

Location	Catchment Name	Total Area (Ha)	Imp_Pre	Imp Area (Pre)	Per Area (Pre)	Imp_Post	Imp Area (Post)	Per Area (Post)	Imp_FUZ	Imp Area (Fuz)	Per Area (Fuz)
Within Delmore	CMT DEL 1	3.8100	0%	0	3.8100	65%	2.4765	1.3335	65%	2.4765	1.3335
Within Delmore	CMT DEL 10	0.8700	0%	0	0.8700	65%	0.5655	0.3045	65%	0.5655	0.3045
Within Delmore	CMT DEL 11	0.6200	7%	0.0434	0.5766	65%	0.403	0.2170	65%	0.403	0.2170
Within Delmore	CMT DEL 12	6.1300	6%	0.3678	5.7622	65%	3.9845	2.1455	65%	3.9845	2.1455
Within Delmore	CMT DEL 13	4.2700	0%	0	4.2700	65%	2.7755	1.4945	65%	2.7755	1.4945
Within Delmore	CMT DEL 14	7.6600	0%	0	7.6600	65%	4.979	2.6810	65%	4.979	2.6810
Within Delmore	CMT DEL 15	4.7200	0%	0	4.7200	65%	3.068	1.6520	65%	3.068	1.6520
Within Delmore	CMT DEL 16	4.2600	5%	0.1917	4.0683	65%	2.769	1.4910	65%	2.769	1.4910
Within Delmore	CMT DEL 17	0.5700	0%	0	0.5700	65%	0.3705	0.1995	65%	0.3705	0.1995
Within Delmore	CMT DEL 18	3.7700	6%	0.2262	3.5438	65%	2.4505	1.3195	65%	2.4505	1.3195
Within Delmore	CMT DEL 3	2.8200	3%	0.0846	2.7354	65%	1.833	0.9870	65%	1.833	0.9870
Within Delmore	CMT DEL 4	2.3400	3%	0.0702	2.2698	65%	1.521	0.8190	65%	1.521	0.8190
Within Delmore	CMT DEL 6	3.7100	0%	0	3.7100	65%	2.4115	1.2985	65%	2.4115	1.2985
Within Delmore	CMT DEL 8	3.3800	0%	0	3.3800	65%	2.197	1.1830	65%	2.197	1.1830
Within Delmore	CMT DEL 9	8.2800	0%	0	8.2800	65%	5.382	2.8980	65%	5.382	2.8980
FUZ	CMT PD 0	6.5900	0%	0	6.5900	0%	0	6.5900	50%	3.295	3.2950
Outside FUZ	CMT PD 1	4.3700	21%	0.9177	3.4523	21%	0.9177	3.4523	21%	0.9177	3.4523
Outside FUZ	CMT PD 10	10.8500	0%	0	10.8500	0%	0	10.8500	0%	0	10.8500
FUZ	CMT PD 11	9.9500	1%	0.1393	9.8107	1%	0.1393	9.8107	65%	6.4675	3.4825
Within Delmore	CMT PD 15	1.8700	0%	0	1.8700	0%	0	1.8700	0%	0	1.8700
Within Delmore	CMT PD 16	2.2300	0%	0	2.2300	0%	0	2.2300	0%	0	2.2300
Within Delmore	CMT PD 17	2.1800	0%	0	2.1800	0%	0	2.1800	0%	0	2.1800
Within Delmore	CMT PD 18	2.7900	0%	0	2.7900	0%	0	2.7900	0%	0	2.7900
Stream - FUZ	CMT PD 19	2.7600	0%	0	2.7600	0%	0	2.7600	0%	0	2.7600
FUZ	CMT PD 2	3.1100	6%	0.1866	2.9234	6%	0.1866	2.9234	45%	1.3995	1.7105
Within Delmore	CMT PD 20	2.5700	0%	0	2.5700	0%	0	2.5700	0%	0	2.5700
FUZ	CMT PD 21	15.9200	3%	0.4776	15.4424	3%	0.4776	15.4424	65%	10.348	5.5720
Outside FUZ	CMT PD 22	24.0200	1%	0.2402	23.7798	1%	0.2402	23.7798	1%	0.2402	23.7798
Outside FUZ	CMT PD 23	14.8100	1%	0.1481	14.6619	1%	0.1481	14.6619	1%	0.1481	14.6619
Outside FUZ	CMT PD 25	24.6400	0%	0	24.6400	0%	0	24.6400	0%	0	24.6400
FUZ	CMT PD 26	4.8000	18%	0.8496	3.9504	18%	0.8496	3.9504	65%	3.12	1.6800
FUZ	CMT PD 27	2.4600	7%	0.1722	2.2878	7%	0.1722	2.2878	65%	1.599	0.8610
FUZ	CMT PD 28	6.1040	0%	0	6.1040	0%	0	6.1040	65%	3.9676	2.1364
FUZ	CMT PD 29	1.7100	12%	0.2052	1.5048	12%	0.2052	1.5048	65%	1.1115	0.5985
FUZ	CMT PD 3	4.2300	5%	0.2115	4.0185	5%	0.2115	4.0185	65%	2.7495	1.4805
FUZ	CMT PD 30	6.1300	10%	0.613	5.5170	10%	0.613	5.5170	65%	3.9845	2.1455
FUZ	CMT PD 4	33.0800	0%	0	33.0800	0%	0	33.0800	50%	16.54	16.5400
FUZ	CMT PD 5	2.8610	0%	0	2.8610	0%	0	2.8610	65%	1.85965	1.0014
Within Delmore	CMT PD 6	8.6900	0%	0	8.6900	0%	0	8.6900	0%	0	8.6900
FUZ	CMT PD 7	3.4400	2%	0.0688	3.3712	2%	0.0688	3.3712	65%	2.236	1.2040
FUZ	CMT PD 8	0.5000	0%	0	0.5000	0%	0	0.5000	65%	0.325	0.1750
FUZ	CTMT ARAS2	8.3100	65%	5.4015	2.9085	65%	5.4015	2.9085	65%	5.4015	2.9085
Non Contributing	PRE12-1	267.0300	50%	133.515	133.5150	50%	133.515	133.5150	50%	133.515	133.5150
Non Contributing	PRE29-2	3.1500	65%	2.0475	1.1025	65%	2.0475	1.1025	65%	2.0475	1.1025
Non Contributing	PRE33-1	38.2700	65%	24.8755	13.3945	65%	24.8755	13.3945	65%	24.8755	13.3945

Reference	3725
Client	Vineway Ltd
Project	Delmore Development
Address	55 Russell Road Orewa
Description	DEVELOPMENT

Revision	Description	Prepared By	Checked By	Approved By
A	FIRST ISSUE	HS		

6.6667

Catchment Label	Catchment Area	Subcatchment 1	Subcatchment 2	Catchment Slope	Catchment Length	Channel Factor	Impervious (Sub C1)	Impervious (Sub C2)	Impervious (Combined)	Soil Type	SCS Curve Number	Weighted CN	I _a weighted	t _c	Lag Time	Storage S
	ha	ha	ha	m/m	km		%	%	%				mm	hours	hours	mm
CMT DEL 1-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 1-P	3.81000	3.8100		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 10-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 10-P	0.87000	0.8700		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 11-I	0.04340	0.0434		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 11-P	0.57660	0.5766		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 12-I	0.36780	0.3678		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 12-P	5.76220	5.7622		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 13-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 13-P	4.27000	4.2700		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 14-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 14-P	7.66000	7.6600		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 15-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 15-P	4.72000	4.7200		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 16-I	0.19170	0.1917		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 16-P	4.06830	4.0683		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 17-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5

CMT DEL 17-P	0.57000	0.5700		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 2-I	0.22620	0.2262		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 2-P	3.54380	3.5438		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 3-I	0.08460	0.0846		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 3-P	2.73540	2.7354		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 4-I	0.07020	0.0702		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 4-P	2.26980	2.2698		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 6-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 6-P	3.71000	3.7100		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 8-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 8-P	3.38000	3.3800		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT DEL 9-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT DEL 9-P	8.28000	8.2800		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 0-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 0-P	6.59000	6.5900		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 1-I	0.91770	0.9177		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 1-P	3.45230	3.4523		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 10-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 10-P	10.85000	10.8500		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 11-I	0.13930	0.1393		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 11-P	9.81070	9.8107		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 15-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 15-P	1.87000	1.8700		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 16-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 16-P	2.23000	2.2300		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 17-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 17-P	2.18000	2.1800		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 18-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 18-P	2.79000	2.7900		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 19-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 19-P	2.76000	2.7600		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 2-I	0.18660	0.1866		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 2-P	2.92340	2.9234		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 20-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 20-P	2.57000	2.5700		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 21-I	0.47760	0.4776		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 21-P	15.44240	15.4424		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 22-I	0.24020	0.2402		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 22-P	23.77980	23.7798		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 23-I	0.14810	0.1481		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 23-P	14.66190	14.6619		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 25-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5

CMT PD 25-P	24.64000	24.6400		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 26-I	0.84960	0.8496		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 26-P	3.95040	3.9504		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 27-I	0.17220	0.1722		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 27-P	2.28780	2.2878		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 28-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 28-P	9.00000	9.0000		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 29-I	0.20520	0.2052		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 29-P	1.50480	1.5048		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 3-I	0.21150	0.2115		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 3-P	4.01850	4.0185		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 30-I	0.61300	0.6130		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 30-P	5.51700	5.5170		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 4-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 4-P	33.08000	33.0800		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 6-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 6-P	8.69000	8.6900		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 7-I	0.06880	0.0688		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 7-P	3.37120	3.3712		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CMT PD 8-I	0.00000	0.0000		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CMT PD 8-P	0.50000	0.5000		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
CTMT ARAS2-I	5.40150	5.4015		0.050	0.100	0.8	100%		100%	Pasture - Type C (Mud/Sandstone)	74	98.0	0.00	0.16667	0.11111	5
CTMT ARAS2-P	2.90850	2.9085		0.050	0.100	0.8	0%		0%	Pasture - Type C (Mud/Sandstone)	74	74.0	5.00	0.16667	0.11111	89
PRE12-1	267.03000	267.0300		0.014	3.000	0.8	50%		50%	Pasture - Type C (Mud/Sandstone)	74	86.0	2.50	0.97186	0.64791	41
PRE29-2	3.15000	3.1500		0.014	0.100	0.6	65%		65%	Pasture - Type C (Mud/Sandstone)	74	89.6	1.75	0.16667	0.11111	29
PRE33-1	38.27000	38.2700		0.020	1.111	0.6	65%		65%	Pasture - Type C (Mud/Sandstone)	74	89.6	1.75	0.32663	0.21775	29

POST DEVELOPMENT HYDROLOGICAL BASIN - PARAMETERS

Subbasin	Initial Abstraction (mm)	Curve Number (CN)	Impervious (%)
CMT DEL 1-I	0	98	0
CMT DEL 1-P	5	74	0
CMT DEL 10-I	0	98	0
CMT DEL 10-P	5	74	0
CMT DEL 11-I	0	98	0
CMT DEL 11-P	5	74	0
CMT DEL 12-I	0	98	0
CMT DEL 12-P	5	74	0
CMT DEL 13-I	0	98	0
CMT DEL 13-P	5	74	0
CMT DEL 14-I	0	98	0
CMT DEL 14-P	5	74	0
CMT DEL 15-I	0	98	0
CMT DEL 15-P	5	74	0
CMT DEL 16-I	0	98	0
CMT DEL 16-P	5	74	0
CMT DEL 17-I	0	98	0
CMT DEL 17-P	5	74	0
CMT DEL 2-I	0	98	0
CMT DEL 2-P	5	74	0
CMT DEL 3-I	0	98	0
CMT DEL 3-P	5	74	0
CMT DEL 4-I	0	98	0
CMT DEL 4-P	5	74	0
CMT DEL 6-I	0	98	0
CMT DEL 6-P	5	74	0
CMT DEL 8-I	0	98	0
CMT DEL 8-P	5	74	0
CMT DEL 9-I	0	98	0
CMT DEL 9-P	5	74	0
CMT PD 0-P	5	74	0
CMT PD 1-I	0	98	0
CMT PD 1-P	5	74	0
CMT PD 10-P	5	74	0
CMT PD 11-I	0	98	0
CMT PD 11-P	5	74	0
CMT PD 15-P	5	74	0
CMT PD 16-P	5	74	0
CMT PD 17-P	5	74	0
CMT PD 18-P	5	74	0
CMT PD 19-P	5	74	0
CMT PD 2-I	0	98	0

POST DEVELOPMENT HYDROLOGICAL BASIN - PARAMETERS

CMT PD 2-P	5	74	0
CMT PD 20-P	5	74	0
CMT PD 21-I	0	98	0
CMT PD 21-P	5	74	0
CMT PD 22-I	0	98	0
CMT PD 22-P	5	74	0
CMT PD 23-I	0	98	0
CMT PD 23-P	5	74	0
CMT PD 25-P	5	74	0
CMT PD 26-I	0	98	0
CMT PD 26-P	5	74	0
CMT PD 27-I	0	98	0
CMT PD 27-P	5	74	0
CMT PD 28-P	5	74	0
CMT PD 29-I	0	98	0
CMT PD 29-P	5	74	0
CMT PD 3-I	0	98	0
CMT PD 3-P	5	74	0
CMT PD 30-I	0	98	0
CMT PD 30-P	5	74	0
CMT PD 4-P	5	74	0
CMT PD 5	5	74	0
CMT PD 6-P	5	74	0
CMT PD 7-I	0	98	0
CMT PD 7-P	5	74	0
CMT PD 8-P	5	74	0
CTMT ARAS2-I	0	98	0
CTMT ARAS2-P	5	74	0
PRE12-1	2.5	86	0
PRE29-2	1.75	89.6	0
PRE33-1	1.75	89.6	0

PRE DEVELOPMENT HYDROLOGICAL BASIN - PARAMETERS

Subbasin	Initial Abstraction (mm)	Curve Number (CN)	Impervious (%)
CMT DEL 1-P	5	74	0
CMT DEL 10-P	5	74	0
CMT DEL 11-I	0	98	0
CMT DEL 11-P	5	74	0
CMT DEL 12-I	0	98	0
CMT DEL 12-P	5	74	0
CMT DEL 13-P	5	74	0
CMT DEL 14-P	5	74	0
CMT DEL 15-P	5	74	0
CMT DEL 16-I	0	98	0
CMT DEL 16-P	5	74	0
CMT DEL 17-P	5	74	0
CMT DEL 2-I	0	98	0
CMT DEL 2-P	5	74	0
CMT DEL 3-I	0	98	0
CMT DEL 3-P	5	74	0
CMT DEL 4-I	0	98	0
CMT DEL 4-P	5	74	0
CMT DEL 6-P	5	74	0
CMT DEL 8-P	5	74	0
CMT DEL 9-P	5	74	0
CMT PD 0-P	5	74	0
CMT PD 1-I	0	98	0
CMT PD 1-P	5	74	0
CMT PD 10-P	5	74	0
CMT PD 11-I	0	98	0
CMT PD 11-P	5	74	0
CMT PD 15-P	5	74	0
CMT PD 16-P	5	74	0
CMT PD 17-P	5	74	0
CMT PD 18-P	5	74	0
CMT PD 19-P	5	74	0
CMT PD 2-I	0	98	0
CMT PD 2-P	5	74	0
CMT PD 20-P	5	74	0
CMT PD 21-I	0	98	0
CMT PD 21-P	5	74	0
CMT PD 22-I	0	98	0
CMT PD 22-P	5	74	0
CMT PD 23-I	0	98	0
CMT PD 23-P	5	74	0
CMT PD 25-P	5	74	0

PRE DEVELOPMENT HYDROLOGICAL BASIN - PARAMETERS

CMT PD 26-I	0	98	0
CMT PD 26-P	5	74	0
CMT PD 27-I	0	98	0
CMT PD 27-P	5	74	0
CMT PD 28-P	5	74	0
CMT PD 29-I	0	98	0
CMT PD 29-P	5	74	0
CMT PD 3-I	0	98	0
CMT PD 3-P	5	74	0
CMT PD 30-I	0	98	0
CMT PD 30-P	5	74	0
CMT PD 4-P	5	74	0
CMT PD 5	5	74	0
CMT PD 6-P	5	74	0
CMT PD 7-I	0	98	0
CMT PD 7-P	5	74	0
CMT PD 8-P	5	74	0
CTMT ARAS2-I	0	98	0
CTMT ARAS2-P	5	74	0
PRE12-1	2.5	86	0
PRE29-2	1.75	89.6	0
PRE33-1	1.75	89.6	0
CMT PD 6-P	5	74	0
CMT PD 7-I	0	98	0
CMT PD 7-P	5	74	0
CMT PD 8-P	5	74	0
CTMT ARAS2-I	0	98	0
CTMT ARAS2-P	5	74	0
PRE12-1	2.5	86	0
PRE29-2	1.75	89.6	0
PRE33-1	1.75	89.6	0

POST DEVELOPMENT HYDROLOGICAL BASIN - TIME OF CONCENTRATION

Subbasin	GRAPH TYPE	LAG TIME (MIN)	TIME OF CONCENTRATION (MIN)
CMT DEL 1-I	Standard (PRF 484)	6.6667	10
CMT DEL 1-P	Standard (PRF 484)	6.6667	10
CMT DEL 10-I	Standard (PRF 484)	6.6667	10
CMT DEL 10-P	Standard (PRF 484)	6.6667	10
CMT DEL 11-I	Standard (PRF 484)	6.6667	10
CMT DEL 11-P	Standard (PRF 484)	6.6667	10
CMT DEL 12-I	Standard (PRF 484)	6.6667	10
CMT DEL 12-P	Standard (PRF 484)	6.6667	10
CMT DEL 13-I	Standard (PRF 484)	6.6667	10
CMT DEL 13-P	Standard (PRF 484)	6.6667	10
CMT DEL 14-I	Standard (PRF 484)	6.6667	10
CMT DEL 14-P	Standard (PRF 484)	6.6667	10
CMT DEL 15-I	Standard (PRF 484)	6.6667	10
CMT DEL 15-P	Standard (PRF 484)	6.6667	10
CMT DEL 16-I	Standard (PRF 484)	6.6667	10
CMT DEL 16-P	Standard (PRF 484)	6.6667	10
CMT DEL 17-I	Standard (PRF 484)	6.6667	10
CMT DEL 17-P	Standard (PRF 484)	6.6667	10
CMT DEL 2-I	Standard (PRF 484)	6.6667	10
CMT DEL 2-P	Standard (PRF 484)	6.6667	10
CMT DEL 3-I	Standard (PRF 484)	6.6667	10
CMT DEL 3-P	Standard (PRF 484)	6.6667	10
CMT DEL 4-I	Standard (PRF 484)	6.6667	10
CMT DEL 4-P	Standard (PRF 484)	6.6667	10
CMT DEL 6-I	Standard (PRF 484)	6.6667	10
CMT DEL 6-P	Standard (PRF 484)	6.6667	10
CMT DEL 8-I	Standard (PRF 484)	6.6667	10
CMT DEL 8-P	Standard (PRF 484)	6.6667	10
CMT DEL 9-I	Standard (PRF 484)	6.6667	10
CMT DEL 9-P	Standard (PRF 484)	6.6667	10
CMT PD 0-P	Standard (PRF 484)	6.6667	10
CMT PD 1-I	Standard (PRF 484)	6.6667	10
CMT PD 1-P	Standard (PRF 484)	6.6667	10
CMT PD 10-P	Standard (PRF 484)	6.6667	10
CMT PD 11-I	Standard (PRF 484)	6.6667	10
CMT PD 11-P	Standard (PRF 484)	6.6667	10
CMT PD 15-P	Standard (PRF 484)	6.6667	10
CMT PD 16-P	Standard (PRF 484)	6.6667	10
CMT PD 17-P	Standard (PRF 484)	6.6667	10
CMT PD 18-P	Standard (PRF 484)	6.6667	10
CMT PD 19-P	Standard (PRF 484)	6.6667	10

POST DEVELOPMENT HYDROLOGICAL BASIN - TIME OF CONCENTRATION

CMT PD 2-I	Standard (PRF 484)	6.6667	10
CMT PD 2-P	Standard (PRF 484)	6.6667	10
CMT PD 20-P	Standard (PRF 484)	6.6667	10
CMT PD 21-I	Standard (PRF 484)	6.6667	10
CMT PD 21-P	Standard (PRF 484)	6.6667	10
CMT PD 22-I	Standard (PRF 484)	6.6667	10
CMT PD 22-P	Standard (PRF 484)	6.6667	10
CMT PD 23-I	Standard (PRF 484)	6.6667	10
CMT PD 23-P	Standard (PRF 484)	6.6667	10
CMT PD 25-P	Standard (PRF 484)	6.6667	10
CMT PD 26-I	Standard (PRF 484)	6.6667	10
CMT PD 26-P	Standard (PRF 484)	6.6667	10
CMT PD 27-I	Standard (PRF 484)	6.6667	10
CMT PD 27-P	Standard (PRF 484)	6.6667	10
CMT PD 28-P	Standard (PRF 484)	6.6667	10
CMT PD 29-I	Standard (PRF 484)	6.6667	10
CMT PD 29-P	Standard (PRF 484)	6.6667	10
CMT PD 3-I	Standard (PRF 484)	6.6667	10
CMT PD 3-P	Standard (PRF 484)	6.6667	10
CMT PD 30-I	Standard (PRF 484)	6.6667	10
CMT PD 30-P	Standard (PRF 484)	6.6667	10
CMT PD 4-P	Standard (PRF 484)	6.6667	10
CMT PD 5	Standard (PRF 484)	6.6667	10
CMT PD 6-P	Standard (PRF 484)	6.6667	10
CMT PD 7-I	Standard (PRF 484)	6.6667	10
CMT PD 7-P	Standard (PRF 484)	6.6667	10
CMT PD 8-P	Standard (PRF 484)	6.6667	10
CTMT ARAS2-I	Standard (PRF 484)	6.6667	10
CTMT ARAS2-P	Standard (PRF 484)	6.6667	10
PRE12-1	Standard (PRF 484)	38.875	58
PRE29-2	Standard (PRF 484)	6.6667	10
PRE33-1	Standard (PRF 484)	13.065	20

PRE DEVELOPMENT HYDROLOGICAL BASIN - TIME OF CONCENTRATION

Subbasin	GRAPH TYPE	LAG TIME (MIN)	TIME OF CONCENTRATION (MIN)
CMT DEL 1-P	Standard (PRF 484)	6.6667	10
CMT DEL 10-P	Standard (PRF 484)	6.6667	10
CMT DEL 11-I	Standard (PRF 484)	6.6667	10
CMT DEL 11-P	Standard (PRF 484)	6.6667	10
CMT DEL 12-I	Standard (PRF 484)	6.6667	10
CMT DEL 12-P	Standard (PRF 484)	6.6667	10
CMT DEL 13-P	Standard (PRF 484)	6.6667	10
CMT DEL 14-P	Standard (PRF 484)	6.6667	10
CMT DEL 15-P	Standard (PRF 484)	6.6667	10
CMT DEL 16-I	Standard (PRF 484)	6.6667	10
CMT DEL 16-P	Standard (PRF 484)	6.6667	10
CMT DEL 17-P	Standard (PRF 484)	6.6667	10
CMT DEL 2-I	Standard (PRF 484)	6.6667	10
CMT DEL 2-P	Standard (PRF 484)	6.6667	10
CMT DEL 3-I	Standard (PRF 484)	6.6667	10
CMT DEL 3-P	Standard (PRF 484)	6.6667	10
CMT DEL 4-I	Standard (PRF 484)	6.6667	10
CMT DEL 4-P	Standard (PRF 484)	6.6667	10
CMT DEL 6-P	Standard (PRF 484)	6.6667	10
CMT DEL 8-P	Standard (PRF 484)	6.6667	10
CMT DEL 9-P	Standard (PRF 484)	6.6667	10
CMT PD 0-P	Standard (PRF 484)	6.6667	10
CMT PD 1-I	Standard (PRF 484)	6.6667	10
CMT PD 1-P	Standard (PRF 484)	6.6667	10
CMT PD 10-P	Standard (PRF 484)	6.6667	10
CMT PD 11-I	Standard (PRF 484)	6.6667	10
CMT PD 11-P	Standard (PRF 484)	6.6667	10
CMT PD 15-P	Standard (PRF 484)	6.6667	10
CMT PD 16-P	Standard (PRF 484)	6.6667	10
CMT PD 17-P	Standard (PRF 484)	6.6667	10
CMT PD 18-P	Standard (PRF 484)	6.6667	10
CMT PD 19-P	Standard (PRF 484)	6.6667	10
CMT PD 2-I	Standard (PRF 484)	6.6667	10
CMT PD 2-P	Standard (PRF 484)	6.6667	10
CMT PD 20-P	Standard (PRF 484)	6.6667	10
CMT PD 21-I	Standard (PRF 484)	6.6667	10
CMT PD 21-P	Standard (PRF 484)	6.6667	10
CMT PD 22-I	Standard (PRF 484)	6.6667	10
CMT PD 22-P	Standard (PRF 484)	6.6667	10
CMT PD 23-I	Standard (PRF 484)	6.6667	10
CMT PD 23-P	Standard (PRF 484)	6.6667	10

PRE DEVELOPMENT HYDROLOGICAL BASIN - TIME OF CONCENTRATION

CMT PD 25-P	Standard (PRF 484)	6.6667	10
CMT PD 26-I	Standard (PRF 484)	6.6667	10
CMT PD 26-P	Standard (PRF 484)	6.6667	10
CMT PD 27-I	Standard (PRF 484)	6.6667	10
CMT PD 27-P	Standard (PRF 484)	6.6667	10
CMT PD 28-P	Standard (PRF 484)	6.6667	10
CMT PD 29-I	Standard (PRF 484)	6.6667	10
CMT PD 29-P	Standard (PRF 484)	6.6667	10
CMT PD 3-I	Standard (PRF 484)	6.6667	10
CMT PD 3-P	Standard (PRF 484)	6.6667	10
CMT PD 30-I	Standard (PRF 484)	6.6667	10
CMT PD 30-P	Standard (PRF 484)	6.6667	10
CMT PD 4-P	Standard (PRF 484)	6.6667	10
CMT PD 5	Standard (PRF 484)	6.6667	10
CMT PD 6-P	Standard (PRF 484)	6.6667	10
CMT PD 7-I	Standard (PRF 484)	6.6667	10
CMT PD 7-P	Standard (PRF 484)	6.6667	10
CMT PD 8-P	Standard (PRF 484)	6.6667	10
CTMT ARAS2-I	Standard (PRF 484)	6.6667	10
CTMT ARAS2-P	Standard (PRF 484)	6.6667	10
PRE12-1	Standard (PRF 484)	38.875	58
PRE29-2	Standard (PRF 484)	6.6667	10
PRE33-1	Standard (PRF 484)	13.065	20
CMT PD 6-P	5	74	111
CMT PD 7-I	0	98	147
CMT PD 7-P	5	74	111
CMT PD 8-P	5	74	111
CTMT ARAS2-I	0	98	147
CTMT ARAS2-P	5	74	111
PRE12-1	2.5	86	129
PRE29-2	1.75	89.6	134
PRE33-1	1.75	89.6	134