35.80	3.196	5.25	67.70
ID = 1 (0579):		173.74	14.048	5.25	64.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.6 100yr-12hr **

CALIB		Area	(ha)=	Curve Number	(CN)=
NASHYD	(7671)	24.09		72.0	
ID= 1	DT= 5.0 min	Ia	(mm)= 10.00	# of Linear Res.(N)=	1.50
		U.H. Tp	(hrs)= 0.86		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89

1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.429 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 34.701
 TOTAL RAINFALL (mm)= 88.540
 RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min | Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89

3.083 5.31 | 6.167 11.51 | 9.250 1.77 |

Max.Eff.Inten.(mm/hr)= 40.71 49.48
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.48 (ii) 18.83 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 2.30 1.25 3.550 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 58.47 75.04
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7690)
 ID= 1 DT= 5.0 min

Area (ha)= 21.92
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.56	6.36
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	382.27	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)= 40.71 49.48
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.18 (ii) 17.53 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 1.41 0.77 2.185 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 58.47 75.04
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7689) | Area (ha)= 42.12
 ID= 1 DT= 5.0 min | Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)= 40.71 55.99
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.95 (ii) 18.85 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.11 0.06

TOTALS

PEAK FLOW (cms)= 2.85 1.45 4.303 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 62.38 77.48
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.70 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

- CN* = 82.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7625) ID= 1 DT= 5.0 min	Area (ha)= 26.64 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	58.57
over (min)	10.00	20.00
Storage Coeff. (min)=	8.68 (ii)	17.42 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

PEAK FLOW (cms)=	1.84	0.94	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	2.780 (iii)
RUNOFF VOLUME (mm)=	87.54	65.11	5.25
TOTAL RAINFALL (mm)=	88.54	88.54	78.79
RUNOFF COEFFICIENT =	0.99	0.74	88.54
			0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

STANDHYD (7631) | Area (ha)= 19.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	65.16
over (min)	10.00	20.00
Storage Coeff. (min)=	7.90 (ii)	16.28 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.13	0.06

TOTALS
 PEAK FLOW (cms)= 1.41 0.69 2.105 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 70.96 81.57
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.80 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636) | Area (ha)= 3.65
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)= 40.71 49.48
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.78 (ii) 14.13 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.22 0.08

TOTALS
 PEAK FLOW (cms)= 0.24 0.14 0.370 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 87.54 58.47 75.04
 TOTAL RAINFALL (mm)= 88.54 88.54 88.54
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	2.780	5.25	78.79
+ ID2= 2 (7631):	19.52	2.105	5.25	81.57
=====	=====	=====	=====	=====
ID = 3 (0579):	46.16	4.885	5.25	79.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)

ID1= 3 (0579):	46.16	4.885	5.25	79.97
+ ID2= 2 (7636):	3.65	0.370	5.25	75.04
=====				
ID = 1 (0579):	49.81	5.255	5.25	79.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	5.255	5.25	79.61
+ ID2= 2 (7671):	24.09	0.429	6.50	34.70
=====				
ID = 3 (0579):	73.90	5.552	5.25	64.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	73.90	5.552	5.25	64.97
+ ID2= 2 (7689):	42.12	4.303	5.25	77.48
=====				
ID = 1 (0579):	116.02	9.854	5.25	69.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	116.02	9.854	5.25	69.51
+ ID2= 2 (7690):	21.92	2.185	5.25	75.04
=====				
ID = 3 (0579):	137.94	12.039	5.25	70.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	137.94	12.039	5.25	70.39
+ ID2= 2 (7693):	35.80	3.550	5.25	75.04
=====				
ID = 1 (0579):	173.74	15.589	5.25	71.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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V V I SSSSS U U A L (v 6.2.2017)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

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O O T T H H Y M M O O
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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
 Output filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a
 Summary filename: C:\Users\rbrockie\AppData\Local\Civica\XH5\096c3912-4cae-4d05-bb7b-d5d9157d3294\95681e00-a

DATE: 01-16-2025 TIME: 03:28:50

USER:

COMMENTS: _____

 ** SIMULATION : Hazel **

READ STORM	Filename: C:\Users\rbrockie\AppData\Local\Temp\9325a8a9-7d30-483c-b03e-31f90ee12493\7713d240
Ptotal=212.00 mm	Comments:

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	6.00	3.00	13.00	6.00	23.00	9.00	53.00
1.00	4.00	4.00	17.00	7.00	13.00	10.00	38.00
2.00	6.00	5.00	13.00	8.00	13.00	11.00	13.00

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00

1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 77.82
over (min) 5.00 20.00
Storage Coeff. (min)= 7.36 (ii) 15.17 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

PEAK FLOW (cms)= 1.84 1.33 *TOTALS* 3.173 (iii)
TIME TO PEAK (hrs)= 10.00 10.00 10.00
RUNOFF VOLUME (mm)= 211.00 194.97 204.11
TOTAL RAINFALL (mm)= 212.00 212.00 212.00
RUNOFF COEFFICIENT = 1.00 0.92 0.96

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 91.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| NASHYD ( 7671) | Area (ha)= 24.09 Curve Number (CN)= 95.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----|
| U.H. Tp(hrs)= 0.86 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00

2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 0.914

PEAK FLOW (cms)= 2.569 (i)
 TIME TO PEAK (hrs)= 11.083
 RUNOFF VOLUME (mm)= 189.431
 TOTAL RAINFALL (mm)= 212.000
 RUNOFF COEFFICIENT = 0.894

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 77.82
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.53 (ii) 16.33 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
 5.163 (iii)
 10.00

PEAK FLOW (cms)= 3.00 2.16
 TIME TO PEAK (hrs)= 10.00 10.00

RUNOFF VOLUME (mm)= 211.00 194.97 204.11
 TOTAL RAINFALL (mm)= 212.00 212.00 212.00
 RUNOFF COEFFICIENT = 1.00 0.92 0.96

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 91.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7689) Area (ha)= 42.12
 ID= 1 DT= 5.0 min Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 84.23
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.96 (ii) 16.52 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
 6.088 (iii)

PEAK FLOW (cms)= 3.72 2.37
 TIME TO PEAK (hrs)= 10.00 10.00
 RUNOFF VOLUME (mm)= 211.00 197.79
 TOTAL RAINFALL (mm)= 212.00 212.00
 RUNOFF COEFFICIENT = 1.00 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7636)
ID= 1 DT= 5.0 min

Area (ha)= 3.65
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 77.82
over (min) 5.00 15.00
Storage Coeff. (min)= 4.30 (ii) 12.10 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.23 0.09

TOTALS
0.533 (iii)
10.00
204.11
212.00
0.96

PEAK FLOW (cms)= 0.31 0.23
TIME TO PEAK (hrs)= 10.00 10.00
RUNOFF VOLUME (mm)= 211.00 194.97
TOTAL RAINFALL (mm)= 212.00 212.00
RUNOFF COEFFICIENT = 1.00 0.92

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 91.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min

Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max. Eff. Inten. (mm/hr)=	53.00	90.65
over (min)	5.00	15.00
Storage Coeff. (min)=	7.11 (ii)	14.45 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.17	0.08

TOTALS

PEAK FLOW (cms)=	1.84	1.01	2.852 (iii)
TIME TO PEAK (hrs)=	10.00	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	203.31	208.23
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.96	0.98

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 95.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7625) ID= 1 DT= 5.0 min	Area (ha)= 26.64 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
--	---	----------------------

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)= 53.00 85.70
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.81 (ii) 15.31 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.07

TOTALS
 PEAK FLOW (cms)= 2.39 1.48 3.869 (iii)
 TIME TO PEAK (hrs)= 10.00 10.00 10.00
 RUNOFF VOLUME (mm)= 211.00 199.62 206.56
 TOTAL RAINFALL (mm)= 212.00 212.00 212.00
 RUNOFF COEFFICIENT = 1.00 0.94 0.97

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 93.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7625):	26.64	3.869	10.00	206.56
+ ID2= 2 (7631):	19.52	2.852	10.00	208.23
=====				
ID = 3 (0579):	46.16	6.720	10.00	207.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	46.16	6.720	10.00	207.27
+ ID2= 2 (7636):	3.65	0.533	10.00	204.11
=====				
ID = 1 (0579):	49.81	7.253	10.00	207.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0579):	49.81	7.253	10.00	207.04
+ ID2= 2 (7671):	24.09	2.569	11.08	189.43
=====				
ID = 3 (0579):	73.90	9.189	10.00	201.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	73.90	9.189	10.00	201.30
+ ID2= 2 (7689):	42.12	6.088	10.00	205.72
=====				
ID = 1 (0579):	116.02	15.277	10.00	202.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0579):	116.02	15.277	10.00	202.90
+ ID2= 2 (7690):	21.92	3.173	10.00	204.11
=====				
ID = 3 (0579):	137.94	18.450	10.00	203.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	137.94	18.450	10.00	203.09
+ ID2= 2 (7693):	35.80	5.163	10.00	204.11
=====				
ID = 1 (0579):	173.74	23.613	10.00	203.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH

APPENDIX D4

CLIMATE CHANGE HYDROLOGIC MODELLING

APPENDIX D4

CLIMATE CHANGE HYDROLOGIC MODELLING OUTPUTS



CATCHMENT 36.10



 ** SIMULATION:1.1 2-year SSP5.85_6hr **

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| CALIB |
| NASHYD ( 7634) | Area (ha)= 257.91 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
-----
| U.H. Tp(hrs)= 2.38
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 0.770 (i)
 TIME TO PEAK (hrs)= 5.667
 RUNOFF VOLUME (mm)= 6.184
 TOTAL RAINFALL (mm)= 38.000
 RUNOFF COEFFICIENT = 0.163

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| NASHYD ( 7649) | Area (ha)= 19.97 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
-----
| U.H. Tp(hrs)= 0.31
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.217 (i)
 TIME TO PEAK (hrs)= 3.000
 RUNOFF VOLUME (mm)= 6.170
 TOTAL RAINFALL (mm)= 38.000

RUNOFF COEFFICIENT = 0.162

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)=	19.68	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.20	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.275 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 6.141
 TOTAL RAINFALL (mm)= 38.000
 RUNOFF COEFFICIENT = 0.162

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.15	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.085 (i)
 TIME TO PEAK (hrs)= 2.750

RUNOFF VOLUME (mm)= 6.093
 TOTAL RAINFALL (mm)= 38.000
 RUNOFF COEFFICIENT = 0.160

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7626) ID= 1 DT= 5.0 min	Area (ha)= 36.78 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max. Eff. Inten. (mm/hr) over (min)	34.96	28.58
Storage Coeff. (min)	10.00	25.00
Unit Hyd. Tpeak (min)	10.16 (ii)	21.80 (ii)
Unit Hyd. peak (cms)	0.11	0.05

PEAK FLOW (cms)	1.94	0.53	*TOTALS*
TIME TO PEAK (hrs)	2.75	3.00	2.358 (iii)
RUNOFF VOLUME (mm)	37.00	16.90	28.36
TOTAL RAINFALL (mm)	38.00	38.00	38.00
RUNOFF COEFFICIENT	0.97	0.44	0.75

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7626):	36.78	2.358	2.75	28.36
+ ID2= 2 (7634):	257.91	0.770	5.67	6.18
=====				
ID = 3 (0560):	294.69	2.397	2.75	8.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560) 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0560):	294.69	2.397	2.75	8.95
+ ID2= 2 (7647):	19.68	0.275	2.83	6.14

=====
ID = 1 (0560): 314.37 2.649 2.75 8.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0560) |
1 + 2 = 3
ID1= 1 (0560): 314.37 2.649 2.75 8.78
+ ID2= 2 (7648): 5.27 0.085 2.75 6.09

ID = 3 (0560): 319.64 2.734 2.75 8.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0560) |
3 + 2 = 1
ID1= 3 (0560): 319.64 2.734 2.75 8.73
+ ID2= 2 (7649): 19.97 0.217 3.00 6.17

ID = 1 (0560): 339.61 2.890 2.75 8.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.2 5-year SSP5.85_6hr **

| CALIB |
| NASHYD (7634) | Area (ha)= 257.91 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
| U.H. Tp(hrs)= 2.38

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 1.569 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 12.530
TOTAL RAINFALL (mm)= 52.000
RUNOFF COEFFICIENT = 0.241

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB |
| NASHYD (7649) | Area (ha)= 19.97 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
| U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.466 (i)
 TIME TO PEAK (hrs)= 3.000
 RUNOFF VOLUME (mm)= 12.503
 TOTAL RAINFALL (mm)= 52.000
 RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)=	19.68	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.20	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.590 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 12.444
 TOTAL RAINFALL (mm)= 52.000
 RUNOFF COEFFICIENT = 0.239

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.15	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.182 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 12.346
 TOTAL RAINFALL (mm)= 52.000
 RUNOFF COEFFICIENT = 0.237

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min

Area (ha)= 36.78	Dir. Conn.(%)= 57.00
Total Imp(%)= 71.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)=	47.84	47.37
over (min)	10.00	20.00
Storage Coeff. (min)=	8.96 (ii)	18.48 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

TOTALS

PEAK FLOW (cms)=	2.70	0.94	3.543 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	51.00	27.45	40.87
TOTAL RAINFALL (mm)=	52.00	52.00	52.00

RUNOFF COEFFICIENT = 0.98 0.53 0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	3.543	2.75	40.87
+ ID2= 2 (7634):	257.91	1.569	5.58	12.53
ID = 3 (0560):	294.69	3.648	2.75	16.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	3.648	2.75	16.07
+ ID2= 2 (7647):	19.68	0.590	2.83	12.44
ID = 1 (0560):	314.37	4.211	2.75	15.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	4.211	2.75	15.84
+ ID2= 2 (7648):	5.27	0.182	2.75	12.35
ID = 3 (0560):	319.64	4.393	2.75	15.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	4.393	2.75	15.78
+ ID2= 2 (7649):	19.97	0.466	3.00	12.50
ID = 1 (0560):	339.61	4.763	2.75	15.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.3 10-year SSP5.85_6hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7634)	257.91	72.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)= 2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24

1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 2.251 (i)
 TIME TO PEAK (hrs)= 5.583
 RUNOFF VOLUME (mm)= 17.933
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.289

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (7649)	Area (ha)=	19.97	Curve Number (CN)=	72.0			
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50			
	U.H. Tp(hrs)=	0.31					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.682 (i)
 TIME TO PEAK (hrs)= 2.917
 RUNOFF VOLUME (mm)= 17.894
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.289

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (7647)	Area (ha)=	19.68	Curve Number (CN)=	72.0			
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50			
	U.H. Tp(hrs)=	0.20					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24

0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.860 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 17.809
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.287

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)=	72.0			
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50			
	U.H. Tp(hrs)=	0.15					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.264 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 17.670
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.285

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
STANDHYD (7626)	Area (ha)=	36.78	Dir. Conn.(%)=	57.00			
ID= 1 DT= 5.0 min	Total Imp(%)=	71.00					

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24

0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 60.70
over (min) 10.00 20.00
Storage Coeff. (min)= 8.35 (ii) 16.97 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 3.24 1.26 4.389 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 61.00 35.55 50.06
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.57 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):	36.78	4.389	2.75	50.06
+ ID2= 2 (7634):	257.91	2.251	5.58	17.93
=====				
ID = 3 (0560):	294.69	4.561	2.75	21.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	4.561	2.75	21.94
+ ID2= 2 (7647):	19.68	0.860	2.83	17.81
=====				
ID = 1 (0560):	314.37	5.394	2.75	21.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):	314.37	5.394	2.75	21.68
+ ID2= 2 (7648):	5.27	0.264	2.75	17.67
=====				
ID = 3 (0560):	319.64	5.658	2.75	21.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	319.64	5.658	2.75	21.62
+ ID2= 2 (7649):	19.97	0.682	2.92	17.89
=====				
ID = 1 (0560):	339.61	6.220	2.75	21.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25-year SSP5.85_6hr **

CALIB			
NASHYD (7634)	Area (ha)= 257.91	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 2.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 3.408 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 27.078
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.352

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7649)	Area (ha)= 19.97	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.31		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 1.056 (i)

TIME TO PEAK (hrs)= 2.917
 RUNOFF VOLUME (mm)= 27.018
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.351

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7647) | Area (ha)= 19.68 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.315 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 26.891
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.349

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7648) | Area (ha)= 5.27 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.404 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 26.681
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.347

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7626) ID= 1 DT= 5.0 min	Area (ha)= 36.78 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max. Eff. Inten. (mm/hr)=	70.84	81.28
over (min)	10.00	20.00
Storage Coeff. (min)=	7.66 (ii)	15.33 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.13	0.07

			TOTALS
PEAK FLOW (cms)=	4.04	1.77	5.699 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	76.00	48.31	64.09
TOTAL RAINFALL (mm)=	77.00	77.00	77.00
RUNOFF COEFFICIENT =	0.99	0.63	0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	5.699	2.75	64.09
+ ID2= 2 (7634):	257.91	3.408	5.50	27.08
=====				
ID = 3 (0560):	294.69	5.999	2.75	31.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1				

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	5.999	2.75	31.70
+ ID2= 2 (7647):	19.68	1.315	2.83	26.89
=====				
ID = 1 (0560):	314.37	7.292	2.75	31.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0560):	314.37	7.292	2.75	31.40
+ ID2= 2 (7648):	5.27	0.404	2.75	26.68
=====				
ID = 3 (0560):	319.64	7.696	2.75	31.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0560):	319.64	7.696	2.75	31.32
+ ID2= 2 (7649):	19.97	1.056	2.92	27.02
=====				
ID = 1 (0560):	339.61	8.592	2.75	31.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.5 50-year SSP5.85_6hr **

CALIB				
NASHYD (7634)				
ID= 1 DT= 5.0 min				
Area	(ha)=	257.91	Curve Number (CN)=	72.0
Ia	(mm)=	10.00	# of Linear Res.(N)=	2.50
U.H. Tp	(hrs)=	2.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 4.425 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 35.105
 TOTAL RAINFALL (mm)= 89.000
 RUNOFF COEFFICIENT = 0.394

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
NASHYD (7649)				
ID= 1 DT= 5.0 min				
Area	(ha)=	19.97	Curve Number (CN)=	72.0
Ia	(mm)=	10.00	# of Linear Res.(N)=	2.50
U.H. Tp	(hrs)=	0.31		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 1.387 (i)
 TIME TO PEAK (hrs)= 2.917
 RUNOFF VOLUME (mm)= 35.028
 TOTAL RAINFALL (mm)= 89.000
 RUNOFF COEFFICIENT = 0.394

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)=	19.68	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.20	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.714 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 34.862
 TOTAL RAINFALL (mm)= 89.000
 RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50

U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.526 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 34.590
 TOTAL RAINFALL (mm)= 89.000
 RUNOFF COEFFICIENT = 0.389

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min

Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 over (min) 5.00
 Storage Coeff. (min)= 7.23 (ii)
 Unit Hyd. Tpeak (min)= 5.00
 Unit Hyd. peak (cms)= 0.17

TOTALS
 6.959 (iii)

PEAK FLOW (cms)= 4.72 2.28

TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 88.00 58.88 75.48
 TOTAL RAINFALL (mm)= 89.00 89.00 89.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	6.959	2.75	75.48
+ ID2= 2 (7634):	257.91	4.425	5.50	35.11
=====				
ID = 3 (0560):	294.69	7.382	2.75	40.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	7.382	2.75	40.14
+ ID2= 2 (7647):	19.68	1.714	2.83	34.86
=====				
ID = 1 (0560):	314.37	9.080	2.75	39.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	9.080	2.75	39.81
+ ID2= 2 (7648):	5.27	0.526	2.75	34.59
=====				
ID = 3 (0560):	319.64	9.606	2.75	39.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	9.606	2.75	39.73
+ ID2= 2 (7649):	19.97	1.387	2.92	35.03
=====				
ID = 1 (0560):	339.61	10.803	2.75	39.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.6 100-year SSP5.85_6hr **

CALIB	Area (ha)= 257.91	Curve Number (CN)= 72.0
NASHYD (7634)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10

0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 5.880 (i)
 TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 46.573
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.444

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7649)	Area (ha)= 19.97	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.31		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 1.861 (i)
 TIME TO PEAK (hrs)= 2.917
 RUNOFF VOLUME (mm)= 46.471
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.443

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)= 19.68	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10

0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 2.282 (i)
 TIME TO PEAK (hrs)= 2.833
 RUNOFF VOLUME (mm)= 46.251
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.440

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)=	72.0			
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50			
	U.H. Tp(hrs)=	0.15					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.700 (i)
 TIME TO PEAK (hrs)= 2.750
 RUNOFF VOLUME (mm)= 45.890
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.437

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
STANDHYD (7626)	Area (ha)=	36.78	Dir. Conn.(%)=	57.00			
ID= 1 DT= 5.0 min	Total Imp(%)=	71.00					

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 120.58
over (min) 5.00 15.00
Storage Coeff. (min)= 6.76 (ii) 13.31 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

TOTALS
PEAK FLOW (cms)= 5.58 2.88 8.444 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 104.00 73.35 90.82
TOTAL RAINFALL (mm)= 105.00 105.00 105.00
RUNOFF COEFFICIENT = 0.99 0.70 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	8.444	2.75	90.82
+ ID2= 2 (7634):	257.91	5.880	5.42	46.57
=====				
ID = 3 (0560):	294.69	9.056	2.75	52.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	9.056	2.75	52.10
+ ID2= 2 (7647):	19.68	2.282	2.83	46.25
=====				
ID = 1 (0560):	314.37	11.337	2.75	51.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	11.337	2.75	51.73
+ ID2= 2 (7648):	5.27	0.700	2.75	45.89
=====				
ID = 3 (0560):	319.64	12.037	2.75	51.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	12.037	2.75	51.63


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+ ID2= 2 ( 7649):    19.97   1.861   2.92   46.47
=====
ID = 1 ( 0560):    339.61  13.670   2.75   51.33

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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** SIMULATION:2.1 2-year SSP5.85_12h **
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| CALIB |
| NASHYD ( 7634) | Area (ha)= 257.91 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----|
| U.H. Tp(hrs)= 2.38 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 3.537

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PEAK FLOW (cms)= 0.979 (i)
TIME TO PEAK (hrs)= 8.417
RUNOFF VOLUME (mm)= 9.157
TOTAL RAINFALL (mm)= 45.000
RUNOFF COEFFICIENT = 0.203

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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| NASHYD ( 7649) | Area (ha)= 19.97 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----|
| U.H. Tp(hrs)= 0.31 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45

0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.245 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 9.137
 TOTAL RAINFALL (mm)= 45.000
 RUNOFF COEFFICIENT = 0.203

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7647)
 ID= 1 DT= 5.0 min

Area (ha)= 19.68	Curve Number (CN)= 72.0
Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
U.H. Tp(hrs)= 0.20	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45

2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.286 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 9.094
 TOTAL RAINFALL (mm)= 45.000
 RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (7648)	Area (ha)=	5.27	Curve Number (CN)=	72.0			
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)=	2.50			
	U.H. Tp(hrs)=	0.15					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.083 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 9.022
 TOTAL RAINFALL (mm)= 45.000
 RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7626)
ID= 1 DT= 5.0 min

Area (ha)= 36.78
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 19.46
over (min) 15.00 30.00
Storage Coeff. (min)= 12.53 (ii) 26.11 (ii)
Unit Hyd. Tpeak (min)= 15.00 30.00
Unit Hyd. peak (cms)= 0.08 0.04

PEAK FLOW (cms)= 1.19 0.43 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.42 1.603 (iii)
RUNOFF VOLUME (mm)= 44.00 22.03 34.55
TOTAL RAINFALL (mm)= 45.00 45.00 45.00
RUNOFF COEFFICIENT = 0.98 0.49 0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7626):	36.78	1.603	5.25	34.55
+ ID2= 2 (7634):	257.91	0.979	8.42	9.16

=====
 ID = 3 (0560): 294.69 1.743 5.25 12.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	1.743	5.25	12.33
+ ID2= 2 (7647):	19.68	0.286	5.25	9.09
=====				
ID = 1 (0560):	314.37	2.029	5.25	12.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	2.029	5.25	12.12
+ ID2= 2 (7648):	5.27	0.083	5.25	9.02
=====				
ID = 3 (0560):	319.64	2.112	5.25	12.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	2.112	5.25	12.07
+ ID2= 2 (7649):	19.97	0.245	5.33	9.14
=====				
ID = 1 (0560):	339.61	2.346	5.25	11.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.2 5-year SSP5.85_12h **

CALIB	Area (ha)= 257.91	Curve Number (CN)= 72.0
NASHYD (7634)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61

2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 1.875 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 17.365
 TOTAL RAINFALL (mm)= 61.000
 RUNOFF COEFFICIENT = 0.285

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7649)	Area (ha)=	19.97	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.31	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.478 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 17.327
 TOTAL RAINFALL (mm)= 61.000
 RUNOFF COEFFICIENT = 0.284

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

NASHYD (7647) | Area (ha)= 19.68 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50

 U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.547 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 17.245
 TOTAL RAINFALL (mm)= 61.000
 RUNOFF COEFFICIENT = 0.283

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 NASHYD (7648) | Area (ha)= 5.27 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50

 U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61

1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.156 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 17.111
 TOTAL RAINFALL (mm)= 61.000
 RUNOFF COEFFICIENT = 0.281

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min | Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	26.11	10.67
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	495.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61

2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 30.03
over (min) 10.00 25.00
Storage Coeff. (min)= 11.09 (ii) 22.51 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.10 0.05

PEAK FLOW (cms)= 1.63 0.72 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.33 2.337 (iii)
RUNOFF VOLUME (mm)= 60.00 34.72 5.25
TOTAL RAINFALL (mm)= 61.00 61.00 49.13
RUNOFF COEFFICIENT = 0.98 0.57 61.00
0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):	36.78	2.337	5.25	49.13
+ ID2= 2 (7634):	257.91	1.875	8.25	17.37
=====				
ID = 3 (0560):	294.69	2.675	5.25	21.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	2.675	5.25	21.33
+ ID2= 2 (7647):	19.68	0.547	5.25	17.25
=====				
ID = 1 (0560):	314.37	3.222	5.25	21.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):	314.37	3.222	5.25	21.07
+ ID2= 2 (7648):	5.27	0.156	5.25	17.11
=====				
ID = 3 (0560):	319.64	3.378	5.25	21.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	319.64	3.378	5.25	21.01
+ ID2= 2 (7649):	19.97	0.478	5.33	17.33
=====				
ID = 1 (0560):	339.61	3.842	5.25	20.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.3 10-year SSP5.85_12h **

CALIB			
NASHYD (7634)	Area (ha)= 257.91	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 2.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 2.594 (i)
 TIME TO PEAK (hrs)= 8.167
 RUNOFF VOLUME (mm)= 23.908
 TOTAL RAINFALL (mm)= 72.000
 RUNOFF COEFFICIENT = 0.332

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)= 19.97	Curve Number (CN)= 72.0
NASHYD (7649)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.31	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72

1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.664 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 23.856
 TOTAL RAINFALL (mm)= 72.000
 RUNOFF COEFFICIENT = 0.331

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7647) | Area (ha)= 19.68 | Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 0.752 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 23.743
 TOTAL RAINFALL (mm)= 72.000
 RUNOFF COEFFICIENT = 0.330

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 NASHYD (7648) | Area (ha)= 5.27 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.212 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 23.558
 TOTAL RAINFALL (mm)= 72.000
 RUNOFF COEFFICIENT = 0.327

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7626) | Area (ha)= 36.78
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	26.11	10.67
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	495.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 37.57
 over (min) 10.00 25.00
 Storage Coeff. (min)= 10.38 (ii) 20.82 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

TOTALS

PEAK FLOW (cms)= 1.92 0.93 2.843 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 71.00 43.99 59.38
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.61 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7626):	36.78	2.843	5.25	59.38
+ ID2= 2 (7634):	257.91	2.594	8.17	23.91
=====				
ID = 3 (0560):	294.69	3.360	5.25	28.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	294.69	3.360	5.25	28.34
+ ID2= 2 (7647):	19.68	0.752	5.25	23.74
=====				
ID = 1 (0560):	314.37	4.112	5.25	28.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0560):	314.37	4.112	5.25	28.05
+ ID2= 2 (7648):	5.27	0.212	5.25	23.56
=====				
ID = 3 (0560):	319.64	4.325	5.25	27.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0560):	319.64	4.325	5.25	27.97
+ ID2= 2 (7649):	19.97	0.664	5.33	23.86
=====				
ID = 1 (0560):	339.61	4.974	5.25	27.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.4 25-year SSP5.85_12h **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7634)	257.91	72.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)= 2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 3.677 (i)
 TIME TO PEAK (hrs)= 8.083

RUNOFF VOLUME (mm)= 33.730
 TOTAL RAINFALL (mm)= 87.000
 RUNOFF COEFFICIENT = 0.388

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7649) | Area (ha)= 19.97 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 0.942 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 33.655
 TOTAL RAINFALL (mm)= 87.000
 RUNOFF COEFFICIENT = 0.387

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7647) | Area (ha)= 19.68 Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87

0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.057 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 33.496
 TOTAL RAINFALL (mm)= 87.000
 RUNOFF COEFFICIENT = 0.385

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7648) | Area (ha)= 5.27 | Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87

2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.296 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 33.235
 TOTAL RAINFALL (mm)= 87.000
 RUNOFF COEFFICIENT = 0.382

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min

Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 48.43
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.62 (ii) 19.06 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.11 0.06

TOTALS

PEAK FLOW	(cms)=	2.33	1.25	3.575 (iii)
TIME TO PEAK	(hrs)=	5.25	5.25	5.25
RUNOFF VOLUME	(mm)=	86.00	57.10	73.57
TOTAL RAINFALL	(mm)=	87.00	87.00	87.00
RUNOFF COEFFICIENT	=	0.99	0.66	0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):	36.78	3.575	5.25	73.57
+ ID2= 2 (7634):	257.91	3.677	8.08	33.73
=====				
ID = 3 (0560):	294.69	4.384	5.25	38.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	4.384	5.25	38.70
+ ID2= 2 (7647):	19.68	1.057	5.25	33.50
=====				
ID = 1 (0560):	314.37	5.441	5.25	38.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):	314.37	5.441	5.25	38.38
+ ID2= 2 (7648):	5.27	0.296	5.25	33.23
=====				
ID = 3 (0560):	319.64	5.738	5.25	38.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	319.64	5.738	5.25	38.29
+ ID2= 2 (7649):	19.97	0.942	5.33	33.66
=====				
ID = 1 (0560):	339.61	6.665	5.25	38.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.5 50-year SSP5.85_12h **

CALIB				
NASHYD (7634)				
ID= 1 DT= 5.0 min				
	Area	(ha)=	257.91	Curve Number (CN)=
	Ia	(mm)=	10.00	# of Linear Res.(N)=
	U.H. Tp	(hrs)=	2.38	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99

0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 3.537

PEAK FLOW (cms)= 4.612 (i)
 TIME TO PEAK (hrs)= 8.083
 RUNOFF VOLUME (mm)= 42.182
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.426

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 NASHYD (7649) | Area (ha)= 19.97 | Curve Number (CN)= 72.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99

2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 1.180 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 42.089
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.425

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)= 19.68	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.317 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 41.890
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.423

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)= 5.27	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	

U.H. Tp(hrs)= 0.15

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.367 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 41.563
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.420

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7626) ID= 1 DT= 5.0 min	Area (ha)= 36.78 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	26.11	10.67
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	495.18	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99

0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 56.89
over (min) 10.00 20.00
Storage Coeff. (min)= 9.14 (ii) 17.98 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 2.65 1.50 *TOTALS* 4.145 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 98.00 67.88 85.05
TOTAL RAINFALL (mm)= 99.00 99.00 99.00
RUNOFF COEFFICIENT = 0.99 0.69 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):	36.78	4.145	5.25	85.05
+ ID2= 2 (7634):	257.91	4.612	8.08	42.18
=====				
ID = 3 (0560):	294.69	5.223	5.25	47.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):	294.69	5.223	5.25	47.53
+ ID2= 2 (7647):	19.68	1.317	5.25	41.89
=====				
ID = 1 (0560):	314.37	6.540	5.25	47.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):	314.37	6.540	5.25	47.18
+ ID2= 2 (7648):	5.27	0.367	5.25	41.56
=====				
ID = 3 (0560):	319.64	6.908	5.25	47.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-----
| ADD HYD ( 0560) |
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0560):  319.64  6.908    5.25    47.09
+ ID2= 2 ( 7649):  19.97   1.180    5.33    42.09
=====
ID = 1 ( 0560):  339.61  8.074    5.25    46.79

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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*****
** SIMULATION:2.6 100-year SSP5.85_12h **
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| CALIB      |
| NASHYD ( 7634) | Area (ha)= 257.91 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----|
| U.H. Tp(hrs)= 2.38 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

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          ---- TRANSFORMED HYETOGRAPH ----
          TIME      RAIN      TIME      RAIN      TIME      RAIN      TIME      RAIN
          hrs      mm/hr     hrs      mm/hr     hrs      mm/hr     hrs      mm/hr
0.083      0.00     3.167     6.90     6.250    14.95     9.33      1.15
0.167      0.00     3.250     6.90     6.333     8.05     9.42      1.15
0.250      0.00     3.333    19.55     6.417     8.05     9.50      1.15
0.333      1.15     3.417    19.55     6.500     8.05     9.58      1.15
0.417      1.15     3.500    19.55     6.583     8.05     9.67      1.15
0.500      1.15     3.583    19.55     6.667     8.05     9.75      1.15
0.583      1.15     3.667    19.55     6.750     8.05     9.83      1.15
0.667      1.15     3.750    19.55     6.833     8.05     9.92      1.15
0.750      1.15     3.833    19.55     6.917     8.05    10.00     1.15
0.833      1.15     3.917    19.55     7.000     8.05    10.08     1.15
0.917      1.15     4.000    19.55     7.083     8.05    10.17     1.15
1.000      1.15     4.083    19.55     7.167     8.05    10.25     1.15
1.083      1.15     4.167    19.55     7.250     8.05    10.33     1.15
1.167      1.15     4.250    19.55     7.333     4.60    10.42     1.15
1.250      1.15     4.333    52.90     7.417     4.60    10.50     1.15
1.333      1.15     4.417    52.90     7.500     4.60    10.58     1.15
1.417      1.15     4.500    52.90     7.583     4.60    10.67     1.15
1.500      1.15     4.583    52.90     7.667     4.60    10.75     1.15
1.583      1.15     4.667    52.90     7.750     4.60    10.83     1.15
1.667      1.15     4.750    52.90     7.833     4.60    10.92     1.15
1.750      1.15     4.833    52.90     7.917     4.60    11.00     1.15
1.833      1.15     4.917    52.90     8.000     4.60    11.08     1.15
1.917      1.15     5.000    52.90     8.083     4.60    11.17     1.15
2.000      1.15     5.083    52.90     8.167     4.60    11.25     1.15
2.083      1.15     5.167    52.90     8.250     4.60    11.33     1.15
2.167      1.15     5.250    52.90     8.333     2.30    11.42     1.15
2.250      1.15     5.333    14.95     8.417     2.30    11.50     1.15
2.333      6.90     5.417    14.95     8.500     2.30    11.58     1.15
2.417      6.90     5.500    14.95     8.583     2.30    11.67     1.15
2.500      6.90     5.583    14.95     8.667     2.30    11.75     1.15
2.583      6.90     5.667    14.95     8.750     2.30    11.83     1.15
2.667      6.90     5.750    14.95     8.833     2.30    11.92     1.15
2.750      6.90     5.833    14.95     8.917     2.30    12.00     1.15
2.833      6.90     5.917    14.95     9.000     2.30    12.08     1.15
2.917      6.90     6.000    14.95     9.083     2.30    12.17     1.15
3.000      6.90     6.083    14.95     9.167     2.30    12.25     1.15
3.083      6.90     6.167    14.95     9.250     2.30

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Unit Hyd Qpeak (cms)= 3.537

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PEAK FLOW      (cms)= 5.936 (i)
TIME TO PEAK   (hrs)= 8.000
RUNOFF VOLUME  (mm)= 54.102
TOTAL RAINFALL (mm)= 115.000
RUNOFF COEFFICIENT = 0.470

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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB      |
| NASHYD ( 7649) | Area (ha)= 19.97 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
|-----|
| U.H. Tp(hrs)= 0.31 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Unit Hyd Qpeak (cms)= 2.102

PEAK FLOW (cms)= 1.514 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 53.983
 TOTAL RAINFALL (mm)= 115.000
 RUNOFF COEFFICIENT = 0.469

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7647)	Area (ha)=	19.68	Curve Number (CN)= 72.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 2.50
	U.H. Tp(hrs)=	0.20	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15

1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Unit Hyd Qpeak (cms)= 3.211

PEAK FLOW (cms)= 1.680 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 53.728
 TOTAL RAINFALL (mm)= 115.000
 RUNOFF COEFFICIENT = 0.467

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (7648)	Area (ha)= 5.27	Curve Number (CN)= 72.0	
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50	
	U.H. Tp(hrs)= 0.15		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Unit Hyd Qpeak (cms)= 1.147

PEAK FLOW (cms)= 0.466 (i)

TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 53.308
 TOTAL RAINFALL (mm)= 115.000
 RUNOFF COEFFICIENT = 0.464

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7626)
 ID= 1 DT= 5.0 min
 Area (ha)= 36.78
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	26.11	10.67
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	495.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)=	52.90	68.22
over (min)	10.00	20.00
Storage Coeff. (min)=	8.61 (ii)	16.83 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

PEAK FLOW (cms)=	3.08	1.83	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	4.911 (iii)
RUNOFF VOLUME (mm)=	114.00	82.55	5.25
TOTAL RAINFALL (mm)=	115.00	115.00	100.47
RUNOFF COEFFICIENT =	0.99	0.72	115.00
			0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7626):		36.78	4.911	5.25	100.47
+ ID2= 2 (7634):		257.91	5.936	8.00	54.10
=====					
ID = 3 (0560):		294.69	6.459	7.33	59.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		294.69	6.459	7.33	59.89
+ ID2= 2 (7647):		19.68	1.680	5.25	53.73
=====					
ID = 1 (0560):		314.37	8.068	5.25	59.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0560):		314.37	8.068	5.25	59.50
+ ID2= 2 (7648):		5.27	0.466	5.25	53.31
=====					
ID = 3 (0560):		319.64	8.534	5.25	59.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0560)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0560):		319.64	8.534	5.25	59.40
+ ID2= 2 (7649):		19.97	1.514	5.33	53.98
=====					
ID = 1 (0560):		339.61	10.037	5.25	59.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CATCHMENT 36.11



 ** SIMULATION:1.1 2-year SSP5.85_6hr **

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| CALIB                                     |
| NASHYD ( 7624) | Area (ha)= 91.09 Curve Number (CN)= 71.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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|                                     |
|                                     | U.H. Tp(hrs)= 2.09
|                                     |
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.162 (i)
 TIME TO PEAK (hrs)= 5.833
 RUNOFF VOLUME (mm)= 5.947
 TOTAL RAINFALL (mm)= 38.000
 RUNOFF COEFFICIENT = 0.156

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB                                     |
| STANDHYD ( 7628) | Area (ha)= 24.85
| ID= 1 DT= 5.0 min | Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)=	34.96	53.19	
over (min)	10.00	20.00	
Storage Coeff. (min)=	9.03 (ii)	18.11 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	1.49	0.49	1.946 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	37.00	24.72	32.58
TOTAL RAINFALL (mm)=	38.00	38.00	38.00
RUNOFF COEFFICIENT =	0.97	0.65	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7630) ID= 1 DT= 5.0 min	Area (ha)= 22.49 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	387.21	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)=	34.96	31.70	
over (min)	10.00	20.00	
Storage Coeff. (min)=	8.76 (ii)	19.94 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	1.25	0.36	1.563 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	37.00	18.33	29.35
TOTAL RAINFALL (mm)=	38.00	38.00	38.00
RUNOFF COEFFICIENT =	0.97	0.48	0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14 Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
--	--	----------------------

IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 6.67 1.47
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 232.95 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max. Eff. Inten. (mm/hr)= 34.96 55.74
 over (min) 5.00 20.00
 Storage Coeff. (min)= 6.46 (ii) 15.38 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.18 0.07

TOTALS

PEAK FLOW (cms)= 0.52 0.17 0.679 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 37.00 26.30 33.36
 TOTAL RAINFALL (mm)= 38.00 38.00 38.00
 RUNOFF COEFFICIENT = 0.97 0.69 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	0.162	5.83	5.95
+ ID2= 2 (7628):	24.85	1.946	2.75	32.58
=====				
ID = 3 (0561):	115.94	1.979	2.75	11.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):	115.94	1.979	2.75	11.65
+ ID2= 2 (7630):	22.49	1.563	2.75	29.35
=====				
ID = 1 (0561):	138.43	3.542	2.75	14.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	3.542	2.75	14.53
+ ID2= 2 (7638):	8.14	0.679	2.75	33.36
=====				

ID = 3 (0561): 146.57 4.221 2.75 15.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.2 5-year SSP5.85_6hr **

CALIB			
NASHYD (7624)	Area (ha)=	91.09	Curve Number (CN)= 71.0
ID= 1 DT= 5.0 min	Ia (mm)=	10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)=	2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.331 (i)
 TIME TO PEAK (hrs)= 5.667
 RUNOFF VOLUME (mm)= 12.095
 TOTAL RAINFALL (mm)= 52.000
 RUNOFF COEFFICIENT = 0.233

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7628)	Area (ha)=	24.85	
ID= 1 DT= 5.0 min	Total Imp(%)=	81.00	Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04

1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)=	47.84	78.53		
over (min)	10.00	20.00		
Storage Coeff. (min)=	7.97 (ii)	15.74 (ii)		
Unit Hyd. Tpeak (min)=	10.00	20.00		
Unit Hyd. peak (cms)=	0.13	0.07		
			TOTALS	
PEAK FLOW (cms)=	2.07	0.78	2.802 (iii)	
TIME TO PEAK (hrs)=	2.75	2.83	2.75	
RUNOFF VOLUME (mm)=	51.00	37.49	46.14	
TOTAL RAINFALL (mm)=	52.00	52.00	52.00	
RUNOFF COEFFICIENT =	0.98	0.72	0.89	

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB				
STANDHYD (7630)	Area (ha)=	22.49		
ID= 1 DT= 5.0 min	Total Imp(%)=	73.00	Dir. Conn.(%)=	59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=		16.42	6.07
Dep. Storage (mm)=		1.00	2.00
Average Slope (%)=		1.00	2.00
Length (m)=		387.21	40.00
Mannings n =		0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)=	47.84	51.60		
over (min)	10.00	20.00		
Storage Coeff. (min)=	7.73 (ii)	16.93 (ii)		
Unit Hyd. Tpeak (min)=	10.00	20.00		
Unit Hyd. peak (cms)=	0.13	0.06		
			TOTALS	
PEAK FLOW (cms)=	1.73	0.61	2.283 (iii)	
TIME TO PEAK (hrs)=	2.75	2.92	2.75	
RUNOFF VOLUME (mm)=	51.00	29.39	42.14	
TOTAL RAINFALL (mm)=	52.00	52.00	52.00	
RUNOFF COEFFICIENT =	0.98	0.57	0.81	

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

STANDHYD (7638) | Area (ha)= 8.14
 ID= 1 DT= 5.0 min | Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max. Eff. Inten. (mm/hr)= 47.84 81.09
 over (min) 5.00 15.00
 Storage Coeff. (min)= 5.70 (ii) 13.37 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.20 0.08

PEAK FLOW (cms)= 0.71 0.27 *TOTALS*
 TIME TO PEAK (hrs)= 2.75 2.75 0.982 (iii)
 RUNOFF VOLUME (mm)= 51.00 39.39 47.05
 TOTAL RAINFALL (mm)= 52.00 52.00 52.00
 RUNOFF COEFFICIENT = 0.98 0.76 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)
 1 + 2 = 3

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	0.331	5.67	12.10
+ ID2= 2 (7628):	24.85	2.802	2.75	46.14
=====				
ID = 3 (0561):	115.94	2.884	2.75	19.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)
 3 + 2 = 1

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):	115.94	2.884	2.75	19.39
+ ID2= 2 (7630):	22.49	2.283	2.75	42.14
=====				
ID = 1 (0561):	138.43	5.167	2.75	23.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)
 1 + 2 = 3

	AREA	QPEAK	TPEAK	R.V.
--	------	-------	-------	------

	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	5.167	2.75	23.09
+ ID2= 2 (7638):	8.14	0.982	2.75	47.05
=====				
ID = 3 (0561):	146.57	6.149	2.75	24.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.3 10-year SSP5.85_6hr **

CALIB	Area (ha)=	Curve Number (CN)=
NASHYD (7624)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.475 (i)
 TIME TO PEAK (hrs)= 5.583
 RUNOFF VOLUME (mm)= 17.350
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.280

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)=	Dir. Conn.(%)=
STANDHYD (7628)	24.85	64.00
ID= 1 DT= 5.0 min	Total Imp(%)= 81.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24

1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 96.68
over (min) 5.00 15.00
Storage Coeff. (min)= 7.42 (ii) 14.58 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

TOTALS
PEAK FLOW (cms)= 2.49 1.02 3.503 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 61.00 46.88 55.92
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.76 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min
Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 65.59
over (min) 5.00 20.00
Storage Coeff. (min)= 7.21 (ii) 15.56 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

TOTALS
PEAK FLOW (cms)= 2.08 0.80 2.830 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 61.00 37.81 51.49
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min

Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max. Eff. Inten. (mm/hr)=	57.04	99.16
over (min)	5.00	15.00
Storage Coeff. (min)=	5.31 (ii)	12.39 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.21	0.08

			TOTALS
PEAK FLOW (cms)=	0.85	0.34	1.191 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	61.00	48.94	56.90
TOTAL RAINFALL (mm)=	62.00	62.00	62.00
RUNOFF COEFFICIENT =	0.98	0.79	0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7624):	91.09	0.475	5.58	17.35
+ ID2= 2 (7628):	24.85	3.503	2.75	55.92
=====				
ID = 3 (0561):	115.94	3.630	2.75	25.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0561):	115.94	3.630	2.75	25.62
+ ID2= 2 (7630):	22.49	2.830	2.75	51.49
=====				
ID = 1 (0561):	138.43	6.460	2.75	29.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	6.460	2.75	29.82
+ ID2= 2 (7638):	8.14	1.191	2.75	56.90
=====				
ID = 3 (0561):	146.57	7.652	2.75	31.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25-year SSP5.85_6hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7624)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.720 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 26.273
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.341

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)	Dir. Conn.(%)
STANDHYD (7628)	24.85	64.00
ID= 1 DT= 5.0 min	Total Imp(%)= 81.00	

	IMPERVIOUS (ha)	PERVIOUS (i)
Surface Area	20.13	4.72
Dep. Storage	1.00	2.00
Average Slope	1.00	2.00
Length	407.02	40.00
Mannings n	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54

0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)= 70.84 123.84
over (min) 5.00 15.00
Storage Coeff. (min)= 6.81 (ii) 11.79 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.09

TOTALS
PEAK FLOW (cms)= 3.11 1.40 4.502 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 76.00 61.21 70.68
TOTAL RAINFALL (mm)= 77.00 77.00 77.00
RUNOFF COEFFICIENT = 0.99 0.79 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min
Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)= 70.84 87.00
over (min) 5.00 15.00
Storage Coeff. (min)= 6.61 (ii) 14.07 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

TOTALS
PEAK FLOW (cms)= 2.59 1.16 3.731 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 76.00 50.96 65.73
TOTAL RAINFALL (mm)= 77.00 77.00 77.00
RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

- CN* = 82.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7638) ID= 1 DT= 5.0 min	Area (ha)= 8.14 Total Imp(%)= 82.00	Dir. Conn.(%)= 66.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max. Eff. Inten. (mm/hr)=	70.84	126.13	
over (min)	5.00	10.00	
Storage Coeff. (min)=	4.87 (ii)	9.69 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.22	0.11	
			TOTALS
PEAK FLOW (cms)=	1.06	0.48	1.535 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	76.00	63.46	71.73
TOTAL RAINFALL (mm)=	77.00	77.00	77.00
RUNOFF COEFFICIENT =	0.99	0.82	0.93

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7624):	91.09	0.720	5.50	26.27
+ ID2= 2 (7628):	24.85	4.502	2.75	70.68
=====				
ID = 3 (0561):	115.94	4.711	2.75	35.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	4.711	2.75	35.79
+ ID2= 2 (7630):	22.49	3.731	2.75	65.73

=====
 ID = 1 (0561): 138.43 8.442 2.75 40.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	8.442	2.75	40.65
+ ID2= 2 (7638):	8.14	1.535	2.75	71.73
=====				
ID = 3 (0561):	146.57	9.977	2.75	42.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.5 50-year SSP5.85_6hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7624)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.936 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 34.129
 TOTAL RAINFALL (mm)= 89.000
 RUNOFF COEFFICIENT = 0.383

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)	Dir. Conn.(%)
STANDHYD (7628)	24.85	64.00
ID= 1 DT= 5.0 min	Total Imp(%)= 81.00	

	IMPERVIOUS (ha)	PERVIOUS (i)
Surface Area	20.13	4.72
Dep. Storage	1.00	2.00
Average slope	1.00	2.00
Length	407.02	40.00
Mannings n	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78

0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 145.49
over (min) 5.00 15.00
Storage Coeff. (min)= 6.42 (ii) 11.13 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.09

PEAK FLOW (cms)= 3.60 1.68 *TOTALS* 5.273 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 88.00 72.81 82.53
TOTAL RAINFALL (mm)= 89.00 89.00 89.00
RUNOFF COEFFICIENT = 0.99 0.82 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min
Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 104.32
over (min) 5.00 15.00
Storage Coeff. (min)= 6.24 (ii) 13.17 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.19 0.08

PEAK FLOW (cms)= 3.00 1.42 *TOTALS* 4.414 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 88.00 61.80 77.26

TOTAL RAINFALL (mm)= 89.00 89.00 89.00
 RUNOFF COEFFICIENT = 0.99 0.69 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7638)
 ID= 1 DT= 5.0 min

Area (ha)= 8.14
 Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 147.60
 over (min) 5.00 10.00
 Storage Coeff.(min)= 4.60 (ii) 9.14 (ii)
 Unit Hyd. Tpeak (min)= 5.00 10.00
 Unit Hyd. peak (cms)= 0.23 0.12

PEAK FLOW (cms)= 1.22 0.57 *TOTALS*
 TIME TO PEAK (hrs)= 2.75 2.75 1.789 (iii)
 RUNOFF VOLUME (mm)= 88.00 75.17 2.75
 TOTAL RAINFALL (mm)= 89.00 89.00 83.64
 RUNOFF COEFFICIENT = 0.99 0.84 0.94

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	0.936	5.50	34.13
+ ID2= 2 (7628):	24.85	5.273	2.75	82.53
=====	=====	=====	=====	=====
ID = 3 (0561):	115.94	5.557	2.75	44.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	5.557	2.75	44.50
+ ID2= 2 (7630):	22.49	4.414	2.75	77.26
=====				
ID = 1 (0561):	138.43	9.970	2.75	49.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	9.970	2.75	49.82
+ ID2= 2 (7638):	8.14	1.789	2.75	83.64
=====				
ID = 3 (0561):	146.57	11.759	2.75	51.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.6 100-year SSP5.85_6hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7624)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 1.246 (i)
 TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 45.380
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.432

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)	Dir. Conn.(%)
STANDHYD (7628)	24.85	64.00
ID= 1 DT= 5.0 min	Total Imp(%)= 81.00	

	IMPERVIOUS (ha)	PERVIOUS (i)
Surface Area	20.13	4.72
Dep. Storage	(mm)= 1.00	2.00
Average Slope	(%)= 1.00	2.00
Length	(m)= 407.02	40.00
Mannings n	= 0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 174.22
over (min) 5.00 15.00
Storage Coeff. (min)= 6.01 (ii) 10.42 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.19 0.09

TOTALS
PEAK FLOW (cms)= 4.25 2.05 6.302 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 104.00 88.40 98.38
TOTAL RAINFALL (mm)= 105.00 105.00 105.00
RUNOFF COEFFICIENT = 0.99 0.84 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630) Area (ha)= 22.49
ID= 1 DT= 5.0 min Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 127.52
over (min) 5.00 15.00
Storage Coeff. (min)= 5.84 (ii) 12.24 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00

Unit Hyd. peak (cms)= 0.20 0.09

PEAK FLOW (cms)= 3.55 1.79 *TOTALS* 5.333 (iii)

TIME TO PEAK (hrs)= 2.75 2.75

RUNOFF VOLUME (mm)= 104.00 76.57 92.75

TOTAL RAINFALL (mm)= 105.00 105.00 105.00

RUNOFF COEFFICIENT = 0.99 0.73 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638) | Area (ha)= 8.14
ID= 1 DT= 5.0 min | Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 176.10

over (min) 5.00 10.00

Storage Coeff. (min)= 4.30 (ii) 8.56 (ii)

Unit Hyd. Tpeak (min)= 5.00 10.00

Unit Hyd. peak (cms)= 0.23 0.12

PEAK FLOW (cms)= 1.44 0.69 *TOTALS* 2.126 (iii)

TIME TO PEAK (hrs)= 2.75 2.75

RUNOFF VOLUME (mm)= 104.00 90.88 99.54

TOTAL RAINFALL (mm)= 105.00 105.00 105.00

RUNOFF COEFFICIENT = 0.99 0.87 0.95

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561) |

1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	1.246	5.42	45.38
+ ID2= 2 (7628):	24.85	6.302	2.75	98.38
=====				
ID = 3 (0561):	115.94	6.698	2.75	56.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	6.698	2.75	56.74
+ ID2= 2 (7630):	22.49	5.333	2.75	92.75
=====				
ID = 1 (0561):	138.43	12.031	2.75	62.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	12.031	2.75	62.59
+ ID2= 2 (7638):	8.14	2.126	2.75	99.54
=====				
ID = 3 (0561):	146.57	14.158	2.75	64.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.1 2-year SSP5.85_12h **

CALIB	Area (ha)=	Curve Number (CN)=
NASHYD (7624)	91.09	71.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.215 (i)
 TIME TO PEAK (hrs)= 8.667

RUNOFF VOLUME (mm)= 8.823
 TOTAL RAINFALL (mm)= 45.000
 RUNOFF COEFFICIENT = 0.196

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7628)
 ID= 1 DT= 5.0 min
 Area (ha)= 24.85
 Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 20.13 4.72
 Dep. Storage (mm)= 1.00 2.00
 Average slope (%)= 1.00 2.00
 Length (m)= 407.02 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 33.16
 over (min) 10.00 25.00
 Storage Coeff. (min)= 11.14 (ii) 22.11 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.10 0.05

TOTALS
 PEAK FLOW (cms)= 0.91 0.37 1.275 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 44.00 31.03 39.33
 TOTAL RAINFALL (mm)= 45.00 45.00 45.00
 RUNOFF COEFFICIENT = 0.98 0.69 0.87

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
 (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
 (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min

Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)=	20.70	21.31
over (min)	10.00	25.00
Storage Coeff. (min)=	10.81 (ii)	23.91 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.11	0.05

TOTALS

PEAK FLOW (cms)=	0.76	0.28	1.037 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	44.00	23.73	35.69
TOTAL RAINFALL (mm)=	45.00	45.00	45.00
RUNOFF COEFFICIENT =	0.98	0.53	0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min

Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00

Length (m) = 232.95 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 34.42
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.97 (ii) 18.78 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
 PEAK FLOW (cms)= 0.31 0.13 0.435 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 44.00 32.79 40.19
 TOTAL RAINFALL (mm)= 45.00 45.00 45.00
 RUNOFF COEFFICIENT = 0.98 0.73 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	0.215	8.67	8.82
+ ID2= 2 (7628):	24.85	1.275	5.25	39.33
=====	=====	=====	=====	=====
ID = 3 (0561):	115.94	1.345	5.25	15.36

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)

```

ID1= 3 ( 0561): 115.94 1.345 5.25 15.36
+ ID2= 2 ( 7630): 22.49 1.037 5.25 35.69
=====
ID = 1 ( 0561): 138.43 2.382 5.25 18.66

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-----
| ADD HYD ( 0561) |
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0561): 138.43 2.382 5.25 18.66
+ ID2= 2 ( 7638): 8.14 0.435 5.25 40.19
=====
ID = 3 ( 0561): 146.57 2.816 5.25 19.86

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.2 5-year SSP5.85_12h **

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-----
| CALIB |
| NASHYD ( 7624) | Area (ha)= 91.09 Curve Number (CN)= 71.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
|-----| U.H. Tp(hrs)= 2.09

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

```

Unit Hyd Qpeak (cms)= 0.744
PEAK FLOW (cms)= 0.413 (i)
TIME TO PEAK (hrs)= 8.500
RUNOFF VOLUME (mm)= 16.797
TOTAL RAINFALL (mm)= 61.000
RUNOFF COEFFICIENT = 0.275

```

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7628)
ID= 1 DT= 5.0 min

Area (ha)= 24.85
Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.13	4.72
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	407.02	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 47.91
over (min) 10.00 20.00
Storage Coeff. (min)= 9.86 (ii) 19.33 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.11 0.06

TOTALS
PEAK FLOW (cms)= 1.24 0.56 1.801 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 60.00 45.94 54.94
TOTAL RAINFALL (mm)= 61.00 61.00 61.00
RUNOFF COEFFICIENT = 0.98 0.75 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min

Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00

Length (m)= 387.21 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 32.43
 over (min) 10.00 25.00
 Storage Coeff. (min)= 9.57 (ii) 20.64 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
 PEAK FLOW (cms)= 1.03 0.46 1.484 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 60.00 36.95 50.55
 TOTAL RAINFALL (mm)= 61.00 61.00 61.00
 RUNOFF COEFFICIENT = 0.98 0.61 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7638)
 ID= 1 DT= 5.0 min
 Area (ha)= 8.14
 Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 6.67 1.47
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 232.95 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 49.06
over (min) 5.00 20.00
Storage Coeff. (min)= 7.05 (ii) 16.44 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.06

TOTALS
PEAK FLOW (cms)= 0.42 0.19 0.604 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 60.00 47.98 55.91
TOTAL RAINFALL (mm)= 61.00 61.00 61.00
RUNOFF COEFFICIENT = 0.98 0.79 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7624):	91.09	0.413	8.50	16.80
+ ID2= 2 (7628):	24.85	1.801	5.25	54.94
ID = 3 (0561):	115.94	1.954	5.25	24.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	1.954	5.25	24.97
+ ID2= 2 (7630):	22.49	1.484	5.25	50.55
ID = 1 (0561):	138.43	3.438	5.25	29.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	3.438	5.25	29.13
+ ID2= 2 (7638):	8.14	0.604	5.25	55.91
=====				
ID = 3 (0561):	146.57	4.042	5.25	30.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.3 10-year SSP5.85_12h **

CALIB NASHYD (7624)	Area (ha)	Curve Number (CN)
ID= 1 DT= 5.0 min	91.09	71.0
	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.571 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 23.177
 TOTAL RAINFALL (mm)= 72.000
 RUNOFF COEFFICIENT = 0.322

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7628)	Area (ha)	Dir. Conn.(%)
ID= 1 DT= 5.0 min	24.85	64.00
	Total Imp(%)= 81.00	
	IMPERVIOUS (ha)= 20.13	PERVIOUS (i) 4.72
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00

Length (m)= 407.02 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 57.87
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.23 (ii) 18.01 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
 PEAK FLOW (cms)= 1.46 0.70 2.157 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 71.00 56.41 65.75
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.78 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7630)
 ID= 1 DT= 5.0 min
 Area (ha)= 22.49
 Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 16.42 6.07
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 387.21 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 40.28
over (min) 10.00 20.00
Storage Coeff. (min)= 8.96 (ii) 19.11 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 1.22 0.59 1.813 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 71.00 46.52 60.96
TOTAL RAINFALL (mm)= 72.00 72.00 72.00
RUNOFF COEFFICIENT = 0.99 0.65 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min
Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.67	1.47
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	232.95	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72

0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 58.95
over (min) 5.00 20.00
Storage Coeff. (min)= 6.60 (ii) 15.32 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.18 0.07

TOTALS
PEAK FLOW (cms)= 0.49 0.23 0.721 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 71.00 58.60 66.78
TOTAL RAINFALL (mm)= 72.00 72.00 72.00
RUNOFF COEFFICIENT = 0.99 0.81 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	0.571	8.42	23.18
+ ID2= 2 (7628):	24.85	2.157	5.25	65.75
=====				
ID = 3 (0561):	115.94	2.382	5.25	32.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):	115.94	2.382	5.25	32.30
+ ID2= 2 (7630):	22.49	1.813	5.25	60.96
=====				
ID = 1 (0561):	138.43	4.195	5.25	36.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	4.195	5.25	36.96
+ ID2= 2 (7638):	8.14	0.721	5.25	66.78
=====				
ID = 3 (0561):	146.57	4.916	5.25	38.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.4 25-year SSP5.85_12h **

CALIB	Area (ha)= 91.09	Curve Number (CN)= 71.0
NASHYD (7624)	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 0.810 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 32.781
 TOTAL RAINFALL (mm)= 87.000
 RUNOFF COEFFICIENT = 0.377

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)= 24.85	Dir. Conn.(%)= 64.00
STANDHYD (7628)	Total Imp(%)= 81.00	
ID= 1 DT= 5.0 min		

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 71.39
over (min) 10.00 20.00
Storage Coeff. (min)= 8.55 (ii) 16.63 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 1.77 0.88 2.643 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 86.00 70.87 80.55
TOTAL RAINFALL (mm)= 87.00 87.00 87.00
RUNOFF COEFFICIENT = 0.99 0.81 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min
Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	16.42	6.07
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	387.21	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87

0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 51.45
over (min) 10.00 20.00
Storage Coeff. (min)= 8.30 (ii) 17.51 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
PEAK FLOW (cms)= 1.47 0.78 2.249 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 86.00 59.98 75.33
TOTAL RAINFALL (mm)= 87.00 87.00 87.00
RUNOFF COEFFICIENT = 0.99 0.69 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min
Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87

1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 72.36
over (min) 5.00 15.00
Storage Coeff. (min)= 6.12 (ii) 14.15 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.19 0.08

TOTALS

PEAK FLOW (cms)= 0.60 0.28 0.882 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 86.00 73.21 81.65
TOTAL RAINFALL (mm)= 87.00 87.00 87.00
RUNOFF COEFFICIENT = 0.99 0.84 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	0.810	8.33	32.78
+ ID2= 2 (7628):	24.85	2.643	5.25	80.55
=====				
ID = 3 (0561):	115.94	2.981	5.25	43.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):	115.94	2.981	5.25	43.02
+ ID2= 2 (7630):	22.49	2.249	5.25	75.33
=====				
ID = 1 (0561):	138.43	5.230	5.25	48.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	5.230	5.25	48.27
+ ID2= 2 (7638):	8.14	0.882	5.25	81.65
=====				
ID = 3 (0561):	146.57	6.112	5.25	50.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.5 50-year SSP5.85_12h **

NASHYD (7624) | Area (ha)= 91.09 Curve Number (CN)= 71.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50

 U.H. Tp(hrs)= 2.09

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 1.017 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 41.068
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.415

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7628) | Area (ha)= 24.85
 ID= 1 DT= 5.0 min | Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.13	4.72
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	407.02	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99

0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 82.16
over (min) 10.00 20.00
Storage Coeff. (min)= 8.12 (ii) 15.76 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.07

TOTALS
PEAK FLOW (cms)= 2.01 1.02 3.031 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 98.00 82.54 92.43
TOTAL RAINFALL (mm)= 99.00 99.00 99.00
RUNOFF COEFFICIENT = 0.99 0.83 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630) | Area (ha)= 22.49
ID= 1 DT= 5.0 min | Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99

1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 60.16
over (min) 10.00 20.00
Storage Coeff. (min)= 7.88 (ii) 16.53 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 1.68 0.92 2.600 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 98.00 71.00 86.93
TOTAL RAINFALL (mm)= 99.00 99.00 99.00
RUNOFF COEFFICIENT = 0.99 0.72 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min
Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99

2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 83.04
over (min) 5.00 15.00
Storage Coeff. (min)= 5.81 (ii) 13.41 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.20 0.08

TOTALS

PEAK FLOW (cms)= 0.68 0.33 1.009 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 98.00 84.98 93.57
TOTAL RAINFALL (mm)= 99.00 99.00 99.00
RUNOFF COEFFICIENT = 0.99 0.86 0.95

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7624):	91.09	1.017	8.33	41.07
+ ID2= 2 (7628):	24.85	3.031	5.25	92.43
=====				
ID = 3 (0561):	115.94	3.471	5.25	52.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0561):	115.94	3.471	5.25	52.08
+ ID2= 2 (7630):	22.49	2.600	5.25	86.93
=====				
ID = 1 (0561):	138.43	6.072	5.25	57.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0561):	138.43	6.072	5.25	57.74
+ ID2= 2 (7638):	8.14	1.009	5.25	93.57
=====				
ID = 3 (0561):	146.57	7.080	5.25	59.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.6 100-year SSP5.85_12h **

CALIB			
NASHYD (7624)		Area (ha)= 91.09	Curve Number (CN)= 71.0
ID= 1 DT= 5.0 min		Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
		U.H. Tp(hrs)= 2.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Unit Hyd Qpeak (cms)= 0.744

PEAK FLOW (cms)= 1.310 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 52.780
 TOTAL RAINFALL (mm)= 115.000
 RUNOFF COEFFICIENT = 0.459

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7628)
 ID= 1 DT= 5.0 min

Area (ha)= 24.85
 Total Imp(%)= 81.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.13	4.72
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	407.02	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15

1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 96.47
over (min) 10.00 15.00
Storage Coeff. (min)= 7.65 (ii) 14.81 (ii)
Unit Hyd. Tpeak (min)= 10.00 15.00
Unit Hyd. peak (cms)= 0.13 0.08

TOTALS

PEAK FLOW (cms)= 2.34 1.22 3.558 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 114.00 98.19 108.31
TOTAL RAINFALL (mm)= 115.00 115.00 115.00
RUNOFF COEFFICIENT = 0.99 0.85 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7630)
ID= 1 DT= 5.0 min
Area (ha)= 22.49
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	16.42	6.07
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	387.21	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15

2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 71.78
over (min) 5.00 20.00
Storage Coeff. (min)= 7.43 (ii) 15.48 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

TOTALS

PEAK FLOW (cms)= 1.95 1.12 3.070 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 114.00 85.93 102.49
TOTAL RAINFALL (mm)= 115.00 115.00 115.00
RUNOFF COEFFICIENT = 0.99 0.75 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7638)
ID= 1 DT= 5.0 min

Area (ha)= 8.14
Total Imp(%)= 82.00 Dir. Conn.(%)= 66.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.67	1.47
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	232.95	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15

2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 97.23
over (min) 5.00 15.00
Storage Coeff. (min)= 5.47 (ii) 12.61 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.20 0.08

PEAK FLOW (cms)= 0.79 0.39 *TOTALS* 1.177 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 114.00 100.73 109.49
TOTAL RAINFALL (mm)= 115.00 115.00 115.00
RUNOFF COEFFICIENT = 0.99 0.88 0.95

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 90.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7624):	91.09	1.310	8.25	52.78
+ ID2= 2 (7628):	24.85	3.558	5.25	108.31
ID = 3 (0561):	115.94	4.147	5.25	64.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0561):	115.94	4.147	5.25	64.68
+ ID2= 2 (7630):	22.49	3.070	5.25	102.49
ID = 1 (0561):	138.43	7.217	5.25	70.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0561)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0561):	138.43	7.217	5.25	70.82
+ ID2= 2 (7638):	8.14	1.177	5.25	109.49
ID = 3 (0561):	146.57	8.394	5.25	72.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CATCHMENT 38.04



 ** SIMULATION:1.1 2-year SSP5.85_6hr **

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| CALIB |
| NASHYD ( 7696) | Area (ha)= 36.37 Curve Number (CN)= 73.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 1.99
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.073 (i)
 TIME TO PEAK (hrs)= 5.667
 RUNOFF VOLUME (mm)= 6.424
 TOTAL RAINFALL (mm)= 38.000
 RUNOFF COEFFICIENT = 0.169

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| STANDHYD ( 7633) | Area (ha)= 54.88
| ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)=	34.96	37.42	
over (min)	10.00	25.00	
Storage Coeff. (min)=	11.45 (ii)	21.91 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.10	0.05	
			TOTALS
PEAK FLOW (cms)=	3.05	0.87	3.752 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	37.00	20.32	30.49
TOTAL RAINFALL (mm)=	38.00	38.00	38.00
RUNOFF COEFFICIENT =	0.97	0.53	0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05		5.57
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	370.76		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)=	34.96	31.70	
over (min)	10.00	20.00	
Storage Coeff. (min)=	8.54 (ii)	19.71 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	1.15	0.33	1.438 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	37.00	18.33	29.35
TOTAL RAINFALL (mm)=	38.00	38.00	38.00
RUNOFF COEFFICIENT =	0.97	0.48	0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 14.25 4.50
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 353.55 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max. Eff. Inten. (mm/hr)= 34.96 37.42
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.30 (ii) 18.76 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 1.08 0.32 *TOTALS*
 TIME TO PEAK (hrs)= 2.75 2.92 1.371 (iii)
 RUNOFF VOLUME (mm)= 37.00 20.32 30.49
 TOTAL RAINFALL (mm)= 38.00 38.00 38.00
 RUNOFF COEFFICIENT = 0.97 0.53 0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB STANDHYD (7641) Area (ha)= 9.24
 ID= 1 DT= 5.0 min Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 7.76 1.48
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 248.19 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76

1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)= 34.96 64.82
over (min) 5.00 20.00
Storage Coeff. (min)= 6.71 (ii) 15.11 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.18 0.07

TOTALS
PEAK FLOW (cms)= 0.60 0.21 0.794 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 37.00 28.72 34.27
TOTAL RAINFALL (mm)= 38.00 38.00 38.00
RUNOFF COEFFICIENT = 0.97 0.76 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min | Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	196.64	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)= 34.96 28.58
over (min) 5.00 20.00
Storage Coeff. (min)= 5.84 (ii) 17.48 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.20 0.06

TOTALS
PEAK FLOW (cms)= 0.32 0.09 0.402 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 37.00 16.90 28.36
TOTAL RAINFALL (mm)= 38.00 38.00 38.00
RUNOFF COEFFICIENT = 0.97 0.44 0.75

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min

Area (ha)= 2.52
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)=	34.96	28.58	
over (min)	5.00	20.00	
Storage Coeff. (min)=	4.54 (ii)	16.19 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.23	0.06	
			TOTALS
PEAK FLOW (cms)=	0.14	0.04	0.176 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	37.00	16.90	28.35
TOTAL RAINFALL (mm)=	38.00	38.00	38.00
RUNOFF COEFFICIENT =	0.97	0.44	0.75

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)
 1 + 2 = 3

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	1.438	2.75	29.35
+ ID2= 2 (7633):	54.88	3.752	2.75	30.49
=====				
ID = 3 (0577):	75.50	5.189	2.75	30.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)
 3 + 2 = 1

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	5.189	2.75	30.18
+ ID2= 2 (7640):	18.75	1.371	2.75	30.49
=====				
ID = 1 (0577):	94.25	6.560	2.75	30.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	6.560	2.75	30.24
+ ID2= 2 (7641):		9.24	0.794	2.75	34.27
=====					
ID = 3 (0577):		103.49	7.354	2.75	30.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	7.354	2.75	30.60
+ ID2= 2 (7643):		5.80	0.402	2.75	28.36
=====					
ID = 1 (0577):		109.29	7.756	2.75	30.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	7.756	2.75	30.48
+ ID2= 2 (7645):		2.52	0.176	2.75	28.35
=====					
ID = 3 (0577):		111.81	7.932	2.75	30.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	7.932	2.75	30.43
+ ID2= 2 (7696):		36.37	0.073	5.67	6.42
=====					
ID = 1 (0577):		148.18	7.948	2.75	24.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.2 5-year SSP5.85_6hr **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=	1.99				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.148 (i)
 TIME TO PEAK (hrs)= 5.500
 RUNOFF VOLUME (mm)= 12.966
 TOTAL RAINFALL (mm)= 52.000
 RUNOFF COEFFICIENT = 0.249

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 41.71 13.17
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 604.87 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)= 47.84 59.43
 over (min) 10.00 20.00
 Storage Coeff. (min)= 10.10 (ii) 18.79 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.11 0.06

TOTALS
 PEAK FLOW (cms)= 4.25 1.49 5.610 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 51.00 32.00 43.59
 TOTAL RAINFALL (mm)= 52.00 52.00 52.00
 RUNOFF COEFFICIENT = 0.98 0.62 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7632)
 ID= 1 DT= 5.0 min

Area (ha)= 20.62
 Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 15.05 5.57
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 370.76 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
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hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)= 47.84 51.60
over (min) 10.00 20.00
Storage Coeff. (min)= 7.53 (ii) 16.73 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
2.099 (iii)

PEAK FLOW (cms)= 1.59 0.56
TIME TO PEAK (hrs)= 2.75 2.92
RUNOFF VOLUME (mm)= 51.00 29.39 42.14
TOTAL RAINFALL (mm)= 52.00 52.00 52.00
RUNOFF COEFFICIENT = 0.98 0.57 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7640)
ID= 1 DT= 5.0 min
Area (ha)= 18.75
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)= 47.84 59.43
over (min) 5.00 20.00
Storage Coeff. (min)= 7.32 (ii) 16.01 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.06

PEAK FLOW	(cms)=	1.50	0.53	*TOTALS*	2.002 (iii)
TIME TO PEAK	(hrs)=	2.75	2.83		2.75
RUNOFF VOLUME	(mm)=	51.00	32.00		43.59
TOTAL RAINFALL	(mm)=	52.00	52.00		52.00
RUNOFF COEFFICIENT	=	0.98	0.62		0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)=	9.24	Total Imp(%)=	84.00	Dir. Conn.(%)=	67.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	248.19	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)=	47.84	92.40
over (min)	5.00	15.00
Storage Coeff. (min)=	5.92 (ii)	13.20 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

PEAK FLOW	(cms)=	0.82	0.32	*TOTALS*	1.139 (iii)
TIME TO PEAK	(hrs)=	2.75	2.75		2.75
RUNOFF VOLUME	(mm)=	51.00	42.18		48.09
TOTAL RAINFALL	(mm)=	52.00	52.00		52.00
RUNOFF COEFFICIENT	=	0.98	0.81		0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7643) ID= 1 DT= 5.0 min	Area (ha)=	5.80	Total Imp(%)=	71.00	Dir. Conn.(%)=	57.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)= 47.84 47.37
 over (min) 5.00 15.00
 Storage Coeff. (min)= 5.15 (ii) 14.66 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.21 0.08

PEAK FLOW (cms)= 0.44 0.17 0.599 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 51.00 27.45 40.87
 TOTAL RAINFALL (mm)= 52.00 52.00 52.00
 RUNOFF COEFFICIENT = 0.98 0.53 0.79

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min

Area (ha)= 2.52	Dir. Conn.(%)= 57.00
Total Imp(%)= 71.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)=	47.84	47.37	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.01 (ii)	13.52 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.24	0.08	
			TOTALS
PEAK FLOW (cms)=	0.19	0.07	0.262 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	51.00	27.45	40.87
TOTAL RAINFALL (mm)=	52.00	52.00	52.00
RUNOFF COEFFICIENT =	0.98	0.53	0.79

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	2.099	2.75	42.14
+ ID2= 2 (7633):	54.88	5.610	2.75	43.59
=====				
ID = 3 (0577):	75.50	7.709	2.75	43.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	7.709	2.75	43.19
+ ID2= 2 (7640):	18.75	2.002	2.75	43.59
=====				
ID = 1 (0577):	94.25	9.710	2.75	43.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	94.25	9.710	2.75	43.27
+ ID2= 2 (7641):	9.24	1.139	2.75	48.09
=====				
ID = 3 (0577):	103.49	10.849	2.75	43.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	103.49	10.849	2.75	43.70
+ ID2= 2 (7643):	5.80	0.599	2.75	40.87
=====				
ID = 1 (0577):	109.29	11.448	2.75	43.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	109.29	11.448	2.75	43.55
+ ID2= 2 (7645):	2.52	0.262	2.75	40.87
=====				
ID = 3 (0577):	111.81	11.710	2.75	43.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	111.81	11.710	2.75	43.49
+ ID2= 2 (7696):	36.37	0.148	5.50	12.97
=====				
ID = 1 (0577):	148.18	11.748	2.75	36.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.3 10-year SSP5.85_6hr **

CALIB	Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)	Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min	U.H. Tp	(hrs)=	1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.211 (i)
 TIME TO PEAK (hrs)= 5.417
 RUNOFF VOLUME (mm)= 18.514
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.299

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area	(ha)=	54.88	Dir. Conn.(%)=	61.00
STANDHYD (7633)	Total Imp	(%)=	76.00		
ID= 1 DT= 5.0 min					

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24

0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 74.73
over (min) 10.00 20.00
Storage Coeff. (min)= 9.42 (ii) 17.35 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 5.11 1.94 6.923 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 61.00 40.79 53.12
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.66 0.86

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632)
ID= 1 DT= 5.0 min
Area (ha)= 20.62
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 65.59
over (min) 5.00 20.00
Storage Coeff. (min)= 7.02 (ii) 15.37 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

PEAK FLOW (cms)= 1.91 0.74 2.600 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 61.00 37.81 51.49
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.61 0.83

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL

THAN THE STORAGE COEFFICIENT.
 (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)=	57.04	74.73
over (min)	5.00	15.00
Storage Coeff. (min)=	6.82 (ii)	14.75 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.18	0.08

TOTALS

PEAK FLOW (cms)=	1.80	0.73	2.510 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	61.00	40.79	53.12
TOTAL RAINFALL (mm)=	62.00	62.00	62.00
RUNOFF COEFFICIENT =	0.98	0.66	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24 Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24

0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 111.97
over (min) 5.00 15.00
Storage Coeff. (min)= 5.52 (ii) 10.50 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.20 0.09

TOTALS
PEAK FLOW (cms)= 0.98 0.41 1.390 (iii)
TIME TO PEAK (hrs)= 2.75 2.75
RUNOFF VOLUME (mm)= 61.00 51.92 58.00
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.84 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min
Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 60.70
over (min) 5.00 15.00
Storage Coeff. (min)= 4.80 (ii) 13.42 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.22 0.08

TOTALS
PEAK FLOW (cms)= 0.52 0.22 0.739 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 61.00 35.55 50.05
TOTAL RAINFALL (mm)= 62.00 62.00 62.00

RUNOFF COEFFICIENT = 0.98 0.57 0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min
 Area (ha)= 2.52
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)=	57.04	60.70
over (min)	5.00	15.00
Storage Coeff.(min)=	3.74 (ii)	12.35 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.25	0.08

			TOTALS
PEAK FLOW (cms)=	0.23	0.10	0.324 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	61.00	35.55	50.05
TOTAL RAINFALL (mm)=	62.00	62.00	62.00
RUNOFF COEFFICIENT =	0.98	0.57	0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ADD HYD (0577)
 1 + 2 = 3
 AREA QPEAK TPEAK R.V.
 (ha) (cms) (hrs) (mm)
 ID1= 1 (7632): 20.62 2.600 2.75 51.49
 + ID2= 2 (7633): 54.88 6.923 2.75 53.12
 =====
 ID = 3 (0577): 75.50 9.523 2.75 52.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		75.50	9.523	2.75	52.67
+ ID2= 2 (7640):		18.75	2.510	2.75	53.12
=====					
ID = 1 (0577):		94.25	12.032	2.75	52.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	12.032	2.75	52.76
+ ID2= 2 (7641):		9.24	1.390	2.75	58.00
=====					
ID = 3 (0577):		103.49	13.423	2.75	53.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	13.423	2.75	53.23
+ ID2= 2 (7643):		5.80	0.739	2.75	50.05
=====					
ID = 1 (0577):		109.29	14.161	2.75	53.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	14.161	2.75	53.06
+ ID2= 2 (7645):		2.52	0.324	2.75	50.05
=====					
ID = 3 (0577):		111.81	14.485	2.75	52.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	14.485	2.75	52.99
+ ID2= 2 (7696):		36.37	0.211	5.42	18.51
=====					
ID = 1 (0577):		148.18	14.544	2.75	44.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25-year SSP5.85_6hr **

CALIB		Area	(ha)=	36.37	Curve Number (CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50
ID= 1 DT= 5.0 min		U.H. Tp	(hrs)=	1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54

1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.319 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 27.872
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.362

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7633) ID= 1 DT= 5.0 min	Area (ha)= 54.88 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)=	70.84	97.94
over (min)	10.00	20.00
Storage Coeff. (min)=	8.63 (ii)	15.75 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.07

			TOTALS
PEAK FLOW (cms)=	6.40	2.69	8.938 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	76.00	54.39	67.57
TOTAL RAINFALL (mm)=	77.00	77.00	77.00
RUNOFF COEFFICIENT =	0.99	0.71	0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 15.05 5.57
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 370.76 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max. Eff. Inten. (mm/hr)= 70.84 87.00
 over (min) 5.00 15.00
 Storage Coeff. (min)= 6.44 (ii) 13.90 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.18 0.08

PEAK FLOW (cms)= 2.38 1.06 *TOTALS*
 TIME TO PEAK (hrs)= 2.75 2.83 3.427 (iii)
 RUNOFF VOLUME (mm)= 76.00 50.96 65.73
 TOTAL RAINFALL (mm)= 77.00 77.00 77.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7640)
 ID= 1 DT= 5.0 min
 Area (ha)= 18.75
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 14.25 4.50
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 353.55 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54

1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)= 70.84 97.94
over (min) 5.00 15.00
Storage Coeff. (min)= 6.26 (ii) 13.37 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.19 0.08

TOTALS

PEAK FLOW (cms)= 2.24 0.99 3.221 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 76.00 54.39 67.57
TOTAL RAINFALL (mm)= 77.00 77.00 77.00
RUNOFF COEFFICIENT = 0.99 0.71 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min | Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)= 70.84 141.16
over (min) 5.00 10.00
Storage Coeff. (min)= 5.06 (ii) 9.63 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.21 0.11

TOTALS

PEAK FLOW (cms)= 1.22 0.55 1.763 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 76.00 66.64 72.91
TOTAL RAINFALL (mm)= 77.00 77.00 77.00
RUNOFF COEFFICIENT = 0.99 0.87 0.95

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)=	70.84	81.28
over (min)	5.00	15.00
Storage Coeff. (min)=	4.40 (ii)	12.07 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.23	0.09

TOTALS
PEAK FLOW (cms)= 0.65 0.31 0.955 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 76.00 48.31 64.09
TOTAL RAINFALL (mm)= 77.00 77.00 77.00
RUNOFF COEFFICIENT = 0.99 0.63 0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min

Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54

0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)= 70.84 81.28
over (min) 5.00 15.00
Storage Coeff. (min)= 3.43 (ii) 11.09 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.26 0.09

PEAK FLOW (cms)= 0.28 0.14 *TOTALS*
TIME TO PEAK (hrs)= 2.75 2.83 0.418 (iii)
RUNOFF VOLUME (mm)= 76.00 48.31 64.09
TOTAL RAINFALL (mm)= 77.00 77.00 77.00
RUNOFF COEFFICIENT = 0.99 0.63 0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7632):	20.62	3.427	2.75	65.73
+ ID2= 2 (7633):	54.88	8.938	2.75	67.57
=====				
ID = 3 (0577):	75.50	12.365	2.75	67.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	75.50	12.365	2.75	67.07
+ ID2= 2 (7640):	18.75	3.221	2.75	67.57
=====				
ID = 1 (0577):	94.25	15.586	2.75	67.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	94.25	15.586	2.75	67.17
+ ID2= 2 (7641):	9.24	1.763	2.75	72.91
=====				
ID = 3 (0577):	103.49	17.349	2.75	67.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	103.49	17.349	2.75	67.68
+ ID2= 2 (7643):	5.80	0.955	2.75	64.09
=====				
ID = 1 (0577):	109.29	18.303	2.75	67.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0577):	109.29	18.303	2.75	67.49
+ ID2= 2 (7645):	2.52	0.418	2.75	64.09
=====				
ID = 3 (0577):	111.81	18.721	2.75	67.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0577):	111.81	18.721	2.75	67.42
+ ID2= 2 (7696):	36.37	0.319	5.33	27.87
=====				
ID = 1 (0577):	148.18	18.817	2.75	57.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.5 50-year SSP5.85_6hr **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7696)	36.37	73.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 1.99	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.413 (i)
 TIME TO PEAK (hrs)= 5.333
 RUNOFF VOLUME (mm)= 36.061
 TOTAL RAINFALL (mm)= 89.000
 RUNOFF COEFFICIENT = 0.405

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)	Dir. Conn.(%)
STANDHYD (7633)	54.88	61.00
ID= 1 DT= 5.0 min	Total Imp(%)= 76.00	

	IMPERVIOUS (ha)	PERVIOUS (i)
Surface Area	41.71	13.17
Dep. Storage	(mm)= 1.00	2.00
Average slope	(%)= 1.00	2.00
Length	(m)= 604.87	40.00
Mannings n	= 0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 116.59
over (min) 10.00 15.00
Storage Coeff. (min)= 8.15 (ii) 14.79 (ii)
Unit Hyd. Tpeak (min)= 10.00 15.00
Unit Hyd. peak (cms)= 0.13 0.08

TOTALS
PEAK FLOW (cms)= 7.43 3.39 10.789 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 88.00 65.54 79.24
TOTAL RAINFALL (mm)= 89.00 89.00 89.00
RUNOFF COEFFICIENT = 0.99 0.74 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632)
ID= 1 DT= 5.0 min
Area (ha)= 20.62
Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.05	5.57
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	370.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 104.32
over (min) 5.00 15.00
Storage Coeff. (min)= 6.07 (ii) 13.01 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00

Unit Hyd. peak (cms)=	0.19	0.08	
PEAK FLOW (cms)=	2.75	1.31	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.83	4.053 (iii)
RUNOFF VOLUME (mm)=	88.00	61.80	2.75
TOTAL RAINFALL (mm)=	89.00	89.00	77.26
RUNOFF COEFFICIENT =	0.99	0.69	89.00
			0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75	Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=		14.25	4.50
Dep. Storage (mm)=		1.00	2.00
Average Slope (%)=		1.00	2.00
Length (m)=		353.55	40.00
Mannings n =		0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)=	81.88	116.59	
over (min)	5.00	15.00	
Storage Coeff. (min)=	5.90 (ii)	12.54 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.19	0.08	
			TOTALS
PEAK FLOW (cms)=	2.59	1.21	3.796 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	88.00	65.54	79.24
TOTAL RAINFALL (mm)=	89.00	89.00	89.00
RUNOFF COEFFICIENT =	0.99	0.74	0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24	Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=		7.76	1.48
Dep. Storage (mm)=		1.00	2.00
Average Slope (%)=		1.00	2.00
Length (m)=		248.19	40.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 164.40
 over (min) 5.00 10.00
 Storage Coeff. (min)= 4.77 (ii) 9.09 (ii)
 Unit Hyd. Tpeak (min)= 5.00 10.00
 Unit Hyd. peak (cms)= 0.22 0.12

TOTALS
 PEAK FLOW (cms)= 1.41 0.64 2.050 (iii)
 TIME TO PEAK (hrs)= 2.75 2.75 2.75
 RUNOFF VOLUME (mm)= 88.00 78.48 84.86
 TOTAL RAINFALL (mm)= 89.00 89.00 89.00
 RUNOFF COEFFICIENT = 0.99 0.88 0.95

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	STANDHYD (7643)	ID= 1 DT= 5.0 min	Area (ha)= 5.80	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	196.64	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78

1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 98.04
over (min) 5.00 15.00
Storage Coeff. (min)= 4.15 (ii) 11.27 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.24 0.09

TOTALS
PEAK FLOW (cms)= 0.75 0.38 1.130 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 88.00 58.88 75.48
TOTAL RAINFALL (mm)= 89.00 89.00 89.00
RUNOFF COEFFICIENT = 0.99 0.66 0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min
Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 98.04
over (min) 5.00 15.00
Storage Coeff. (min)= 3.23 (ii) 10.35 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.27 0.09

TOTALS
PEAK FLOW (cms)= 0.33 0.17 0.495 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 88.00 58.88 75.48
TOTAL RAINFALL (mm)= 89.00 89.00 89.00
RUNOFF COEFFICIENT = 0.99 0.66 0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7632):	20.62	4.053	2.75	77.26
+ ID2= 2 (7633):	54.88	10.789	2.75	79.24
=====				
ID = 3 (0577):	75.50	14.842	2.75	78.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	75.50	14.842	2.75	78.70
+ ID2= 2 (7640):	18.75	3.796	2.75	79.24
=====				
ID = 1 (0577):	94.25	18.639	2.75	78.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	94.25	18.639	2.75	78.81
+ ID2= 2 (7641):	9.24	2.050	2.75	84.86
=====				
ID = 3 (0577):	103.49	20.689	2.75	79.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	103.49	20.689	2.75	79.35
+ ID2= 2 (7643):	5.80	1.130	2.75	75.48
=====				
ID = 1 (0577):	109.29	21.819	2.75	79.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	109.29	21.819	2.75	79.14
+ ID2= 2 (7645):	2.52	0.495	2.75	75.48
=====				
ID = 3 (0577):	111.81	22.314	2.75	79.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	111.81	22.314	2.75	79.06
+ ID2= 2 (7696):	36.37	0.413	5.33	36.06
=====				
ID = 1 (0577):	148.18	22.444	2.75	68.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.6 100-year SSP5.85_6hr **

CALIB				
NASHYD (7696)				
ID= 1 DT= 5.0 min				
Area	(ha)=	36.37	Curve Number	(CN)= 73.0
Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50
U.H. Tp	(hrs)=	1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.547 (i)
 TIME TO PEAK (hrs)= 5.250
 RUNOFF VOLUME (mm)= 47.731
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.455

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max. Eff. Inten. (mm/hr)= 96.60 141.46
 over (min) 10.00 15.00
 Storage Coeff. (min)= 7.63 (ii) 12.55 (ii)
 Unit Hyd. Tpeak (min)= 10.00 15.00
 Unit Hyd. peak (cms)= 0.13 0.08

TOTALS

PEAK FLOW (cms)=	8.81	4.33	13.143 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	104.00	80.63	94.89
TOTAL RAINFALL (mm)=	105.00	105.00	105.00
RUNOFF COEFFICIENT =	0.99	0.77	0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max. Eff. Inten. (mm/hr)=	96.60	127.52
over (min)	5.00	15.00
Storage Coeff. (min)=	5.69 (ii)	12.09 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.20	0.09

PEAK FLOW (cms)=	3.25	1.64	*TOTALS*
TIME TO PEAK (hrs)=	2.75	2.75	4.896 (iii)
RUNOFF VOLUME (mm)=	104.00	76.57	2.75
TOTAL RAINFALL (mm)=	105.00	105.00	92.75
RUNOFF COEFFICIENT =	0.99	0.73	105.00
			0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10

0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 141.46
over (min) 5.00 15.00
Storage Coeff. (min)= 5.53 (ii) 10.45 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.20 0.09

PEAK FLOW (cms)= 3.06 1.55 4.607 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 104.00 80.63 94.89
TOTAL RAINFALL (mm)= 105.00 105.00 105.00
RUNOFF COEFFICIENT = 0.99 0.77 0.90

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min

Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	248.19	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 195.26
over (min) 5.00 10.00
Storage Coeff. (min)= 4.47 (ii) 8.50 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.23 0.12

PEAK FLOW (cms)= 1.66 0.77 2.432 (iii)

TOTALS

TIME TO PEAK (hrs)= 2.75 2.75 2.75
 RUNOFF VOLUME (mm)= 104.00 94.32 100.81
 TOTAL RAINFALL (mm)= 105.00 105.00 105.00
 RUNOFF COEFFICIENT = 0.99 0.90 0.96

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7643)
 ID= 1 DT= 5.0 min

Area (ha)= 5.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	196.64	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 120.58
 over (min) 5.00 15.00
 Storage Coeff. (min)= 3.89 (ii) 10.44 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.25 0.09

TOTALS

PEAK FLOW (cms)= 0.89 0.48 1.368 (iii)
 TIME TO PEAK (hrs)= 2.75 2.75 2.75
 RUNOFF VOLUME (mm)= 104.00 73.35 90.82
 TOTAL RAINFALL (mm)= 105.00 105.00 105.00
 RUNOFF COEFFICIENT = 0.99 0.70 0.86

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min

Area (ha)= 2.52
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 120.58
 over (min) 5.00 10.00
 Storage Coeff. (min)= 3.03 (ii) 9.58 (ii)
 Unit Hyd. Tpeak (min)= 5.00 10.00
 Unit Hyd. peak (cms)= 0.27 0.11

TOTALS

PEAK FLOW (cms)= 0.39 0.22 0.608 (iii)
 TIME TO PEAK (hrs)= 2.75 2.75 2.75
 RUNOFF VOLUME (mm)= 104.00 73.35 90.82
 TOTAL RAINFALL (mm)= 105.00 105.00 105.00
 RUNOFF COEFFICIENT = 0.99 0.70 0.86

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	4.896	2.75	92.75
+ ID2= 2 (7633):	54.88	13.143	2.75	94.89
=====				
ID = 3 (0577):	75.50	18.039	2.75	94.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	18.039	2.75	94.30
+ ID2= 2 (7640):	18.75	4.607	2.75	94.89
=====				
ID = 1 (0577):	94.25	22.646	2.75	94.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	94.25	22.646	2.75	94.42
+ ID2= 2 (7641):	9.24	2.432	2.75	100.81
=====				
ID = 3 (0577):	103.49	25.079	2.75	94.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	25.079	2.75	94.99
+ ID2= 2 (7643):		5.80	1.368	2.75	90.82
=====					
ID = 1 (0577):		109.29	26.446	2.75	94.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	26.446	2.75	94.77
+ ID2= 2 (7645):		2.52	0.608	2.75	90.82
=====					
ID = 3 (0577):		111.81	27.054	2.75	94.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	27.054	2.75	94.68
+ ID2= 2 (7696):		36.37	0.547	5.25	47.73
=====					
ID = 1 (0577):		148.18	27.235	2.75	83.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.1 2-year SSP5_85_12h **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD (7696)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=		1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45

2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.096 (i)
 TIME TO PEAK (hrs)= 8.500
 RUNOFF VOLUME (mm)= 9.493
 TOTAL RAINFALL (mm)= 45.000
 RUNOFF COEFFICIENT = 0.211

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min | Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 24.73
 over (min) 15.00 30.00
 Storage Coeff. (min)= 14.12 (ii) 26.47 (ii)
 Unit Hyd. Tpeak (min)= 15.00 30.00
 Unit Hyd. peak (cms)= 0.08 0.04

TOTALS
 PEAK FLOW (cms)= 1.90 0.70 2.561 (iii)
 TIME TO PEAK (hrs)= 5.25 5.42 5.25
 RUNOFF VOLUME (mm)= 44.00 26.05 37.00
 TOTAL RAINFALL (mm)= 45.00 45.00 45.00
 RUNOFF COEFFICIENT = 0.98 0.58 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7632) ID= 1 DT= 5.0 min	Area (ha)= 20.62 Total Imp(%)= 73.00	Dir. Conn.(%)= 59.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)=	20.70	21.31
over (min)	10.00	25.00
Storage Coeff. (min)=	10.53 (ii)	23.63 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.11	0.05

PEAK FLOW (cms)=	0.70	0.26	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.33	0.952 (iii)
RUNOFF VOLUME (mm)=	44.00	23.73	5.25
TOTAL RAINFALL (mm)=	45.00	45.00	35.69
RUNOFF COEFFICIENT =	0.98	0.53	45.00
			0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7640)
ID= 1 DT= 5.0 min

Area (ha)= 18.75
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	14.25	4.50
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	353.55	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 24.73
over (min) 10.00 25.00
Storage Coeff. (min)= 10.23 (ii) 22.58 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
0.903 (iii)

PEAK FLOW (cms)= 0.66 0.25
TIME TO PEAK (hrs)= 5.25 5.33
RUNOFF VOLUME (mm)= 44.00 26.05 37.00
TOTAL RAINFALL (mm)= 45.00 45.00 45.00
RUNOFF COEFFICIENT = 0.98 0.58 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min

Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00

Average slope (%)= 1.00 2.00
 Length (m)= 248.19 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max. Eff. Inten. (mm/hr)= 20.70 39.48
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.28 (ii) 18.51 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 0.36 0.15 0.505 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 44.00 35.42 41.17
 TOTAL RAINFALL (mm)= 45.00 45.00 45.00
 RUNOFF COEFFICIENT = 0.98 0.79 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7643) ID= 1 DT= 5.0 min	Area (ha)= 5.80 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	196.64	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 19.46
over (min) 5.00 25.00
Storage Coeff. (min)= 7.20 (ii) 20.78 (ii)
Unit Hyd. Tpeak (min)= 5.00 25.00
Unit Hyd. peak (cms)= 0.17 0.05

PEAK FLOW (cms)= 0.19 0.07 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.33 0.262 (iii)
RUNOFF VOLUME (mm)= 44.00 22.03 34.55
TOTAL RAINFALL (mm)= 45.00 45.00 45.00
RUNOFF COEFFICIENT = 0.98 0.49 0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min
Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
Surface Area (ha)= 1.79 0.73
Dep. Storage (mm)= 1.00 2.00
Average Slope (%)= 1.00 2.00
Length (m)= 129.61 40.00
Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45

0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 19.46
over (min) 5.00 20.00
Storage Coeff. (min)= 5.60 (ii) 19.19 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.20 0.06

PEAK FLOW (cms)= 0.08 0.03 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.33 0.116 (iii)
RUNOFF VOLUME (mm)= 44.00 22.03 5.25
TOTAL RAINFALL (mm)= 45.00 45.00 34.55
RUNOFF COEFFICIENT = 0.98 0.49 45.00
0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7632):	20.62	0.952	5.25	35.69
+ ID2= 2 (7633):	54.88	2.561	5.25	37.00
ID = 3 (0577):	75.50	3.513	5.25	36.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0577):	75.50	3.513	5.25	36.64
+ ID2= 2 (7640):	18.75	0.903	5.25	37.00
ID = 1 (0577):	94.25	4.416	5.25	36.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0577):	94.25	4.416	5.25	36.71
+ ID2= 2 (7641):	9.24	0.505	5.25	41.17

ID = 3 (0577): 103.49 4.920 5.25 37.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0577):	103.49	4.920	5.25	37.11
+	ID2= 2 (7643):	5.80	0.262	5.25	34.55
=====					
ID =	1 (0577):	109.29	5.182	5.25	36.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0577):	109.29	5.182	5.25	36.97
+	ID2= 2 (7645):	2.52	0.116	5.25	34.55
=====					
ID =	3 (0577):	111.81	5.298	5.25	36.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0577):	111.81	5.298	5.25	36.92
+	ID2= 2 (7696):	36.37	0.096	8.50	9.49
=====					
ID =	1 (0577):	148.18	5.330	5.25	30.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.2 5-year SSP5_85_12h **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD	(7696)	Ia	(mm)=	10.00	# of Linear Res.	(N)=	1.50
ID=	1 DT=	U.H.	Tp(hrs)=	1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61

2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.183 (i)
 TIME TO PEAK (hrs)= 8.417
 RUNOFF VOLUME (mm)= 17.932
 TOTAL RAINFALL (mm)= 61.000
 RUNOFF COEFFICIENT = 0.294

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min
 Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 36.92
 over (min) 15.00 25.00
 Storage Coeff. (min)= 12.51 (ii) 23.02 (ii)
 Unit Hyd. Tpeak (min)= 15.00 25.00
 Unit Hyd. peak (cms)= 0.08 0.05

TOTALS
 3.691 (iii)
 5.25

PEAK FLOW (cms)= 2.59 1.12
 TIME TO PEAK (hrs)= 5.25 5.33

RUNOFF VOLUME (mm)= 60.00 39.90 52.16
 TOTAL RAINFALL (mm)= 61.00 61.00 61.00
 RUNOFF COEFFICIENT = 0.98 0.65 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7632) | Area (ha)= 20.62
 ID= 1 DT= 5.0 min | Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.05	5.57
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	370.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)=	28.06	32.43
over (min)	10.00	25.00
Storage Coeff. (min)=	9.32 (ii)	20.40 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.12	0.05

			TOTALS
PEAK FLOW (cms)=	0.95	0.42	1.362 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	60.00	36.95	50.55
TOTAL RAINFALL (mm)=	61.00	61.00	61.00
RUNOFF COEFFICIENT =	0.98	0.61	0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL

THAN THE STORAGE COEFFICIENT.
 (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)=	28.06	36.92
over (min)	10.00	20.00
Storage Coeff. (min)=	9.06 (ii)	19.57 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

		TOTALS
PEAK FLOW (cms)=	0.89	1.293 (iii)
TIME TO PEAK (hrs)=	5.25	5.25
RUNOFF VOLUME (mm)=	60.00	52.16
TOTAL RAINFALL (mm)=	61.00	61.00
RUNOFF COEFFICIENT =	0.98	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24 Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	248.19	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max. Eff. Inten. (mm/hr)=	28.06	55.29
over (min)	5.00	20.00
Storage Coeff. (min)=	7.33 (ii)	16.27 (ii)
Unit Hyd. Tpeak (min)=	5.00	20.00
Unit Hyd. peak (cms)=	0.17	0.06

			TOTALS
PEAK FLOW (cms)=	0.48	0.21	0.697 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	60.00	50.94	57.01
TOTAL RAINFALL (mm)=	61.00	61.00	61.00
RUNOFF COEFFICIENT =	0.98	0.84	0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7643) ID= 1 DT= 5.0 min	Area (ha)= 5.80 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)=	28.06	30.03	
over (min)	5.00	20.00	
Storage Coeff. (min)=	6.37 (ii)	17.79 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.18	0.06	
			TOTALS
PEAK FLOW (cms)=	0.26	0.12	0.379 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	60.00	34.72	49.13
TOTAL RAINFALL (mm)=	61.00	61.00	61.00
RUNOFF COEFFICIENT =	0.98	0.57	0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7645) ID= 1 DT= 5.0 min	Area (ha)= 2.52	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61

0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 30.03
over (min) 5.00 20.00
Storage Coeff. (min)= 4.96 (ii) 16.38 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.22 0.06

PEAK FLOW (cms)= 0.11 0.05 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 0.166 (iii)
RUNOFF VOLUME (mm)= 60.00 34.72 5.25
TOTAL RAINFALL (mm)= 61.00 61.00 49.13
RUNOFF COEFFICIENT = 0.98 0.57 61.00
0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	1.362	5.25	50.55
+ ID2= 2 (7633):	54.88	3.691	5.25	52.16
=====				
ID = 3 (0577):	75.50	5.053	5.25	51.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	5.053	5.25	51.72
+ ID2= 2 (7640):	18.75	1.293	5.25	52.16
=====				
ID = 1 (0577):	94.25	6.346	5.25	51.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0577) |

1 + 2 = 3		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		94.25	6.346	5.25	51.81
+ ID2= 2 (7641):		9.24	0.697	5.25	57.01
=====					
ID = 3 (0577):		103.49	7.042	5.25	52.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		103.49	7.042	5.25	52.27
+ ID2= 2 (7643):		5.80	0.379	5.25	49.13
=====					
ID = 1 (0577):		109.29	7.422	5.25	52.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):		109.29	7.422	5.25	52.10
+ ID2= 2 (7645):		2.52	0.166	5.25	49.13
=====					
ID = 3 (0577):		111.81	7.587	5.25	52.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):		111.81	7.587	5.25	52.04
+ ID2= 2 (7696):		36.37	0.183	8.42	17.93
=====					
ID = 1 (0577):		148.18	7.658	5.25	43.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.3 10-year SSP5.85_12h **

CALIB	Area (ha)=	Curve Number (CN)=
NASHYD (7696)	36.37	73.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 1.99	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72

2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.252 (i)
 TIME TO PEAK (hrs)= 8.333
 RUNOFF VOLUME (mm)= 24.632
 TOTAL RAINFALL (mm)= 72.000
 RUNOFF COEFFICIENT = 0.342

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min
 Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 45.74
 over (min) 10.00 25.00
 Storage Coeff. (min)= 11.70 (ii) 21.35 (ii)

Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.10	0.05	
			TOTALS
PEAK FLOW (cms)=	3.06	1.42	4.470 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	71.00	49.81	62.74
TOTAL RAINFALL (mm)=	72.00	72.00	72.00
RUNOFF COEFFICIENT =	0.99	0.69	0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)=	20.62	
STANDHYD (7632)	Total Imp(%)=	73.00	Dir. Conn.(%)= 59.00
ID= 1 DT= 5.0 min			

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	370.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	40.28	
over (min)	10.00	20.00	
Storage Coeff. (min)=	8.72 (ii)	18.88 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	1.12	0.55	1.664 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	71.00	46.52	60.96
TOTAL RAINFALL (mm)=	72.00	72.00	72.00
RUNOFF COEFFICIENT =	0.99	0.65	0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	45.74
over (min)	10.00	20.00
Storage Coeff. (min)=	8.48 (ii)	18.13 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

PEAK FLOW (cms)=	1.05	0.51	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	1.559 (iii)
RUNOFF VOLUME (mm)=	71.00	49.81	62.74
TOTAL RAINFALL (mm)=	72.00	72.00	72.00
RUNOFF COEFFICIENT =	0.99	0.69	0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min

Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76	1.48
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	248.19	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 65.98
 over (min) 5.00 20.00
 Storage Coeff. (min)= 6.86 (ii) 15.19 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.18 0.07

PEAK FLOW (cms)= 0.57 0.26 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.25 0.829 (iii)
 RUNOFF VOLUME (mm)= 71.00 61.72 67.94
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.86 0.94

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68

Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 196.64 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 37.57
 over (min) 5.00 20.00
 Storage Coeff. (min)= 5.96 (ii) 16.40 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.19 0.06

TOTALS
 PEAK FLOW (cms)= 0.30 0.16 0.460 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 71.00 43.99 59.38
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.61 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7645)
 ID= 1 DT= 5.0 min
 Area (ha)= 2.52
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 1.79 0.73
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 129.61 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 37.57
 over (min) 5.00 20.00
 Storage Coeff. (min)= 4.64 (ii) 15.08 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.22 0.07

PEAK FLOW (cms)= 0.13 0.07 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.25 0.201 (iii)
 RUNOFF VOLUME (mm)= 71.00 43.99 59.38
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.61 0.82

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7632):	20.62	1.664	5.25	60.96
+ ID2= 2 (7633):	54.88	4.470	5.25	62.74
===== ID = 3 (0577):	75.50	6.134	5.25	62.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0577):	75.50	6.134	5.25	62.25
+ ID2= 2 (7640):	18.75	1.559	5.25	62.74
===== ID = 1 (0577):	94.25	7.693	5.25	62.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0577):	94.25	7.693	5.25	62.35
+	ID2= 2 (7641):	9.24	0.829	5.25	67.94
=====					
ID	= 3 (0577):	103.49	8.522	5.25	62.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0577):	103.49	8.522	5.25	62.85
+	ID2= 2 (7643):	5.80	0.460	5.25	59.38
=====					
ID	= 1 (0577):	109.29	8.982	5.25	62.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1=	1 (0577):	109.29	8.982	5.25	62.66
+	ID2= 2 (7645):	2.52	0.201	5.25	59.38
=====					
ID	= 3 (0577):	111.81	9.183	5.25	62.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1=	3 (0577):	111.81	9.183	5.25	62.59
+	ID2= 2 (7696):	36.37	0.252	8.33	24.63
=====					
ID	= 1 (0577):	148.18	9.287	5.25	53.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.4 25-year SSP5.85_12h **

CALIB		Area	(ha)=	36.37	Curve Number	(CN)=	73.0
NASHYD	(7696)	Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID=	1 DT= 5.0 min	U.H. Tp	(hrs)=	1.99			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87

1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.356 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 34.659
 TOTAL RAINFALL (mm)= 87.000
 RUNOFF COEFFICIENT = 0.398

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min | Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87

3.083 5.22 | 6.167 11.31 | 9.250 1.74 |

Max.Eff.Inten.(mm/hr)= 40.02 57.40
 over (min) 10.00 20.00
 Storage Coeff. (min)= 10.85 (ii) 19.66 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.11 0.06

TOTALS

PEAK FLOW (cms)= 3.71 1.86 5.572 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 86.00 63.67 77.29
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.73 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7632) | Area (ha)= 20.62
 ID= 1 DT= 5.0 min | Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.05	5.57
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	370.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 51.45
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.09 (ii) 17.30 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 1.35 0.71 2.064 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 86.00 59.98 75.33
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.69 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7640) | Area (ha)= 18.75
 ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	14.25	4.50
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	353.55	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 57.40
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.86 (ii) 16.67 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS
 1.925 (iii)

PEAK FLOW (cms)= 1.27 0.65
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 86.00 63.67 77.29
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.73 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

- CN* = 84.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7641)
ID= 1 DT= 5.0 min | Area (ha)= 9.24
Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	248.19	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)=	40.02	80.50
over (min)	5.00	15.00
Storage Coeff. (min)=	6.36 (ii)	14.06 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

PEAK FLOW (cms)=	0.69	0.32	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	1.010 (iii)
RUNOFF VOLUME (mm)=	86.00	76.51	5.25
TOTAL RAINFALL (mm)=	87.00	87.00	82.87
RUNOFF COEFFICIENT =	0.99	0.88	87.00
			0.95

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

STANDHYD (7643) | Area (ha)= 5.80
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)=	40.02	48.43
over (min)	5.00	15.00
Storage Coeff. (min)=	5.53 (ii)	14.96 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.20	0.08

TOTALS
 PEAK FLOW (cms)= 0.37 0.21 0.576 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 86.00 57.10 73.57
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7645) | Area (ha)= 2.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00

Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 48.43
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.31 (ii) 13.74 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.23 0.08

TOTALS
 PEAK FLOW (cms)= 0.16 0.09 0.251 (iii)
 TIME TO PEAK (hrs)= 5.17 5.25 5.25
 RUNOFF VOLUME (mm)= 86.00 57.10 73.57
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7632):	20.62	2.064	5.25	75.33
+ ID2= 2 (7633):	54.88	5.572	5.25	77.29
===== ID = 3 (0577):	75.50	7.636	5.25	76.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)

```

ID1= 3 ( 0577):    75.50   7.636   5.25   76.76
+ ID2= 2 ( 7640):    18.75   1.925   5.25   77.29
=====
ID = 1 ( 0577):    94.25   9.561   5.25   76.86

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0577) |
| 1 + 2 = 3 |
|-----|
| AREA   QPEAK   TPEAK   R.V. |
| (ha)  (cms)  (hrs)  (mm) |
|-----|
ID1= 1 ( 0577):    94.25   9.561   5.25   76.86
+ ID2= 2 ( 7641):     9.24   1.010   5.25   82.87
=====
ID = 3 ( 0577):   103.49  10.572   5.25   77.40

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0577) |
| 3 + 2 = 1 |
|-----|
| AREA   QPEAK   TPEAK   R.V. |
| (ha)  (cms)  (hrs)  (mm) |
|-----|
ID1= 3 ( 0577):   103.49  10.572   5.25   77.40
+ ID2= 2 ( 7643):     5.80   0.576   5.25   73.57
=====
ID = 1 ( 0577):   109.29  11.148   5.25   77.19

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0577) |
| 1 + 2 = 3 |
|-----|
| AREA   QPEAK   TPEAK   R.V. |
| (ha)  (cms)  (hrs)  (mm) |
|-----|
ID1= 1 ( 0577):   109.29  11.148   5.25   77.19
+ ID2= 2 ( 7645):     2.52   0.251   5.25   73.57
=====
ID = 3 ( 0577):   111.81  11.399   5.25   77.11

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0577) |
| 3 + 2 = 1 |
|-----|
| AREA   QPEAK   TPEAK   R.V. |
| (ha)  (cms)  (hrs)  (mm) |
|-----|
ID1= 3 ( 0577):   111.81  11.399   5.25   77.11
+ ID2= 2 ( 7696):    36.37   0.356   8.25   34.66
=====
ID = 1 ( 0577):   148.18  11.554   5.25   66.69

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:2.5 50-year SSP5.85_12h **

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| CALIB |
| NASHYD ( 7696) | Area (ha)= 36.37 Curve Number (CN)= 73.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
|-----| U.H. Tp(hrs)= 1.99

```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99

1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.445 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 43.266
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.437

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	41.71	13.17
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	604.87	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99

2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 66.73
over (min) 10.00 20.00
Storage Coeff. (min)= 10.30 (ii) 18.60 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.11 0.06

TOTALS

PEAK FLOW (cms)= 4.22 2.21 6.430 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 98.00 74.95 89.01
TOTAL RAINFALL (mm)= 99.00 99.00 99.00
RUNOFF COEFFICIENT = 0.99 0.76 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7632) | Area (ha)= 20.62
ID= 1 DT= 5.0 min | Total Imp(%)= 73.00 Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.05	5.57
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	370.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 60.16

Storage Coeff. (min)=	10.00	20.00	
Unit Hyd. Tpeak (min)=	7.68 (ii)	16.33 (ii)	
Unit Hyd. peak (cms)=	10.00	20.00	
	0.13	0.06	
			TOTALS
PEAK FLOW (cms)=	1.54	0.85	2.386 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	98.00	71.00	86.93
TOTAL RAINFALL (mm)=	99.00	99.00	99.00
RUNOFF COEFFICIENT =	0.99	0.72	0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7640) ID= 1 DT= 5.0 min	Area (ha)= 18.75	Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten. (mm/hr)=	45.54	66.73	
Storage Coeff. (min)=	5.00	20.00	
Unit Hyd. Tpeak (min)=	7.47 (ii)	15.76 (ii)	
Unit Hyd. peak (cms)=	5.00	20.00	
	0.17	0.07	
			TOTALS
PEAK FLOW (cms)=	1.45	0.77	2.219 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	98.00	74.95	89.01

TOTAL RAINFALL (mm)= 99.00 99.00 99.00
 RUNOFF COEFFICIENT = 0.99 0.76 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7641)
 ID= 1 DT= 5.0 min

Area (ha)= 9.24
 Total Imp(%)= 84.00 Dir. Conn.(%)= 67.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.76	1.48
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	248.19	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 92.07
 over (min) 5.00 15.00
 Storage Coeff. (min)= 6.04 (ii) 13.33 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.19 0.08

TOTALS

PEAK FLOW (cms)= 0.78 0.37 1.153 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 98.00 88.38 94.82
 TOTAL RAINFALL (mm)= 99.00 99.00 99.00
 RUNOFF COEFFICIENT = 0.99 0.89 0.96

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7643)
ID= 1 DT= 5.0 min

Area (ha)= 5.80
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	4.12	1.68
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	196.64	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 56.89
over (min) 5.00 15.00
Storage Coeff. (min)= 5.25 (ii) 14.09 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.21 0.08

TOTALS

PEAK FLOW (cms)= 0.42 0.25 0.667 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 98.00 67.88 85.05
TOTAL RAINFALL (mm)= 99.00 99.00 99.00
RUNOFF COEFFICIENT = 0.99 0.69 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min

Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.79	0.73
Dep. Storage	(mm)=	1.00	2.00
Average slope	(%)=	1.00	2.00
Length	(m)=	129.61	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)=	45.54	56.89
over (min)	5.00	15.00
Storage Coeff. (min)=	4.09 (ii)	12.93 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.24	0.08

TOTALS

PEAK FLOW (cms)=	0.18	0.11	0.291 (iii)
TIME TO PEAK (hrs)=	5.17	5.25	5.25
RUNOFF VOLUME (mm)=	98.00	67.88	85.05
TOTAL RAINFALL (mm)=	99.00	99.00	99.00
RUNOFF COEFFICIENT =	0.99	0.69	0.86

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)				
1 + 2 = 3				

ID1= 1 (7632):	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
+ ID2= 2 (7633):	20.62	2.386	5.25	86.93
	54.88	6.430	5.25	89.01
=====				
ID = 3 (0577):	75.50	8.816	5.25	88.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	75.50	8.816	5.25	88.44
+ ID2= 2 (7640):	18.75	2.219	5.25	89.01
=====				
ID = 1 (0577):	94.25	11.035	5.25	88.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	94.25	11.035	5.25	88.55
+ ID2= 2 (7641):	9.24	1.153	5.25	94.82
=====				
ID = 3 (0577):	103.49	12.188	5.25	89.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	103.49	12.188	5.25	89.11
+ ID2= 2 (7643):	5.80	0.667	5.25	85.05
=====				
ID = 1 (0577):	109.29	12.855	5.25	88.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0577):	109.29	12.855	5.25	88.90
+ ID2= 2 (7645):	2.52	0.291	5.25	85.05
=====				
ID = 3 (0577):	111.81	13.146	5.25	88.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0577):	111.81	13.146	5.25	88.81
+ ID2= 2 (7696):	36.37	0.445	8.25	43.27
=====				
ID = 1 (0577):	148.18	13.346	5.25	77.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.6 100-year SSP5.85_12h **

CALIB				
NASHYD (7696)				
ID= 1 DT= 5.0 min	Area (ha)=	36.37	Curve Number (CN)=	73.0
	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
	U.H. Tp(hrs)=	1.99		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15

0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Unit Hyd Qpeak (cms)= 0.312

PEAK FLOW (cms)= 0.571 (i)
 TIME TO PEAK (hrs)= 8.250
 RUNOFF VOLUME (mm)= 55.378
 TOTAL RAINFALL (mm)= 115.000
 RUNOFF COEFFICIENT = 0.482

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7633)
 ID= 1 DT= 5.0 min

Area (ha)= 54.88
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	41.71	13.17
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	604.87	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15

2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)=	52.90	79.14	
over (min)	10.00	20.00	
Storage Coeff. (min)=	9.70 (ii)	17.45 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.11	0.06	
			TOTALS
PEAK FLOW (cms)=	4.91	2.67	7.576 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	114.00	90.17	104.71
TOTAL RAINFALL (mm)=	115.00	115.00	115.00
RUNOFF COEFFICIENT =	0.99	0.78	0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7632)	Area (ha)=	20.62	
ID= 1 DT= 5.0 min	Total Imp(%)=	73.00	Dir. Conn.(%)= 59.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.05	5.57	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	370.76	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15

2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 71.78
over (min) 5.00 20.00
Storage Coeff. (min)= 7.23 (ii) 15.29 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

TOTALS
2.816 (iii)
5.25
102.49
115.00
0.89

PEAK FLOW (cms)= 1.79 1.03
TIME TO PEAK (hrs)= 5.25 5.25
RUNOFF VOLUME (mm)= 114.00 85.93
TOTAL RAINFALL (mm)= 115.00 115.00
RUNOFF COEFFICIENT = 0.99 0.75

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7640)
ID= 1 DT= 5.0 min
Area (ha)= 18.75
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	14.25	4.50
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	353.55	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 79.14
over (min) 5.00 15.00
Storage Coeff. (min)= 7.03 (ii) 14.78 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00

Unit Hyd. peak (cms)=	0.17	0.08	
PEAK FLOW (cms)=	1.68	0.94	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.25	2.621 (iii)
RUNOFF VOLUME (mm)=	114.00	90.17	5.25
TOTAL RAINFALL (mm)=	115.00	115.00	104.71
RUNOFF COEFFICIENT =	0.99	0.78	115.00
			0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7641) ID= 1 DT= 5.0 min	Area (ha)= 9.24	Total Imp(%)= 84.00	Dir. Conn.(%)= 67.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.76		1.48
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	248.19		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)=	52.90	107.45	
over (min)	5.00	15.00	
Storage Coeff. (min)=	5.69 (ii)	12.54 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.20	0.08	
			TOTALS
PEAK FLOW (cms)=	0.91	0.43	1.344 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	114.00	104.24	110.78
TOTAL RAINFALL (mm)=	115.00	115.00	115.00
RUNOFF COEFFICIENT =	0.99	0.91	0.96

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 92.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7643) ID= 1 DT= 5.0 min	Area (ha)= 5.80 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	4.12	1.68
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	196.64	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)=	52.90	68.22
over (min)	5.00	15.00
Storage Coeff. (min)=	4.94 (ii)	13.17 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.22	0.08

			TOTALS
PEAK FLOW (cms)=	0.49	0.30	0.788 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	114.00	82.55	100.47
TOTAL RAINFALL (mm)=	115.00	115.00	115.00
RUNOFF COEFFICIENT =	0.99	0.72	0.87

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7645)
ID= 1 DT= 5.0 min

Area (ha)= 2.52
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.79	0.73
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	129.61	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 68.22
over (min) 5.00 15.00
Storage Coeff. (min)= 3.85 (ii) 12.08 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.25 0.09

PEAK FLOW (cms)= 0.21 0.13 *TOTALS*
TIME TO PEAK (hrs)= 5.17 5.25 0.343 (iii)
RUNOFF VOLUME (mm)= 114.00 82.55 100.47
TOTAL RAINFALL (mm)= 115.00 115.00 115.00
RUNOFF COEFFICIENT = 0.99 0.72 0.87

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0577)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7632):	20.62	2.816	5.25	102.49

+ ID2= 2 (7633):	54.88	7.576	5.25	104.71
=====				
ID = 3 (0577):	75.50	10.392	5.25	104.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	75.50	10.392	5.25	104.10
+ ID2= 2 (7640):	18.75	2.621	5.25	104.71
=====				
ID = 1 (0577):	94.25	13.014	5.25	104.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	94.25	13.014	5.25	104.22
+ ID2= 2 (7641):	9.24	1.344	5.25	110.78
=====				
ID = 3 (0577):	103.49	14.358	5.25	104.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	103.49	14.358	5.25	104.81
+ ID2= 2 (7643):	5.80	0.788	5.25	100.47
=====				
ID = 1 (0577):	109.29	15.146	5.25	104.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0577):	109.29	15.146	5.25	104.58
+ ID2= 2 (7645):	2.52	0.343	5.25	100.47
=====				
ID = 3 (0577):	111.81	15.489	5.25	104.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0577)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0577):	111.81	15.489	5.25	104.48
+ ID2= 2 (7696):	36.37	0.571	8.25	55.38
=====				
ID = 1 (0577):	148.18	15.756	5.25	92.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CATCHMENT 38.05



 ** SIMULATION:1.1 2-year SSP5.85_6hr **

 | READ STORM | Filename: C:\Users\atahmid\AppData
 | | ata\Local\Temp\
 | | 8223d339-748c-4880-8cc5-044c06864140\1fd0c8f7
 | Ptotal= 38.00 mm | Comments: 2. 2-year SSP5.85_6hr

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	12.92	3.50	5.32	5.25	0.76
0.25	0.76	2.00	12.92	3.75	3.04	5.50	0.76
0.50	0.76	2.25	34.96	4.00	3.04	5.75	0.76
0.75	0.76	2.50	34.96	4.25	1.52	6.00	0.76
1.00	0.76	2.75	9.88	4.50	1.52		
1.25	4.56	3.00	9.88	4.75	0.76		
1.50	4.56	3.25	5.32	5.00	0.76		

 | CALIB |
 | NASHYD (0578) | Area (ha)= 41.63 Curve Number (CN)= 73.0
 | ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 | | U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.281 (i)
 TIME TO PEAK (hrs)= 3.833
 RUNOFF VOLUME (mm)= 6.428
 TOTAL RAINFALL (mm)= 38.000
 RUNOFF COEFFICIENT = 0.169

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.2 5-year SSP5.85_6hr **

 | READ STORM | Filename: C:\Users\atahmid\AppData
 | | ata\Local\Temp\
 | | 8223d339-748c-4880-8cc5-044c06864140\ce43be72
 | Ptotal= 52.00 mm | Comments: 2. 5-year SSP5.85_6hr

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	17.68	3.50	7.28	5.25	1.04
0.25	1.04	2.00	17.68	3.75	4.16	5.50	1.04
0.50	1.04	2.25	47.84	4.00	4.16	5.75	1.04
0.75	1.04	2.50	47.84	4.25	2.08	6.00	1.04
1.00	1.04	2.75	13.52	4.50	2.08		
1.25	6.24	3.00	13.52	4.75	1.04		
1.50	6.24	3.25	7.28	5.00	1.04		

CALIB
 NASHYD (0578)
 ID= 1 DT= 5.0 min

Area (ha)= 41.63 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.578 (i)
 TIME TO PEAK (hrs)= 3.750
 RUNOFF VOLUME (mm)= 12.973
 TOTAL RAINFALL (mm)= 52.000
 RUNOFF COEFFICIENT = 0.249

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.3 10-year SSP5.85_6hr **

READ STORM
 Ptotal= 62.00 mm

Filename: C:\Users\atahmid\AppData
 ata\Local\Temp\
 8223d339-748c-4880-8cc5-044c06864140\d17889ca
 Comments: 2. 10-year SSP5.85_6hr

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	1.75	21.08	3.50	8.68	5.25	1.24
0.25	1.24	2.00	21.08	3.75	4.96	5.50	1.24
0.50	1.24	2.25	57.04	4.00	4.96	5.75	1.24
0.75	1.24	2.50	57.04	4.25	2.48	6.00	1.24
1.00	1.24	2.75	16.12	4.50	2.48		
1.25	7.44	3.00	16.12	4.75	1.24		
1.50	7.44	3.25	8.68	5.00	1.24		

CALIB
 NASHYD (0578)
 ID= 1 DT= 5.0 min

Area (ha)= 41.63 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24

0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.833 (i)
 TIME TO PEAK (hrs)= 3.750
 RUNOFF VOLUME (mm)= 18.524
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.299

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.4 25-year SSP5.85_6hr **

READ STORM	Filename: C:\Users\atahmid\AppData ata\Local\Temp\ 8223d339-748c-4880-8cc5-044c06864140\822ab7cc
Ptotal= 77.00 mm	Comments: 2. 25-year SSP5.85_6hr

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	1.75	26.18	3.50	10.78	5.25	1.54
0.25	1.54	2.00	26.18	3.75	6.16	5.50	1.54
0.50	1.54	2.25	70.84	4.00	6.16	5.75	1.54
0.75	1.54	2.50	70.84	4.25	3.08	6.00	1.54
1.00	1.54	2.75	20.02	4.50	3.08		
1.25	9.24	3.00	20.02	4.75	1.54		
1.50	9.24	3.25	10.78	5.00	1.54		

CALIB	Area (ha)= 41.63	Curve Number (CN)= 73.0
NASHYD (0578)	Ia (mm)= 10.00	# of Linear Res.(N)= 2.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.82	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.265 (i)

TIME TO PEAK (hrs)= 3.667
 RUNOFF VOLUME (mm)= 27.886
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.362

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.5 50-year SSP5.85_6hr **

 READ STORM | Filename: C:\Users\atahmid\AppData
 | | ata\Local\Temp\
 | | 8223d339-748c-4880-8cc5-044c06864140\323e8cf4
 Ptotal= 89.00 mm | Comments: 2. 50-year SSP5.85_6hr

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	30.26	3.50	12.46	5.25	1.78
0.25	1.78	2.00	30.26	3.75	7.12	5.50	1.78
0.50	1.78	2.25	81.88	4.00	7.12	5.75	1.78
0.75	1.78	2.50	81.88	4.25	3.56	6.00	1.78
1.00	1.78	2.75	23.14	4.50	3.56		
1.25	10.68	3.00	23.14	4.75	1.78		
1.50	10.68	3.25	12.46	5.00	1.78		

 CALIB |
 NASHYD (0578) | Area (ha)= 41.63 Curve Number (CN)= 73.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.646 (i)
 TIME TO PEAK (hrs)= 3.667
 RUNOFF VOLUME (mm)= 36.080
 TOTAL RAINFALL (mm)= 89.000
 RUNOFF COEFFICIENT = 0.405

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:1.6 100-year SSP5.85_6hr **

 READ STORM | Filename: C:\Users\atahmid\AppData
 | | ata\Local\Temp\
 | | 8223d339-748c-4880-8cc5-044c06864140\658d6a47
 Ptotal=105.00 mm | Comments: 2. 100-year SSP5.85_6hr

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
------	------	------	------	------	------	------	------

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	1.75	35.70	3.50	14.70	5.25	2.10
0.25	2.10	2.00	35.70	3.75	8.40	5.50	2.10
0.50	2.10	2.25	96.60	4.00	8.40	5.75	2.10
0.75	2.10	2.50	96.60	4.25	4.20	6.00	2.10
1.00	2.10	2.75	27.30	4.50	4.20		
1.25	12.60	3.00	27.30	4.75	2.10		
1.50	12.60	3.25	14.70	5.00	2.10		

CALIB
 NASHYD (0578)
 ID= 1 DT= 5.0 min

Area (ha)= 41.63 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 2.192 (i)
 TIME TO PEAK (hrs)= 3.667
 RUNOFF VOLUME (mm)= 47.756
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.455

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.1 2-year SSP5.85_12h **

READ STORM
 Ptotal= 45.00 mm

Filename: C:\Users\atahmid\AppData
 ata\Local\Temp\
 8223d339-748c-4880-8cc5-044c06864140\236b34c5
 Comments: 3. 2-year SSP5.85_12h

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	7.65	6.50	3.15	9.75	0.45
0.25	0.45	3.50	7.65	6.75	3.15	10.00	0.45
0.50	0.45	3.75	7.65	7.00	3.15	10.25	0.45
0.75	0.45	4.00	7.65	7.25	1.80	10.50	0.45
1.00	0.45	4.25	20.70	7.50	1.80	10.75	0.45
1.25	0.45	4.50	20.70	7.75	1.80	11.00	0.45
1.50	0.45	4.75	20.70	8.00	1.80	11.25	0.45
1.75	0.45	5.00	20.70	8.25	0.90	11.50	0.45
2.00	0.45	5.25	5.85	8.50	0.90	11.75	0.45
2.25	2.70	5.50	5.85	8.75	0.90	12.00	0.45
2.50	2.70	5.75	5.85	9.00	0.90		
2.75	2.70	6.00	5.85	9.25	0.45		
3.00	2.70	6.25	3.15	9.50	0.45		

CALIB

NASHYD (0578) | Area (ha)= 41.63 Curve Number (CN)= 73.0
 ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 ----- U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.312 (i)
 TIME TO PEAK (hrs)= 6.250
 RUNOFF VOLUME (mm)= 9.498
 TOTAL RAINFALL (mm)= 45.000
 RUNOFF COEFFICIENT = 0.211

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.2 5-year SSP5.85_12h **

 READ STORM | Filename: C:\Users\atahmid\AppData
 | Ptotal= 61.00 mm | ata\Local\Temp\
 | | 8223d339-748c-4880-8cc5-044c06864140\436e3d21
 | | Comments: 3. 5-year SSP5.85_12h

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	10.37	6.50	4.27	9.75	0.61
0.25	0.61	3.50	10.37	6.75	4.27	10.00	0.61
0.50	0.61	3.75	10.37	7.00	4.27	10.25	0.61
0.75	0.61	4.00	10.37	7.25	2.44	10.50	0.61
1.00	0.61	4.25	28.06	7.50	2.44	10.75	0.61
1.25	0.61	4.50	28.06	7.75	2.44	11.00	0.61
1.50	0.61	4.75	28.06	8.00	2.44	11.25	0.61
1.75	0.61	5.00	28.06	8.25	1.22	11.50	0.61
2.00	0.61	5.25	7.93	8.50	1.22	11.75	0.61
2.25	3.66	5.50	7.93	8.75	1.22	12.00	0.61
2.50	3.66	5.75	7.93	9.00	1.22		
2.75	3.66	6.00	7.93	9.25	0.61		
3.00	3.66	6.25	4.27	9.50	0.61		

CALIB
 NASHYD (0578)
 ID= 1 DT= 5.0 min

Area (ha)= 41.63 Curve Number (CN)= 73.0
 Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
 U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.608 (i)
 TIME TO PEAK (hrs)= 6.083
 RUNOFF VOLUME (mm)= 17.941
 TOTAL RAINFALL (mm)= 61.000
 RUNOFF COEFFICIENT = 0.294

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 ** SIMULATION:2.3 10-year SSP5.85_12h **

READ STORM
 Ptotal= 72.00 mm

Filename: C:\Users\atahmid\AppData
 ata\Local\Temp\
 8223d339-748c-4880-8cc5-044c06864140\2955e951
 Comments: 3. 10-year SSP5.85_12h

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	12.24	6.50	5.04	9.75	0.72
0.25	0.72	3.50	12.24	6.75	5.04	10.00	0.72
0.50	0.72	3.75	12.24	7.00	5.04	10.25	0.72
0.75	0.72	4.00	12.24	7.25	2.88	10.50	0.72
1.00	0.72	4.25	33.12	7.50	2.88	10.75	0.72
1.25	0.72	4.50	33.12	7.75	2.88	11.00	0.72
1.50	0.72	4.75	33.12	8.00	2.88	11.25	0.72
1.75	0.72	5.00	33.12	8.25	1.44	11.50	0.72

2.00	0.72	5.25	9.36	8.50	1.44	11.75	0.72
2.25	4.32	5.50	9.36	8.75	1.44	12.00	0.72
2.50	4.32	5.75	9.36	9.00	1.44		
2.75	4.32	6.00	9.36	9.25	0.72		
3.00	4.32	6.25	5.04	9.50	0.72		

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CALIB
NASHYD ( 0578) | Area (ha)= 41.63 Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
                   | U.H. Tp(hrs)= 0.82
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

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----- TRANSFORMED HYETOGRAPH -----

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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 0.848 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 24.645
TOTAL RAINFALL (mm)= 72.000
RUNOFF COEFFICIENT = 0.342

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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*****
** SIMULATION:2.4 25-year SSP5.85_12h **
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READ STORM |
| Ptotal= 87.00 mm |
|-----|
Filename: C:\Users\atahmid\AppData
          ata\Local\Temp\
          8223d339-748c-4880-8cc5-044c06864140\a5e4e414
Comments: 3. 25-year SSP5.85_12h
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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	14.79	6.50	6.09	9.75	0.87
0.25	0.87	3.50	14.79	6.75	6.09	10.00	0.87
0.50	0.87	3.75	14.79	7.00	6.09	10.25	0.87

0.75	0.87	4.00	14.79	7.25	3.48	10.50	0.87
1.00	0.87	4.25	40.02	7.50	3.48	10.75	0.87
1.25	0.87	4.50	40.02	7.75	3.48	11.00	0.87
1.50	0.87	4.75	40.02	8.00	3.48	11.25	0.87
1.75	0.87	5.00	40.02	8.25	1.74	11.50	0.87
2.00	0.87	5.25	11.31	8.50	1.74	11.75	0.87
2.25	5.22	5.50	11.31	8.75	1.74	12.00	0.87
2.50	5.22	5.75	11.31	9.00	1.74		
2.75	5.22	6.00	11.31	9.25	0.87		
3.00	5.22	6.25	6.09	9.50	0.87		

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CALIB
NASHYD ( 0578) | Area (ha)= 41.63 Curve Number (CN)= 73.0
ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
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U.H. Tp(hrs)= 0.82

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.210 (i)
TIME TO PEAK (hrs)= 5.917
RUNOFF VOLUME (mm)= 34.677
TOTAL RAINFALL (mm)= 87.000
RUNOFF COEFFICIENT = 0.399

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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*****
** SIMULATION:2.5 50-year SSP5.85_12h **
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READ STORM | Filename: C:\Users\atahmid\AppData
            | ata\Local\Temp\
            | 8223d339-748c-4880-8cc5-044c06864140\615bc7e2
Ptotal= 99.00 mm | Comments: 3. 50-year SSP5.85_12h
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TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	3.25	16.83	6.50	6.93	9.75	0.99
0.25	0.99	3.50	16.83	6.75	6.93	10.00	0.99
0.50	0.99	3.75	16.83	7.00	6.93	10.25	0.99
0.75	0.99	4.00	16.83	7.25	3.96	10.50	0.99
1.00	0.99	4.25	45.54	7.50	3.96	10.75	0.99
1.25	0.99	4.50	45.54	7.75	3.96	11.00	0.99
1.50	0.99	4.75	45.54	8.00	3.96	11.25	0.99
1.75	0.99	5.00	45.54	8.25	1.98	11.50	0.99
2.00	0.99	5.25	12.87	8.50	1.98	11.75	0.99
2.25	5.94	5.50	12.87	8.75	1.98	12.00	0.99
2.50	5.94	5.75	12.87	9.00	1.98		
2.75	5.94	6.00	12.87	9.25	0.99		
3.00	5.94	6.25	6.93	9.50	0.99		

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| CALIB                                     |
| NASHYD ( 0578) | Area (ha)= 41.63 | Curve Number (CN)= 73.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 | # of Linear Res.(N)= 2.50 |
|-----| U.H. Tp(hrs)= 0.82 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.524 (i)
 TIME TO PEAK (hrs)= 5.917
 RUNOFF VOLUME (mm)= 43.289
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.437

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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** SIMULATION:2.6 100-year SSP5.85_12h **
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READ STORM
Ptotal=115.00 mm

Filename: C:\Users\atahmid\AppData
ata\Local\Temp\
8223d339-748c-4880-8cc5-044c06864140\0b7c8317
Comments: 3. 100-year SSP5.85_12h

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	3.25	19.55	6.50	8.05	9.75	1.15
0.25	1.15	3.50	19.55	6.75	8.05	10.00	1.15
0.50	1.15	3.75	19.55	7.00	8.05	10.25	1.15
0.75	1.15	4.00	19.55	7.25	4.60	10.50	1.15
1.00	1.15	4.25	52.90	7.50	4.60	10.75	1.15
1.25	1.15	4.50	52.90	7.75	4.60	11.00	1.15
1.50	1.15	4.75	52.90	8.00	4.60	11.25	1.15
1.75	1.15	5.00	52.90	8.25	2.30	11.50	1.15
2.00	1.15	5.25	14.95	8.50	2.30	11.75	1.15
2.25	6.90	5.50	14.95	8.75	2.30	12.00	1.15
2.50	6.90	5.75	14.95	9.00	2.30		
2.75	6.90	6.00	14.95	9.25	1.15		
3.00	6.90	6.25	8.05	9.50	1.15		

CALIB
NASHYD (0578)
ID= 1 DT= 5.0 min

Area (ha)= 41.63 Curve Number (CN)= 73.0
Ia (mm)= 10.00 # of Linear Res.(N)= 2.50
U.H. Tp(hrs)= 0.82

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Unit Hyd Qpeak (cms)= 1.659

PEAK FLOW (cms)= 1.968 (i)
TIME TO PEAK (hrs)= 5.917
RUNOFF VOLUME (mm)= 55.407
TOTAL RAINFALL (mm)= 115.000
RUNOFF COEFFICIENT = 0.482

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CATCHMENT 38.06



 ** SIMULATION:1.1 2-year SSP5.85_6hr **

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| CALIB |
| NASHYD ( 7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
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| U.H. Tp(hrs)= 0.86
  
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.092 (i)
 TIME TO PEAK (hrs)= 4.250
 RUNOFF VOLUME (mm)= 6.168
 TOTAL RAINFALL (mm)= 38.000
 RUNOFF COEFFICIENT = 0.162

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| STANDHYD ( 7693) | Area (ha)= 35.80
| ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)=	34.96	28.58	
over (min)	10.00	25.00	
Storage Coeff. (min)=	10.08 (ii)	21.72 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.11	0.05	
			TOTALS
PEAK FLOW (cms)=	1.89	0.51	2.298 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	37.00	16.90	28.36
TOTAL RAINFALL (mm)=	38.00	38.00	38.00
RUNOFF COEFFICIENT =	0.97	0.44	0.75

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	382.27	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)=	34.96	28.58	
over (min)	10.00	25.00	
Storage Coeff. (min)=	8.70 (ii)	20.34 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.12	0.05	
			TOTALS
PEAK FLOW (cms)=	1.18	0.32	1.434 (iii)
TIME TO PEAK (hrs)=	2.75	3.00	2.75
RUNOFF VOLUME (mm)=	37.00	16.90	28.36
TOTAL RAINFALL (mm)=	38.00	38.00	38.00
RUNOFF COEFFICIENT =	0.97	0.44	0.75

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689) ID= 1 DT= 5.0 min	Area (ha)= 42.12 Total Imp(%)= 75.00	Dir. Conn.(%)= 60.00
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IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 31.59 10.53
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 529.91 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max. Eff. Inten. (mm/hr)= 34.96 34.30
 over (min) 10.00 25.00
 Storage Coeff. (min)= 10.58 (ii) 21.41 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 2.33 0.63 *TOTALS*
 TIME TO PEAK (hrs)= 2.75 3.00 2.840 (iii)
 RUNOFF VOLUME (mm)= 37.00 18.86 2.75
 TOTAL RAINFALL (mm)= 38.00 38.00 29.75
 RUNOFF COEFFICIENT = 0.97 0.50 38.00
 0.78

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7625)
 ID= 1 DT= 5.0 min
 Area (ha)= 26.64
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 20.25 6.39
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 421.43 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76

1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)= 34.96 37.42
over (min) 10.00 20.00
Storage Coeff. (min)= 9.22 (ii) 19.68 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 1.52 0.45 1.924 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 37.00 20.32 30.49
TOTAL RAINFALL (mm)= 38.00 38.00 38.00
RUNOFF COEFFICIENT = 0.97 0.53 0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (7631)	Area (ha)= 19.52		
ID= 1 DT= 5.0 min	Total Imp(%)= 79.00	Dir. Conn.(%)= 64.00	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)= 34.96 46.70
over (min) 10.00 20.00
Storage Coeff. (min)= 8.40 (ii) 17.97 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 1.18 0.37 1.522 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 37.00 23.79 32.24
TOTAL RAINFALL (mm)= 38.00 38.00 38.00
RUNOFF COEFFICIENT = 0.97 0.63 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7636)
ID= 1 DT= 5.0 min

Area (ha)= 3.65
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	4.56	3.250	9.88	4.83	0.76
0.167	0.00	1.750	4.56	3.333	5.32	4.92	0.76
0.250	0.00	1.833	12.92	3.417	5.32	5.00	0.76
0.333	0.76	1.917	12.92	3.500	5.32	5.08	0.76
0.417	0.76	2.000	12.92	3.583	5.32	5.17	0.76
0.500	0.76	2.083	12.92	3.667	5.32	5.25	0.76
0.583	0.76	2.167	12.92	3.750	5.32	5.33	0.76
0.667	0.76	2.250	12.92	3.833	3.04	5.42	0.76
0.750	0.76	2.333	34.96	3.917	3.04	5.50	0.76
0.833	0.76	2.417	34.96	4.000	3.04	5.58	0.76
0.917	0.76	2.500	34.96	4.083	3.04	5.67	0.76
1.000	0.76	2.583	34.96	4.167	3.04	5.75	0.76
1.083	0.76	2.667	34.96	4.250	3.04	5.83	0.76
1.167	0.76	2.750	34.96	4.333	1.52	5.92	0.76
1.250	0.76	2.833	9.88	4.417	1.52	6.00	0.76
1.333	4.56	2.917	9.88	4.500	1.52	6.08	0.76
1.417	4.56	3.000	9.88	4.583	1.52	6.17	0.76
1.500	4.56	3.083	9.88	4.667	1.52	6.25	0.76
1.583	4.56	3.167	9.88	4.750	1.52		

Max.Eff.Inten.(mm/hr)= 34.96 28.58
over (min) 5.00 20.00
Storage Coeff. (min)= 5.08 (ii) 16.73 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.21 0.06

TOTALS
PEAK FLOW (cms)= 0.20 0.06 0.254 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 37.00 16.90 28.36
TOTAL RAINFALL (mm)= 38.00 38.00 38.00
RUNOFF COEFFICIENT = 0.97 0.44 0.75

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7625):	26.64	1.924	2.75	30.49
+ ID2= 2 (7631):	19.52	1.522	2.75	32.24
=====				
ID = 3 (0579):	46.16	3.446	2.75	31.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	46.16	3.446	2.75	31.23
+ ID2= 2 (7636):	3.65	0.254	2.75	28.36
=====				
ID = 1 (0579):	49.81	3.700	2.75	31.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		49.81	3.700	2.75	31.02
+ ID2= 2 (7671):		24.09	0.092	4.25	6.17
=====					
ID = 3 (0579):		73.90	3.732	2.75	22.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	3.732	2.75	22.92
+ ID2= 2 (7689):		42.12	2.840	2.75	29.75
=====					
ID = 1 (0579):		116.02	6.572	2.75	25.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	6.572	2.75	25.40
+ ID2= 2 (7690):		21.92	1.434	2.75	28.36
=====					
ID = 3 (0579):		137.94	8.007	2.75	25.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	8.007	2.75	25.87
+ ID2= 2 (7693):		35.80	2.298	2.75	28.36
=====					
ID = 1 (0579):		173.74	10.305	2.75	26.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.2 5-year SSP5_85_6hr **

CALIB		Area	(ha)=	Curve Number	(CN)=
NASHYD (7671)		24.09		72.0	
ID= 1 DT= 5.0 min		Ia (mm)= 10.00		# of Linear Res.(N)= 1.50	
		U.H. Tp(hrs)= 0.86			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.188 (i)

TIME TO PEAK (hrs)= 4.250
 RUNOFF VOLUME (mm)= 12.499
 TOTAL RAINFALL (mm)= 52.000
 RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7693) ID= 1 DT= 5.0 min	Area (ha)= 35.80 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)=	47.84	47.37
over (min)	10.00	20.00
Storage Coeff. (min)=	8.89 (ii)	18.40 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

PEAK FLOW (cms)=	2.63	0.92	3.452 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	51.00	27.45	40.87
TOTAL RAINFALL (mm)=	52.00	52.00	52.00
RUNOFF COEFFICIENT =	0.98	0.53	0.79

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)= 47.84 47.37
over (min) 10.00 20.00
Storage Coeff. (min)= 7.67 (ii) 17.19 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 1.63 0.57 *TOTALS*
TIME TO PEAK (hrs)= 2.75 2.92 2.149 (iii)
RUNOFF VOLUME (mm)= 51.00 27.45 2.75
TOTAL RAINFALL (mm)= 52.00 52.00 40.87
RUNOFF COEFFICIENT = 0.98 0.53 52.00
0.79

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min
Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)= 47.84 55.47
over (min) 10.00 20.00
Storage Coeff. (min)= 9.33 (ii) 18.27 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)= 3.24 1.11 4.246 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 51.00 30.09 42.64
 TOTAL RAINFALL (mm)= 52.00 52.00 52.00
 RUNOFF COEFFICIENT = 0.98 0.58 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7625) | Area (ha)= 26.64
 ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max. Eff. Inten. (mm/hr)= 47.84 59.43
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.13 (ii) 16.82 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

TOTALS

PEAK FLOW (cms)= 2.11 0.75 2.801 (iii)
 TIME TO PEAK (hrs)= 2.75 2.92 2.75
 RUNOFF VOLUME (mm)= 51.00 32.00 43.59
 TOTAL RAINFALL (mm)= 52.00 52.00 52.00
 RUNOFF COEFFICIENT = 0.98 0.62 0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7631) | Area (ha)= 19.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)= 47.84 69.54
 over (min) 5.00 20.00
 Storage Coeff. (min)= 7.41 (ii) 15.57 (ii)
 Unit Hyd. Tpeak (min)= 5.00 20.00
 Unit Hyd. peak (cms)= 0.17 0.07

TOTALS

PEAK FLOW (cms)= 1.64 0.59 2.203 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 51.00 36.38 45.73
 TOTAL RAINFALL (mm)= 52.00 52.00 52.00
 RUNOFF COEFFICIENT = 0.98 0.70 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min

Area (ha)= 3.65
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	6.24	3.250	13.52	4.83	1.04
0.167	0.00	1.750	6.24	3.333	7.28	4.92	1.04
0.250	0.00	1.833	17.68	3.417	7.28	5.00	1.04
0.333	1.04	1.917	17.68	3.500	7.28	5.08	1.04
0.417	1.04	2.000	17.68	3.583	7.28	5.17	1.04
0.500	1.04	2.083	17.68	3.667	7.28	5.25	1.04
0.583	1.04	2.167	17.68	3.750	7.28	5.33	1.04
0.667	1.04	2.250	17.68	3.833	4.16	5.42	1.04
0.750	1.04	2.333	47.84	3.917	4.16	5.50	1.04
0.833	1.04	2.417	47.84	4.000	4.16	5.58	1.04
0.917	1.04	2.500	47.84	4.083	4.16	5.67	1.04
1.000	1.04	2.583	47.84	4.167	4.16	5.75	1.04
1.083	1.04	2.667	47.84	4.250	4.16	5.83	1.04
1.167	1.04	2.750	47.84	4.333	2.08	5.92	1.04
1.250	1.04	2.833	13.52	4.417	2.08	6.00	1.04
1.333	6.24	2.917	13.52	4.500	2.08	6.08	1.04
1.417	6.24	3.000	13.52	4.583	2.08	6.17	1.04
1.500	6.24	3.083	13.52	4.667	2.08	6.25	1.04
1.583	6.24	3.167	13.52	4.750	2.08		

Max.Eff.Inten.(mm/hr)=	47.84	47.37	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.48 (ii)	14.00 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.23	0.08	
			TOTALS
PEAK FLOW (cms)=	0.28	0.11	0.379 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	51.00	27.45	40.87
TOTAL RAINFALL (mm)=	52.00	52.00	52.00
RUNOFF COEFFICIENT =	0.98	0.53	0.79

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```

-----
| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 7625): 26.64  2.801  2.75  43.59
+ ID2= 2 ( 7631): 19.52  2.203  2.75  45.73
=====
ID = 3 ( 0579): 46.16  5.004  2.75  44.50

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579): 46.16  5.004  2.75  44.50
+ ID2= 2 ( 7636):  3.65  0.379  2.75  40.87
=====
ID = 1 ( 0579): 49.81  5.383  2.75  44.23

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579): 49.81  5.383  2.75  44.23
+ ID2= 2 ( 7671): 24.09  0.188  4.25  12.50
=====
ID = 3 ( 0579): 73.90  5.461  2.75  33.89

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579): 73.90  5.461  2.75  33.89
+ ID2= 2 ( 7689): 42.12  4.246  2.75  42.64
=====
ID = 1 ( 0579): 116.02  9.707  2.75  37.06

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579): 116.02  9.707  2.75  37.06
+ ID2= 2 ( 7690): 21.92  2.149  2.75  40.87
=====
ID = 3 ( 0579): 137.94  11.855  2.75  37.67

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0579) |

```

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	137.94	11.855	2.75	37.67
+ ID2= 2 (7693):	35.80	3.452	2.75	40.87
=====				
ID = 1 (0579):	173.74	15.307	2.75	38.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.3 10-year SSP5.85_6hr **

CALIB NASHYD (7671) ID= 1 DT= 5.0 min	Area (ha)= 24.09 Ia (mm)= 10.00 U.H. Tp(hrs)= 0.86	Curve Number (CN)= 72.0 # of Linear Res.(N)= 1.50
--	--	--

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.270 (i)
 TIME TO PEAK (hrs)= 4.250
 RUNOFF VOLUME (mm)= 17.889
 TOTAL RAINFALL (mm)= 62.000
 RUNOFF COEFFICIENT = 0.289

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7693) ID= 1 DT= 5.0 min	Area (ha)= 35.80 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	---	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24

1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 60.70
over (min) 10.00 20.00
Storage Coeff. (min)= 8.28 (ii) 16.90 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 3.15 1.22 *TOTALS* 4.276 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 61.00 35.55 50.06
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.57 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 60.70
over (min) 5.00 20.00
Storage Coeff. (min)= 7.15 (ii) 15.77 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

PEAK FLOW (cms)= 1.96 0.76 *TOTALS* 2.669 (iii)
TIME TO PEAK (hrs)= 2.75 2.92 2.75
RUNOFF VOLUME (mm)= 61.00 35.55 50.06
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.57 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.

(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max. Eff. Inten. (mm/hr)= 57.04 70.30
over (min) 10.00 20.00
Storage Coeff. (min)= 8.70 (ii) 16.82 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

				TOTALS
PEAK FLOW	(cms)=	3.89	1.46	5.244 (iii)
TIME TO PEAK	(hrs)=	2.75	2.92	2.75
RUNOFF VOLUME	(mm)=	61.00	38.61	52.04
TOTAL RAINFALL	(mm)=	62.00	62.00	62.00
RUNOFF COEFFICIENT	=	0.98	0.62	0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min

Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24

0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 74.73
over (min) 10.00 20.00
Storage Coeff. (min)= 7.58 (ii) 15.51 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.13 0.07

TOTALS

PEAK FLOW (cms)= 2.53 0.98 3.448 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 61.00 40.79 53.12
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.66 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min

Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)= 57.04 85.96
over (min) 5.00 15.00
Storage Coeff. (min)= 6.91 (ii) 14.40 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

TOTALS

PEAK FLOW (cms)= 1.96 0.78 2.740 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 61.00 45.67 55.48
TOTAL RAINFALL (mm)= 62.00 62.00 62.00
RUNOFF COEFFICIENT = 0.98 0.74 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7636) ID= 1 DT= 5.0 min	Area (ha)= 3.65 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	--	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	7.44	3.250	16.12	4.83	1.24
0.167	0.00	1.750	7.44	3.333	8.68	4.92	1.24
0.250	0.00	1.833	21.08	3.417	8.68	5.00	1.24
0.333	1.24	1.917	21.08	3.500	8.68	5.08	1.24
0.417	1.24	2.000	21.08	3.583	8.68	5.17	1.24
0.500	1.24	2.083	21.08	3.667	8.68	5.25	1.24
0.583	1.24	2.167	21.08	3.750	8.68	5.33	1.24
0.667	1.24	2.250	21.08	3.833	4.96	5.42	1.24
0.750	1.24	2.333	57.04	3.917	4.96	5.50	1.24
0.833	1.24	2.417	57.04	4.000	4.96	5.58	1.24
0.917	1.24	2.500	57.04	4.083	4.96	5.67	1.24
1.000	1.24	2.583	57.04	4.167	4.96	5.75	1.24
1.083	1.24	2.667	57.04	4.250	4.96	5.83	1.24
1.167	1.24	2.750	57.04	4.333	2.48	5.92	1.24
1.250	1.24	2.833	16.12	4.417	2.48	6.00	1.24
1.333	7.44	2.917	16.12	4.500	2.48	6.08	1.24
1.417	7.44	3.000	16.12	4.583	2.48	6.17	1.24
1.500	7.44	3.083	16.12	4.667	2.48	6.25	1.24
1.583	7.44	3.167	16.12	4.750	2.48		

Max.Eff.Inten.(mm/hr)=	57.04	60.70	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.18 (ii)	12.79 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.24	0.08	
			TOTALS
PEAK FLOW (cms)=	0.33	0.14	0.467 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	61.00	35.55	50.05
TOTAL RAINFALL (mm)=	62.00	62.00	62.00
RUNOFF COEFFICIENT =	0.98	0.57	0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7625):	26.64	3.448	2.75	53.12
+ ID2= 2 (7631):	19.52	2.740	2.75	55.48
=====				
ID = 3 (0579):	46.16	6.188	2.75	54.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1				

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	6.188	2.75	54.12
+ ID2= 2 (7636):	3.65	0.467	2.75	50.05
=====				
ID = 1 (0579):	49.81	6.655	2.75	53.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	49.81	6.655	2.75	53.82
+ ID2= 2 (7671):	24.09	0.270	4.25	17.89
=====				
ID = 3 (0579):	73.90	6.775	2.75	42.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	73.90	6.775	2.75	42.11
+ ID2= 2 (7689):	42.12	5.244	2.75	52.04
=====				
ID = 1 (0579):	116.02	12.018	2.75	45.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	116.02	12.018	2.75	45.71
+ ID2= 2 (7690):	21.92	2.669	2.75	50.06
=====				
ID = 3 (0579):	137.94	14.687	2.75	46.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	137.94	14.687	2.75	46.40
+ ID2= 2 (7693):	35.80	4.276	2.75	50.06
=====				
ID = 1 (0579):	173.74	18.963	2.75	47.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:1.4 25-year SSP5.85_6hr **

CALIB				
NASHYD (7671)				
ID= 1 DT= 5.0 min				
Area	(ha)=	24.09	Curve Number (CN)=	72.0
Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50
U.H. Tp	(hrs)=	0.86		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54

1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.409 (i)
 TIME TO PEAK (hrs)= 4.083
 RUNOFF VOLUME (mm)= 27.011
 TOTAL RAINFALL (mm)= 77.000
 RUNOFF COEFFICIENT = 0.351

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7693) ID= 1 DT= 5.0 min	Area (ha)= 35.80 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)=	70.84	81.28
over (min)	10.00	20.00
Storage Coeff. (min)=	7.60 (ii)	15.26 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.13	0.07

		TOTALS
PEAK FLOW (cms)=	3.94	1.72
TIME TO PEAK (hrs)=	2.75	2.83
RUNOFF VOLUME (mm)=	76.00	48.31
TOTAL RAINFALL (mm)=	77.00	77.00
RUNOFF COEFFICIENT =	0.99	0.63

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00

Average Slope (%)= 1.00 2.00
 Length (m)= 382.27 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)= 70.84 81.28
 over (min) = 5.00 15.00
 Storage Coeff. (min)= 6.56 (ii) 14.22 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.18 0.08

TOTALS
 PEAK FLOW (cms)= 2.44 1.12 3.536 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 76.00 48.31 64.09
 TOTAL RAINFALL (mm)= 77.00 77.00 77.00
 RUNOFF COEFFICIENT = 0.99 0.63 0.83

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7689)
 ID= 1 DT= 5.0 min | Area (ha)= 42.12
 Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54

1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)=	70.84	92.95					
over (min)	10.00	20.00					
Storage Coeff. (min)=	7.98 (ii)	15.24 (ii)					
Unit Hyd. Tpeak (min)=	10.00	20.00					
Unit Hyd. peak (cms)=	0.13	0.07					
PEAK FLOW (cms)=	4.86	2.03			*TOTALS*		
TIME TO PEAK (hrs)=	2.75	2.83			6.779 (iii)		
RUNOFF VOLUME (mm)=	76.00	51.88			2.75		
TOTAL RAINFALL (mm)=	77.00	77.00			66.35		
RUNOFF COEFFICIENT =	0.99	0.67			77.00		
					0.86		

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
STANDHYD (7625)	Area (ha)=	26.64					
ID= 1 DT= 5.0 min	Total Imp(%)=	76.00	Dir. Conn.(%)=	61.00			

		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39	
Dep. Storage (mm)=	1.00	2.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	421.43	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)=	70.84	97.94					
over (min)	5.00	15.00					
Storage Coeff. (min)=	6.95 (ii)	14.07 (ii)					
Unit Hyd. Tpeak (min)=	5.00	15.00					
Unit Hyd. peak (cms)=	0.17	0.08					
PEAK FLOW (cms)=	3.17	1.39			*TOTALS*		
TIME TO PEAK (hrs)=	2.75	2.83			4.544 (iii)		
RUNOFF VOLUME (mm)=	76.00	54.39			2.75		
TOTAL RAINFALL (mm)=	77.00	77.00			67.57		
RUNOFF COEFFICIENT =	0.99	0.71			77.00		
					0.88		

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

STANDHYD (7631) | Area (ha)= 19.52
 ID= 1 DT= 5.0 min | Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54
0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max. Eff. Inten. (mm/hr)=	70.84	110.57
over (min)	5.00	15.00
Storage Coeff. (min)=	6.33 (ii)	13.11 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.19	0.08

TOTALS
 PEAK FLOW (cms)= 2.44 1.05 3.491 (iii)
 TIME TO PEAK (hrs)= 2.75 2.75 2.75
 RUNOFF VOLUME (mm)= 76.00 59.88 70.20
 TOTAL RAINFALL (mm)= 77.00 77.00 77.00
 RUNOFF COEFFICIENT = 0.99 0.78 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636) | Area (ha)= 3.65
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	9.24	3.250	20.02	4.83	1.54
0.167	0.00	1.750	9.24	3.333	10.78	4.92	1.54
0.250	0.00	1.833	26.18	3.417	10.78	5.00	1.54
0.333	1.54	1.917	26.18	3.500	10.78	5.08	1.54
0.417	1.54	2.000	26.18	3.583	10.78	5.17	1.54
0.500	1.54	2.083	26.18	3.667	10.78	5.25	1.54
0.583	1.54	2.167	26.18	3.750	10.78	5.33	1.54
0.667	1.54	2.250	26.18	3.833	6.16	5.42	1.54
0.750	1.54	2.333	70.84	3.917	6.16	5.50	1.54
0.833	1.54	2.417	70.84	4.000	6.16	5.58	1.54

0.917	1.54	2.500	70.84	4.083	6.16	5.67	1.54
1.000	1.54	2.583	70.84	4.167	6.16	5.75	1.54
1.083	1.54	2.667	70.84	4.250	6.16	5.83	1.54
1.167	1.54	2.750	70.84	4.333	3.08	5.92	1.54
1.250	1.54	2.833	20.02	4.417	3.08	6.00	1.54
1.333	9.24	2.917	20.02	4.500	3.08	6.08	1.54
1.417	9.24	3.000	20.02	4.583	3.08	6.17	1.54
1.500	9.24	3.083	20.02	4.667	3.08	6.25	1.54
1.583	9.24	3.167	20.02	4.750	3.08		

Max.Eff.Inten.(mm/hr)= 70.84 81.28
over (min) 5.00 15.00
Storage Coeff. (min)= 3.83 (ii) 11.50 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.25 0.09

PEAK FLOW (cms)= 0.41 0.20 0.603 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 76.00 48.31 64.09
TOTAL RAINFALL (mm)= 77.00 77.00 77.00
RUNOFF COEFFICIENT = 0.99 0.63 0.83

TOTALS

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7625):	26.64	4.544	2.75	67.57
+ ID2= 2 (7631):	19.52	3.491	2.75	70.20
=====				
ID = 3 (0579):	46.16	8.035	2.75	68.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	46.16	8.035	2.75	68.68
+ ID2= 2 (7636):	3.65	0.603	2.75	64.09
=====				
ID = 1 (0579):	49.81	8.639	2.75	68.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	49.81	8.639	2.75	68.35
+ ID2= 2 (7671):	24.09	0.409	4.08	27.01
=====				
ID = 3 (0579):	73.90	8.833	2.75	54.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	73.90	8.833	2.75	54.87
+ ID2= 2 (7689):	42.12	6.779	2.75	66.35
=====				
ID = 1 (0579):	116.02	15.612	2.75	59.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)

```

ID1= 1 ( 0579): 116.02 15.612 2.75 59.04
+ ID2= 2 ( 7690): 21.92 3.536 2.75 64.09
=====
ID = 3 ( 0579): 137.94 19.148 2.75 59.84

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-----
| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579): 137.94 19.148 2.75 59.84
+ ID2= 2 ( 7693): 35.80 5.552 2.75 64.09
=====
ID = 1 ( 0579): 173.74 24.700 2.75 60.72

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.5 50-year SSP5.85_6hr **

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| CALIB |
| NASHYD ( 7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
-----
| U.H. Tp(hrs)= 0.86 |

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Unit Hyd Qpeak (cms)= 0.478

```

PEAK FLOW (cms)= 0.532 (i)
TIME TO PEAK (hrs)= 4.083
RUNOFF VOLUME (mm)= 35.018
TOTAL RAINFALL (mm)= 89.000
RUNOFF COEFFICIENT = 0.393

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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB |
| STANDHYD ( 7693) | Area (ha)= 35.80
| ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00
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          IMPERVIOUS      PERVIOUS (i)
Surface Area (ha)= 25.42 10.38
Dep. Storage (mm)= 1.00 2.00
Average Slope (%)= 1.00 2.00
Length (m)= 488.54 40.00
Mannings n = 0.013 0.250

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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78

0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 98.04
over (min) 5.00 15.00
Storage Coeff. (min)= 7.17 (ii) 14.28 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

TOTALS
PEAK FLOW (cms)= 4.60 2.22 6.778 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 88.00 58.88 75.48
TOTAL RAINFALL (mm)= 89.00 89.00 89.00
RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min
Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 98.04
over (min) 5.00 15.00
Storage Coeff. (min)= 6.19 (ii) 13.30 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.19 0.08

TOTALS
PEAK FLOW (cms)= 2.83 1.38 4.194 (iii)

TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 88.00 58.88 75.48
 TOTAL RAINFALL (mm)= 89.00 89.00 89.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7689)
 ID= 1 DT= 5.0 min

Area (ha)= 42.12
 Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 111.24
 over (min) 10.00 15.00
 Storage Coeff. (min)= 7.53 (ii) 14.29 (ii)
 Unit Hyd. Tpeak (min)= 10.00 15.00
 Unit Hyd. peak (cms)= 0.13 0.08

TOTALS

PEAK FLOW (cms)= 5.64 2.59 8.198 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 88.00 62.81 77.92
 TOTAL RAINFALL (mm)= 89.00 89.00 89.00
 RUNOFF COEFFICIENT = 0.99 0.71 0.88

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7625)
 ID= 1 DT= 5.0 min

Area (ha)= 26.64
 Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 116.59
over (min) 5.00 15.00
Storage Coeff. (min)= 6.56 (ii) 13.20 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.18 0.08

PEAK FLOW (cms)= 3.67 1.69 *TOTALS* 5.360 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 88.00 65.54 79.24
TOTAL RAINFALL (mm)= 89.00 89.00 89.00
RUNOFF COEFFICIENT = 0.99 0.74 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min
Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)= 81.88 130.20

over (min)	5.00	15.00	
Storage Coeff. (min)=	5.98 (ii)	10.87 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.19	0.09	
			TOTALS
PEAK FLOW (cms)=	2.83	1.30	4.132 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	88.00	71.41	82.03
TOTAL RAINFALL (mm)=	89.00	89.00	89.00
RUNOFF COEFFICIENT =	0.99	0.80	0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7636) ID= 1 DT= 5.0 min	Area (ha)= 3.65	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
--	-----------------	---------------------	----------------------

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	10.68	3.250	23.14	4.83	1.78
0.167	0.00	1.750	10.68	3.333	12.46	4.92	1.78
0.250	0.00	1.833	30.26	3.417	12.46	5.00	1.78
0.333	1.78	1.917	30.26	3.500	12.46	5.08	1.78
0.417	1.78	2.000	30.26	3.583	12.46	5.17	1.78
0.500	1.78	2.083	30.26	3.667	12.46	5.25	1.78
0.583	1.78	2.167	30.26	3.750	12.46	5.33	1.78
0.667	1.78	2.250	30.26	3.833	7.12	5.42	1.78
0.750	1.78	2.333	81.88	3.917	7.12	5.50	1.78
0.833	1.78	2.417	81.88	4.000	7.12	5.58	1.78
0.917	1.78	2.500	81.88	4.083	7.12	5.67	1.78
1.000	1.78	2.583	81.88	4.167	7.12	5.75	1.78
1.083	1.78	2.667	81.88	4.250	7.12	5.83	1.78
1.167	1.78	2.750	81.88	4.333	3.56	5.92	1.78
1.250	1.78	2.833	23.14	4.417	3.56	6.00	1.78
1.333	10.68	2.917	23.14	4.500	3.56	6.08	1.78
1.417	10.68	3.000	23.14	4.583	3.56	6.17	1.78
1.500	10.68	3.083	23.14	4.667	3.56	6.25	1.78
1.583	10.68	3.167	23.14	4.750	3.56		

Max.Eff.Inten.(mm/hr)=	81.88	98.04	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.61 (ii)	10.73 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.25	0.09	
			TOTALS
PEAK FLOW (cms)=	0.47	0.24	0.714 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	88.00	58.88	75.48
TOTAL RAINFALL (mm)=	89.00	89.00	89.00
RUNOFF COEFFICIENT =	0.99	0.66	0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (7625):	26.64	5.360	2.75	79.24

```

+ ID2= 2 ( 7631):   19.52   4.132   2.75   82.03
=====
ID = 3 ( 0579):   46.16   9.492   2.75   80.42

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579):  46.16   9.492   2.75   80.42
+ ID2= 2 ( 7636):  3.65   0.714   2.75   75.48
=====
ID = 1 ( 0579):  49.81  10.206   2.75   80.06

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579):  49.81  10.206   2.75   80.06
+ ID2= 2 ( 7671):  24.09   0.532   4.08   35.02
=====
ID = 3 ( 0579):  73.90  10.469   2.75   65.37

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579):  73.90  10.469   2.75   65.37
+ ID2= 2 ( 7689):  42.12   8.198   2.75   77.92
=====
ID = 1 ( 0579):  116.02  18.668   2.75   69.93

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0579):  116.02  18.668   2.75   69.93
+ ID2= 2 ( 7690):  21.92   4.194   2.75   75.48
=====
ID = 3 ( 0579):  137.94  22.862   2.75   70.81

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

| ADD HYD ( 0579) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0579):  137.94  22.862   2.75   70.81
+ ID2= 2 ( 7693):  35.80   6.778   2.75   75.48
=====
ID = 1 ( 0579):  173.74  29.640   2.75   71.77

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

** SIMULATION:1.6 100-year SSP5.85_6hr **

```

| CALIB |
| NASHYD ( 7671) | Area (ha)= 24.09 Curve Number (CN)= 72.0
| ID= 1 DT= 5.0 min | Ia (mm)= 10.00 # of Linear Res.(N)= 1.50
|-----| U.H. Tp(hrs)= 0.86

```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

```

----- TRANSFORMED HYETOGRAPH -----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
0.083 0.00 | 1.667 12.60 | 3.250 27.30 | 4.83 2.10
0.167 0.00 | 1.750 12.60 | 3.333 14.70 | 4.92 2.10
0.250 0.00 | 1.833 35.70 | 3.417 14.70 | 5.00 2.10

```

0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.708 (i)
 TIME TO PEAK (hrs)= 4.000
 RUNOFF VOLUME (mm)= 46.458
 TOTAL RAINFALL (mm)= 105.000
 RUNOFF COEFFICIENT = 0.442

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min
 Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 120.58
 over (min) 5.00 15.00
 Storage Coeff. (min)= 6.71 (ii) 13.26 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.18 0.08

PEAK FLOW (cms)= 5.44 2.81 8.224 (iii)
 TIME TO PEAK (hrs)= 2.75 2.83 2.75
 RUNOFF VOLUME (mm)= 104.00 73.35 90.82
 TOTAL RAINFALL (mm)= 105.00 105.00 105.00
 RUNOFF COEFFICIENT = 0.99 0.70 0.86

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.56	6.36
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	382.27	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max. Eff. Inten. (mm/hr)=	96.60	120.58
over (min)	5.00	15.00
Storage Coeff. (min)=	5.79 (ii)	12.34 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.20	0.08

PEAK FLOW (cms)=	3.34	1.74	5.083 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	104.00	73.35	90.82
TOTAL RAINFALL (mm)=	105.00	105.00	105.00
RUNOFF COEFFICIENT =	0.99	0.70	0.86

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10

0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 135.71
over (min) 5.00 15.00
Storage Coeff. (min)= 7.04 (ii) 13.29 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

TOTALS

PEAK FLOW (cms)= 6.72 3.24 9.954 (iii)
TIME TO PEAK (hrs)= 2.75 2.83 2.75
RUNOFF VOLUME (mm)= 104.00 77.66 93.47
TOTAL RAINFALL (mm)= 105.00 105.00 105.00
RUNOFF COEFFICIENT = 0.99 0.74 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625) | Area (ha)= 26.64
ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 141.46
over (min) 5.00 15.00
Storage Coeff. (min)= 6.14 (ii) 11.07 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.19 0.09

TOTALS

PEAK FLOW (cms)= 4.34 2.17 6.510 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 104.00 80.63 94.89
TOTAL RAINFALL (mm)= 105.00 105.00 105.00
RUNOFF COEFFICIENT = 0.99 0.77 0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7631) ID= 1 DT= 5.0 min	Area (ha)= 19.52 Total Imp(%)= 79.00	Dir. Conn.(%)= 64.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)=	96.60	156.28	
over (min)	5.00	15.00	
Storage Coeff. (min)=	5.59 (ii)	10.18 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.20	0.10	
			TOTALS
PEAK FLOW (cms)=	3.34	1.60	4.941 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	104.00	86.92	97.85
TOTAL RAINFALL (mm)=	105.00	105.00	105.00
RUNOFF COEFFICIENT =	0.99	0.83	0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7636) ID= 1 DT= 5.0 min	Area (ha)= 3.65 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

0.083	0.00	1.667	12.60	3.250	27.30	4.83	2.10
0.167	0.00	1.750	12.60	3.333	14.70	4.92	2.10
0.250	0.00	1.833	35.70	3.417	14.70	5.00	2.10
0.333	2.10	1.917	35.70	3.500	14.70	5.08	2.10
0.417	2.10	2.000	35.70	3.583	14.70	5.17	2.10
0.500	2.10	2.083	35.70	3.667	14.70	5.25	2.10
0.583	2.10	2.167	35.70	3.750	14.70	5.33	2.10
0.667	2.10	2.250	35.70	3.833	8.40	5.42	2.10
0.750	2.10	2.333	96.60	3.917	8.40	5.50	2.10
0.833	2.10	2.417	96.60	4.000	8.40	5.58	2.10
0.917	2.10	2.500	96.60	4.083	8.40	5.67	2.10
1.000	2.10	2.583	96.60	4.167	8.40	5.75	2.10
1.083	2.10	2.667	96.60	4.250	8.40	5.83	2.10
1.167	2.10	2.750	96.60	4.333	4.20	5.92	2.10
1.250	2.10	2.833	27.30	4.417	4.20	6.00	2.10
1.333	12.60	2.917	27.30	4.500	4.20	6.08	2.10
1.417	12.60	3.000	27.30	4.583	4.20	6.17	2.10
1.500	12.60	3.083	27.30	4.667	4.20	6.25	2.10
1.583	12.60	3.167	27.30	4.750	4.20		

Max.Eff.Inten.(mm/hr)= 96.60 120.58
over (min) 5.00 10.00
Storage Coeff. (min)= 3.38 (ii) 9.93 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.26 0.11

TOTALS
PEAK FLOW (cms)= 0.56 0.32 0.878 (iii)
TIME TO PEAK (hrs)= 2.75 2.75 2.75
RUNOFF VOLUME (mm)= 104.00 73.35 90.82
TOTAL RAINFALL (mm)= 105.00 105.00 105.00
RUNOFF COEFFICIENT = 0.99 0.70 0.86

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	6.510	2.75	94.89
+ ID2= 2 (7631):	19.52	4.941	2.75	97.85
=====				
ID = 3 (0579):	46.16	11.450	2.75	96.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	11.450	2.75	96.14
+ ID2= 2 (7636):	3.65	0.878	2.75	90.82
=====				
ID = 1 (0579):	49.81	12.328	2.75	95.75

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	12.328	2.75	95.75
+ ID2= 2 (7671):	24.09	0.708	4.00	46.46
=====				
ID = 3 (0579):	73.90	12.693	2.75	79.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	73.90	12.693	2.75	79.68
+ ID2= 2 (7689):	42.12	9.954	2.75	93.47

=====
 ID = 1 (0579): 116.02 22.647 2.75 84.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0579):	116.02	22.647	2.75	84.69
+ ID2= 2 (7690):	21.92	5.083	2.75	90.82
=====				
ID = 3 (0579):	137.94	27.731	2.75	85.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	137.94	27.731	2.75	85.66
+ ID2= 2 (7693):	35.80	8.224	2.75	90.82
=====				
ID = 1 (0579):	173.74	35.955	2.75	86.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.1 2-year SSP5.85_12h **

CALIB	Area (ha)	Curve Number (CN)
NASHYD (7671)	24.09	72.0
ID= 1 DT= 5.0 min	Ia (mm)= 10.00	# of Linear Res.(N)= 1.50
	U.H. Tp(hrs)= 0.86	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.109 (i)
 TIME TO PEAK (hrs)= 6.917
 RUNOFF VOLUME (mm)= 9.134
 TOTAL RAINFALL (mm)= 45.000
 RUNOFF COEFFICIENT = 0.203

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693) Area (ha)= 35.80
 ID= 1 DT= 5.0 min Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)=	20.70	19.46
over (min)	10.00	30.00
Storage Coeff. (min)=	12.42 (ii)	26.01 (ii)
Unit Hyd. Tpeak (min)=	10.00	30.00
Unit Hyd. peak (cms)=	0.10	0.04

			TOTALS
PEAK FLOW (cms)=	1.17	0.42	1.564 (iii)
TIME TO PEAK (hrs)=	5.25	5.42	5.25
RUNOFF VOLUME (mm)=	44.00	22.03	34.55
TOTAL RAINFALL (mm)=	45.00	45.00	45.00
RUNOFF COEFFICIENT =	0.98	0.49	0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max. Eff. Inten. (mm/hr)= 20.70 19.46
over (min) 10.00 25.00
Storage Coeff. (min)= 10.72 (ii) 24.31 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 0.72 0.27 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.33 0.976 (iii)
RUNOFF VOLUME (mm)= 44.00 22.03 34.55
TOTAL RAINFALL (mm)= 45.00 45.00 45.00
RUNOFF COEFFICIENT = 0.98 0.49 0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53

Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 529.91 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max. Eff. Inten. (mm/hr)= 20.70 22.96
 over (min) 15.00 30.00
 Storage Coeff. (min)= 13.05 (ii) 25.76 (ii)
 Unit Hyd. Tpeak (min)= 15.00 30.00
 Unit Hyd. peak (cms)= 0.08 0.04

TOTALS

PEAK FLOW (cms)=	1.44	0.51	1.927 (iii)
TIME TO PEAK (hrs)=	5.25	5.42	5.25
RUNOFF VOLUME (mm)=	44.00	24.35	36.14
TOTAL RAINFALL (mm)=	45.00	45.00	45.00
RUNOFF COEFFICIENT =	0.98	0.54	0.80

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7625)
 ID= 1 DT= 5.0 min

Area (ha)=	26.64
Total Imp(%)=	76.00
Dir. Conn.(%)=	61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max. Eff. Inten. (mm/hr)= 20.70 24.73
 over (min) 10.00 25.00
 Storage Coeff. (min)= 11.37 (ii) 23.71 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.10 0.05

PEAK FLOW (cms)= 0.93 0.35 *TOTALS* 1.276 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 44.00 26.05 37.00
 TOTAL RAINFALL (mm)= 45.00 45.00 45.00
 RUNOFF COEFFICIENT = 0.98 0.58 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7631)
 ID= 1 DT= 5.0 min
 Area (ha)= 19.52
 Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 15.42 4.10
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 360.74 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45

0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45
1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 29.28
over (min) 10.00 25.00
Storage Coeff. (min)= 10.36 (ii) 21.89 (ii)
Unit Hyd. Tpeak (min)= 10.00 25.00
Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 0.72 0.28 *TOTALS* 0.994 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 44.00 30.00 38.96
TOTAL RAINFALL (mm)= 45.00 45.00 45.00
RUNOFF COEFFICIENT = 0.98 0.67 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7636)
ID= 1 DT= 5.0 min
Area (ha)= 3.65
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	2.70	6.250	5.85	9.33	0.45
0.167	0.00	3.250	2.70	6.333	3.15	9.42	0.45
0.250	0.00	3.333	7.65	6.417	3.15	9.50	0.45
0.333	0.45	3.417	7.65	6.500	3.15	9.58	0.45
0.417	0.45	3.500	7.65	6.583	3.15	9.67	0.45
0.500	0.45	3.583	7.65	6.667	3.15	9.75	0.45
0.583	0.45	3.667	7.65	6.750	3.15	9.83	0.45
0.667	0.45	3.750	7.65	6.833	3.15	9.92	0.45
0.750	0.45	3.833	7.65	6.917	3.15	10.00	0.45
0.833	0.45	3.917	7.65	7.000	3.15	10.08	0.45
0.917	0.45	4.000	7.65	7.083	3.15	10.17	0.45
1.000	0.45	4.083	7.65	7.167	3.15	10.25	0.45
1.083	0.45	4.167	7.65	7.250	3.15	10.33	0.45

1.167	0.45	4.250	7.65	7.333	1.80	10.42	0.45
1.250	0.45	4.333	20.70	7.417	1.80	10.50	0.45
1.333	0.45	4.417	20.70	7.500	1.80	10.58	0.45
1.417	0.45	4.500	20.70	7.583	1.80	10.67	0.45
1.500	0.45	4.583	20.70	7.667	1.80	10.75	0.45
1.583	0.45	4.667	20.70	7.750	1.80	10.83	0.45
1.667	0.45	4.750	20.70	7.833	1.80	10.92	0.45
1.750	0.45	4.833	20.70	7.917	1.80	11.00	0.45
1.833	0.45	4.917	20.70	8.000	1.80	11.08	0.45
1.917	0.45	5.000	20.70	8.083	1.80	11.17	0.45
2.000	0.45	5.083	20.70	8.167	1.80	11.25	0.45
2.083	0.45	5.167	20.70	8.250	1.80	11.33	0.45
2.167	0.45	5.250	20.70	8.333	0.90	11.42	0.45
2.250	0.45	5.333	5.85	8.417	0.90	11.50	0.45
2.333	2.70	5.417	5.85	8.500	0.90	11.58	0.45
2.417	2.70	5.500	5.85	8.583	0.90	11.67	0.45
2.500	2.70	5.583	5.85	8.667	0.90	11.75	0.45
2.583	2.70	5.667	5.85	8.750	0.90	11.83	0.45
2.667	2.70	5.750	5.85	8.833	0.90	11.92	0.45
2.750	2.70	5.833	5.85	8.917	0.90	12.00	0.45
2.833	2.70	5.917	5.85	9.000	0.90	12.08	0.45
2.917	2.70	6.000	5.85	9.083	0.90	12.17	0.45
3.000	2.70	6.083	5.85	9.167	0.90	12.25	0.45
3.083	2.70	6.167	5.85	9.250	0.90		

Max.Eff.Inten.(mm/hr)= 20.70 19.46
over (min) 5.00 20.00
Storage Coeff. (min)= 6.26 (ii) 19.85 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.19 0.06

PEAK FLOW (cms)= 0.12 0.05 *TOTALS* 0.167 (iii)
TIME TO PEAK (hrs)= 5.25 5.33 5.25
RUNOFF VOLUME (mm)= 44.00 22.03 34.55
TOTAL RAINFALL (mm)= 45.00 45.00 45.00
RUNOFF COEFFICIENT = 0.98 0.49 0.77

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	1.276	5.25	37.00
+ ID2= 2 (7631):	19.52	0.994	5.25	38.96
=====				
ID = 3 (0579):	46.16	2.270	5.25	37.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	2.270	5.25	37.83
+ ID2= 2 (7636):	3.65	0.167	5.25	34.55
=====				
ID = 1 (0579):	49.81	2.437	5.25	37.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	2.437	5.25	37.59
+ ID2= 2 (7671):	24.09	0.109	6.92	9.13
=====				
ID = 3 (0579):	73.90	2.498	5.25	28.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0579) |

3 + 2 = 1		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	2.498	5.25	28.31
+ ID2= 2 (7689):		42.12	1.927	5.25	36.14
=====					
ID = 1 (0579):		116.02	4.425	5.25	31.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	4.425	5.25	31.15
+ ID2= 2 (7690):		21.92	0.976	5.25	34.55
=====					
ID = 3 (0579):		137.94	5.401	5.25	31.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	5.401	5.25	31.69
+ ID2= 2 (7693):		35.80	1.564	5.25	34.55
=====					
ID = 1 (0579):		173.74	6.965	5.25	32.28

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.2 5-year SSP5.85_12h **

CALIB		Area	(ha)=	24.09	Curve Number	(CN)=	72.0
NASHYD (7671)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=	0.86				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61

3.083 3.66 | 6.167 7.93 | 9.250 1.22 |

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.210 (i)
 TIME TO PEAK (hrs)= 6.667
 RUNOFF VOLUME (mm)= 17.322
 TOTAL RAINFALL (mm)= 61.000
 RUNOFF COEFFICIENT = 0.284

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 30.03
 over (min) 10.00 25.00
 Storage Coeff. (min)= 11.00 (ii) 22.42 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.10 0.05

PEAK FLOW (cms)= 1.58 0.71 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.33 2.275 (iii)
 RUNOFF VOLUME (mm)= 60.00 34.72 49.13
 TOTAL RAINFALL (mm)= 61.00 61.00 61.00
 RUNOFF COEFFICIENT = 0.98 0.57 0.81

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)

- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92 Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max. Eff. Inten. (mm/hr)=	28.06	30.03
over (min)	10.00	25.00
Storage Coeff. (min)=	9.50 (ii)	20.91 (ii)
Unit Hyd. Tpeak (min)=	10.00	25.00
Unit Hyd. peak (cms)=	0.12	0.05

PEAK FLOW (cms)=	0.97	0.44	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.33	1.403 (iii)
RUNOFF VOLUME (mm)=	60.00	34.72	5.25
TOTAL RAINFALL (mm)=	61.00	61.00	49.13
RUNOFF COEFFICIENT =	0.98	0.57	61.00
			0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689)	Area (ha)= 42.12
---------------------------	------------------

|ID= 1 DT= 5.0 min | Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max. Eff. Inten. (mm/hr) over (min)	=	28.06	34.75
Storage Coeff. (min)	=	11.55 (ii)	22.32 (ii)
Unit Hyd. Tpeak (min)	=	10.00	25.00
Unit Hyd. peak (cms)	=	0.10	0.05

PEAK FLOW (cms)	=	1.96	0.84	*TOTALS*
TIME TO PEAK (hrs)	=	5.25	5.33	2.787 (iii)
RUNOFF VOLUME (mm)	=	60.00	37.74	51.10
TOTAL RAINFALL (mm)	=	61.00	61.00	61.00
RUNOFF COEFFICIENT	=	0.98	0.62	0.84

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min | Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 36.92
 over (min) 10.00 25.00
 Storage Coeff.(min)= 10.07 (ii) 20.58 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 1.26 0.56 *TOTALS* 1.815 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 60.00 39.90 52.16
 TOTAL RAINFALL (mm)= 61.00 61.00 61.00
 RUNOFF COEFFICIENT = 0.98 0.65 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7631)
 ID= 1 DT= 5.0 min
 Area (ha)= 19.52
 Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61

0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61
0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		0.61

Max.Eff.Inten.(mm/hr)= 28.06 42.64
over (min) 10.00 20.00
Storage Coeff. (min)= 9.17 (ii) 19.10 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 0.97 0.43 *TOTALS* 1.406 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 60.00 44.73 54.50
TOTAL RAINFALL (mm)= 61.00 61.00 61.00
RUNOFF COEFFICIENT = 0.98 0.73 0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7636)
ID= 1 DT= 5.0 min
Area (ha)= 3.65
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	155.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	3.66	6.250	7.93	9.33	0.61
0.167	0.00	3.250	3.66	6.333	4.27	9.42	0.61
0.250	0.00	3.333	10.37	6.417	4.27	9.50	0.61
0.333	0.61	3.417	10.37	6.500	4.27	9.58	0.61
0.417	0.61	3.500	10.37	6.583	4.27	9.67	0.61
0.500	0.61	3.583	10.37	6.667	4.27	9.75	0.61
0.583	0.61	3.667	10.37	6.750	4.27	9.83	0.61
0.667	0.61	3.750	10.37	6.833	4.27	9.92	0.61
0.750	0.61	3.833	10.37	6.917	4.27	10.00	0.61

0.833	0.61	3.917	10.37	7.000	4.27	10.08	0.61
0.917	0.61	4.000	10.37	7.083	4.27	10.17	0.61
1.000	0.61	4.083	10.37	7.167	4.27	10.25	0.61
1.083	0.61	4.167	10.37	7.250	4.27	10.33	0.61
1.167	0.61	4.250	10.37	7.333	2.44	10.42	0.61
1.250	0.61	4.333	28.06	7.417	2.44	10.50	0.61
1.333	0.61	4.417	28.06	7.500	2.44	10.58	0.61
1.417	0.61	4.500	28.06	7.583	2.44	10.67	0.61
1.500	0.61	4.583	28.06	7.667	2.44	10.75	0.61
1.583	0.61	4.667	28.06	7.750	2.44	10.83	0.61
1.667	0.61	4.750	28.06	7.833	2.44	10.92	0.61
1.750	0.61	4.833	28.06	7.917	2.44	11.00	0.61
1.833	0.61	4.917	28.06	8.000	2.44	11.08	0.61
1.917	0.61	5.000	28.06	8.083	2.44	11.17	0.61
2.000	0.61	5.083	28.06	8.167	2.44	11.25	0.61
2.083	0.61	5.167	28.06	8.250	2.44	11.33	0.61
2.167	0.61	5.250	28.06	8.333	1.22	11.42	0.61
2.250	0.61	5.333	7.93	8.417	1.22	11.50	0.61
2.333	3.66	5.417	7.93	8.500	1.22	11.58	0.61
2.417	3.66	5.500	7.93	8.583	1.22	11.67	0.61
2.500	3.66	5.583	7.93	8.667	1.22	11.75	0.61
2.583	3.66	5.667	7.93	8.750	1.22	11.83	0.61
2.667	3.66	5.750	7.93	8.833	1.22	11.92	0.61
2.750	3.66	5.833	7.93	8.917	1.22	12.00	0.61
2.833	3.66	5.917	7.93	9.000	1.22	12.08	0.61
2.917	3.66	6.000	7.93	9.083	1.22	12.17	0.61
3.000	3.66	6.083	7.93	9.167	1.22	12.25	0.61
3.083	3.66	6.167	7.93	9.250	1.22		

Max.Eff.Inten.(mm/hr)= 28.06 30.03
over (min) 5.00 20.00
Storage Coeff. (min)= 5.55 (ii) 16.96 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.20 0.06

TOTALS
PEAK FLOW (cms)= 0.16 0.08 0.239 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 60.00 34.72 49.13
TOTAL RAINFALL (mm)= 61.00 61.00 61.00
RUNOFF COEFFICIENT = 0.98 0.57 0.81

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	1.815	5.25	52.16
+ ID2= 2 (7631):	19.52	1.406	5.25	54.50
=====				
ID = 3 (0579):	46.16	3.221	5.25	53.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	3.221	5.25	53.15
+ ID2= 2 (7636):	3.65	0.239	5.25	49.13
=====				
ID = 1 (0579):	49.81	3.460	5.25	52.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	3.460	5.25	52.85
+ ID2= 2 (7671):	24.09	0.210	6.67	17.32
=====				
ID = 3 (0579):	73.90	3.593	5.25	41.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	3.593	5.25	41.27
+ ID2= 2 (7689):		42.12	2.787	5.25	51.10
=====					
ID = 1 (0579):		116.02	6.380	5.25	44.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	6.380	5.25	44.84
+ ID2= 2 (7690):		21.92	1.403	5.25	49.13
=====					
ID = 3 (0579):		137.94	7.783	5.25	45.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	7.783	5.25	45.52
+ ID2= 2 (7693):		35.80	2.275	5.25	49.13
=====					
ID = 1 (0579):		173.74	10.059	5.25	46.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.3 10-year SSP5.85_12h **

CALIB	Area (ha)=	24.09	Curve Number (CN)=	72.0
NASHYD (7671)	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)=	0.86		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72

2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.292 (i)
 TIME TO PEAK (hrs)= 6.583
 RUNOFF VOLUME (mm)= 23.849
 TOTAL RAINFALL (mm)= 72.000
 RUNOFF COEFFICIENT = 0.331

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min
 Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 37.57
 over (min) 10.00 25.00
 Storage Coeff. (min)= 10.30 (ii) 20.74 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

TOTALS
 PEAK FLOW (cms)= 1.87 0.91 2.768 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 71.00 43.99 59.38
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.61 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	37.57
over (min)	10.00	20.00
Storage Coeff. (min)=	8.89 (ii)	19.33 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

PEAK FLOW (cms)=	1.15	0.57	*TOTALS*
TIME TO PEAK (hrs)=	5.25	5.33	1.721 (iii)
RUNOFF VOLUME (mm)=	71.00	43.99	59.38
TOTAL RAINFALL (mm)=	72.00	72.00	72.00
RUNOFF COEFFICIENT =	0.99	0.61	0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 43.40
 over (min) 10.00 25.00
 Storage Coeff. (min)= 10.81 (ii) 20.67 (ii)
 Unit Hyd. Tpeak (min)= 10.00 25.00
 Unit Hyd. peak (cms)= 0.11 0.05

PEAK FLOW (cms)= 2.32 1.07 *TOTALS* 3.377 (iii)
 TIME TO PEAK (hrs)= 5.25 5.33 5.25
 RUNOFF VOLUME (mm)= 71.00 47.40 61.56
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min

Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39

Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 421.43 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 45.74
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.42 (ii) 19.07 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

TOTALS

PEAK FLOW (cms)=	1.49	0.72	2.208 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	71.00	49.81	62.74
TOTAL RAINFALL (mm)=	72.00	72.00	72.00
RUNOFF COEFFICIENT =	0.99	0.69	0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7631)
 ID= 1 DT= 5.0 min

Area (ha)=	19.52	
Total Imp(%)=	79.00	Dir. Conn.(%)= 64.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.42	4.10
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	360.74	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72
0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max. Eff. Inten. (mm/hr)= 33.12 51.67
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.58 (ii) 17.77 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 1.15 0.54 *TOTALS* 1.686 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 71.00 55.11 65.28
 TOTAL RAINFALL (mm)= 72.00 72.00 72.00
 RUNOFF COEFFICIENT = 0.99 0.77 0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min
 Area (ha)= 3.65
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

IMPERVIOUS PERVIOUS (i)
 Surface Area (ha)= 2.59 1.06
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 155.99 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	4.32	6.250	9.36	9.33	0.72
0.167	0.00	3.250	4.32	6.333	5.04	9.42	0.72
0.250	0.00	3.333	12.24	6.417	5.04	9.50	0.72
0.333	0.72	3.417	12.24	6.500	5.04	9.58	0.72
0.417	0.72	3.500	12.24	6.583	5.04	9.67	0.72

0.500	0.72	3.583	12.24	6.667	5.04	9.75	0.72
0.583	0.72	3.667	12.24	6.750	5.04	9.83	0.72
0.667	0.72	3.750	12.24	6.833	5.04	9.92	0.72
0.750	0.72	3.833	12.24	6.917	5.04	10.00	0.72
0.833	0.72	3.917	12.24	7.000	5.04	10.08	0.72
0.917	0.72	4.000	12.24	7.083	5.04	10.17	0.72
1.000	0.72	4.083	12.24	7.167	5.04	10.25	0.72
1.083	0.72	4.167	12.24	7.250	5.04	10.33	0.72
1.167	0.72	4.250	12.24	7.333	2.88	10.42	0.72
1.250	0.72	4.333	33.12	7.417	2.88	10.50	0.72
1.333	0.72	4.417	33.12	7.500	2.88	10.58	0.72
1.417	0.72	4.500	33.12	7.583	2.88	10.67	0.72
1.500	0.72	4.583	33.12	7.667	2.88	10.75	0.72
1.583	0.72	4.667	33.12	7.750	2.88	10.83	0.72
1.667	0.72	4.750	33.12	7.833	2.88	10.92	0.72
1.750	0.72	4.833	33.12	7.917	2.88	11.00	0.72
1.833	0.72	4.917	33.12	8.000	2.88	11.08	0.72
1.917	0.72	5.000	33.12	8.083	2.88	11.17	0.72
2.000	0.72	5.083	33.12	8.167	2.88	11.25	0.72
2.083	0.72	5.167	33.12	8.250	2.88	11.33	0.72
2.167	0.72	5.250	33.12	8.333	1.44	11.42	0.72
2.250	0.72	5.333	9.36	8.417	1.44	11.50	0.72
2.333	4.32	5.417	9.36	8.500	1.44	11.58	0.72
2.417	4.32	5.500	9.36	8.583	1.44	11.67	0.72
2.500	4.32	5.583	9.36	8.667	1.44	11.75	0.72
2.583	4.32	5.667	9.36	8.750	1.44	11.83	0.72
2.667	4.32	5.750	9.36	8.833	1.44	11.92	0.72
2.750	4.32	5.833	9.36	8.917	1.44	12.00	0.72
2.833	4.32	5.917	9.36	9.000	1.44	12.08	0.72
2.917	4.32	6.000	9.36	9.083	1.44	12.17	0.72
3.000	4.32	6.083	9.36	9.167	1.44	12.25	0.72
3.083	4.32	6.167	9.36	9.250	1.44		

Max.Eff.Inten.(mm/hr)= 33.12 37.57
over (min) 5.00 20.00
Storage Coeff. (min)= 5.19 (ii) 15.63 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.21 0.07

PEAK FLOW (cms)= 0.19 0.10 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 0.290 (iii)
RUNOFF VOLUME (mm)= 71.00 43.99 59.38
TOTAL RAINFALL (mm)= 72.00 72.00 72.00
RUNOFF COEFFICIENT = 0.99 0.61 0.82

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	2.208	5.25	62.74
+ ID2= 2 (7631):	19.52	1.686	5.25	65.28
=====				
ID = 3 (0579):	46.16	3.893	5.25	63.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	3.893	5.25	63.81
+ ID2= 2 (7636):	3.65	0.290	5.25	59.38
=====				
ID = 1 (0579):	49.81	4.184	5.25	63.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):	49.81	4.184	5.25	63.49
+ ID2= 2 (7671):	24.09	0.292	6.58	23.85

=====
 ID = 3 (0579): 73.90 4.377 5.25 50.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	73.90	4.377	5.25	50.57
+ ID2= 2 (7689):	42.12	3.377	5.25	61.56
=====				
ID = 1 (0579):	116.02	7.754	5.25	54.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0579):	116.02	7.754	5.25	54.56
+ ID2= 2 (7690):	21.92	1.721	5.25	59.38
=====				
ID = 3 (0579):	137.94	9.474	5.25	55.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	137.94	9.474	5.25	55.32
+ ID2= 2 (7693):	35.80	2.768	5.25	59.38
=====				
ID = 1 (0579):	173.74	12.242	5.25	56.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.4 25-year SSP5.85_12h **

CALIB	Area (ha)=	24.09	Curve Number (CN)=	72.0
NASHYD (7671)	Ia (mm)=	10.00	# of Linear Res.(N)=	1.50
ID= 1 DT= 5.0 min	U.H. Tp(hrs)=	0.86		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87

2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.416 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 33.646
 TOTAL RAINFALL (mm)= 87.000
 RUNOFF COEFFICIENT = 0.387

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	25.42	10.38
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	488.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max. Eff. Inten. (mm/hr)= 40.02 48.43
 over (min) 10.00 20.00
 Storage Coeff. (min)= 9.54 (ii) 18.98 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.12 0.06

PEAK FLOW (cms)= 2.26 1.22 *TOTALS* 3.481 (iii)

TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 86.00 57.10 73.57
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7690)
 ID= 1 DT= 5.0 min

Area (ha)= 21.92
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max. Eff. Inten. (mm/hr)= 40.02 48.43
 over (min) 10.00 20.00
 Storage Coeff. (min)= 8.24 (ii) 17.67 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 1.39 0.75 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.25 2.142 (iii)
 RUNOFF VOLUME (mm)= 86.00 57.10 73.57
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.66 0.85

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)

- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7689)
ID= 1 DT= 5.0 min

Area (ha)= 42.12
Total Imp(%)= 75.00 Dir. Conn.(%)= 60.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 54.84
over (min) 10.00 20.00
Storage Coeff. (min)= 10.02 (ii) 19.00 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.11 0.06

PEAK FLOW (cms)= 2.80 1.42 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 4.221 (iii)
RUNOFF VOLUME (mm)= 86.00 60.97 75.99
TOTAL RAINFALL (mm)= 87.00 87.00 87.00
RUNOFF COEFFICIENT = 0.99 0.70 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)

Area (ha)= 26.64

ID= 1 DT= 5.0 min | Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max. Eff. Inten. (mm/hr) over (min)	=	40.02	57.40
Storage Coeff. (min)	=	10.00	20.00
Unit Hyd. Tpeak (min)	=	8.74 (ii)	17.55 (ii)
Unit Hyd. peak (cms)	=	10.00	20.00
	=	0.12	0.06

PEAK FLOW (cms)	=	1.80	0.92	*TOTALS*
TIME TO PEAK (hrs)	=	5.25	5.25	2.727 (iii)
RUNOFF VOLUME (mm)	=	86.00	63.67	5.25
TOTAL RAINFALL (mm)	=	87.00	87.00	77.29
RUNOFF COEFFICIENT	=	0.99	0.73	87.00
				0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min | Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87
0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max. Eff. Inten. (mm/hr)= 40.02 63.93
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.96 (ii) 16.40 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.06

PEAK FLOW (cms)= 1.39 0.68 *TOTALS*
 TIME TO PEAK (hrs)= 5.25 5.25 2.067 (iii)
 RUNOFF VOLUME (mm)= 86.00 69.48 80.05
 TOTAL RAINFALL (mm)= 87.00 87.00 87.00
 RUNOFF COEFFICIENT = 0.99 0.80 0.92

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7636)
 ID= 1 DT= 5.0 min
 Area (ha)= 3.65
 Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	2.59	1.06
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	155.99	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.22	6.250	11.31	9.33	0.87

0.167	0.00	3.250	5.22	6.333	6.09	9.42	0.87
0.250	0.00	3.333	14.79	6.417	6.09	9.50	0.87
0.333	0.87	3.417	14.79	6.500	6.09	9.58	0.87
0.417	0.87	3.500	14.79	6.583	6.09	9.67	0.87
0.500	0.87	3.583	14.79	6.667	6.09	9.75	0.87
0.583	0.87	3.667	14.79	6.750	6.09	9.83	0.87
0.667	0.87	3.750	14.79	6.833	6.09	9.92	0.87
0.750	0.87	3.833	14.79	6.917	6.09	10.00	0.87
0.833	0.87	3.917	14.79	7.000	6.09	10.08	0.87
0.917	0.87	4.000	14.79	7.083	6.09	10.17	0.87
1.000	0.87	4.083	14.79	7.167	6.09	10.25	0.87
1.083	0.87	4.167	14.79	7.250	6.09	10.33	0.87
1.167	0.87	4.250	14.79	7.333	3.48	10.42	0.87
1.250	0.87	4.333	40.02	7.417	3.48	10.50	0.87
1.333	0.87	4.417	40.02	7.500	3.48	10.58	0.87
1.417	0.87	4.500	40.02	7.583	3.48	10.67	0.87
1.500	0.87	4.583	40.02	7.667	3.48	10.75	0.87
1.583	0.87	4.667	40.02	7.750	3.48	10.83	0.87
1.667	0.87	4.750	40.02	7.833	3.48	10.92	0.87
1.750	0.87	4.833	40.02	7.917	3.48	11.00	0.87
1.833	0.87	4.917	40.02	8.000	3.48	11.08	0.87
1.917	0.87	5.000	40.02	8.083	3.48	11.17	0.87
2.000	0.87	5.083	40.02	8.167	3.48	11.25	0.87
2.083	0.87	5.167	40.02	8.250	3.48	11.33	0.87
2.167	0.87	5.250	40.02	8.333	1.74	11.42	0.87
2.250	0.87	5.333	11.31	8.417	1.74	11.50	0.87
2.333	5.22	5.417	11.31	8.500	1.74	11.58	0.87
2.417	5.22	5.500	11.31	8.583	1.74	11.67	0.87
2.500	5.22	5.583	11.31	8.667	1.74	11.75	0.87
2.583	5.22	5.667	11.31	8.750	1.74	11.83	0.87
2.667	5.22	5.750	11.31	8.833	1.74	11.92	0.87
2.750	5.22	5.833	11.31	8.917	1.74	12.00	0.87
2.833	5.22	5.917	11.31	9.000	1.74	12.08	0.87
2.917	5.22	6.000	11.31	9.083	1.74	12.17	0.87
3.000	5.22	6.083	11.31	9.167	1.74	12.25	0.87
3.083	5.22	6.167	11.31	9.250	1.74		

Max.Eff.Inten.(mm/hr)= 40.02 48.43
over (min) 5.00 15.00
Storage Coeff.(min)= 4.81 (ii) 14.24 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.22 0.08

PEAK FLOW (cms)= 0.23 0.13 *TOTALS*
TIME TO PEAK (hrs)= 5.25 5.25 0.363 (iii)
RUNOFF VOLUME (mm)= 86.00 57.10 73.57
TOTAL RAINFALL (mm)= 87.00 87.00 87.00
RUNOFF COEFFICIENT = 0.99 0.66 0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	2.727	5.25	77.29
+ ID2= 2 (7631):	19.52	2.067	5.25	80.05
=====				
ID = 3 (0579):	46.16	4.795	5.25	78.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	4.795	5.25	78.46
+ ID2= 2 (7636):	3.65	0.363	5.25	73.57
=====				
ID = 1 (0579):	49.81	5.158	5.25	78.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		49.81	5.158	5.25	78.10
+ ID2= 2 (7671):		24.09	0.416	6.50	33.65
=====					
ID = 3 (0579):		73.90	5.444	5.25	63.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		73.90	5.444	5.25	63.61
+ ID2= 2 (7689):		42.12	4.221	5.25	75.99
=====					
ID = 1 (0579):		116.02	9.665	5.25	68.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0579):		116.02	9.665	5.25	68.10
+ ID2= 2 (7690):		21.92	2.142	5.25	73.57
=====					
ID = 3 (0579):		137.94	11.807	5.25	68.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):		137.94	11.807	5.25	68.97
+ ID2= 2 (7693):		35.80	3.481	5.25	73.57
=====					
ID = 1 (0579):		173.74	15.288	5.25	69.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.5 50-year SSP5.85_12h **

CALIB		Area	(ha)=	24.09	Curve Number	(CN)=	72.0
NASHYD (7671)		Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=	0.86				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99

2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.523 (i)
 TIME TO PEAK (hrs)= 6.417
 RUNOFF VOLUME (mm)= 42.078
 TOTAL RAINFALL (mm)= 99.000
 RUNOFF COEFFICIENT = 0.425

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693) | Area (ha)= 35.80
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max. Eff. Inten. (mm/hr)= 45.54 56.89
 over (min) 10.00 20.00

Storage Coeff. (min)=	9.06 (ii)	17.91 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.12	0.06	
			TOTALS
PEAK FLOW (cms)=	2.58	1.46	4.036 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	98.00	67.88	85.05
TOTAL RAINFALL (mm)=	99.00	99.00	99.00
RUNOFF COEFFICIENT =	0.99	0.69	0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7690) ID= 1 DT= 5.0 min	Area (ha)= 21.92	Total Imp(%)= 71.00	Dir. Conn.(%)= 57.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56		6.36
Dep. Storage (mm)=	1.00		2.00
Average Slope (%)=	1.00		2.00
Length (m)=	382.27		40.00
Mannings n =	0.013		0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)=	45.54	56.89	
over (min)	10.00	20.00	
Storage Coeff. (min)=	7.82 (ii)	16.67 (ii)	
Unit Hyd. Tpeak (min)=	10.00	20.00	
Unit Hyd. peak (cms)=	0.13	0.06	
			TOTALS
PEAK FLOW (cms)=	1.58	0.90	2.483 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	98.00	67.88	85.05
TOTAL RAINFALL (mm)=	99.00	99.00	99.00

RUNOFF COEFFICIENT = 0.99 0.69 0.86

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7689) ID= 1 DT= 5.0 min	Area (ha)= 42.12 Total Imp(%)= 75.00	Dir. Conn.(%)= 60.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	31.59	10.53
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	529.91	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)=	45.54	64.02
over (min)	10.00	20.00
Storage Coeff. (min)=	9.52 (ii)	17.95 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

TOTALS
4.878 (iii)
5.25
87.62
99.00
0.89

PEAK FLOW (cms)=	3.19	1.69	4.878 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	98.00	72.06	87.62
TOTAL RAINFALL (mm)=	99.00	99.00	99.00
RUNOFF COEFFICIENT =	0.99	0.73	0.89

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7625)
ID= 1 DT= 5.0 min

Area (ha)= 26.64
Total Imp(%)= 76.00 Dir. Conn.(%)= 61.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	20.25	6.39
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	421.43	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)=	45.54	66.73
over (min)	10.00	20.00
Storage Coeff. (min)=	8.30 (ii)	16.59 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.13	0.06

TOTALS

PEAK FLOW (cms)=	2.05	1.09	3.144 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	98.00	74.95	89.01
TOTAL RAINFALL (mm)=	99.00	99.00	99.00
RUNOFF COEFFICIENT =	0.99	0.76	0.90

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min

Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

IMPERVIOUS PERVIOUS (i)

Surface Area (ha)= 15.42 4.10
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 360.74 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 73.70
 over (min) 10.00 20.00
 Storage Coeff. (min)= 7.56 (ii) 15.53 (ii)
 Unit Hyd. Tpeak (min)= 10.00 20.00
 Unit Hyd. peak (cms)= 0.13 0.07

TOTALS

PEAK FLOW (cms)= 1.58 0.79 2.372 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 98.00 81.09 91.91
 TOTAL RAINFALL (mm)= 99.00 99.00 99.00
 RUNOFF COEFFICIENT = 0.99 0.82 0.93

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
 STANDHYD (7636) | Area (ha)= 3.65
 ID= 1 DT= 5.0 min | Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

Surface Area (ha)= IMPERVIOUS 2.59 PERVIOUS (i) 1.06
 Dep. Storage (mm)= 1.00 2.00
 Average Slope (%)= 1.00 2.00
 Length (m)= 155.99 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.94	6.250	12.87	9.33	0.99
0.167	0.00	3.250	5.94	6.333	6.93	9.42	0.99
0.250	0.00	3.333	16.83	6.417	6.93	9.50	0.99
0.333	0.99	3.417	16.83	6.500	6.93	9.58	0.99
0.417	0.99	3.500	16.83	6.583	6.93	9.67	0.99
0.500	0.99	3.583	16.83	6.667	6.93	9.75	0.99
0.583	0.99	3.667	16.83	6.750	6.93	9.83	0.99
0.667	0.99	3.750	16.83	6.833	6.93	9.92	0.99
0.750	0.99	3.833	16.83	6.917	6.93	10.00	0.99
0.833	0.99	3.917	16.83	7.000	6.93	10.08	0.99
0.917	0.99	4.000	16.83	7.083	6.93	10.17	0.99
1.000	0.99	4.083	16.83	7.167	6.93	10.25	0.99
1.083	0.99	4.167	16.83	7.250	6.93	10.33	0.99
1.167	0.99	4.250	16.83	7.333	3.96	10.42	0.99
1.250	0.99	4.333	45.54	7.417	3.96	10.50	0.99
1.333	0.99	4.417	45.54	7.500	3.96	10.58	0.99
1.417	0.99	4.500	45.54	7.583	3.96	10.67	0.99
1.500	0.99	4.583	45.54	7.667	3.96	10.75	0.99
1.583	0.99	4.667	45.54	7.750	3.96	10.83	0.99
1.667	0.99	4.750	45.54	7.833	3.96	10.92	0.99
1.750	0.99	4.833	45.54	7.917	3.96	11.00	0.99
1.833	0.99	4.917	45.54	8.000	3.96	11.08	0.99
1.917	0.99	5.000	45.54	8.083	3.96	11.17	0.99
2.000	0.99	5.083	45.54	8.167	3.96	11.25	0.99
2.083	0.99	5.167	45.54	8.250	3.96	11.33	0.99
2.167	0.99	5.250	45.54	8.333	1.98	11.42	0.99
2.250	0.99	5.333	12.87	8.417	1.98	11.50	0.99
2.333	5.94	5.417	12.87	8.500	1.98	11.58	0.99
2.417	5.94	5.500	12.87	8.583	1.98	11.67	0.99
2.500	5.94	5.583	12.87	8.667	1.98	11.75	0.99
2.583	5.94	5.667	12.87	8.750	1.98	11.83	0.99
2.667	5.94	5.750	12.87	8.833	1.98	11.92	0.99
2.750	5.94	5.833	12.87	8.917	1.98	12.00	0.99
2.833	5.94	5.917	12.87	9.000	1.98	12.08	0.99
2.917	5.94	6.000	12.87	9.083	1.98	12.17	0.99
3.000	5.94	6.083	12.87	9.167	1.98	12.25	0.99
3.083	5.94	6.167	12.87	9.250	1.98		

Max.Eff.Inten.(mm/hr)= 45.54 56.89
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.57 (ii) 13.41 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.23 0.08

TOTALS

PEAK FLOW (cms)= 0.26 0.16 0.420 (iii)
 TIME TO PEAK (hrs)= 5.25 5.25 5.25
 RUNOFF VOLUME (mm)= 98.00 67.88 85.05
 TOTAL RAINFALL (mm)= 99.00 99.00 99.00
 RUNOFF COEFFICIENT = 0.99 0.69 0.86

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (7625):	26.64	3.144	5.25	89.01
+ ID2= 2 (7631):	19.52	2.372	5.25	91.91
===== ID = 3 (0579):	46.16	5.517	5.25	90.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0579):	46.16	5.517	5.25	90.24
+ ID2= 2 (7636):	3.65	0.420	5.25	85.05
===== ID = 1 (0579):	49.81	5.937	5.25	89.86

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)					
1 + 2 = 3					
	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
ID1= 1 (0579):	49.81	5.937	5.25	89.86	
+ ID2= 2 (7671):	24.09	0.523	6.42	42.08	
=====					
ID = 3 (0579):	73.90	6.306	5.25	74.28	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)					
3 + 2 = 1					
	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
ID1= 3 (0579):	73.90	6.306	5.25	74.28	
+ ID2= 2 (7689):	42.12	4.878	5.25	87.62	
=====					
ID = 1 (0579):	116.02	11.184	5.25	79.13	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)					
1 + 2 = 3					
	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
ID1= 1 (0579):	116.02	11.184	5.25	79.13	
+ ID2= 2 (7690):	21.92	2.483	5.25	85.05	
=====					
ID = 3 (0579):	137.94	13.667	5.25	80.07	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)					
3 + 2 = 1					
	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
ID1= 3 (0579):	137.94	13.667	5.25	80.07	
+ ID2= 2 (7693):	35.80	4.036	5.25	85.05	
=====					
ID = 1 (0579):	173.74	17.703	5.25	81.09	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION:2.6 100-year SSP5.85_12h **

CALIB					
NASHYD (7671)					
ID= 1 DT= 5.0 min					
Area	(ha)=	24.09	Curve Number	(CN)=	72.0
Ia	(mm)=	10.00	# of Linear Res.(N)=	1.50	
U.H. Tp	(hrs)=	0.86			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15

1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Unit Hyd Qpeak (cms)= 0.478

PEAK FLOW (cms)= 0.676 (i)
 TIME TO PEAK (hrs)= 6.417
 RUNOFF VOLUME (mm)= 53.968
 TOTAL RAINFALL (mm)= 115.000
 RUNOFF COEFFICIENT = 0.469

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 CALIB
 STANDHYD (7693)
 ID= 1 DT= 5.0 min

Area (ha)= 35.80
Total Imp(%)= 71.00
Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	25.42	10.38
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	488.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15

3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 68.22
over (min) 10.00 20.00
Storage Coeff. (min)= 8.54 (ii) 16.76 (ii)
Unit Hyd. Tpeak (min)= 10.00 20.00
Unit Hyd. peak (cms)= 0.12 0.06

TOTALS
PEAK FLOW (cms)= 3.00 1.78 4.781 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 114.00 82.55 100.47
TOTAL RAINFALL (mm)= 115.00 115.00 115.00
RUNOFF COEFFICIENT = 0.99 0.72 0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7690)
ID= 1 DT= 5.0 min

Area (ha)= 21.92
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	15.56	6.36
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	382.27	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 68.22
over (min) 5.00 20.00
Storage Coeff. (min)= 7.37 (ii) 15.59 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
Unit Hyd. peak (cms)= 0.17 0.07

PEAK FLOW	(cms)=	1.84	1.10	*TOTALS*	2.940 (iii)
TIME TO PEAK	(hrs)=	5.25	5.25		5.25
RUNOFF VOLUME	(mm)=	114.00	82.55		100.47
TOTAL RAINFALL	(mm)=	115.00	115.00		115.00
RUNOFF COEFFICIENT	=	0.99	0.72		0.87

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	Area (ha)=	42.12		
STANDHYD (7689)	Total Imp(%)=	75.00	Dir. Conn.(%)=	60.00
ID= 1 DT= 5.0 min				

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	31.59	10.53
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	529.91	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max. Eff. Inten. (mm/hr)=	52.90	76.26
over (min)	10.00	20.00
Storage Coeff. (min)=	8.96 (ii)	16.83 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.12	0.06

			TOTALS
PEAK FLOW	(cms)=	3.71	2.05
TIME TO PEAK	(hrs)=	5.25	5.25
RUNOFF VOLUME	(mm)=	114.00	87.07
TOTAL RAINFALL	(mm)=	115.00	115.00
RUNOFF COEFFICIENT	=	0.99	0.70

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 82.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (7625) ID= 1 DT= 5.0 min	Area (ha)= 26.64 Total Imp(%)= 76.00	Dir. Conn.(%)= 61.00
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	20.25	6.39
Dep. Storage (mm)=	1.00	2.00
Average Slope (%)=	1.00	2.00
Length (m)=	421.43	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)=	52.90	79.14
over (min)	10.00	20.00
Storage Coeff. (min)=	7.81 (ii)	15.56 (ii)
Unit Hyd. Tpeak (min)=	10.00	20.00
Unit Hyd. peak (cms)=	0.13	0.07

TOTALS		
PEAK FLOW (cms)=	2.39	1.31
TIME TO PEAK (hrs)=	5.25	5.25
RUNOFF VOLUME (mm)=	114.00	90.17
TOTAL RAINFALL (mm)=	115.00	115.00
RUNOFF COEFFICIENT =	0.99	0.78
		3.701 (iii)
		104.71
		115.00
		0.91

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 84.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7631)
ID= 1 DT= 5.0 min

Area (ha)= 19.52
Total Imp(%)= 79.00 Dir. Conn.(%)= 64.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	15.42	4.10
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	360.74	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 86.68
over (min) 5.00 15.00
Storage Coeff. (min)= 7.12 (ii) 14.59 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.17 0.08

PEAK FLOW (cms)= 1.84 0.95 2.787 (iii)
TIME TO PEAK (hrs)= 5.25 5.25 5.25
RUNOFF VOLUME (mm)= 114.00 96.67 107.76
TOTAL RAINFALL (mm)= 115.00 115.00 115.00
RUNOFF COEFFICIENT = 0.99 0.84 0.94

TOTALS

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 88.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (7636)
ID= 1 DT= 5.0 min

Area (ha)= 3.65
Total Imp(%)= 71.00 Dir. Conn.(%)= 57.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.59	1.06
Dep. Storage	(mm)=	1.00	2.00
Average Slope	(%)=	1.00	2.00

Length (m) = 155.99 40.00
 Mannings n = 0.013 0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	6.90	6.250	14.95	9.33	1.15
0.167	0.00	3.250	6.90	6.333	8.05	9.42	1.15
0.250	0.00	3.333	19.55	6.417	8.05	9.50	1.15
0.333	1.15	3.417	19.55	6.500	8.05	9.58	1.15
0.417	1.15	3.500	19.55	6.583	8.05	9.67	1.15
0.500	1.15	3.583	19.55	6.667	8.05	9.75	1.15
0.583	1.15	3.667	19.55	6.750	8.05	9.83	1.15
0.667	1.15	3.750	19.55	6.833	8.05	9.92	1.15
0.750	1.15	3.833	19.55	6.917	8.05	10.00	1.15
0.833	1.15	3.917	19.55	7.000	8.05	10.08	1.15
0.917	1.15	4.000	19.55	7.083	8.05	10.17	1.15
1.000	1.15	4.083	19.55	7.167	8.05	10.25	1.15
1.083	1.15	4.167	19.55	7.250	8.05	10.33	1.15
1.167	1.15	4.250	19.55	7.333	4.60	10.42	1.15
1.250	1.15	4.333	52.90	7.417	4.60	10.50	1.15
1.333	1.15	4.417	52.90	7.500	4.60	10.58	1.15
1.417	1.15	4.500	52.90	7.583	4.60	10.67	1.15
1.500	1.15	4.583	52.90	7.667	4.60	10.75	1.15
1.583	1.15	4.667	52.90	7.750	4.60	10.83	1.15
1.667	1.15	4.750	52.90	7.833	4.60	10.92	1.15
1.750	1.15	4.833	52.90	7.917	4.60	11.00	1.15
1.833	1.15	4.917	52.90	8.000	4.60	11.08	1.15
1.917	1.15	5.000	52.90	8.083	4.60	11.17	1.15
2.000	1.15	5.083	52.90	8.167	4.60	11.25	1.15
2.083	1.15	5.167	52.90	8.250	4.60	11.33	1.15
2.167	1.15	5.250	52.90	8.333	2.30	11.42	1.15
2.250	1.15	5.333	14.95	8.417	2.30	11.50	1.15
2.333	6.90	5.417	14.95	8.500	2.30	11.58	1.15
2.417	6.90	5.500	14.95	8.583	2.30	11.67	1.15
2.500	6.90	5.583	14.95	8.667	2.30	11.75	1.15
2.583	6.90	5.667	14.95	8.750	2.30	11.83	1.15
2.667	6.90	5.750	14.95	8.833	2.30	11.92	1.15
2.750	6.90	5.833	14.95	8.917	2.30	12.00	1.15
2.833	6.90	5.917	14.95	9.000	2.30	12.08	1.15
2.917	6.90	6.000	14.95	9.083	2.30	12.17	1.15
3.000	6.90	6.083	14.95	9.167	2.30	12.25	1.15
3.083	6.90	6.167	14.95	9.250	2.30		

Max.Eff.Inten.(mm/hr)= 52.90 68.22
 over (min) 5.00 15.00
 Storage Coeff. (min)= 4.30 (ii) 12.53 (ii)
 Unit Hyd. Tpeak (min)= 5.00 15.00
 Unit Hyd. peak (cms)= 0.23 0.08

TOTALS
 PEAK FLOW (cms)= 0.31 0.19 0.497 (iii)
 TIME TO PEAK (hrs)= 5.17 5.25 5.25
 RUNOFF VOLUME (mm)= 114.00 82.55 100.47
 TOTAL RAINFALL (mm)= 115.00 115.00 115.00
 RUNOFF COEFFICIENT = 0.99 0.72 0.87

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 80.0 Ia = Dep. Storage (Above)
- (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
 THAN THE STORAGE COEFFICIENT.
- (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0579)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (7625):	26.64	3.701	5.25	104.71
+ ID2= 2 (7631):	19.52	2.787	5.25	107.76
=====	=====	=====	=====	=====
ID = 3 (0579):	46.16	6.488	5.25	106.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1				

	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0579):	46.16	6.488	5.25	106.00
+ ID2= 2 (7636):	3.65	0.497	5.25	100.47
ID = 1 (0579):	49.81	6.984	5.25	105.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	49.81	6.984	5.25	105.59
+ ID2= 2 (7671):	24.09	0.676	6.42	53.97
ID = 3 (0579):	73.90	7.473	5.25	88.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	73.90	7.473	5.25	88.76
+ ID2= 2 (7689):	42.12	5.757	5.25	103.23
ID = 1 (0579):	116.02	13.229	5.25	94.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0579):	116.02	13.229	5.25	94.02
+ ID2= 2 (7690):	21.92	2.940	5.25	100.47
ID = 3 (0579):	137.94	16.169	5.25	95.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0579)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0579):	137.94	16.169	5.25	95.04
+ ID2= 2 (7693):	35.80	4.781	5.25	100.47
ID = 1 (0579):	173.74	20.950	5.25	96.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

APPENDIX D5

EROSION THRESHOLD ASSESSMENT

APPENDIX D5

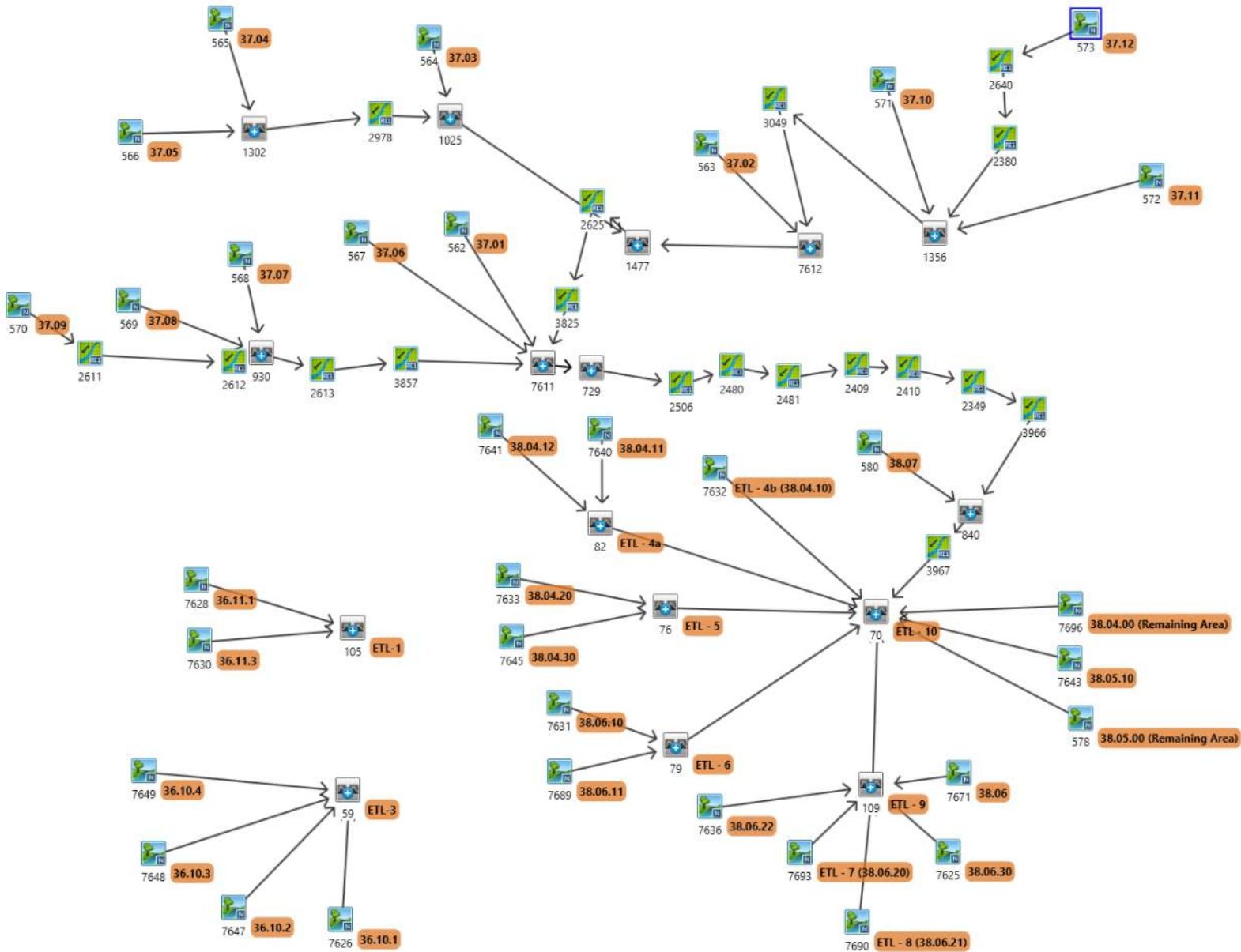
EROSION THRESHOLD ASSESSMENT



**EXISTING CONDITIONS EROSION
THRESHOLD MODELLING OUTPUTS**



Phase 2 - Visual OTTHymo Continuous Modeling Schematic Existing Erosion Threshold Analysis



Existing Conditions Erosion Threshold VO Parameter Summary

NASHYD

Name	36.11.1	36.11.3	36.10.1	36.10.2	36.10.3	36.10.4	ETL-4b (38.04.10)	38.04.11	38.04.12	38.04.20	38.04.30	38.06.10	38.06.11	38.06.22	ETL-7 (38.06.20)	ETL-8 (38.06.21)	38.06.3
Number	7628	7630	7626	7647	7648	7649	7632	7640	7641	7633	7645	7631	7689	7636	7693	7690	7625
Area (ha)	24.85	22.49	36.78	19.68	5.27	19.97	20.62	18.75	9.24	54.88	2.52	19.52	42.12	3.65	35.8	21.92	26.64
CN*	71	71	72	72	72	72	73	73	73	73	73	72	72	72	72	72	72
IA(mm)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10
TP Method	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands	Uplands
TP (hr)	0.77	1.00	0.44	0.20	0.15	0.31	0.61	0.51	0.46	1.07	0.11	0.73	0.92	0.19	0.76	0.61	0.60
Land Cover	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height
Soil Texture	Clay Loam	Clay Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam

* *Italicized numbers are from TRCA Existing Conditions Modelling*

Name	38.06	38.04.00	38.05.10	38.05.00	38.07	37.01	37.02	37.03	37.04	37.05	37.06	37.07	37.08	37.09	37.10	37.11	37.12
Number	7671	7696	7643	578	39	580	563	564	565	566	567	568	569	570	571	572	573
DT(min)	5	5	5	5	5												
Area (ha)	24.09	39.22	5.80	41.63	293.26	306.23	26.85	145.14	141.48	365.26	105.51	235.25	284.55	299.42	125.88	188.91	192.77
CN*	72	73	73	73	69	71	72	68	69	64	70	70	71	69	75	76	75
IA(mm)	10	10	10	10	10	10	10.0	10.0	10	10	10	10	10	10	10	10	10
TP Method			Uplands														
TP (hr)	0.86	1.99	0.34	0.82	4.55	2.26	0.77	2.18	2.00	2.99	1.46	3.74	4.37	3.11	1.63	1.91	3.67
Land Cover	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Light Forest	Light Forest	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Light Forest	Light Forest	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height
Soil Texture	Clay Loam	Clay	Clay	Clay	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Sandy Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay

* *Italicized numbers are from TRCA Existing Conditions Modelling*

¹Note that where there is NO directly connected area (ie: roof runoff to grassed areas), the hydrology program does not accept XIMP=0%, therefore, XIMP = 1% has been used

²Note that where there is NO pervious area, the hydrology program does not accept TIMP and XIMP=100%, therefore, TIMP and XIMP = 99% has been used

Total Area = 788.7 ha



Existing Conditions Time to Peak Calculations

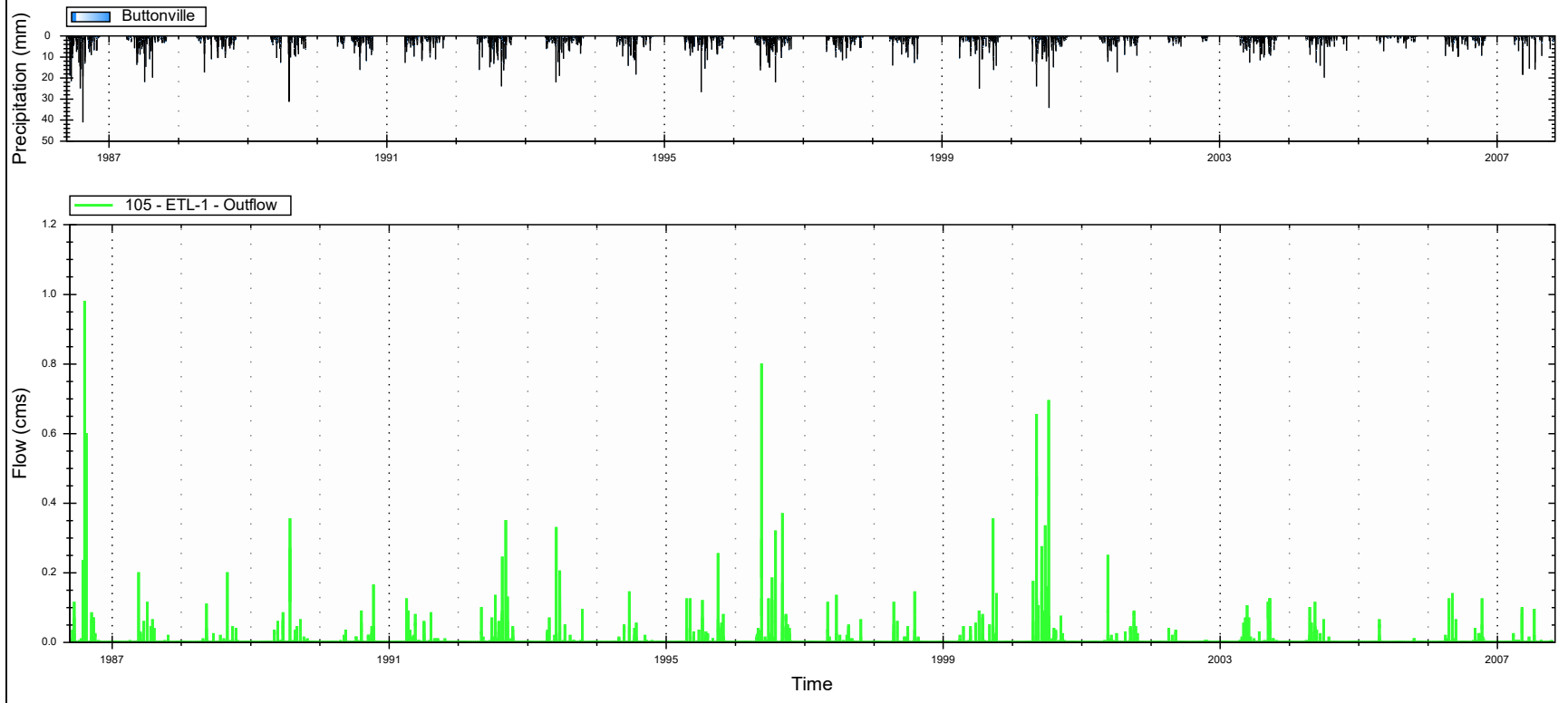
Wildfield Village
Project Number: 2630
Date: January 2025
Designer Initials: R.B.

Uplands Method:

Catchment ID	High Elevation	Low Elevation	Length (m)	Slope (%)	Land Cover Type	Velocity (m/s)	Time of Concentration (s)	Time of Concentration (hr)	Time to Peak (hr)
36.11.1	239.50	230.00	1080	0.88	Cultivated Straight Row	0.26	4117.0	1.14	0.77
36.11.3	247.10	234.70	1410	0.88	Cultivated Straight Row	0.26	5375.6	1.49	1.00
36.10.1	250.40	238.75	800	1.46	Cultivated Straight Row	0.34	2373.5	0.66	0.44
36.10.2	245.00	238.20	400	1.70	Cultivated Straight Row	0.36	1098.9	0.31	0.20
36.10.3	252.00	248.30	270	1.37	Cultivated Straight Row	0.33	825.6	0.23	0.15
36.10.4	257.00	248.20	570	1.54	Cultivated Straight Row	0.35	1642.7	0.46	0.31
ETL-4b (38.04.10)	234.75	219.50	1090	1.40	Cultivated Straight Row	0.33	3299.0	0.92	0.61
38.04.11	233.75	222.50	870	1.29	Cultivated Straight Row	0.32	2738.3	0.76	0.51
38.04.12	231.60	228.00	560	0.64	Cultivated Straight Row	0.22	2494.9	0.69	0.46
38.04.20	242.50	219.00	1820	1.29	Cultivated Straight Row	0.32	5732.5	1.59	1.07
38.04.30	222.35	217.90	226	1.97	Cultivated Straight Row	0.39	577.1	0.16	0.11
38.06.10	243.00	224.25	1315	1.43	Cultivated Straight Row	0.33	3942.6	1.10	0.73
38.06.11	247.00	224.20	1635	1.39	Cultivated Straight Row	0.33	4956.5	1.38	0.92
38.06.22	241.30	233.40	400	1.98	Cultivated Straight Row	0.39	1019.9	0.28	0.19
ETL-7 (38.06.20)	248.50	230.60	1320	1.36	Cultivated Straight Row	0.33	4057.6	1.13	0.76
ETL-8 (38.06.21)	250.10	234.50	1090	1.43	Cultivated Straight Row	0.33	3261.9	0.91	0.61
38.06.3	236.85	222.00	1062	1.40	Cultivated Straight Row	0.33	3215.1	0.89	0.60
38.06	252.85	236.70	1395	1.16	Cultivated Straight Row	0.30	4638.9	1.29	0.86
38.05.10	235.00	223.70	660	1.71	Cultivated Straight Row	0.37	1806.7	0.50	0.34

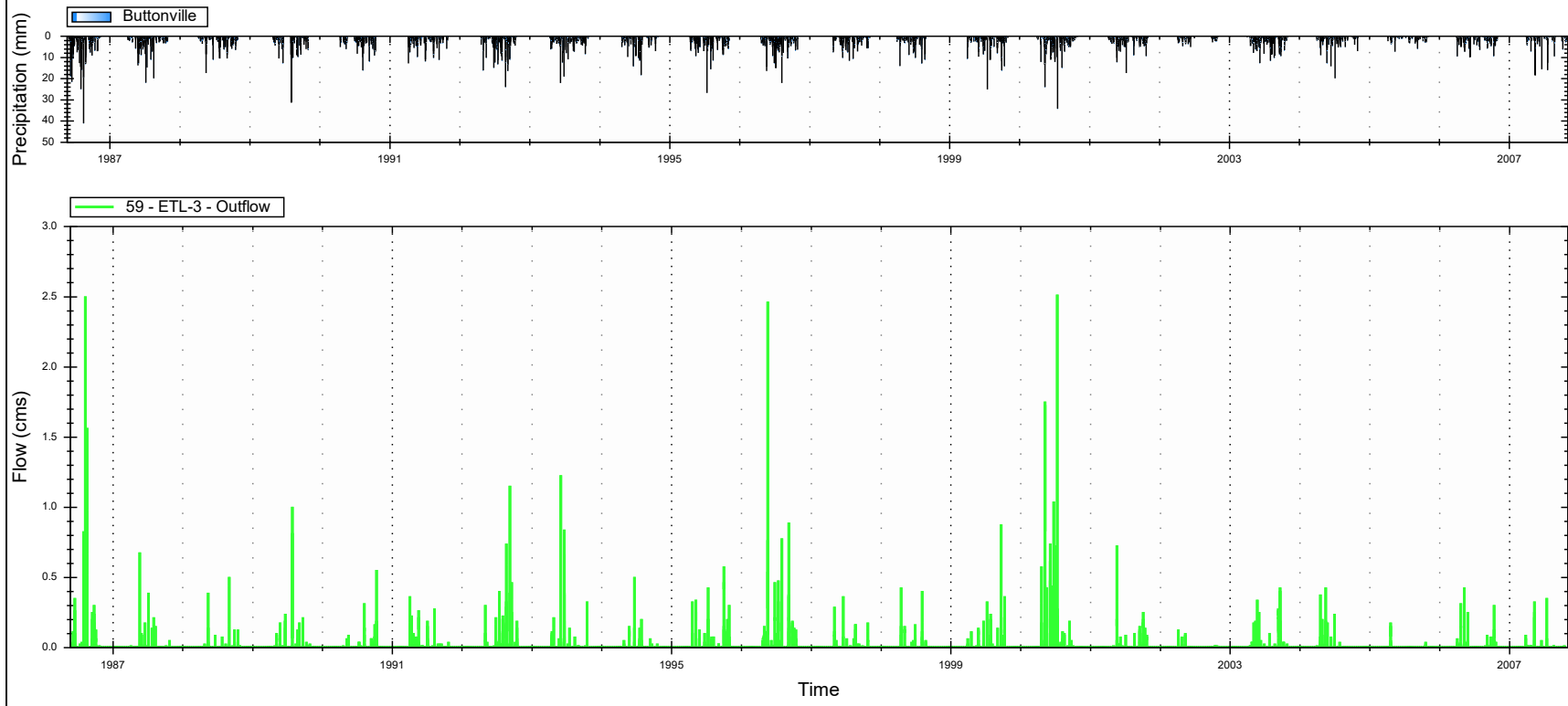
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



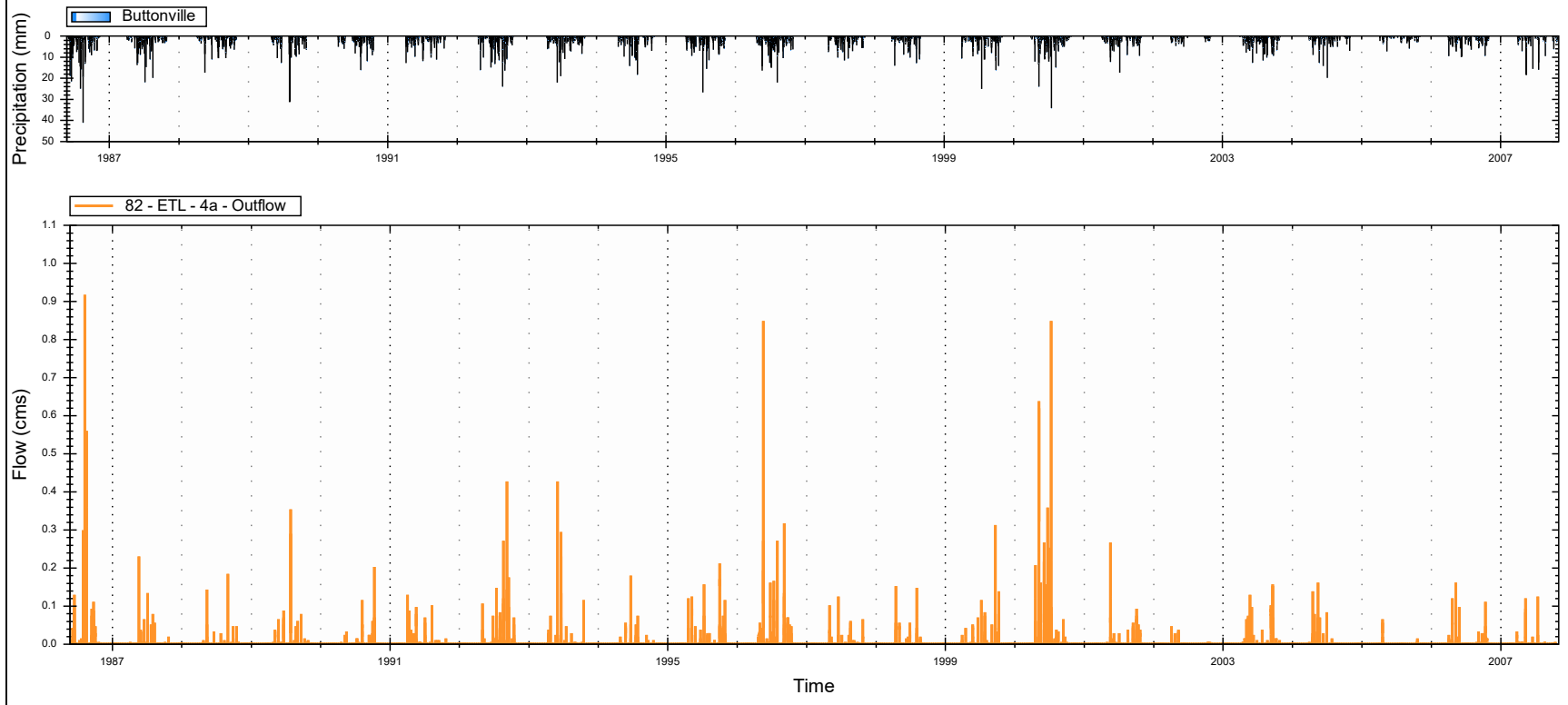
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



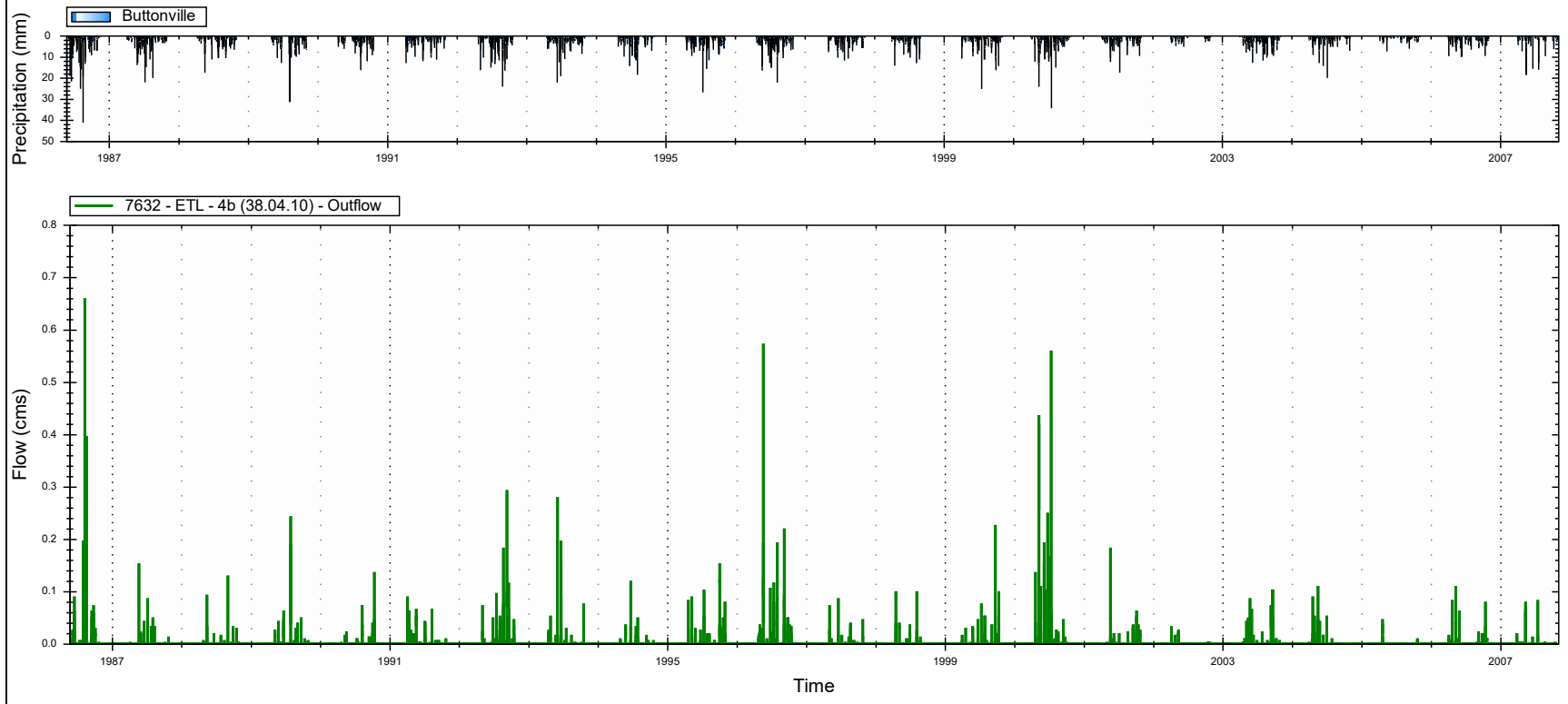
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



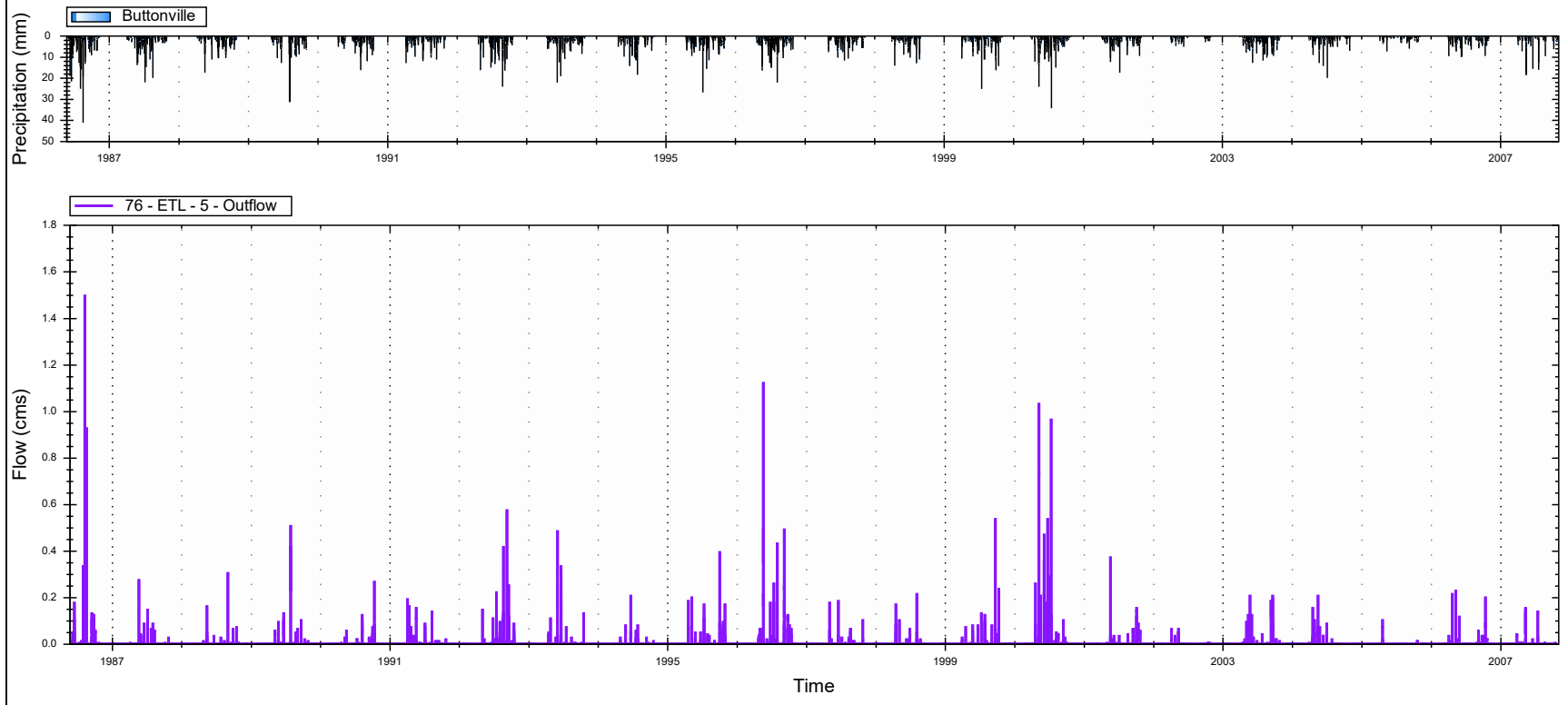
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



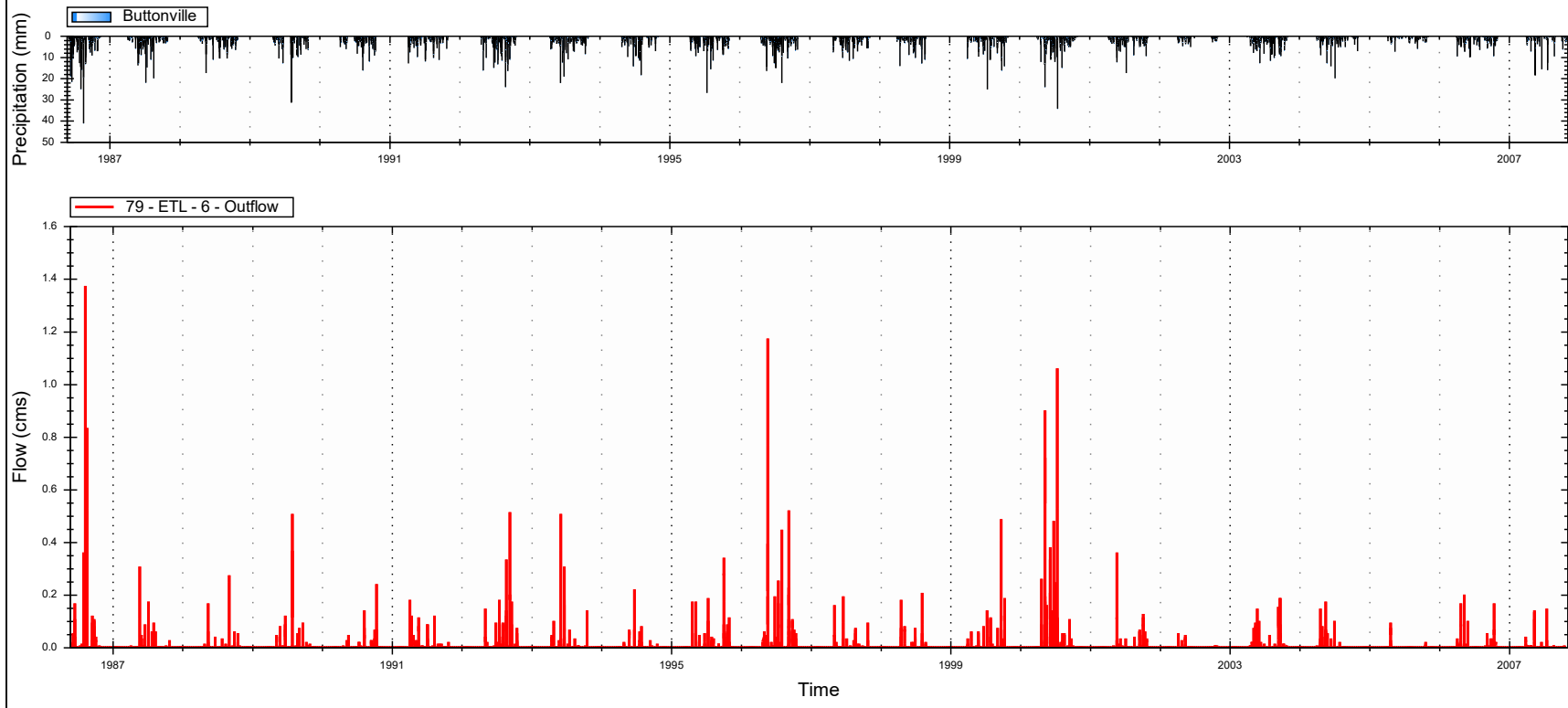
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



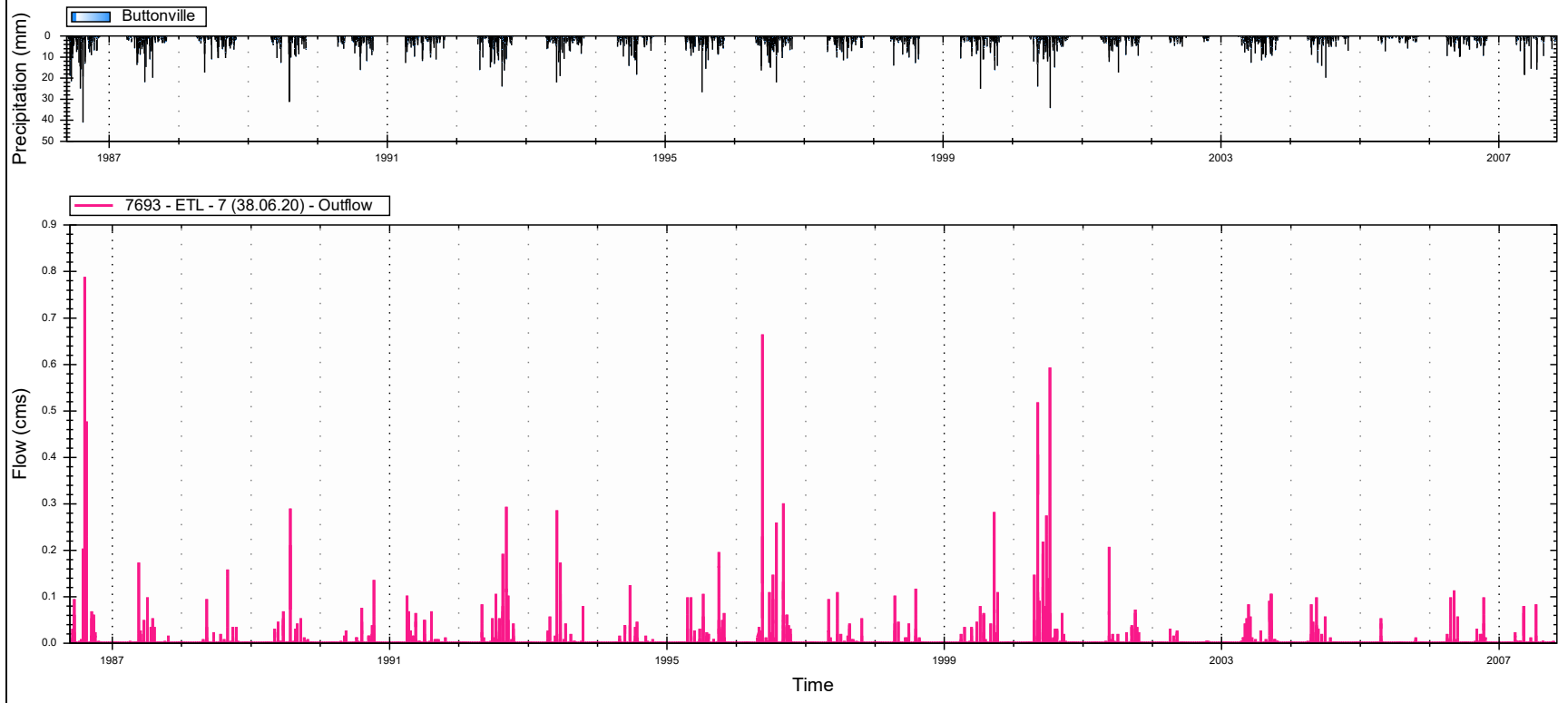
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



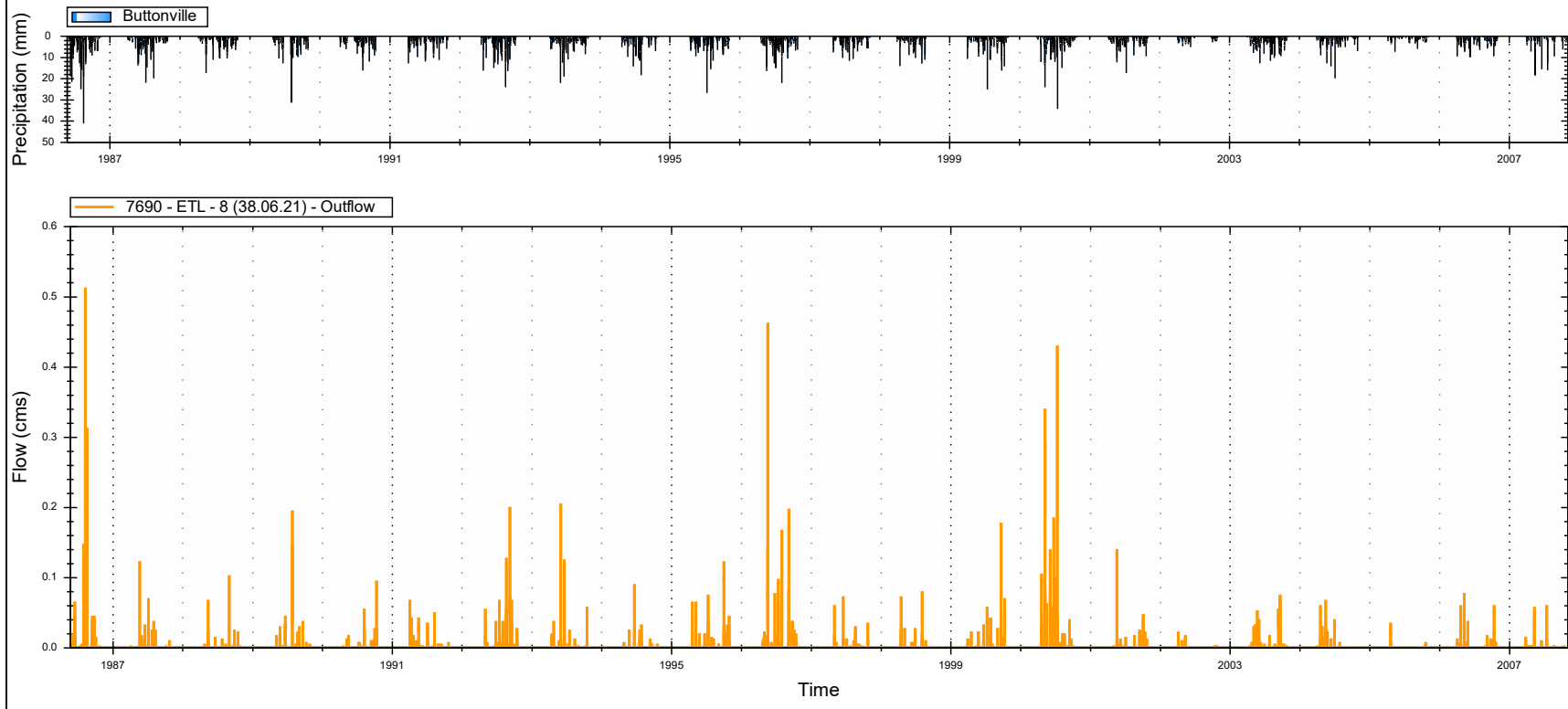
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



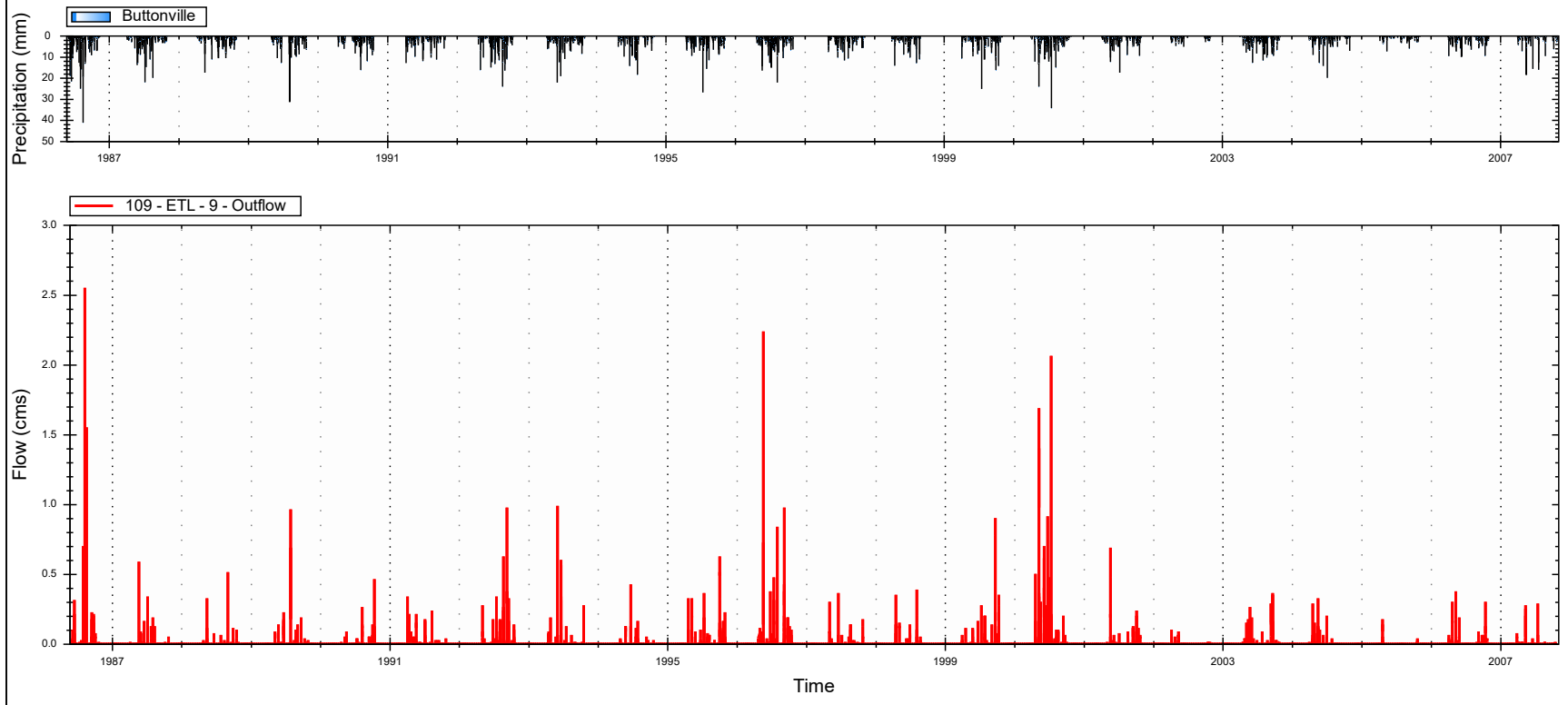
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



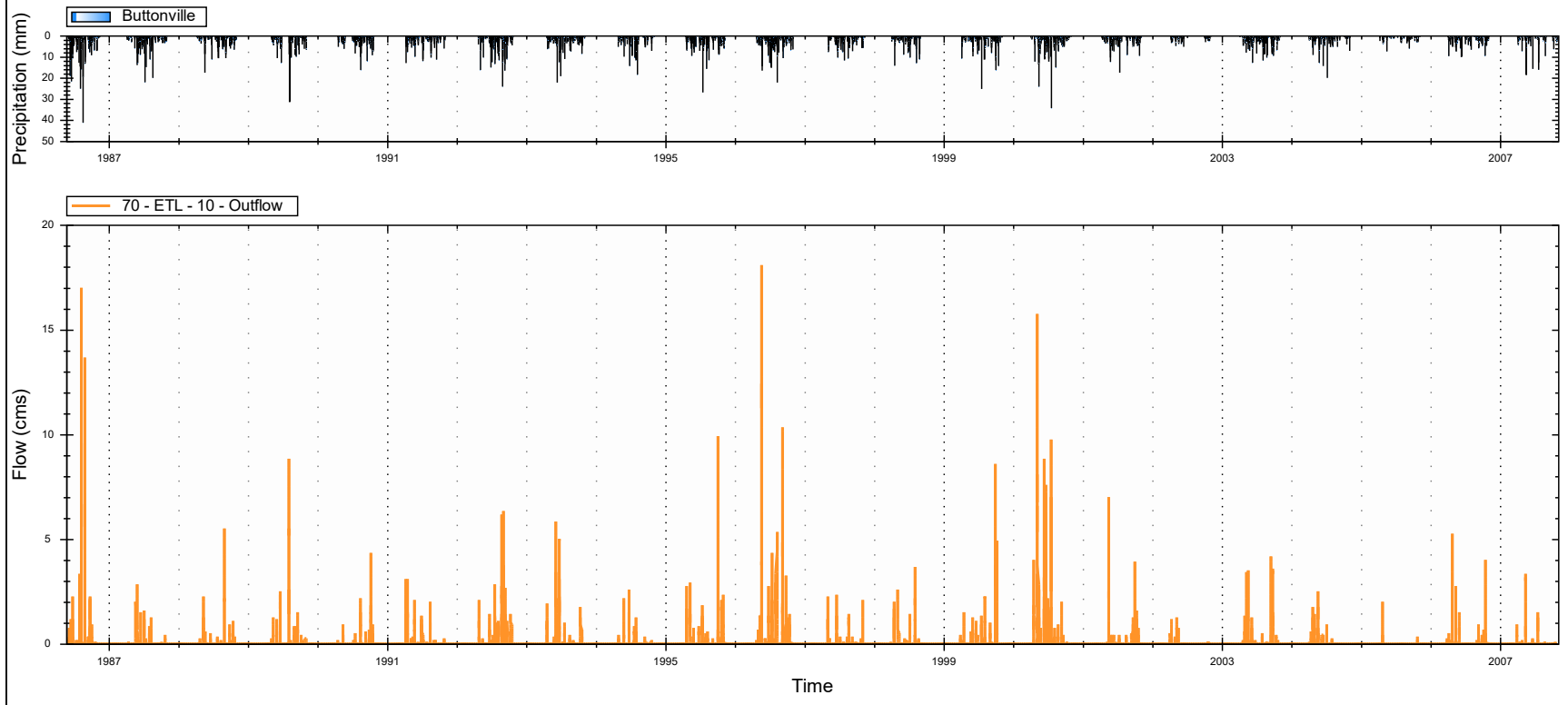
VH Hydrograph Plots

7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



VH Hydrograph Plots

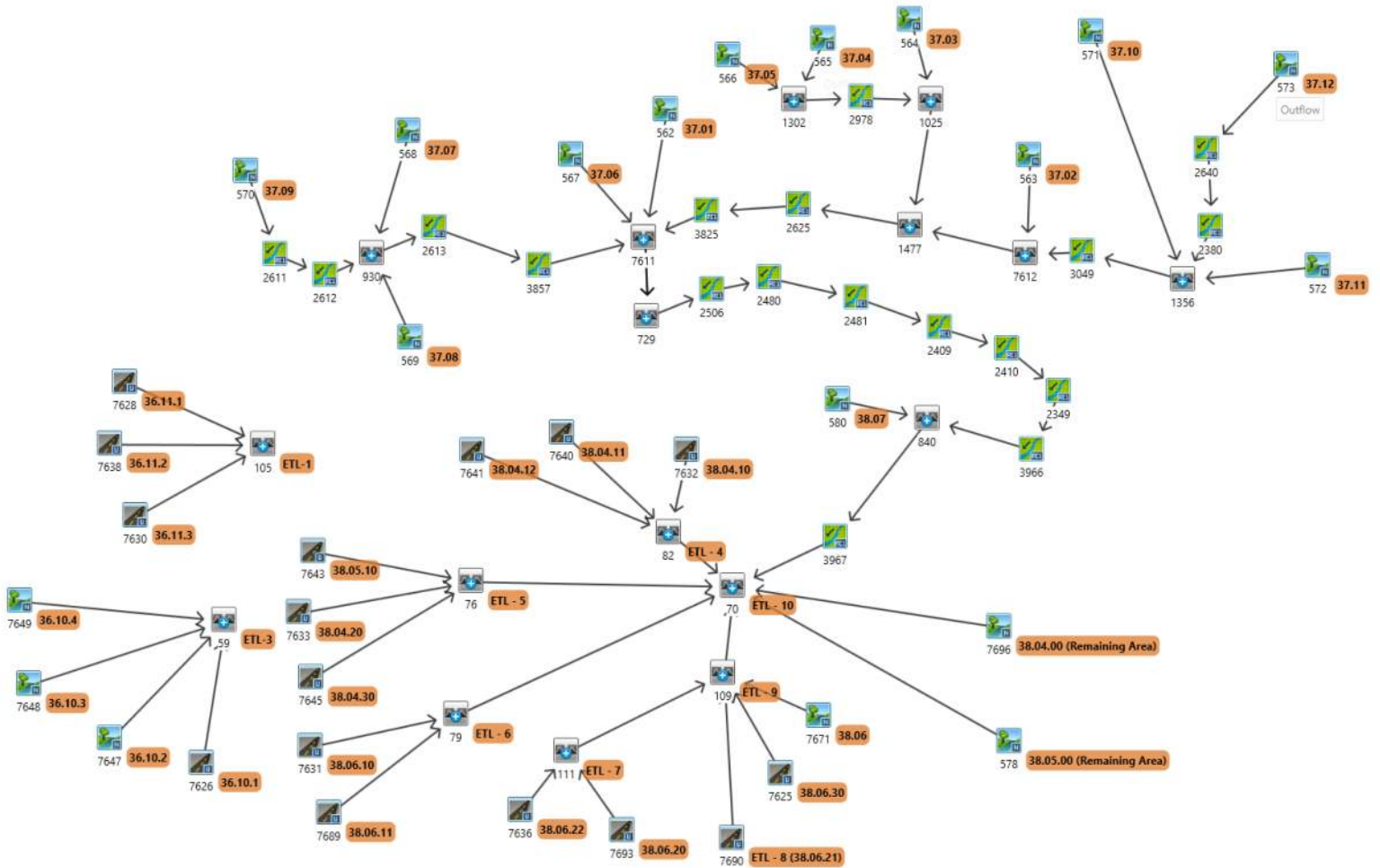
7. 2015 Existing Conditions - Erosion Threshold Model (SCS December 2024)



**PROPOSED CONDITIONS EROSION
THRESHOLD MODELLING OUTPUTS**



Phase 2 - Visual OTTHymo Continuous Modeling Schematic Proposed Erosion Threshold Analysis



Proposed Conditions Erosion Threshold VO Parameter Summary

NASHYD

Name	36.10.2	36.10.3	36.10.4	38.06	38.04.00	38.05.00	37.01	37.02	37.03	37.04	37.05	37.06	37.07	37.08	37.09	37.10	37.11	37.12	38.07
Number	7647	7648	7649	7671	7696	578	580	563	564	565	566	567	568	569	570	571	572	573	580
Area (ha)	19.68	5.27	19.97	24.1	39.22	5.80	306.23	26.85	145.14	141.48	365.26	105.51	235.25	284.55	299.42	125.88	188.91	192.77	293.26
CN*	72	72	72	72	73	73	71	72	68	69	64	70	70	71	69	75	76	75	69
IA(mm)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
TP (hr)	0.20	0.15	0.31	0.86	1.99	0.82	2.26	0.77	2.18	2.00	2.99	1.46	3.74	4.37	3.11	1.63	1.91	3.67	4.55
Land Cover	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Light Forest	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Light Forest	Light Forest	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Crops up to Shoulder Height	Light Forest
Soil Texture	Clay	Clay	Clay	Clay Loam	Clay	Clay	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Sandy Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay	Clay Loam

* Italicized numbers are from TRCA Existing Conditions Modelling

STANDHYD

Name	36.10.1	38.06.10	38.06.11	38.06.20	38.06.21	38.06.22	38.06.30	36.11.1	36.11.2	36.11.3	38.04.10	38.04.11	38.04.12	38.04.20	38.04.30	38.05.10
Number	7626	7631	7689	7693	7690	7636	7625	7628	7638	7630	7632	7640	7641	7633	7645	7643
Area (ha)	36.78	19.52	42.12	35.80	21.92	3.65	26.64	24.85	8.14	22.49	20.62	18.75	9.24	54.88	2.52	5.8
TIMP ²	0.71	0.79	0.75	0.71	0.71	0.71	0.76	0.81	0.82	0.73	0.73	0.76	0.84	0.76	0.71	0.71
XIMP ^{1,2}	0.57	0.64	0.60	0.57	0.57	0.57	0.61	0.64	0.66	0.59	0.59	0.61	0.67	0.61	0.57	0.57
CNII	80	88	82	80	80	80	84	88	90	82	82	84	92	84	80	80
IA(mm)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
SLPP(%)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LGP(m)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
MNP	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
DPSI (mm)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SLPI(%)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
LGI(m)	495.18	360.74	529.91	488.54	382.27	155.99	421.43	407.02	232.95	387.21	370.76	353.55	248.19	604.87	129.61	196.64
MNI	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Land Cover	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land	Grass Land
Soil Texture	Clay	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay	Clay	Clay	Clay	Clay	Clay

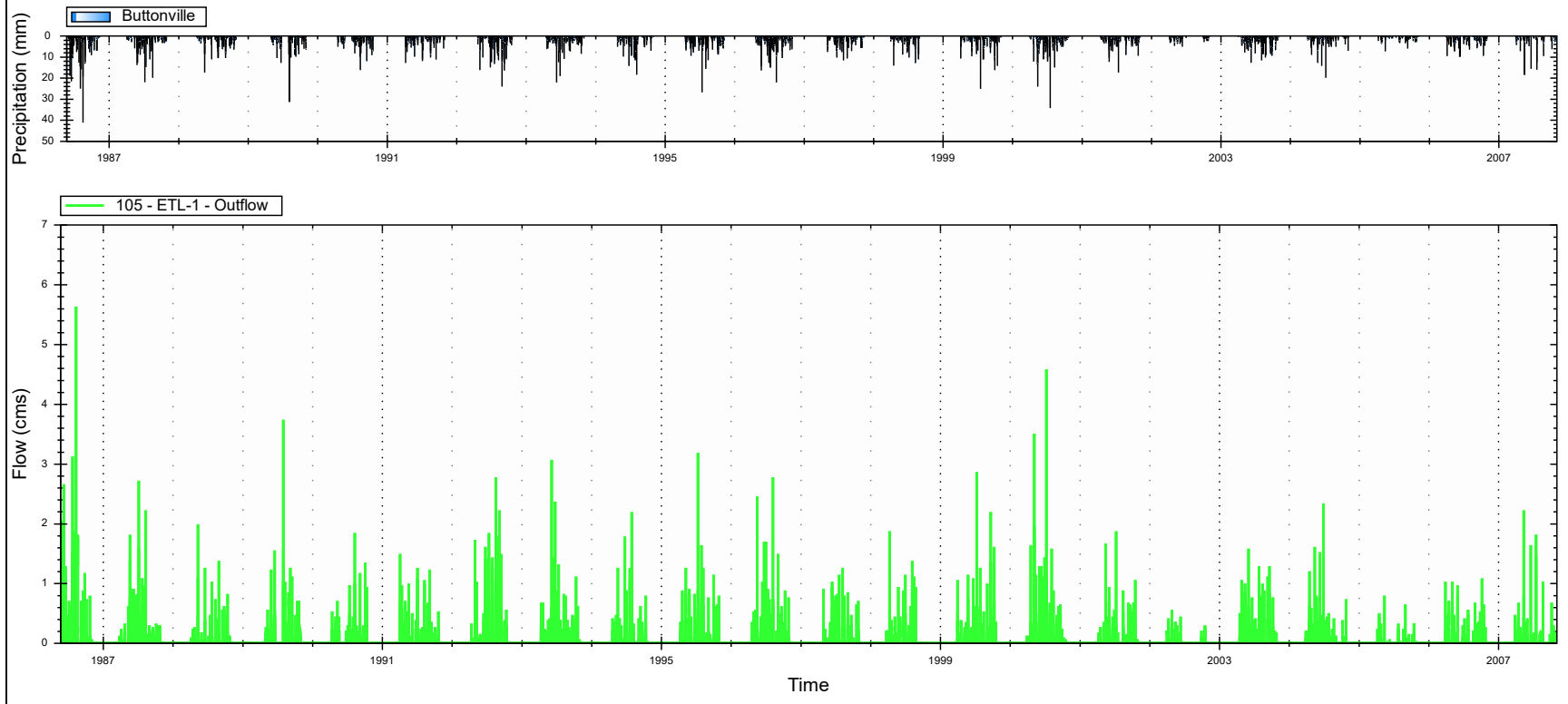
¹Note that where there is NO directly connected area (ie: roof runoff to grassed areas), the hydrology program does not accept XIMP=0%, therefore, XIMP = 1% has been used

²Note that where there is NO pervious area, the hydrology program does not accept TIMP and XIMP=100%, therefore, TIMP and XIMP = 99% has been used

Total Area = 2531.3 ha

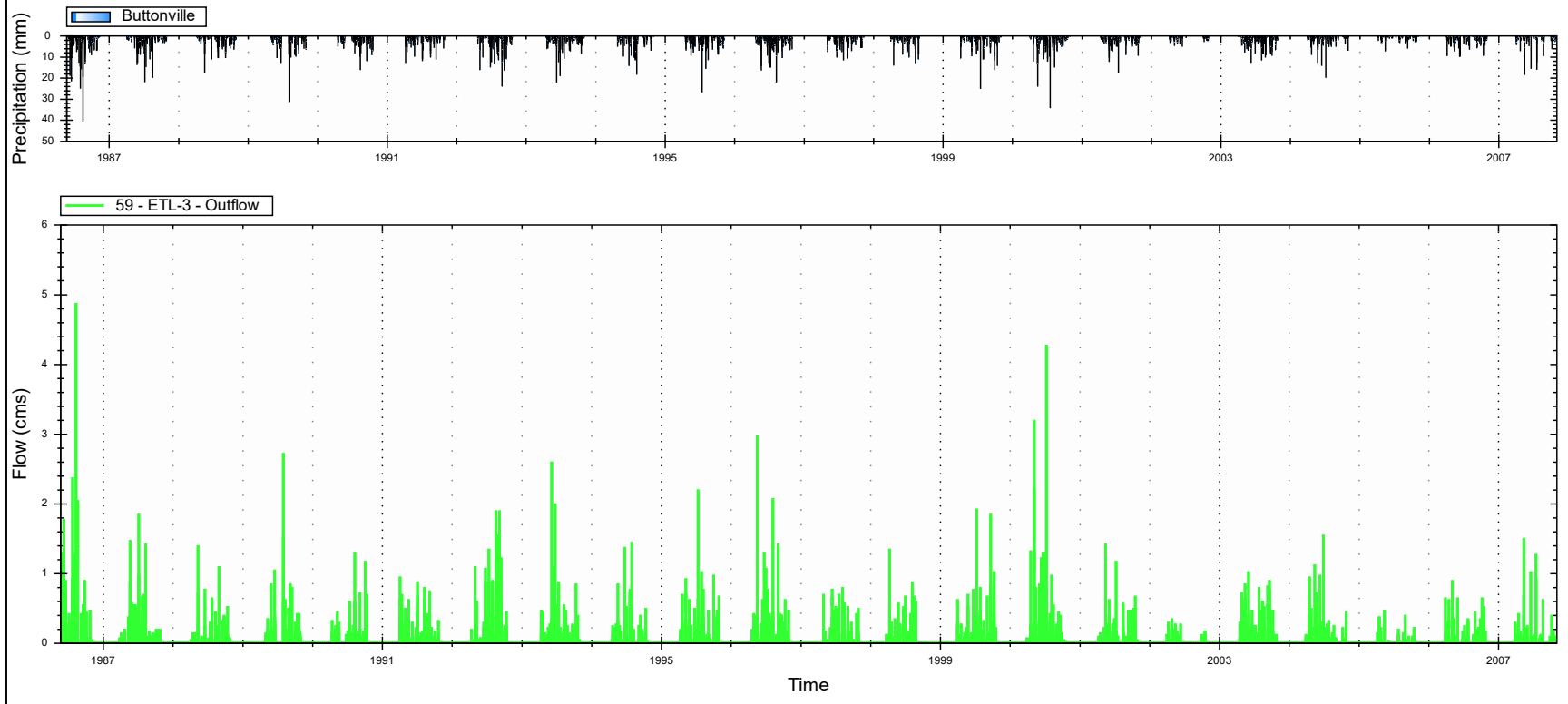
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



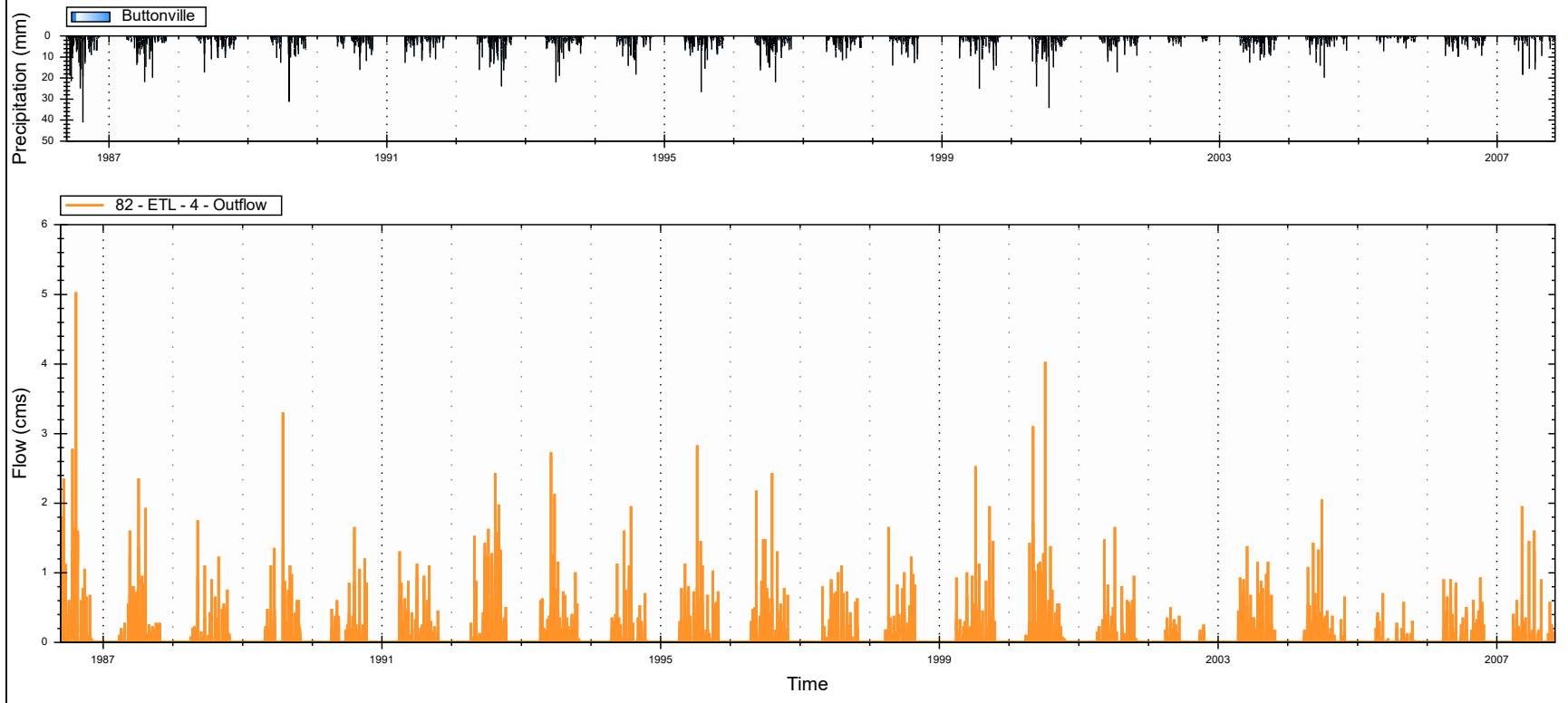
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



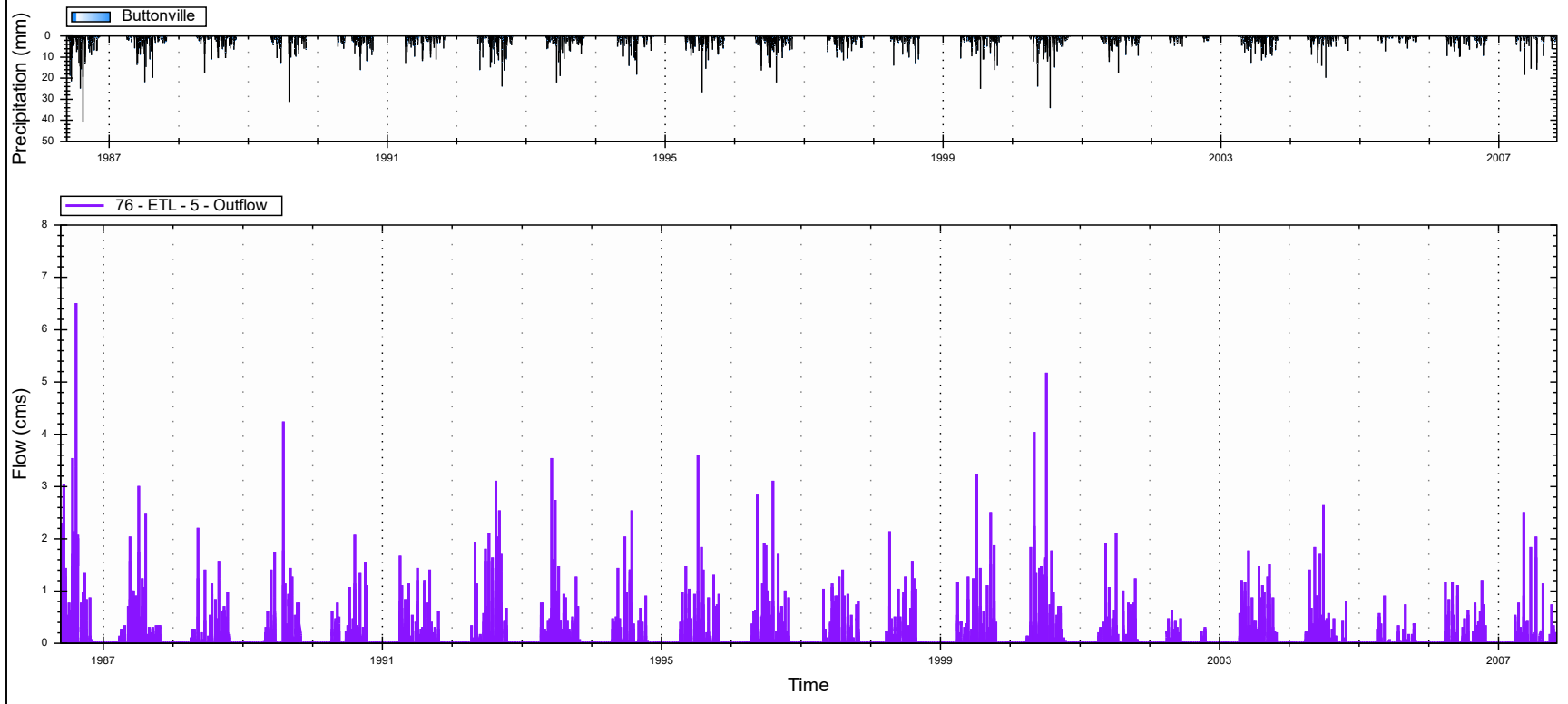
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



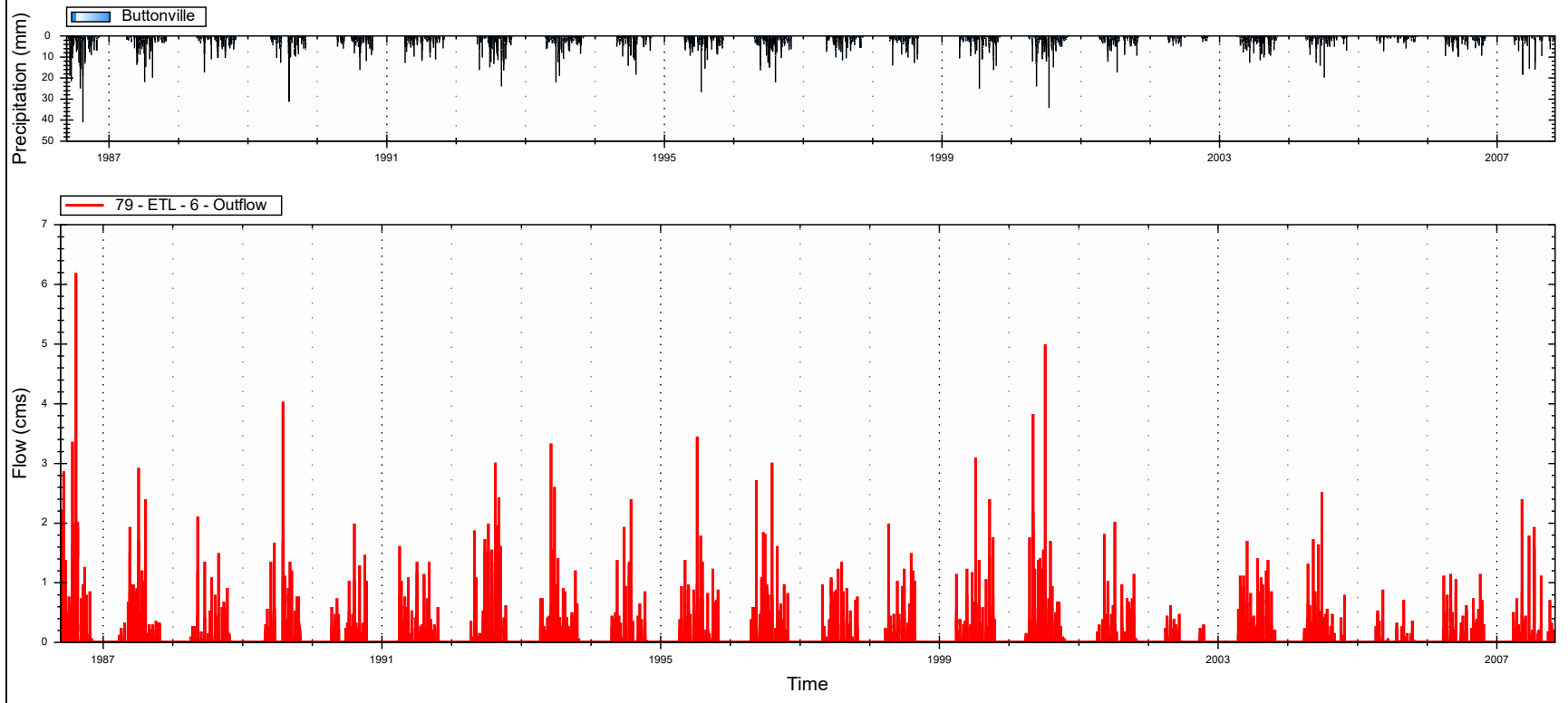
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



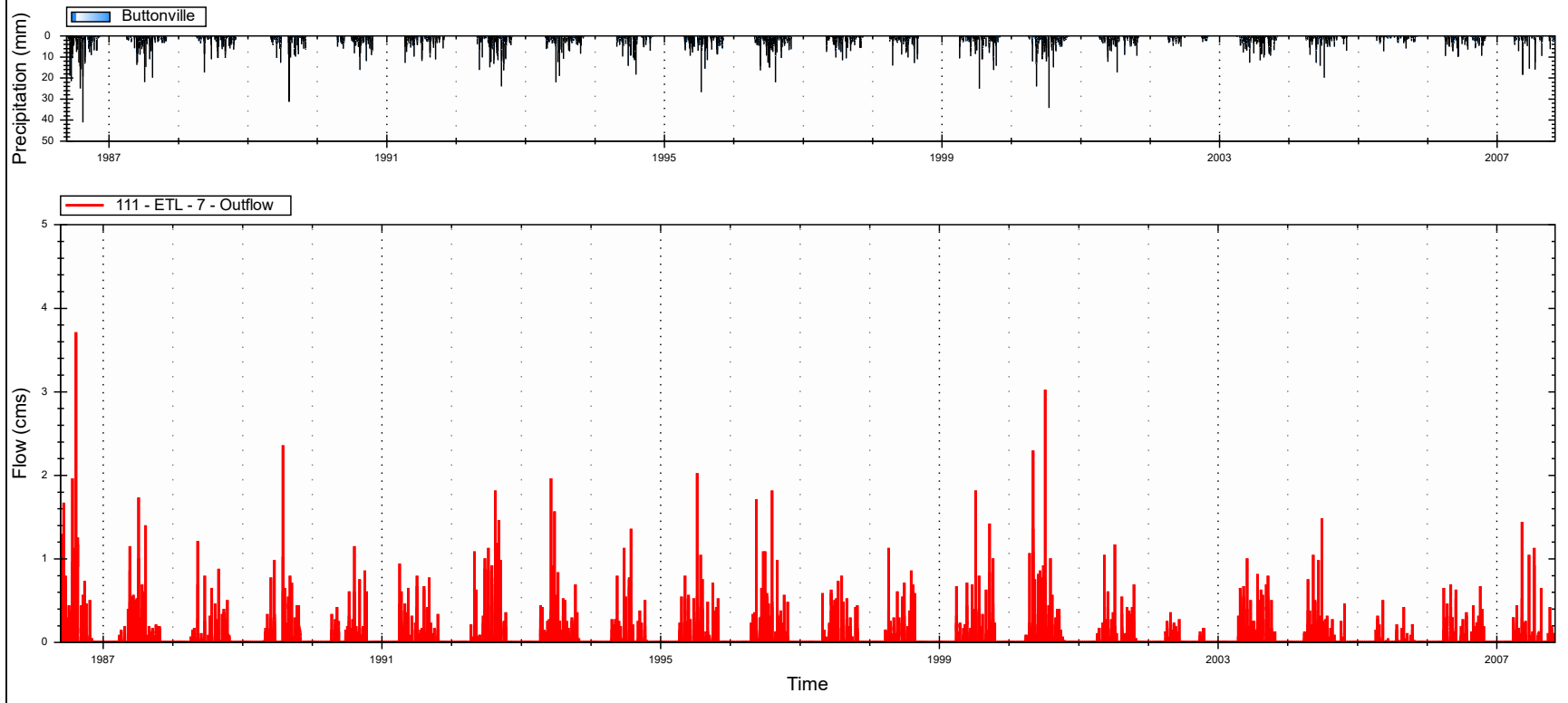
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



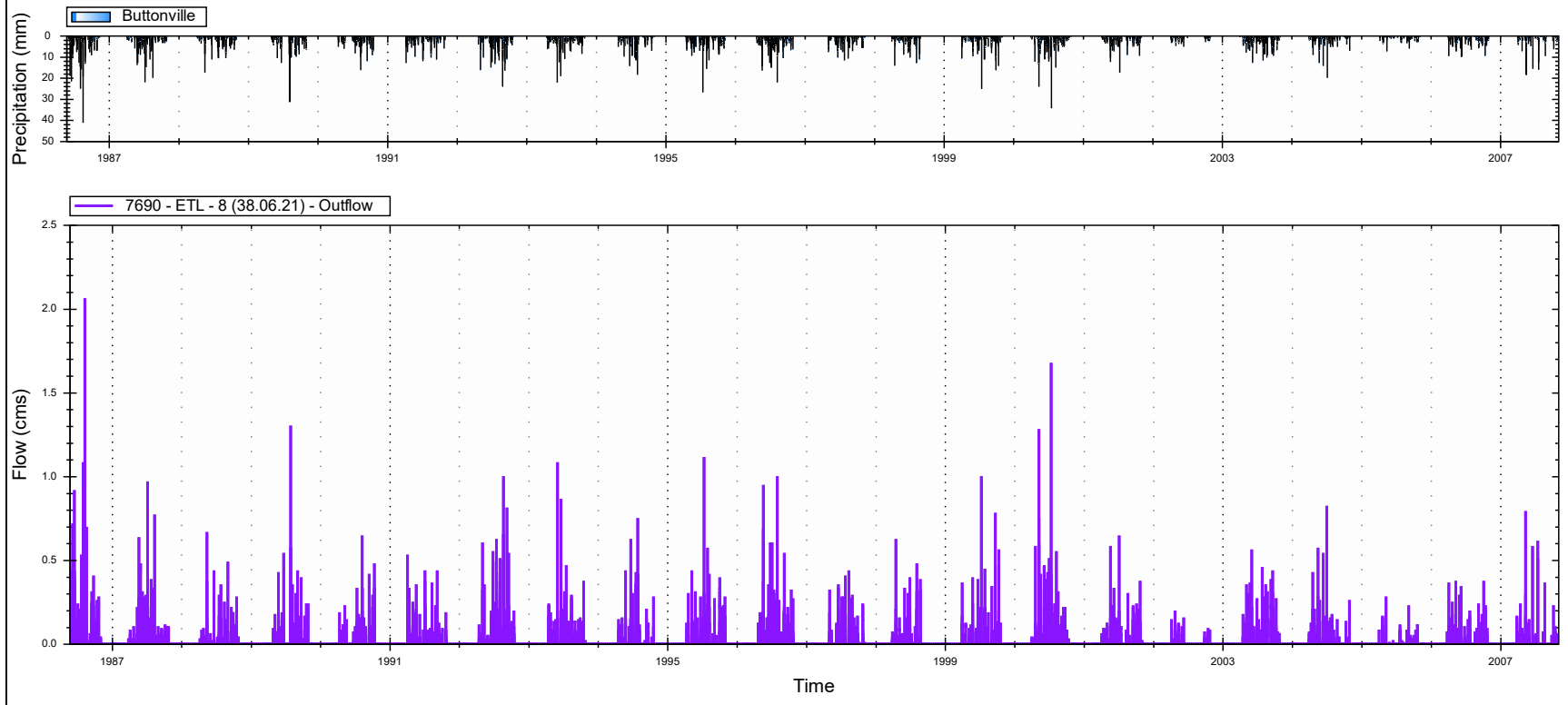
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



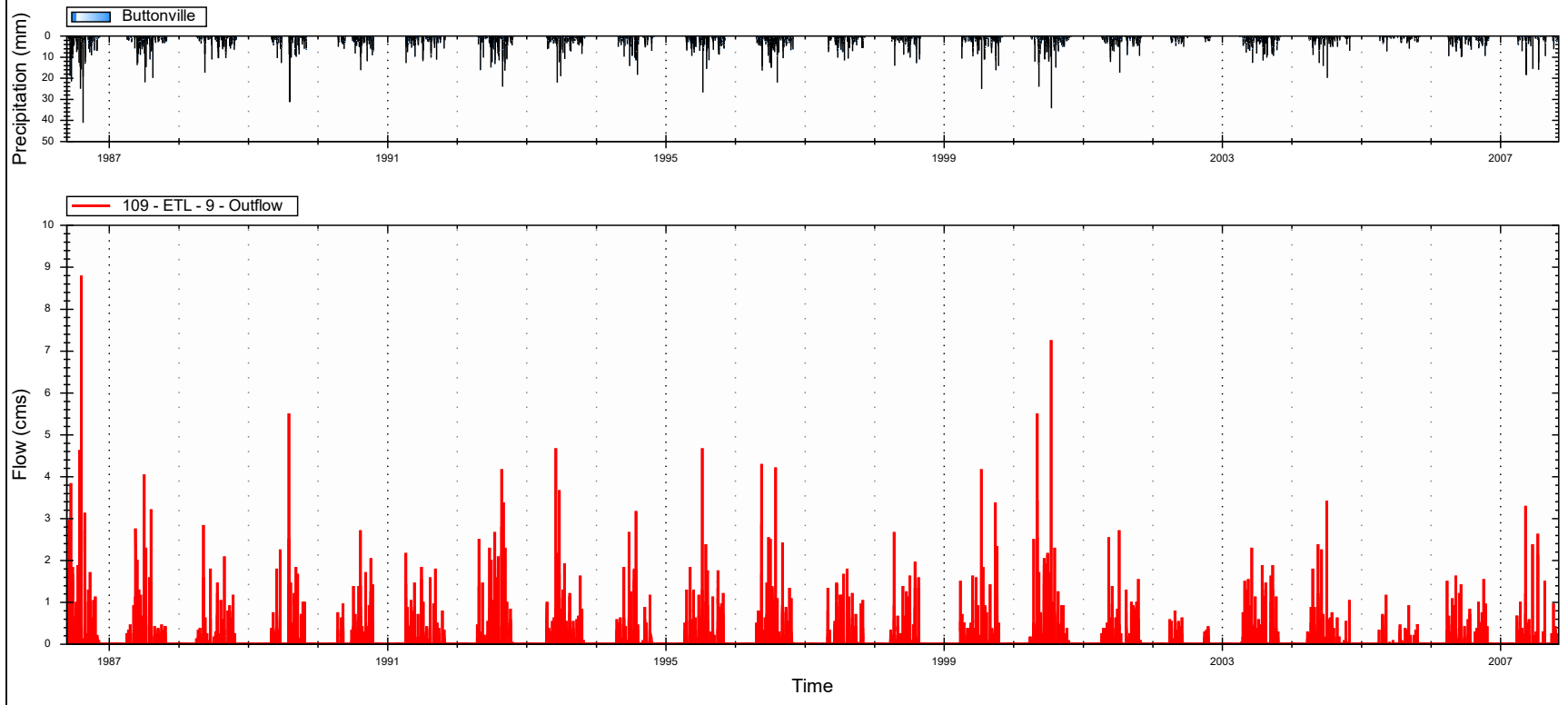
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



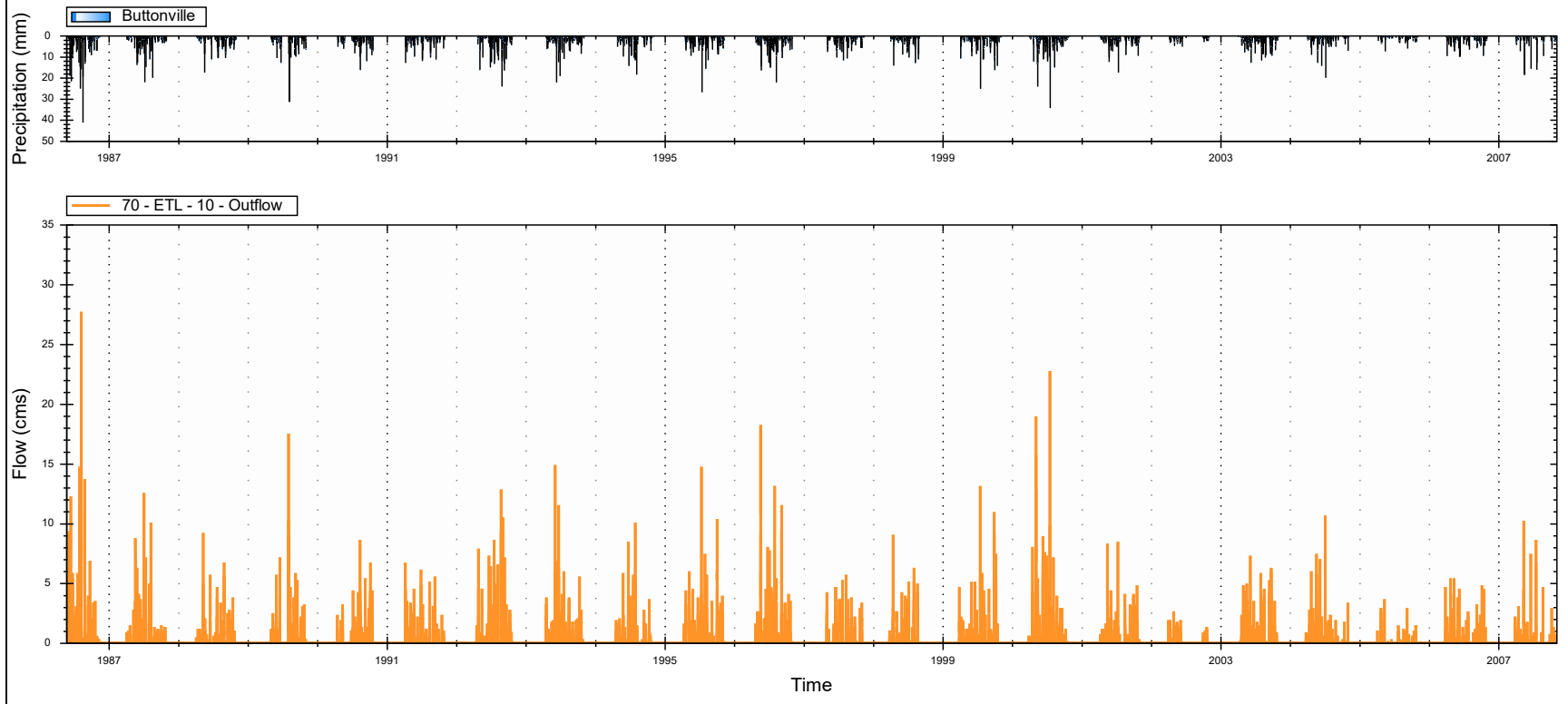
VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



VH Hydrograph Plots

8. 2015 Proposed Conditions - Erosion Threshold Model (SCS December 2024)



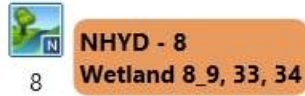
APPENDIX D6

WETLAND HYDROLOGIC ASSESSMENT

**EXISTING CONDITIONS WETLAND
CONTINUOUS HYDROLOGIC MODELLING OUTPUTS**



Phase 2 - Wetland Visual OTTHymo Continuous Modeling Schematic



Existing Conditions VO Parameter Summary

NASHYD

Number	10	8
Name	Wetland 10, 11	Wetland 8, 33, 34
Area (ha)	54.88	4.49
CN*	73.0	73.0
IA(mm)	10.0	10.0
TP Method	Uplands	Uplands
TP (hr)	1.07	0.39
Land Cover	Crops up to Shoulder Height	Crops up to Shoulder Height
Soil Texture	Clay	Clay

* *Italicized numbers are from TRCA Existing Conditions Modelling*

¹Note that where there is NO directly connected area (ie: roof runoff to grassed areas), the hydrology program does not accept XIMP=0%, therefore, XIMP = 1% has been used

²Note that where there is NO pervious area, the hydrology program does not accept TIMP and XIMP=100%, therefore, TIMP and XIMP = 99% has been used

Total Area = 59.37



Proposed Conditions Time to Peak Calculations

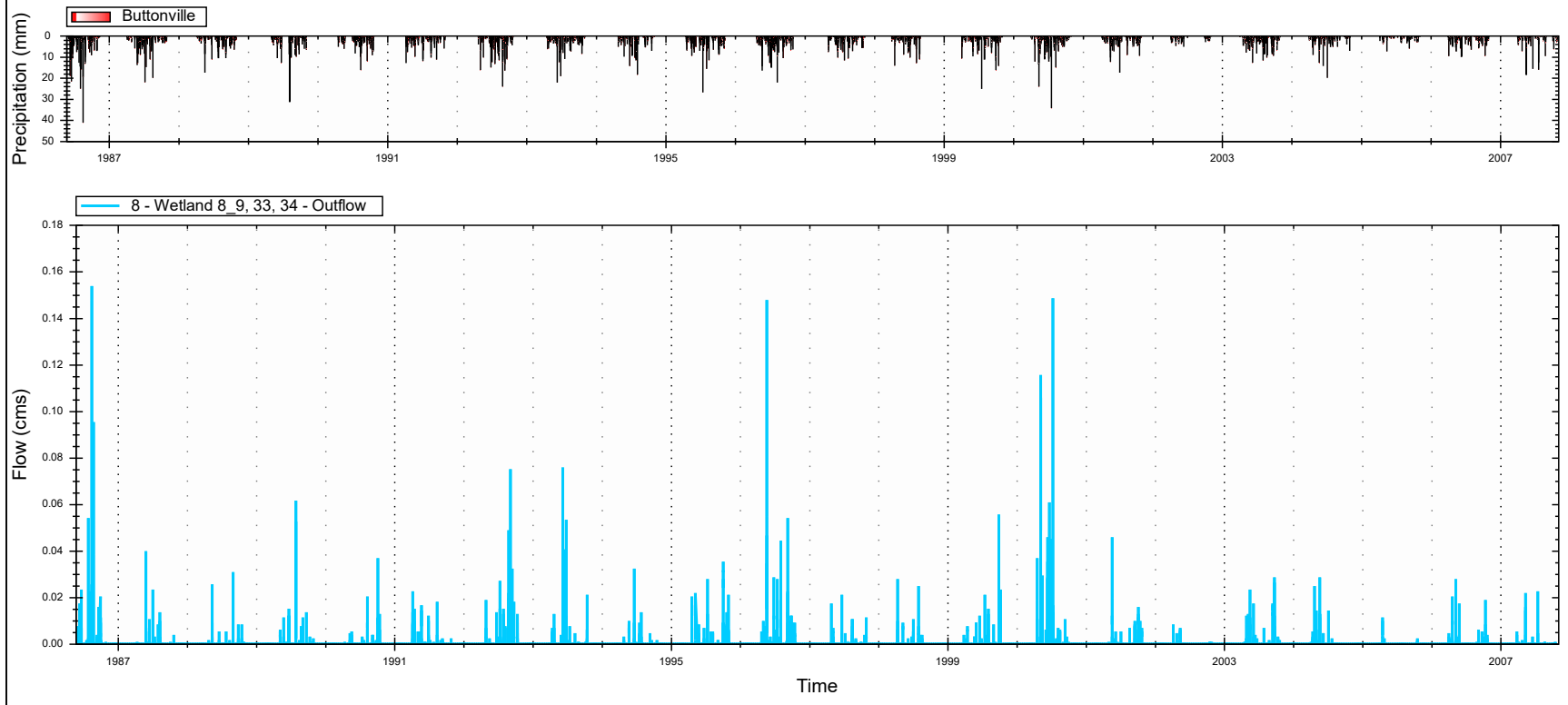
Wildfield Village
Project Number: 2630
Date: December 2024
Designer Initials: R.B.

Uplands Method:

Catchment ID	High Elevation	Low Elevation	Length (m)	Slope (%)	Land Cover Type	Velocity (m/s)	Time of Concentration (s)	Time of Concentration (hr)	Time to Peak (hr)
10	242.50	219.00	1820.00	1.29	Cultivated Straight Row	0.32	5732.5	1.59	1.07
8	235.00	229.50	578.00	0.95	Cultivated Straight Row	0.27	2118.9	0.59	0.39

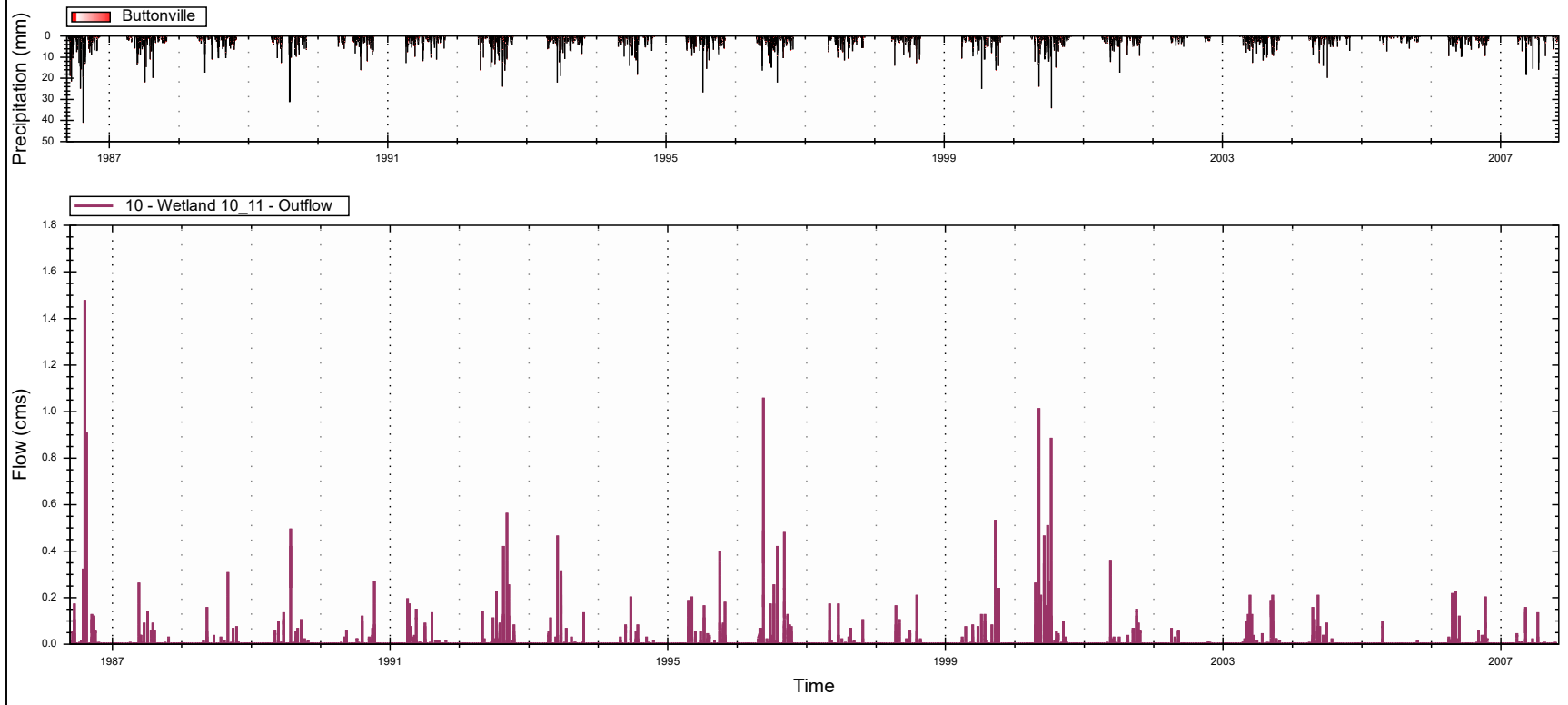
VH Hydrograph Plots

1. 2015 Existing Conditions (Phase 1) - with Wetlands (SCS January 2025)



VH Hydrograph Plots

1. 2015 Existing Conditions (Phase 1) - with Wetlands (SCS January 2025)



Wetland ID 8_9, 33, 34
 Area (ha) 4.49

Runoff Volume (m ³)																	
Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Spring (March - May)	Summer (June - August)	Fall (September - November)	Winter (December - February)
	1	2	3	4	5	6	7	8	9	10	11	12					
1986	0	0	0	0	0	314165	20879	2713846	549531	130524	0	0	3728945	0	3048890	680055	0
1987	0	0	0	7139	197380	153468	106368	169138	0	36683	0	0	670177	204520	428975	36683	0
1988	0	0	0	16882	220504	30981	19801	6511	372939	165546	0	0	833164	237386	57292	538486	0
1989	0	0	0	0	196123	287001	0	671390	220190	52488	0	0	1427191	196123	958391	272678	0
1990	0	0	0	8262	115977	0	43508	258714	49121	717143	0	0	1192724	124238	302222	766263	0
1991	0	0	0	957852	240664	6376	169408	133847	27120	14368	0	0	1549634	1198516	309630	41488	0
1992	0	0	0	0	156297	87061	335268	977698	823331	201466	0	0	2581121	156297	1400027	1024798	0
1993	0	0	0	263743	20070	1295949	64521	21597	12886	166399	0	0	1845166	283813	1382067	179286	0
1994	0	0	0	27389	199176	216957	89980	79293	22899	9115	0	0	644809	226565	386230	32014	0
1995	0	0	0	297732	276000	60884	195450	95457	15895	1098389	265628	0	2305435	573732	351792	1379912	0
1996	0	0	0	59717	1812972	230876	485683	312729	1438372	329072	0	0	4669420	1872689	1029288	1767444	0
1997	0	0	0	0	241203	161236	19981	192082	31744	13290	150954	0	810490	241203	373299	195989	0
1998	0	0	0	249869	227014	25144	124463	361310	0	0	0	0	987800	476883	510917	0	0
1999	0	0	0	139549	44496	218753	95413	210222	691325	536824	0	0	1936582	184045	524387	1228150	0
2000	0	0	0	377564	1823793	1770317	1097266	133937	137888	3143	0	0	5343908	2201357	3001520	141031	0
2001	0	0	0	0	565785	64656	22899	46067	154501	770439	0	0	1624347	565785	133622	924940	0
2002	0	0	0	148709	242774	0	0	0	0	10417	0	0	401900	391483	0	10417	0
2003	0	0	0	13425	774390	170979	0	34214	746732	62501	0	0	1802241	787815	205193	809233	0
2004	0	0	0	204969	486985	57517	69999	0	0	0	0	0	819470	691954	127516	0	0
2005	0	0	0	199087	180	0	0	0	45	47414	0	0	246726	199266	0	47459	0
2006	0	0	0	527530	340611	131557	0	0	113148	444061	0	0	1556908	868142	131557	557209	0
2007	0	0	0	105515	371368	13650	101833	4131	0	3053	0	0	599550	476883	119614	3053	0
Total	0	0	0	3604931	8553764	5297527	3062719	6422182	5407666	4812337	416582	0	37577708	12158696	14782427	10636586	0

Wetland ID 10_11
 Area (ha) 54.88

Year	Runoff Volume (m ³)												Annual	Spring (March - May)	Summer (June - August)	Fall (September - November)	Winter (December - February)
	January	February	March	April	May	June	July	August	September	October	November	December					
	1	2	3	4	5	6	7	8	9	10	11	12					
1986	0	0	0	0	0	3839954	255192	33170570	6716763	1595362	0	0	45,577,840	0	37,265,715	8,312,125	0
1987	0	0	0	87259	2412525	1875798	1300107	2067330	0	448370	0	0	8,191,389	2,499,784	5,243,235	448,370	0
1988	0	0	0	206349	2695157	378672	242021	79576	4558333	2023426	0	0	10,183,533	2,901,506	700,269	6,581,758	0
1989	0	0	0	0	2397158	3507930	0	8206206	2691315	641547	0	0	17,444,157	2,397,158	11,714,136	3,332,862	0
1990	0	0	0	100979	1417550	0	531787	3162186	600387	8765434	0	0	14,578,323	1,518,530	3,693,973	9,365,821	0
1991	0	0	0	11707550	2941568	77930	2070622	1635973	331475	175616	0	0	18,940,734	14,649,118	3,784,525	507,091	0
1992	0	0	0	0	1910373	1064123	4097890	11950120	10063346	2462466	0	0	31,548,317	1,910,373	17,112,133	12,525,811	0
1993	0	0	0	3223651	245314	15840014	788626	263973	157506	2033853	0	0	22,552,936	3,468,965	16,892,613	2,191,358	0
1994	0	0	0	334768	2434477	2651802	1099795	969181	279888	111406	0	0	7,881,317	2,769,245	4,720,778	391,294	0
1995	0	0	0	3639093	3373474	744173	2388926	1166749	194275	13425294	3246701	0	28,178,685	7,012,566	4,299,848	16,866,270	0
1996	0	0	0	729904	22159446	2821930	5936370	3822392	17580808	4022155	0	0	57,073,005	22,889,350	12,580,691	21,602,963	0
1997	0	0	0	0	2948154	1970741	244216	2347766	388002	162445	1845066	0	9,906,389	2,948,154	4,562,723	2,395,512	0
1998	0	0	0	3054072	2774733	307328	1521274	4416194	0	0	0	0	12,073,600	5,828,805	6,244,795	0	0
1999	0	0	0	1705670	543861	2673754	1166200	2569482	8449874	6561453	0	0	23,670,293	2,249,531	6,409,435	15,011,326	0
2000	0	0	0	4614859	22291707	21638086	13411574	1637070	1685365	38416	0	0	65,317,078	26,906,566	36,686,731	1,723,781	0
2001	0	0	0	0	6915429	790272	279888	563069	1888421	9416859	0	0	19,853,938	6,915,429	1,633,229	11,305,280	0
2002	0	0	0	1817626	2967362	0	0	0	0	127322	0	0	4,912,309	4,784,987	0	127,322	0
2003	0	0	0	164091	9465154	2089830	0	418186	9127093	763930	0	0	22,028,283	9,629,245	2,508,016	9,891,022	0
2004	0	0	0	2505272	5952285	703013	855579	0	0	0	0	0	10,016,149	8,457,557	1,558,592	0	0
2005	0	0	0	2433379	2195	0	0	0	549	579533	0	0	3,015,656	2,435,574	0	580,082	0
2006	0	0	0	6447851	4163197	1607984	0	0	1382976	5427632	0	0	19,029,640	10,611,048	1,607,984	6,810,608	0
2007	0	0	0	1289680	4539125	166835	1244678	50490	0	37318	0	0	7,328,126	5,828,805	1,462,003	37,318	0
Total	0	0	0	44062054	104550242	64750168	37434746	78496510	66096374	58819835	5091766	0	459,301,696	148,612,296	180,681,424	130,007,976	0

**PROPOSED CONDITIONS WETLAND
CONTINUOUS HYDROLOGIC MODELLING OUTPUTS**



Proposed Conditions Wetland VO Parameter Summary

NASHYD

Number	10	8
Name	Wetland 10, 11	Wetland 8, 33, 34
Area (ha)	0.89	2.56
CN*	<i>73.0</i>	<i>73.0</i>
IA(mm)	<i>10.0</i>	<i>10.0</i>
TP Method	Uplands	Uplands
TP (hr)	0.15	0.15
Land Cover	Crops up to Shoulder Height	Crops up to Shoulder Height
Soil Texture	Clay	Clay

** Italicized numbers are from TRCA Existing Conditions Modelling*

¹Note that where there is NO directly connected area (ie: roof runoff to grassed areas), the hydrology program does not accept XIMP=0%, therefore, XIMP = 1% has been used

²Note that where there is NO pervious area, the hydrology program does not accept TIMP and XIMP=100%, therefore, TIMP and XIMP = 99% has been used

Total Area = 3.45



Proposed Conditions Time to Peak Calculations

Wildfield Village
Project Number: 2630
Date: December 2024
Designer Initials: R.B.

Uplands Method:

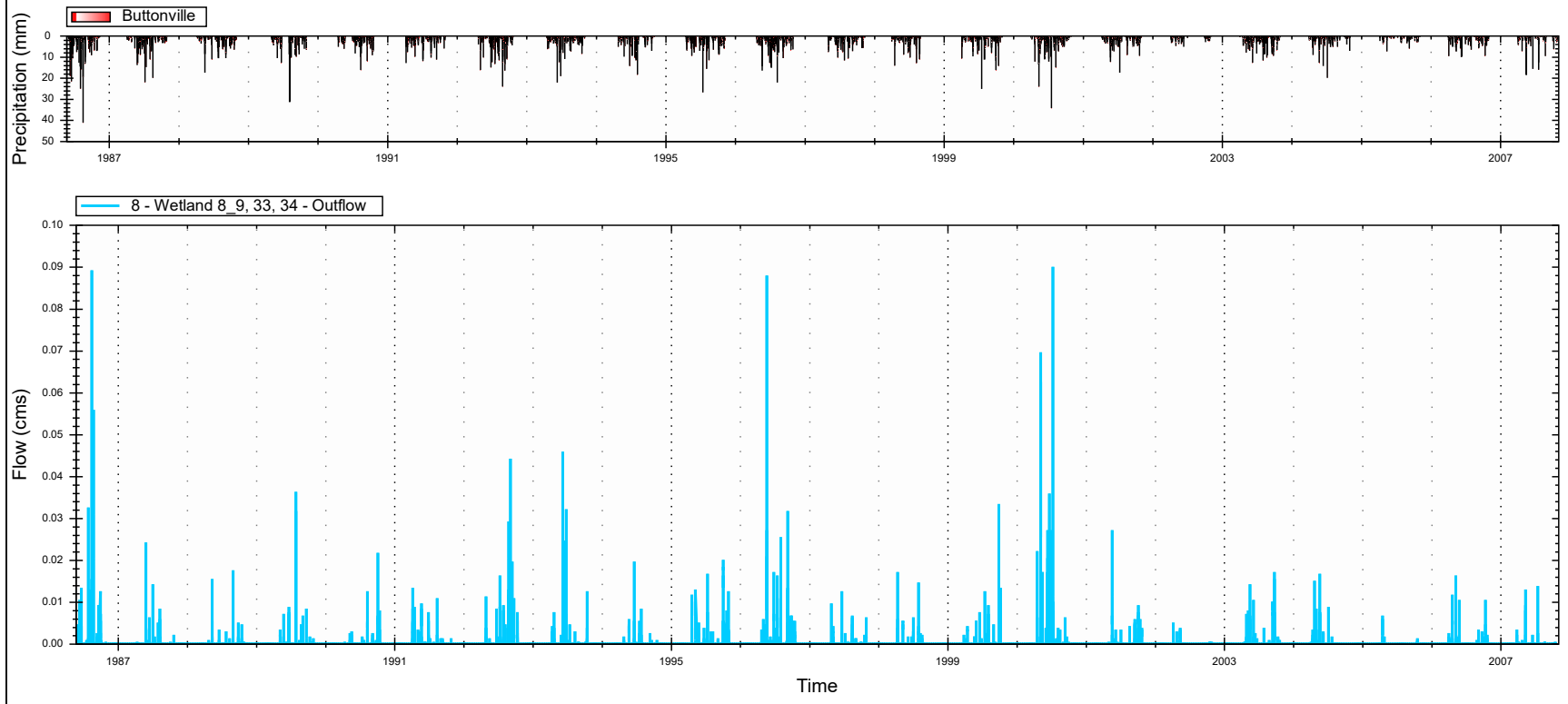
Catchment ID	High Elevation	Low Elevation	Length (m)	Slope (%)	Land Cover Type	Velocity (m/s)	Time of Concentration (s)	Time of Concentration (hr)	Time to Peak (hr)
10	221.68	219.00	243	1.10	Cultivated Straight Row	0.29	827.8	0.23	0.15
8	231.75	229.50	227	0.99	Cultivated Straight Row	0.28	815.5	0.23	0.15



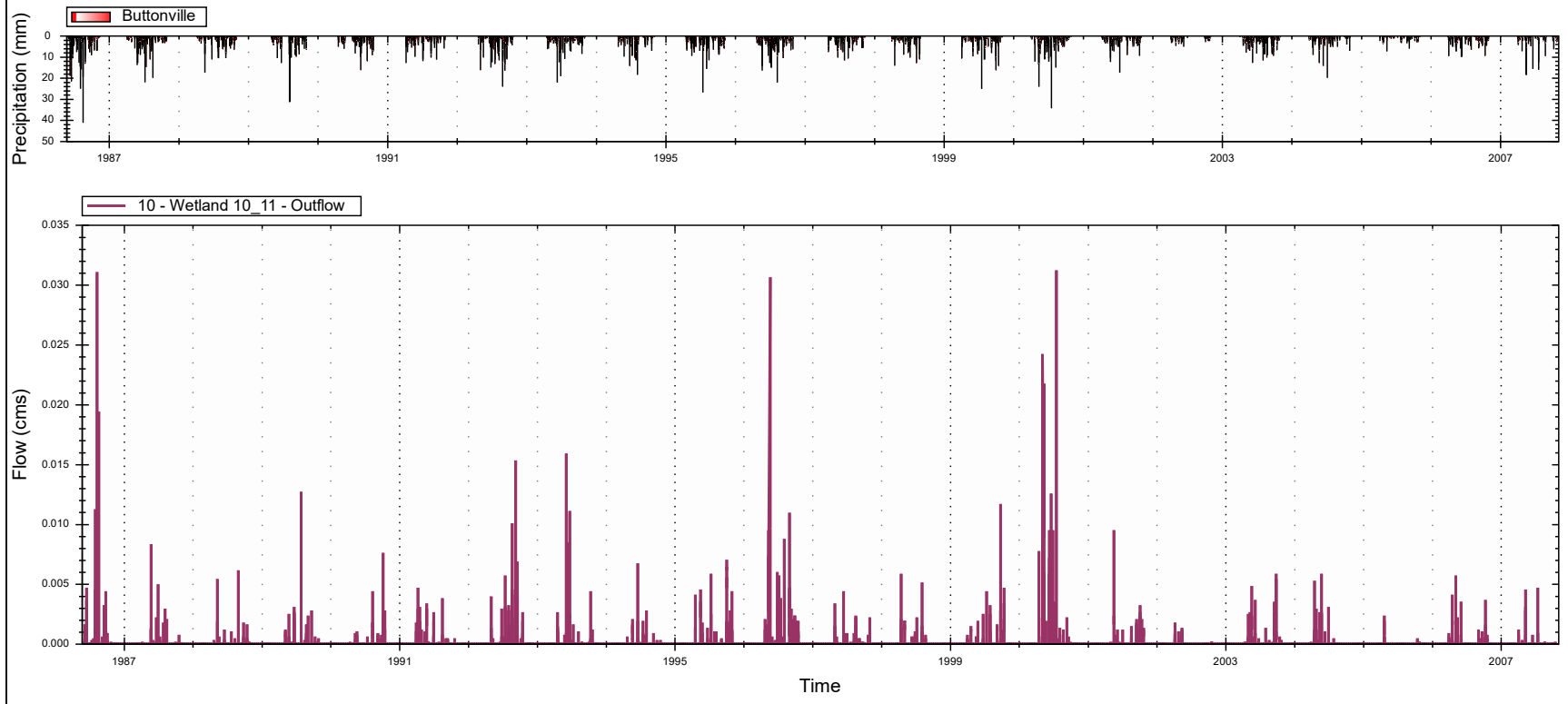
Proposed Conditions Time to Peak Calculations

Wildfield Village
Project Number: 2630
Date: December 2024
Designer Initials: R.B.

VH Hydrograph Plots 2. 2015 Proposed Conditions (Phase 2) - with Wetlands (SCS January 2025)



VH Hydrograph Plots 2. 2015 Proposed Conditions (Phase 2) - with Wetlands (SCS January 2025)



Wetland ID 8_9, 33, 34
 Area (ha) 2.56

Runoff Volume (m ³)																	
Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Spring (March - May)	Summer (June - August)	Fall (September - November)	Winter (December - February)
	1	2	3	4	5	6	7	8	9	10	11	12					
1986	0	0	0	0	0	179123	11904	1547315	313318	74419	0	0	2126080	0	1738342	387738	0
1987	0	0	0	4070	112538	87501	60646	96435	0	20915	0	0	382106	116608	244582	20915	0
1988	0	0	0	9626	125722	17664	11290	3712	212634	94387	0	0	475034	135347	32666	307021	0
1989	0	0	0	0	111821	163635	0	382797	125542	29926	0	0	813722	111821	546432	155469	0
1990	0	0	0	4710	66125	0	24806	147507	28006	408883	0	0	680038	70835	172314	436890	0
1991	0	0	0	546125	137216	3635	96589	76314	15462	8192	0	0	883533	683341	176538	23654	0
1992	0	0	0	0	89114	49638	191155	557440	469427	114867	0	0	1471642	89114	798234	584294	0
1993	0	0	0	150374	11443	738893	36787	12314	7347	94874	0	0	1052032	161818	787994	102221	0
1994	0	0	0	15616	113562	123699	51302	45210	13056	5197	0	0	367642	129178	220211	18253	0
1995	0	0	0	169754	157363	34714	111437	54426	9062	626253	151450	0	1314458	327117	200576	786765	0
1996	0	0	0	34048	1033677	131635	276915	178304	820096	187622	0	0	2662298	1067725	586854	1007718	0
1997	0	0	0	0	137523	91930	11392	109517	18099	7578	86067	0	462106	137523	212838	111744	0
1998	0	0	0	142464	129434	14336	70963	206003	0	0	0	0	563200	271898	291302	0	0
1999	0	0	0	79565	25370	124723	54400	119859	394163	306074	0	0	1104154	104934	298982	700237	0
2000	0	0	0	215270	1039846	1009357	625613	76365	78618	1792	0	0	3046861	1255117	1711334	80410	0
2001	0	0	0	0	322586	36864	13056	26266	88090	439270	0	0	926131	322586	76186	527360	0
2002	0	0	0	84787	138419	0	0	0	0	5939	0	0	229146	223206	0	5939	0
2003	0	0	0	7654	441523	97485	0	19507	425754	35635	0	0	1027558	449178	116992	461389	0
2004	0	0	0	116864	277658	32794	39910	0	0	0	0	0	467226	394522	72704	0	0
2005	0	0	0	113510	102	0	0	0	26	27034	0	0	140672	113613	0	27059	0
2006	0	0	0	300774	194202	75008	0	0	64512	253184	0	0	887680	494976	75008	317696	0
2007	0	0	0	60160	211738	7782	58061	2355	0	1741	0	0	341837	271898	68198	1741	0
Total	0	0	0	2055373	4876979	3020416	1746227	3661645	3083213	2743782	237517	0	21425152	6932352	8428288	6064512	0

Wetland ID 10_11
Area (ha) 0.89

Runoff Volume (m ³)																	
Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Spring (March - May)	Summer (June - August)	Fall (September - November)	Winter (December - February)
	1	2	3	4	5	6	7	8	9	10	11	12					
1986	0	0	0	0	0	62273	4139	537934	108927	25872	0	0	739,145	0	604,346	134,799	0
1987	0	0	0	1415	39124	30420	21084	33526	0	7271	0	0	132,841	40,540	85,031	7,271	0
1988	0	0	0	3346	43708	6141	3925	1291	73923	32814	0	0	165,148	47,054	11,356	106,738	0
1989	0	0	0	0	38875	56889	0	133082	43646	10404	0	0	282,895	38,875	189,971	54,050	0
1990	0	0	0	1638	22989	0	8624	51282	9737	142151	0	0	236,420	24,626	59,906	151,887	0
1991	0	0	0	189864	47704	1264	33580	26531	5376	2848	0	0	307,166	237,568	61,374	8,224	0
1992	0	0	0	0	30981	17257	66456	193798	163199	39934	0	0	511,625	30,981	277,511	203,134	0
1993	0	0	0	52279	3978	256881	12789	4281	2554	32983	0	0	365,746	56,257	273,951	35,538	0
1994	0	0	0	5429	39480	43005	17836	15717	4539	1807	0	0	127,813	44,909	76,558	6,346	0
1995	0	0	0	59016	54708	12068	38742	18921	3151	217721	52652	0	456,979	113,724	69,732	273,524	0
1996	0	0	0	11837	359364	45764	96271	61989	285112	65228	0	0	925,564	371,201	204,024	350,340	0
1997	0	0	0	0	47811	31960	3961	38074	6292	2634	29922	0	160,654	47,811	73,995	38,849	0
1998	0	0	0	49529	44998	4984	24671	71618	0	0	0	0	195,800	94,527	101,273	0	0
1999	0	0	0	27661	8820	43361	18913	41670	137033	106408	0	0	383,866	36,481	103,943	243,442	0
2000	0	0	0	74840	361509	350909	217498	26549	27332	623	0	0	1,059,260	436,349	594,956	27,955	0
2001	0	0	0	0	112149	12816	4539	9131	30625	152715	0	0	321,975	112,149	26,486	183,340	0
2002	0	0	0	29477	48122	0	0	0	0	2065	0	0	79,664	77,599	0	2,065	0
2003	0	0	0	2661	153498	33891	0	6782	148016	12389	0	0	357,237	156,159	40,673	160,405	0
2004	0	0	0	40629	96529	11401	13875	0	0	0	0	0	162,434	137,158	25,276	0	0
2005	0	0	0	39463	36	0	0	0	9	9398	0	0	48,906	39,498	0	9,407	0
2006	0	0	0	104566	67515	26077	0	0	22428	88021	0	0	308,608	172,082	26,077	110,449	0
2007	0	0	0	20915	73612	2706	20185	819	0	605	0	0	118,842	94,527	23,710	605	0
Total	0	0	0	714563	1695512	1050067	607087	1272994	1071898	953893	82574	0	7,448,588	2,410,076	2,930,147	2,108,366	0