

MEMO

To Adedoyin Adenowo, M.Sc., P.Eng. Date March 22, 2013
Senior Wastewater Engineer File no TC124202
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Subject K2 Wind Power Project
Township of Ashfield-Colborne-Wawanosh, Huron County, Ontario
Preliminary Engineering Report Stormwater Management Plan for the Project
Substation – July 2012
Addendum

Dear Mr. Adenowo:

Please find attached addendum pages for the above noted report. Should you have any questions please do not hesitate to contact the undersigned.

Regards,

**AMEC Environment & Infrastructure
A Division of AMEC Americas Limited**



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.Enclosure

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Table 2-4 : Post-Development Catchment Parameterization

Catchment #	Area (ha)	CN (AMC II)	CN (AMC III)	Time to Peak ¹ (hr)
1	2.3	76	88	0.27
2	2.7	76	88	0.59
3	1.7	76	88	0.33
4	1.6	76	88	0.19
5	0.41	79.5	89.7	0.23
6	0.19	85	91.9	0.20
7	2.6	77	88.4	0.19
8	0.21	81	90.2	0.14
9	0.27	76	88	0.10

Table 2-5 : Pre- To Post-Development (no SWM) Site Peak Flow Comparison

6 Hour Design Rainfall Event	Pre-development Peak Flows at Location C (m ³ /s)	Post Development Peak Flows at Location C (m ³ /s)	Change from Pre-Development	
			Absolute (m ³ /s)	%
2 Year	0.06	0.10	0.04	67%
5 Year	0.21	0.26	0.05	24%
10 Year	0.33	0.40	0.07	21%
25 Year	0.50	0.59	0.09	18%
50 Year	0.63	0.74	0.11	17%
100 Year	0.77	0.90	0.13	17%
Regional	0.45	0.46	0.01	2%

NOTES:
 Post development peak flows in this table do not include any representation of stormwater quantity control.

Stormwater runoff within the development Site will be directed to the SWM Pond prior to discharge to the downstream drainage course. Runoff within temporary areas, such as temporary construction parking and lay down area, will be directed to the diversion ditches.

As noted previously, the surface water quantity objective of the SWMP is to maintain no increase in peak flows discharging from the Site for post-development versus pre-development conditions, up to and including the 100 year return period design event. The results noted in Table 2-4 indicate the need for quantity control for this development to achieve this objective. As such, a SWM Pond to provide water quantity control (to pre-development levels) for the 2, 5, 10, 25, 50, 100 year design rainfall events is recommended. The target release rates for the noted



Appendix D provides details for the stage-storage-discharge calculations. Elevations used in this report are based on the current topographic information only. Final grading details will be developed through the detailed design process and may provide the opportunity for further optimization of the SWM Pond configuration. The final SWM Pond elevations will need to be integrated into the final Site grading plan.

Stormwater quality control will be affected through the implementation of an OGS. The Stormceptor model STC 750 is an example of an OGS that would provide the necessary stormwater quality control. Based on calculations using Stormceptor Sizing program, the STC 750 model can provide 79% of Total Suspended Solids (TSS) Removal with capturing 89% of runoff volume. As a result, the average efficiency would be 70%, which is higher than the required normal level of protection. The detailed calculation report generated by the Stormceptor Sizing program is provided in Appendix C. Please note alternate OGS's (from other manufacturers) with similar quality control capabilities are available.

Table 2-6: Pre- To Post-Development (with SWM) Site Peak Flow Comparison

Design Rainfall Event	Pre-development Peak Flows at Location D (m ³ /s)	Post Development Peak Flows at Location D with SWM (m ³ /s)	Change from Pre-Development		Maximum Ponding Depth (m)
			Absolute (m ³ /s)	%	
6 Hour Duration					
2 Year	0.06	0.04	-0.02	-33%	245.2
5 Year	0.21	0.17	-0.04	-19%	245.4
10 Year	0.33	0.28	-0.05	-15%	245.5
25 Year	0.50	0.42	-0.08	-16%	245.6
50 Year	0.63	0.52	-0.11	-17%	245.7
100 Year	0.77	0.68	-0.09	-12%	245.8
12 Hour Duration					
2 Year	0.07	0.04	-0.03	-43%	245.2
5 Year	0.20	0.16	-0.04	-20%	245.4
10 Year	0.30	0.26	-0.04	-13%	245.5
25 Year	0.44	0.38	-0.06	-14%	245.6
50 Year	0.56	0.47	-0.09	-16%	245.7
100 Year	0.67	0.57	-0.10	-15%	245.8
Regional	0.45	0.45	0	0%	245.6



Table 2-7: Development Site Peak Flow Summary

6 Hour Design Rainfall Event	Post Development Peak Flows (m ³ /s) by Location and Computational Node ¹							
	A	B	C	D	E	F	G	H
	(0012)	(0013)	(0014)	(0019)	(0002)	(0001)	(0017)	(0018)
2 Year	0.09	0.02	0.10	0.04	0.03	0.04	0.08	0.10
5 Year	0.23	0.05	0.26	0.17	0.08	0.12	0.24	0.31
10 Year	0.34	0.07	0.40	0.28	0.13	0.18	0.38	0.49
25 Year	0.49	0.10	0.59	0.42	0.19	0.28	0.57	0.75
50 Year	0.62	0.12	0.74	0.52	0.24	0.36	0.73	0.96
100 Year	0.75	0.15	0.90	0.68	0.30	0.44	0.89	1.18
Regional-	0.40	0.06	0.46	0.45	0.30	0.28	0.77	0.96

NOTES:

1. Locations descriptions:

- | | |
|---|---|
| A ditch flow along west drainage ditch | E outflow from north and west diversion ditch |
| B ditch flow along south drainage ditch | F outflow from east diversion ditch |
| C inflow to SWM Pond | G outflow from south diversion ditch |
| D outflow from SWM Pond | H outflow from the site |

2. Computational nodes relate to the detailed hydrologic modelling output provided in Appendix B.

3. The regional storm has a 12 hour duration.

```
V  V  I  SSSSS  U  U  A  L
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
```

Pre-Development
6 & 12 hour duration (SCS)
AMC II
2, 5, 10, 25, 50 and 100 year events

```
  OOO  TTTTT  TTTTT  H  H  Y  Y  M  M  OOO  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O  Company

  OOO  T  T  H  H  Y  M  M  OOO  Serial
```

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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 2.4\VO2\voin.dat

Output filename:
C:\Users\peter.dekker\AppData\Local\Temp\c15c202d-c9be-42d5-939e-6e4b682cd565\Scenario.out
Summary filename:
C:\Users\peter.dekker\AppData\Local\Temp\c15c202d-c9be-42d5-939e-6e4b682cd565\Scenario.sum

DATE: 03/21/2013

TIME: 10:25:15

USER:

COMMENTS: _____

```
*****
** SIMULATION NUMBER: 1 **
*****
```

2 year - 6 hour

MASS STORM
Ptotal= 40.40 mm

Filename: C:\Users\peter.dekker\AppData\Local\Temp\c15c202d-c9be-42d5-939e-6e4b682cd565\6c9614ea
Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.82	1.60	2.91	3.10	54.38	4.60	2.75
0.20	1.86	1.70	3.07	3.20	10.87	4.70	2.63
0.30	1.82	1.80	3.31	3.30	9.49	4.80	2.55

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

0.40	1.82	1.90	3.56	3.40	8.20	4.90	2.38
0.50	1.82	2.00	3.76	3.50	6.99	5.00	2.30
0.60	1.86	2.10	4.04	3.60	5.62	5.10	2.14
0.70	1.86	2.20	4.36	3.70	4.81	5.20	2.14
0.80	1.94	2.30	4.93	3.80	4.57	5.30	2.06
0.90	2.06	2.40	5.49	3.90	4.20	5.40	1.98
1.00	2.18	2.50	6.06	4.00	3.92	5.50	1.94
1.10	2.22	2.60	6.59	4.10	3.64	5.60	1.94
1.20	2.34	2.70	13.57	4.20	3.43	5.70	1.90
1.30	2.55	2.80	27.23	4.30	3.19	5.80	1.90
1.40	2.63	2.90	43.67	4.40	3.11	5.90	1.82
1.50	2.75	3.00	78.38	4.50	2.95	6.00	1.78

DESIGN SCS(0005)	Area (ha)= 3.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.24	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.850

PEAK FLOW (cms)= 0.064 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 5.686
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.141

reference location C for Table 2-5
reference location D for Table 2-6

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

DESIGN SCS(0004)	Area (ha)= 1.60	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.034 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 5.712
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.141

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.024 (i)
TIME TO PEAK (hrs)= 3.400
RUNOFF VOLUME (mm)= 5.676
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.140

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

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-----
| DESIGN SCS(0002) | Area (ha)= 2.70 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.59

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Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.252

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PEAK FLOW (cms)= 0.027 (i)
TIME TO PEAK (hrs)= 3.700
RUNOFF VOLUME (mm)= 5.674
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.140

```

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

```

-----
| DESIGN SCS(0001) | Area (ha)= 2.30 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.27

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Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.470

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PEAK FLOW (cms)= 0.038 (i)
TIME TO PEAK (hrs)= 3.300
RUNOFF VOLUME (mm)= 5.680
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.141

```

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

```

-----
| ADD HYD (0015) |
| 1 + 2 = 3 |
-----
          AREA    QPEAK    TPEAK    R.V.
          (ha)    (cms)    (hrs)    (mm)
ID1= 1 (0001):  2.30  0.038  3.30  5.68
+ ID2= 2 (0002):  2.70  0.027  3.70  5.67
=====
ID = 3 (0015):  5.00  0.051  3.40  5.68

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-----
| ADD HYD (0017) |
| 1 + 2 = 3 |
-----
          AREA    QPEAK    TPEAK    R.V.
          (ha)    (cms)    (hrs)    (mm)
ID1= 1 (0003):  1.70  0.024  3.40  5.68
+ ID2= 2 (0015):  5.00  0.051  3.40  5.68
=====
ID = 3 (0017):  6.70  0.075  3.40  5.68

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.034	3.20	5.71
+ ID2= 2 (0017):	6.70	0.075	3.40	5.68
ID = 3 (0018):	8.30	0.099	3.30	5.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 2 **

5 year - 6 hour

MASS STORM
 Ptotal= 58.70 mm

Filename: C:\Users\peter.dekker\AppData\Local\Temp\c15c202d-c9be-42d5-939e-6e4b682cd565\3ab1021d
 Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	2.64	1.60	4.23	3.10	79.01	4.60	3.99
0.20	2.70	1.70	4.46	3.20	15.79	4.70	3.82
0.30	2.64	1.80	4.81	3.30	13.79	4.80	3.70
0.40	2.64	1.90	5.17	3.40	11.92	4.90	3.46
0.50	2.64	2.00	5.46	3.50	10.16	5.00	3.35
0.60	2.70	2.10	5.87	3.60	8.16	5.10	3.11
0.70	2.70	2.20	6.34	3.70	6.99	5.20	3.11
0.80	2.82	2.30	7.16	3.80	6.63	5.30	2.99
0.90	2.99	2.40	7.98	3.90	6.10	5.40	2.88
1.00	3.17	2.50	8.81	4.00	5.69	5.50	2.82
1.10	3.23	2.60	9.57	4.10	5.28	5.60	2.82
1.20	3.40	2.70	19.72	4.20	4.99	5.70	2.76
1.30	3.70	2.80	39.56	4.30	4.64	5.80	2.76
1.40	3.82	2.90	63.45	4.40	4.52	5.90	2.64
1.50	3.99	3.00	113.88	4.50	4.29	6.00	2.58

DESIGN SCS(0005) | Area (ha)= 3.70 | Curve Number (CN) = 76.0
 ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S | # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.24

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.850

reference location C for Table 2-5
 reference location D for Table 2-6

PEAK FLOW (cms)= 0.209 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 14.842
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.253

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

DESIGN SCS(0004) | Area (ha)= 1.60 | Curve Number (CN) = 76.0

| ID= 1 DT= 6.0 min | Area (ha)= 1.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 ----- U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464
 PEAK FLOW (cms)= 0.100 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 14.909
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.254

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

| DESIGN SCS(0003) | Area (ha)= 1.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 ----- U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284
 PEAK FLOW (cms)= 0.077 (i)
 TIME TO PEAK (hrs)= 3.300
 RUNOFF VOLUME (mm)= 14.816
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.252

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

| DESIGN SCS(0002) | Area (ha)= 2.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 ----- U.H. Tp(hrs)= 0.59

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252
 PEAK FLOW (cms)= 0.080 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 14.810
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.252

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

| DESIGN SCS(0001) | Area (ha)= 2.30 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 ----- U.H. Tp(hrs)= 0.27

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470
 PEAK FLOW (cms)= 0.116 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 14.828
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.253

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

ADD HYD (0015)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):		2.30	0.116	3.20	14.83
+ ID2= 2 (0002):		2.70	0.080	3.60	14.81
=====					
ID = 3 (0015):		5.00	0.160	3.30	14.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):		1.70	0.077	3.30	14.82
+ ID2= 2 (0015):		5.00	0.160	3.30	14.82
=====					
ID = 3 (0017):		6.70	0.237	3.30	14.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):		1.60	0.100	3.20	14.91
+ ID2= 2 (0017):		6.70	0.237	3.30	14.82
=====					
ID = 3 (0018):		8.30	0.305	3.20	14.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 3 **

10 year - 6 hour

MASS STORM
 Ptotal= 70.80 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\ffa2bfa3
 Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.10	3.19	1.60	5.10	3.10	95.30	4.60	4.81
0.20	3.26	1.70	5.38	3.20	19.05	4.70	4.60
0.30	3.19	1.80	5.81	3.30	16.64	4.80	4.46
0.40	3.19	1.90	6.23	3.40	14.37	4.90	4.18
0.50	3.19	2.00	6.58	3.50	12.25	5.00	4.04
0.60	3.26	2.10	7.08	3.60	9.84	5.10	3.75

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

0.70	3.26	2.20	7.65	3.70	8.43	5.20	3.75
0.80	3.40	2.30	8.64	3.80	8.00	5.30	3.61
0.90	3.61	2.40	9.63	3.90	7.36	5.40	3.47
1.00	3.82	2.50	10.62	4.00	6.87	5.50	3.40
1.10	3.89	2.60	11.54	4.10	6.37	5.60	3.40
1.20	4.11	2.70	23.79	4.20	6.02	5.70	3.33
1.30	4.46	2.80	47.72	4.30	5.59	5.80	3.33
1.40	4.60	2.90	76.53	4.40	5.45	5.90	3.19
1.50	4.81	3.00	137.35	4.50	5.17	6.00	3.12

DESIGN SCS(0005) ID= 1 DT= 6.0 min	Area (ha)= 3.70 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.24	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.850

reference location C for Table 2-5
reference location D for Table 2-6

PEAK FLOW (cms)= 0.328 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 22.264
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.314

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

DESIGN SCS(0004) ID= 1 DT= 6.0 min	Area (ha)= 1.60 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.19	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.153 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 22.364
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.316

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

DESIGN SCS(0003) ID= 1 DT= 6.0 min	Area (ha)= 1.70 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.33	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.121 (i)
TIME TO PEAK (hrs)= 3.300
RUNOFF VOLUME (mm)= 22.225
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.314

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.126 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 22.216
 TOTAL RAINFALL (mm)= 70.800
 RUNOFF COEFFICIENT = 0.314

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.184 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 22.242
 TOTAL RAINFALL (mm)= 70.800
 RUNOFF COEFFICIENT = 0.314

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.184	3.20	22.24
+ ID2= 2 (0002):	2.70	0.126	3.60	22.22
ID = 3 (0015):	5.00	0.254	3.30	22.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.121	3.30	22.22
+ ID2= 2 (0015):	5.00	0.254	3.30	22.23
ID = 3 (0017):	6.70	0.375	3.30	22.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3				

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):	1.60	0.153	3.20	22.36
+ ID2= 2 (0017):	6.70	0.375	3.30	22.23
=====				
ID = 3 (0018):	8.30	0.488	3.20	22.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 4 **

25 year - 6 hour

MASS STORM

Ptotal= 86.10 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\9084e867
 Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.10	3.87	1.60	6.20	3.10	115.89	4.60	5.85
0.20	3.96	1.70	6.54	3.20	23.16	4.70	5.60
0.30	3.87	1.80	7.06	3.30	20.23	4.80	5.42
0.40	3.87	1.90	7.58	3.40	17.48	4.90	5.08
0.50	3.87	2.00	8.01	3.50	14.90	5.00	4.91
0.60	3.96	2.10	8.61	3.60	11.97	5.10	4.56
0.70	3.96	2.20	9.30	3.70	10.25	5.20	4.56
0.80	4.13	2.30	10.50	3.80	9.73	5.30	4.39
0.90	4.39	2.40	11.71	3.90	8.95	5.40	4.22
1.00	4.65	2.50	12.91	4.00	8.35	5.50	4.13
1.10	4.74	2.60	14.03	4.10	7.75	5.60	4.13
1.20	4.99	2.70	28.93	4.20	7.32	5.70	4.05
1.30	5.42	2.80	58.03	4.30	6.80	5.80	4.05
1.40	5.60	2.90	93.07	4.40	6.63	5.90	3.87
1.50	5.85	3.00	167.03	4.50	6.29	6.00	3.79

DESIGN SCS(0005)
 ID= 1 DT= 6.0 min

Area (ha)= 3.70
 Ia (mm)= 0.2 S
 U.H. Tp(hrs)= 0.24
 Curve Number (CN) = 76.0
 # of Linear Res.(N)= 5.00

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.850

reference location C for Table 2-5
 reference location D for Table 2-6

PEAK FLOW (cms)= 0.495 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 32.734
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.380

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

DESIGN SCS(0004)
 ID= 1 DT= 6.0 min

Area (ha)= 1.60
 Ia (mm)= 0.2 S
 U.H. Tp(hrs)= 0.19
 Curve Number (CN) = 76.0
 # of Linear Res.(N)= 5.00

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.227 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 32.880
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.382

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.184 (i)
 TIME TO PEAK (hrs)= 3.300
 RUNOFF VOLUME (mm)= 32.675
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.380

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.191 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 32.662
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.379

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.282 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 32.701
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.380

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.282	3.20	32.70
+ ID2= 2 (0002):	2.70	0.191	3.60	32.66
ID = 3 (0015):	5.00	0.387	3.30	32.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.184	3.30	32.68
+ ID2= 2 (0015):	5.00	0.387	3.30	32.68
ID = 3 (0017):	6.70	0.571	3.30	32.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.227	3.10	32.88
+ ID2= 2 (0017):	6.70	0.571	3.30	32.68
ID = 3 (0018):	8.30	0.750	3.20	32.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 5 **

50 year - 6 hour

MASS STORM	Filename: C:\Users\peter.dekker\AppData\Local\Temp\c15c202d-c9be-42d5-939e-6e4b682cd565\6d8912e9
Ptotal= 97.50 mm	Comments: Type II 6-hr Tabular
	Duration of storm = 6.00 hrs
	Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	4.39	1.60	7.02	3.10	131.24	4.60	6.63
0.20	4.49	1.70	7.41	3.20	26.23	4.70	6.34
0.30	4.39	1.80	8.00	3.30	22.91	4.80	6.14
0.40	4.39	1.90	8.58	3.40	19.79	4.90	5.75
0.50	4.39	2.00	9.07	3.50	16.87	5.00	5.56
0.60	4.48	2.10	9.75	3.60	13.55	5.10	5.17
0.70	4.49	2.20	10.53	3.70	11.60	5.20	5.17
0.80	4.68	2.30	11.89	3.80	11.02	5.30	4.97
0.90	4.97	2.40	13.26	3.90	10.14	5.40	4.78

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt							
1.00	5.26	2.50	14.62	4.00	9.46	5.50	4.68
1.10	5.36	2.60	15.89	4.10	8.78	5.60	4.68
1.20	5.66	2.70	32.76	4.20	8.29	5.70	4.58
1.30	6.14	2.80	65.72	4.30	7.70	5.80	4.58
1.40	6.34	2.90	105.40	4.40	7.51	5.90	4.39
1.50	6.63	3.00	189.15	4.50	7.12	6.00	4.29

DESIGN SCS(0005) ID= 1 DT= 6.0 min	Area (ha)= 3.70 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.24	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
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Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.850

reference location C for Table 2-5
reference location D for Table 2-6

PEAK FLOW (cms)= 0.628 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 41.133
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.422

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

DESIGN SCS(0004) ID= 1 DT= 6.0 min	Area (ha)= 1.60 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.19	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.291 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 41.317
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.424

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

DESIGN SCS(0003) ID= 1 DT= 6.0 min	Area (ha)= 1.70 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.33	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.234 (i)
TIME TO PEAK (hrs)= 3.300
RUNOFF VOLUME (mm)= 41.060
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.421

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

DESIGN SCS(0002) ID= 1 DT= 6.0 min	Area (ha)= 2.70 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.59	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.244 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 41.044
 TOTAL RAINFALL (mm)= 97.500
 RUNOFF COEFFICIENT = 0.421

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.360 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 41.092
 TOTAL RAINFALL (mm)= 97.500
 RUNOFF COEFFICIENT = 0.421

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.360	3.20	41.09
+ ID2= 2 (0002):	2.70	0.244	3.60	41.04
=====				
ID = 3 (0015):	5.00	0.495	3.30	41.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.234	3.30	41.06
+ ID2= 2 (0015):	5.00	0.495	3.30	41.07
=====				
ID = 3 (0017):	6.70	0.729	3.30	41.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.291	3.10	41.32
+ ID2= 2 (0017):	6.70	0.729	3.30	41.06

=====
 ID = 3 (0018): 8.30 0.961 3.20 41.11
 =====

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 6 **

100 year - 6 hour

 | MASS STORM |
Ptotal=108.80 mm

Filename: C:\Users\peter.dekker\AppData
 ata\Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\341afc73
 Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	'	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	4.90	1.60	7.83		3.10	146.44	4.60	7.40
0.20	5.00	1.70	8.27		3.20	29.27	4.70	7.07
0.30	4.90	1.80	8.92		3.30	25.57	4.80	6.85
0.40	4.90	1.90	9.57		3.40	22.09	4.90	6.42
0.50	4.90	2.00	10.12		3.50	18.82	5.00	6.20
0.60	5.00	2.10	10.88		3.60	15.12	5.10	5.77
0.70	5.00	2.20	11.75		3.70	12.95	5.20	5.77
0.80	5.22	2.30	13.27		3.80	12.29	5.30	5.55
0.90	5.55	2.40	14.80		3.90	11.32	5.40	5.33
1.00	5.88	2.50	16.32		4.00	10.55	5.50	5.22
1.10	5.98	2.60	17.73		4.10	9.79	5.60	5.22
1.20	6.31	2.70	36.56		4.20	9.25	5.70	5.11
1.30	6.85	2.80	73.33		4.30	8.60	5.80	5.11
1.40	7.07	2.90	117.61		4.40	8.38	5.90	4.90
1.50	7.40	3.00	211.07		4.50	7.94	6.00	4.79

 | DESIGN SCS(0005) |
ID= 1 DT= 6.0 min

Area (ha)= 3.70 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.24

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.850

reference location C for Table 2-5
 reference location D for Table 2-6

PEAK FLOW (cms)= 0.765 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 49.852
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.458

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

 | DESIGN SCS(0004) |
ID= 1 DT= 6.0 min

Area (ha)= 1.60 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.357 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 50.075
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.460

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.286 (i)
 TIME TO PEAK (hrs)= 3.300
 RUNOFF VOLUME (mm)= 49.763
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.457

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.298 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 49.744
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.457

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.440 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 49.803
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.458

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

| ADD HYD (0015) |

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	2.30	0.440	3.20	49.80
+ ID2= 2 (0002):	2.70	0.298	3.60	49.74
<hr/>				
ID = 3 (0015):	5.00	0.607	3.30	49.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0003):	1.70	0.286	3.30	49.76
+ ID2= 2 (0015):	5.00	0.607	3.30	49.77
<hr/>				
ID = 3 (0017):	6.70	0.893	3.30	49.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0004):	1.60	0.357	3.10	50.07
+ ID2= 2 (0017):	6.70	0.893	3.30	49.77
<hr/>				
ID = 3 (0018):	8.30	1.180	3.20	49.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 7 **

2 year - 12 hour

MASS STORM
 Ptotal= 43.80 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\f766a459
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	0.92	3.10	1.66	6.10	9.90	9.10	1.58
0.20	0.96	3.20	1.66	6.20	8.67	9.20	1.53
0.30	0.96	3.30	1.66	6.30	7.49	9.30	1.45
0.40	1.01	3.40	1.66	6.40	6.35	9.40	1.40
0.50	0.92	3.50	1.66	6.50	5.08	9.50	1.40
0.60	1.05	3.60	1.71	6.60	4.38	9.60	1.36
0.70	1.01	3.70	1.80	6.70	4.16	9.70	1.36
0.80	0.96	3.80	1.84	6.80	3.85	9.80	1.31
0.90	1.05	3.90	2.01	6.90	3.55	9.90	1.23
1.00	1.05	4.00	2.01	7.00	3.33	10.00	1.18
1.10	1.05	4.10	2.15	7.10	3.15	10.10	1.23
1.20	1.01	4.20	2.28	7.20	2.89	10.20	1.14

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

1.30	1.09	4.30	2.41	7.30	2.80	10.30	1.18
1.40	1.09	4.40	2.50	7.40	2.72	10.40	1.18
1.50	1.10	4.50	2.63	7.50	2.50	10.50	1.14
1.60	1.10	4.60	2.85	7.60	2.41	10.60	1.14
1.70	1.09	4.70	3.02	7.70	2.28	10.70	1.09
1.80	1.10	4.80	3.20	7.80	2.19	10.80	1.09
1.90	1.14	4.90	3.46	7.90	2.10	10.90	1.09
2.00	1.18	5.00	3.64	8.00	1.97	11.00	1.09
2.10	1.14	5.10	4.03	8.10	1.93	11.10	1.01
2.20	1.23	5.20	4.47	8.20	1.88	11.20	1.05
2.30	1.27	5.30	4.99	8.30	1.80	11.30	1.05
2.40	1.36	5.40	5.52	8.40	1.80	11.40	1.01
2.50	1.36	5.50	6.00	8.50	1.75	11.50	1.01
2.60	1.45	5.60	12.40	8.60	1.75	11.60	1.01
2.70	1.49	5.70	24.79	8.70	1.71	11.70	1.01
2.80	1.53	5.80	39.77	8.80	1.66	11.80	0.92
2.90	1.58	5.90	71.39	8.90	1.62	11.90	1.01
3.00	1.66	6.00	49.54	9.00	1.53	12.00	0.92

 | DESIGN SCS(0005) | Area (ha)= 3.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.24

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.850

reference location D for Table 2-6

PEAK FLOW (cms)= 0.069 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 7.152
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.163

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

 | DESIGN SCS(0004) | Area (ha)= 1.60 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.035 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 7.184
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.164

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

 | DESIGN SCS(0003) | Area (ha)= 1.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.026 (i)

TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 7.139
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.163

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.027 (i)
 TIME TO PEAK (hrs)= 6.600
 RUNOFF VOLUME (mm)= 7.136
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.163

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.039 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 7.145
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.163

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

ADD HYD (0015)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):	2.30	0.039	6.20	7.14
+ ID2= 2 (0002):	2.70	0.027	6.60	7.14
=====				
ID = 3 (0015):	5.00	0.053	6.20	7.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):	1.70	0.026	6.20	7.14
+ ID2= 2 (0015):	5.00	0.053	6.20	7.14
=====				

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt
 ID = 3 (0017): 6.70 0.079 6.20 7.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0004):	1.60	0.035	6.10	7.18
+ ID2= 2 (0017):	6.70	0.079	6.20	7.14
ID = 3 (0018):	8.30	0.104	6.20	7.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 8 **

5 year - 12 hour

MASS STORM	Filename: C:\Users\peter.dekker\AppData Local\Temp\ c15c202d-c9be-42d5-939e-6e4b682cd565\9a9e091aa
Ptotal= 61.90 mm	Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.30	3.10	2.35	6.10	13.99	9.10	2.23
0.20	1.36	3.20	2.35	6.20	12.26	9.20	2.17
0.30	1.36	3.30	2.35	6.30	10.58	9.30	2.04
0.40	1.42	3.40	2.35	6.40	8.98	9.40	1.98
0.50	1.30	3.50	2.35	6.50	7.18	9.50	1.98
0.60	1.49	3.60	2.41	6.60	6.19	9.60	1.92
0.70	1.42	3.70	2.54	6.70	5.88	9.70	1.92
0.80	1.36	3.80	2.60	6.80	5.45	9.80	1.86
0.90	1.49	3.90	2.85	6.90	5.01	9.90	1.73
1.00	1.49	4.00	2.85	7.00	4.70	10.00	1.67
1.10	1.49	4.10	3.03	7.10	4.46	10.10	1.73
1.20	1.42	4.20	3.22	7.20	4.09	10.20	1.61
1.30	1.55	4.30	3.40	7.30	3.96	10.30	1.67
1.40	1.55	4.40	3.53	7.40	3.84	10.40	1.67
1.50	1.55	4.50	3.71	7.50	3.53	10.50	1.61
1.60	1.55	4.60	4.02	7.60	3.40	10.60	1.61
1.70	1.55	4.70	4.27	7.70	3.22	10.70	1.55
1.80	1.55	4.80	4.52	7.80	3.09	10.80	1.55
1.90	1.61	4.90	4.89	7.90	2.97	10.90	1.55
2.00	1.67	5.00	5.14	8.00	2.79	11.00	1.55
2.10	1.61	5.10	5.69	8.10	2.72	11.10	1.42
2.20	1.73	5.20	6.31	8.20	2.66	11.20	1.49
2.30	1.80	5.30	7.06	8.30	2.54	11.30	1.49
2.40	1.92	5.40	7.80	8.40	2.54	11.40	1.42
2.50	1.92	5.50	8.48	8.50	2.48	11.50	1.42
2.60	2.04	5.60	17.52	8.60	2.48	11.60	1.42
2.70	2.10	5.70	35.04	8.70	2.41	11.70	1.42
2.80	2.17	5.80	56.21	8.80	2.35	11.80	1.30
2.90	2.23	5.90	100.90	8.90	2.29	11.90	1.42
3.00	2.35	6.00	70.01	9.00	2.17	12.00	1.30

```

-----
| DESIGN SCS(0005) | Area      (ha)= 3.70   Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia        (mm)= 0.2 S   # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.24

```

```

Ia as 0.2xS      (mm)= 16.042
Unit Hyd Qpeak  (cms)= 0.850

```

```

PEAK FLOW      (cms)= 0.198 (i)
TIME TO PEAK   (hrs)= 6.100
RUNOFF VOLUME  (mm)= 16.717
TOTAL RAINFALL (mm)= 61.900
RUNOFF COEFFICIENT = 0.270

```

reference location D for Table 2-6

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

```

-----
| DESIGN SCS(0004) | Area      (ha)= 1.60   Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia        (mm)= 0.2 S   # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.19

```

```

Ia as 0.2xS      (mm)= 16.042
Unit Hyd Qpeak  (cms)= 0.464

```

```

PEAK FLOW      (cms)= 0.093 (i)
TIME TO PEAK   (hrs)= 6.100
RUNOFF VOLUME  (mm)= 16.792
TOTAL RAINFALL (mm)= 61.900
RUNOFF COEFFICIENT = 0.271

```

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

```

-----
| DESIGN SCS(0003) | Area      (ha)= 1.70   Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia        (mm)= 0.2 S   # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.33

```

```

Ia as 0.2xS      (mm)= 16.042
Unit Hyd Qpeak  (cms)= 0.284

```

```

PEAK FLOW      (cms)= 0.073 (i)
TIME TO PEAK   (hrs)= 6.200
RUNOFF VOLUME  (mm)= 16.688
TOTAL RAINFALL (mm)= 61.900
RUNOFF COEFFICIENT = 0.270

```

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

```

-----
| DESIGN SCS(0002) | Area      (ha)= 2.70   Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia        (mm)= 0.2 S   # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.59

```

```

Ia as 0.2xS      (mm)= 16.042
Unit Hyd Qpeak  (cms)= 0.252

```

```

PEAK FLOW      (cms)= 0.076 (i)
TIME TO PEAK   (hrs)= 6.500

```


RUNOFF VOLUME (mm)= 16.681
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.269

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

DESIGN SCS(0001)	Area (ha)=	2.30	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.27		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.111 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 16.701
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.270

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

ADD HYD (0015)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):	2.30	0.111	6.10	16.70
+ ID2= 2 (0002):	2.70	0.076	6.50	16.68
<hr/>				
ID = 3 (0015):	5.00	0.154	6.20	16.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):	1.70	0.073	6.20	16.69
+ ID2= 2 (0015):	5.00	0.154	6.20	16.69
<hr/>				
ID = 3 (0017):	6.70	0.227	6.20	16.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):	1.60	0.093	6.10	16.79
+ ID2= 2 (0017):	6.70	0.227	6.20	16.69
<hr/>				
ID = 3 (0018):	8.30	0.295	6.10	16.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 9 **

10 year - 12 hour

MASS STORM
 Ptotal= 73.90 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\42e5721b
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.55	3.10	2.81	6.10	16.70	9.10	2.66
0.20	1.63	3.20	2.81	6.20	14.63	9.20	2.59
0.30	1.63	3.30	2.81	6.30	12.64	9.30	2.44
0.40	1.70	3.40	2.81	6.40	10.72	9.40	2.36
0.50	1.55	3.50	2.81	6.50	8.57	9.50	2.36
0.60	1.77	3.60	2.88	6.60	7.39	9.60	2.29
0.70	1.70	3.70	3.03	6.70	7.02	9.70	2.29
0.80	1.63	3.80	3.10	6.80	6.50	9.80	2.22
0.90	1.77	3.90	3.40	6.90	5.99	9.90	2.07
1.00	1.77	4.00	3.40	7.00	5.62	10.00	2.00
1.10	1.77	4.10	3.62	7.10	5.32	10.10	2.07
1.20	1.70	4.20	3.84	7.20	4.88	10.20	1.92
1.30	1.85	4.30	4.06	7.30	4.73	10.30	2.00
1.40	1.85	4.40	4.21	7.40	4.58	10.40	2.00
1.50	1.85	4.50	4.43	7.50	4.21	10.50	1.92
1.60	1.85	4.60	4.80	7.60	4.06	10.60	1.92
1.70	1.85	4.70	5.10	7.70	3.84	10.70	1.85
1.80	1.85	4.80	5.39	7.80	3.69	10.80	1.85
1.90	1.92	4.90	5.84	7.90	3.55	10.90	1.85
2.00	2.00	5.00	6.13	8.00	3.33	11.00	1.85
2.10	1.92	5.10	6.80	8.10	3.25	11.10	1.70
2.20	2.07	5.20	7.54	8.20	3.18	11.20	1.77
2.30	2.14	5.30	8.42	8.30	3.03	11.30	1.77
2.40	2.29	5.40	9.31	8.40	3.03	11.40	1.70
2.50	2.29	5.50	10.12	8.50	2.96	11.50	1.70
2.60	2.44	5.60	20.91	8.60	2.96	11.60	1.70
2.70	2.51	5.70	41.83	8.70	2.88	11.70	1.70
2.80	2.59	5.80	67.10	8.80	2.81	11.80	1.55
2.90	2.66	5.90	120.46	8.90	2.73	11.90	1.70
3.00	2.81	6.00	83.58	9.00	2.59	12.00	1.55

DESIGN SCS(0005)
 ID= 1 DT= 6.0 min

Area (ha)= 3.70 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.24

Ia as 0.2xS (mm)= 16.042
 Unit Hyd qpeak (cms)= 0.850

PEAK FLOW (cms)= 0.301 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 24.298
 TOTAL RAINFALL (mm)= 73.900
 RUNOFF COEFFICIENT = 0.329

reference location D for Table 2-6

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

DESIGN SCS(0004)	Area (ha)=	1.60	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.19		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.138 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 24.407
 TOTAL RAINFALL (mm)= 73.900
 RUNOFF COEFFICIENT = 0.330

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

DESIGN SCS(0003)	Area (ha)=	1.70	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.33		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.112 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 24.255
 TOTAL RAINFALL (mm)= 73.900
 RUNOFF COEFFICIENT = 0.328

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

DESIGN SCS(0002)	Area (ha)=	2.70	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.59		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.117 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 24.246
 TOTAL RAINFALL (mm)= 73.900
 RUNOFF COEFFICIENT = 0.328

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

DESIGN SCS(0001)	Area (ha)=	2.30	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.27		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.171 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 24.274

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt
 TOTAL RAINFALL (mm)= 73.900
 RUNOFF COEFFICIENT = 0.328

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.171	6.10	24.27
+ ID2= 2 (0002):	2.70	0.117	6.50	24.25
ID = 3 (0015):	5.00	0.237	6.20	24.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.112	6.20	24.26
+ ID2= 2 (0015):	5.00	0.237	6.20	24.26
ID = 3 (0017):	6.70	0.349	6.20	24.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.138	6.10	24.41
+ ID2= 2 (0017):	6.70	0.349	6.20	24.26
ID = 3 (0018):	8.30	0.457	6.10	24.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 10 **

25 year - 12 hour

MASS STORM
 Ptotal= 89.10 mm

Filename: C:\Users\peter.dekker\AppData
 ata\Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\0591a129
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.87	3.10	3.39	6.10	20.14	9.10	3.21
0.20	1.96	3.20	3.39	6.20	17.64	9.20	3.12
0.30	1.96	3.30	3.39	6.30	15.24	9.30	2.94

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

0.40	2.05	3.40	3.39	6.40	12.92	9.40	2.85
0.50	1.87	3.50	3.39	6.50	10.34	9.50	2.85
0.60	2.14	3.60	3.47	6.60	8.91	9.60	2.76
0.70	2.05	3.70	3.65	6.70	8.46	9.70	2.76
0.80	1.96	3.80	3.74	6.80	7.84	9.80	2.67
0.90	2.14	3.90	4.10	6.90	7.22	9.90	2.49
1.00	2.14	4.00	4.10	7.00	6.77	10.00	2.41
1.10	2.14	4.10	4.37	7.10	6.42	10.10	2.49
1.20	2.05	4.20	4.63	7.20	5.88	10.20	2.32
1.30	2.23	4.30	4.90	7.30	5.70	10.30	2.41
1.40	2.23	4.40	5.08	7.40	5.52	10.40	2.41
1.50	2.23	4.50	5.35	7.50	5.08	10.50	2.32
1.60	2.23	4.60	5.79	7.60	4.90	10.60	2.32
1.70	2.23	4.70	6.15	7.70	4.63	10.70	2.23
1.80	2.23	4.80	6.50	7.80	4.45	10.80	2.23
1.90	2.32	4.90	7.04	7.90	4.28	10.90	2.23
2.00	2.41	5.00	7.40	8.00	4.01	11.00	2.23
2.10	2.32	5.10	8.20	8.10	3.92	11.10	2.05
2.20	2.49	5.20	9.09	8.20	3.83	11.20	2.14
2.30	2.58	5.30	10.16	8.30	3.65	11.30	2.14
2.40	2.76	5.40	11.23	8.40	3.65	11.40	2.05
2.50	2.76	5.50	12.21	8.50	3.56	11.50	2.05
2.60	2.94	5.60	25.22	8.60	3.56	11.60	2.05
2.70	3.03	5.70	50.43	8.70	3.47	11.70	2.05
2.80	3.12	5.80	80.90	8.80	3.39	11.80	1.87
2.90	3.21	5.90	145.23	8.90	3.30	11.90	2.05
3.00	3.39	6.00	100.77	9.00	3.12	12.00	1.87

 | DESIGN SCS(0005) | Area (ha)= 3.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.24

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.850

reference location D for Table 2-6

PEAK FLOW (cms)= 0.444 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 34.900
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.392

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

 | DESIGN SCS(0004) | Area (ha)= 1.60 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.206 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 35.056
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.393

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

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

```

-----
| DESIGN SCS(0003) | Area (ha)= 1.70 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.33

```

```

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

```

```

PEAK FLOW (cms)= 0.166 (i)
TIME TO PEAK (hrs)= 6.200
RUNOFF VOLUME (mm)= 34.838
TOTAL RAINFALL (mm)= 89.100
RUNOFF COEFFICIENT = 0.391

```

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

```

-----
| DESIGN SCS(0002) | Area (ha)= 2.70 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.59

```

```

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.252

```

```

PEAK FLOW (cms)= 0.174 (i)
TIME TO PEAK (hrs)= 6.500
RUNOFF VOLUME (mm)= 34.824
TOTAL RAINFALL (mm)= 89.100
RUNOFF COEFFICIENT = 0.391

```

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

```

-----
| DESIGN SCS(0001) | Area (ha)= 2.30 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.27

```

```

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.470

```

```

PEAK FLOW (cms)= 0.255 (i)
TIME TO PEAK (hrs)= 6.100
RUNOFF VOLUME (mm)= 34.866
TOTAL RAINFALL (mm)= 89.100
RUNOFF COEFFICIENT = 0.391

```

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

```

-----
| ADD HYD (0015) |
| 1 + 2 = 3 |
-----
          AREA    QPEAK    TPEAK    R.V.
          (ha)    (cms)    (hrs)    (mm)
ID1= 1 (0001):  2.30  0.255  6.10  34.87
+ ID2= 2 (0002):  2.70  0.174  6.50  34.82
=====
ID = 3 (0015):  5.00  0.354  6.20  34.84

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):		1.70	0.166	6.20	34.84
+ ID2= 2 (0015):		5.00	0.354	6.20	34.84
=====					
ID = 3 (0017):		6.70	0.520	6.20	34.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):		1.60	0.206	6.00	35.06
+ ID2= 2 (0017):		6.70	0.520	6.20	34.84
=====					
ID = 3 (0018):		8.30	0.686	6.10	34.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 11 **

50 year - 12 hour

MASS STORM
 Ptotal=100.30 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\5bc341ed
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.10	2.11	3.10	3.81	6.10	22.67	9.10	3.61
0.20	2.21	3.20	3.81	6.20	19.86	9.20	3.51
0.30	2.21	3.30	3.81	6.30	17.15	9.30	3.31
0.40	2.31	3.40	3.81	6.40	14.54	9.40	3.21
0.50	2.11	3.50	3.81	6.50	11.63	9.50	3.21
0.60	2.41	3.60	3.91	6.60	10.03	9.60	3.11
0.70	2.31	3.70	4.11	6.70	9.53	9.70	3.11
0.80	2.21	3.80	4.21	6.80	8.83	9.80	3.01
0.90	2.41	3.90	4.61	6.90	8.12	9.90	2.81
1.00	2.41	4.00	4.61	7.00	7.62	10.00	2.71
1.10	2.41	4.10	4.91	7.10	7.22	10.10	2.81
1.20	2.31	4.20	5.22	7.20	6.62	10.20	2.61
1.30	2.51	4.30	5.52	7.30	6.42	10.30	2.71
1.40	2.51	4.40	5.72	7.40	6.22	10.40	2.71
1.50	2.51	4.50	6.02	7.50	5.72	10.50	2.61
1.60	2.51	4.60	6.52	7.60	5.52	10.60	2.61
1.70	2.51	4.70	6.92	7.70	5.22	10.70	2.51
1.80	2.51	4.80	7.32	7.80	5.01	10.80	2.51
1.90	2.61	4.90	7.92	7.90	4.81	10.90	2.51
2.00	2.71	5.00	8.32	8.00	4.51	11.00	2.51
2.10	2.61	5.10	9.23	8.10	4.41	11.10	2.31

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

2.20	2.81	5.20	10.23	8.20	4.31	11.20	2.41
2.30	2.91	5.30	11.43	8.30	4.11	11.30	2.41
2.40	3.11	5.40	12.64	8.40	4.11	11.40	2.31
2.50	3.11	5.50	13.74	8.50	4.01	11.50	2.31
2.60	3.31	5.60	28.38	8.60	4.01	11.60	2.31
2.70	3.41	5.70	56.77	8.70	3.91	11.70	2.31
2.80	3.51	5.80	91.07	8.80	3.81	11.80	2.11
2.90	3.61	5.90	163.49	8.90	3.71	11.90	2.31
3.00	3.81	6.00	113.44	9.00	3.51	12.00	2.11

 | DESIGN SCS(0005) | Area (ha)= 3.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.24

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.850

PEAK FLOW (cms)= 0.555 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 43.260
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.431

reference location D for Table 2-6

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

 | DESIGN SCS(0004) | Area (ha)= 1.60 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.260 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 43.454
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.433

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

 | DESIGN SCS(0003) | Area (ha)= 1.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.208 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 43.183
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.431

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

DESIGN SCS(0002)	Area (ha)=	2.70	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00

	U.H. Tp(hrs)=	0.59		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.219 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 43.166
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.430

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

DESIGN SCS(0001)	Area (ha)=	2.30	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00

	U.H. Tp(hrs)=	0.27		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.321 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 43.217
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.431

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

ADD HYD (0015)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):	2.30	0.321	6.10	43.22
+ ID2= 2 (0002):	2.70	0.219	6.50	43.17
=====				
ID = 3 (0015):	5.00	0.446	6.20	43.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):	1.70	0.208	6.20	43.18
+ ID2= 2 (0015):	5.00	0.446	6.20	43.19
=====				
ID = 3 (0017):	6.70	0.654	6.20	43.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.

VO2out_PreDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):	1.60	0.260	6.00	43.45
+ ID2= 2 (0017):	6.70	0.654	6.20	43.19
=====				
ID = 3 (0018):	8.30	0.866	6.10	43.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 ** SIMULATION NUMBER: 12 **

100 year - 12 hour

 | MASS STORM |
Ptota1=111.50 mm

Filename: C:\Users\peter.dekker\AppData
 ata\Local\Temp\
 c15c202d-c9be-42d5-939e-6e4b682cd565\2e2ecdea
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME	RAIN	TIME	RAIN	'	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	'	hrs	mm/hr	hrs	mm/hr
0.10	2.34	3.10	4.24	'	6.10	25.20	9.10	4.01
0.20	2.45	3.20	4.24	'	6.20	22.08	9.20	3.90
0.30	2.45	3.30	4.24	'	6.30	19.07	9.30	3.68
0.40	2.56	3.40	4.24	'	6.40	16.17	9.40	3.57
0.50	2.34	3.50	4.24	'	6.50	12.93	9.50	3.57
0.60	2.68	3.60	4.35	'	6.60	11.15	9.60	3.46
0.70	2.56	3.70	4.57	'	6.70	10.59	9.70	3.46
0.80	2.45	3.80	4.68	'	6.80	9.81	9.80	3.34
0.90	2.68	3.90	5.13	'	6.90	9.03	9.90	3.12
1.00	2.68	4.00	5.13	'	7.00	8.47	10.00	3.01
1.10	2.68	4.10	5.46	'	7.10	8.03	10.10	3.12
1.20	2.56	4.20	5.80	'	7.20	7.36	10.20	2.90
1.30	2.79	4.30	6.13	'	7.30	7.14	10.30	3.01
1.40	2.79	4.40	6.36	'	7.40	6.91	10.40	3.01
1.50	2.79	4.50	6.69	'	7.50	6.36	10.50	2.90
1.60	2.79	4.60	7.25	'	7.60	6.13	10.60	2.90
1.70	2.79	4.70	7.69	'	7.70	5.80	10.70	2.79
1.80	2.79	4.80	8.14	'	7.80	5.57	10.80	2.79
1.90	2.90	4.90	8.81	'	7.90	5.35	10.90	2.79
2.00	3.01	5.00	9.25	'	8.00	5.02	11.00	2.79
2.10	2.90	5.10	10.26	'	8.10	4.91	11.10	2.56
2.20	3.12	5.20	11.37	'	8.20	4.79	11.20	2.68
2.30	3.23	5.30	12.71	'	8.30	4.57	11.30	2.68
2.40	3.46	5.40	14.05	'	8.40	4.57	11.40	2.56
2.50	3.46	5.50	15.28	'	8.50	4.46	11.50	2.56
2.60	3.68	5.60	31.55	'	8.60	4.46	11.60	2.56
2.70	3.79	5.70	63.11	'	8.70	4.35	11.70	2.56
2.80	3.90	5.80	101.24	'	8.80	4.24	11.80	2.34
2.90	4.01	5.90	181.74	'	8.90	4.13	11.90	2.56
3.00	4.24	6.00	126.11	'	9.00	3.90	12.00	2.34

 | DESIGN SCS(0005) |
ID= 1 DT= 6.0 min

Area (ha)= 3.70 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.24

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.850

PEAK FLOW (cms)= 0.671 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 51.985
 TOTAL RAINFALL (mm)= 111.500
 RUNOFF COEFFICIENT = 0.466

reference location D for Table 2-6

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

DESIGN SCS(0004)	Area (ha)= 1.60	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.315 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 52.218
 TOTAL RAINFALL (mm)= 111.500
 RUNOFF COEFFICIENT = 0.468

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.252 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 51.892
 TOTAL RAINFALL (mm)= 111.500
 RUNOFF COEFFICIENT = 0.465

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.265 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 51.872
 TOTAL RAINFALL (mm)= 111.500
 RUNOFF COEFFICIENT = 0.465

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
------------------	-----------------	--------------------------

| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 ----- U.H. Tp(hrs)= 0.27

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.389 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 51.933
 TOTAL RAINFALL (mm)= 111.500
 RUNOFF COEFFICIENT = 0.466

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

| ADD HYD (0015) |
 | 1 + 2 = 3 |

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	2.30	0.389	6.10	51.93
+ ID2= 2 (0002):	2.70	0.265	6.50	51.87
=====				
ID = 3 (0015):	5.00	0.542	6.20	51.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0017) |
 | 1 + 2 = 3 |

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0003):	1.70	0.252	6.20	51.89
+ ID2= 2 (0015):	5.00	0.542	6.20	51.90
=====				
ID = 3 (0017):	6.70	0.794	6.20	51.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0018) |
 | 1 + 2 = 3 |

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0004):	1.60	0.315	6.00	52.22
+ ID2= 2 (0017):	6.70	0.794	6.20	51.90
=====				
ID = 3 (0018):	8.30	1.053	6.10	51.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH

```
V   V   I   SSSSS  U   U   A   L
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
```

Pre-Development
Regional Storm
AMC III

```
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  Company

000  T     T     H   H   Y     M   M   000  Serial
```

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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 2.4\VO2\voin.dat

Output filename:
C:\Users\peter.dekker\AppData\Local\Temp\58e4d2b7-4946-4274-a5c0-0a1968459e0f\Scenario.out
Summary filename:
C:\Users\peter.dekker\AppData\Local\Temp\58e4d2b7-4946-4274-a5c0-0a1968459e0f\Scenario.sum

DATE: 03/21/2013

TIME: 10:42:29

USER:

COMMENTS: _____

** SIMULATION NUMBER: 1 **

```
-----
| MASS STORM |
| Ptota1=212.00 mm |
|-----
```

Filename: C:\Users\peter.dekker\AppData\Local\Temp\58e4d2b7-4946-4274-a5c0-0a1968459e0f\9ad18410
Comments: Hurricane Hazel (last 12 h)

Duration of storm = 12.00 hrs
Mass curve time step = 60.00 min

***** WARNING : THE SUM OF THE COORDINATES IS NOT ONE.

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
1.00	2.12	4.00	6.36	7.00	21.20	10.00	14.84
2.00	12.72	5.00	21.20	8.00	25.44	11.00	8.48

VO2out_PreDev_Reg_12HR_Haze1_AMC3_PD.txt
 3.00 2.12 | 6.00 48.76 | 9.00 12.72 | 12.00 19.08

DESIGN SCS(0005)	Area (ha)= 3.70	Curve Number (CN) = 88.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.24	

NOTE: RAINFALL WAS TRANSFORMED TO 6.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.100	2.12	3.100	6.36	6.100	21.20	9.10	14.84
0.200	2.12	3.200	6.36	6.200	21.20	9.20	14.84
0.300	2.12	3.300	6.36	6.300	21.20	9.30	14.84
0.400	2.12	3.400	6.36	6.400	21.20	9.40	14.84
0.500	2.12	3.500	6.36	6.500	21.20	9.50	14.84
0.600	2.12	3.600	6.36	6.600	21.20	9.60	14.84
0.700	2.12	3.700	6.36	6.700	21.20	9.70	14.84
0.800	2.12	3.800	6.36	6.800	21.20	9.80	14.84
0.900	2.12	3.900	6.36	6.900	21.20	9.90	14.84
1.000	2.12	4.000	6.36	7.000	21.20	10.00	14.84
1.100	12.72	4.100	21.20	7.100	25.44	10.10	8.48
1.200	12.72	4.200	21.20	7.200	25.44	10.20	8.48
1.300	12.72	4.300	21.20	7.300	25.44	10.30	8.48
1.400	12.72	4.400	21.20	7.400	25.44	10.40	8.48
1.500	12.72	4.500	21.20	7.500	25.44	10.50	8.48
1.600	12.72	4.600	21.20	7.600	25.44	10.60	8.48
1.700	12.72	4.700	21.20	7.700	25.44	10.70	8.48
1.800	12.72	4.800	21.20	7.800	25.44	10.80	8.48
1.900	12.72	4.900	21.20	7.900	25.44	10.90	8.48
2.000	12.72	5.000	21.20	8.000	25.44	11.00	8.48
2.100	2.12	5.100	48.76	8.100	12.72	11.10	19.08
2.200	2.12	5.200	48.76	8.200	12.72	11.20	19.08
2.300	2.12	5.300	48.76	8.300	12.72	11.30	19.08
2.400	2.12	5.400	48.76	8.400	12.72	11.40	19.08
2.500	2.12	5.500	48.76	8.500	12.72	11.50	19.08
2.600	2.12	5.600	48.76	8.600	12.72	11.60	19.08
2.700	2.12	5.700	48.76	8.700	12.72	11.70	19.08
2.800	2.12	5.800	48.76	8.800	12.72	11.80	19.08
2.900	2.12	5.900	48.76	8.900	12.72	11.90	19.08
3.000	2.12	6.000	48.76	9.000	12.72	12.00	19.08

Ia as 0.2xS (mm)= 6.927
 Unit Hyd Qpeak (cms)= 0.850
 PEAK FLOW (cms)= 0.451 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 159.209
 TOTAL RAINFALL (mm)= 195.040
 RUNOFF COEFFICIENT = 0.816

reference location C for Table 2-5
 reference location D for Table 2-6

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

DESIGN SCS(0004)	Area (ha)= 1.60	Curve Number (CN) = 88.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 6.927

VO2out_PreDev_Reg_12HR_Haze1_AMC3_PD.txt
Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.197 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 159.922
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.820

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

DESIGN SCS(0003) ID= 1 DT= 6.0 min	Area (ha)= 1.70 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.33	Curve Number (CN) = 88.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 6.927
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.203 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 158.926
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.815

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

DESIGN SCS(0002) ID= 1 DT= 6.0 min	Area (ha)= 2.70 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.59	Curve Number (CN) = 88.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 6.927
Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.299 (i)
TIME TO PEAK (hrs)= 6.200
RUNOFF VOLUME (mm)= 158.864
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.815

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

DESIGN SCS(0001) ID= 1 DT= 6.0 min	Area (ha)= 2.30 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.27	Curve Number (CN) = 88.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 6.927
Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.279 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 159.051
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.815

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

VO2out_PreDev_Reg_12HR_Haze1_AMC3_PD.txt

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.279	6.00	159.05
+ ID2= 2 (0002):	2.70	0.299	6.20	158.86
ID = 3 (0015):	5.00	0.564	6.10	158.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.203	6.00	158.93
+ ID2= 2 (0015):	5.00	0.564	6.10	158.95
ID = 3 (0017):	6.70	0.766	6.10	158.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.197	6.00	159.92
+ ID2= 2 (0017):	6.70	0.766	6.10	158.94
ID = 3 (0018):	8.30	0.960	6.00	159.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH


```

V   V   I   SSSSS  U   U   A   L
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
  
```

Post-Development
6 & 12 hour duration (SCS)
AMC II
2, 5, 10, 25, 50 and 100 year events

```

OOO   TTTTT  TTTTT  H   H   Y   Y   M   M   OOO   TM
O   O   T     T     H   H   Y   Y   MM  MM  O   O
O   O   T     T     H   H   Y     M   M   O   O   Company

OOO   T     T     H   H   Y     M   M   OOO           Serial
  
```

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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 2.4\VO2\voin.dat

Output filename:

C:\Users\peter.dekker\AppData\Local\Temp\d6a98aa7-33ee-418a-93ae-3c5ffc369e12\Scenario.out

Summary filename:

C:\Users\peter.dekker\AppData\Local\Temp\d6a98aa7-33ee-418a-93ae-3c5ffc369e12\Scenario.sum

DATE: 03/21/2013

TIME: 10:28:44

USER:

COMMENTS: _____

```

*****
** SIMULATION NUMBER:   1 **
*****
  
```

2 year - 6 hour

MASS STORM
Ptotal= 40.40 mm

Filename: C:\Users\peter.dekker\AppData\Local\Temp\d6a98aa7-33ee-418a-93ae-3c5ffc369e12\6c9614ea
Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.82	1.60	2.91	3.10	54.38	4.60	2.75
0.20	1.86	1.70	3.07	3.20	10.87	4.70	2.63
0.30	1.82	1.80	3.31	3.30	9.49	4.80	2.55

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

0.40	1.82	1.90	3.56	3.40	8.20	4.90	2.38
0.50	1.82	2.00	3.76	3.50	6.99	5.00	2.30
0.60	1.86	2.10	4.04	3.60	5.62	5.10	2.14
0.70	1.86	2.20	4.36	3.70	4.81	5.20	2.14
0.80	1.94	2.30	4.93	3.80	4.57	5.30	2.06
0.90	2.06	2.40	5.49	3.90	4.20	5.40	1.98
1.00	2.18	2.50	6.06	4.00	3.92	5.50	1.94
1.10	2.22	2.60	6.59	4.10	3.64	5.60	1.94
1.20	2.34	2.70	13.57	4.20	3.43	5.70	1.90
1.30	2.55	2.80	27.23	4.30	3.19	5.80	1.90
1.40	2.63	2.90	43.67	4.40	3.11	5.90	1.82
1.50	2.75	3.00	78.38	4.50	2.95	6.00	1.78

 | DESIGN SCS(0004) | Area (ha)= 1.60 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.034 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 5.712
 TOTAL RAINFALL (mm)= 40.400
 RUNOFF COEFFICIENT = 0.141

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

 | DESIGN SCS(0003) | Area (ha)= 1.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.024 (i)
 TIME TO PEAK (hrs)= 3.400
 RUNOFF VOLUME (mm)= 5.676
 TOTAL RAINFALL (mm)= 40.400
 RUNOFF COEFFICIENT = 0.140

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

 | DESIGN SCS(0002) | Area (ha)= 2.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.59

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.027 (i)
 TIME TO PEAK (hrs)= 3.700
 RUNOFF VOLUME (mm)= 5.674
 TOTAL RAINFALL (mm)= 40.400
 RUNOFF COEFFICIENT = 0.140

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

```

-----
| DESIGN SCS(0001) | Area (ha)= 2.30 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.27

```

```

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.470

```

```

PEAK FLOW (cms)= 0.038 (i)
TIME TO PEAK (hrs)= 3.300
RUNOFF VOLUME (mm)= 5.680
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.141

```

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

```

-----
| ADD HYD (0015) |
| 1 + 2 = 3 |
-----
          AREA    QPEAK    TPEAK    R.V.
          (ha)    (cms)    (hrs)    (mm)
ID1= 1 (0001):  2.30  0.038    3.30    5.68
+ ID2= 2 (0002):  2.70  0.027    3.70    5.67
=====
ID = 3 (0015):  5.00  0.051    3.40    5.68

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD (0017) |
| 1 + 2 = 3 |
-----
          AREA    QPEAK    TPEAK    R.V.
          (ha)    (cms)    (hrs)    (mm)
ID1= 1 (0003):  1.70  0.024    3.40    5.68
+ ID2= 2 (0015):  5.00  0.051    3.40    5.68
=====
ID = 3 (0017):  6.70  0.075    3.40    5.68

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD (0018) |
| 1 + 2 = 3 |
-----
          AREA    QPEAK    TPEAK    R.V.
          (ha)    (cms)    (hrs)    (mm)
ID1= 1 (0004):  1.60  0.034    3.20    5.71
+ ID2= 2 (0017):  6.70  0.075    3.40    5.68
=====
ID = 3 (0018):  8.30  0.099    3.30    5.68

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| DESIGN SCS(0006) | Area (ha)= 0.19 Curve Number (CN) = 85.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.20

```

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

Ia as 0.2xS (mm)= 8.965
 Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.011 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 13.025
 TOTAL RAINFALL (mm)= 40.400
 RUNOFF COEFFICIENT = 0.322

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

DESIGN SCS(0005)	Area (ha)=	0.41	Curve Number (CN) =	79.6
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.23		

Ia as 0.2xS (mm)= 13.019
 Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.012 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 8.129
 TOTAL RAINFALL (mm)= 40.400
 RUNOFF COEFFICIENT = 0.201

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

ADD HYD (0011)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0005):	0.41	0.012	3.20	8.13
+ ID2= 2 (0006):	0.19	0.011	3.20	13.02
ID = 3 (0011):	0.60	0.023	3.20	9.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)=	2.60	Curve Number (CN) =	77.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.19		

Ia as 0.2xS (mm)= 15.174
 Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.063 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 6.336
 TOTAL RAINFALL (mm)= 40.400
 RUNOFF COEFFICIENT = 0.157

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

ADD HYD (0012)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3				

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0007):	2.60	0.063	3.20	6.34
+ ID2= 2 (0011):	0.60	0.023	3.20	9.68
=====				
ID = 3 (0012):	3.20	0.085	3.20	6.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)=	0.21	Curve Number (CN) =	81.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.14		

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 9.412
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.233

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

DESIGN SCS(0009)	Area (ha)=	0.27	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.10		

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.008 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 5.861
TOTAL RAINFALL (mm)= 40.400
RUNOFF COEFFICIENT = 0.145

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

ADD HYD (0013)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0008):	0.21	0.010	3.10	9.41
+ ID2= 2 (0009):	0.27	0.008	3.10	5.86
=====				
ID = 3 (0013):	0.48	0.018	3.10	7.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0014)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0012):	3.20	0.085	3.20	6.96
+ ID2= 2 (0013):	0.48	0.018	3.10	7.41

=====
 ID = 3 (0014): 3.68 0.097 3.20 7.02
 =====

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location C for Table 2-5

 | RESERVOIR (0019) |
 | IN= 2---> OUT= 1 |
DT= 6.0 min

reference location D for Table 2-6

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.4620	0.0350
0.0150	0.0050	0.5400	0.0420
0.0600	0.0110	0.8860	0.0490
0.1270	0.0160	1.4500	0.0570
0.2410	0.0220	2.1700	0.0650
0.3690	0.0290	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0014)	3.680	0.097	3.20	7.02
OUTFLOW: ID= 1 (0019)	3.680	0.040	3.50	7.00

PEAK FLOW REDUCTION [Qout/Qin](%)= 41.29
 TIME SHIFT OF PEAK FLOW (min)= 18.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0084

 ** SIMULATION NUMBER: 2 **

5 year - 6 hour

 | MASS STORM |
Ptotal= 58.70 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 d6a98aa7-33ee-418a-93ae-3c5ffc369e12\3ab1021d
 Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	2.64	1.60	4.23	3.10	79.01	4.60	3.99
0.20	2.70	1.70	4.46	3.20	15.79	4.70	3.82
0.30	2.64	1.80	4.81	3.30	13.79	4.80	3.70
0.40	2.64	1.90	5.17	3.40	11.92	4.90	3.46
0.50	2.64	2.00	5.46	3.50	10.16	5.00	3.35
0.60	2.70	2.10	5.87	3.60	8.16	5.10	3.11
0.70	2.70	2.20	6.34	3.70	6.99	5.20	3.11
0.80	2.82	2.30	7.16	3.80	6.63	5.30	2.99
0.90	2.99	2.40	7.98	3.90	6.10	5.40	2.88
1.00	3.17	2.50	8.81	4.00	5.69	5.50	2.82
1.10	3.23	2.60	9.57	4.10	5.28	5.60	2.82
1.20	3.40	2.70	19.72	4.20	4.99	5.70	2.76
1.30	3.70	2.80	39.56	4.30	4.64	5.80	2.76
1.40	3.82	2.90	63.45	4.40	4.52	5.90	2.64
1.50	3.99	3.00	113.88	4.50	4.29	6.00	2.58

 | DESIGN SCS(0004) |
ID= 1 DT= 6.0 min

Area (ha)= 1.60 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.100 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 14.909
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.254

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

 | DESIGN SCS(0003) | Area (ha)= 1.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.077 (i)
 TIME TO PEAK (hrs)= 3.300
 RUNOFF VOLUME (mm)= 14.816
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.252

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

 | DESIGN SCS(0002) | Area (ha)= 2.70 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.59

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.080 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 14.810
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.252

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

 | DESIGN SCS(0001) | Area (ha)= 2.30 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.27

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.116 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 14.828
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.253

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.116	3.20	14.83
+ ID2= 2 (0002):	2.70	0.080	3.60	14.81
ID = 3 (0015):	5.00	0.160	3.30	14.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.077	3.30	14.82
+ ID2= 2 (0015):	5.00	0.160	3.30	14.82
ID = 3 (0017):	6.70	0.237	3.30	14.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.100	3.20	14.91
+ ID2= 2 (0017):	6.70	0.237	3.30	14.82
ID = 3 (0018):	8.30	0.305	3.20	14.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)	Area (ha)=	0.19	Curve Number (CN) =	85.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 8.965
Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.022 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 26.297
TOTAL RAINFALL (mm)= 58.700
RUNOFF COEFFICIENT = 0.448

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

DESIGN SCS(0005)	Area (ha)=	0.41	Curve Number (CN) =	79.6
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.23		

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

Ia as 0.2xS (mm)= 13.019
 Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.032 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 18.888
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.322

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0005):	0.41	0.032	3.20	18.89
+ ID2= 2 (0006):	0.19	0.022	3.20	26.30
ID = 3 (0011):	0.60	0.053	3.20	21.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)= 2.60	Curve Number (CN) = 77.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
 Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.176 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 15.973
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.272

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.176	3.20	15.97
+ ID2= 2 (0011):	0.60	0.053	3.20	21.23
ID = 3 (0012):	3.20	0.229	3.20	16.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)= 0.21	Curve Number (CN) = 81.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.14	

Ia as 0.2xS (mm)= 11.916
 Unit Hyd Qpeak (cms)= 0.083

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

PEAK FLOW (cms)= 0.023 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 21.023
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.358

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

DESIGN SCS(0009) ID= 1 DT= 6.0 min	Area (ha)= 0.27 Ia (mm)= 0.2 S U.H. Tp(hrs)= 0.10	Curve Number (CN) = 76.0 # of Linear Res.(N)= 5.00
---------------------------------------	---	---

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.024 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 15.299
 TOTAL RAINFALL (mm)= 58.700
 RUNOFF COEFFICIENT = 0.261

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

ADD HYD (0013) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0008):	0.21	0.023	3.10	21.02
+ ID2= 2 (0009):	0.27	0.024	3.10	15.30
=====				
ID = 3 (0013):	0.48	0.047	3.10	17.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location C for Table 2-5

ADD HYD (0014) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0012):	3.20	0.229	3.20	16.96
+ ID2= 2 (0013):	0.48	0.047	3.10	17.80
=====				
ID = 3 (0014):	3.68	0.257	3.10	17.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location D for Table 2-6

RESERVOIR (0019) IN= 2---> OUT= 1 DT= 6.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.4620	0.0350
	0.0150	0.0050	0.5400	0.0420
	0.0600	0.0110	0.8860	0.0490
	0.1270	0.0160	1.4500	0.0570
	0.2410	0.0220	2.1700	0.0650
	0.3690	0.0290	0.0000	0.0000

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0014)	3.680	0.257	3.10	17.07
OUTFLOW: ID= 1 (0019)	3.680	0.167	3.30	17.05

PEAK FLOW REDUCTION [Qout/Qin] (%) = 64.85
 TIME SHIFT OF PEAK FLOW (min) = 12.00
 MAXIMUM STORAGE USED (ha.m.) = 0.0182

 ** SIMULATION NUMBER: 3 **

10 year - 6 hour

 | MASS STORM |
Ptotal= 70.80 mm

Filename: C:\Users\peter.dekker\AppData\Local\Temp\
 d6a98aa7-33ee-418a-93ae-3c5ffc369e12\ffa2bfa3
 Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME	RAIN	TIME	RAIN	'	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	'	hrs	mm/hr	hrs	mm/hr
0.10	3.19	1.60	5.10		3.10	95.30	4.60	4.81
0.20	3.26	1.70	5.38		3.20	19.05	4.70	4.60
0.30	3.19	1.80	5.81		3.30	16.64	4.80	4.46
0.40	3.19	1.90	6.23		3.40	14.37	4.90	4.18
0.50	3.19	2.00	6.58		3.50	12.25	5.00	4.04
0.60	3.26	2.10	7.08		3.60	9.84	5.10	3.75
0.70	3.26	2.20	7.65		3.70	8.43	5.20	3.75
0.80	3.40	2.30	8.64		3.80	8.00	5.30	3.61
0.90	3.61	2.40	9.63		3.90	7.36	5.40	3.47
1.00	3.82	2.50	10.62		4.00	6.87	5.50	3.40
1.10	3.89	2.60	11.54		4.10	6.37	5.60	3.40
1.20	4.11	2.70	23.79		4.20	6.02	5.70	3.33
1.30	4.46	2.80	47.72		4.30	5.59	5.80	3.33
1.40	4.60	2.90	76.53		4.40	5.45	5.90	3.19
1.50	4.81	3.00	137.35		4.50	5.17	6.00	3.12

 | DESIGN SCS(0004) |
ID= 1 DT= 6.0 min

Area (ha) = 1.60 Curve Number (CN) = 76.0
 Ia (mm) = 0.2 S # of Linear Res.(N) = 5.00
 U.H. Tp(hrs) = 0.19

Ia as 0.2xS (mm) = 16.042
 Unit Hyd Qpeak (cms) = 0.464

PEAK FLOW (cms) = 0.153 (i)
 TIME TO PEAK (hrs) = 3.200
 RUNOFF VOLUME (mm) = 22.364
 TOTAL RAINFALL (mm) = 70.800
 RUNOFF COEFFICIENT = 0.316

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

 | DESIGN SCS(0003) |
ID= 1 DT= 6.0 min

Area (ha) = 1.70 Curve Number (CN) = 76.0
 Ia (mm) = 0.2 S # of Linear Res.(N) = 5.00

U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.121 (i)
TIME TO PEAK (hrs)= 3.300
RUNOFF VOLUME (mm)= 22.225
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.314

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.126 (i)
TIME TO PEAK (hrs)= 3.600
RUNOFF VOLUME (mm)= 22.216
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.314

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.184 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 22.242
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.314

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.184	3.20	22.24
+ ID2= 2 (0002):	2.70	0.126	3.60	22.22
=====				
ID = 3 (0015):	5.00	0.254	3.30	22.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.121	3.30	22.22
+ ID2= 2 (0015):	5.00	0.254	3.30	22.23
ID = 3 (0017):	6.70	0.375	3.30	22.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.153	3.20	22.36
+ ID2= 2 (0017):	6.70	0.375	3.30	22.23
ID = 3 (0018):	8.30	0.488	3.20	22.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)	Area (ha)=	0.19	Curve Number (CN) =	85.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 8.965
Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.029 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 36.037
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.509

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

DESIGN SCS(0005)	Area (ha)=	0.41	Curve Number (CN) =	79.6
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.23		

Ia as 0.2xS (mm)= 13.019
Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.047 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 27.243
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.385

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

ID1= 1 (0005):	0.41	0.047	3.20	27.24
+ ID2= 2 (0006):	0.19	0.029	3.10	36.04
=====				
ID = 3 (0011):	0.60	0.076	3.20	30.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)= 2.60	Curve Number (CN) = 77.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.265 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 23.688
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.335

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

ADD HYD (0012)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0007):	2.60	0.265	3.20	23.69
+ ID2= 2 (0011):	0.60	0.076	3.20	30.03
=====				
ID = 3 (0012):	3.20	0.341	3.20	24.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)= 0.21	Curve Number (CN) = 81.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.14	

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.033 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 29.902
TOTAL RAINFALL (mm)= 70.800
RUNOFF COEFFICIENT = 0.422

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

DESIGN SCS(0009)	Area (ha)= 0.27	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.10	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.149

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

PEAK FLOW (cms)= 0.035 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 22.949
 TOTAL RAINFALL (mm)= 70.800
 RUNOFF COEFFICIENT = 0.324

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

ADD HYD (0013) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0008):	0.21	0.033	3.10	29.90
+ ID2= 2 (0009):	0.27	0.035	3.10	22.95
ID = 3 (0013):	0.48	0.069	3.10	25.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location C for Table 2-5

ADD HYD (0014) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0012):	3.20	0.341	3.20	24.88
+ ID2= 2 (0013):	0.48	0.069	3.10	25.99
ID = 3 (0014):	3.68	0.395	3.10	25.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location D for Table 2-6

RESERVOIR (0019) IN= 2---> OUT= 1 DT= 6.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.4620	0.0350
	0.0150	0.0050	0.5400	0.0420
	0.0600	0.0110	0.8860	0.0490
	0.1270	0.0160	1.4500	0.0570
	0.2410	0.0220	2.1700	0.0650
	0.3690	0.0290	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0014)	3.680	0.395	3.10	25.02
OUTFLOW: ID= 1 (0019)	3.680	0.281	3.30	25.00

PEAK FLOW REDUCTION [Qout/Qin] (%)= 71.14
 TIME SHIFT OF PEAK FLOW (min)= 12.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0248

 ** SIMULATION NUMBER: 4 **

25 year - 6 hour

Ptotal= 86.10 mm

Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs

Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	3.87	1.60	6.20	3.10	115.89	4.60	5.85
0.20	3.96	1.70	6.54	3.20	23.16	4.70	5.60
0.30	3.87	1.80	7.06	3.30	20.23	4.80	5.42
0.40	3.87	1.90	7.58	3.40	17.48	4.90	5.08
0.50	3.87	2.00	8.01	3.50	14.90	5.00	4.91
0.60	3.96	2.10	8.61	3.60	11.97	5.10	4.56
0.70	3.96	2.20	9.30	3.70	10.25	5.20	4.56
0.80	4.13	2.30	10.50	3.80	9.73	5.30	4.39
0.90	4.39	2.40	11.71	3.90	8.95	5.40	4.22
1.00	4.65	2.50	12.91	4.00	8.35	5.50	4.13
1.10	4.74	2.60	14.03	4.10	7.75	5.60	4.13
1.20	4.99	2.70	28.93	4.20	7.32	5.70	4.05
1.30	5.42	2.80	58.03	4.30	6.80	5.80	4.05
1.40	5.60	2.90	93.07	4.40	6.63	5.90	3.87
1.50	5.85	3.00	167.03	4.50	6.29	6.00	3.79

DESIGN SCS(0004) | Area (ha)= 1.60 | Curve Number (CN) = 76.0
 ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S | # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.227 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 32.880
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.382

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

DESIGN SCS(0003) | Area (ha)= 1.70 | Curve Number (CN) = 76.0
 ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S | # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.184 (i)
 TIME TO PEAK (hrs)= 3.300
 RUNOFF VOLUME (mm)= 32.675
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.380

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

DESIGN SCS(0002) | Area (ha)= 2.70 | Curve Number (CN) = 76.0
 ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S | # of Linear Res.(N)= 5.00

U.H. Tp(hrs)= 0.59

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.191 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 32.662
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.379

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.282 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 32.701
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.380

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

ADD HYD (0015)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):	2.30	0.282	3.20	32.70
+ ID2= 2 (0002):	2.70	0.191	3.60	32.66
ID = 3 (0015):	5.00	0.387	3.30	32.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):	1.70	0.184	3.30	32.68
+ ID2= 2 (0015):	5.00	0.387	3.30	32.68
ID = 3 (0017):	6.70	0.571	3.30	32.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):	1.60	0.227	3.10	32.88

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

+ ID2= 2 (0017):	6.70	0.571	3.30	32.68
ID = 3 (0018):	8.30	0.750	3.20	32.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006) ID= 1 DT= 6.0 min	Area (ha)= 0.19	Curve Number (CN) = 85.0
	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.20	

Ia as 0.2xS (mm)= 8.965
Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.041 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 49.042
TOTAL RAINFALL (mm)= 86.100
RUNOFF COEFFICIENT = 0.570

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

DESIGN SCS(0005) ID= 1 DT= 6.0 min	Area (ha)= 0.41	Curve Number (CN) = 79.6
	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.23	

Ia as 0.2xS (mm)= 13.019
Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.067 (i)
TIME TO PEAK (hrs)= 3.200
RUNOFF VOLUME (mm)= 38.756
TOTAL RAINFALL (mm)= 86.100
RUNOFF COEFFICIENT = 0.450

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

ADD HYD (0011) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0005):	0.41	0.067	3.20	38.76
+ ID2= 2 (0006):	0.19	0.041	3.10	49.04
ID = 3 (0011):	0.60	0.107	3.20	42.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007) ID= 1 DT= 6.0 min	Area (ha)= 2.60	Curve Number (CN) = 77.0
	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.391 (i)

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 34.497
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.401

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.391	3.10	34.50
+ ID2= 2 (0011):	0.60	0.107	3.20	42.01
=====				
ID = 3 (0012):	3.20	0.493	3.20	35.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)=	0.21	Curve Number (CN) =	81.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.14		

Ia as 0.2xS (mm)= 11.916
 Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.047 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 42.031
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.488

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

DESIGN SCS(0009)	Area (ha)=	0.27	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.10		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.051 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 33.740
 TOTAL RAINFALL (mm)= 86.100
 RUNOFF COEFFICIENT = 0.392

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

ADD HYD (0013)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0008):	0.21	0.047	3.10	42.03
+ ID2= 2 (0009):	0.27	0.051	3.10	33.74
=====				

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt
 ID = 3 (0013): 0.48 0.098 3.10 37.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location C for Table 2-5

ADD HYD (0014)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0012):	3.20	0.493	3.20	35.91
+ ID2= 2 (0013):	0.48	0.098	3.10	37.37
===== ID = 3 (0014):	3.68	0.588	3.10	36.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location D for Table 2-6

RESERVOIR (0019)	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
IN= 2---> OUT= 1				
DT= 6.0 min				
	0.0000	0.0000	0.4620	0.0350
	0.0150	0.0050	0.5400	0.0420
	0.0600	0.0110	0.8860	0.0490
	0.1270	0.0160	1.4500	0.0570
	0.2410	0.0220	2.1700	0.0650
	0.3690	0.0290	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0014)	3.680	0.588	3.10	36.10
OUTFLOW: ID= 1 (0019)	3.680	0.424	3.30	36.08

PEAK FLOW REDUCTION [Qout/Qin](%)= 72.08
 TIME SHIFT OF PEAK FLOW (min)= 12.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0338

 ** SIMULATION NUMBER: 5 **

50 year - 6 hour

MASS STORM	Filename:
Ptotal= 97.50 mm	C:\Users\peter.dekker\AppData\Local\Temp\d6a98aa7-33ee-418a-93ae-3c5ffc369e12\6d8912e9
	Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	4.39	1.60	7.02	3.10	131.24	4.60	6.63
0.20	4.49	1.70	7.41	3.20	26.23	4.70	6.34
0.30	4.39	1.80	8.00	3.30	22.91	4.80	6.14
0.40	4.39	1.90	8.58	3.40	19.79	4.90	5.75
0.50	4.39	2.00	9.07	3.50	16.87	5.00	5.56
0.60	4.48	2.10	9.75	3.60	13.55	5.10	5.17
0.70	4.49	2.20	10.53	3.70	11.60	5.20	5.17
0.80	4.68	2.30	11.89	3.80	11.02	5.30	4.97

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt							
0.90	4.97	2.40	13.26	3.90	10.14	5.40	4.78
1.00	5.26	2.50	14.62	4.00	9.46	5.50	4.68
1.10	5.36	2.60	15.89	4.10	8.78	5.60	4.68
1.20	5.66	2.70	32.76	4.20	8.29	5.70	4.58
1.30	6.14	2.80	65.72	4.30	7.70	5.80	4.58
1.40	6.34	2.90	105.40	4.40	7.51	5.90	4.39
1.50	6.63	3.00	189.15	4.50	7.12	6.00	4.29

DESIGN SCS(0004)	Area (ha)= 1.60	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.291 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 41.317
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.424

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.234 (i)
TIME TO PEAK (hrs)= 3.300
RUNOFF VOLUME (mm)= 41.060
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.421

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.244 (i)
TIME TO PEAK (hrs)= 3.600
RUNOFF VOLUME (mm)= 41.044
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.421

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00

U.H. Tp(hrs)= 0.27

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.360 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 41.092
 TOTAL RAINFALL (mm)= 97.500
 RUNOFF COEFFICIENT = 0.421

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.360	3.20	41.09
+ ID2= 2 (0002):	2.70	0.244	3.60	41.04
ID = 3 (0015):	5.00	0.495	3.30	41.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.234	3.30	41.06
+ ID2= 2 (0015):	5.00	0.495	3.30	41.07
ID = 3 (0017):	6.70	0.729	3.30	41.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.291	3.10	41.32
+ ID2= 2 (0017):	6.70	0.729	3.30	41.06
ID = 3 (0018):	8.30	0.961	3.20	41.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)	Area (ha)=	0.19	Curve Number (CN) =	85.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 8.965
 Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.049 (i)
 TIME TO PEAK (hrs)= 3.100

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

RUNOFF VOLUME (mm)= 59.086
 TOTAL RAINFALL (mm)= 97.500
 RUNOFF COEFFICIENT = 0.606

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

DESIGN SCS(0005)	Area (ha)= 0.41	Curve Number (CN) = 79.6
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.23	

Ia as 0.2xS (mm)= 13.019
 Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.083 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 47.844
 TOTAL RAINFALL (mm)= 97.500
 RUNOFF COEFFICIENT = 0.491

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0005):	0.41	0.083	3.20	47.84
+ ID2= 2 (0006):	0.19	0.049	3.10	59.09
ID = 3 (0011):	0.60	0.130	3.20	51.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)= 2.60	Curve Number (CN) = 77.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
 Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.497 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 43.129
 TOTAL RAINFALL (mm)= 97.500
 RUNOFF COEFFICIENT = 0.442

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.497	3.10	43.13
+ ID2= 2 (0011):	0.60	0.130	3.20	51.40
ID = 3 (0012):	3.20	0.618	3.10	44.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| DESIGN SCS(0008) | Area (ha)= 0.21 Curve Number (CN) = 81.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.14
    
```

```

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083
    
```

```

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 51.548
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.529
    
```

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

```

-----
| DESIGN SCS(0009) | Area (ha)= 0.27 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.10
    
```

```

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.149
    
```

```

PEAK FLOW (cms)= 0.064 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 42.397
TOTAL RAINFALL (mm)= 97.500
RUNOFF COEFFICIENT = 0.435
    
```

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

```

-----
| ADD HYD (0013) |
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
+ ID1= 1 (0008):  0.21  0.057  3.10  51.55
+ ID2= 2 (0009):  0.27  0.064  3.10  42.40
-----
ID = 3 (0013):  0.48  0.121  3.10  46.40
    
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD (0014) |
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
+ ID1= 1 (0012):  3.20  0.618  3.10  44.68
+ ID2= 2 (0013):  0.48  0.121  3.10  46.40
-----
ID = 3 (0014):  3.68  0.739  3.10  44.90
    
```

reference location C for Table 2-5

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR (0019)
 IN= 2----> OUT= 1
 DT= 6.0 min

reference location D for Table 2-6

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.4620	0.0350
0.0150	0.0050	0.5400	0.0420
0.0600	0.0110	0.8860	0.0490
0.1270	0.0160	1.4500	0.0570
0.2410	0.0220	2.1700	0.0650
0.3690	0.0290	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0014)	3.680	0.739	3.10	44.90
OUTFLOW: ID= 1 (0019)	3.680	0.519	3.30	44.88

PEAK FLOW REDUCTION [Qout/Qin] (%) = 70.12
 TIME SHIFT OF PEAK FLOW (min) = 12.00
 MAXIMUM STORAGE USED (ha.m.) = 0.0416

 ** SIMULATION NUMBER: 6 **

100 year - 6 hour

MASS STORM
 Ptotal=108.80 mm

Filename: C:\Users\peter.dekker\AppData\Local\Temp\d6a98aa7-33ee-418a-93ae-3c5ffc369e12\341afc73
 Comments: Type II 6-hr Tabular

Duration of storm = 6.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	4.90	1.60	7.83	3.10	146.44	4.60	7.40
0.20	5.00	1.70	8.27	3.20	29.27	4.70	7.07
0.30	4.90	1.80	8.92	3.30	25.57	4.80	6.85
0.40	4.90	1.90	9.57	3.40	22.09	4.90	6.42
0.50	4.90	2.00	10.12	3.50	18.82	5.00	6.20
0.60	5.00	2.10	10.88	3.60	15.12	5.10	5.77
0.70	5.00	2.20	11.75	3.70	12.95	5.20	5.77
0.80	5.22	2.30	13.27	3.80	12.29	5.30	5.55
0.90	5.55	2.40	14.80	3.90	11.32	5.40	5.33
1.00	5.88	2.50	16.32	4.00	10.55	5.50	5.22
1.10	5.98	2.60	17.73	4.10	9.79	5.60	5.22
1.20	6.31	2.70	36.56	4.20	9.25	5.70	5.11
1.30	6.85	2.80	73.33	4.30	8.60	5.80	5.11
1.40	7.07	2.90	117.61	4.40	8.38	5.90	4.90
1.50	7.40	3.00	211.07	4.50	7.94	6.00	4.79

DESIGN SCS(0004)
 ID= 1 DT= 6.0 min

Area (ha) = 1.60 Curve Number (CN) = 76.0
 Ia (mm) = 0.2 S # of Linear Res.(N) = 5.00
 U.H. Tp(hrs) = 0.19

Ia as 0.2xS (mm) = 16.042
 Unit Hyd Qpeak (cms) = 0.464

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

PEAK FLOW (cms)= 0.357 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 50.075
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.460

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.286 (i)
 TIME TO PEAK (hrs)= 3.300
 RUNOFF VOLUME (mm)= 49.763
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.457

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.298 (i)
 TIME TO PEAK (hrs)= 3.600
 RUNOFF VOLUME (mm)= 49.744
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.457

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.440 (i)
 TIME TO PEAK (hrs)= 3.200
 RUNOFF VOLUME (mm)= 49.803
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.458

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

| ADD HYD (0015) |

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	2.30	0.440	3.20	49.80
+ ID2= 2 (0002):	2.70	0.298	3.60	49.74
<hr/>				
ID = 3 (0015):	5.00	0.607	3.30	49.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0003):	1.70	0.286	3.30	49.76
+ ID2= 2 (0015):	5.00	0.607	3.30	49.77
<hr/>				
ID = 3 (0017):	6.70	0.893	3.30	49.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0004):	1.60	0.357	3.10	50.07
+ ID2= 2 (0017):	6.70	0.893	3.30	49.77
<hr/>				
ID = 3 (0018):	8.30	1.180	3.20	49.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)	Area (ha)=	0.19	Curve Number (CN) =	85.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 8.965
Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 69.263
TOTAL RAINFALL (mm)= 108.800
RUNOFF COEFFICIENT = 0.637

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

DESIGN SCS(0005)	Area (ha)=	0.41	Curve Number (CN) =	79.6
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.23		

Ia as 0.2xS (mm)= 13.019
Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.099 (i)
TIME TO PEAK (hrs)= 3.200

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

RUNOFF VOLUME (mm)= 57.179
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.526

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0005):	0.41	0.099	3.20	57.18
+ ID2= 2 (0006):	0.19	0.057	3.10	69.26
ID = 3 (0011):	0.60	0.154	3.20	61.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)= 2.60	Curve Number (CN) = 77.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
 Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.606 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 52.062
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.479

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.606	3.10	52.06
+ ID2= 2 (0011):	0.60	0.154	3.20	61.01
ID = 3 (0012):	3.20	0.751	3.10	53.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)= 0.21	Curve Number (CN) = 81.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.14	

Ia as 0.2xS (mm)= 11.916
 Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.068 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 61.288
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.563

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

DESIGN SCS(0009)	Area (ha)=	0.27	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.10		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.077 (i)
 TIME TO PEAK (hrs)= 3.100
 RUNOFF VOLUME (mm)= 51.384
 TOTAL RAINFALL (mm)= 108.800
 RUNOFF COEFFICIENT = 0.472

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

ADD HYD (0013)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0008):	0.21	0.068	3.10	61.29
+ ID2= 2 (0009):	0.27	0.077	3.10	51.38
ID = 3 (0013):	0.48	0.145	3.10	55.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location C for Table 2-5

ADD HYD (0014)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0012):	3.20	0.751	3.10	53.74
+ ID2= 2 (0013):	0.48	0.145	3.10	55.72
ID = 3 (0014):	3.68	0.895	3.10	54.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location D for Table 2-6

RESERVOIR (0019)	OUTFLOW	STORAGE	OUTFLOW	STORAGE
IN= 2---> OUT= 1	(cms)	(ha.m.)	(cms)	(ha.m.)
DT= 6.0 min	0.0000	0.0000	0.4620	0.0350
	0.0150	0.0050	0.5400	0.0420
	0.0600	0.0110	0.8860	0.0490
	0.1270	0.0160	1.4500	0.0570
	0.2410	0.0220	2.1700	0.0650
	0.3690	0.0290	0.0000	0.0000
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0014)	3.680	0.895	3.10	54.00
OUTFLOW: ID= 1 (0019)	3.680	0.675	3.20	53.98

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

PEAK FLOW REDUCTION [Qout/Qin](%)= 75.43
 TIME SHIFT OF PEAK FLOW (min)= 6.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0471

 ** SIMULATION NUMBER: 7 **

2 year - 12 hour

 | MASS STORM |
Ptotal= 43.80 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 d6a98aa7-33ee-418a-93ae-3c5fffc369e12\f766a459
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	0.92	3.10	1.66	6.10	9.90	9.10	1.58
0.20	0.96	3.20	1.66	6.20	8.67	9.20	1.53
0.30	0.96	3.30	1.66	6.30	7.49	9.30	1.45
0.40	1.01	3.40	1.66	6.40	6.35	9.40	1.40
0.50	0.92	3.50	1.66	6.50	5.08	9.50	1.40
0.60	1.05	3.60	1.71	6.60	4.38	9.60	1.36
0.70	1.01	3.70	1.80	6.70	4.16	9.70	1.36
0.80	0.96	3.80	1.84	6.80	3.85	9.80	1.31
0.90	1.05	3.90	2.01	6.90	3.55	9.90	1.23
1.00	1.05	4.00	2.01	7.00	3.33	10.00	1.18
1.10	1.05	4.10	2.15	7.10	3.15	10.10	1.23
1.20	1.01	4.20	2.28	7.20	2.89	10.20	1.14
1.30	1.09	4.30	2.41	7.30	2.80	10.30	1.18
1.40	1.09	4.40	2.50	7.40	2.72	10.40	1.18
1.50	1.10	4.50	2.63	7.50	2.50	10.50	1.14
1.60	1.10	4.60	2.85	7.60	2.41	10.60	1.14
1.70	1.09	4.70	3.02	7.70	2.28	10.70	1.09
1.80	1.10	4.80	3.20	7.80	2.19	10.80	1.09
1.90	1.14	4.90	3.46	7.90	2.10	10.90	1.09
2.00	1.18	5.00	3.64	8.00	1.97	11.00	1.09
2.10	1.14	5.10	4.03	8.10	1.93	11.10	1.01
2.20	1.23	5.20	4.47	8.20	1.88	11.20	1.05
2.30	1.27	5.30	4.99	8.30	1.80	11.30	1.05
2.40	1.36	5.40	5.52	8.40	1.80	11.40	1.01
2.50	1.36	5.50	6.00	8.50	1.75	11.50	1.01
2.60	1.45	5.60	12.40	8.60	1.75	11.60	1.01
2.70	1.49	5.70	24.79	8.70	1.71	11.70	1.01
2.80	1.53	5.80	39.77	8.80	1.66	11.80	0.92
2.90	1.58	5.90	71.39	8.90	1.62	11.90	1.01
3.00	1.66	6.00	49.54	9.00	1.53	12.00	0.92

 | DESIGN SCS(0004) |
ID= 1 DT= 6.0 min

Area (ha)= 1.60 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.035 (i)
 TIME TO PEAK (hrs)= 6.100

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

RUNOFF VOLUME (mm)= 7.184
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.164

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.026 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 7.139
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.163

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.027 (i)
 TIME TO PEAK (hrs)= 6.600
 RUNOFF VOLUME (mm)= 7.136
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.163

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.039 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 7.145
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.163

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

ADD HYD (0015)
1 + 2 = 3

AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
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VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

ID1= 1 (0001):	2.30	0.039	6.20	7.14
+ ID2= 2 (0002):	2.70	0.027	6.60	7.14
=====				
ID = 3 (0015):	5.00	0.053	6.20	7.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):	1.70	0.026	6.20	7.14
+ ID2= 2 (0015):	5.00	0.053	6.20	7.14
=====				
ID = 3 (0017):	6.70	0.079	6.20	7.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):	1.60	0.035	6.10	7.18
+ ID2= 2 (0017):	6.70	0.079	6.20	7.14
=====				
ID = 3 (0018):	8.30	0.104	6.20	7.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)		Area (ha)=	0.19	Curve Number (CN) =	85.0
ID= 1 DT= 6.0 min		Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
		U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 8.965
 Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.010 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 15.313
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.350

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

DESIGN SCS(0005)		Area (ha)=	0.41	Curve Number (CN) =	79.6
ID= 1 DT= 6.0 min		Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
		U.H. Tp(hrs)=	0.23		

Ia as 0.2xS (mm)= 13.019
 Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.013 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 9.908
 TOTAL RAINFALL (mm)= 43.800

RUNOFF COEFFICIENT = 0.226

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0005):	0.41	0.013	6.10	9.91
+ ID2= 2 (0006):	0.19	0.010	6.10	15.31
ID = 3 (0011):	0.60	0.023	6.10	11.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)= 2.60	Curve Number (CN) = 77.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.064 (i)
TIME TO PEAK (hrs)= 6.100
RUNOFF VOLUME (mm)= 7.894
TOTAL RAINFALL (mm)= 43.800
RUNOFF COEFFICIENT = 0.180

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.064	6.10	7.89
+ ID2= 2 (0011):	0.60	0.023	6.10	11.62
ID = 3 (0012):	3.20	0.087	6.10	8.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)= 0.21	Curve Number (CN) = 81.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.14	

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.010 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 11.354
TOTAL RAINFALL (mm)= 43.800
RUNOFF COEFFICIENT = 0.259

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

DESIGN SCS(0009)	Area (ha)= 0.27	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.10	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.009 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 7.371
 TOTAL RAINFALL (mm)= 43.800
 RUNOFF COEFFICIENT = 0.168

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

ADD HYD (0013)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0008):	0.21	0.010	6.00	11.35
+ ID2= 2 (0009):	0.27	0.009	6.00	7.37
=====				
ID = 3 (0013):	0.48	0.019	6.00	9.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0014)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0012):	3.20	0.087	6.10	8.59
+ ID2= 2 (0013):	0.48	0.019	6.00	9.11
=====				
ID = 3 (0014):	3.68	0.098	6.10	8.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR (0019)				
IN= 2---> OUT= 1				
DT= 6.0 min				
	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.4620	0.0350
	0.0150	0.0050	0.5400	0.0420
	0.0600	0.0110	0.8860	0.0490
	0.1270	0.0160	1.4500	0.0570
	0.2410	0.0220	2.1700	0.0650
	0.3690	0.0290	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0014)	3.680	0.098	6.10	8.66
OUTFLOW: ID= 1 (0019)	3.680	0.042	6.30	8.64

PEAK FLOW REDUCTION [Qout/Qin] (%)= 42.44

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt
 TIME SHIFT OF PEAK FLOW (min)= 12.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0086

 ** SIMULATION NUMBER: 8 **

5 year - 12 hour

 | MASS STORM |
Ptotal= 61.90 mm

Filename: C:\Users\peter.dekker\AppData
 ata\Local\Temp\
 d6a98aa7-33ee-418a-93ae-3c5ffc369e12\a9e091aa
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	'	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.30	3.10	2.35		6.10	13.99	9.10	2.23
0.20	1.36	3.20	2.35		6.20	12.26	9.20	2.17
0.30	1.36	3.30	2.35		6.30	10.58	9.30	2.04
0.40	1.42	3.40	2.35		6.40	8.98	9.40	1.98
0.50	1.30	3.50	2.35		6.50	7.18	9.50	1.98
0.60	1.49	3.60	2.41		6.60	6.19	9.60	1.92
0.70	1.42	3.70	2.54		6.70	5.88	9.70	1.92
0.80	1.36	3.80	2.60		6.80	5.45	9.80	1.86
0.90	1.49	3.90	2.85		6.90	5.01	9.90	1.73
1.00	1.49	4.00	2.85		7.00	4.70	10.00	1.67
1.10	1.49	4.10	3.03		7.10	4.46	10.10	1.73
1.20	1.42	4.20	3.22		7.20	4.09	10.20	1.61
1.30	1.55	4.30	3.40		7.30	3.96	10.30	1.67
1.40	1.55	4.40	3.53		7.40	3.84	10.40	1.67
1.50	1.55	4.50	3.71		7.50	3.53	10.50	1.61
1.60	1.55	4.60	4.02		7.60	3.40	10.60	1.61
1.70	1.55	4.70	4.27		7.70	3.22	10.70	1.55
1.80	1.55	4.80	4.52		7.80	3.09	10.80	1.55
1.90	1.61	4.90	4.89		7.90	2.97	10.90	1.55
2.00	1.67	5.00	5.14		8.00	2.79	11.00	1.55
2.10	1.61	5.10	5.69		8.10	2.72	11.10	1.42
2.20	1.73	5.20	6.31		8.20	2.66	11.20	1.49
2.30	1.80	5.30	7.06		8.30	2.54	11.30	1.49
2.40	1.92	5.40	7.80		8.40	2.54	11.40	1.42
2.50	1.92	5.50	8.48		8.50	2.48	11.50	1.42
2.60	2.04	5.60	17.52		8.60	2.48	11.60	1.42
2.70	2.10	5.70	35.04		8.70	2.41	11.70	1.42
2.80	2.17	5.80	56.21		8.80	2.35	11.80	1.30
2.90	2.23	5.90	100.90		8.90	2.29	11.90	1.42
3.00	2.35	6.00	70.01		9.00	2.17	12.00	1.30

 | DESIGN SCS(0004) |
ID= 1 DT= 6.0 min

Area (ha)= 1.60 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.093 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 16.792
 TOTAL RAINFALL (mm)= 61.900

RUNOFF COEFFICIENT = 0.271

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.073 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 16.688
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.270

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.076 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 16.681
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.269

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.111 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 16.701
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.270

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

ADD HYD (0015)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	2.30	0.111	6.10	16.70
+ ID2= 2 (0002):	2.70	0.076	6.50	16.68

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

=====
 ID = 3 (0015): 5.00 0.154 6.20 16.69
 =====

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | ADD HYD (0017) |
1 + 2 = 3
 AREA QPEAK TPEAK R.V.
 (ha) (cms) (hrs) (mm)
 ID1= 1 (0003): 1.70 0.073 6.20 16.69
 + ID2= 2 (0015): 5.00 0.154 6.20 16.69

 ID = 3 (0017): 6.70 0.227 6.20 16.69
 =====

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | ADD HYD (0018) |
1 + 2 = 3
 AREA QPEAK TPEAK R.V.
 (ha) (cms) (hrs) (mm)
 ID1= 1 (0004): 1.60 0.093 6.10 16.79
 + ID2= 2 (0017): 6.70 0.227 6.20 16.69

 ID = 3 (0018): 8.30 0.295 6.10 16.71
 =====

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | DESIGN SCS(0006) | Area (ha)= 0.19 Curve Number (CN) = 85.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.20

Ia as 0.2xS (mm)= 8.965
 Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.020 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 28.813
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.465

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

 | DESIGN SCS(0005) | Area (ha)= 0.41 Curve Number (CN) = 79.6
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.23

Ia as 0.2xS (mm)= 13.019
 Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.030 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 21.020
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.340

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0005):	0.41	0.030	6.10	21.02
+ ID2= 2 (0006):	0.19	0.020	6.00	28.81
ID = 3 (0011):	0.60	0.049	6.10	23.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)=	2.60	Curve Number (CN) =	77.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.19		

Ia as 0.2xS (mm)= 15.174
 Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.163 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 17.928
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.290

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.163	6.10	17.93
+ ID2= 2 (0011):	0.60	0.049	6.10	23.49
ID = 3 (0012):	3.20	0.212	6.10	18.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)=	0.21	Curve Number (CN) =	81.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.14		

Ia as 0.2xS (mm)= 11.916
 Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.022 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 23.296
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.376

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

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

DESIGN SCS(0009)	Area (ha)=	0.27	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.10		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.021 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 17.231
 TOTAL RAINFALL (mm)= 61.900
 RUNOFF COEFFICIENT = 0.278

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

ADD HYD (0013)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0008):	0.21	0.022	6.00	23.30
+ ID2= 2 (0009):	0.27	0.021	6.00	17.23
ID = 3 (0013):	0.48	0.043	6.00	19.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0014)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0012):	3.20	0.212	6.10	18.97
+ ID2= 2 (0013):	0.48	0.043	6.00	19.88
ID = 3 (0014):	3.68	0.245	6.00	19.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR (0019)	OUTFLOW	STORAGE	OUTFLOW	STORAGE
IN= 2---> OUT= 1	(cms)	(ha.m.)	(cms)	(ha.m.)
DT= 6.0 min	0.0000	0.0000	0.4620	0.0350
	0.0150	0.0050	0.5400	0.0420
	0.0600	0.0110	0.8860	0.0490
	0.1270	0.0160	1.4500	0.0570
	0.2410	0.0220	2.1700	0.0650
	0.3690	0.0290	0.0000	0.0000

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0014)	3.680	0.245	6.00	19.09
OUTFLOW: ID= 1 (0019)	3.680	0.158	6.20	19.07

PEAK FLOW REDUCTION [Qout/Qin](%)= 64.26
 TIME SHIFT OF PEAK FLOW (min)= 12.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0177

 ** SIMULATION NUMBER: 9 **

10 year - 12 hour

 | MASS STORM |
Ptotal= 73.90 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 d6a98aa7-33ee-418a-93ae-3c5ffc369e12\42e5721b
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.55	3.10	2.81	6.10	16.70	9.10	2.66
0.20	1.63	3.20	2.81	6.20	14.63	9.20	2.59
0.30	1.63	3.30	2.81	6.30	12.64	9.30	2.44
0.40	1.70	3.40	2.81	6.40	10.72	9.40	2.36
0.50	1.55	3.50	2.81	6.50	8.57	9.50	2.36
0.60	1.77	3.60	2.88	6.60	7.39	9.60	2.29
0.70	1.70	3.70	3.03	6.70	7.02	9.70	2.29
0.80	1.63	3.80	3.10	6.80	6.50	9.80	2.22
0.90	1.77	3.90	3.40	6.90	5.99	9.90	2.07
1.00	1.77	4.00	3.40	7.00	5.62	10.00	2.00
1.10	1.77	4.10	3.62	7.10	5.32	10.10	2.07
1.20	1.70	4.20	3.84	7.20	4.88	10.20	1.92
1.30	1.85	4.30	4.06	7.30	4.73	10.30	2.00
1.40	1.85	4.40	4.21	7.40	4.58	10.40	2.00
1.50	1.85	4.50	4.43	7.50	4.21	10.50	1.92
1.60	1.85	4.60	4.80	7.60	4.06	10.60	1.92
1.70	1.85	4.70	5.10	7.70	3.84	10.70	1.85
1.80	1.85	4.80	5.39	7.80	3.69	10.80	1.85
1.90	1.92	4.90	5.84	7.90	3.55	10.90	1.85
2.00	2.00	5.00	6.13	8.00	3.33	11.00	1.85
2.10	1.92	5.10	6.80	8.10	3.25	11.10	1.70
2.20	2.07	5.20	7.54	8.20	3.18	11.20	1.77
2.30	2.14	5.30	8.42	8.30	3.03	11.30	1.77
2.40	2.29	5.40	9.31	8.40	3.03	11.40	1.70
2.50	2.29	5.50	10.12	8.50	2.96	11.50	1.70
2.60	2.44	5.60	20.91	8.60	2.96	11.60	1.70
2.70	2.51	5.70	41.83	8.70	2.88	11.70	1.70
2.80	2.59	5.80	67.10	8.80	2.81	11.80	1.55
2.90	2.66	5.90	120.46	8.90	2.73	11.90	1.70
3.00	2.81	6.00	83.58	9.00	2.59	12.00	1.55

 | DESIGN SCS(0004) |
ID= 1 DT= 6.0 min

Area (ha)= 1.60 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464
 PEAK FLOW (cms)= 0.138 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 24.407
 TOTAL RAINFALL (mm)= 73.900
 RUNOFF COEFFICIENT = 0.330

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

```

-----
| DESIGN SCS(0003) | Area (ha)= 1.70 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.112 (i)
TIME TO PEAK (hrs)= 6.200
RUNOFF VOLUME (mm)= 24.255
TOTAL RAINFALL (mm)= 73.900
RUNOFF COEFFICIENT = 0.328
    
```

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

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-----
| DESIGN SCS(0002) | Area (ha)= 2.70 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.59

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.117 (i)
TIME TO PEAK (hrs)= 6.500
RUNOFF VOLUME (mm)= 24.246
TOTAL RAINFALL (mm)= 73.900
RUNOFF COEFFICIENT = 0.328
    
```

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

```

-----
| DESIGN SCS(0001) | Area (ha)= 2.30 Curve Number (CN) = 76.0
| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
-----
U.H. Tp(hrs)= 0.27

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.171 (i)
TIME TO PEAK (hrs)= 6.100
RUNOFF VOLUME (mm)= 24.274
TOTAL RAINFALL (mm)= 73.900
RUNOFF COEFFICIENT = 0.328
    
```

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

```

-----
| ADD HYD (0015) |
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 1 (0001):  2.30    0.171    6.10    24.27
+ ID2= 2 (0002):  2.70    0.117    6.50    24.25
=====
ID = 3 (0015):  5.00    0.237    6.20    24.26
    
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0003):	1.70	0.112	6.20	24.26
+ ID2= 2 (0015):	5.00	0.237	6.20	24.26
ID = 3 (0017):	6.70	0.349	6.20	24.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0004):	1.60	0.138	6.10	24.41
+ ID2= 2 (0017):	6.70	0.349	6.20	24.26
ID = 3 (0018):	8.30	0.457	6.10	24.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006) ID= 1 DT= 6.0 min	Area (ha)= 0.19	Curve Number (CN) = 85.0
	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.20	

Ia as 0.2xS (mm)= 8.965
Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.027 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 38.617
TOTAL RAINFALL (mm)= 73.900
RUNOFF COEFFICIENT = 0.523

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

DESIGN SCS(0005) ID= 1 DT= 6.0 min	Area (ha)= 0.41	Curve Number (CN) = 79.6
	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.23	

Ia as 0.2xS (mm)= 13.019
Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.042 (i)
TIME TO PEAK (hrs)= 6.100
RUNOFF VOLUME (mm)= 29.501
TOTAL RAINFALL (mm)= 73.900
RUNOFF COEFFICIENT = 0.399

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0005):	0.41	0.042	6.10	29.50
+ ID2= 2 (0006):	0.19	0.027	6.00	38.62
ID = 3 (0011):	0.60	0.069	6.10	32.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)= 2.60	Curve Number (CN) = 77.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.240 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 25.794
TOTAL RAINFALL (mm)= 73.900
RUNOFF COEFFICIENT = 0.349

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.240	6.00	25.79
+ ID2= 2 (0011):	0.60	0.069	6.10	32.39
ID = 3 (0012):	3.20	0.307	6.10	27.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)= 0.21	Curve Number (CN) = 81.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.14	

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 32.288
TOTAL RAINFALL (mm)= 73.900
RUNOFF COEFFICIENT = 0.437

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

DESIGN SCS(0009)	Area (ha)= 0.27	Curve Number (CN) = 76.0
------------------	-----------------	--------------------------

| ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 ----- U.H. Tp(hrs)= 0.10

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.031 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 25.045
 TOTAL RAINFALL (mm)= 73.900
 RUNOFF COEFFICIENT = 0.339

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

| ADD HYD (0013) |
 | 1 + 2 = 3 |

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0008):	0.21	0.030	6.00	32.29
+ ID2= 2 (0009):	0.27	0.031	6.00	25.05
ID = 3 (0013):	0.48	0.061	6.00	28.21

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0014) |
 | 1 + 2 = 3 |

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0012):	3.20	0.307	6.10	27.03
+ ID2= 2 (0013):	0.48	0.061	6.00	28.21
ID = 3 (0014):	3.68	0.365	6.00	27.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| RESERVOIR (0019) |
 | IN= 2---> OUT= 1 |
 | DT= 6.0 min |

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.4620	0.0350
0.0150	0.0050	0.5400	0.0420
0.0600	0.0110	0.8860	0.0490
0.1270	0.0160	1.4500	0.0570
0.2410	0.0220	2.1700	0.0650
0.3690	0.0290	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0014)	3.680	0.365	6.00	27.18
OUTFLOW: ID= 1 (0019)	3.680	0.258	6.20	27.16

PEAK FLOW REDUCTION [Qout/Qin] (%)= 70.80
 TIME SHIFT OF PEAK FLOW (min)= 12.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0236

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

 ** SIMULATION NUMBER: 10 **

25 year - 12 hour

 | MASS STORM |
Ptotal= 89.10 mm

Filename: C:\Users\peter.dekker\AppData
 Local\Temp\
 d6a98aa7-33ee-418a-93ae-3c5ffc369e12\0591a129
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	1.87	3.10	3.39	6.10	20.14	9.10	3.21
0.20	1.96	3.20	3.39	6.20	17.64	9.20	3.12
0.30	1.96	3.30	3.39	6.30	15.24	9.30	2.94
0.40	2.05	3.40	3.39	6.40	12.92	9.40	2.85
0.50	1.87	3.50	3.39	6.50	10.34	9.50	2.85
0.60	2.14	3.60	3.47	6.60	8.91	9.60	2.76
0.70	2.05	3.70	3.65	6.70	8.46	9.70	2.76
0.80	1.96	3.80	3.74	6.80	7.84	9.80	2.67
0.90	2.14	3.90	4.10	6.90	7.22	9.90	2.49
1.00	2.14	4.00	4.10	7.00	6.77	10.00	2.41
1.10	2.14	4.10	4.37	7.10	6.42	10.10	2.49
1.20	2.05	4.20	4.63	7.20	5.88	10.20	2.32
1.30	2.23	4.30	4.90	7.30	5.70	10.30	2.41
1.40	2.23	4.40	5.08	7.40	5.52	10.40	2.41
1.50	2.23	4.50	5.35	7.50	5.08	10.50	2.32
1.60	2.23	4.60	5.79	7.60	4.90	10.60	2.32
1.70	2.23	4.70	6.15	7.70	4.63	10.70	2.23
1.80	2.23	4.80	6.50	7.80	4.45	10.80	2.23
1.90	2.32	4.90	7.04	7.90	4.28	10.90	2.23
2.00	2.41	5.00	7.40	8.00	4.01	11.00	2.23
2.10	2.32	5.10	8.20	8.10	3.92	11.10	2.05
2.20	2.49	5.20	9.09	8.20	3.83	11.20	2.14
2.30	2.58	5.30	10.16	8.30	3.65	11.30	2.14
2.40	2.76	5.40	11.23	8.40	3.65	11.40	2.05
2.50	2.76	5.50	12.21	8.50	3.56	11.50	2.05
2.60	2.94	5.60	25.22	8.60	3.56	11.60	2.05
2.70	3.03	5.70	50.43	8.70	3.47	11.70	2.05
2.80	3.12	5.80	80.90	8.80	3.39	11.80	1.87
2.90	3.21	5.90	145.23	8.90	3.30	11.90	2.05
3.00	3.39	6.00	100.77	9.00	3.12	12.00	1.87

 | DESIGN SCS(0004) |
ID= 1 DT= 6.0 min

Area (ha)= 1.60 Curve Number (CN) = 76.0
 Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.206 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 35.056
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.393

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.166 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 34.838
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.391

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.174 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 34.824
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.391

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.255 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 34.866
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.391

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

ADD HYD (0015)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):	2.30	0.255	6.10	34.87
+ ID2= 2 (0002):	2.70	0.174	6.50	34.82
ID = 3 (0015):	5.00	0.354	6.20	34.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0003):		1.70	0.166	6.20	34.84
+ ID2= 2 (0015):		5.00	0.354	6.20	34.84
=====					
ID = 3 (0017):		6.70	0.520	6.20	34.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):		1.60	0.206	6.00	35.06
+ ID2= 2 (0017):		6.70	0.520	6.20	34.84
=====					
ID = 3 (0018):		8.30	0.686	6.10	34.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)	Area (ha)=	0.19	Curve Number (CN) =	85.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 8.965
 Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.036 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 51.661
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.580

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

DESIGN SCS(0005)	Area (ha)=	0.41	Curve Number (CN) =	79.6
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.23		

Ia as 0.2xS (mm)= 13.019
 Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.060 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 41.111
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.461

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

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0005):	0.41	0.060	6.10	41.11
+ ID2= 2 (0006):	0.19	0.036	6.00	51.66
ID = 3 (0011):	0.60	0.095	6.10	44.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)=	2.60	Curve Number (CN) =	77.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.19		

Ia as 0.2xS (mm)= 15.174
Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.354 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 36.727
TOTAL RAINFALL (mm)= 89.100
RUNOFF COEFFICIENT = 0.412

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.354	6.00	36.73
+ ID2= 2 (0011):	0.60	0.095	6.10	44.45
ID = 3 (0012):	3.20	0.443	6.00	38.17

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)=	0.21	Curve Number (CN) =	81.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.14		

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.041 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 44.502
TOTAL RAINFALL (mm)= 89.100
RUNOFF COEFFICIENT = 0.499

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

DESIGN SCS(0009)	Area (ha)=	0.27	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.10		

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.045 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 35.973
 TOTAL RAINFALL (mm)= 89.100
 RUNOFF COEFFICIENT = 0.404

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

ADD HYD (0013)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1	(0008):	0.21	0.041	6.00	44.50
+ ID2= 2	(0009):	0.27	0.045	6.00	35.97
=====		=====			
ID = 3	(0013):	0.48	0.086	6.00	39.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0014)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1	(0012):	3.20	0.443	6.00	38.17
+ ID2= 2	(0013):	0.48	0.086	6.00	39.70
=====		=====			
ID = 3	(0014):	3.68	0.529	6.00	38.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR (0019)		OUTFLOW	STORAGE	OUTFLOW	STORAGE
IN= 2---> OUT= 1		(cms)	(ha.m.)	(cms)	(ha.m.)
DT= 6.0 min					
		0.0000	0.0000	0.4620	0.0350
		0.0150	0.0050	0.5400	0.0420
		0.0600	0.0110	0.8860	0.0490
		0.1270	0.0160	1.4500	0.0570
		0.2410	0.0220	2.1700	0.0650
		0.3690	0.0290	0.0000	0.0000

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0014)	3.680	0.529	6.00	38.37
OUTFLOW: ID= 1 (0019)	3.680	0.383	6.20	38.35

PEAK FLOW REDUCTION [Qout/Qin] (%)= 72.47
 TIME SHIFT OF PEAK FLOW (min)= 12.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0313

 ** SIMULATION NUMBER: 11 **

50 year - 12 hour

MASS STORM
Ptotal=100.30 mm

Filename: C:\Users\peter.dekker\AppData
 ata\Local\Temp\
 d6a98aa7-33ee-418a-93ae-3c5ffc369e12\5bc341ed
 Comments: Type II 12-hr MASS CURVE

Duration of storm = 12.00 hrs
 Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	'	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	2.11	3.10	3.81		6.10	22.67	9.10	3.61
0.20	2.21	3.20	3.81		6.20	19.86	9.20	3.51
0.30	2.21	3.30	3.81		6.30	17.15	9.30	3.31
0.40	2.31	3.40	3.81		6.40	14.54	9.40	3.21
0.50	2.11	3.50	3.81		6.50	11.63	9.50	3.21
0.60	2.41	3.60	3.91		6.60	10.03	9.60	3.11
0.70	2.31	3.70	4.11		6.70	9.53	9.70	3.11
0.80	2.21	3.80	4.21		6.80	8.83	9.80	3.01
0.90	2.41	3.90	4.61		6.90	8.12	9.90	2.81
1.00	2.41	4.00	4.61		7.00	7.62	10.00	2.71
1.10	2.41	4.10	4.91		7.10	7.22	10.10	2.81
1.20	2.31	4.20	5.22		7.20	6.62	10.20	2.61
1.30	2.51	4.30	5.52		7.30	6.42	10.30	2.71
1.40	2.51	4.40	5.72		7.40	6.22	10.40	2.71
1.50	2.51	4.50	6.02		7.50	5.72	10.50	2.61
1.60	2.51	4.60	6.52		7.60	5.52	10.60	2.61
1.70	2.51	4.70	6.92		7.70	5.22	10.70	2.51
1.80	2.51	4.80	7.32		7.80	5.01	10.80	2.51
1.90	2.61	4.90	7.92		7.90	4.81	10.90	2.51
2.00	2.71	5.00	8.32		8.00	4.51	11.00	2.51
2.10	2.61	5.10	9.23		8.10	4.41	11.10	2.31
2.20	2.81	5.20	10.23		8.20	4.31	11.20	2.41
2.30	2.91	5.30	11.43		8.30	4.11	11.30	2.41
2.40	3.11	5.40	12.64		8.40	4.11	11.40	2.31
2.50	3.11	5.50	13.74		8.50	4.01	11.50	2.31
2.60	3.31	5.60	28.38		8.60	4.01	11.60	2.31
2.70	3.41	5.70	56.77		8.70	3.91	11.70	2.31
2.80	3.51	5.80	91.07		8.80	3.81	11.80	2.11
2.90	3.61	5.90	163.49		8.90	3.71	11.90	2.31
3.00	3.81	6.00	113.44		9.00	3.51	12.00	2.11

 | DESIGN SCS(0004) | Area (ha)= 1.60 Curve Number (CN) = 76.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
 |-----
 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.260 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 43.454
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.433

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

DESIGN SCS(0003)	Area (ha)=	1.70	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
-----	U.H. Tp(hrs)=	0.33		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.208 (i)
 TIME TO PEAK (hrs)= 6.200
 RUNOFF VOLUME (mm)= 43.183
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.431

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

DESIGN SCS(0002)	Area (ha)=	2.70	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
-----	U.H. Tp(hrs)=	0.59		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.219 (i)
 TIME TO PEAK (hrs)= 6.500
 RUNOFF VOLUME (mm)= 43.166
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.430

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

DESIGN SCS(0001)	Area (ha)=	2.30	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
-----	U.H. Tp(hrs)=	0.27		

Ia as 0.2xS (mm)= 16.042
 Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.321 (i)
 TIME TO PEAK (hrs)= 6.100
 RUNOFF VOLUME (mm)= 43.217
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.431

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

ADD HYD (0015)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):	2.30	0.321	6.10	43.22
+ ID2= 2 (0002):	2.70	0.219	6.50	43.17
=====	=====	=====	=====	=====
ID = 3 (0015):	5.00	0.446	6.20	43.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.208	6.20	43.18
+ ID2= 2 (0015):	5.00	0.446	6.20	43.19
ID = 3 (0017):	6.70	0.654	6.20	43.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.260	6.00	43.45
+ ID2= 2 (0017):	6.70	0.654	6.20	43.19
ID = 3 (0018):	8.30	0.866	6.10	43.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)	Area (ha)	Curve Number (CN)
ID= 1 DT= 6.0 min	= 0.19	= 85.0
	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.20	

Ia as 0.2xS (mm)= 8.965
Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 61.591
TOTAL RAINFALL (mm)= 100.300
RUNOFF COEFFICIENT = 0.614

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

DESIGN SCS(0005)	Area (ha)	Curve Number (CN)
ID= 1 DT= 6.0 min	= 0.41	= 79.6
	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.23	

Ia as 0.2xS (mm)= 13.019
Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.073 (i)
TIME TO PEAK (hrs)= 6.100
RUNOFF VOLUME (mm)= 50.129
TOTAL RAINFALL (mm)= 100.300
RUNOFF COEFFICIENT = 0.500

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

| ADD HYD (0011) |

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0005):	0.41	0.073	6.10	50.13
+ ID2= 2 (0006):	0.19	0.043	6.00	61.59
=====				
ID = 3 (0011):	0.60	0.114	6.10	53.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)=	2.60	Curve Number (CN) =	77.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.19		

Ia as 0.2xS (mm)= 15.174
Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.443 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 45.310
TOTAL RAINFALL (mm)= 100.300
RUNOFF COEFFICIENT = 0.452

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

ADD HYD (0012)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0007):	2.60	0.443	6.00	45.31
+ ID2= 2 (0011):	0.60	0.114	6.10	53.76
=====				
ID = 3 (0012):	3.20	0.551	6.00	46.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)=	0.21	Curve Number (CN) =	81.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.14		

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 53.937
TOTAL RAINFALL (mm)= 100.300
RUNOFF COEFFICIENT = 0.538

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

DESIGN SCS(0009)	Area (ha)=	0.27	Curve Number (CN) =	76.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.10		

Ia as 0.2xS (mm)= 16.042

Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.055 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 44.590
 TOTAL RAINFALL (mm)= 100.300
 RUNOFF COEFFICIENT = 0.445

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

ADD HYD (0013)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1	(0008):	0.21	0.050	6.00	53.94
+ ID2= 2	(0009):	0.27	0.055	6.00	44.59
=====					
ID = 3	(0013):	0.48	0.105	6.00	48.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0014)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1	(0012):	3.20	0.551	6.00	46.89
+ ID2= 2	(0013):	0.48	0.105	6.00	48.68
=====					
ID = 3	(0014):	3.68	0.656	6.00	47.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR (0019)		OUTFLOW	STORAGE	OUTFLOW	STORAGE
IN= 2---> OUT= 1		(cms)	(ha.m.)	(cms)	(ha.m.)
DT= 6.0 min					
		0.0000	0.0000	0.4620	0.0350
		0.0150	0.0050	0.5400	0.0420
		0.0600	0.0110	0.8860	0.0490
		0.1270	0.0160	1.4500	0.0570
		0.2410	0.0220	2.1700	0.0650
		0.3690	0.0290	0.0000	0.0000
		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
INFLOW :	ID= 2 (0014)	3.680	0.656	6.00	47.13
OUTFLOW:	ID= 1 (0019)	3.680	0.471	6.20	47.11

PEAK FLOW REDUCTION [Qout/Qin](%)= 71.85
 TIME SHIFT OF PEAK FLOW (min)= 12.00
 MAXIMUM STORAGE USED (ha.m.)= 0.0376

 ** SIMULATION NUMBER: 12 **

MASS STORM
Ptotal=111.50 mm

Filename: C:\Users\peter.dekker\AppData
Local\Temp\
d6a98aa7-33ee-418a-93ae-3c5ffc369e12\2e2ecdea
Comments: Type II 12-hr MASS CURVE

100 year - 12 hour

Duration of storm = 12.00 hrs
Mass curve time step = 6.00 min

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.10	2.34	3.10	4.24	6.10	25.20	9.10	4.01
0.20	2.45	3.20	4.24	6.20	22.08	9.20	3.90
0.30	2.45	3.30	4.24	6.30	19.07	9.30	3.68
0.40	2.56	3.40	4.24	6.40	16.17	9.40	3.57
0.50	2.34	3.50	4.24	6.50	12.93	9.50	3.57
0.60	2.68	3.60	4.35	6.60	11.15	9.60	3.46
0.70	2.56	3.70	4.57	6.70	10.59	9.70	3.46
0.80	2.45	3.80	4.68	6.80	9.81	9.80	3.34
0.90	2.68	3.90	5.13	6.90	9.03	9.90	3.12
1.00	2.68	4.00	5.13	7.00	8.47	10.00	3.01
1.10	2.68	4.10	5.46	7.10	8.03	10.10	3.12
1.20	2.56	4.20	5.80	7.20	7.36	10.20	2.90
1.30	2.79	4.30	6.13	7.30	7.14	10.30	3.01
1.40	2.79	4.40	6.36	7.40	6.91	10.40	3.01
1.50	2.79	4.50	6.69	7.50	6.36	10.50	2.90
1.60	2.79	4.60	7.25	7.60	6.13	10.60	2.90
1.70	2.79	4.70	7.69	7.70	5.80	10.70	2.79
1.80	2.79	4.80	8.14	7.80	5.57	10.80	2.79
1.90	2.90	4.90	8.81	7.90	5.35	10.90	2.79
2.00	3.01	5.00	9.25	8.00	5.02	11.00	2.79
2.10	2.90	5.10	10.26	8.10	4.91	11.10	2.56
2.20	3.12	5.20	11.37	8.20	4.79	11.20	2.68
2.30	3.23	5.30	12.71	8.30	4.57	11.30	2.68
2.40	3.46	5.40	14.05	8.40	4.57	11.40	2.56
2.50	3.46	5.50	15.28	8.50	4.46	11.50	2.56
2.60	3.68	5.60	31.55	8.60	4.46	11.60	2.56
2.70	3.79	5.70	63.11	8.70	4.35	11.70	2.56
2.80	3.90	5.80	101.24	8.80	4.24	11.80	2.34
2.90	4.01	5.90	181.74	8.90	4.13	11.90	2.56
3.00	4.24	6.00	126.11	9.00	3.90	12.00	2.34

DESIGN SCS(0004)
ID= 1 DT= 6.0 min

Area (ha)= 1.60 Curve Number (CN) = 76.0
Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00
U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.315 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 52.218
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.468

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

DESIGN SCS(0003)
ID= 1 DT= 6.0 min

Area (ha)= 1.70 Curve Number (CN) = 76.0
Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

U.H. Tp(hrs)= 0.33

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.252 (i)
TIME TO PEAK (hrs)= 6.200
RUNOFF VOLUME (mm)= 51.892
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.465

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.265 (i)
TIME TO PEAK (hrs)= 6.500
RUNOFF VOLUME (mm)= 51.872
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.465

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.389 (i)
TIME TO PEAK (hrs)= 6.100
RUNOFF VOLUME (mm)= 51.933
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.466

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.389	6.10	51.93
+ ID2= 2 (0002):	2.70	0.265	6.50	51.87
=====				
ID = 3 (0015):	5.00	0.542	6.20	51.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0003):	1.70	0.252	6.20	51.89
+ ID2= 2 (0015):	5.00	0.542	6.20	51.90
ID = 3 (0017):	6.70	0.794	6.20	51.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0004):	1.60	0.315	6.00	52.22
+ ID2= 2 (0017):	6.70	0.794	6.20	51.90
ID = 3 (0018):	8.30	1.053	6.10	51.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)	Area (ha)=	0.19	Curve Number (CN) =	85.0
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 8.965
Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 71.722
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.643

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

DESIGN SCS(0005)	Area (ha)=	0.41	Curve Number (CN) =	79.6
ID= 1 DT= 6.0 min	Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
	U.H. Tp(hrs)=	0.23		

Ia as 0.2xS (mm)= 13.019
Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.086 (i)
TIME TO PEAK (hrs)= 6.100
RUNOFF VOLUME (mm)= 59.450
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.533

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

ADD HYD (0011)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				

VO2out_PostDev_SCS_6&12HR_1-100YRS_AMC2_PD.txt

ID1= 1 (0005):	0.41	0.086	6.10	59.45
+ ID2= 2 (0006):	0.19	0.050	6.00	71.72
=====				
ID = 3 (0011):	0.60	0.134	6.10	63.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0007)	Area (ha)= 2.60	Curve Number (CN) = 77.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

Ia as 0.2xS (mm)= 15.174
Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.534 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 54.244
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.486

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

ADD HYD (0012)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0007):	2.60	0.534	6.00	54.24
+ ID2= 2 (0011):	0.60	0.134	6.10	63.34
=====				
ID = 3 (0012):	3.20	0.663	6.00	55.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0008)	Area (ha)= 0.21	Curve Number (CN) = 81.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.14	

Ia as 0.2xS (mm)= 11.916
Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 63.655
TOTAL RAINFALL (mm)= 111.500
RUNOFF COEFFICIENT = 0.571

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

DESIGN SCS(0009)	Area (ha)= 0.27	Curve Number (CN) = 76.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.10	

Ia as 0.2xS (mm)= 16.042
Unit Hyd Qpeak (cms)= 0.149


```

V   V   I   SSSSS  U   U   A   L
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

```

Post-Development
Regional Storm
AMC III

```

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  Company

000  T  T  H  H  Y  M  M  000  Serial

```

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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 2.4\VO2\voin.dat

Output filename:

C:\Users\peter.dekker\AppData\Local\Temp\16e4635a-24a0-49ce-b2b7-d11a24d04e75\Scenario.out

Summary filename:

C:\Users\peter.dekker\AppData\Local\Temp\16e4635a-24a0-49ce-b2b7-d11a24d04e75\Scenario.sum

DATE: 03/21/2013

TIME: 10:41:31

USER:

COMMENTS: _____

** SIMULATION NUMBER: 1 **

```

-----
| MASS STORM |
| Ptota1=212.00 mm |
|-----|

```

Filename: C:\Users\peter.dekker\AppData\Local\Temp\16e4635a-24a0-49ce-b2b7-d11a24d04e75\9ad18410
Comments: Hurricane Hazel (last 12 h)

Duration of storm = 12.00 hrs
Mass curve time step = 60.00 min

***** WARNING : THE SUM OF THE COORDINATES IS NOT ONE.

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
1.00	2.12	4.00	6.36	7.00	21.20	10.00	14.84
2.00	12.72	5.00	21.20	8.00	25.44	11.00	8.48

VO2out_PostDev_Reg_12HR_Haze1_AMC3_PD.txt
 3.00 2.12 | 6.00 48.76 | 9.00 12.72 | 12.00 19.08

DESIGN SCS(0004)	Area (ha)= 1.60	Curve Number (CN) = 88.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.19	

NOTE: RAINFALL WAS TRANSFORMED TO 6.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.100	2.12	3.100	6.36	6.100	21.20	9.10	14.84
0.200	2.12	3.200	6.36	6.200	21.20	9.20	14.84
0.300	2.12	3.300	6.36	6.300	21.20	9.30	14.84
0.400	2.12	3.400	6.36	6.400	21.20	9.40	14.84
0.500	2.12	3.500	6.36	6.500	21.20	9.50	14.84
0.600	2.12	3.600	6.36	6.600	21.20	9.60	14.84
0.700	2.12	3.700	6.36	6.700	21.20	9.70	14.84
0.800	2.12	3.800	6.36	6.800	21.20	9.80	14.84
0.900	2.12	3.900	6.36	6.900	21.20	9.90	14.84
1.000	2.12	4.000	6.36	7.000	21.20	10.00	14.84
1.100	12.72	4.100	21.20	7.100	25.44	10.10	8.48
1.200	12.72	4.200	21.20	7.200	25.44	10.20	8.48
1.300	12.72	4.300	21.20	7.300	25.44	10.30	8.48
1.400	12.72	4.400	21.20	7.400	25.44	10.40	8.48
1.500	12.72	4.500	21.20	7.500	25.44	10.50	8.48
1.600	12.72	4.600	21.20	7.600	25.44	10.60	8.48
1.700	12.72	4.700	21.20	7.700	25.44	10.70	8.48
1.800	12.72	4.800	21.20	7.800	25.44	10.80	8.48
1.900	12.72	4.900	21.20	7.900	25.44	10.90	8.48
2.000	12.72	5.000	21.20	8.000	25.44	11.00	8.48
2.100	2.12	5.100	48.76	8.100	12.72	11.10	19.08
2.200	2.12	5.200	48.76	8.200	12.72	11.20	19.08
2.300	2.12	5.300	48.76	8.300	12.72	11.30	19.08
2.400	2.12	5.400	48.76	8.400	12.72	11.40	19.08
2.500	2.12	5.500	48.76	8.500	12.72	11.50	19.08
2.600	2.12	5.600	48.76	8.600	12.72	11.60	19.08
2.700	2.12	5.700	48.76	8.700	12.72	11.70	19.08
2.800	2.12	5.800	48.76	8.800	12.72	11.80	19.08
2.900	2.12	5.900	48.76	8.900	12.72	11.90	19.08
3.000	2.12	6.000	48.76	9.000	12.72	12.00	19.08

Ia as 0.2xS (mm)= 6.927
 Unit Hyd Qpeak (cms)= 0.464

PEAK FLOW (cms)= 0.197 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 159.922
 TOTAL RAINFALL (mm)= 195.040
 RUNOFF COEFFICIENT = 0.820

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

DESIGN SCS(0003)	Area (ha)= 1.70	Curve Number (CN) = 88.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.33	

Ia as 0.2xS (mm)= 6.927

VO2out_PostDev_Reg_12HR_Haze1_AMC3_PD.txt
Unit Hyd Qpeak (cms)= 0.284

PEAK FLOW (cms)= 0.203 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 158.926
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.815

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

DESIGN SCS(0002)	Area (ha)= 2.70	Curve Number (CN) = 88.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.59	

Ia as 0.2xS (mm)= 6.927
Unit Hyd Qpeak (cms)= 0.252

PEAK FLOW (cms)= 0.299 (i)
TIME TO PEAK (hrs)= 6.200
RUNOFF VOLUME (mm)= 158.864
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.815

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

DESIGN SCS(0001)	Area (ha)= 2.30	Curve Number (CN) = 88.0
ID= 1 DT= 6.0 min	Ia (mm)= 0.2 S	# of Linear Res.(N)= 5.00
	U.H. Tp(hrs)= 0.27	

Ia as 0.2xS (mm)= 6.927
Unit Hyd Qpeak (cms)= 0.470

PEAK FLOW (cms)= 0.279 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 159.051
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.815

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

ADD HYD (0015)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0001):	2.30	0.279	6.00	159.05
+ ID2= 2 (0002):	2.70	0.299	6.20	158.86
=====				
ID = 3 (0015):	5.00	0.564	6.10	158.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0017)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				

VO2out_PostDev_Reg_12HR_Haze1_AMC3_PD.txt

ID1= 1 (0003):	1.70	0.203	6.00	158.93
+ ID2= 2 (0015):	5.00	0.564	6.10	158.95
=====				
ID = 3 (0017):	6.70	0.766	6.10	158.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0018)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0004):	1.60	0.197	6.00	159.92
+ ID2= 2 (0017):	6.70	0.766	6.10	158.94
=====				
ID = 3 (0018):	8.30	0.960	6.00	159.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

DESIGN SCS(0006)		Area (ha)=	0.19	Curve Number (CN) =	91.9
ID= 1 DT= 6.0 min		Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
		U.H. Tp(hrs)=	0.20		

Ia as 0.2xS (mm)= 4.477
 Unit Hyd Qpeak (cms)= 0.052

PEAK FLOW (cms)= 0.025 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 171.428
 TOTAL RAINFALL (mm)= 195.040
 RUNOFF COEFFICIENT = 0.879

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

DESIGN SCS(0005)		Area (ha)=	0.41	Curve Number (CN) =	89.7
ID= 1 DT= 6.0 min		Ia (mm)=	0.2 S	# of Linear Res.(N)=	5.00
		U.H. Tp(hrs)=	0.23		

Ia as 0.2xS (mm)= 5.833
 Unit Hyd Qpeak (cms)= 0.098

PEAK FLOW (cms)= 0.051 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 164.379
 TOTAL RAINFALL (mm)= 195.040
 RUNOFF COEFFICIENT = 0.843

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

ADD HYD (0011)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0005):	0.41	0.051	6.00	164.38
+ ID2= 2 (0006):	0.19	0.025	6.00	171.43
=====				

VO2out_PostDev_Reg_12HR_Haze1_AMC3_PD.txt
 ID = 3 (0011): 0.60 0.076 6.00 166.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | DESIGN SCS(0007) | Area (ha)= 2.60 Curve Number (CN) = 88.4
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.19

Ia as 0.2xS (mm)= 6.666
 Unit Hyd Qpeak (cms)= 0.755

PEAK FLOW (cms)= 0.322 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 161.122
 TOTAL RAINFALL (mm)= 195.040
 RUNOFF COEFFICIENT = 0.826

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

 | ADD HYD (0012) |
1 + 2 = 3
 AREA QPEAK TPEAK R.V.
 (ha) (cms) (hrs) (mm)
 ID1= 1 (0007): 2.60 0.322 6.00 161.12
 + ID2= 2 (0011): 0.60 0.076 6.00 166.61
 =====
 ID = 3 (0012): 3.20 0.398 6.00 162.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 | DESIGN SCS(0008) | Area (ha)= 0.21 Curve Number (CN) = 90.2
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.14

Ia as 0.2xS (mm)= 5.519
 Unit Hyd Qpeak (cms)= 0.083

PEAK FLOW (cms)= 0.027 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 169.012
 TOTAL RAINFALL (mm)= 195.040
 RUNOFF COEFFICIENT = 0.867

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

 | DESIGN SCS(0009) | Area (ha)= 0.27 Curve Number (CN) = 88.0
 | ID= 1 DT= 6.0 min | Ia (mm)= 0.2 S # of Linear Res.(N)= 5.00

 U.H. Tp(hrs)= 0.10

Ia as 0.2xS (mm)= 6.927
 Unit Hyd Qpeak (cms)= 0.149

PEAK FLOW (cms)= 0.034 (i)
 TIME TO PEAK (hrs)= 6.000
 RUNOFF VOLUME (mm)= 164.104

VO2out_PostDev_Reg_12HR_Haze1_AMC3_PD.txt
TOTAL RAINFALL (mm)= 195.040
RUNOFF COEFFICIENT = 0.841

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

ADD HYD (0013) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0008):	0.21	0.027	6.00	169.01
+ ID2= 2 (0009):	0.27	0.034	6.00	164.10
===== ID = 3 (0013):	0.48	0.062	6.00	166.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location C for Table 2-5

ADD HYD (0014) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0012):	3.20	0.398	6.00	162.15
+ ID2= 2 (0013):	0.48	0.062	6.00	166.25
===== ID = 3 (0014):	3.68	0.460	6.00	162.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

reference location D for Table 2-6

RESERVOIR (0019) IN= 2---> OUT= 1 DT= 6.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.4620	0.0350
	0.0150	0.0050	0.5400	0.0420
	0.0600	0.0110	0.8860	0.0490
	0.1270	0.0160	1.4500	0.0570
	0.2410	0.0220	2.1700	0.0650
	0.3690	0.0290	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0014)	3.680	0.460	6.00	162.69
OUTFLOW: ID= 1 (0019)	3.680	0.449	6.00	162.67

PEAK FLOW REDUCTION [Qout/Qin] (%)= 97.57
TIME SHIFT OF PEAK FLOW (min)= 0.00
MAXIMUM STORAGE USED (ha.m.)= 0.0343

FINISH