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March 15, 2024 Project Number: 1474

David Schaeffer Engineering Ltd
120 Iber Road, Unit 103
Ottawa, Ontario
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Attention: **Marc Pichette, P.Eng**

Subject: **Barrhaven Conservancy West – Preliminary Water Balance**

Introduction

Barrhaven Conservancy West Development is located in Barrhaven, Ontario, north of the Jock River, east of Highway 416 and west of Borrisokane Road. The proposed development is approximately **48.42 ha** that will primarily comprise of single and townhouse residential lots, stacked condos and a park. The following memo outlines how the proposed development will match/exceed the existing water budget through the use of LIDs.

Water Balance Overview

A pre- and post-development water balance has been completed for the site based on continuous hydrologic model simulations. As such a SWMHYMO model was developed that reflects the hydrologic conditions of these lands under pre-development, post-development without LIDs and post-development with LIDs conditions. These models were run using 36 years of hourly rainfall data from the Ottawa International Airport from 1967 to 2003 (excluding 2001 - missing rainfall data), and the average annual runoff volumes from the subject site were computed and compared. **Table A1 in Attachment A** outlines the continuous modelling parameters for both pre and post-development conditions. The following section outlines the modelling approach for each scenario and the results of this analysis.

Pre-Development

Based on the Soil Survey Complex mapping from the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) the site primarily consists of Carsonby - Silt (Type C) and Brandon -Silty Clay- (Type D) Soils. This was confirmed by Paterson Groups through onsite field investigations and boreholes which also reported Silt and Silty Clays through the majority of the site.

Based on the Southern Ontario Land Resource Information System (SOLRIS) the site consists primarily of tilled lands and hedgerows. Based on the underlying Land Use Type and Soil Classification at each location within a subcatchment, a Curve Number (CN) was calculated, based on applicable values outlined in **Tables A2 and A3** in the SWMHYMO Manual. Each Curve Number was then weighted based on the total area within the subcatchment to determine the weighted CN for that subcatchment. The CN value calculated was then converted to CN*, as CN* values have been shown to correlate well with measured flows and perform well in continuous SWMHYMO modelling (as discussed in the July 1989 INTERHYMO / OTTHYMO 89 Manual), when compared to conventional CN. Full details of the derivation of CN under existing conditions have been outlined in **Table A2** and **Figures A1 & A2** in **Attachment A**.

The time to peak (Tp) for these areas has been calculated based on existing topography. Flow paths have been discretized based on the topographic data using GIS tools and the longest major flow path within the subcatchment identified; refer to **Figure A3 in Attachment A** for the flow paths discretized for these lands. The upstream and downstream topographic elevations and flow lengths were identified for this subcatchment and used in the calculations. For these lands, the Federal Aviation Administration (FFA) method was determined to be the most appropriate method to calculate the Tp. Full details of these calculations have been provided in **Table A3 in Attachment A**, along with other time-to-peak values using alternative Tp calculation methods. This site under pre-development conditions has been represented in SWMHYMO using a CONTINUOUS NASHYD command, with all continuous parameters outlined in **Table A1 of Attachment A**. Note that the pre-development areas have been represented as 3 individual areas (Split by theFoster and Okeefe drains) with the results of the 3 areas added together to provide the full site pre-development water budget.

Post-Development – Without LIDs

Under post-development conditions, the site will have 6 individual storm sewer outlets, as such the development lands have been broken into these 6 discrete areas (with a total drainage area of **48.42 ha**, matching existing conditions). Based on the development conceptual plan, the **48.42 ha** site will have a total imperviousness of **70%**, see **Figure A4** in **Attachment A** for an overview of the proposed development plan. These developed lands have been represented using CONTINUOUS STANDHYD commands in SWMHYMO. This scenario has been provided to quantify the average annual reduction in infiltration volume throughout the site due to the increase in impervious area.

To best represent infiltration over a long simulation period, and to provide a consistent comparison between pre- and post-development conditions, the SCS procedure was used to simulate infiltration over the subject site for both pre-and post-development conditions. Under post-development conditions, soils in the development areas will be defined by the characteristics of topsoil, which has a CN of **79** (CN* = **71**) for urban lawns in fair condition.

Post-Development – With LIDs

As mentioned above the proposed development will have LIDs implemented throughout the site to offset any deficit in annual infiltration volume produced by the increase in the impervious area due to the development. For this analysis, it is assumed that the development will have infiltration LIDs implemented at the road catch basins. Runoff captured by the road catch basins will be directed to an infiltration trench, where it can infiltrate before discharging to the storm sewer system (see *Figure 5* in the DSEL *Figures & Drawings* package for more details about the proposed LID configuration). A conceptual design of these LID systems has been completed but will be refined at detailed design when detailed grading is available, to yield optimal benefit from this LID approach. **Table 1** below outlines the parameters of these conceptual LIDs based on the current development plan. Based on this analysis the site on average will need **3.75 CBs** per impervious hectare of development. Each of the LID clusters has been represented in the model as single lumped ROUTE RESERVOIR commands, with the outflow of each command reflective of the soil infiltration rate and the volume reflective of the storage volume within each LID.

Soil Infiltration & Draw Down Time

Based on the Paterson Group's geotechnical Investigation, the site consists of soil that typically has infiltration rates in the range of **9 mm/hr - 25 mm/hr**. As such it has been assumed that this site will have an infiltration rate of 9mm/hr with a safety factor of 2.5 (3.6 mm/hr). Based on a trench height of 0.4 m (with a void ratio of 0.4) these trenches will have a draw downtime of approximately **45 hours**. Note that in this analysis it is assumed that only the bottom of the trench can infiltrate, which is a conservative assumption.

Table 1: Proposed LID Summary

Parameters	Total	W1	W2	W3	W4	W5	W6
Area (ha)	48.42	5.76	8.51	10.03	10.11	6.20	7.81
RC	0.72	0.66	0.62	0.73	0.69	0.67	0.77
Total Imp. (%)	70%	66%	60%	76%	70%	67%	81%
Imp Area (ha)	34.08	3.78	5.11	7.59	7.08	4.16	6.36
# of CBMH's	128	14	19	28	27	16	24
Pipe Dia (mm)	-	250	250	250	250	250	250
Perf. Pipe Length (m)	3840	420	570	840	810	480	720
Pipe Vol. (m^3)	188	21	28	41	40	24	35
Trench Width (m)	-	1.25	1.25	1.25	1.25	1.25	1.25
Trench Height (m)	-	0.4	0.4	0.4	0.4	0.4	0.4
Trench Length (m)	-	30	30	30	30	30	30
Void Ratio	-	0.4	0.4	0.4	0.4	0.4	0.4
Trench Vol. (m^3)	693	76	103	152	146	87	130
Total Vol. (m^3)	881	96	131	193	186	110	165
Area of Trench (m^2)	4800	525	713	1050	1013	600	900
Soil Infiltration Rate (mm/hr)	-	9	9	9	9	9	9
Safety Factor	-	2.5	2.5	2.5	2.5	2.5	2.5
Reduced Rate (mm/hr)	-	3.6	3.6	3.6	3.6	3.6	3.6
Infiltration rate (m^3/hr)	-	0.0005	0.0007	0.0011	0.0010	0.0006	0.0009

Water Budget Scenario Summary

The models were run for 36 years using hourly rainfall data from the Ottawa Airport, and the annual evaporation, infiltration and runoff volumes were calculated for each scenario. **Tables 2-4** summarize the annual average water balance under existing conditions and post-development conditions for the proposed development lands with and without LID measures in place, as m³/year, mm/year and % of total annual rainfall.

Table 2:Pre-Development Water Balance

Drainage Area (ha)		48.42	Imperviousness:	7%
Annual Average Volume	Precipitation	Evapotranspiration	Runoff	Infiltration
m³	288,466	188,545	35,419	64,503
mm	596	389	73	133
%	100%	65.4%	12.3%	22.4%

Table 3:Post Development Water Balance – Without LIDs

Drainage Area (ha)		48.42	Imperviousness:	70%
Annual Average Volume	Precipitation	Evapotranspiration	Runoff	Infiltration
m³	288,466	107,821	148,079	32,566
mm	596	223	306	67
%	100.0%	37.4%	51.3%	11.3%

Table 4:Post Development Water Balance – With LIDs

Drainage Area (ha)		48.42	Imperviousness:	70%
Annual Average Volume	Precipitation	Evapotranspiration	Runoff	Infiltration
m³	288,466	107,821	111,716	68,929
mm	596	223	231	142
%	100%	37.4%	38.7%	23.9%

Based on this analysis of pre-development conditions, this site will evaporate **65.4%**, runoff **12.3%** and infiltrate **22.4%** of all annual rainfall. Under post-development conditions without LIDs, this site will evaporate **37.4%**, runoff **51.3%** and infiltrate **11.3%** of all annual rainfall, resulting in a deficit of **66 mm/year** infiltrated from pre-development conditions. Under post-development conditions with LIDs, this site will evaporate **37.4%**, runoff **38.7%** and infiltrate **23.9%** of all annual rainfall, resulting in an exceedance of 9 mm/year infiltrated from pre-development conditions. Full annual breakdowns of the three conditions have been provided in **Attachment B, Tables B1-B3**. An average annual summary of the infiltration volume for each of the proposed LID measures is outlined in **Table B4**, which shows that the LIDs alone provide a total average annual infiltration volume of **75 mm/year**.

Conclusion

A preliminary water balance analysis of the existing site was completed to determine pre-development infiltration rates, based on continuous hydrologic model simulations. A post-development analysis for the site, where no LIDs were implemented, showed that the volume of annual rainfall infiltrated would decrease by **66 mm/yr**. (**-49%** from existing). Implementing LIDs in the way of infiltration trenches connected to the catchbasins at a rate of **3.75 CB** per impervious hectare would exceed the annual infiltration rate by **9 mm/year** (**+1.5%** from existing). Based on the above it has been shown that the Barrhaven Conservancy West Developments will be able to meet pre-development infiltration rates within **±5%** under post-development conditions through the use of LIDs.

Yours truly,
J.F Sabourin and Associates Inc.

Jonathon Burnett, P.Eng
Water Resources Engineer

cc: J.F Sabourin, M.Eng, P.Eng
Director of Water Resources Projects

Tables

Table 1: Proposed LID Summary
Table 2: Pre-Development Water Balance
Table 3: Post Development Water Balance – Without LIDs
Table 4 Post Development Water Balance – With LIDs

Attachments

Attachment A: SWMHYMO Models & Parameters
Attachment B: Water Budget Results

Modelling Files (Provided Electronically)

SWMHYMO BCD_WEST-PRE_v03.dat
BCD_WEST-POST_v03.dat

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Attachment A

SWMHYMO Models & Parameters

N

Legend

Soil Name (SCS Value)

- BRANDON (D)
- CARSONBY (C)
- Development Area

SCALE: 1:4500

0 100 200 m

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Conservancy West

Figure A1: Soil Types

PROJECT	1474(03)
DRAWN	JB
DATE	March 2024

C:\Users\BrennanThomas\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\1474(03)-21\202403-BCDC West - Prelim Design\Design\GIS\20240306-Pre Dev Parameters

N

Legend

Land Use

- Hedge Rows
- Tilled
- Development Area

SCALE: 1:4500

0 100 200 m

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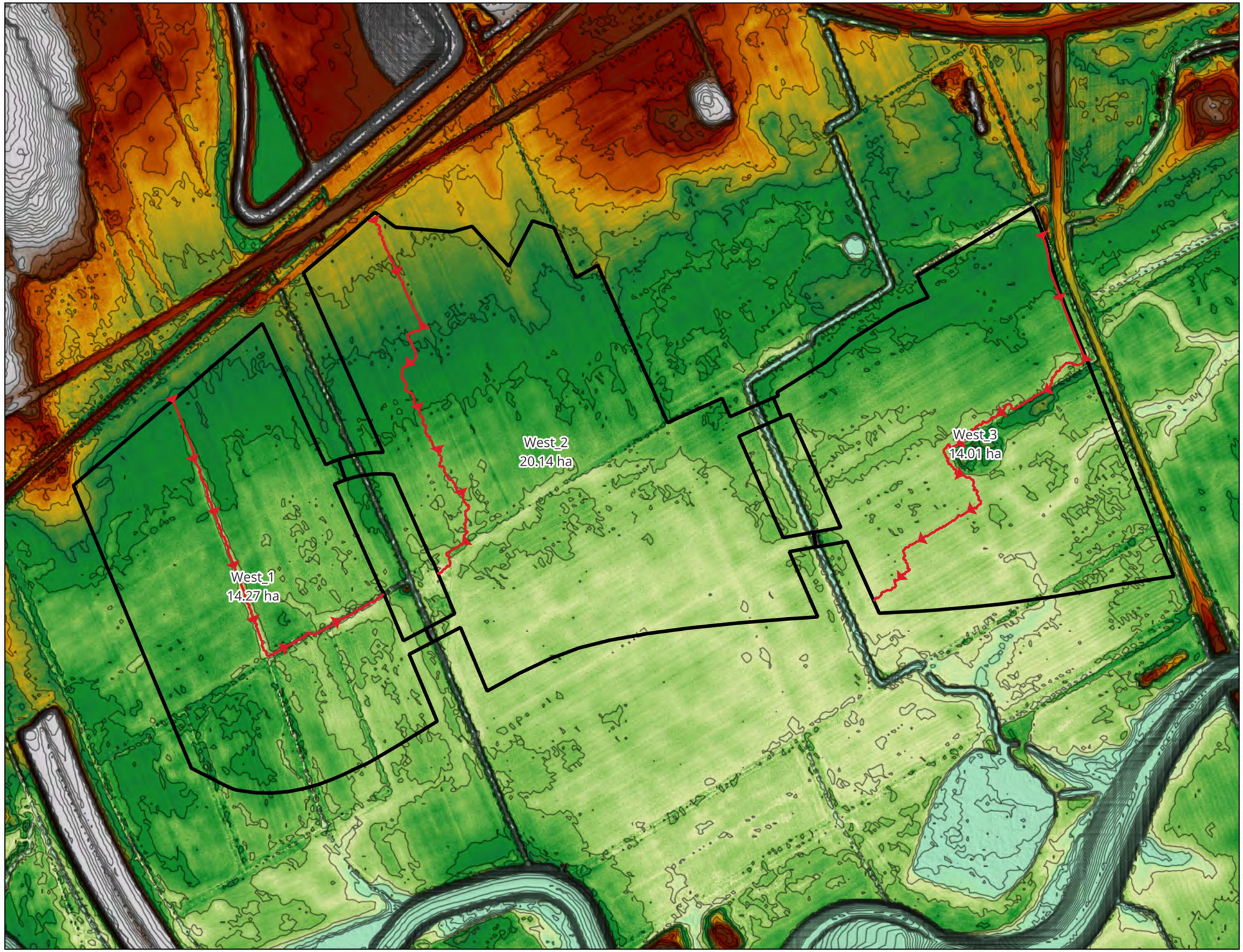
Figure A2: Land Use

PROJECT	1474(03)
DRAWN	JB
DATE	March 2024

C:\Users\BrennanThomas\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\1474(03)-21\202403-BCDC West - Prelim Design\Design\GIS\20240306-Pre Dev Parameters



N

Legend

Streams

Major Flow Path

Development Area

Terrain (m)

94.75

90.5

Contours

0.25 m

SCALE: 1:4500

0 100 200 m

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Figure A3: Flow Paths

PROJECT	1474(03)
DRAWN	JB
DATE	March 2024

C:\Users\JonathonBurnett\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\1474(03)-21\202403-BCDC West - Prelim Design\Design\GIS\20240306-Pre Dev Parameters

N

Legend

- Junctions
- Site Plan
- Minor System
- Lumped Areas:
  <Name>
  <Area>
  <Runoff Coefficient>

SCALE: 1:4500

0 100 200 m

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Figure A4: Proposed Development

PROJECT	1474(03)
DRAWN	JB
DATE	March 2024

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Table A1: Continuous Simulation Parameters

Parameter(s) & Value(s)	Description
APII=[50], APIK=[0.90]/day	Used to compute the Antecedent Precipitation Index during the continuous simulation. Without model calibration, these are the default values.
IAimp = [1.57](mm), IAper=[4.67](mm)	Default Initial Abstraction (IA) values per the City of Ottawa Design Guidelines
IaREC=[6](hrs);	The time that it takes for the Initial Abstraction over pervious areas to recover during a dry period in undeveloped areas.
SMIN=[-1], SMAX=[-1](mm)	The negative values indicate that the storage volume in the SCS procedure will vary between the "S" determined for AMC I and AMC III conditions of the entered CN value in undeveloped and urban areas.
SK=[0.03]/(mm);	A calibration coefficient that can typically vary from 0.01 to 0.3 for undeveloped and urban areas. The higher the value, the more runoff generated. To set the baseline for existing conditions, it was decided to take a value in the low range.
InitGWResVol=[10](mm), GWResK=[0.9](mm/day/mm), VhydCond=[1](mm/hr);	Parameters that are used to simulate both the groundwater storage and discharge to surface watercourses from undeveloped areas. Without adequate field measurements, these parameters were selected based on previous continuous modelling experience.
IaRECper=[6](hrs);	The time that it takes for the Initial Abstraction over pervious areas to recover during a dry period in urban areas.
IaRECimp=[1.5](hrs);	The time that it takes for the Initial Abstraction over impervious areas to recover during a dry period in urban areas.
InterEventTime=[12](hrs)	The continuous dry time is required to reset the parameters in the SCS procedure to their initial values.

Table A2: Calculation of SCS Curve Number (CN) and Modified Curve Number (CN*)

West_1 (14.27 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
8.979	Tilled	CARSONBY	C	Fair	79	62.9%	49.7
4.166	Tilled	BRANDON	D	Fair	84	29.2%	24.5
1.123	Hedge Rows	CARSONBY	C	Fair	70	7.9%	5.5
						CN	**79.7**
						CN*	**72**

West_2 (20.138 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
4.879	Tilled	CARSONBY	C	Fair	79	24.2%	19.1
15.117	Tilled	BRANDON	D	Fair	84	75.1%	63.1
0.109	Hedge Rows	CARSONBY	C	Fair	70	0.5%	0.4
0.034	Hedge Rows	BRANDON	D	Fair	77	0.2%	0.1
						CN	**82.7**
						CN*	**76**

#REF!							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
14.007	Tilled	CARSONBY	C	Fair	79	100.0%	79.0
						CN	**79.0**
						CN*	**71**

Table A3: Time to Peak Calculations

Parameter	Units	West_1	West_2	West_3
Area	ha	14.268	20.139	14.007
CN*	-	72	76	71
Ptotal to calc C from CN, use 2	P(mm)	48.5	48.5	48.5
yr 24 hr SCS stom	Ia(mm)	4.67	4.67	4.67
	RV(mm)	13.5	15.6	13.0
C	-	0.28	0.32	0.27
Ptotal to calc C from CN, use 2	P(mm)	31.9	31.9	31.9
yr 3 hr CHI stom	Ia(mm)	4.67	4.67	4.67
	RV(mm)	5.9	7.0	5.6
C	-	0.18	0.22	0.18
Length of Channel	m	541	619	764
	ft	1776	2029	2507
Elevation of Head Water	m	91.52	92.07	91.50
	ft	300	302	300
Elevation of Outlet	m	90.31	91.00	91.00
	ft	296	299	299
Average Slope	m/m	0.22%	0.17%	0.07%
	ft/ft	0.22%	0.17%	0.07%
Kirpich				
Time of Concentration	mins	26	32	54
Time to Peak	min	17	21	36
Time to Peak	Hours	0.29	0.35	0.60
FAA (SCS)				
Time of Concentration	mins	103	113	186
Time to Peak	mins	69	75	124
Time to Peak	Hours	1.14	1.26	2.07
FAA (CHI)				
Time of Concentration	mins	114	128	207
Time to Peak	mins	76	86	138
Time to Peak	Hours	1.27	1.43	2.29
Barnsby Williams				
Time of Concentration	mins	32	37	58
Time to Peak	mins	21	25	39
Time to Peak	Hours	0.36	0.42	0.65
SCS				
Time of Concentration	mins	134	151	337
Time to Peak	mins	90	100	225
Time to Peak	Hours	1.49	1.67	3.75
Selected Method				
FAA (SCS)				
Time to Peak	min	69	75	124
Time to Peak	Hours	1.14	1.26	2.07

Note:

All methods calculated as per Appendix A of the SWMHYMO manual

Time to Peak calculated as 2/3 Time of concentration

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*#  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
*#*************************************************************************************************************
*#  Project Name: Barrhaven Conservancy Development
*#  Project Number: 1474
*#  Date        : 2021/Oct/18
*#  Modeller    : J.Burnett, P.Eng.
*#  Updated     : 2022/Dec/07 [JB]
*#  Updated     : 2022/Dec/13 [LP]
*#  Updated     : 2024/Mar/14 [JB]
*#  Company     : J.F. Sabourin and Associates
*#  License #   : 2582634
*#*************************************************************************************************************
START               TZERO=[1967.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[67]
*%                   [""] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------------------------------------|
*# Ottawa International Airport (1967 - 2003)
READ AES DATA       AES_FILENAME=["YOW_1967_2007.123"],
                    IELEM=[123], START_DATE=[0], END_DATE=[-364]
*%-----------------|-------------------------------------------------------------------------------------------|
COMPUTE API         APII=[50], APIK=[0.90]/day
*%-----------------|-------------------------------------------------------------------------------------------|
*#*************************************************************************************************************
*#                   Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
*#*************************************************************************************************************
*%-----------------|-------------------------------------------------------------------------------------------|
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                      InterEventTime=[12](hrs)
                    Baseflow simulation parameters:
                      BaseFlowOption=[1] , InitGWResVol=[10](mm), GWResK=[0.9](mm/day/mm)
                      VHydCond=[1.0](mm/hr), END=-1
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                      InterEventTime=[12](hrs)
                    Baseflow simulation parameters:
                      BaseFlowOption=[1] , InitGWResVol=[10](mm), GWResK=[0.9](mm/day/mm)
                      VHydCond=[1.0](mm/hr), END=-1
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                      InterEventTime=[12](hrs)
                    Baseflow simulation parameters:
                      BaseFlowOption=[1] , InitGWResVol=[10](mm), GWResK=[0.9](mm/day/mm)
                      VHydCond=[1.0](mm/hr), END=-1
*%-----------------|-------------------------------------------------------------------------------------------|
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*%-----------------|-------------------------------------------------------------------------------------------
```

```
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   ******************************
55 *#                   Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE
   DEVELOPMENT CONDITIONS
56 *#*****************************************************************************
   ******************************
57 *#                   Set infiltration to 0 (CN = 99.99) for water balance analysis
58 *#*****************************************************************************
   ******************************
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61                    Continuous simulation parameters:
62                      IaRECper=[6](hrs),SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                        InterEventTime=[12](hrs)
63                    Baseflow simulation parameters:
64                      BaseFlowOption=[1] , InitGWResVol=[10](mm), GWResK=[0.9](mm/day/mm)
65                      VHydCond=[1.0](mm/hr), END=-1
66 *%-----------------|-----------------------------------------------------------------
   ------------------------------|
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69                    Continuous simulation parameters:
70                      IaRECper=[6](hrs),SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                        InterEventTime=[12](hrs)
71                    Baseflow simulation parameters:
72                      BaseFlowOption=[1] , InitGWResVol=[10](mm), GWResK=[0.9](mm/day/mm)
73                      VHydCond=[1.0](mm/hr), END=-1
74 *%-----------------|-----------------------------------------------------------------
   ------------------------------|
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77                    Continuous simulation parameters:
78                      IaRECper=[6](hrs),SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                        InterEventTime=[12](hrs)
79                    Baseflow simulation parameters:
80                      BaseFlowOption=[1] , InitGWResVol=[10](mm), GWResK=[0.9](mm/day/mm)
81                      VHydCond=[1.0](mm/hr), END=-1
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   ------------------------------|
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   add=["INF-West_1","INF-West_2","INF-West_3"]
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   ------------------------------|
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87 *#############################################################################
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   ------------------------------|
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   ------------------------------|
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   ------------------------------|
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   ------------------------------|
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99 *%-----------------|-----------------------------------------------------------------
   ------------------------------|
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101 *%-----------------|-----------------------------------------------------------------
   ------------------------------|
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*%-----------------|-------------------------------------------------------------------------------|
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*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1977.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[77]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1978.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[78]
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START               TZERO=[1979.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[79]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1980.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[80]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1981.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[81]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1982.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[82]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1983.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[83]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1984.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[84]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1985.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[85]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1986.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[86]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1987.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[87]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1988.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[88]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1989.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[89]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1990.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[90]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1991.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[91]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1992.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[92]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1993.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[93]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1994.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[94]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1995.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[95]
*%-----------------|-------------------------------------------------------------------------------|
START               TZERO=[1996.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[96]
*%-----------------|-------------------------------------------------------------------------------|
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START               TZERO=[1997.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[97]
*%-----------------|-------------------------------------------------------------------------------
-------------------------------|
START               TZERO=[1998.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[98]
*%-----------------|-------------------------------------------------------------------------------
-------------------------------|
START               TZERO=[1999.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[99]
*%-----------------|-------------------------------------------------------------------------------
-------------------------------|
START               TZERO=[2000.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[100]
*%-----------------|-------------------------------------------------------------------------------
-------------------------------|
*% MISSING FROM AES RAINFALL DATA
*%START               TZERO=[2001.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[101]
*%-----------------|-------------------------------------------------------------------------------
-------------------------------|
START               TZERO=[2002.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[102]
*%-----------------|-------------------------------------------------------------------------------
-------------------------------|
START               TZERO=[2003.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[103]
*%-----------------|-------------------------------------------------------------------------------
-------------------------------|
FINISH
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222     000    11   5555   =========
00004>  S       W   W   MM MM   H   H    Y Y    MM MM   O   O          2     0   0   1 1   5       Ver 5.500
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O          2     0   0   11    5       FEB  2015
00006>      S    W W    M   M   H   H     Y     M   M   O   O        222     0   0   11    5       =========
00007>  SSSSS    W W    M   M   H   H     Y     M   M    OOO         2       0   0   11     5    # 2549237
00008>
00009>         StormWater Management HYdrologic Model                 222     000    11   555    =========
00010>
00011>  ***********************************************************************************
00012>  ***************************************  SWMHYMO Ver 5.500  ***********************
00013>  ***************************  A single event and continuous hydrologic simulation model  ***********************
00014>  ***************************       based on the principles of HYMO and its successors    ***********************
00015>  ***************************                 OTTHYMO-83 and OTTHYMO-89.                  ***********************
00016>  ***********************************************************************************
00017>  ***************************  Distributed by:  J.F. Sabourin and Associates Inc.          ***********************
00018>  ***************************                   Ottawa, Ontario: (613) 836-3884           ***********************
00019>  ***************************                   Gatineau, Quebec: (819) 243-6858          ***********************
00020>  ***************************                   E-Mail: swmhymo@jfsa.com                  ***********************
00021>  ***********************************************************************************
00022>
00023>  ***********************************************************************************
00024>  ++++++++++++++++++  Licensed user: JFSAinc.                    ++++++++++++++++++
00025>  ++++++++++++++++++                 Ottawa                SERIAL#:2549237          ++++++++++++++++++
00026>  ***********************************************************************************
00027>
00028>  ***************************                                  ***********************
00029>  ***************************  +++++  PROGRAM ARRAY DIMENSIONS  +++++  ***********************
00030>  ***************************  Maximum value for ID numbers  :    11    ***********************
00031>  ***************************  Max. number of rainfall points: 105408   ***********************
00032>  ***************************  Max. number of flow points   : 105408    ***********************
00033>  ***********************************************************************************
00034>
00035>
00036>  ******************************  S U M M A R Y   O U T P U T  ******************************
00037>  ***********************************************************************************
00038>  *                    RUN DATE: 2024-03-14      TIME: 20:05:04      RUN COUNTER: 008081      *
00039>  ***********************************************************************************
00040>  * Input   file: C:\Temp\20240306-Pre-Dev\BCD_WEST-PRE_v03.dat                        *
00041>  * Output  file: C:\Temp\20240306-Pre-Dev\BCD_WEST-PRE_v03.out                        *
00042>  * Summary file: C:\Temp\20240306-Pre-Dev\BCD_WEST-PRE_v03.sum                        *
00043>  * User comments:                                                                    *
00044>  * 1:_____________________________________________________________________________*
00045>  * 2:_____________________________________________________________________________*
00046>  * 3:_____________________________________________________________________________*
00047>  ***********************************************************************************
00048>
00049>
00050> #*********************************************************************************************
00051> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00052> #*********************************************************************************************
00053> #  Project Name: Barrhaven Conservancy Development
00054> #  Project Number: 1474
00055> #  Date        : 2021/Oct/18
00056> #  Modeller    : J.Burnett, P.Eng.
00057> #  Updated     : 2022/Dec/07 [JB]
00058> #  Updated     : 2022/Dec/13 [LP]
00059> #  Updated     : 2024/Mar/14 [JB]
00060> #  Company     : J.F. Sabourin and Associates
00061> #  License #   : 2582634
00062> #*********************************************************************************************
00063>   ** END OF RUN :   66
00064>
00065> ***********************************************************************************
00066>
00067>
00068>
00069>
00070>
00071>  RUN#:COMMAND#
00072> R0067:C00001-------------------------------------------------------------------------
00073>      START
00074>       [TZERO =    .00 hrs on 19670101]
00075>       [METOUT=  2    (1=imperial, 2=metric output)]
00076>       [NSTORM=  0 ]
00077>       [NRUN  = 0067 ]
00078> #*********************************************************************************************
00079> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00080> #*********************************************************************************************
00081> #  Project Name: Barrhaven Conservancy Development
00082> #  Project Number: 1474
00083> #  Date        : 2021/Oct/18
00084> #  Modeller    : J.Burnett, P.Eng.
00085> #  Updated     : 2022/Dec/07 [JB]
00086> #  Updated     : 2022/Dec/13 [LP]
00087> #  Updated     : 2024/Mar/14 [JB]
00088> #  Company     : J.F. Sabourin and Associates
00089> #  License #   : 2582634
00090> #*********************************************************************************************
00091> # Ottawa International Airport (1967 - 2003)
00092> R0067:C00002-------------------------------------------------------------------------
00093>   *  READ AES DATA
00094>       [Filename  = YOW_1967_2007.123                                          ]
00095>       [Start_date= 1967.0101: End_date= 1967.1231]
00096>       [DT= 60.min: Length= 3984.hrs: WetHrs= 257: DryHrs= 3727: PTOT= 386.90)
00097>       Maximum average rainfall intensities over
00098>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00099>        24.60    17.65    13.20     7.25     3.83     2.36     1.73     1.32     .90    mm/hr
00100>        24.60    35.30    39.60    43.50    46.00    56.60    62.30    63.20    64.90    mm
00101>       19670921 19670921 19670921 19670921 19670921 19670922 19670922 19670923 19670924  date
00102>       Number of rainfall events per following interevent time
00103>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00104>          80       65       56       40       32       29       24       20       18
00105>       Number of events with at least the following durations
00106>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00107>          79       42       29       14        3        0        0        0        0
00108> R0067:C00003-------------------------------------------------------------------------
00109>      COMPUTE API
00110>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00111>       [APImax= 76.77: APIavg= 24.81: APImin=  3.06]
00112> #*********************************************************************************************
00113> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00114> #*********************************************************************************************
00115> R0067:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00116>      CONTINUOUS NASHYD       5.0 01:West_1        14.27     .144 1967.0921_18:50   63.09 .163     .000
00117>       [CN= 72.0: N= 3.00: Tp= 1.14]
00118>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00119>       [InterEventTime=  12.00]
00120> R0067:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00121>      CONTINUOUS NASHYD       5.0 01:West_2        20.14     .221 1967.0921_19:05   70.91 .183     .000
00122>       [CN= 76.0: N= 3.00: Tp= 1.26]
00123>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00124>       [InterEventTime=  12.00]
00125> R0067:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00126>      CONTINUOUS NASHYD       5.0 01:West_3        14.01     .102 1967.0921_20:15   61.60 .159     .000
00127>       [CN= 71.0: N= 3.00: Tp= 2.07]
00128>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00129>       [InterEventTime=  12.00]
00130> R0067:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00131>      ADD HYD                 5.0 02:West_1        14.27     .144 1967.0921_18:50   63.09  n/a     .000
00132>                          +   5.0 02:West_2        20.14     .221 1967.0921_19:05   70.91  n/a     .000
00133>                          +   5.0 02:West_3        14.01     .102 1967.0921_20:15   61.60  n/a     .000
00134>                      SUM=    5.0 01:West-Total    48.42     .451 1967.0921_19:15   65.91  n/a     .000
00135> #*********************************************************************************************
00136> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00137> #*********************************************************************************************
00138> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
00139> #*********************************************************************************************
00140> R0067:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00141>      CONTINUOUS NASHYD       5.0 01:INF-West_1    14.27     .389 1967.0921_18:20  157.58 .407     .000
00142>       [CN=100.0: N= 3.00: Tp= 1.14]
00143>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00144>       [InterEventTime=  12.00]
00145> R0067:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00146>      CONTINUOUS NASHYD       5.0 01:INF-West_2    20.14     .517 1967.0921_18:30  157.58 .407     .000
00147>       [CN=100.0: N= 3.00: Tp= 1.26]
00148>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00149>       [InterEventTime=  12.00]
00150> R0067:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00151>      CONTINUOUS NASHYD       5.0 01:INF-West_3    14.01     .260 1967.0921_19:30  157.58 .407     .000
00152>       [CN=100.0: N= 3.00: Tp= 2.07]
00153>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00154>       [InterEventTime=  12.00]
00155> R0067:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00156>      ADD HYD                 5.0 02:INF-West_1    14.27     .389 1967.0921_18:20  157.58  n/a     .000
00157>                          +   5.0 02:INF-West_2    20.14     .517 1967.0921_18:30  157.58  n/a     .000
00158>                          +   5.0 02:INF-West_3    14.01     .260 1967.0921_19:30  157.58  n/a     .000
00159>                      SUM=    5.0 01:INF-West-T    48.42    1.122 1967.0921_18:35  157.58  n/a     .000
00160> ##############################################################################
00161> # CONTINUOUS RAINFALL DATA
00162> ##############################################################################
00163>   ** END OF RUN :   67
00164>
00165> ***********************************************************************************
00166>
00167>
00168>
00169>
00170>
00171>  RUN#:COMMAND#
00172> R0068:C00001-------------------------------------------------------------------------
00173>      START
00174>       [TZERO =    .00 hrs on 19680101]
00175>       [METOUT=  2    (1=imperial, 2=metric output)]
00176>       [NSTORM=  0 ]
00177>       [NRUN  = 0068 ]
00178> #*********************************************************************************************
00179> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00180> #*********************************************************************************************
00181> #  Project Name: Barrhaven Conservancy Development
00182> #  Project Number: 1474
00183> #  Date        : 2021/Oct/18
00184> #  Modeller    : J.Burnett, P.Eng.
00185> #  Updated     : 2022/Dec/07 [JB]
00186> #  Updated     : 2022/Dec/13 [LP]
00187> #  Updated     : 2024/Mar/14 [JB]
00188> #  Company     : J.F. Sabourin and Associates
00189> #  License #   : 2582634
00190> #*********************************************************************************************
00191> # Ottawa International Airport (1967 - 2003)
00192> R0068:C00002-------------------------------------------------------------------------
00193>   *  READ AES DATA
00194>       [Filename  = YOW_1967_2007.123                                          ]
00195>       [Start_date= 1968.0101: End_date= 1968.1230]
00196>       [DT= 60.min: Length= 8760.hrs: WetHrs=  413: DryHrs=  8347: PTOT= 592.80)
00197>       Maximum average rainfall intensities over
00198>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00199>        33.30    17.05    11.37     6.23     3.74     1.87     1.26      .95      .70    mm/hr
00200>        33.30    34.10    34.10    37.40    44.90    44.90    45.40    45.40    50.20    mm
00201>       19680817 19680817 19680817 19680808 19680817 19680818 19680817 19680808 19680820  date
00202>       Number of rainfall events per following interevent time
00203>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00204>         137      105       93       84       72       63       48       43       36
00205>       Number of events with at least the following durations
00206>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00207>         136       76       49       18        5        0        0        0        0
00208> R0068:C00003-------------------------------------------------------------------------
00209>      COMPUTE API
00210>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00211>       [APImax= 67.52: APIavg= 16.74: APImin=  .27)
00212> #*********************************************************************************************
00213> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00214> #*********************************************************************************************
00215> R0068:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00216>      CONTINUOUS NASHYD       5.0 01:West_1        14.27     .151 1968.0817_ 5:55   67.82 .114     .000
00217>       [CN= 72.0: N= 3.00: Tp= 1.14]
00218>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00219>       [InterEventTime=  12.00]
00220> R0068:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00221>      CONTINUOUS NASHYD       5.0 01:West_2        20.14     .223 1968.0817_ 6:00   77.11 .130     .000
00222>       [CN= 76.0: N= 3.00: Tp= 1.26]
00223>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00224>       [InterEventTime=  12.00]
00225> R0068:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00226>      CONTINUOUS NASHYD       5.0 01:West_3        14.01     .082 1968.0817_ 6:50   66.09 .111     .000
00227>       [CN= 71.0: N= 3.00: Tp= 2.07]
00228>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00229>       [InterEventTime=  12.00]
00230> R0068:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00231>      ADD HYD                 5.0 02:West_1        14.27     .151 1968.0817_ 5:55   67.82  n/a     .000
00232>                          +   5.0 02:West_2        20.14     .223 1968.0817_ 6:00   77.11  n/a     .000
00233>                          +   5.0 02:West_3        14.01     .082 1968.0817_ 6:50   66.09  n/a     .000
00234>                      SUM=    5.0 01:West-Total    48.42     .442 1968.0817_ 6:05   71.18  n/a     .000
00235> #*********************************************************************************************
00236> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00237> #*********************************************************************************************
00238> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
00239> #*********************************************************************************************
00240> R0068:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00241>      CONTINUOUS NASHYD       5.0 01:INF-West_1    14.27     .406 1968.0817_ 5:45  210.47 .355     .000
00242>       [CN=100.0: N= 3.00: Tp= 1.14]
00243>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00244>       [InterEventTime=  12.00]
00245> R0068:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00246>      CONTINUOUS NASHYD       5.0 01:INF-West_2    20.14     .522 1968.0817_ 5:55  210.47 .355     .000
00247>       [CN=100.0: N= 3.00: Tp= 1.26]
00248>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00249>       [InterEventTime=  12.00]
00250> R0068:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00251>      CONTINUOUS NASHYD       5.0 01:INF-West_3    14.01     .226 1968.0817_ 6:40  210.47 .355     .000
00252>       [CN=100.0: N= 3.00: Tp= 2.07]
00253>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00254>       [InterEventTime=  12.00]
00255> R0068:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00256>      ADD HYD                 5.0 02:INF-West_1    14.27     .406 1968.0817_ 5:45  210.47  n/a     .000
00257>                          +   5.0 02:INF-West_2    20.14     .522 1968.0817_ 5:55  210.47  n/a     .000
00258>                          +   5.0 02:INF-West_3    14.01     .226 1968.0817_ 6:40  210.47  n/a     .000
00259>                      SUM=    5.0 01:INF-West-T    48.42    1.113 1968.0817_ 5:55  210.47  n/a     .000
00260> ##############################################################################
00261> # CONTINUOUS RAINFALL DATA
00262> ##############################################################################
00263>   ** END OF RUN :   68
00264>
00265> ***********************************************************************************
00266>
00267>
00268>
00269>
00270>
00271>  RUN#:COMMAND#
00272> R0069:C00001-------------------------------------------------------------------------
00273>      START
00274>       [TZERO =    .00 hrs on 19690101]
00275>       [METOUT=  2    (1=imperial, 2=metric output)]
00276>       [NSTORM=  0 ]
00277>       [NRUN  = 0069 ]
00278> #*********************************************************************************************
00279> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00280> #*********************************************************************************************
00281> #  Project Name: Barrhaven Conservancy Development
00282> #  Project Number: 1474
00283> #  Date        : 2021/Oct/18
00284> #  Modeller    : J.Burnett, P.Eng.
00285> #  Updated     : 2022/Dec/07 [JB]
00286> #  Updated     : 2022/Dec/13 [LP]
00287> #  Updated     : 2024/Mar/14 [JB]
00288> #  Company     : J.F. Sabourin and Associates
00289> #  License #   : 2582634
00290> #*********************************************************************************************
00291> # Ottawa International Airport (1967 - 2003)
00292> R0069:C00002-------------------------------------------------------------------------
00293>   *  READ AES DATA
00294>       [Filename  = YOW_1967_2007.123                                          ]
00295>       [Stt_date= 1969.0101: End_date= 1969.1231]
00296>       [DT= 60.min: Length= 8760.hrs: WetHrs=  470: DryHrs= 8290: PTOT= 570.30)
00297>       Maximum average rainfall intensities over
00298>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00299>        21.10    16.25    10.83     7.78     3.93     2.10     1.40     1.09      .75    mm/hr
00300>        21.10    32.50    32.50    46.70    47.20    50.30    50.30    52.10    54.00    mm
00301>       19690818 19690818 19690818 19690819 19690819 19690819 19690819 19690819 19690819  date
00302>       Number of rainfall events per following interevent time
00303>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00304>         157      119      107       92       72       58       49       43       32
00305>       Number of events with at least the following durations
00306>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00307>         156       84       58       21        5        0        0        0        0
00308> R0069:C00003-------------------------------------------------------------------------
00309>      COMPUTE API
00310>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00311>       [APImax= 56.77: APIavg= 16.06: APImin=  .26]
00312> #*********************************************************************************************
00313> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00314> #*********************************************************************************************
00315> R0069:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00316>      CONTINUOUS NASHYD       5.0 01:West_1        14.27     .135 1969.0819_ 2:50   55.35 .097     .000
00317>       [CN= 72.0: N= 3.00: Tp= 1.14]
00318>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00319>       [InterEventTime=  12.00]
00320> R0069:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00321>      CONTINUOUS NASHYD       5.0 01:West_2        20.14     .196 1969.0819_ 3:00   63.40 .111     .000
00322>       [CN= 76.0: N= 3.00: Tp= 1.26]
00323>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00324>       [InterEventTime=  12.00]
00325> R0069:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00326>      CONTINUOUS NASHYD       5.0 01:West_3        14.01     .086 1969.0819_ 3:35   53.87 .094     .000
00327>       [CN= 71.0: N= 3.00: Tp= 2.07]
00328>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00329>       [InterEventTime=  12.00]
00330> R0069:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00331>      ADD HYD                 5.0 02:West_1        14.27     .135 1969.0819_ 2:50   55.35  n/a     .000
00332>                          +   5.0 02:West_2        20.14     .196 1969.0819_ 3:00   63.40  n/a     .000
00333>                          +   5.0 02:West_3        14.01     .086 1969.0819_ 3:35   53.87  n/a     .000
00334>                      SUM=    5.0 01:West-Total    48.42     .410 1969.0819_ 3:00   58.27  n/a     .000
00335> #*********************************************************************************************
00336> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00337> #*********************************************************************************************
00338> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
00339> #*********************************************************************************************
00340> R0069:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00341>      CONTINUOUS NASHYD       5.0 01:INF-West_1    14.27     .360 1969.0818_22:40  191.45 .336     .000
00342>       [CN=100.0: N= 3.00: Tp= 1.14]
00343>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00344>       [InterEventTime=  12.00]
00345> R0069:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00346>      CONTINUOUS NASHYD       5.0 01:INF-West_2    20.14     .467 1969.0818_22:45  191.45 .336     .000
00347>       [CN=100.0: N= 3.00: Tp= 1.26]
00348>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00349>       [InterEventTime=  12.00]
00350> R0069:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00351>      CONTINUOUS NASHYD       5.0 01:INF-West_3    14.01     .207 1969.0818_23:30  191.45 .336     .000
00352>       [CN=100.0: N= 3.00: Tp= 2.07]
00353>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00354>       [InterEventTime=  12.00]
00355> R0069:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00356>      ADD HYD                 5.0 02:INF-West_1    14.27     .360 1969.0818_22:40  191.45  n/a     .000
00357>                          +   5.0 02:INF-West_2    20.14     .467 1969.0818_22:45  191.45  n/a     .000
00358>                          +   5.0 02:INF-West_3    14.01     .207 1969.0818_23:30  191.45  n/a     .000
00359>                      SUM=    5.0 01:INF-West-T    48.42     .998 1969.0818_22:45  191.45  n/a     .000
00360> ##############################################################################
```

```
00361> # CONTINUOUS RAINFALL DATA
00362> ##############################################################################
00363>   ** END OF RUN :   69
00364>
00365> *****************************************************************************************

00366>
00367>
00368>
00369>
00370>
00371>  RUN#:COMMAND#
00372> R0070:C00001-------------------------------------------------------------------------------
00373>       START
00374>       [TZERO =    .00 hrs on 19700101]
00375>       [METOUT=  2    (1=imperial, 2=metric output)]
00376>       [NSTORM=  0 ]
00377>       [NRUN  = 0070 ]
00378> ***************************************************************************************************************
00379> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00380> ***************************************************************************************************************
00381> #  Project Name: Barrhaven Conservancy Development
00382> #  Project Number: 1474
00383> #  Date       : 2021/Oct/18
00384> #  Modeller   : J.Burnett, P.Eng.
00385> #  Updated    : 2022/Dec/07 [JB]
00386> #  Updated    : 2022/Dec/13 [LP]
00387> #  Updated    : 2024/Mar/14 [JB]
00388> #  Company    : J.F. Sabourin and Associates
00389> #  License #  : 2582634
00390> ***************************************************************************************************************
00391> # Ottawa International Airport (1967 - 2003)
00392> R0070:C00002-------------------------------------------------------------------------------
00393>  *  READ AES DATA
00394>       [Filename  = YOW_1967_2007.123                                    ]
00395>       [Start_date= 1970.0101: End_date= 1970.1231]
00396>       (DT= 60.min: Length= 8760.hrs: WetHrs=  373: DryHrs= 8387: PTOT= 558.90)
00397>       Maximum average rainfall intensities over
00398>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00399>        35.30  18.30    12.20     6.10     3.63     1.81     1.21     1.46     .99    mm/hr
00400>        35.30  36.60    36.60    36.60    43.50    43.50    43.50    69.90   71.20    mm
00401>      19700926 19700926 19700926 19700927 19700817 19700817 19700818 19700926 19700927  date
00402>       Number of rainfall events per following interevent time
00403>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00404>          148    127      109       84       72       60       54       41       30
00405>       Number of events with at least the following durations
00406>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00407>          147     79       40       15        3        0        0        0        0
00408> R0070:C00003-------------------------------------------------------------------------------
00409>       COMPUTE API
00410>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00411>       [APImax= 76.00: APIavg= 15.84: APImin=  .07]
00412> ***************************************************************************************************************
00413> #                 Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00414> ***************************************************************************************************************
00415> R0070:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00416>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .193 1970.0926_22:00   52.85 .095     .000
00417>       [CN= 72.0: N= 3.00: Tp= 1.14]
00418>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00419>       [InterEventTime=  12.00]
00420> R0070:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00421>      CONTINUOUS NASHYD     5.0 01:West_2        20.14     .282 1970.0926_22:05   60.26 .108     .000
00422>       [CN= 76.0: N= 3.00: Tp= 1.26]
00423>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00424>       [InterEventTime=  12.00]
00425> R0070:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00426>      CONTINUOUS NASHYD     5.0 01:West_3        14.01     .108 1970.0926_22:55   51.48 .092     .000
00427>       [CN= 71.0: N= 3.00: Tp= 2.07]
00428>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00429>       [InterEventTime=  12.00]
00430> R0070:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00431>      ADD HYD               5.0 02:West_1        14.27     .193 1970.0926_22:00   52.85  n/a     .000
00432>                      +     5.0 02:West_2        20.14     .282 1970.0926_22:05   60.26  n/a     .000
00433>                      +     5.0 02:West_3        14.01     .108 1970.0926_22:55   51.48  n/a     .000
00434>                    SUM=    5.0 01:West-Total    48.42     .562 1970.0926_22:10   55.53  n/a     .000
00435> ***************************************************************************************************************
00436> #                 Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00437> ***************************************************************************************************************
00438> #                 Set infiltration to 0 (CN = 99.99) for water balance analysis
00439> ***************************************************************************************************************
00440> R0070:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00441>      CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .436 1970.0926_21:50  178.67 .320     .000
00442>       [CN=100.0: N= 3.00: Tp= 1.14]
00443>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00444>       [InterEventTime=  12.00]
00445> R0070:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00446>      CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .563 1970.0926_21:55  178.67 .320     .000
00447>       [CN=100.0: N= 3.00: Tp= 1.26]
00448>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00449>       [InterEventTime=  12.00]
00450> R0070:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00451>      CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .247 1970.0926_22:45  178.67 .320     .000
00452>       [CN=100.0: N= 3.00: Tp= 2.07]
00453>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00454>       [InterEventTime=  12.00]
00455> R0070:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00456>      ADD HYD               5.0 02:INF-West_1    14.27     .436 1970.0926_21:50  178.67  n/a     .000
00457>                      +     5.0 02:INF-West_2    20.14     .563 1970.0926_21:55  178.67  n/a     .000
00458>                      +     5.0 02:INF-West_3    14.01     .247 1970.0926_22:45  178.67  n/a     .000
00459>                    SUM=    5.0 01:INF-West_T    48.42    1.199 1970.0926_22:00  178.67  n/a     .000
00460> ##############################################################################
00461> # CONTINUOUS RAINFALL DATA
00462> ##############################################################################
00463>   ** END OF RUN :   70
00464>
00465> *****************************************************************************************

00466>
00467>
00468>
00469>
00470>
00471>  RUN#:COMMAND#
00472> R0071:C00001-------------------------------------------------------------------------------
00473>       START
00474>       [TZERO =    .00 hrs on 19710101]
00475>       [METOUT=  2    (1=imperial, 2=metric output)]
00476>       [NSTORM=  0 ]
00477>       [NRUN  = 0071 ]
00478> ***************************************************************************************************************
00479> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00480> ***************************************************************************************************************
00481> #  Project Name: Barrhaven Conservancy Development
00482> #  Project Number: 1474
00483> #  Date       : 2021/Oct/18
00484> #  Modeller   : J.Burnett, P.Eng.
00485> #  Updated    : 2022/Dec/07 [JB]
00486> #  Updated    : 2022/Dec/13 [LP]
00487> #  Updated    : 2024/Mar/14 [JB]
00488> #  Company    : J.F. Sabourin and Associates
00489> #  License #  : 2582634
00490> ***************************************************************************************************************
00491> # Ottawa International Airport (1967 - 2003)
00492> R0071:C00002-------------------------------------------------------------------------------
00493>  *  READ AES DATA
00494>       [Filename  = YOW_1967_2007.123                                    ]
00495>       [Start_date= 1971.0101: End_date= 1971.1231]
00496>       (DT= 60.min: Length= 8760.hrs: WetHrs=  412: DryHrs= 8348: PTOT= 522.10)
00497>       Maximum average rainfall intensities over
00498>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00499>        24.60  16.60    11.67     6.13     3.09     1.56     1.06      .79      .54    mm/hr
00500>        24.60  33.20    35.00    36.80    37.10    37.40    38.00    38.00    38.90    mm
00501>      19710810 19710810 19710810 19710810 19710810 19710810 19710810 19710811 19710812 19710830  date
00502>       Number of rainfall events per following interevent time
00503>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00504>          156    123      113       93       72       61       52       42       33
00505>       Number of events with at least the following durations
00506>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00507>          155     81       59       21        2        0        0        0        0
00508> R0071:C00003-------------------------------------------------------------------------------
00509>       COMPUTE API
00510>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00511>       [APImax= 62.22: APIavg= 14.84: APImin=  .36]
00512> ***************************************************************************************************************
00513> #                 Barrhaven Conservancy West Developments (WITH INFILTRATION)      PRE DEVELOPMENT CONDITIONS
00514> ***************************************************************************************************************
00515> R0071:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00516>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .140 1971.0810_16:30   39.74 .076     .000
00517>       [CN= 72.0: N= 3.00: Tp= 1.14]
00518>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00519>       [InterEventTime=  12.00]
00520> R0071:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00521>      CONTINUOUS NASHYD     5.0 01:West_2        20.14     .212 1971.0810_16:35   45.48 .087     .000
00522>       [CN= 76.0: N= 3.00: Tp= 1.26]
00523>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00524>       [InterEventTime=  12.00]
00525> R0071:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00526>      CONTINUOUS NASHYD     5.0 01:West_3        14.01     .085 1971.0810_17:20   38.68 .074     .000
00527>       [CN= 71.0: N= 3.00: Tp= 2.07]
00528>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00529>       [InterEventTime=  12.00]
00530> R0071:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00531>      ADD HYD               5.0 02:West_1        14.27     .140 1971.0810_16:30   39.74  n/a     .000
00532>                      +     5.0 02:West_2        20.14     .212 1971.0810_16:35   45.48  n/a     .000
00533>                      +     5.0 02:West_3        14.01     .085 1971.0810_17:20   38.68  n/a     .000
00534>                    SUM=    5.0 01:West-Total    48.42     .425 1971.0810_16:35   41.82  n/a     .000
00535> ***************************************************************************************************************
00536> #                 Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00537> ***************************************************************************************************************
00538> #                 Set infiltration to 0 (CN = 99.99) for water balance analysis
00539> ***************************************************************************************************************
00540> R0071:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00541>      CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .386 1971.0810_16:10  143.53 .275     .000
00542>       [CN=100.0: N= 3.00: Tp= 1.14]
00543>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00544>       [InterEventTime=  12.00]
00545> R0071:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00546>      CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .510 1971.0810_16:15  143.53 .275     .000
00547>       [CN=100.0: N= 3.00: Tp= 1.26]
00548>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00549>       [InterEventTime=  12.00]
00550> R0071:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00551>      CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .240 1971.0810_17:00  143.53 .275     .000
00552>       [CN=100.0: N= 3.00: Tp= 2.07]
00553>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00554>       [InterEventTime=  12.00]
00555> R0071:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00556>      ADD HYD               5.0 02:INF-West_1    14.27     .386 1971.0810_16:10  143.53  n/a     .000
00557>                      +     5.0 02:INF-West_2    20.14     .510 1971.0810_16:15  143.53  n/a     .000
00558>                      +     5.0 02:INF-West_3    14.01     .240 1971.0810_17:00  143.53  n/a     .000
00559>                    SUM=    5.0 01:INF-West_T    48.42    1.102 1971.0810_16:20  143.53  n/a     .000
00560> ##############################################################################
00561> # CONTINUOUS RAINFALL DATA
00562> ##############################################################################
00563>   ** END OF RUN :   71
00564>
00565> *****************************************************************************************

00566>
00567>
00568>
00569>
00570>
00571>  RUN#:COMMAND#
00572> R0072:C00001-------------------------------------------------------------------------------
00573>       START
00574>       [TZERO =    .00 hrs on 19720101]
00575>       [METOUT=  2    (1=imperial, 2=metric output)]
00576>       [NSTORM=  0 ]
00577>       [NRUN  = 0072 ]
00578> ***************************************************************************************************************
00579> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00580> ***************************************************************************************************************
00581> #  Project Name: Barrhaven Conservancy Development
00582> #  Project Number: 1474
00583> #  Date       : 2021/Oct/18
00584> #  Modeller   : J.Burnett, P.Eng.
00585> #  Updated    : 2022/Dec/07 [JB]
00586> #  Updated    : 2022/Dec/13 [LP]
00587> #  Updated    : 2024/Mar/14 [JB]
00588> #  Company    : J.F. Sabourin and Associates
00589> #  License #  : 2582634
00590> ***************************************************************************************************************
00591> # Ottawa International Airport (1967 - 2003)
00592> R0072:C00002-------------------------------------------------------------------------------
00593>  *  READ AES DATA
00594>       [Filename  = YOW_1967_2007.123                                    ]
00595>       [Start_date= 1972.0101: End_date= 1972.1230]
00596>       (DT= 60.min: Length= 8760.hrs: WetHrs=  489: DryHrs= 8271: PTOT= 784.30)
00597>       Maximum average rainfall intensities over
00598>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00599>        37.30  19.15    12.97     8.15     4.50     2.53     2.00     1.71     1.17    mm/hr
00600>        37.30  38.30    38.90    48.90    54.00    60.70    72.10    82.20    84.20    mm
00601>      19720712 19720712 19720807 19720808 19720808 19720808 19720808 19720713 19720714 19720715  date
00602>       Number of rainfall events per following interevent time
00603>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00604>          170    133      126       86       76       60       45       41       31
00605>       Number of events with at least the following durations
00606>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00607>          169     96       58       21        5        0        0        0        0
00608> R0072:C00003-------------------------------------------------------------------------------
00609>       COMPUTE API
00610>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00611>       [APImax=108.88: APIavg= 21.70: APImin=  .00]
00612> ***************************************************************************************************************
00613> #                 Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00614> ***************************************************************************************************************
00615> R0072:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00616>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .278 1972.0807_23:45  121.97 .156     .000
00617>       [CN= 72.0: N= 3.00: Tp= 1.14]
00618>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00619>       [InterEventTime=  12.00]
00620> R0072:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00621>      CONTINUOUS NASHYD     5.0 01:West_2        20.14     .402 1972.0807_23:50  136.80 .174     .000
00622>       [CN= 76.0: N= 3.00: Tp= 1.26]
00623>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00624>       [InterEventTime=  12.00]
00625> R0072:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00626>      CONTINUOUS NASHYD     5.0 01:West_3        14.01     .164 1972.0808_ 0:55  119.16 .152     .000
00627>       [CN= 71.0: N= 3.00: Tp= 2.07]
00628>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00629>       [InterEventTime=  12.00]
00630> R0072:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00631>      ADD HYD               5.0 02:West_1        14.27     .278 1972.0807_23:45  121.97  n/a     .000
00632>                      +     5.0 02:West_2        20.14     .402 1972.0807_23:50  136.80  n/a     .000
00633>                      +     5.0 02:West_3        14.01     .164 1972.0808_ 0:55  119.16  n/a     .000
00634>                    SUM=    5.0 01:West-Total    48.42     .814 1972.0807_23:55  127.32  n/a     .000
00635> ***************************************************************************************************************
00636> #                 Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00637> ***************************************************************************************************************
00638> #                 Set infiltration to 0 (CN = 99.99) for water balance analysis
00639> ***************************************************************************************************************
00640> R0072:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00641>      CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .507 1972.0807_23:35  305.45 .389     .000
00642>       [CN=100.0: N= 3.00: Tp= 1.14]
00643>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00644>       [InterEventTime=  12.00]
00645> R0072:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00646>      CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .663 1972.0807_23:40  305.45 .389     .000
00647>       [CN=100.0: N= 3.00: Tp= 1.26]
00648>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00649>       [InterEventTime=  12.00]
00650> R0072:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00651>      CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .307 1972.0808_ 0:30  305.45 .389     .000
00652>       [CN=100.0: N= 3.00: Tp= 2.07]
00653>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00654>       [InterEventTime=  12.00]
00655> R0072:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00656>      ADD HYD               5.0 02:INF-West_1    14.27     .507 1972.0807_23:35  305.45  n/a     .000
00657>                      +     5.0 02:INF-West_2    20.14     .663 1972.0807_23:40  305.46  n/a     .000
00658>                      +     5.0 02:INF-West_3    14.01     .307 1972.0808_ 0:30  305.45  n/a     .000
00659>                    SUM=    5.0 01:INF-West_T    48.42    1.429 1972.0807_23:45  305.45  n/a     .000
00660> ##############################################################################
00661> # CONTINUOUS RAINFALL DATA
00662> ##############################################################################
00663>   ** END OF RUN :   72
00664>
00665> *****************************************************************************************

00666>
00667>
00668>
00669>
00670>
00671>  RUN#:COMMAND#
00672> R0073:C00001-------------------------------------------------------------------------------
00673>       START
00674>       [TZERO =    .00 hrs on 19730101]
00675>       [METOUT=  2    (1=imperial, 2=metric output)]
00676>       [NSTORM=  0 ]
00677>       [NRUN  = 0073 ]
00678> ***************************************************************************************************************
00679> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00680> ***************************************************************************************************************
00681> #  Project Name: Barrhaven Conservancy Development
00682> #  Project Number: 1474
00683> #  Date       : 2021/Oct/18
00684> #  Modeller   : J.Burnett, P.Eng.
00685> #  Updated    : 2022/Dec/07 [JB]
00686> #  Updated    : 2022/Dec/13 [LP]
00687> #  Updated    : 2024/Mar/14 [JB]
00688> #  Company    : J.F. Sabourin and Associates
00689> #  License #  : 2582634
00690> ***************************************************************************************************************
00691> # Ottawa International Airport (1967 - 2003)
00692> R0073:C00002-------------------------------------------------------------------------------
00693>  *  READ AES DATA
00694>       [Filename  = YOW_1967_2007.123                                    ]
00695>       [Start_date= 1973.0101: End_date= 1973.1231]
00696>       (DT= 60.min: Length= 8760.hrs: WetHrs=  549: DryHrs= 8211: PTOT= 744.90)
00697>       Maximum average rainfall intensities over
00698>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00699>        30.00  17.25    12.33     7.10     3.63     1.89     1.28      .96      .96    mm/hr
00700>        30.00  34.50    37.00    42.60    43.60    45.40    46.00    46.00    69.20    mm
00701>      19730611 19730808 19730808 19730808 19730808 19730616 19730616 19730616 19731005  date
00702>       Number of rainfall events per following interevent time
00703>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00704>          200    164      143      108       79       61       54       43       37
00705>       Number of events with at least the following durations
00706>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00707>          200    102       66       20        4        0        0        0        0
00708> R0073:C00003-------------------------------------------------------------------------------
00709>       COMPUTE API
00710>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00711>       [APImax= 78.26: APIavg= 20.56: APImin=  .06]
00712> ***************************************************************************************************************
00713> #                 Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00714> ***************************************************************************************************************
00715> R0073:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00716>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .228 1973.0808_20:50   89.43 .120     .000
00717>       [CN= 72.0: N= 3.00: Tp= 1.14]
00718>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00719>       [InterEventTime=  12.00]
00720> R0073:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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00721>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .336 1973.0808_21:00  101.49 .136     .000
00722>       [CN= 76.0: N= 3.00: Tp= 1.26]
00723>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00724>       [InterEventTime=  12.00]
00725> R0073:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00726>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .132 1973.0808_21:45   87.18 .117     .000
00727>       [CN= 71.0: N= 3.00: Tp= 2.07]
00728>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00729>       [InterEventTime=  12.00]
00730> R0073:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00731>     ADD HYD               5.0 02:West_1        14.27     .228 1973.0808_20:50   89.43  n/a     .000
00732>                     +     5.0 02:West_2        20.14     .336 1973.0808_21:00  101.49  n/a     .000
00733>                     +     5.0 02:West_3        14.01     .132 1973.0808_21:45   87.18  n/a     .000
00734>                   SUM=    5.0 01:West-Total    48.42     .674 1973.0808_21:00   93.79  n/a     .000
00735> ********************************************************************************************************************************
00736> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00737> ********************************************************************************************************************************
00738> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
00739> ********************************************************************************************************************************
00740> R0073:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00741>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .497 1973.0808_20:35  275.63 .370     .000
00742>       [CN=100.0: N= 3.00: Tp= 1.14]
00743>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00744>       [InterEventTime=  12.00]
00745> R0073:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00746>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .650 1973.0808_20:45  275.63 .370     .000
00747>       [CN=100.0: N= 3.00: Tp= 1.26]
00748>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00749>       [InterEventTime=  12.00]
00750> R0073:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00751>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .300 1973.0808_21:30  275.63 .370     .000
00752>       [CN=100.0: N= 3.00: Tp= 2.07]
00753>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00754>       [InterEventTime=  12.00]
00755> R0073:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00756>     ADD HYD               5.0 02:INF-West_1    14.27     .497 1973.0808_20:35  275.63  n/a     .000
00757>                     +     5.0 02:INF-West_2    20.14     .650 1973.0808_20:45  275.63  n/a     .000
00758>                     +     5.0 02:INF-West_3    14.01     .300 1973.0808_21:30  275.63  n/a     .000
00759>                   SUM=    5.0 01:INF-West-T    48.42    1.401 1973.0808_20:45  275.63  n/a     .000
00760> ##############################################################################
00761> # CONTINUOUS RAINFALL DATA
00762> ##############################################################################
00763>  ** END OF RUN :   73
00764>
00765> ********************************************************************************
00766>
00767>
00768>
00769>
00770>
00771>  RUN#:COMMAND#
00772> R0074:C00001------------------------------------------------------------------------
00773>     START
00774>       [TZERO =    .00 hrs on 19740101]
00775>       [METOUT=   2    (1=imperial, 2=metric output)]
00776>       [NSTORM=   0 ]
00777>       [NRUN  = 0074 ]
00778> ********************************************************************************************************************************
00779> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00780> ********************************************************************************
00781> #  Project Name: Barrhaven Conservancy Development
00782> #  Project Number: 1474
00783> #  Date       : 2021/Oct/18
00784> #  Modeller   : J.Burnett, P.Eng.
00785> #  Updated    : 2022/Dec/07 [JB]
00786> #  Updated    : 2022/Dec/13 [LP]
00787> #  Updated    : 2024/Mar/14 [JB]
00788> #  Company    : J.F. Sabourin and Associates
00789> #  License #  : 2582634
00790> ********************************************************************************
00791> # Ottawa International Airport (1967 - 2003)
00792> R0074:C00002------------------------------------------------------------------------
00793>   *  READ AES DATA
00794>       [Filename  = YOW_1967_2007.123                                    ]
00795>       [Start_date= 1974.0101: End_date= 1974.1231]
00796>       [DT= 60.min: Length= 8760.hrs: WetHrs=  320: DryHrs= 8440: PTOT= 386.20]
00797>       Maximum average rainfall intensities over
00798>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00799>        20.60    15.40    10.37     5.18     2.98     1.63     1.08      .81      .54    mm/hr
00800>        20.60    30.80    31.10    31.10    35.70    39.00    39.00    39.00    39.00    mm
00801>       19740718 19740719 19740719 19740719 19740719 19740305 19740305 19740306 19740306 19740307  date
00802>       Number of rainfall events per following interevent time
00803>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00804>          129      105       93       77       63       50       38       33       23
00805>       Number of events with at least the following durations
00806>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00807>          128       66       32       10        3        0        0        0        0
00808> R0074:C00003------------------------------------------------------------------------
00809>     COMPUTE API
00810>       [APIinit= 50.00: APIkdy= .9000: APIkdt= .9956]
00811>       [APImax= 52.93: APIavg= 11.36: APImin=  .00]
00812> ********************************************************************************************************************************
00813> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00814> ********************************************************************************************************************************
00815> R0074:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00816>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .085 1974.0719_ 1:40   24.04 .062     .000
00817>       [CN= 72.0: N= 3.00: Tp= 1.14]
00818>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00819>       [InterEventTime=  12.00]
00820> R0074:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00821>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .130 1974.0719_ 1:45   27.61 .072     .000
00822>       [CN= 76.0: N= 3.00: Tp= 1.26]
00823>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00824>       [InterEventTime=  12.00]
00825> R0074:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00826>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .050 1974.0719_ 2:30   23.38 .061     .000
00827>       [CN= 71.0: N= 3.00: Tp= 2.07]
00828>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00829>       [InterEventTime=  12.00]
00830> R0074:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00831>     ADD HYD               5.0 02:West_1        14.27     .085 1974.0719_ 1:40   24.04  n/a     .000
00832>                     +     5.0 02:West_2        20.14     .130 1974.0719_ 1:45   27.61  n/a     .000
00833>                     +     5.0 02:West_3        14.01     .050 1974.0719_ 2:30   23.38  n/a     .000
00834>                   SUM=    5.0 01:West-Total    48.42     .257 1974.0719_ 1:45   25.33  n/a     .000
00835> ********************************************************************************************************************************
00836> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00837> ********************************************************************************************************************************
00838> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
00839> ********************************************************************************************************************************
00840> R0074:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00841>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .310 1974.0719_ 1:20   95.45 .247     .000
00842>       [CN=100.0: N= 3.00: Tp= 1.14]
00843>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00844>       [InterEventTime=  12.00]
00845> R0074:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00846>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .408 1974.0719_ 1:30   95.45 .247     .000
00847>       [CN=100.0: N= 3.00: Tp= 1.26]
00848>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00849>       [InterEventTime=  12.00]
00850> R0074:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00851>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .189 1974.0719_ 2:10   95.45 .247     .000
00852>       [CN=100.0: N= 3.00: Tp= 2.07]
00853>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00854>       [InterEventTime=  12.00]
00855> R0074:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00856>     ADD HYD               5.0 02:INF-West_1    14.27     .310 1974.0719_ 1:20   95.45  n/a     .000
00857>                     +     5.0 02:INF-West_2    20.14     .408 1974.0719_ 1:30   95.45  n/a     .000
00858>                     +     5.0 02:INF-West_3    14.01     .189 1974.0719_ 2:10   95.45  n/a     .000
00859>                   SUM=    5.0 01:INF-West-T    48.42     .880 1974.0719_ 1:30   95.45  n/a     .000
00860> ##############################################################################
00861> # CONTINUOUS RAINFALL DATA
00862> ##############################################################################
00863>  ** END OF RUN :   74
00864>
00865> ********************************************************************************
00866>
00867>
00868>
00869>
00870>
00871>  RUN#:COMMAND#
00872> R0075:C00001------------------------------------------------------------------------
00873>     START
00874>       [TZERO =    .00 hrs on 19750101]
00875>       [METOUT=   2    (1=imperial, 2=metric output)]
00876>       [NSTORM=   0 ]
00877>       [NRUN  = 0075 ]
00878> ********************************************************************************************************************************
00879> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00880> ********************************************************************************
00881> #  Project Name: Barrhaven Conservancy Development
00882> #  Project Number: 1474
00883> #  Date       : 2021/Oct/18
00884> #  Modeller   : J.Burnett, P.Eng.
00885> #  Updated    : 2022/Dec/07 [JB]
00886> #  Updated    : 2022/Dec/13 [LP]
00887> #  Updated    : 2024/Mar/14 [JB]
00888> #  Company    : J.F. Sabourin and Associates
00889> #  License #  : 2582634
00890> ********************************************************************************
00891> # Ottawa International Airport (1967 - 2003)
00892> R0075:C00002------------------------------------------------------------------------
00893>   *  READ AES DATA
00894>       [Filename  = YOW_1967_2007.123                                    ]
00895>       [Start_date= 1975.0101: End_date= 1975.1231]
00896>       [DT= 60.min: Length= 8760.hrs: WetHrs=  344: DryHrs= 8416: PTOT= 535.50]
00897>       Maximum average rainfall intensities over
00898>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00899>        34.80    18.40    12.53     6.32     3.33     1.73     1.15      .87      .62    mm/hr
00900>        34.80    36.80    37.60    37.90    40.00    41.50    41.50    41.80    44.40    mm
00901>       19750708 19750720 19750720 19750720 19750721 19750721 19750721 19750721 19750928  date
00902>       Number of rainfall events per following interevent time
00903>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00904>          136      118       99       78       61       49       40       33       25
00905>       Number of events with at least the following durations
00906>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00907>          135       70       40       17        1        0        0        0        0
00908> R0075:C00003------------------------------------------------------------------------
00909>     COMPUTE API
00910>       [APIinit= 50.00: APIkdy= .9000: APIkdt= .9956]
00911>       [APImax= 73.23: APIavg= 15.16: APImin=  .00]
00912> ********************************************************************************************************************************
00913> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00914> ********************************************************************************************************************************
00915> R0075:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00916>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .147 1975.0720_17:40   53.72 .100     .000
00917>       [CN= 72.0: N= 3.00: Tp= 1.14]
00918>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
00919>       [InterEventTime=  12.00]
00920> R0075:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00921>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .222 1975.0720_17:45   61.11 .114     .000
00922>       [CN= 76.0: N= 3.00: Tp= 1.26]
00923>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
00924>       [InterEventTime=  12.00]
00925> R0075:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00926>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .089 1975.0720_18:35   52.35 .098     .000
00927>       [CN= 71.0: N= 3.00: Tp= 2.07]
00928>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
00929>       [InterEventTime=  12.00]
00930> R0075:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00931>     ADD HYD               5.0 02:West_1        14.27     .147 1975.0720_17:40   53.72  n/a     .000
00932>                     +     5.0 02:West_2        20.14     .222 1975.0720_17:45   61.11  n/a     .000
00933>                     +     5.0 02:West_3        14.01     .089 1975.0720_18:35   52.35  n/a     .000
00934>                   SUM=    5.0 01:West-Total    48.42     .445 1975.0720_17:50   56.40  n/a     .000
00935> ********************************************************************************************************************************
00936> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
00937> ********************************************************************************************************************************
00938> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
00939> ********************************************************************************************************************************
00940> R0075:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00941>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .421 1975.0708_17:45  174.49 .326     .000
00942>       [CN=100.0: N= 3.00: Tp= 1.14]
00943>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00944>       [InterEventTime=  12.00]
00945> R0075:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00946>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .542 1975.0708_17:55  174.49 .326     .000
00947>       [CN=100.0: N= 3.00: Tp= 1.26]
00948>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00949>       [InterEventTime=  12.00]
00950> R0075:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00951>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .247 1975.0720_18:15  174.49 .326     .000
00952>       [CN=100.0: N= 3.00: Tp= 2.07]
00953>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
00954>       [InterEventTime=  12.00]
00955> R0075:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00956>     ADD HYD               5.0 02:INF-West_1    14.27     .421 1975.0708_17:45  174.49  n/a     .000
00957>                     +     5.0 02:INF-West_2    20.14     .542 1975.0708_17:55  174.49  n/a     .000
00958>                     +     5.0 02:INF-West_3    14.01     .247 1975.0720_18:15  174.49  n/a     .000
00959>                   SUM=    5.0 01:INF-West-T    48.42    1.153 1975.0708_17:55  174.49  n/a     .000
00960> ##############################################################################
00961> # CONTINUOUS RAINFALL DATA
00962> ##############################################################################
00963>  ** END OF RUN :   75
00964>
00965> ********************************************************************************
00966>
00967>
00968>
00969>
00970>
00971>  RUN#:COMMAND#
00972> R0076:C00001------------------------------------------------------------------------
00973>     START
00974>       [TZERO =    .00 hrs on 19760101]
00975>       [METOUT=   2    (1=imperial, 2=metric output)]
00976>       [NSTORM=   0 ]
00977>       [NRUN  = 0076 ]
00978> ********************************************************************************************************************************
00979> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00980> ********************************************************************************
00981> #  Project Name: Barrhaven Conservancy Development
00982> #  Project Number: 1474
00983> #  Date       : 2021/Oct/18
00984> #  Modeller   : J.Burnett, P.Eng.
00985> #  Updated    : 2022/Dec/07 [JB]
00986> #  Updated    : 2022/Dec/13 [LP]
00987> #  Updated    : 2024/Mar/14 [JB]
00988> #  Company    : J.F. Sabourin and Associates
00989> #  License #  : 2582634
00990> ********************************************************************************
00991> # Ottawa International Airport (1967 - 2003)
00992> R0076:C00002------------------------------------------------------------------------
00993>   *  READ AES DATA
00994>       [Filename  = YOW_1967_2007.123                                    ]
00995>       [Start_date= 1976.0101: End_date= 1976.1230]
00996>       [DT= 60.min: Length= 8064.hrs: WetHrs=  390: DryHrs= 7674: PTOT= 493.20]
00997>       Maximum average rainfall intensities over
00998>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00999>        14.00     8.90     6.43     4.65     2.35     1.39      .97      .99      .80    mm/hr
01000>        14.00    17.80    19.30    27.90    28.20    33.30    35.10    47.60    57.50    mm
01001>       19760828 19760828 19760828 19760828 19760828 19760920 19760520 19760520 19760921  date
01002>       Number of rainfall events per following interevent time
01003>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01004>          164      133      117       89       72       62       46       40       28
01005>       Number of events with at least the following durations
01006>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01007>          163       80       47       15        2        0        0        0        0
01008> R0076:C00003------------------------------------------------------------------------
01009>     COMPUTE API
01010>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01011>       [APImax= 59.66: APIavg= 15.35: APImin=  .02]
01012> ********************************************************************************************************************************
01013> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01014> ********************************************************************************************************************************
01015> R0076:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01016>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .065 1976.0519_23:20   36.78 .075     .000
01017>       [CN= 72.0: N= 3.00: Tp= 1.14]
01018>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01019>       [InterEventTime=  12.00]
01020> R0076:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01021>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .101 1976.0519_23:20   42.34 .086     .000
01022>       [CN= 76.0: N= 3.00: Tp= 1.26]
01023>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01024>       [InterEventTime=  12.00]
01025> R0076:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01026>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .051 1976.0520_ 0:00   35.75 .072     .000
01027>       [CN= 71.0: N= 3.00: Tp= 2.07]
01028>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01029>       [InterEventTime=  12.00]
01030> R0076:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01031>     ADD HYD               5.0 02:West_1        14.27     .065 1976.0519_23:20   36.78  n/a     .000
01032>                     +     5.0 02:West_2        20.14     .101 1976.0519_23:20   42.34  n/a     .000
01033>                     +     5.0 02:West_3        14.01     .051 1976.0520_ 0:00   35.75  n/a     .000
01034>                   SUM=    5.0 01:West-Total    48.42     .215 1976.0519_23:25   38.79  n/a     .000
01035> ********************************************************************************************************************************
01036> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01037> ********************************************************************************************************************************
01038> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
01039> ********************************************************************************************************************************
01040> R0076:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01041>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .132 1976.0828_20:20  137.15 .278     .000
01042>       [CN=100.0: N= 3.00: Tp= 1.14]
01043>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01044>       [InterEventTime=  12.00]
01045> R0076:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01046>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .182 1976.0828_22:50  137.15 .278     .000
01047>       [CN=100.0: N= 3.00: Tp= 1.26]
01048>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01049>       [InterEventTime=  12.00]
01050> R0076:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01051>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .113 1976.0828_23:20  137.15 .278     .000
01052>       [CN=100.0: N= 3.00: Tp= 2.07]
01053>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01054>       [InterEventTime=  12.00]
01055> R0076:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01056>     ADD HYD               5.0 02:INF-West_1    14.27     .132 1976.0828_20:20  137.15  n/a     .000
01057>                     +     5.0 02:INF-West_2    20.14     .182 1976.0828_22:50  137.15  n/a     .000
01058>                     +     5.0 02:INF-West_3    14.01     .113 1976.0828_23:20  137.15  n/a     .000
01059>                   SUM=    5.0 01:INF-West-T    48.42     .423 1976.0828_22:55  137.15  n/a     .000
01060> ##############################################################################
01061> # CONTINUOUS RAINFALL DATA
01062> ##############################################################################
01063>  ** END OF RUN :   76
01064>
01065> ********************************************************************************
01066>
01067>
01068>
01069>
01070>
01071>  RUN#:COMMAND#
01072> R0077:C00001------------------------------------------------------------------------
01073>     START
01074>       [TZERO =    .00 hrs on 19770101]
01075>       [METOUT=   2    (1=imperial, 2=metric output)]
01076>       [NSTORM=   0 ]
01077>       [NRUN  = 0077 ]
01078> ********************************************************************************************************************************
01079> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01080> ********************************************************************************
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01081> #  Project Name: Barrhaven Conservancy Development
01082> #  Project Number: 1474
01083> #  Date       : 2021/Oct/18
01084> #  Modeller   : J.Burnett, P.Eng.
01085> #  Updated    : 2022/Dec/07 [JB]
01086> #  Updated    : 2022/Dec/13 [LP]
01087> #  Updated    : 2024/Mar/14 [JB]
01088> #  Company    : J.F. Sabourin and Associates
01089> #  License #  : 2582634
01090> #*************************************************************************************************
01091> # Ottawa International Airport (1967 - 2003)
01092> R0077:C00002-------------------------------------------------------------------------------------
01093>   *  READ AES DATA
01094>       [Filename  = YOW_1967_2007.123                                          ]
01095>       [Start_date= 1977.0101: End_date= 1977.1231]
01096>       [DT= 60.min: Length= 8016.hrs: WetHrs=  512: DryHrs= 7504: PTOT= 677.80)
01097>       Maximum average rainfall intensities over
01098>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01099>        21.30    15.20    10.40     6.53     3.30     1.66     1.40     1.06      .73    mm/hr
01100>        21.30    30.40    31.20    39.20    39.60    39.80    50.40    51.00    52.40    mm
01101>      19770717 19770717 19770717 19770901 19770902 19770314 19770314 19770314 19770718  date
01102>       Number of rainfall events per following interevent time
01103>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01104>          172      142      126       99       78       63       53       42       30
01105>       Number of events with at least the following durations
01106>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01107>          171       88       60       22        5        1        0        0        0
01108> R0077:C00003-------------------------------------------------------------------------------------
01109>       COMPUTE API
01110>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01111>       [APImax= 74.80: APIavg= 20.62: APImin=  1.63)
01112> #*************************************************************************************************
01113> #                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01114> #*************************************************************************************************
01115> R0077:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01116>      CONTINUOUS NASHYD      5.0 01:West_1      14.27      .145 1977.0901_23:50   70.59 .104     .000
01117>        [CN= 72.0: N= 3.00: Tp= 1.14]
01118>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01119>        [InterEventTime=  12.00]
01120> R0077:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01121>      CONTINUOUS NASHYD      5.0 01:West_2      20.14      .217 1977.0901_23:55   80.37 .119     .000
01122>        [CN= 76.0: N= 3.00: Tp= 1.26]
01123>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01124>        [InterEventTime=  12.00]
01125> R0077:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01126>      CONTINUOUS NASHYD      5.0 01:West_3      14.01      .085 1977.0902_ 0:40   68.77 .101     .000
01127>        [CN= 71.0: N= 3.00: Tp= 2.07]
01128>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01129>        [InterEventTime=  12.00]
01130> R0077:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01131>      ADD HYD                5.0 02:West_1      14.27      .145 1977.0901_23:50   70.59  n/a     .000
01132>                       +     5.0 02:West_2      20.14      .217 1977.0901_23:55   80.37  n/a     .000
01133>                       +     5.0 02:West_3      14.01      .085 1977.0902_ 0:40   68.77  n/a     .000
01134>                     SUM=    5.0 01:West-Total  48.42      .436 1977.0901_23:55   74.13  n/a     .000
01135> #*************************************************************************************************
01136> #                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01137> #*************************************************************************************************
01138> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
01139> #*************************************************************************************************
01140> R0077:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01141>      CONTINUOUS NASHYD      5.0 01:INF-West_1  14.27      .364 1977.0901_23:35   229.46 .339     .000
01142>        [CN=100.0: N= 3.00: Tp= 1.14]
01143>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01144>        [InterEventTime=  12.00]
01145> R0077:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01146>      CONTINUOUS NASHYD      5.0 01:INF-West_2  20.14      .481 1977.0901_23:40   229.47 .339     .000
01147>        [CN=100.0: N= 3.00: Tp= 1.26]
01148>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01149>        [InterEventTime=  12.00]
01150> R0077:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01151>      CONTINUOUS NASHYD      5.0 01:INF-West_3  14.01      .234 1977.0902_ 0:20   229.46 .339     .000
01152>        [CN=100.0: N= 3.00: Tp= 2.07]
01153>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01154>        [InterEventTime=  12.00]
01155> R0077:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01156>      ADD HYD                5.0 02:INF-West_1  14.27      .364 1977.0901_23:35   229.46  n/a     .000
01157>                       +     5.0 02:INF-West_2  20.14      .481 1977.0901_23:40   229.46  n/a     .000
01158>                       +     5.0 02:INF-West_3  14.01      .234 1977.0902_ 0:20   229.46  n/a     .000
01159>                     SUM=    5.0 01:INF-West-T  48.42     1.054 1977.0901_23:40   229.46  n/a     .000
01160> ##################################################################################
01161> # CONTINUOUS RAINFALL DATA
01162> ##################################################################################
01163>  ** END OF RUN :   77
01164>
01165> *************************************************************************************
01166>
01167>
01168>
01169>
01170>
01171>  RUN#:COMMAND#
01172> R0078:C00001-------------------------------------------------------------------------------------
01173>      START
01174>      [TZERO =    .00 hrs on 19780101]
01175>      [METOUT=  2   (1=imperial, 2=metric output)]
01176>      [NSTORM=  0 ]
01177>      [NRUN  = 0078 ]
01178> #*************************************************************************************************
01179> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01180> #*************************************************************************************************
01181> #  Project Name: Barrhaven Conservancy Development
01182> #  Project Number: 1474
01183> #  Date       : 2021/Oct/18
01184> #  Modeller   : J.Burnett, P.Eng.
01185> #  Updated    : 2022/Dec/07 [JB]
01186> #  Updated    : 2022/Dec/13 [LP]
01187> #  Updated    : 2024/Mar/14 [JB]
01188> #  Company    : J.F. Sabourin and Associates
01189> #  License #  : 2582634
01190> #*************************************************************************************************
01191> # Ottawa International Airport (1967 - 2003)
01192> R0078:C00002-------------------------------------------------------------------------------------
01193>   *  READ AES DATA
01194>       [Filename  = YOW_1967_2007.123                                          ]
01195>       [Start_date= 1978.0101: End_date= 1978.1231]
01196>       [DT= 60.min: Length= 8040.hrs: WetHrs=  409: DryHrs= 7631: PTOT= 641.40)
01197>       Maximum average rainfall intensities over
01198>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01199>        36.00    18.15    12.10     6.05     3.04     1.64     1.13      .87      .58    mm/hr
01200>        36.00    36.30    36.30    36.30    36.50    39.40    40.60    41.60    41.60    mm
01201>      19780618 19780618 19780618 19780618 19780619 19780411 19780412 19780620 19780621  date
01202>       Number of rainfall events per following interevent time
01203>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01204>          154      128      118       97       71       58       51       46       33
01205>       Number of events with at least the following durations
01206>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01207>          154       75       44       18        5        0        0        0        0
01208> R0078:C00003-------------------------------------------------------------------------------------
01209>       COMPUTE API
01210>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01211>       [APImax= 65.36: APIavg= 19.25: APImin=  .25)
01212> #*************************************************************************************************
01213> #                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01214> #*************************************************************************************************
01215> R0078:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01216>      CONTINUOUS NASHYD      5.0 01:West_1      14.27      .180 1978.0618_17:55   53.70 .084     .000
01217>        [CN= 72.0: N= 3.00: Tp= 1.14]
01218>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01219>        [InterEventTime=  12.00]
01220> R0078:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01221>      CONTINUOUS NASHYD      5.0 01:West_2      20.14      .264 1978.0618_18:05   61.75 .096     .000
01222>        [CN= 76.0: N= 3.00: Tp= 1.26]
01223>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01224>        [InterEventTime=  12.00]
01225> R0078:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01226>      CONTINUOUS NASHYD      5.0 01:West_3      14.01      .098 1978.0618_18:50   52.22 .081     .000
01227>        [CN= 71.0: N= 3.00: Tp= 2.07]
01228>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01229>        [InterEventTime=  12.00]
01230> R0078:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01231>      ADD HYD                5.0 02:West_1      14.27      .180 1978.0618_17:55   53.70  n/a     .000
01232>                       +     5.0 02:West_2      20.14      .264 1978.0618_18:05   61.75  n/a     .000
01233>                       +     5.0 02:West_3      14.01      .098 1978.0618_18:50   52.22  n/a     .000
01234>                     SUM=    5.0 01:West-Total  48.42      .523 1978.0618_18:05   56.62  n/a     .000
01235> #*************************************************************************************************
01236> #                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01237> #*************************************************************************************************
01238> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
01239> #*************************************************************************************************
01240> R0078:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01241>      CONTINUOUS NASHYD      5.0 01:INF-West_1  14.27      .441 1978.0618_17:45   214.53 .334     .000
01242>        [CN=100.0: N= 3.00: Tp= 1.14]
01243>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01244>        [InterEventTime=  12.00]
01245> R0078:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01246>      CONTINUOUS NASHYD      5.0 01:INF-West_2  20.14      .568 1978.0618_17:55   214.53 .334     .000
01247>        [CN=100.0: N= 3.00: Tp= 1.26]
01248>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01249>        [InterEventTime=  12.00]
01250> R0078:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01251>      CONTINUOUS NASHYD      5.0 01:INF-West_3  14.01      .247 1978.0618_18:40   214.53 .334     .000
01252>        [CN=100.0: N= 3.00: Tp= 2.07]
01253>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01254>        [InterEventTime=  12.00]
01255> R0078:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01256>      ADD HYD                5.0 02:INF-West_1  14.27      .441 1978.0618_17:45   214.53  n/a     .000
01257>                       +     5.0 02:INF-West_2  20.14      .568 1978.0618_17:55   214.53  n/a     .000
01258>                       +     5.0 02:INF-West_3  14.01      .247 1978.0618_18:40   214.53  n/a     .000
01259>                     SUM=    5.0 01:INF-West-T  48.42     1.209 1978.0618_17:55   214.53  n/a     .000
01260> ##################################################################################
01261> # CONTINUOUS RAINFALL DATA
01262> ##################################################################################
01263>  ** END OF RUN :   78
01264>
01265> *************************************************************************************
01266>
01267>
01268>
01269>
01270>
01271>  RUN#:COMMAND#
01272> R0079:C00001-------------------------------------------------------------------------------------
01273>      START
01274>      [TZERO =    .00 hrs on 19790101]
01275>      [METOUT=  2   (1=imperial, 2=metric output)]
01276>      [NSTORM=  0 ]
01277>      [NRUN  = 0079 ]
01278> #*************************************************************************************************
01279> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01280> #*************************************************************************************************
01281> #  Project Name: Barrhaven Conservancy Development
01282> #  Project Number: 1474
01283> #  Date       : 2021/Oct/18
01284> #  Modeller   : J.Burnett, P.Eng.
01285> #  Updated    : 2022/Dec/07 [JB]
01286> #  Updated    : 2022/Dec/13 [LP]
01287> #  Updated    : 2024/Mar/14 [JB]
01288> #  Company    : J.F. Sabourin and Associates
01289> #  License #  : 2582634
01290> #*************************************************************************************************
01291> # Ottawa International Airport (1967 - 2003)
01292> R0079:C00002-------------------------------------------------------------------------------------
01293>   *  READ AES DATA
01294>       [Filename  = YOW_1967_2007.123                                          ]
01295>       [Start_date= 1979.0101: End_date= 1979.1231]
01296>       [DT= 60.min: Length= 8760.hrs: WetHrs=  546: DryHrs= 8214: PTOT= 866.50)
01297>       Maximum average rainfall intensities over
01298>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01299>        34.90    22.00    14.67     7.33     5.14     2.63     1.75     1.31      .88    mm/hr
01300>        34.90    44.00    44.00    44.00    61.70    63.00    63.00    63.00    63.00    mm
01301>      19790616 19790616 19790616 19790616 19790914 19790915 19790915 19790915 19790917  date
01302>       Number of rainfall events per following interevent time
01303>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01304>          188      147      129      103       86       60       53       43       36
01305>       Number of events with at least the following durations
01306>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01307>          187       97       65       25        6        1        0        0        0
01308> R0079:C00003-------------------------------------------------------------------------------------
01309>       COMPUTE API
01310>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01311>       [APImax= 78.42: APIavg= 23.13: APImin=  .13)
01312> #*************************************************************************************************
01313> #                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01314> #*************************************************************************************************
01315> R0079:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01316>      CONTINUOUS NASHYD      5.0 01:West_1      14.27      .252 1979.0616_14:55   141.56 .163     .000
01317>        [CN= 72.0: N= 3.00: Tp= 1.14]
01318>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01319>        [InterEventTime=  12.00]
01320> R0079:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01321>      CONTINUOUS NASHYD      5.0 01:West_2      20.14      .367 1979.0616_15:00   159.06 .184     .000
01322>        [CN= 76.0: N= 3.00: Tp= 1.26]
01323>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01324>        [InterEventTime=  12.00]
01325> R0079:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01326>      CONTINUOUS NASHYD      5.0 01:West_3      14.01      .139 1979.0616_15:45   138.25 .160     .000
01327>        [CN= 71.0: N= 3.00: Tp= 2.07]
01328>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01329>        [InterEventTime=  12.00]
01330> R0079:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01331>      ADD HYD                5.0 02:West_1      14.27      .252 1979.0616_14:55   141.55  n/a     .000
01332>                       +     5.0 02:West_2      20.14      .367 1979.0616_15:00   159.06  n/a     .000
01333>                       +     5.0 02:West_3      14.01      .139 1979.0616_15:45   138.25  n/a     .000
01334>                     SUM=    5.0 01:West-Total  48.42      .731 1979.0616_15:00   147.88  n/a     .000
01335> #*************************************************************************************************
01336> #                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01337> #*************************************************************************************************
01338> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
01339> #*************************************************************************************************
01340> R0079:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01341>      CONTINUOUS NASHYD      5.0 01:INF-West_1  14.27      .561 1979.0616_14:40   372.09 .429     .000
01342>        [CN=100.0: N= 3.00: Tp= 1.14]
01343>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01344>        [InterEventTime=  12.00]
01345> R0079:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01346>      CONTINUOUS NASHYD      5.0 01:INF-West_2  20.14      .725 1979.0616_14:45   372.09 .429     .000
01347>        [CN=100.0: N= 3.00: Tp= 1.26]
01348>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01349>        [InterEventTime=  12.00]
01350> R0079:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01351>      CONTINUOUS NASHYD      5.0 01:INF-West_3  14.01      .318 1979.0616_15:35   372.09 .429     .000
01352>        [CN=100.0: N= 3.00: Tp= 2.07]
01353>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01354>        [InterEventTime=  12.00]
01355> R0079:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01356>      ADD HYD                5.0 02:INF-West_1  14.27      .561 1979.0616_14:40   372.09  n/a     .000
01357>                       +     5.0 02:INF-West_2  20.14      .725 1979.0616_14:45   372.09  n/a     .000
01358>                       +     5.0 02:INF-West_3  14.01      .318 1979.0616_15:35   372.09  n/a     .000
01359>                     SUM=    5.0 01:INF-West-T  48.42     1.548 1979.0616_14:50   372.09  n/a     .000
01360> ##################################################################################
01361> # CONTINUOUS RAINFALL DATA
01362> ##################################################################################
01363>  ** END OF RUN :   79
01364>
01365> *************************************************************************************
01366>
01367>
01368>
01369>
01370>
01371>  RUN#:COMMAND#
01372> R0080:C00001-------------------------------------------------------------------------------------
01373>      START
01374>      [TZERO =    .00 hrs on 19800101]
01375>      [METOUT=  2   (1=imperial, 2=metric output)]
01376>      [NSTORM=  0 ]
01377>      [NRUN  = 0080 ]
01378> #*************************************************************************************************
01379> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01380> #*************************************************************************************************
01381> #  Project Name: Barrhaven Conservancy Development
01382> #  Project Number: 1474
01383> #  Date       : 2021/Oct/18
01384> #  Modeller   : J.Burnett, P.Eng.
01385> #  Updated    : 2022/Dec/07 [JB]
01386> #  Updated    : 2022/Dec/13 [LP]
01387> #  Updated    : 2024/Mar/14 [JB]
01388> #  Company    : J.F. Sabourin and Associates
01389> #  License #  : 2582634
01390> #*************************************************************************************************
01391> # Ottawa International Airport (1967 - 2003)
01392> R0080:C00002-------------------------------------------------------------------------------------
01393>   *  READ AES DATA
01394>       [Filename  = YOW_1967_2007.123                                          ]
01395>       [Start_date= 1980.0101: End_date= 1980.1230]
01396>       [DT= 60.min: Length= 8760.hrs: WetHrs=  427: DryHrs= 8333: PTOT= 622.00)
01397>       Maximum average rainfall intensities over
01398>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01399>        15.00     9.20     6.50     4.72     3.57     1.97     1.35     1.01      .86    mm/hr
01400>        15.00    18.40    19.50    28.30    42.80    47.20    48.60    48.60    62.00    mm
01401>      19800830 19800830 19801025 19801025 19801026 19801026 19801027 19801027 19800902  date
01402>       Number of rainfall events per following interevent time
01403>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01404>          151      125      112       93       79       62       49       44       28
01405>       Number of events with at least the following durations
01406>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01407>          150       85       54       16        4        0        0        0        0
01408> R0080:C00003-------------------------------------------------------------------------------------
01409>       COMPUTE API
01410>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01411>       [APImax= 68.72: APIavg= 17.50: APImin=  .06)
01412> #*************************************************************************************************
01413> #                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01414> #*************************************************************************************************
01415> R0080:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01416>      CONTINUOUS NASHYD      5.0 01:West_1      14.27      .080 1980.1026_ 0:30    58.50 .094     .000
01417>        [CN= 72.0: N= 3.00: Tp= 1.14]
01418>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01419>        [InterEventTime=  12.00]
01420> R0080:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01421>      CONTINUOUS NASHYD      5.0 01:West_2      20.14      .122 1980.1026_ 0:35    66.79 .107     .000
01422>        [CN= 76.0: N= 3.00: Tp= 1.26]
01423>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01424>        [InterEventTime=  12.00]
01425> R0080:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01426>      CONTINUOUS NASHYD      5.0 01:West_3      14.01      .061 1980.1026_ 1:10    56.97 .092     .000
01427>        [CN= 71.0: N= 3.00: Tp= 2.07]
01428>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01429>        [InterEventTime=  12.00]
01430> R0080:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01431>      ADD HYD                5.0 02:West_1      14.27      .080 1980.1026_ 0:30    58.50  n/a     .000
01432>                       +     5.0 02:West_2      20.14      .122 1980.1026_ 0:35    66.79  n/a     .000
01433>                       +     5.0 02:West_3      14.01      .061 1980.1026_ 1:10    56.97  n/a     .000
01434>                     SUM=    5.0 01:West-Total  48.42      .260 1980.1026_ 0:35    61.50  n/a     .000
01435> #*************************************************************************************************
01436> #                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01437> #*************************************************************************************************
01438> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
01439> #*************************************************************************************************
01440> R0080:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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```
01441>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .167 1980.0901_21:10  202.99 .326     .000
01442>       [CN=100.0: N= 3.00: Tp= 1.14]
01443>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01444>       [InterEventTime=  12.00]
01445> R0080:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01446>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .221 1980.0901_21:15  202.99 .326     .000
01447>       [CN=100.0: N= 3.00: Tp= 1.26]
01448>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01449>       [InterEventTime=  12.00]
01450> R0080:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01451>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .133 1980.0321_16:10  202.99 .326     .000
01452>       [CN=100.0: N= 3.00: Tp= 2.07]
01453>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01454>       [InterEventTime=  12.00]
01455> R0080:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01456>     ADD HYD               5.0 02:INF-West_1    14.27     .167 1980.0901_21:10  202.99  n/a     .000
01457>                     +     5.0 02:INF-West_2    20.14     .221 1980.0901_21:15  202.99  n/a     .000
01458>                     +     5.0 02:INF-West_3    14.01     .133 1980.0321_16:10  202.99  n/a     .000
01459>                   SUM=    5.0 01:West-T        48.42     .491 1980.0321_15:30  202.99  n/a     .000
01460> ##############################################################################
01461> # CONTINUOUS RAINFALL DATA
01462> ##############################################################################
01463>  ** END OF RUN :   80
01464>
01465> *****************************************************************************
01466>
01467>
01468>
01469>
01470>
01471>  RUN#:COMMAND#
01472> R0081:C00001------------------------------------------------------------------------------
01473>     START
01474>       [TZERO =    .00 hrs on 19810101]
01475>       [METOUT=   2    (1=imperial, 2=metric output)]
01476>       [NSTORM=   0 ]
01477>       [NRUN  = 0081 ]
01478> *****************************************************************************************************
01479> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01480> *****************************************************************************************************
01481> #  Project Name: Barrhaven Conservancy Development
01482> #  Project Number: 1474
01483> #  Date        : 2021/Oct/18
01484> #  Modeller    : J.Burnett, P.Eng.
01485> #  Updated     : 2022/Dec/07 [JB]
01486> #  Updated     : 2022/Dec/13 [LP]
01487> #  Updated     : 2024/Mar/14 [JB]
01488> #  Company     : J.F. Sabourin and Associates
01489> #  License #   : 2582634
01490> *****************************************************************************************************
01491> # Ottawa International Airport (1967 - 2003)
01492> R0081:C00002------------------------------------------------------------------------------
01493>   *  READ AES DATA
01494>       [Filename  = YOW_1967_2007.123                                    ]
01495>       [Start_date= 1981.0101: End_date= 1981.1231]
01496>       [DT= 60.min: Length= 8760.hrs: WetHrs=  641: DryHrs= 8119: PTOT= 936.40)
01497>       Maximum average rainfall intensities over
01498>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01499>        35.30    31.85    26.20    18.15     9.27     4.83     3.22     2.41     1.62     mm/hr
01500>        35.30    63.70    78.60   108.90   111.30   115.90   115.90   115.90   116.70     mm
01501>       19810805 19810805 19810805 19810805 19810805 19810806 19810806 19810806 19810805  date
01502>       Number of rainfall events per following interevent time
01503>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01504>          226      171      136      109       83       68       59       47       30
01505>       Number of events with at least the following durations
01506>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01507>          225      128       79       28        7        0        0        0        0
01508> R0081:C00003------------------------------------------------------------------------------
01509>       COMPUTE API
01510>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01511>       [APImax=123.49: APIavg= 25.69: APImin=  .26]
01512> *****************************************************************************************************
01513> #                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01514> *****************************************************************************************************
01515> R0081:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01516>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .785 1981.0805_ 2:55  179.64 .192     .000
01517>       [CN= 72.0: N= 3.00: Tp= 1.14]
01518>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01519>       [InterEventTime=  12.00]
01520> R0081:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01521>     CONTINUOUS NASHYD     5.0 01:West_2        20.14    1.116 1981.0805_ 3:05  196.98 .210     .000
01522>       [CN= 76.0: N= 3.00: Tp= 1.26]
01523>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01524>       [InterEventTime=  12.00]
01525> R0081:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01526>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .557 1981.0805_ 4:25  176.32 .188     .000
01527>       [CN= 71.0: N= 3.00: Tp= 2.07]
01528>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01529>       [InterEventTime=  12.00]
01530> R0081:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01531>     ADD HYD               5.0 02:West_1        14.27     .785 1981.0805_ 2:55  179.64  n/a     .000
01532>                     +     5.0 02:West_2        20.14    1.116 1981.0805_ 3:05  196.98  n/a     .000
01533>                     +     5.0 02:West_3        14.01     .557 1981.0805_ 4:25  176.32  n/a     .000
01534>                   SUM=    5.0 01:West-Total    48.42    2.353 1981.0805_ 3:10  185.89  n/a     .000
01535> *****************************************************************************************************
01536> #                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01537> *****************************************************************************************************
01538> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
01539> *****************************************************************************************************
01540> R0081:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01541>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27    1.007 1981.0805_ 2:35  380.71 .407     .000
01542>       [CN=100.0: N= 3.00: Tp= 1.14]
01543>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01544>       [InterEventTime=  12.00]
01545> R0081:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01546>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14    1.352 1981.0805_ 2:40  380.71 .407     .000
01547>       [CN=100.0: N= 3.00: Tp= 1.26]
01548>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01549>       [InterEventTime=  12.00]
01550> R0081:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01551>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .710 1981.0805_ 3:45  380.70 .407     .000
01552>       [CN=100.0: N= 3.00: Tp= 2.07]
01553>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01554>       [InterEventTime=  12.00]
01555> R0081:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01556>     ADD HYD               5.0 02:INF-West_1    14.27    1.007 1981.0805_ 2:35  380.70  n/a     .000
01557>                     +     5.0 02:INF-West_2    20.14    1.352 1981.0805_ 2:40  380.71  n/a     .000
01558>                     +     5.0 02:INF-West_3    14.01     .710 1981.0805_ 3:45  380.70  n/a     .000
01559>                   SUM=    5.0 01:INF-West-T    48.42    2.967 1981.0805_ 2:45  380.70  n/a     .000
01560> ##############################################################################
01561> # CONTINUOUS RAINFALL DATA
01562> ##############################################################################
01563>  ** END OF RUN :   81
01564>
01565> *****************************************************************************
01566>
01567>
01568>
01569>
01570>
01571>  RUN#:COMMAND#
01572> R0082:C00001------------------------------------------------------------------------------
01573>     START
01574>       [TZERO =    .00 hrs on 19820101]
01575>       [METOUT=   2    (1=imperial, 2=metric output)]
01576>       [NSTORM=   0 ]
01577>       [NRUN  = 0082 ]
01578> *****************************************************************************************************
01579> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01580> *****************************************************************************************************
01581> #  Project Name: Barrhaven Conservancy Development
01582> #  Project Number: 1474
01583> #  Date        : 2021/Oct/18
01584> #  Modeller    : J.Burnett, P.Eng.
01585> #  Updated     : 2022/Dec/07 [JB]
01586> #  Updated     : 2022/Dec/13 [LP]
01587> #  Updated     : 2024/Mar/14 [JB]
01588> #  Company     : J.F. Sabourin and Associates
01589> #  License #   : 2582634
01590> *****************************************************************************************************
01591> # Ottawa International Airport (1967 - 2003)
01592> R0082:C00002------------------------------------------------------------------------------
01593>   *  READ AES DATA
01594>       [Filename  = YOW_1967_2007.123                                    ]
01595>       [Start_date= 1982.0101: End_date= 1982.1231]
01596>       [DT= 60.min: Length= 8760.hrs: WetHrs=  436: DryHrs= 8324: PTOT= 596.10)
01597>       Maximum average rainfall intensities over
01598>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01599>        19.80    10.75     7.60     5.83     3.36     1.68     1.12      .96      .80     mm/hr
01600>        19.80    21.50    22.80    35.00    40.30    40.30    40.30    46.30    57.30     mm
01601>       19820801 19820901 19820825 19820825 19820825 19820826 19820826 19820825 19820825  date
01602>       Number of rainfall events per following interevent time
01603>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01604>          134      110       98       78       66       57       48       41       33
01605>       Number of events with at least the following durations
01606>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01607>          133       81       58       18        4        1        1        0        0
01608> R0082:C00003------------------------------------------------------------------------------
01609>       COMPUTE API
01610>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01611>       [APImax= 56.66: APIavg= 16.78: APImin=  .03]
01612> *****************************************************************************************************
01613> #                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01614> *****************************************************************************************************
01615> R0082:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01616>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .102 1982.0825_12:15   47.17 .079     .000
01617>       [CN= 72.0: N= 3.00: Tp= 1.14]
01618>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01619>       [InterEventTime=  12.00]
01620> R0082:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01621>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .159 1982.0825_12:25   54.10 .091     .000
01622>       [CN= 76.0: N= 3.00: Tp= 1.26]
01623>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01624>       [InterEventTime=  12.00]
01625> R0082:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01626>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .076 1982.0825_13:35   45.89 .077     .000
01627>       [CN= 71.0: N= 3.00: Tp= 2.07]
01628>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01629>       [InterEventTime=  12.00]
01630> R0082:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01631>     ADD HYD               5.0 02:West_1        14.27     .102 1982.0825_12:15   47.17  n/a     .000
01632>                     +     5.0 02:West_2        20.14     .159 1982.0825_12:25   54.10  n/a     .000
01633>                     +     5.0 02:West_3        14.01     .076 1982.0825_13:35   45.89  n/a     .000
01634>                   SUM=    5.0 01:West-Total    48.42     .327 1982.0825_12:30   49.68  n/a     .000
01635> *****************************************************************************************************
01636> #                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01637> *****************************************************************************************************
01638> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
01639> *****************************************************************************************************
01640> R0082:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01641>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .264 1982.0825_11:35  182.36 .306     .000
01642>       [CN=100.0: N= 3.00: Tp= 1.14]
01643>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01644>       [InterEventTime=  12.00]
01645> R0082:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01646>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .358 1982.0825_11:40  182.36 .306     .000
01647>       [CN=100.0: N= 3.00: Tp= 1.26]
01648>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01649>       [InterEventTime=  12.00]
01650> R0082:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01651>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .196 1982.0825_12:45  182.36 .306     .000
01652>       [CN=100.0: N= 3.00: Tp= 2.07]
01653>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01654>       [InterEventTime=  12.00]
01655> R0082:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01656>     ADD HYD               5.0 02:INF-West_1    14.27     .264 1982.0825_11:35  182.36  n/a     .000
01657>                     +     5.0 02:INF-West_2    20.14     .358 1982.0825_11:40  182.36  n/a     .000
01658>                     +     5.0 02:INF-West_3    14.01     .196 1982.0825_12:45  182.36  n/a     .000
01659>                   SUM=    5.0 01:INF-West-T    48.42     .794 1982.0825_11:50  182.36  n/a     .000
01660> ##############################################################################
01661> # CONTINUOUS RAINFALL DATA
01662> ##############################################################################
01663>  ** END OF RUN :   82
01664>
01665> *****************************************************************************
01666>
01667>
01668>
01669>
01670>
01671>  RUN#:COMMAND#
01672> R0083:C00001------------------------------------------------------------------------------
01673>     START
01674>       [TZERO =    .00 hrs on 19830101]
01675>       [METOUT=   2    (1=imperial, 2=metric output)]
01676>       [NSTORM=   0 ]
01677>       [NRUN  = 0083 ]
01678> *****************************************************************************************************
01679> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01680> *****************************************************************************************************
01681> #  Project Name: Barrhaven Conservancy Development
01682> #  Project Number: 1474
01683> #  Date        : 2021/Oct/18
01684> #  Modeller    : J.Burnett, P.Eng.
01685> #  Updated     : 2022/Dec/07 [JB]
01686> #  Updated     : 2022/Dec/13 [LP]
01687> #  Updated     : 2024/Mar/14 [JB]
01688> #  Company     : J.F. Sabourin and Associates
01689> #  License #   : 2582634
01690> *****************************************************************************************************
01691> # Ottawa International Airport (1967 - 2003)
01692> R0083:C00002------------------------------------------------------------------------------
01693>   *  READ AES DATA
01694>       [Filename  = YOW_1967_2007.123                                    ]
01695>       [Start_date= 1983.0101: End_date= 1983.1231]
01696>       [DT= 60.min: Length= 8760.hrs: WetHrs=  462: DryHrs= 8298: PTOT= 587.50)
01697>       Maximum average rainfall intensities over
01698>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01699>        10.40     9.70     7.53     5.43     3.18     2.36     1.68     1.32      .92     mm/hr
01700>        10.40    19.40    22.60    32.60    38.20    56.70    60.40    63.20    66.00     mm
01701>       19831004 19830921 19830921 19831005 19831005 19831005 19831005 19831006 19831008  date
01702>       Number of rainfall events per following interevent time
01703>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01704>          143      115      103       85       70       55       50       45       35
01705>       Number of events with at least the following durations
01706>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01707>          142       87       56       28        5        0        0        0        0
01708> R0083:C00003------------------------------------------------------------------------------
01709>       COMPUTE API
01710>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01711>       [APImax= 79.86: APIavg= 16.57: APImin=  .05)
01712> *****************************************************************************************************
01713> #                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01714> *****************************************************************************************************
01715> R0083:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01716>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .132 1983.1005_16:30   51.78 .088     .000
01717>       [CN= 72.0: N= 3.00: Tp= 1.14]
01718>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
01719>       [InterEventTime=  12.00]
01720> R0083:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01721>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .202 1983.1005_16:35   58.94 .100     .000
01722>       [CN= 76.0: N= 3.00: Tp= 1.26]
01723>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
01724>       [InterEventTime=  12.00]
01725> R0083:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01726>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .100 1983.1005_17:50   50.45 .086     .000
01727>       [CN= 71.0: N= 3.00: Tp= 2.07]
01728>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
01729>       [InterEventTime=  12.00]
01730> R0083:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01731>     ADD HYD               5.0 02:West_1        14.27     .132 1983.1005_16:30   51.78  n/a     .000
01732>                     +     5.0 02:West_2        20.14     .202 1983.1005_16:35   58.94  n/a     .000
01733>                     +     5.0 02:West_3        14.01     .100 1983.1005_17:50   50.45  n/a     .000
01734>                   SUM=    5.0 01:West-Total    48.42     .419 1983.1005_16:45   54.37  n/a     .000
01735> *****************************************************************************************************
01736> #                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
01737> *****************************************************************************************************
01738> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
01739> *****************************************************************************************************
01740> R0083:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01741>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .252 1983.1005_16:00  172.99 .294     .000
01742>       [CN=100.0: N= 3.00: Tp= 1.14]
01743>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01744>       [InterEventTime=  12.00]
01745> R0083:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01746>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .339 1983.1005_16:10  172.99 .294     .000
01747>       [CN=100.0: N= 3.00: Tp= 1.26]
01748>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01749>       [InterEventTime=  12.00]
01750> R0083:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01751>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .184 1983.1005_17:20  172.99 .294     .000
01752>       [CN=100.0: N= 3.00: Tp= 2.07]
01753>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
01754>       [InterEventTime=  12.00]
01755> R0083:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01756>     ADD HYD               5.0 02:INF-West_1    14.27     .252 1983.1005_16:00  172.99  n/a     .000
01757>                     +     5.0 02:INF-West_2    20.14     .339 1983.1005_16:10  172.99  n/a     .000
01758>                     +     5.0 02:INF-West_3    14.01     .184 1983.1005_17:20  172.99  n/a     .000
01759>                   SUM=    5.0 01:INF-West-T    48.42     .746 1983.1005_16:15  172.99  n/a     .000
01760> ##############################################################################
01761> # CONTINUOUS RAINFALL DATA
01762> ##############################################################################
01763>  ** END OF RUN :   83
01764>
01765> *****************************************************************************
01766>
01767>
01768>
01769>
01770>
01771>  RUN#:COMMAND#
01772> R0084:C00001------------------------------------------------------------------------------
01773>     START
01774>       [TZERO =    .00 hrs on 19840101]
01775>       [METOUT=   2    (1=imperial, 2=metric output)]
01776>       [NSTORM=   0 ]
01777>       [NRUN  = 0084 ]
01778> *****************************************************************************************************
01779> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01780> *****************************************************************************************************
01781> #  Project Name: Barrhaven Conservancy Development
01782> #  Project Number: 1474
01783> #  Date        : 2021/Oct/18
01784> #  Modeller    : J.Burnett, P.Eng.
01785> #  Updated     : 2022/Dec/07 [JB]
01786> #  Updated     : 2022/Dec/13 [LP]
01787> #  Updated     : 2024/Mar/14 [JB]
01788> #  Company     : J.F. Sabourin and Associates
01789> #  License #   : 2582634
01790> *****************************************************************************************************
01791> # Ottawa International Airport (1967 - 2003)
01792> R0084:C00002------------------------------------------------------------------------------
01793>   *  READ AES DATA
01794>       [Filename  = YOW_1967_2007.123                                    ]
01795>       [Start_date= 1984.0101: End_date= 1984.1230]
01796>       [DT= 60.min: Length= 8760.hrs: WetHrs=  308: DryHrs= 8452: PTOT= 459.40)
01797>       Maximum average rainfall intensities over
01798>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01799>        17.80     9.70     7.57     4.33     3.01     1.85     1.58     1.19     1.00     mm/hr
01800>        17.80    19.40    22.70    26.00    36.10    44.30    57.00    57.00    72.20     mm
```

```
      19840812 19840812 19840812 19840806 19840812 19840813 19840813 19840814 19840813  date
      Number of rainfall events per following interevent time
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
         98       80       75       63       55       48       40       34       26
      Number of events with at least the following durations
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
         97       58       39       11        3        1        0        0        0
R0084:C00003----------------------------------------------------------------------------------
     COMPUTE API
      [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
      {APImax= 86.83: APIavg= 13.22: APImin=   .00}
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
R0084:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_1        14.27     .112 1984.0813_ 7:05   49.92 .109     .000
      [CN= 72.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
      [InterEventTime=  12.00]
R0084:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_2        20.14     .162 1984.0813_ 7:15   56.90 .124     .000
      [CN= 76.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
      [InterEventTime=  12.00]
R0084:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_3        14.01     .073 1984.0813_ 8:35   48.62 .106     .000
      [CN= 71.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
      [InterEventTime=  12.00]
R0084:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:West_1        14.27     .112 1984.0813_ 7:05   49.92  n/a     .000
                   +      5.0 02:West_2        20.14     .162 1984.0813_ 7:15   56.90  n/a     .000
                   +      5.0 02:West_3        14.01     .073 1984.0813_ 8:35   48.62  n/a     .000
                SUM=      5.0 01:West-Total    48.42     .332 1984.0813_ 7:20   52.45  n/a     .000
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
#                  Set infiltration to 0 (CN = 99.99) for water balance analysis
#*****************************************************************************************************
R0084:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .223 1984.0812_ 7:45  167.70 .365     .000
      [CN=100.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0084:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .287 1984.0812_ 7:50  167.70 .365     .000
      [CN=100.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0084:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .142 1984.0807_ 0:00  167.70 .365     .000
      [CN=100.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0084:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:INF-West_1    14.27     .223 1984.0812_ 7:45  167.70  n/a     .000
                   +      5.0 02:INF-West_2    20.14     .287 1984.0812_ 7:50  167.70  n/a     .000
                   +      5.0 02:INF-West_3    14.01     .142 1984.0807_ 0:00  167.70  n/a     .000
                SUM=      5.0 01:INF-West-T    48.42     .628 1984.0806_23:25  167.70  n/a     .000
################################################################################
# CONTINUOUS RAINFALL DATA
################################################################################
  ** END OF RUN :   84

*****************************************************************************************************





 RUN#:COMMAND#
R0085:C00001----------------------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on 19850101]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   0 ]
      [NRUN  = 0085 ]
#*****************************************************************************************************
#  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
#*****************************************************************************************************
#  Project Name: Barrhaven Conservancy Development
#  Project Number: 1474
#  Date         : 2021/Oct/18
#  Modeller     : J.Burnett, P.Eng.
#  Updated      : 2022/Dec/07 [JB]
#  Updated      : 2022/Dec/13 [LP]
#  Updated      : 2024/Mar/14 [JB]
#  Company      : J.F. Sabourin and Associates
#  License #    : 2582634
#*****************************************************************************************************
# Ottawa International Airport (1967 - 2003)
R0085:C00002----------------------------------------------------------------------------------
  *  READ AES DATA
      [Filename  = YOW_1967_2007.123                                         ]
      [Start_date= 1985.0101: End_date= 1985.1231]
      {DT= 60.min: Length= 8760.hrs: WetHrs=  354: DryHrs= 8406: PTOT= 559.90}
      Maximum average rainfall intensities over
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
       19.00    13.60    11.73     6.60     3.30     1.65     1.11      .89      .60    mm/hr
       19.00    27.20    35.20    39.60    39.60    39.60    40.10    42.80    43.40    mm
      19850716 19850617 19850617 19850618 19850618 19850618 19850618 19850827 19850827  date
      Number of rainfall events per following interevent time
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
        108       88       84       74       69       56       49       43       32
      Number of events with at least the following durations
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
        107       70       43       13        4        1        0        0        0
R0085:C00003----------------------------------------------------------------------------------
     COMPUTE API
      [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
      {APImax= 57.29: APIavg= 15.86: APImin=   .20}
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
R0085:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_1        14.27     .125 1985.0618_ 0:35   52.48 .094     .000
      [CN= 72.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
      [InterEventTime=  12.00]
R0085:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_2        20.14     .192 1985.0618_ 0:40   60.37 .108     .000
      [CN= 76.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
      [InterEventTime=  12.00]
R0085:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_3        14.01     .085 1985.0618_ 1:45   51.04 .091     .000
      [CN= 71.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
      [InterEventTime=  12.00]
R0085:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:West_1        14.27     .125 1985.0618_ 0:35   52.48  n/a     .000
                   +      5.0 02:West_2        20.14     .192 1985.0618_ 0:40   60.37  n/a     .000
                   +      5.0 02:West_3        14.01     .085 1985.0618_ 1:45   51.04  n/a     .000
                SUM=      5.0 01:West-Total    48.42     .389 1985.0618_ 0:45   55.34  n/a     .000
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
#                  Set infiltration to 0 (CN = 99.99) for water balance analysis
#*****************************************************************************************************
R0085:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .328 1985.0618_ 0:10  212.50 .380     .000
      [CN=100.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0085:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .441 1985.0618_ 0:15  212.50 .380     .000
      [CN=100.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0085:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .224 1985.0618_ 1:10  212.50 .380     .000
      [CN=100.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0085:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:INF-West_1    14.27     .328 1985.0618_ 0:10  212.50  n/a     .000
                   +      5.0 02:INF-West_2    20.14     .441 1985.0618_ 0:15  212.50  n/a     .000
                   +      5.0 02:INF-West_3    14.01     .224 1985.0618_ 1:10  212.50  n/a     .000
                SUM=      5.0 01:INF-West-T    48.42     .964 1985.0618_ 0:20  212.50  n/a     .000
################################################################################
# CONTINUOUS RAINFALL DATA
################################################################################
  ** END OF RUN :   85

*****************************************************************************************************





 RUN#:COMMAND#
R0086:C00001----------------------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on 19860101]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   0 ]
      [NRUN  = 0086 ]
#*****************************************************************************************************
#  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
#*****************************************************************************************************
```

```
#  Project Name: Barrhaven Conservancy Development
#  Project Number: 1474
#  Date         : 2021/Oct/18
#  Modeller     : J.Burnett, P.Eng.
#  Updated      : 2022/Dec/07 [JB]
#  Updated      : 2022/Dec/13 [LP]
#  Updated      : 2024/Mar/14 [JB]
#  Company      : J.F. Sabourin and Associates
#  License #    : 2582634
#*****************************************************************************************************
# Ottawa International Airport (1967 - 2003)
R0086:C00002----------------------------------------------------------------------------------
  *  READ AES DATA
      [Filename  = YOW_1967_2007.123                                         ]
      [Start_date= 1986.0101: End_date= 1986.1231]
      {DT= 60.min: Length= 8040.hrs: WetHrs=  520: DryHrs= 7520: PTOT= 849.40}
      Maximum average rainfall intensities over
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
       18.30    17.80    13.57     7.07     4.84     2.89     2.42     1.85     1.31    mm/hr
       18.30    35.60    40.70    42.40    58.10    69.30    87.00    88.60    94.40    mm
      19860729 19860729 19860729 19860729 19860912 19860912 19860912 19860912 19860913  date
      Number of rainfall events per following interevent time
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
        178      144      131      104       80       63       53       48       33
      Number of events with at least the following durations
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
        177      104       76       24        2        0        0        0        0
R0086:C00003----------------------------------------------------------------------------------
     COMPUTE API
      [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
      {APImax=102.23: APIavg= 25.30: APImin=   .17}
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
R0086:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_1        14.27     .258 1986.0911_23:40  146.75 .173     .000
      [CN= 72.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
      [InterEventTime=  12.00]
R0086:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_2        20.14     .376 1986.0911_23:45  163.14 .192     .000
      [CN= 76.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
      [InterEventTime=  12.00]
R0086:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_3        14.01     .190 1986.0912_ 0:30  143.62 .169     .000
      [CN= 71.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
      [InterEventTime=  12.00]
R0086:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:West_1        14.27     .258 1986.0911_23:40  146.75  n/a     .000
                   +      5.0 02:West_2        20.14     .376 1986.0911_23:45  163.15  n/a     .000
                   +      5.0 02:West_3        14.01     .190 1986.0912_ 0:30  143.62  n/a     .000
                SUM=      5.0 01:West-Total    48.42     .807 1986.0911_23:50  152.66  n/a     .000
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
#                  Set infiltration to 0 (CN = 99.99) for water balance analysis
#*****************************************************************************************************
R0086:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .422 1986.0729_15:40  340.34 .401     .000
      [CN=100.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0086:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .560 1986.0729_15:50  340.34 .401     .000
      [CN=100.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0086:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .275 1986.0729_16:40  340.34 .401     .000
      [CN=100.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0086:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:INF-West_1    14.27     .422 1986.0729_15:40  340.34  n/a     .000
                   +      5.0 02:INF-West_2    20.14     .560 1986.0729_15:50  340.34  n/a     .000
                   +      5.0 02:INF-West_3    14.01     .275 1986.0729_16:40  340.34  n/a     .000
                SUM=      5.0 01:INF-West-T    48.42    1.213 1986.0729_15:55  340.34  n/a     .000
################################################################################
# CONTINUOUS RAINFALL DATA
################################################################################
  ** END OF RUN :   86

*****************************************************************************************************





 RUN#:COMMAND#
R0087:C00001----------------------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on 19870101]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   0 ]
      [NRUN  = 0087 ]
#*****************************************************************************************************
#  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
#*****************************************************************************************************
#  Project Name: Barrhaven Conservancy Development
#  Project Number: 1474
#  Date         : 2021/Oct/18
#  Modeller     : J.Burnett, P.Eng.
#  Updated      : 2022/Dec/07 [JB]
#  Updated      : 2022/Dec/13 [LP]
#  Updated      : 2024/Mar/14 [JB]
#  Company      : J.F. Sabourin and Associates
#  License #    : 2582634
#*****************************************************************************************************
# Ottawa International Airport (1967 - 2003)
R0087:C00002----------------------------------------------------------------------------------
  *  READ AES DATA
      [Filename  = YOW_1967_2007.123                                         ]
      [Start_date= 1987.0101: End_date= 1987.1231]
      {DT= 60.min: Length= 7344.hrs: WetHrs=  492: DryHrs= 6852: PTOT= 640.10}
      Maximum average rainfall intensities over
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
       20.00    13.90    14.03     7.05     4.87     2.46     1.84     1.40      .93    mm/hr
       20.00    27.80    42.10    42.30    58.40    59.00    66.40    67.00    67.00    mm
      19870724 19870724 19870724 19870724 19870724 19870725 19870725 19870726 19870726  date
      Number of rainfall events per following interevent time
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
        180      147      128       93       74       55       49       41       28
      Number of events with at least the following durations
        1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
        179       94       60       20        3        0        0        0        0
R0087:C00003----------------------------------------------------------------------------------
     COMPUTE API
      [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
      {APImax= 75.76: APIavg= 21.41: APImin=  1.18}
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
R0087:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_1        14.27     .183 1987.0724_15:40   68.56 .107     .000
      [CN= 72.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
      [InterEventTime=  12.00]
R0087:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_2        20.14     .274 1987.0724_15:45   77.04 .120     .000
      [CN= 76.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
      [InterEventTime=  12.00]
R0087:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:West_3        14.01     .115 1987.0724_16:25   66.97 .105     .000
      [CN= 71.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
      [InterEventTime=  12.00]
R0087:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:West_1        14.27     .183 1987.0724_15:40   68.56  n/a     .000
                   +      5.0 02:West_2        20.14     .274 1987.0724_15:45   77.04  n/a     .000
                   +      5.0 02:West_3        14.01     .115 1987.0724_16:25   66.97  n/a     .000
                SUM=      5.0 01:West-Total    48.42     .560 1987.0724_15:45   71.63  n/a     .000
#*****************************************************************************************************
#                  Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
#*****************************************************************************************************
#                  Set infiltration to 0 (CN = 99.99) for water balance analysis
#*****************************************************************************************************
R0087:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .382 1987.0724_15:20  195.07 .305     .000
      [CN=100.0: N= 3.00: Tp= 1.14]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0087:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .516 1987.0724_15:25  195.07 .305     .000
      [CN=100.0: N= 3.00: Tp= 1.26]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0087:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .266 1987.0724_16:05  195.07 .305     .000
      [CN=100.0: N= 3.00: Tp= 2.07]
      [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
      [InterEventTime=  12.00]
R0087:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               5.0 02:INF-West_1    14.27     .382 1987.0724_15:20  195.07  n/a     .000
                   +      5.0 02:INF-West_2    20.14     .516 1987.0724_15:25  195.07  n/a     .000
                   +      5.0 02:INF-West_3    14.01     .266 1987.0724_16:05  195.07  n/a     .000
                SUM=      5.0 01:INF-West-T    48.42    1.141 1987.0724_15:30  195.07  n/a     .000
################################################################################
```

```
02161> # CONTINUOUS RAINFALL DATA
02162> ##############################################################################
02163>  ** END OF RUN :  87
02164>
02165> *****************************************************************************************

02166>
02167>
02168>
02169>
02170>
02171>  RUN#:COMMAND#
02172> R0088:C00001-------------------------------------------------------------------------------
02173>      START
02174>       [TZERO =    .00 hrs on 19880101]
02175>       [METOUT=  2    (1=imperial, 2=metric output)]
02176>       [NSTORM=  0 ]
02177>       [NRUN  = 0088 ]
02178> *****************************************************************************************
02179> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02180> *****************************************************************************************
02181> #  Project Name: Barrhaven Conservancy Development
02182> #  Project Number: 1474
02183> #  Date       : 2021/Oct/18
02184> #  Modeller   : J.Burnett, P.Eng.
02185> #  Updated    : 2022/Dec/07 [JB]
02186> #  Updated    : 2022/Dec/13 [LP]
02187> #  Updated    : 2024/Mar/14 [JB]
02188> #  Company    : J.F. Sabourin and Associates
02189> #  License #  : 2582634
02190> *****************************************************************************************
02191> # Ottawa International Airport (1967 - 2003)
02192> R0088:C00002-------------------------------------------------------------------------------
02193>  *  READ AES DATA
02194>       [Filename  = YOW_1967_2007.123                                          ]
02195>       [Start_date= 1988.0101: End_date= 1988.1230]
02196>       (DT= 60.min: Length= 8760.hrs: WetHrs=  487: DryHrs= 8273: PTOT= 643.80)
02197>       Maximum average rainfall intensities over
02198>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02199>        25.50  18.20    12.77     7.37     3.78     1.91     1.27      .95      .94    mm/hr
02200>        25.50  36.40    38.30    44.20    45.40    45.80    45.80    45.80    67.40    mm
02201>       19880917 19880726 19880625 19880625 19880625 19880625 19880625 19880626 19880625  date
02202>       Number of rainfall events per following interevent time
02203>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02204>          165      130      109       80       66       56       49       42       26
02205>       Number of events with at least the following durations
02206>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02207>          164      102       71       20        5        0        0        0        0
02208> R0088:C00003-------------------------------------------------------------------------------
02209>      COMPUTE API
02210>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02211>       [APImax= 66.04: APIavg= 18.06: APImin=  .03]
02212> *****************************************************************************************
02213> #                Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02214> *****************************************************************************************
02215> R0088:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02216>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .228 1988.0625_13:40   66.49 .103     .000
02217>        [CN= 72.0: N= 3.00: Tp= 1.14]
02218>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02219>        [InterEventTime=  12.00]
02220> R0088:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02221>      CONTINUOUS NASHYD     5.0 01:West_2        20.14     .337 1988.0625_13:45   75.66 .118     .000
02222>        [CN= 76.0: N= 3.00: Tp= 1.26]
02223>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02224>        [InterEventTime=  12.00]
02225> R0088:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02226>      CONTINUOUS NASHYD     5.0 01:West_3        14.01     .135 1988.0625_14:30   64.79 .101     .000
02227>        [CN= 71.0: N= 3.00: Tp= 2.07]
02228>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02229>        [InterEventTime=  12.00]
02230> R0088:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02231>      ADD HYD               5.0 02:West_1        14.27     .228 1988.0625_13:40   66.49  n/a     .000
02232>                      +     5.0 02:West_2        20.14     .337 1988.0625_13:45   75.66  n/a     .000
02233>                      +     5.0 02:West_3        14.01     .135 1988.0625_14:30   64.79  n/a     .000
02234>                    SUM=    5.0 01:West-Total    48.42     .681 1988.0625_13:50   69.81  n/a     .000
02235> *****************************************************************************************
02236> #                Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02237> *****************************************************************************************
02238> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
02239> *****************************************************************************************
02240> R0088:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02241>      CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .467 1988.0625_13:25  208.89 .324     .000
02242>        [CN=100.0: N= 3.00: Tp= 1.14]
02243>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02244>        [InterEventTime=  12.00]
02245> R0088:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02246>      CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .619 1988.0625_13:30  208.89 .324     .000
02247>        [CN=100.0: N= 3.00: Tp= 1.26]
02248>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02249>        [InterEventTime=  12.00]
02250> R0088:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02251>      CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .297 1988.0625_14:15  208.89 .324     .000
02252>        [CN=100.0: N= 3.00: Tp= 2.07]
02253>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02254>        [InterEventTime=  12.00]
02255> R0088:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02256>      ADD HYD               5.0 01:INF-West_1    14.27     .467 1988.0625_13:25  208.89  n/a     .000
02257>                      +     5.0 02:INF-West_2    20.14     .619 1988.0625_13:30  208.89  n/a     .000
02258>                      +     5.0 02:INF-West_3    14.01     .297 1988.0625_14:15  208.89  n/a     .000
02259>                    SUM=    5.0 01:INF-West-T    48.42    1.348 1988.0625_13:35  208.89  n/a     .000
02260> ##############################################################################
02261> # CONTINUOUS RAINFALL DATA
02262> ##############################################################################
02263>  ** END OF RUN :  88
02264>
02265> *****************************************************************************************

02266>
02267>
02268>
02269>
02270>
02271>  RUN#:COMMAND#
02272> R0089:C00001-------------------------------------------------------------------------------
02273>      START
02274>       [TZERO =    .00 hrs on 19890101]
02275>       [METOUT=  2    (1=imperial, 2=metric output)]
02276>       [NSTORM=  0 ]
02277>       [NRUN  = 0089 ]
02278> *****************************************************************************************
02279> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02280> *****************************************************************************************
02281> #  Project Name: Barrhaven Conservancy Development
02282> #  Project Number: 1474
02283> #  Date       : 2021/Oct/18
02284> #  Modeller   : J.Burnett, P.Eng.
02285> #  Updated    : 2022/Dec/07 [JB]
02286> #  Updated    : 2022/Dec/13 [LP]
02287> #  Updated    : 2024/Mar/14 [JB]
02288> #  Company    : J.F. Sabourin and Associates
02289> #  License #  : 2582634
02290> *****************************************************************************************
02291> # Ottawa International Airport (1967 - 2003)
02292> R0089:C00002-------------------------------------------------------------------------------
02293>  *  READ AES DATA
02294>       [Filename  = YOW_1967_2007.123                                          ]
02295>       [Start_date= 1989.0101: End_date= 1989.1231]
02296>       (DT= 60.min: Length= 8040.hrs: WetHrs=  422: DryHrs= 7618: PTOT= 523.20)
02297>       Maximum average rainfall intensities over
02298>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02299>        22.70  12.60     8.93     5.75     3.03     1.69     1.14      .86      .59    mm/hr
02300>        22.70  25.20    26.80    34.50    36.30    40.60    40.90    41.30    42.50    mm
02301>       19890727 19890727 19890727 19890727 19890727 19891020 19891021 19891021 19891022  date
02302>       Number of rainfall events per following interevent time
02303>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02304>          151      125      108       89       67       53       42       37       29
02305>       Number of events with at least the following durations
02306>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02307>          150       81       52       19        5        0        0        0        0
02308> R0089:C00003-------------------------------------------------------------------------------
02309>      COMPUTE API
02310>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02311>       [APImax= 55.10: APIavg= 16.03: APImin=  .02]
02312> *****************************************************************************************
02313> #                Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02314> *****************************************************************************************
02315> R0089:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02316>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .096 1989.0727_16:05   41.43 .079     .000
02317>        [CN= 72.0: N= 3.00: Tp= 1.14]
02318>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02319>        [InterEventTime=  12.00]
02320> R0089:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02321>      CONTINUOUS NASHYD     5.0 01:West_2        20.14     .147 1989.0727_16:15   47.58 .091     .000
02322>        [CN= 76.0: N= 3.00: Tp= 1.26]
02323>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02324>        [InterEventTime=  12.00]
02325> R0089:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02326>      CONTINUOUS NASHYD     5.0 01:West_3        14.01     .060 1989.0727_17:15   40.31 .077     .000
02327>        [CN= 71.0: N= 3.00: Tp= 2.07]
02328>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02329>        [InterEventTime=  12.00]
02330> R0089:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02331>      ADD HYD               5.0 02:West_1        14.27     .096 1989.0727_16:05   41.43  n/a     .000
02332>                      +     5.0 02:West_2        20.14     .147 1989.0727_16:15   47.58  n/a     .000
02333>                      +     5.0 02:West_3        14.01     .060 1989.0727_17:15   40.31  n/a     .000
02334>                    SUM=    5.0 01:West-Total    48.42     .292 1989.0727_16:20   43.66  n/a     .000
02335> *****************************************************************************************
02336> #                Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02337> *****************************************************************************************
02338> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
02339> *****************************************************************************************
02340> R0089:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02341>      CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .329 1989.0727_15:50  159.72 .305     .000
02342>        [CN=100.0: N= 3.00: Tp= 1.14]
02343>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02344>        [InterEventTime=  12.00]
02345> R0089:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02346>      CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .428 1989.0727_15:55  159.72 .305     .000
02347>        [CN=100.0: N= 3.00: Tp= 1.26]
02348>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02349>        [InterEventTime=  12.00]
02350> R0089:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02351>      CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .199 1989.0727_16:50  159.72 .305     .000
02352>        [CN=100.0: N= 3.00: Tp= 2.07]
02353>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02354>        [InterEventTime=  12.00]
02355> R0089:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02356>      ADD HYD               5.0 02:INF-West_1    14.27     .329 1989.0727_15:50  159.72  n/a     .000
02357>                      +     5.0 02:INF-West_2    20.14     .428 1989.0727_15:55  159.72  n/a     .000
02358>                      +     5.0 02:INF-West_3    14.01     .199 1989.0727_16:50  159.72  n/a     .000
02359>                    SUM=    5.0 01:INF-West-T    48.42     .920 1989.0727_16:00  159.72  n/a     .000
02360> ##############################################################################
02361> # CONTINUOUS RAINFALL DATA
02362> ##############################################################################
02363>  ** END OF RUN :  89
02364>
02365> *****************************************************************************************

02366>
02367>
02368>
02369>
02370>
02371>  RUN#:COMMAND#
02372> R0090:C00001-------------------------------------------------------------------------------
02373>      START
02374>       [TZERO =    .00 hrs on 19900101]
02375>       [METOUT=  2    (1=imperial, 2=metric output)]
02376>       [NSTORM=  0 ]
02377>       [NRUN  = 0090 ]
02378> *****************************************************************************************
02379> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02380> *****************************************************************************************
02381> #  Project Name: Barrhaven Conservancy Development
02382> #  Project Number: 1474
02383> #  Date       : 2021/Oct/18
02384> #  Modeller   : J.Burnett, P.Eng.
02385> #  Updated    : 2022/Dec/07 [JB]
02386> #  Updated    : 2022/Dec/13 [LP]
02387> #  Updated    : 2024/Mar/14 [JB]
02388> #  Company    : J.F. Sabourin and Associates
02389> #  License #  : 2582634
02390> *****************************************************************************************
02391> # Ottawa International Airport (1967 - 2003)
02392> R0090:C00002-------------------------------------------------------------------------------
02393>  *  READ AES DATA
02394>       [Filename  = YOW_1967_2007.123                                          ]
02395>       [Start_date= 1990.0101: End_date= 1990.1231]
02396>       (DT= 60.min: Length= 7344.hrs: WetHrs=  618: DryHrs= 6726: PTOT= 727.80)
02397>       Maximum average rainfall intensities over
02398>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02399>        20.60  12.25     9.60     5.58     4.43     2.25     1.50     1.23     1.06    mm/hr
02400>        20.60  24.50    28.80    33.50    53.20    54.00    54.00    59.00    76.60    mm
02401>       19900720 19900720 19900828 19900828 19900828 19900720 19900720 19900722 19900723  date
02402>       Number of rainfall events per following interevent time
02403>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02404>          204      156      107       84       66       56       47       33
02405>       Number of events with at least the following durations
02406>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02407>          203      116       75       31        6        1        0        0        0
02408> R0090:C00003-------------------------------------------------------------------------------
02409>      COMPUTE API
02410>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02411>       [APImax= 75.10: APIavg= 23.47: APImin=  3.10]
02412> *****************************************************************************************
02413> #                Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02414> *****************************************************************************************
02415> R0090:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02416>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .186 1990.0720_14:05   85.06 .117     .000
02417>        [CN= 72.0: N= 3.00: Tp= 1.14]
02418>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02419>        [InterEventTime=  12.00]
02420> R0090:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02421>      CONTINUOUS NASHYD     5.0 01:West_2        20.14     .274 1990.0720_14:10   96.52 .133     .000
02422>        [CN= 76.0: N= 3.00: Tp= 1.26]
02423>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02424>        [InterEventTime=  12.00]
02425> R0090:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02426>      CONTINUOUS NASHYD     5.0 01:West_3        14.01     .126 1990.0720_14:55   82.91 .114     .000
02427>        [CN= 71.0: N= 3.00: Tp= 2.07]
02428>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02429>        [InterEventTime=  12.00]
02430> R0090:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02431>      ADD HYD               5.0 02:West_1        14.27     .186 1990.0720_14:05   85.06  n/a     .000
02432>                      +     5.0 02:West_2        20.14     .274 1990.0720_14:10   96.52  n/a     .000
02433>                      +     5.0 02:West_3        14.01     .126 1990.0720_14:55   82.91  n/a     .000
02434>                    SUM=    5.0 01:West-Total    48.42     .573 1990.0720_14:15   89.21  n/a     .000
02435> *****************************************************************************************
02436> #                Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02437> *****************************************************************************************
02438> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
02439> *****************************************************************************************
02440> R0090:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02441>      CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .288 1990.0720_ 5:50  250.74 .345     .000
02442>        [CN=100.0: N= 3.00: Tp= 1.14]
02443>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02444>        [InterEventTime=  12.00]
02445> R0090:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02446>      CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .375 1990.0720_ 6:00  250.74 .345     .000
02447>        [CN=100.0: N= 3.00: Tp= 1.26]
02448>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02449>        [InterEventTime=  12.00]
02450> R0090:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02451>      CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .190 1990.0720_14:40  250.74 .345     .000
02452>        [CN=100.0: N= 3.00: Tp= 2.07]
02453>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02454>        [InterEventTime=  12.00]
02455> R0090:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02456>      ADD HYD               5.0 02:INF-West_1    14.27     .288 1990.0720_ 5:50  250.74  n/a     .000
02457>                      +     5.0 02:INF-West_2    20.14     .375 1990.0720_ 6:00  250.74  n/a     .000
02458>                      +     5.0 02:INF-West_3    14.01     .190 1990.0720_14:40  250.74  n/a     .000
02459>                    SUM=    5.0 01:INF-West-T    48.42     .805 1990.0720_14:05  250.74  n/a     .000
02460> ##############################################################################
02461> # CONTINUOUS RAINFALL DATA
02462> ##############################################################################
02463>  ** END OF RUN :  90
02464>
02465> *****************************************************************************************

02466>
02467>
02468>
02469>
02470>
02471>  RUN#:COMMAND#
02472> R0091:C00001-------------------------------------------------------------------------------
02473>      START
02474>       [TZERO =    .00 hrs on 19910101]
02475>       [METOUT=  2    (1=imperial, 2=metric output)]
02476>       [NSTORM=  0 ]
02477>       [NRUN  = 0091 ]
02478> *****************************************************************************************
02479> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02480> *****************************************************************************************
02481> #  Project Name: Barrhaven Conservancy Development
02482> #  Project Number: 1474
02483> #  Date       : 2021/Oct/18
02484> #  Modeller   : J.Burnett, P.Eng.
02485> #  Updated    : 2022/Dec/07 [JB]
02486> #  Updated    : 2022/Dec/13 [LP]
02487> #  Updated    : 2024/Mar/14 [JB]
02488> #  Company    : J.F. Sabourin and Associates
02489> #  License #  : 2582634
02490> *****************************************************************************************
02491> # Ottawa International Airport (1967 - 2003)
02492> R0091:C00002-------------------------------------------------------------------------------
02493>  *  READ AES DATA
02494>       [Filename  = YOW_1967_2007.123                                          ]
02495>       [Start_date= 1991.0101: End_date= 1991.1231]
02496>       (DT= 60.min: Length= 8040.hrs: WetHrs=  486: DryHrs= 7554: PTOT= 556.00)
02497>       Maximum average rainfall intensities over
02498>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02499>        11.30    9.90     6.87     4.10     2.53     1.72     1.28     1.08      .79    mm/hr
02500>        11.30   19.80    20.60    24.60    30.40    41.20    46.00    51.60    57.00    mm
02501>       19910409 19910409 19910409 19910409 19911016 19910422 19910410 19910410 19910423  date
02502>       Number of rainfall events per following interevent time
02503>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02504>          165      137      127      102       80       63       52       45       38
02505>       Number of events with at least the following durations
02506>         1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02507>          164       89       56       21        6        1        0        0        0
02508> R0091:C00003-------------------------------------------------------------------------------
02509>      COMPUTE API
02510>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02511>       [APImax= 72.80: APIavg= 16.88: APImin=  .26]
02512> *****************************************************************************************
02513> #                Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02514> *****************************************************************************************
02515> R0091:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02516>      CONTINUOUS NASHYD     5.0 01:West_1        14.27     .085 1991.0410_ 4:00   46.13 .083     .000
02517>        [CN= 72.0: N= 3.00: Tp= 1.14]
02518>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02519>        [InterEventTime=  12.00]
02520> R0091:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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02521>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .125 1991.0410_ 4:05   52.68 .095     .000
02522>       [CN= 76.0: N= 3.00: Tp= 1.26]
02523>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02524>       [InterEventTime=  12.00]
02525> R0091:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02526>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .049 1991.0410_ 4:55   44.92 .081     .000
02527>       [CN= 71.0: N= 3.00: Tp= 2.07]
02528>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02529>       [InterEventTime=  12.00]
02530> R0091:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02531>     ADD HYD               5.0 02:West_1        14.27     .085 1991.0410_ 4:00   46.13  n/a     .000
02532>                       +   5.0 02:West_2        20.14     .125 1991.0410_ 4:05   52.68  n/a     .000
02533>                       +   5.0 02:West_3        14.01     .049 1991.0410_ 4:55   44.92  n/a     .000
02534>                     SUM=  5.0 01:West-Total    48.42     .252 1991.0410_ 4:10   48.50  n/a     .000
02535> ********************************************************************************************************************************
02536> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02537> ********************************************************************************************************************************
02538> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
02539> ********************************************************************************************************************************
02540> R0091:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02541>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .175 1991.0409_ 1:40  159.83 .287     .000
02542>       [CN=100.0: N= 3.00: Tp= 1.14]
02543>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02544>       [InterEventTime=  12.00]
02545> R0091:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02546>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .228 1991.0409_ 1:50  159.83 .287     .000
02547>       [CN=100.0: N= 3.00: Tp= 1.26]
02548>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02549>       [InterEventTime=  12.00]
02550> R0091:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02551>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .105 1991.0409_ 2:45  159.83 .287     .000
02552>       [CN=100.0: N= 3.00: Tp= 2.07]
02553>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02554>       [InterEventTime=  12.00]
02555> R0091:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02556>     ADD HYD               5.0 02:INF-West_1    14.27     .175 1991.0409_ 1:40  159.83  n/a     .000
02557>                       +   5.0 02:INF-West_2    20.14     .228 1991.0409_ 1:50  159.83  n/a     .000
02558>                       +   5.0 02:INF-West_3    14.01     .105 1991.0409_ 2:45  159.83  n/a     .000
02559>                     SUM=  5.0 01:INF-West-T    48.42     .490 1991.0409_ 1:50  159.83  n/a     .000
02560> ################################################################################
02561> # CONTINUOUS RAINFALL DATA
02562> ################################################################################
02563>  ** END OF RUN :   91
02564>
02565> ********************************************************************************
02566>
02567>
02568>
02569>
02570>
02571>  RUN#:COMMAND#
02572> R0092:C00001------------------------------------------------------------------------
02573>      START
02574>       [TZERO =    .00 hrs on 19920101]
02575>       [METOUT=   2    (1=imperial, 2=metric output)]
02576>       [NSTORM=   0 ]
02577>       [NRUN  = 0092 ]
02578> ********************************************************************************************************************************
02579> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02580> ********************************************************************************
02581> #  Project Name: Barrhaven Conservancy Development
02582> #  Project Number: 1474
02583> #  Date       : 2021/Oct/18
02584> #  Modeller   : J.Burnett, P.Eng.
02585> #  Updated    : 2022/Dec/07 [JB]
02586> #  Updated    : 2022/Dec/13 [LP]
02587> #  Updated    : 2024/Mar/14 [JB]
02588> #  Company    : J.F. Sabourin and Associates
02589> #  License #  : 2582634
02590> ********************************************************************************
02591> # Ottawa International Airport (1967 - 2003)
02592> R0092:C00002------------------------------------------------------------------------
02593>  *  READ AES DATA
02594>       [Filename  = YOW_1967_2007.123                                    ]
02595>       [Start_date= 1992.0101: End_date= 1992.1230]
02596>       [DT= 60.min: Length= 8760.hrs: WetHrs=  551: DryHrs= 8209: PTOT= 732.80]
02597>       Maximum average rainfall intensities over
02598>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02599>        31.50    18.00    13.30     7.22     4.14     2.26     1.51     1.51     1.02    mm/hr
02600>        31.50    36.00    39.90    43.30    49.70    54.20    54.20    72.60    73.60    mm
02601>       19920804 19920804 19920804 19920804 19920717 19920718 19920718 19920719 19920720  date
02602>       Number of rainfall events per following interevent time
02603>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02604>          190      151      132      100       84       69       55       47       38
02605>       Number of events with at least the following durations
02606>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02607>          189      109       70       22        5        1        0        0        0
02608> R0092:C00003------------------------------------------------------------------------
02609>      COMPUTE API
02610>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02611>       [APImax= 97.62: APIavg= 20.33: APImin=  1.07]
02612> ********************************************************************************************************************************
02613> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02614> ********************************************************************************************************************************
02615> R0092:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02616>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .293 1992.0717_19:20   94.75 .129     .000
02617>       [CN= 72.0: N= 3.00: Tp= 1.14]
02618>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02619>       [InterEventTime=  12.00]
02620> R0092:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02621>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .432 1992.0717_19:25  106.69 .146     .000
02622>       [CN= 76.0: N= 3.00: Tp= 1.26]
02623>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02624>       [InterEventTime=  12.00]
02625> R0092:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02626>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .191 1992.0717_20:15   92.50 .126     .000
02627>       [CN= 71.0: N= 3.00: Tp= 2.07]
02628>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02629>       [InterEventTime=  12.00]
02630> R0092:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02631>     ADD HYD               5.0 02:West_1        14.27     .293 1992.0717_19:20   94.75  n/a     .000
02632>                       +   5.0 02:West_2        20.14     .432 1992.0717_19:25  106.69  n/a     .000
02633>                       +   5.0 02:West_3        14.01     .191 1992.0717_20:15   92.50  n/a     .000
02634>                     SUM=  5.0 01:West-Total    48.42     .890 1992.0717_19:30   99.07  n/a     .000
02635> ********************************************************************************************************************************
02636> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02637> ********************************************************************************************************************************
02638> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
02639> ********************************************************************************************************************************
02640> R0092:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02641>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .486 1992.0717_19:00  266.21 .363     .000
02642>       [CN=100.0: N= 3.00: Tp= 1.14]
02643>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02644>       [InterEventTime=  12.00]
02645> R0092:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02646>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .650 1992.0717_19:10  266.21 .363     .000
02647>       [CN=100.0: N= 3.00: Tp= 1.26]
02648>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02649>       [InterEventTime=  12.00]
02650> R0092:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02651>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .327 1992.0717_20:00  266.21 .363     .000
02652>       [CN=100.0: N= 3.00: Tp= 2.07]
02653>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02654>       [InterEventTime=  12.00]
02655> R0092:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02656>     ADD HYD               5.0 02:INF-West_1    14.27     .486 1992.0717_19:00  266.21  n/a     .000
02657>                       +   5.0 02:INF-West_2    20.14     .650 1992.0717_19:10  266.21  n/a     .000
02658>                       +   5.0 02:INF-West_3    14.01     .327 1992.0717_20:00  266.21  n/a     .000
02659>                     SUM=  5.0 01:INF-West-T    48.42    1.420 1992.0717_19:15  266.21  n/a     .000
02660> ################################################################################
02661> # CONTINUOUS RAINFALL DATA
02662> ################################################################################
02663>  ** END OF RUN :   92
02664>
02665> ********************************************************************************
02666>
02667>
02668>
02669>
02670>
02671>  RUN#:COMMAND#
02672> R0093:C00001------------------------------------------------------------------------
02673>      START
02674>       [TZERO =    .00 hrs on 19930101]
02675>       [METOUT=   2    (1=imperial, 2=metric output)]
02676>       [NSTORM=   0 ]
02677>       [NRUN  = 0093 ]
02678> ********************************************************************************************************************************
02679> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02680> ********************************************************************************
02681> #  Project Name: Barrhaven Conservancy Development
02682> #  Project Number: 1474
02683> #  Date       : 2021/Oct/18
02684> #  Modeller   : J.Burnett, P.Eng.
02685> #  Updated    : 2022/Dec/07 [JB]
02686> #  Updated    : 2022/Dec/13 [LP]
02687> #  Updated    : 2024/Mar/14 [JB]
02688> #  Company    : J.F. Sabourin and Associates
02689> #  License #  : 2582634
02690> ********************************************************************************
02691> # Ottawa International Airport (1967 - 2003)
02692> R0093:C00002------------------------------------------------------------------------
02693>  *  READ AES DATA
02694>       [Filename  = YOW_1967_2007.123                                    ]
02695>       [Start_date= 1993.0101: End_date= 1993.1231]
02696>       [DT= 60.min: Length= 8760.hrs: WetHrs=  585: DryHrs= 8175: PTOT= 721.30]
02697>       Maximum average rainfall intensities over
02698>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02699>        12.60     6.60     4.83     3.72     3.58     2.31     1.61     1.21     .81    mm/hr
02700>        12.60    13.20    14.50    22.30    43.00    55.50    58.10    58.10    58.10    mm
02701>       19930703 19930703 19931127 19931128 19931128 19931128 19931128 19931128 19931129  date
02702>       Number of rainfall events per following interevent time
02703>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02704>          191      154      137      111       91       73       57       48       34
02705>       Number of events with at least the following durations
02706>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02707>          190      110       66       27        7        2        0        0        0
02708> R0093:C00003------------------------------------------------------------------------
02709>      COMPUTE API
02710>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02711>       [APImax= 66.56: APIavg= 20.01: APImin=  .11]
02712> ********************************************************************************************************************************
02713> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02714> ********************************************************************************************************************************
02715> R0093:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02716>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .104 1993.1128_ 7:35   62.59 .087     .000
02717>       [CN= 72.0: N= 3.00: Tp= 1.14]
02718>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02719>       [InterEventTime=  12.00]
02720> R0093:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02721>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .158 1993.1128_ 7:40   71.45 .099     .000
02722>       [CN= 76.0: N= 3.00: Tp= 1.26]
02723>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02724>       [InterEventTime=  12.00]
02725> R0093:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02726>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .082 1993.1128_ 8:35   60.95 .085     .000
02727>       [CN= 71.0: N= 3.00: Tp= 2.07]
02728>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02729>       [InterEventTime=  12.00]
02730> R0093:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02731>     ADD HYD               5.0 02:West_1        14.27     .104 1993.1128_ 7:35   62.59  n/a     .000
02732>                       +   5.0 02:West_2        20.14     .158 1993.1128_ 7:40   71.45  n/a     .000
02733>                       +   5.0 02:West_3        14.01     .082 1993.1128_ 8:35   60.95  n/a     .000
02734>                     SUM=  5.0 01:West-Total    48.42     .340 1993.1128_ 7:40   65.80  n/a     .000
02735> ********************************************************************************************************************************
02736> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02737> ********************************************************************************************************************************
02738> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
02739> ********************************************************************************************************************************
02740> R0093:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02741>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .162 1993.1128_ 7:20  211.67 .293     .000
02742>       [CN=100.0: N= 3.00: Tp= 1.14]
02743>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02744>       [InterEventTime=  12.00]
02745> R0093:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02746>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .224 1993.1128_ 7:25  211.68 .293     .000
02747>       [CN=100.0: N= 3.00: Tp= 1.26]
02748>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02749>       [InterEventTime=  12.00]
02750> R0093:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02751>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .138 1993.1128_ 7:55  211.67 .293     .000
02752>       [CN=100.0: N= 3.00: Tp= 2.07]
02753>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02754>       [InterEventTime=  12.00]
02755> R0093:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02756>     ADD HYD               5.0 02:INF-West_1    14.27     .162 1993.1128_ 7:20  211.67  n/a     .000
02757>                       +   5.0 02:INF-West_2    20.14     .224 1993.1128_ 7:25  211.67  n/a     .000
02758>                       +   5.0 02:INF-West_3    14.01     .138 1993.1128_ 7:55  211.67  n/a     .000
02759>                     SUM=  5.0 01:INF-West-T    48.42     .521 1993.1128_ 7:25  211.67  n/a     .000
02760> ################################################################################
02761> # CONTINUOUS RAINFALL DATA
02762> ################################################################################
02763>  ** END OF RUN :   93
02764>
02765> ********************************************************************************
02766>
02767>
02768>
02769>
02770>
02771>  RUN#:COMMAND#
02772> R0094:C00001------------------------------------------------------------------------
02773>      START
02774>       [TZERO =    .00 hrs on 19940101]
02775>       [METOUT=   2    (1=imperial, 2=metric output)]
02776>       [NSTORM=   0 ]
02777>       [NRUN  = 0094 ]
02778> ********************************************************************************************************************************
02779> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02780> ********************************************************************************
02781> #  Project Name: Barrhaven Conservancy Development
02782> #  Project Number: 1474
02783> #  Date       : 2021/Oct/18
02784> #  Modeller   : J.Burnett, P.Eng.
02785> #  Updated    : 2022/Dec/07 [JB]
02786> #  Updated    : 2022/Dec/13 [LP]
02787> #  Updated    : 2024/Mar/14 [JB]
02788> #  Company    : J.F. Sabourin and Associates
02789> #  License #  : 2582634
02790> ********************************************************************************
02791> # Ottawa International Airport (1967 - 2003)
02792> R0094:C00002------------------------------------------------------------------------
02793>  *  READ AES DATA
02794>       [Filename  = YOW_1967_2007.123                                    ]
02795>       [Start_date= 1994.0101: End_date= 1994.1231]
02796>       [DT= 60.min: Length= 8760.hrs: WetHrs=  342: DryHrs= 8418: PTOT= 540.20]
02797>       Maximum average rainfall intensities over
02798>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02799>        22.60    11.90     8.43     5.42     2.92     1.79     1.19      .89     1.15    mm/hr
02800>        22.60    23.80    25.30    32.50    35.00    42.90    42.90    42.90    82.60    mm
02801>       19940629 19940629 19940627 19940625 19940625 19940625 19940626 19940626 19940627  date
02802>       Number of rainfall events per following interevent time
02803>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02804>          138      115      101       79       62       48       39       34       26
02805>       Number of events with at least the following durations
02806>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02807>          137       72       48       12        1        0        0        0        0
02808> R0094:C00003------------------------------------------------------------------------
02809>      COMPUTE API
02810>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02811>       [APImax= 97.84: APIavg= 15.35: APImin=  .02]
02812> ********************************************************************************************************************************
02813> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02814> ********************************************************************************************************************************
02815> R0094:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02816>     CONTINUOUS NASHYD     5.0 01:West_1        14.27     .103 1994.0627_11:30   59.78 .111     .000
02817>       [CN= 72.0: N= 3.00: Tp= 1.14]
02818>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02819>       [InterEventTime=  12.00]
02820> R0094:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02821>     CONTINUOUS NASHYD     5.0 01:West_2        20.14     .159 1994.0627_11:35   67.89 .126     .000
02822>       [CN= 76.0: N= 3.00: Tp= 1.26]
02823>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02824>       [InterEventTime=  12.00]
02825> R0094:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02826>     CONTINUOUS NASHYD     5.0 01:West_3        14.01     .074 1994.0627_12:35   58.28 .108     .000
02827>       [CN= 71.0: N= 3.00: Tp= 2.07]
02828>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02829>       [InterEventTime=  12.00]
02830> R0094:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02831>     ADD HYD               5.0 02:West_1        14.27     .103 1994.0627_11:30   59.78  n/a     .000
02832>                       +   5.0 02:West_2        20.14     .159 1994.0627_11:35   67.89  n/a     .000
02833>                       +   5.0 02:West_3        14.01     .074 1994.0627_12:35   58.28  n/a     .000
02834>                     SUM=  5.0 01:West-Total    48.42     .326 1994.0627_11:45   62.72  n/a     .000
02835> ********************************************************************************************************************************
02836> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02837> ********************************************************************************************************************************
02838> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
02839> ********************************************************************************************************************************
02840> R0094:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02841>     CONTINUOUS NASHYD     5.0 01:INF-West_1    14.27     .239 1994.0627_11:00  182.47 .338     .000
02842>       [CN=100.0: N= 3.00: Tp= 1.14]
02843>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02844>       [InterEventTime=  12.00]
02845> R0094:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02846>     CONTINUOUS NASHYD     5.0 01:INF-West_2    20.14     .324 1994.0627_11:10  182.47 .338     .000
02847>       [CN=100.0: N= 3.00: Tp= 1.26]
02848>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02849>       [InterEventTime=  12.00]
02850> R0094:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02851>     CONTINUOUS NASHYD     5.0 01:INF-West_3    14.01     .173 1994.0627_12:10  182.47 .338     .000
02852>       [CN=100.0: N= 3.00: Tp= 2.07]
02853>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02854>       [InterEventTime=  12.00]
02855> R0094:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02856>     ADD HYD               5.0 02:INF-West_1    14.27     .239 1994.0627_11:00  182.47  n/a     .000
02857>                       +   5.0 02:INF-West_2    20.14     .324 1994.0627_11:10  182.47  n/a     .000
02858>                       +   5.0 02:INF-West_3    14.01     .173 1994.0627_12:10  182.47  n/a     .000
02859>                     SUM=  5.0 01:INF-West-T    48.42     .714 1994.0627_11:15  182.47  n/a     .000
02860> ################################################################################
02861> # CONTINUOUS RAINFALL DATA
02862> ################################################################################
02863>  ** END OF RUN :   94
02864>
02865> ********************************************************************************
02866>
02867>
02868>
02869>
02870>
02871>  RUN#:COMMAND#
02872> R0095:C00001------------------------------------------------------------------------
02873>      START
02874>       [TZERO =    .00 hrs on 19950101]
02875>       [METOUT=   2    (1=imperial, 2=metric output)]
02876>       [NSTORM=   0 ]
02877>       [NRUN  = 0095 ]
02878> ********************************************************************************************************************************
02879> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02880> ********************************************************************************
```

```
02881> #  Project Name: Barrhaven Conservancy Development
02882> #  Project Number: 1474
02883> #  Date       : 2021/Oct/18
02884> #  Modeller   : J.Burnett, P.Eng.
02885> #  Updated    : 2022/Dec/07 [JB]
02886> #  Updated    : 2022/Dec/13 [LP]
02887> #  Updated    : 2024/Mar/14 [JB]
02888> #  Company    : J.F. Sabourin and Associates
02889> #  License #  : 2582634
02890> #*****************************************************************************************************
02891> # Ottawa International Airport (1967 - 2003)
02892> R0095:C00002-------------------------------------------------------------------------------------------
02893>   *  READ AES DATA
02894>       [Filename  = YOW_1967_2007.123                                          ]
02895>       [Start_date= 1995.0101: End_date= 1995.1231]
02896>       [DT= 60.min: Length= 8040.hrs: WetHrs=  332: DryHrs= 7708: PTOT= 538.50]
02897>       Maximum average rainfall intensities over
02898>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02899>        16.90    13.25    11.33     8.98     6.35     3.48     2.95     2.21     1.48    mm/hr
02900>        16.90    26.50    34.00    53.90    76.20    83.40   106.20   106.20   106.20    mm
02901>       19950603 19950603 19951006 19951006 19951006 19951006 19951007 19951007 19951008  date
02902>       Number of rainfall events per following interevent time
02903>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02904>           91       73       65       55       47       41       34       31       25
02905>       Number of events with at least the following durations
02906>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02907>           90       54       35       16        7        1        0        0        0
02908> R0095:C00003-------------------------------------------------------------------------------------------
02909>       COMPUTE API
02910>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02911>       [APImax= 99.57: APIavg= 16.58: APImin=  .00]
02912> #*****************************************************************************************************
02913> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02914> #*****************************************************************************************************
02915> R0095:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02916>     CONTINUOUS NASHYD      5.0 01:West_1     14.27      .311 1995.0603_ 9:30  159.14 .296     .000
02917>       [CN= 72.0: N= 3.00: Tp= 1.14]
02918>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
02919>       [InterEventTime=  12.00]
02920> R0095:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02921>     CONTINUOUS NASHYD      5.0 01:West_2     20.14      .442 1995.0603_ 9:35  172.16 .320     .000
02922>       [CN= 76.0: N= 3.00: Tp= 1.26]
02923>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
02924>       [InterEventTime=  12.00]
02925> R0095:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02926>     CONTINUOUS NASHYD      5.0 01:West_3     14.01      .236 1995.1006_ 8:35  156.58 .291     .000
02927>       [CN= 71.0: N= 3.00: Tp= 2.07]
02928>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
02929>       [InterEventTime=  12.00]
02930> R0095:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02931>     ADD HYD                5.0 02:West_1     14.27      .311 1995.0603_ 9:30  159.14  n/a     .000
02932>                      +     5.0 02:West_2     20.14      .442 1995.0603_ 9:35  172.16  n/a     .000
02933>                      +     5.0 02:West_3     14.01      .236 1995.1006_ 8:35  156.58  n/a     .000
02934>                    SUM=    5.0 01:West-Total  48.42     .959 1995.0603_ 9:40  163.82  n/a     .000
02935> #*****************************************************************************************************
02936> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
02937> #*****************************************************************************************************
02938> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
02939> #*****************************************************************************************************
02940> R0095:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02941>     CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27      .418 1995.1006_ 6:05  283.64 .527     .000
02942>       [CN=100.0: N= 3.00: Tp= 1.14]
02943>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02944>       [InterEventTime=  12.00]
02945> R0095:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02946>     CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14      .576 1995.1006_ 6:15  283.64 .527     .000
02947>       [CN=100.0: N= 3.00: Tp= 1.26]
02948>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02949>       [InterEventTime=  12.00]
02950> R0095:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02951>     CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01      .350 1995.1006_ 7:35  283.64 .527     .000
02952>       [CN=100.0: N= 3.00: Tp= 2.07]
02953>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
02954>       [InterEventTime=  12.00]
02955> R0095:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02956>     ADD HYD                5.0 02:INF-West_1    14.27      .418 1995.1006_ 6:05  283.64  n/a     .000
02957>                      +     5.0 02:INF-West_2    20.14      .576 1995.1006_ 6:15  283.64  n/a     .000
02958>                      +     5.0 02:INF-West_3    14.01      .350 1995.1006_ 7:35  283.64  n/a     .000
02959>                    SUM=    5.0 01:INF-West-T    48.42     1.310 1995.1006_ 6:30  283.64  n/a     .000
02960> ##################################################################################
02961> # CONTINUOUS RAINFALL DATA
02962> ##################################################################################
02963>  ** END OF RUN :   95
02964>
02965> *****************************************************************************************************
02966>
02967>
02968>
02969>
02970>
02971>  RUN#:COMMAND#
02972> R0096:C00001-------------------------------------------------------------------------------------------
02973>     START
02974>       [TZERO =    .00 hrs on 19960101]
02975>       [METOUT=  2   (1=imperial, 2=metric output)]
02976>       [NSTORM=  0 ]
02977>       [NRUN  = 0096 ]
02978> #*****************************************************************************************************
02979> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02980> #*****************************************************************************************************
02981> #  Project Name: Barrhaven Conservancy Development
02982> #  Project Number: 1474
02983> #  Date       : 2021/Oct/18
02984> #  Modeller   : J.Burnett, P.Eng.
02985> #  Updated    : 2022/Dec/07 [JB]
02986> #  Updated    : 2022/Dec/13 [LP]
02987> #  Updated    : 2024/Mar/14 [JB]
02988> #  Company    : J.F. Sabourin and Associates
02989> #  License #  : 2582634
02990> #*****************************************************************************************************
02991> # Ottawa International Airport (1967 - 2003)
02992> R0096:C00002-------------------------------------------------------------------------------------------
02993>   *  READ AES DATA
02994>       [Filename  = YOW_1967_2007.123                                          ]
02995>       [Start_date= 1996.0101: End_date= 1996.1230]
02996>       [DT= 60.min: Length= 6552.hrs: WetHrs=  387: DryHrs= 6165: PTOT= 512.20]
02997>       Maximum average rainfall intensities over
02998>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02999>        18.50    13.55     9.03     5.42     2.93     1.84     1.32     1.02      .70    mm/hr
03000>        18.50    27.10    27.10    32.50    35.10    44.10    47.50    49.00    50.30    mm
03001>       19960731 19960731 19960731 19960731 19960731 19961109 19961109 19961109 19961109  date
03002>       Number of rainfall events per following interevent time
03003>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03004>          132      104       93       71       59       43       36       31       24
03005>       Number of events with at least the following durations
03006>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03007>          131       72       50       19        2        1        0        0        0
03008> R0096:C00003-------------------------------------------------------------------------------------------
03009>       COMPUTE API
03010>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03011>       [APImax= 63.22: APIavg= 19.39: APImin=  .71]
03012> #*****************************************************************************************************
03013> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03014> #*****************************************************************************************************
03015> R0096:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03016>     CONTINUOUS NASHYD      5.0 01:West_1     14.27      .107 1996.0731_16:30   46.54 .091     .000
03017>       [CN= 72.0: N= 3.00: Tp= 1.14]
03018>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
03019>       [InterEventTime=  12.00]
03020> R0096:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03021>     CONTINUOUS NASHYD      5.0 01:West_2     20.14      .162 1996.0731_16:40   53.26 .104     .000
03022>       [CN= 76.0: N= 3.00: Tp= 1.26]
03023>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
03024>       [InterEventTime=  12.00]
03025> R0096:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03026>     CONTINUOUS NASHYD      5.0 01:West_3     14.01      .064 1996.0731_17:30   45.29 .088     .000
03027>       [CN= 71.0: N= 3.00: Tp= 2.07]
03028>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
03029>       [InterEventTime=  12.00]
03030> R0096:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03031>     ADD HYD                5.0 02:West_1     14.27      .107 1996.0731_16:30   46.54  n/a     .000
03032>                      +     5.0 02:West_2     20.14      .162 1996.0731_16:40   53.26  n/a     .000
03033>                      +     5.0 02:West_3     14.01      .064 1996.0731_17:30   45.29  n/a     .000
03034>                    SUM=    5.0 01:West-Total  48.42     .324 1996.0731_16:40   48.97  n/a     .000
03035> #*****************************************************************************************************
03036> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03037> #*****************************************************************************************************
03038> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
03039> #*****************************************************************************************************
03040> R0096:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03041>     CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27      .290 1996.0731_16:20  157.48 .307     .000
03042>       [CN=100.0: N= 3.00: Tp= 1.14]
03043>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03044>       [InterEventTime=  12.00]
03045> R0096:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03046>     CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14      .382 1996.0731_16:25  157.48 .307     .000
03047>       [CN=100.0: N= 3.00: Tp= 1.26]
03048>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03049>       [InterEventTime=  12.00]
03050> R0096:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03051>     CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01      .178 1996.0731_17:10  157.48 .307     .000
03052>       [CN=100.0: N= 3.00: Tp= 2.07]
03053>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03054>       [InterEventTime=  12.00]
03055> R0096:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03056>     ADD HYD                5.0 02:INF-West_1    14.27      .290 1996.0731_16:20  157.48  n/a     .000
03057>                      +     5.0 02:INF-West_2    20.14      .382 1996.0731_16:25  157.48  n/a     .000
03058>                      +     5.0 02:INF-West_3    14.01      .178 1996.0731_17:10  157.48  n/a     .000
03059>                    SUM=    5.0 01:INF-West-T    48.42      .824 1996.0731_16:25  157.48  n/a     .000
03060> ##################################################################################
03061> # CONTINUOUS RAINFALL DATA
03062> ##################################################################################
03063>  ** END OF RUN :   96
03064>
03065> *****************************************************************************************************
03066>
03067>
03068>
03069>
03070>
03071>  RUN#:COMMAND#
03072> R0097:C00001-------------------------------------------------------------------------------------------
03073>     START
03074>       [TZERO =    .00 hrs on 19970101]
03075>       [METOUT=  2   (1=imperial, 2=metric output)]
03076>       [NSTORM=  0 ]
03077>       [NRUN  = 0097 ]
03078> #*****************************************************************************************************
03079> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03080> #*****************************************************************************************************
03081> #  Project Name: Barrhaven Conservancy Development
03082> #  Project Number: 1474
03083> #  Date       : 2021/Oct/18
03084> #  Modeller   : J.Burnett, P.Eng.
03085> #  Updated    : 2022/Dec/07 [JB]
03086> #  Updated    : 2022/Dec/13 [LP]
03087> #  Updated    : 2024/Mar/14 [JB]
03088> #  Company    : J.F. Sabourin and Associates
03089> #  License #  : 2582634
03090> #*****************************************************************************************************
03091> # Ottawa International Airport (1967 - 2003)
03092> R0097:C00002-------------------------------------------------------------------------------------------
03093>   *  READ AES DATA
03094>       [Filename  = YOW_1967_2007.123                                          ]
03095>       [Start_date= 1997.0101: End_date= 1997.1231]
03096>       [DT= 60.min: Length= 8040.hrs: WetHrs=  379: DryHrs= 7661: PTOT= 433.20]
03097>       Maximum average rainfall intensities over
03098>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03099>        12.50     7.60     5.67     4.43     2.91     1.68     1.12      .84      .63    mm/hr
03100>        12.50    15.20    17.00    26.60    34.90    40.40    40.40    40.40    45.30    mm
03101>       19970622 19970622 19970622 19970221 19970222 19970222 19970222 19970222 19970222  date
03102>       Number of rainfall events per following interevent time
03103>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03104>          113       92       83       67       61       55       48       43       30
03105>       Number of events with at least the following durations
03106>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03107>          112       70       46       20        4        0        0        0        0
03108> R0097:C00003-------------------------------------------------------------------------------------------
03109>       COMPUTE API
03110>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03111>       [APImax= 50.00: APIavg= 13.66: APImin=  .27]
03112> #*****************************************************************************************************
03113> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03114> #*****************************************************************************************************
03115> R0097:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03116>     CONTINUOUS NASHYD      5.0 01:West_1     14.27      .062 1997.0221_21:35   27.92 .064     .000
03117>       [CN= 72.0: N= 3.00: Tp= 1.14]
03118>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
03119>       [InterEventTime=  12.00]
03120> R0097:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03121>     CONTINUOUS NASHYD      5.0 01:West_2     20.14      .096 1997.0221_21:40   32.31 .075     .000
03122>       [CN= 76.0: N= 3.00: Tp= 1.26]
03123>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
03124>       [InterEventTime=  12.00]
03125> R0097:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03126>     CONTINUOUS NASHYD      5.0 01:West_3     14.01      .044 1997.0221_22:25   27.13 .063     .000
03127>       [CN= 71.0: N= 3.00: Tp= 2.07]
03128>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
03129>       [InterEventTime=  12.00]
03130> R0097:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03131>     ADD HYD                5.0 02:West_1     14.27      .062 1997.0221_21:35   27.92  n/a     .000
03132>                      +     5.0 02:West_2     20.14      .096 1997.0221_21:40   32.31  n/a     .000
03133>                      +     5.0 02:West_3     14.01      .044 1997.0221_22:25   27.13  n/a     .000
03134>                    SUM=    5.0 01:West-Total  48.42     .199 1997.0221_21:45   29.52  n/a     .000
03135> #*****************************************************************************************************
03136> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03137> #*****************************************************************************************************
03138> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
03139> #*****************************************************************************************************
03140> R0097:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03141>     CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27      .177 1997.0221_21:15  128.55 .297     .000
03142>       [CN=100.0: N= 3.00: Tp= 1.14]
03143>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03144>       [InterEventTime=  12.00]
03145> R0097:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03146>     CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14      .245 1997.0221_21:20  128.55 .297     .000
03147>       [CN=100.0: N= 3.00: Tp= 1.26]
03148>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03149>       [InterEventTime=  12.00]
03150> R0097:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03151>     CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01      .145 1997.0221_21:50  128.55 .297     .000
03152>       [CN=100.0: N= 3.00: Tp= 2.07]
03153>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03154>       [InterEventTime=  12.00]
03155> R0097:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03156>     ADD HYD                5.0 02:INF-West_1    14.27      .177 1997.0221_21:15  128.55  n/a     .000
03157>                      +     5.0 02:INF-West_2    20.14      .245 1997.0221_21:20  128.55  n/a     .000
03158>                      +     5.0 02:INF-West_3    14.01      .145 1997.0221_21:50  128.55  n/a     .000
03159>                    SUM=    5.0 01:INF-West-T    48.42      .562 1997.0221_21:25  128.55  n/a     .000
03160> ##################################################################################
03161> # CONTINUOUS RAINFALL DATA
03162> ##################################################################################
03163>  ** END OF RUN :   97
03164>
03165> *****************************************************************************************************
03166>
03167>
03168>
03169>
03170>
03171>  RUN#:COMMAND#
03172> R0098:C00001-------------------------------------------------------------------------------------------
03173>     START
03174>       [TZERO =    .00 hrs on 19980101]
03175>       [METOUT=  2   (1=imperial, 2=metric output)]
03176>       [NSTORM=  0 ]
03177>       [NRUN  = 0098 ]
03178> #*****************************************************************************************************
03179> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03180> #*****************************************************************************************************
03181> #  Project Name: Barrhaven Conservancy Development
03182> #  Project Number: 1474
03183> #  Date       : 2021/Oct/18
03184> #  Modeller   : J.Burnett, P.Eng.
03185> #  Updated    : 2022/Dec/07 [JB]
03186> #  Updated    : 2022/Dec/13 [LP]
03187> #  Updated    : 2024/Mar/14 [JB]
03188> #  Company    : J.F. Sabourin and Associates
03189> #  License #  : 2582634
03190> #*****************************************************************************************************
03191> # Ottawa International Airport (1967 - 2003)
03192> R0098:C00002-------------------------------------------------------------------------------------------
03193>   *  READ AES DATA
03194>       [Filename  = YOW_1967_2007.123                                          ]
03195>       [Start_date= 1998.0101: End_date= 1998.1231]
03196>       [DT= 60.min: Length= 5088.hrs: WetHrs=  291: DryHrs= 4797: PTOT= 440.30]
03197>       Maximum average rainfall intensities over
03198>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03199>        15.80     8.90     7.60     4.00     2.54     1.82     1.27      .95      .76    mm/hr
03200>        15.80    17.80    22.80    24.00    30.50    43.60    45.80    45.80    54.60    mm
03201>       19980716 19980627 19980927 19980927 19980927 19980927 19980928 19980928 19980615  date
03202>       Number of rainfall events per following interevent time
03203>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03204>          126      104       95       78       63       42       37       32       21
03205>       Number of events with at least the following durations
03206>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03207>          125       64       43        8        1        0        0        0        0
03208> R0098:C00003-------------------------------------------------------------------------------------------
03209>       COMPUTE API
03210>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03211>       [APImax= 57.22: APIavg= 21.28: APImin=  1.69]
03212> #*****************************************************************************************************
03213> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03214> #*****************************************************************************************************
03215> R0098:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03216>     CONTINUOUS NASHYD      5.0 01:West_1     14.27      .070 1998.0927_15:05   32.64 .074     .000
03217>       [CN= 72.0: N= 3.00: Tp= 1.14]
03218>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
03219>       [InterEventTime=  12.00]
03220> R0098:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03221>     CONTINUOUS NASHYD      5.0 01:West_2     20.14      .103 1998.0927_15:15   37.63 .085     .000
03222>       [CN= 76.0: N= 3.00: Tp= 1.26]
03223>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
03224>       [InterEventTime=  12.00]
03225> R0098:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03226>     CONTINUOUS NASHYD      5.0 01:West_3     14.01      .040 1998.0927_16:00   31.73 .072     .000
03227>       [CN= 71.0: N= 3.00: Tp= 2.07]
03228>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
03229>       [InterEventTime=  12.00]
03230> R0098:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03231>     ADD HYD                5.0 02:West_1     14.27      .070 1998.0927_15:05   32.64  n/a     .000
03232>                      +     5.0 02:West_2     20.14      .103 1998.0927_15:15   37.63  n/a     .000
03233>                      +     5.0 02:West_3     14.01      .040 1998.0927_16:00   31.73  n/a     .000
03234>                    SUM=    5.0 01:West-Total  48.42     .206 1998.0927_15:15   34.45  n/a     .000
03235> #*****************************************************************************************************
03236> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03237> #*****************************************************************************************************
03238> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
03239> #*****************************************************************************************************
03240> R0098:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
```

```
03241>     CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27     .176 1998.0627_ 1:50  127.31 .289     .000
03242>       [CN=100.0: N= 3.00: Tp= 1.14]
03243>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03244>       [InterEventTime=  12.00]
03245> R0098:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03246>     CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14     .242 1998.0927_ 3:20  127.31 .289     .000
03247>       [CN=100.0: N= 3.00: Tp= 1.26]
03248>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03249>       [InterEventTime=  12.00]
03250> R0098:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03251>     CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01     .135 1998.0927_ 3:50  127.31 .289     .000
03252>       [CN=100.0: N= 3.00: Tp= 2.07]
03253>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03254>       [InterEventTime=  12.00]
03255> R0098:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03256>     ADD HYD                5.0 02:INF-West_1    14.27     .176 1998.0627_ 1:50  127.31  n/a     .000
03257>                      +     5.0 02:INF-West_2    20.14     .242 1998.0927_ 3:20  127.31  n/a     .000
03258>                      +     5.0 02:INF-West_3    14.01     .135 1998.0927_ 3:50  127.31  n/a     .000
03259>                    SUM=    5.0 01:INF-West-T    48.42     .544 1998.0927_ 3:20  127.31  n/a     .000
03260> ##############################################################################
03261> # CONTINUOUS RAINFALL DATA
03262> ##############################################################################
03263>  ** END OF RUN :   98
03264>
03265> *******************************************************************************
03266>
03267>
03268>
03269>
03270>
03271>  RUN#:COMMAND#
03272> R0099:C00001------------------------------------------------------------------------------
03273>     START
03274>       [TZERO =    .00 hrs on 19990101]
03275>       [METOUT=   2    (1=imperial, 2=metric output)]
03276>       [NSTORM=   0 ]
03277>       [NRUN  = 0099 ]
03278> *******************************************************************************************************
03279> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03280> *******************************************************************************************************
03281> #  Project Name: Barrhaven Conservancy Development
03282> #  Project Number: 1474
03283> #  Date        : 2021/Oct/18
03284> #  Modeller    : J.Burnett, P.Eng.
03285> #  Updated     : 2022/Dec/07 [JB]
03286> #  Updated     : 2022/Dec/13 [LP]
03287> #  Updated     : 2024/Mar/14 [JB]
03288> #  Company     : J.F. Sabourin and Associates
03289> #  License #   : 2582634
03290> *******************************************************************************************************
03291> # Ottawa International Airport (1967 - 2003)
03292> R0099:C00002------------------------------------------------------------------------------
03293>   *  READ AES DATA
03294>       [Filename  = YOW_1967_2007.123                                    ]
03295>       [Start_date= 1999.0101: End_date= 1999.1231]
03296>       (DT= 60.min: Length= 4440.hrs: WetHrs=  247: DryHrs= 4193: PTOT= 424.40)
03297>       Maximum average rainfall intensities over
03298>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03299>        17.50    10.10     9.03     6.57     3.31     1.65     1.45     1.22      .97    mm/hr
03300>        17.50    20.20    27.10    39.40    39.70    39.70    52.20    58.60    69.50    mm
03301>       19990717 19990717 19990906 19990906 19990906 19990906 19990907 19990908 19990908  date
03302>       Number of rainfall events per following interevent time
03303>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03304>          102       80       70       63       56       39       31       28       18
03305>       Number of events with at least the following durations
03306>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03307>          101       57       31       10        1        0        0        0        0
03308> R0099:C00003------------------------------------------------------------------------------
03309>       COMPUTE API
03310>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03311>       [APImax= 69.51: APIavg= 23.97: APImin=  1.93]
03312> *******************************************************************************************************
03313> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03314> *******************************************************************************************************
03315> R0099:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03316>     CONTINUOUS NASHYD      5.0 01:West_1        14.27     .092 1999.0906_10:15   33.50 .079     .000
03317>       [CN= 72.0: N= 3.00: Tp= 1.14]
03318>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
03319>       [InterEventTime=  12.00]
03320> R0099:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03321>     CONTINUOUS NASHYD      5.0 01:West_2        20.14     .146 1999.0906_10:20   38.58 .091     .000
03322>       [CN= 76.0: N= 3.00: Tp= 1.26]
03323>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
03324>       [InterEventTime=  12.00]
03325> R0099:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03326>     CONTINUOUS NASHYD      5.0 01:West_3        14.01     .069 1999.0906_11:05   32.57 .077     .000
03327>       [CN= 71.0: N= 3.00: Tp= 2.07]
03328>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
03329>       [InterEventTime=  12.00]
03330> R0099:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03331>     ADD HYD                5.0 02:West_1        14.27     .092 1999.0906_10:15   33.50  n/a     .000
03332>                      +     5.0 02:West_2        20.14     .146 1999.0906_10:20   38.58  n/a     .000
03333>                      +     5.0 02:West_3        14.01     .069 1999.0906_11:05   32.57  n/a     .000
03334>                    SUM=    5.0 01:West-Total    48.42     .302 1999.0906_10:25   35.34  n/a     .000
03335> *******************************************************************************************************
03336> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03337> *******************************************************************************************************
03338> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
03339> *******************************************************************************************************
03340> R0099:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03341>     CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27     .277 1999.0906_ 9:05  131.43 .310     .000
03342>       [CN=100.0: N= 3.00: Tp= 1.14]
03343>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03344>       [InterEventTime=  12.00]
03345> R0099:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03346>     CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14     .377 1999.0906_ 9:15  131.43 .310     .000
03347>       [CN=100.0: N= 3.00: Tp= 1.26]
03348>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03349>       [InterEventTime=  12.00]
03350> R0099:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03351>     CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01     .209 1999.0906_10:20  131.43 .310     .000
03352>       [CN=100.0: N= 3.00: Tp= 2.07]
03353>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03354>       [InterEventTime=  12.00]
03355> R0099:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03356>     ADD HYD                5.0 02:INF-West_1    14.27     .277 1999.0906_ 9:05  131.43  n/a     .000
03357>                      +     5.0 02:INF-West_2    20.14     .377 1999.0906_ 9:15  131.43  n/a     .000
03358>                      +     5.0 02:INF-West_3    14.01     .209 1999.0906_10:20  131.43  n/a     .000
03359>                    SUM=    5.0 01:INF-West-T    48.42     .836 1999.0906_ 9:20  131.43  n/a     .000
03360> ##############################################################################
03361> # CONTINUOUS RAINFALL DATA
03362> ##############################################################################
03363>  ** END OF RUN :   99
03364>
03365> *******************************************************************************
03366>
03367>
03368>
03369>
03370>
03371>  RUN#:COMMAND#
03372> R0100:C00001------------------------------------------------------------------------------
03373>     START
03374>       [TZERO =    .00 hrs on 20000101]
03375>       [METOUT=   2    (1=imperial, 2=metric output)]
03376>       [NSTORM=   0 ]
03377>       [NRUN  = 0100 ]
03378> *******************************************************************************************************
03379> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03380> *******************************************************************************************************
03381> #  Project Name: Barrhaven Conservancy Development
03382> #  Project Number: 1474
03383> #  Date        : 2021/Oct/18
03384> #  Modeller    : J.Burnett, P.Eng.
03385> #  Updated     : 2022/Dec/07 [JB]
03386> #  Updated     : 2022/Dec/13 [LP]
03387> #  Updated     : 2024/Mar/14 [JB]
03388> #  Company     : J.F. Sabourin and Associates
03389> #  License #   : 2582634
03390> *******************************************************************************************************
03391> # Ottawa International Airport (1967 - 2003)
03392> R0100:C00002------------------------------------------------------------------------------
03393>   *  READ AES DATA
03394>       [Filename  = YOW_1967_2007.123                                    ]
03395>       [Start_date= 2000.0101: End_date= 2000.1230]
03396>       (DT= 60.min: Length= 5160.hrs: WetHrs=  401: DryHrs= 4759: PTOT= 535.90)
03397>       Maximum average rainfall intensities over
03398>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03399>        14.70     9.60     8.03     6.43     3.89     1.95     1.30     1.03      .84    mm/hr
03400>        14.70    19.20    24.10    38.60    46.70    46.70    46.80    49.30    60.40    mm
03401>       20000625 20000625 20000625 20000625 20000625 20000625 20000625 20000626 20000510 20000511  date
03402>       Number of rainfall events per following interevent time
03403>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03404>          156      125      110       86       67       46       34       30       23
03405>       Number of events with at least the following durations
03406>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03407>          155       82       49       16        2        0        0        0        0
03408> R0100:C00003------------------------------------------------------------------------------
03409>       COMPUTE API
03410>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03411>       [APImax= 76.65: APIavg= 25.66: APImin=  5.70]
03412> *******************************************************************************************************
03413> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03414> *******************************************************************************************************
03415> R0100:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03416>     CONTINUOUS NASHYD      5.0 01:West_1        14.27     .207 2000.0625_10:40   56.28 .105     .000
03417>       [CN= 72.0: N= 3.00: Tp= 1.14]
03418>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
03419>       [InterEventTime=  12.00]
03420> R0100:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03421>     CONTINUOUS NASHYD      5.0 01:West_2        20.14     .303 2000.0625_10:45   63.91 .119     .000
03422>       [CN= 76.0: N= 3.00: Tp= 1.26]
03423>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
03424>       [InterEventTime=  12.00]
03425> R0100:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03426>     CONTINUOUS NASHYD      5.0 01:West_3        14.01     .135 2000.0625_11:25   54.85 .102     .000
03427>       [CN= 71.0: N= 3.00: Tp= 2.07]
03428>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
03429>       [InterEventTime=  12.00]
03430> R0100:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03431>     ADD HYD                5.0 02:West_1        14.27     .207 2000.0625_10:40   56.28  n/a     .000
03432>                      +     5.0 02:West_2        20.14     .303 2000.0625_10:45   63.91  n/a     .000
03433>                      +     5.0 02:West_3        14.01     .135 2000.0625_11:25   54.85  n/a     .000
03434>                    SUM=    5.0 01:West-Total    48.42     .631 2000.0625_10:50   59.04  n/a     .000
03435> *******************************************************************************************************
03436> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03437> *******************************************************************************************************
03438> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
03439> *******************************************************************************************************
03440> R0100:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03441>     CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27     .327 2000.0625_10:30  172.01 .321     .000
03442>       [CN=100.0: N= 3.00: Tp= 1.14]
03443>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03444>       [InterEventTime=  12.00]
03445> R0100:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03446>     CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14     .439 2000.0625_10:35  172.01 .321     .000
03447>       [CN=100.0: N= 3.00: Tp= 1.26]
03448>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03449>       [InterEventTime=  12.00]
03450> R0100:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03451>     CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01     .237 2000.0625_11:10  172.01 .321     .000
03452>       [CN=100.0: N= 3.00: Tp= 2.07]
03453>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03454>       [InterEventTime=  12.00]
03455> R0100:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03456>     ADD HYD                5.0 02:INF-West_1    14.27     .327 2000.0625_10:30  172.01  n/a     .000
03457>                      +     5.0 02:INF-West_2    20.14     .439 2000.0625_10:35  172.01  n/a     .000
03458>                      +     5.0 02:INF-West_3    14.01     .237 2000.0625_11:10  172.01  n/a     .000
03459>                    SUM=    5.0 01:INF-West-T    48.42     .987 2000.0625_10:35  172.01  n/a     .000
03460> ##############################################################################
03461> # CONTINUOUS RAINFALL DATA
03462> ##############################################################################
03463>  ** END OF RUN :  101
03464>
03465> *******************************************************************************
03466>
03467>
03468>
03469>
03470>
03471>  RUN#:COMMAND#
03472> R0102:C00001------------------------------------------------------------------------------
03473>     START
03474>       [TZERO =    .00 hrs on 20020101]
03475>       [METOUT=   2    (1=imperial, 2=metric output)]
03476>       [NSTORM=   0 ]
03477>       [NRUN  = 0102 ]
03478> *******************************************************************************************************
03479> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03480> *******************************************************************************************************
03481> #  Project Name: Barrhaven Conservancy Development
03482> #  Project Number: 1474
03483> #  Date        : 2021/Oct/18
03484> #  Modeller    : J.Burnett, P.Eng.
03485> #  Updated     : 2022/Dec/07 [JB]
03486> #  Updated     : 2022/Dec/13 [LP]
03487> #  Updated     : 2024/Mar/14 [JB]
03488> #  Company     : J.F. Sabourin and Associates
03489> #  License #   : 2582634
03490> *******************************************************************************************************
03491> # Ottawa International Airport (1967 - 2003)
03492> R0102:C00002------------------------------------------------------------------------------
03493>   *  READ AES DATA
03494>       [Filename  = YOW_1967_2007.123                                    ]
03495>       [Start_date= 2002.0101: End_date= 2002.1231]
03496>       (DT= 60.min: Length= 5088.hrs: WetHrs=  304: DryHrs= 4784: PTOT= 551.50)
03497>       Maximum average rainfall intensities over
03498>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03499>        45.00    26.75    18.40     9.48     4.74     2.48     2.08     1.56     1.04    mm/hr
03500>        45.00    53.50    55.20    56.90    56.90    59.50    74.90    74.90    74.90    mm
03501>       20020627 20020627 20020627 20020627 20020627 20020627 20020627 20020627 20020628 20020629  date
03502>       Number of rainfall events per following interevent time
03503>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03504>          100       83       78       56       47       41       36       34       25
03505>       Number of events with at least the following durations
03506>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03507>          100       59       33       13        5        0        0        0        0
03508> R0102:C00003------------------------------------------------------------------------------
03509>       COMPUTE API
03510>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03511>       [APImax=114.06: APIavg= 26.37: APImin=  4.40]
03512> *******************************************************************************************************
03513> #                    Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03514> *******************************************************************************************************
03515> R0102:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03516>     CONTINUOUS NASHYD      5.0 01:West_1        14.27     .455 2002.0627_14:50  103.15 .187     .000
03517>       [CN= 72.0: N= 3.00: Tp= 1.14]
03518>       [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
03519>       [InterEventTime=  12.00]
03520> R0102:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03521>     CONTINUOUS NASHYD      5.0 01:West_2        20.14     .645 2002.0627_15:00  114.49 .208     .000
03522>       [CN= 76.0: N= 3.00: Tp= 1.26]
03523>       [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
03524>       [InterEventTime=  12.00]
03525> R0102:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03526>     CONTINUOUS NASHYD      5.0 01:West_3        14.01     .260 2002.0627_15:50  100.99 .183     .000
03527>       [CN= 71.0: N= 3.00: Tp= 2.07]
03528>       [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
03529>       [InterEventTime=  12.00]
03530> R0102:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03531>     ADD HYD                5.0 02:West_1        14.27     .455 2002.0627_14:50  103.15  n/a     .000
03532>                      +     5.0 02:West_2        20.14     .645 2002.0627_15:00  114.49  n/a     .000
03533>                      +     5.0 02:West_3        14.01     .260 2002.0627_15:50  100.99  n/a     .000
03534>                    SUM=    5.0 01:West-Total    48.42    1.311 2002.0627_15:00  107.24  n/a     .000
03535> *******************************************************************************************************
03536> #                    Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03537> *******************************************************************************************************
03538> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
03539> *******************************************************************************************************
03540> R0102:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03541>     CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27     .736 2002.0627_14:45  243.89 .442     .000
03542>       [CN=100.0: N= 3.00: Tp= 1.14]
03543>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03544>       [InterEventTime=  12.00]
03545> R0102:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03546>     CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14     .953 2002.0627_14:50  243.89 .442     .000
03547>       [CN=100.0: N= 3.00: Tp= 1.26]
03548>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03549>       [InterEventTime=  12.00]
03550> R0102:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03551>     CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01     .425 2002.0627_15:40  243.89 .442     .000
03552>       [CN=100.0: N= 3.00: Tp= 2.07]
03553>       [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03554>       [InterEventTime=  12.00]
03555> R0102:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03556>     ADD HYD                5.0 02:INF-West_1    14.27     .736 2002.0627_14:45  243.89  n/a     .000
03557>                      +     5.0 02:INF-West_2    20.14     .953 2002.0627_14:50  243.89  n/a     .000
03558>                      +     5.0 02:INF-West_3    14.01     .425 2002.0627_15:40  243.89  n/a     .000
03559>                    SUM=    5.0 01:INF-West-T    48.42    2.034 2002.0627_14:50  243.89  n/a     .000
03560> ##############################################################################
03561> # CONTINUOUS RAINFALL DATA
03562> ##############################################################################
03563>  ** END OF RUN :  102
03564>
03565> *******************************************************************************
03566>
03567>
03568>
03569>
03570>
03571>  RUN#:COMMAND#
03572> R0103:C00001------------------------------------------------------------------------------
03573>     START
03574>       [TZERO =    .00 hrs on 20030101]
03575>       [METOUT=   2    (1=imperial, 2=metric output)]
03576>       [NSTORM=   0 ]
03577>       [NRUN  = 0103 ]
03578> *******************************************************************************************************
03579> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03580> *******************************************************************************************************
03581> #  Project Name: Barrhaven Conservancy Development
03582> #  Project Number: 1474
03583> #  Date        : 2021/Oct/18
03584> #  Modeller    : J.Burnett, P.Eng.
03585> #  Updated     : 2022/Dec/07 [JB]
03586> #  Updated     : 2022/Dec/13 [LP]
03587> #  Updated     : 2024/Mar/14 [JB]
03588> #  Company     : J.F. Sabourin and Associates
03589> #  License #   : 2582634
03590> *******************************************************************************************************
03591> # Ottawa International Airport (1967 - 2003)
03592> R0103:C00002------------------------------------------------------------------------------
03593>   *  READ AES DATA
03594>       [Filename  = YOW_1967_2007.123                                    ]
03595>       [Start_date= 2003.0101: End_date= 2003.1231]
03596>       (DT= 60.min: Length= 4440.hrs: WetHrs=  406: DryHrs= 4034: PTOT= 554.60)
03597>       Maximum average rainfall intensities over
03598>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03599>        15.10    10.00     7.13     4.28     3.18     1.86     1.25      .94      .81    mm/hr
03600>        15.10    20.00    21.40    25.70    38.20    44.60    44.90    45.10    58.30    mm
```

```
03601>       20030711 20030711 20030711 20030711 20031021 20031015 20030525 20030526 20030527  date
03602>       Number of rainfall events per following interevent time
03603>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03604>          145      127      109       86       64       45       38       25       15
03605>       Number of events with at least the following durations
03606>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03607>          144       80       43       13        5        1        0        0        0
03608> R0103:C00003-------------------------------------------------------------------------------------------------------
03609>       COMPUTE API
03610>         [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03611>         [APImax= 72.10: APIavg= 28.54: APImin=  4.70]
03612> #*************************************************************************************************************
03613> #                Barrhaven Conservancy West Developments (WITH INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03614> #*************************************************************************************************************
03615> R0103:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03616>      CONTINUOUS NASHYD      5.0 01:West_1        14.27     .149 2003.0711_17:45   76.16 .137     .000
03617>        [CN= 72.0: N= 3.00: Tp= 1.14]
03618>        [IaREC= 6.00: SMIN= 39.75: SMAX=264.99: SK= .030]
03619>        [InterEventTime=  12.00]
03620> R0103:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03621>      CONTINUOUS NASHYD      5.0 01:West_2        20.14     .221 2003.0711_17:50   86.07 .155     .000
03622>        [CN= 76.0: N= 3.00: Tp= 1.26]
03623>        [IaREC= 6.00: SMIN= 32.46: SMAX=216.39: SK= .030]
03624>        [InterEventTime=  12.00]
03625> R0103:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03626>      CONTINUOUS NASHYD      5.0 01:West_3        14.01     .091 2003.1021_ 9:50   74.30 .134     .000
03627>        [CN= 71.0: N= 3.00: Tp= 2.07]
03628>        [IaREC= 6.00: SMIN= 41.38: SMAX=275.84: SK= .030]
03629>        [InterEventTime=  12.00]
03630> R0103:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03631>      ADD HYD                5.0 02:West_1        14.27     .149 2003.0711_17:45   76.16  n/a     .000
03632>                       +     5.0 02:West_2        20.14     .221 2003.0711_17:50   86.07  n/a     .000
03633>                       +     5.0 02:West_3        14.01     .091 2003.1021_ 9:50   74.30  n/a     .000
03634>                     SUM=    5.0 01:West-Total    48.42     .444 2003.0711_17:55   79.74  n/a     .000
03635> #*************************************************************************************************************
03636> #                Barrhaven Conservancy West Developments (WITHOUT INFILTRATION) - PRE DEVELOPMENT CONDITIONS
03637> #*************************************************************************************************************
03638> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
03639> #*************************************************************************************************************
03640> R0103:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03641>      CONTINUOUS NASHYD      5.0 01:INF-West_1    14.27     .307 2003.0711_17:35  204.68 .369     .000
03642>        [CN=100.0: N= 3.00: Tp= 1.14]
03643>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03644>        [InterEventTime=  12.00]
03645> R0103:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03646>      CONTINUOUS NASHYD      5.0 01:INF-West_2    20.14     .403 2003.0711_17:40  204.68 .369     .000
03647>        [CN=100.0: N= 3.00: Tp= 1.26]
03648>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03649>        [InterEventTime=  12.00]
03650> R0103:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03651>      CONTINUOUS NASHYD      5.0 01:INF-West_3    14.01     .191 2003.0711_18:20  204.68 .369     .000
03652>        [CN=100.0: N= 3.00: Tp= 2.07]
03653>        [IaREC= 6.00: SMIN=  1.39: SMAX=  9.24: SK= .000]
03654>        [InterEventTime=  12.00]
03655> R0103:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03656>      ADD HYD                5.0 02:INF-West_1    14.27     .307 2003.0711_17:35  204.68  n/a     .000
03657>                       +     5.0 02:INF-West_2    20.14     .403 2003.0711_17:40  204.68  n/a     .000
03658>                       +     5.0 02:INF-West_3    14.01     .191 2003.0711_18:20  204.68  n/a     .000
03659>                     SUM=    5.0 01:INF-West-T    48.42     .876 2003.0711_17:40  204.68  n/a     .000
03660> ##############################################################################
03661> # CONTINUOUS RAINFALL DATA
03662> ##############################################################################
03663> R0103:C00002-------------------------------------------------------------------------------------------------------
03664>      FINISH
03665> -------------------------------------------------------------------------------------------------------------
03666> *************************************************************************************************************
03667>       WARNINGS / ERRORS / NOTES
03668>       -------------------------
03669> R0067:C00002  READ AES DATA
03670> *** WARNING: Requested start date is less than start date in file.
03671> *** WARNING: Missing rainfall increments were set to 0.
03672> *** WARNING: Missing rainfall increments were set to 0.
03673> *** WARNING: Missing rainfall increments were set to 0.
03674> *** WARNING: Missing rainfall increments were set to 0.
03675> *** WARNING: Missing rainfall increments were set to 0.
03676> *** WARNING: Missing rainfall increments were set to 0.
03677> *** WARNING: Missing rainfall increments were set to 0.
03678> *** WARNING: Missing rainfall increments were set to 0.
03679> *** WARNING: Missing rainfall increments were set to 0.
03680> *** WARNING: Missing rainfall increments were set to 0.
03681> *** WARNING: Requested start date is less than start date in file.
03682> *** WARNING: Missing rainfall increments were set to 0.
03683> *** WARNING: Missing rainfall increments were set to 0.
03684> *** WARNING: Missing rainfall increments were set to 0.
03685> *** WARNING: Missing rainfall increments were set to 0.
03686> *** WARNING: Missing rainfall increments were set to 0.
03687> *** WARNING: Missing rainfall increments were set to 0.
03688> *** WARNING: Missing rainfall increments were set to 0.
03689> *** WARNING: Missing rainfall increments were set to 0.
03690> *** WARNING: Missing rainfall increments were set to 0.
03691> *** WARNING: Missing rainfall increments were set to 0.
03692> *** WARNING: Requested start date is less than start date in file.
03693> *** WARNING: Missing rainfall increments were set to 0.
03694> *** WARNING: Missing rainfall increments were set to 0.
03695> *** WARNING: Missing rainfall increments were set to 0.
03696> *** WARNING: Requested start date is less than start date in file.
03697> *** WARNING: Missing rainfall increments were set to 0.
03698> *** WARNING: Missing rainfall increments were set to 0.
03699> *** WARNING: Missing rainfall increments were set to 0.
03700> *** WARNING: Missing rainfall increments were set to 0.
03701> *** WARNING: Missing rainfall increments were set to 0.
03702> *** WARNING: Missing rainfall increments were set to 0.
03703> *** WARNING: Requested start date is less than start date in file.
03704> *** WARNING: Missing rainfall increments were set to 0.
03705> *** WARNING: Missing rainfall increments were set to 0.
03706> *** WARNING: Requested start date is less than start date in file.
03707> *** WARNING: Missing rainfall increments were set to 0.
03708> *** WARNING: Requested start date is less than start date in file.
03709> *** WARNING: Missing rainfall increments were set to 0.
03710> *** WARNING: Requested start date is less than start date in file.
03711> *** WARNING: Missing rainfall increments were set to 0.
03712> *** WARNING: Requested start date is less than start date in file.
03713> *** WARNING: Missing rainfall increments were set to 0.
03714> *** WARNING: Requested start date is less than start date in file.
03715> *** WARNING: Missing rainfall increments were set to 0.
03716>    Simulation ended on 2024-03-14     at 20:05:19
03717> =============================================================================================================
03718>
```

```
20     Metric units / ID Numbers OFF
*#*******************************************************************************************************************
*#  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
*#*******************************************************************************************************************
*#  Project Name: Barrhaven Conservancy Development
*#  Project Number: 1474
*#  Date        : 2021/Oct/18
*#  Modeller    : J.Burnett, P.Eng.
*#  Updated     : 2024/Mar/14 [LP]
*#  Company     : J.F. Sabourin and Associates
*#  License #   : 2582634
*#*******************************************************************************************************************
START               TZERO=[1967.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[67]
*%                   [""] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------------------------------------------
*# Ottawa International Airport (1967 - 2003)
READ AES DATA       AES_FILENAME=["YOW_1967_2007.123"],
                    IELEM=[123], START_DATE=[0], END_DATE=[-364]
*%-----------------|-------------------------------------------------------------------------------------------------
COMPUTE API         APII=[50], APIK=[0.90]/day
*%-----------------|-------------------------------------------------------------------------------------------------
*#*******************************************************************************************************************
*#                   Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
*#*******************************************************************************************************************
*%-----------------|-------------------------------------------------------------------------------------------------
CONTINUOUS STANDHYD NHYD=["W1"], DT=[5](min), AREA=[5.76](ha)
                    XIMP=[0.55], TIMP=[0.66], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[71],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[196](m),
                    MNI=[0.013], SCI=[0](min),
                    Continuous simulation parameters:
                    IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                    SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.03]/(mm),
                    InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------------------------
*# LID for Outlet W1 (14 catchbasins, 30 m long trench each)
*# Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
*# Total Volume provided by LID  - 96 m³
*# Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
ROUTE RESERVOIR     NHYDout=["W1-LID"], NHYDin=["W1"], RDT=[5](min),
                         TABLE of ( OUTFLOW-STORAGE ) values
                                   (cms) - (ha-m)
                                 [   0.0000 ,  0.0000  ]
                                 [   0.0004 ,  0.0001  ]
                                 [   0.0005 ,  0.0096  ]
                                 [      -1   ,  -1     ]
                    NHYDovf=["W1-LID-Out"],
*%-----------------|-------------------------------------------------------------------------------------------------
CONTINUOUS STANDHYD NHYD=["W2"], DT=[5](min), AREA=[8.51](ha)
                    XIMP=[0.50], TIMP=[0.60], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[71],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[238](m),
```

```
                     MNI=[0.013], SCI=[0](min),
                     Continuous simulation parameters:
                     IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                     SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.03]/(mm),
                     InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------|
*# LID for Outlet W2 (19 catchbasins, 30 m long trench each)
*# Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
*# Total Volume provided by LID  - 131 m³
*# Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
ROUTE RESERVOIR      NHYDout=["W2-LID"], NHYDin=["W2"], RDT=[5](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                 [   0.0000 ,  0.0000  ]
                                 [   0.0006 ,  0.0001  ]
                                 [   0.0007 ,  0.0131  ]
                                 [      -1   ,  -1     ]
                     NHYDovf=["W2-LID-Out"],
*%-----------------|-------------------------------------------------------------------------------|
CONTINUOUS STANDHYD NHYD=["W3"], DT=[5](min), AREA=[10.03](ha)
                     XIMP=[0.66], TIMP=[0.76], DWF=[0](cms),
                     LOSS=[2]: SCS curve number CN=[71],
                     Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                     MNP=[0.250], SCP=[0](min),
                     Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[259](m),
                     MNI=[0.013], SCI=[0](min),
                     Continuous simulation parameters:
                     IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                     SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.03]/(mm),
                     InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------|
*# LID for Outlet W3 (28 catchbasins, 30 m long trench each)
*# Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
*# Total Volume provided by LID  - 193 m³
*# Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
ROUTE RESERVOIR      NHYDout=["W3-LID"], NHYDin=["W3"], RDT=[5](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                 [   0.0000 ,  0.0000  ]
                                 [   0.0010 ,  0.0001  ]
                                 [   0.0011 ,  0.0193  ]
                                 [      -1   ,  -1     ]
                     NHYDovf=["W3-LID-Out"],
*%-----------------|-------------------------------------------------------------------------------|
CONTINUOUS STANDHYD NHYD=["W4"], DT=[5](min), AREA=[10.11](ha)
                     XIMP=[0.60], TIMP=[0.70], DWF=[0](cms),
                     LOSS=[2]: SCS curve number CN=[71],
                     Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                     MNP=[0.250], SCP=[0](min),
                     Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[260](m),
                     MNI=[0.013], SCI=[0](min),
                     Continuous simulation parameters:
                     IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                     SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.03]/(mm),
                     InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------|
*# LID for Outlet W4 (27 catchbasins, 30 m long trench each)
*# Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
*# Total Volume provided by LID  - 186 m³
*# Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
ROUTE RESERVOIR      NHYDout=["W4-LID"], NHYDin=["W4"], RDT=[5](min),
```

```
                          TABLE of ( OUTFLOW-STORAGE ) values
                                   (cms) - (ha-m)
                                 [   0.0000 ,  0.0000  ]
                                 [   0.0009 ,  0.0001  ]
                                 [   0.0010 ,  0.0186  ]
                                 [      -1   ,  -1     ]
                     NHYDovf=["W4-LID-Out"],
*%-----------------|-------------------------------------------------------------------------------
-----------------------------|
CONTINUOUS STANDHYD NHYD=["W5"], DT=[5](min), AREA=[6.20](ha)
                     XIMP=[0.57], TIMP=[0.67], DWF=[0](cms),
                     LOSS=[2]: SCS curve number CN=[71],
                     Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                     MNP=[0.250], SCP=[0](min),
                     Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[203](m),
                     MNI=[0.013], SCI=[0](min),
                     Continuous simulation parameters:
                     IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                     SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.03]/(mm),
                     InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------
-----------------------------|
*# LID for Outlet W5 (16 catchbasins, 30 m long trench each)
*# Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm
diameter perforated pipe
*# Total Volume provided by LID  - 110 m³
*# Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
ROUTE RESERVOIR      NHYDout=["W5-LID"], NHYDin=["W5"], RDT=[5](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                   (cms) - (ha-m)
                                 [   0.0000 ,  0.0000  ]
                                 [   0.0005 ,  0.0001  ]
                                 [   0.0006 ,  0.0110  ]
                                 [      -1   ,  -1     ]
                     NHYDovf=["W5-LID-Out"],
*%-----------------|-------------------------------------------------------------------------------
-----------------------------|
CONTINUOUS STANDHYD NHYD=["W6"], DT=[5](min), AREA=[7.81](ha)
                     XIMP=[0.71], TIMP=[0.81], DWF=[0](cms),
                     LOSS=[2]: SCS curve number CN=[71],
                     Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                     MNP=[0.250], SCP=[0](min),
                     Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[228](m),
                     MNI=[0.013], SCI=[0](min),
                     Continuous simulation parameters:
                     IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                     SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.03]/(mm),
                     InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------
-----------------------------|
*# LID for Outlet W6 (24 catchbasins, 30 m long trench each)
*# Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm
diameter perforated pipe
*# Total Volume provided by LID  - 165 m³
*# Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
ROUTE RESERVOIR      NHYDout=["W6-LID"], NHYDin=["W6"], RDT=[5](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                   (cms) - (ha-m)
                                 [   0.0000 ,  0.0000  ]
                                 [   0.0008 ,  0.0001  ]
                                 [   0.0009 ,  0.0165  ]
                                 [      -1   ,  -1     ]
                     NHYDovf=["W6-LID-Out"],
*%-----------------|-------------------------------------------------------------------------------
-----------------------------|
*Development Without LIDs
ADD HYD              NHYDsum=["BCD-PH3"], NHYDs to add=["W1", "W2", "W3", "W4","W5","W6"]
*%-----------------|-------------------------------------------------------------------------------
-----------------------------|
```

```
*Development With LIDs
ADD HYD             NHYDsum=["BCD-PH3-LID"], NHYDs to
add=["W1-LID-Out","W2-LID-Out","W3-LID-Out","W4-LID-Out", "W5-LID-Out", "W6-LID-Out"]
*%-----------------|-------------------------------------------------------------------------------|
*#*****************************************************************************************************
*#                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  -
POST DEVELOPMENT CONDITIONS
*#*****************************************************************************************************
*#                  Set infiltration to 0 (CN = 99.99) for water balance analysis
*#*****************************************************************************************************
*%-----------------|-------------------------------------------------------------------------------|
CONTINUOUS STANDHYD NHYD=["INF-W1"], DT=[5](min), AREA=[5.76](ha)
                    XIMP=[0.55], TIMP=[0.66], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[99.99],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[196](m),
                    MNI=[0.013], SCI=[0](min),
                    Continuous simulation parameters:
                    IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                    SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                    InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------|
CONTINUOUS STANDHYD NHYD=["INF-W2"], DT=[5](min), AREA=[8.51](ha)
                    XIMP=[0.50], TIMP=[0.60], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[99.99],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[238](m),
                    MNI=[0.013], SCI=[0](min),
                    Continuous simulation parameters:
                    IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                    SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                    InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------|
CONTINUOUS STANDHYD NHYD=["INF-W3"], DT=[5](min), AREA=[10.03](ha)
                    XIMP=[0.66], TIMP=[0.76], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[99.99],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[259](m),
                    MNI=[0.013], SCI=[0](min),
                    Continuous simulation parameters:
                    IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                    SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                    InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------|
CONTINUOUS STANDHYD NHYD=["INF-W4"], DT=[5](min), AREA=[10.11](ha)
                    XIMP=[0.60], TIMP=[0.70], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[99.99],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[260](m),
                    MNI=[0.013], SCI=[0](min),
                    Continuous simulation parameters:
                    IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                    SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                    InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------------------|
CONTINUOUS STANDHYD NHYD=["INF-W5"], DT=[5](min), AREA=[6.20](ha)
```

```
                    XIMP=[0.57], TIMP=[0.67], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[99.99],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[203](m),
                    MNI=[0.013], SCI=[0](min),
                    Continuous simulation parameters:
                    IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                    SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                    InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------
----------------------------|
CONTINUOUS STANDHYD NHYD=["INF-W6"], DT=[5](min), AREA=[7.81](ha)
                    XIMP=[0.71], TIMP=[0.81], DWF=[0](cms),
                    LOSS=[2]: SCS curve number CN=[99.99],
                    Pervious   areas: IAper=[4.67](mm), SLPP=[2.0](%), LGP=[40](m),
                    MNP=[0.250], SCP=[0](min),
                    Impervious areas: IAimp=[1.57](mm), SLPI=[0.5](%), LGI=[228](m),
                    MNI=[0.013], SCI=[0](min),
                    Continuous simulation parameters:
                    IaRECper=[6](hrs),  IaRECimp=[1.5](hrs),
                    SMIN=[-1](mm),  SMAX=[-1](mm), SK=[0.00]/(mm),
                    InterEventTime=[12](hrs), END=-1
*%-----------------|-------------------------------------------------------------------
----------------------------|
*Development Without Infiltration for water budget
ADD HYD             NHYDsum=["INF-BCD-PH3"], NHYDs to add=["INF-W1", "INF-W2", "INF-W3",
"INF-W4", "INF-W5", "INF-W6"]
*%-----------------|-------------------------------------------------------------------
----------------------------|
*###############################################################################
*# CONTINUOUS RAINFALL DATA
*###############################################################################
*%-----------------|-------------------------------------------------------------------
----------------------------|
*%-----------------|-------------------------------------------------------------------
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START               TZERO=[1968.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[68]
*%-----------------|-------------------------------------------------------------------
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START               TZERO=[1969.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[69]
*%-----------------|-------------------------------------------------------------------
----------------------------|
START               TZERO=[1970.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[70]
*%-----------------|-------------------------------------------------------------------
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START               TZERO=[1971.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[71]
*%-----------------|-------------------------------------------------------------------
----------------------------|
START               TZERO=[1972.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[72]
*%-----------------|-------------------------------------------------------------------
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START               TZERO=[1973.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[73]
*%-----------------|-------------------------------------------------------------------
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START               TZERO=[1974.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[74]
*%-----------------|-------------------------------------------------------------------
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START               TZERO=[1975.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[75]
*%-----------------|-------------------------------------------------------------------
----------------------------|
START               TZERO=[1976.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[76]
*%-----------------|-------------------------------------------------------------------
----------------------------|
START               TZERO=[1977.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[77]
*%-----------------|-------------------------------------------------------------------
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START               TZERO=[1978.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[78]
*%-----------------|-------------------------------------------------------------------
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START                TZERO=[1980.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[80]
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------------------------------|
START                TZERO=[1981.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[81]
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START                TZERO=[1982.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[82]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1983.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[83]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1984.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[84]
*%-----------------|-------------------------------------------------------------------------
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START                TZERO=[1985.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[85]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1986.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[86]
*%-----------------|-------------------------------------------------------------------------
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START                TZERO=[1987.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[87]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1988.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[88]
*%-----------------|-------------------------------------------------------------------------
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START                TZERO=[1989.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[89]
*%-----------------|-------------------------------------------------------------------------
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START                TZERO=[1990.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[90]
*%-----------------|-------------------------------------------------------------------------
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START                TZERO=[1991.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[91]
*%-----------------|-------------------------------------------------------------------------
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START                TZERO=[1992.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[92]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1993.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[93]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1994.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[94]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1995.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[95]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
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*%-----------------|-------------------------------------------------------------------------
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START                TZERO=[1997.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[97]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1998.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[98]
*%-----------------|-------------------------------------------------------------------------
------------------------------|
START                TZERO=[1999.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[99]
*%-----------------|-------------------------------------------------------------------------
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*%-----------------|-------------------------------------------------------------------------
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*% MISSING FROM AES RAINFALL DATA
*%START                TZERO=[2001.0101],  METOUT=[2],  NSTORM=[0],  NRUN=[101]
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*%-----------------|-------------------------------------------------------------------------------|
FINISH
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222     000    11   5555   =========
00004>  S       W W W   MM MM   H   H    Y Y    MM MM   O   O           2   0   0   11   5
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O           2   0   0   11   5       Ver 5.500
00006>      S   W W W   M   M   H   H     Y     M   M   O   O       222   0   0   11   555     FEB  2015
00007>  SSSSS    W W    M   M   H   H     Y     M   M    OOO        2     0   0   11     5     =========
00008>
00009>        StormWater Management HYdrologic Model                222     000    11   555     =========
00010>
00011>  ********************************************************************************
00012>  ***********************  SWMHYMO Ver 5.500  ********************************
00013>  ***********************  A single event and continuous hydrologic simulation model  ********************
00014>  ***********************     based on the principles of HYMO and its successors     ********************
00015>  ***********************          OTTHYMO-83 and OTTHYMO-89.                       ********************
00016>  ********************************************************************************
00017>  ********************* Distributed by:  J.F. Sabourin and Associates Inc.          ********************
00018>  *********************                  Ottawa, Ontario: (613) 836-3884            ********************
00019>  *********************                  Gatineau, Quebec: (819) 243-6858           ********************
00020>  *********************                  E-Mail: swmhymo@jfsa.com                   ********************
00021>  ********************************************************************************
00022>
00023>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00024>  ++++++++++++++++++ Licensed user: JFSAinc.                    ++++++++++++++++++
00025>  ++++++++++++++++++                 Ottawa                SERIAL#:2549237      ++++++++++++++++++
00026>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00027>
00028>  ********************                                                  ********************
00029>  ********************          ++++++ PROGRAM ARRAY DIMENSIONS ++++++  ********************
00030>  ********************      Maximum value for ID numbers  :    11       ********************
00031>  ********************      Max. number of rainfall points: 105408      ********************
00032>  ********************      Max. number of flow points    : 105408      ********************
00033>  ********************************************************************************
00034>
00035>
00036>  ******************************  S U M M A R Y   O U T P U T  ***********************
00037>  ********************************************************************************
00038>  *                    RUN DATE: 2024-03-14     TIME: 20:58:37     RUN COUNTER: 008083     *
00039>  ********************************************************************************
00040>  * Input   file: C:\Temp\20240314-Post-Dev\BCD_WEST-POST_v03.dat                  *
00041>  * Output  file: C:\Temp\20240314-Post-Dev\BCD_WEST-POST_v03.out                  *
00042>  * Summary file: C:\Temp\20240314-Post-Dev\BCD_WEST-POST_v03.sum                  *
00043>  * User comments:                                                                *
00044>  * 1:_____________________________________________________________________________*
00045>  * 2:_____________________________________________________________________________*
00046>  * 3:_____________________________________________________________________________*
00047>  ********************************************************************************
00048>
00049>
00050> #*******************************************************************************************************
00051> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00052> #*******************************************************************************************************
00053> #  Project Name: Barrhaven Conservancy Development
00054> #  Project Number: 1474
00055> #  Date        : 2021/Oct/18
00056> #  Modeller    : J.Burnett, P.Eng.
00057> #  Updated     : 2024/Mar/14 [LP]
00058> #  Company     : J.F. Sabourin and Associates
00059> #  License #   : 2582634
00060> #*******************************************************************************************************
00061>   ** END OF RUN :   66
00062>
00063> ********************************************************************************
00064>
00065>
00066>
00067>
00068>
00069>  RUN#:COMMAND#
00070> R0067:C00001-------------------------------------------------------------------------------
00071>      START
00072>        [TZERO =    .00 hrs on 19670101]
00073>        [METOUT=   2   (1=imperial, 2=metric output)]
00074>        [NSTORM=   0 ]
00075>        [NRUN  = 0067 ]
00076> #*******************************************************************************************************
00077> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00078> #*******************************************************************************************************
00079> #  Project Name: Barrhaven Conservancy Development
00080> #  Project Number: 1474
00081> #  Date        : 2021/Oct/18
00082> #  Modeller    : J.Burnett, P.Eng.
00083> #  Updated     : 2024/Mar/14 [LP]
00084> #  Company     : J.F. Sabourin and Associates
00085> #  License #   : 2582634
00086> #*******************************************************************************************************
00087> # Ottawa International Airport (1967 - 2003)
00088> R0067:C00002-------------------------------------------------------------------------------
00089>  *  READ AES DATA
00090>        [Filename  = YOW_1967_2007.123                                  ]
00091>        [Start_date= 1967.0101: End_date= 1967.1231]
00092>        [DT= 60.min: Length= 3984.hrs: WetHrs=  257: DryHrs= 3727: PTOT= 386.90)
00093>        Maximum average rainfall intensities over
00094>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00095>         24.60    17.65    13.20     7.25     3.83     2.36     1.73     1.32      .90    mm/hr
00096>         24.60    35.30    39.60    43.50    46.00    56.60    62.30    63.20    64.90    mm
00097>       19670921 19670921 19670921 19670921 19670921 19670921 19670922 19670922 19670923 19670924  date
00098>       Number of rainfall events per following interevent time
00099>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00100>            80       65       56       40       32       29       24       20       18
00101>       Number of events with at least the following durations
00102>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00103>            79       42       29       14        3        0        0        0        0
00104> R0067:C00003-------------------------------------------------------------------------------
00105>      COMPUTE API
00106>        [APIinit= 50.00: APIkdt= .9000: APIkdt= .9956]
00107>        [APImax= 76.77: APIavg= 24.81: APImin=  3.06)
00108> #*******************************************************************************************************
00109> #                    Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
00110> #*******************************************************************************************************
00111> R0067:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00112>      CONTINUOUS STANDHYD    5.0 01:W1          5.76     .240 1967.0921_17:00  203.20 .525     .000
00113>        [XIMP=.55:TIMP=.66]
00114>        [LOSS= 2 :CN= 71.0]
00115>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00116>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00117>        [IaRECimp=   1.50: IaRECper=   6.00]
00118>        [SMIN= 41.38: SMAX=275.84: SK= .030]
00119> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
00120> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00121> # Total Volume provided by LID  - 96 m³
00122> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00123> R0067:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00124>      ROUTE RESERVOIR ->     5.0 02:W1          5.76     .240 1967.0921_17:00  203.20  n/a     .000
00125>                   out <=    5.0 01:W1-LID      1.07     .001 1967.0725_ 0:30  203.20  n/a     .000
00126>              overflow <=    5.0 03:W1-LID-Out  4.69     .235 1967.0921_17:00  203.20  n/a     .000
00127>       (MxStoUsed=.9599E-02  m3, TotOvfVol=.9523E+00  m3, N-Ovf=   73, TotDurOvf=  123.hrs)
00128> R0067:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00129>      CONTINUOUS STANDHYD    5.0 01:W2          8.51     .324 1967.0921_17:00  189.65 .490     .000
00130>        [XIMP=.50:TIMP=.60]
00131>        [LOSS= 2 :CN= 71.0]
00132>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00133>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00134>        [IaRECimp=   1.50: IaRECper=   6.00]
00135>        [SMIN= 41.38: SMAX=275.84: SK= .030]
00136> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
00137> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00138> # Total Volume provided by LID  - 131 m³
00139> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00140> R0067:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00141>      ROUTE RESERVOIR ->     5.0 02:W2          8.51     .324 1967.0921_17:00  189.65  n/a     .000
00142>                   out <=    5.0 01:W2-LID      1.59     .001 1967.0725_ 0:30  189.65  n/a     .000
00143>              overflow <=    5.0 03:W2-LID-Out  6.92     .318 1967.0921_17:00  189.65  n/a     .000
00144>       (MxStoUsed=.1309E-01  m3, TotOvfVol=.1313E+01  m3, N-Ovf=   69, TotDurOvf=  125.hrs)
00145> R0067:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00146>      CONTINUOUS STANDHYD    5.0 01:W3         10.03     .484 1967.0921_17:00  229.91 .594     .000
00147>        [XIMP=.66:TIMP=.76]
00148>        [LOSS= 2 :CN= 71.0]
00149>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00150>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00151>        [IaRECimp=   1.50: IaRECper=   6.00]
00152>        [SMIN= 41.38: SMAX=275.84: SK= .030]
00153> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
00154> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00155> # Total Volume provided by LID  - 193 m³
00156> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00157> R0067:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00158>      ROUTE RESERVOIR ->     5.0 02:W3         10.03     .484 1967.0921_17:00  229.91  n/a     .000
00159>                   out <=    5.0 01:W3-LID      1.99     .001 1967.0725_ 0:30  229.92  n/a     .000
00160>              overflow <=    5.0 03:W3-LID-Out  8.04     .477 1967.0921_17:00  229.91  n/a     .000
00161>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.1848E+01  m3, N-Ovf=   62, TotDurOvf=  122.hrs)
00162> R0067:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00163>      CONTINUOUS STANDHYD    5.0 01:W4         10.11     .449 1967.0921_17:00  214.68 .555     .000
00164>        [XIMP=.60:TIMP=.70]
00165>        [LOSS= 2 :CN= 71.0]
00166>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00167>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00168>        [IaRECimp=   1.50: IaRECper=   6.00]
00169>        [SMIN= 41.38: SMAX=275.84: SK= .030]
00170> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
00171> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00172> # Total Volume provided by LID  - 186 m³
00173> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00174> R0067:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00175>      ROUTE RESERVOIR ->     5.0 02:W4         10.11     .449 1967.0921_17:00  214.68  n/a     .000
00176>                   out <=    5.0 01:W4-LID      2.00     .001 1967.0725_ 0:30  214.68  n/a     .000
00177>              overflow <=    5.0 03:W4-LID-Out  8.11     .442 1967.0921_17:00  214.68  n/a     .000
00178>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.1741E+01  m3, N-Ovf=   71, TotDurOvf=  122.hrs)
00179> R0067:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00180>      CONTINUOUS STANDHYD    5.0 01:W5          6.20     .264 1967.0921_17:00  207.14 .535     .000
00181>        [XIMP=.57:TIMP=.67]
00182>        [LOSS= 2 :CN= 71.0]
00183>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00184>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00185>        [IaRECimp=   1.50: IaRECper=   6.00]
00186>        [SMIN= 41.38: SMAX=275.84: SK= .030]
00187> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
00188> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00189> # Total Volume provided by LID  - 110 m³
00190> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00191> R0067:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00192>      ROUTE RESERVOIR ->     5.0 02:W5          6.20     .264 1967.0921_17:00  207.14  n/a     .000
00193>                   out <=    5.0 01:W5-LID      1.22     .001 1967.0725_ 0:30  207.15  n/a     .000
00194>              overflow <=    5.0 03:W5-LID-Out  4.98     .260 1967.0921_17:00  207.14  n/a     .000
00195>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.1031E+01  m3, N-Ovf=   75, TotDurOvf=  121.hrs)
00196> R0067:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00197>      CONTINUOUS STANDHYD    5.0 01:W6          7.81     .403 1967.0921_17:00  242.59 .627     .000
00198>        [XIMP=.71:TIMP=.81]
00199>        [LOSS= 2 :CN= 71.0]
00200>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00201>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00202>        [IaRECimp=   1.50: IaRECper=   6.00]
00203>        [SMIN= 41.38: SMAX=275.84: SK= .030]
00204> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
00205> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00206> # Total Volume provided by LID  - 165 m³
00207> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00208> R0067:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00209>      ROUTE RESERVOIR ->     5.0 02:W6          7.81     .403 1967.0921_17:00  242.59  n/a     .000
00210>                   out <=    5.0 01:W6-LID      1.58     .001 1967.0725_ 0:30  242.58  n/a     .000
00211>              overflow <=    5.0 03:W6-LID-Out  6.23     .398 1967.0921_17:00  242.59  n/a     .000
00212>       (MxStoUsed=.1649E-01  m3, TotOvfVol=.1511E+01  m3, N-Ovf=   70, TotDurOvf=  120.hrs)
00213> R0067:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00214>      ADD HYD                5.0 02:W1          5.76     .240 1967.0921_17:00  203.20  n/a     .000
00215>                       +     5.0 02:W2          8.51     .324 1967.0921_17:00  189.65  n/a     .000
00216>                       +     5.0 02:W3         10.03     .484 1967.0921_17:00  229.91  n/a     .000
00217>                       +     5.0 02:W4         10.11     .449 1967.0921_17:00  214.68  n/a     .000
00218>                       +     5.0 02:W5          6.20     .264 1967.0921_17:00  207.14  n/a     .000
00219>                       +     5.0 02:W6          7.81     .403 1967.0921_17:00  242.59  n/a     .000
00220>                     SUM=    5.0 01:BCD-PH3    48.42    2.163 1967.0921_17:00  215.61  n/a     .000
00221> R0067:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00222>      ADD HYD                5.0 02:W1-LID-Out  4.69     .235 1967.0921_17:00  203.20  n/a     .000
00223>                       +     5.0 02:W2-LID-Out  6.92     .318 1967.0921_17:00  189.65  n/a     .000
00224>                       +     5.0 02:W3-LID-Out  8.04     .477 1967.0921_17:00  229.91  n/a     .000
00225>                       +     5.0 02:W4-LID-Out  8.11     .442 1967.0921_17:00  214.68  n/a     .000
00226>                       +     5.0 02:W5-LID-Out  4.98     .260 1967.0921_17:00  207.14  n/a     .000
00227>                       +     5.0 02:W6-LID-Out  6.23     .398 1967.0921_17:00  242.59  n/a     .000
00228>                     SUM=    5.0 01:BCD-PH3-LI 38.97    2.131 1967.0921_17:00  215.49  n/a     .000
00229> #*******************************************************************************************************
00230> #                    Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
00231> #*******************************************************************************************************
00232> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
00233> #*******************************************************************************************************
00234> R0067:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00235>      CONTINUOUS STANDHYD    5.0 01:INF-W1      5.76     .349 1967.0921_17:00  252.77 .653     .000
00236>        [XIMP=.55:TIMP=.66]
00237>        [LOSS= 2 :CN=100.0]
00238>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00239>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00240>        [IaRECimp=   1.50: IaRECper=   6.00]
00241>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
00242> R0067:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00243>      CONTINUOUS STANDHYD    5.0 01:INF-W2      8.51     .499 1967.0921_17:00  243.78 .630     .000
00244>        [XIMP=.50:TIMP=.60]
00245>        [LOSS= 2 :CN=100.0]
00246>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00247>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00248>        [IaRECimp=   1.50: IaRECper=   6.00]
00249>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
00250> R0067:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00251>      CONTINUOUS STANDHYD    5.0 01:INF-W3     10.03     .627 1967.0921_17:00  267.93 .693     .000
00252>        [XIMP=.66:TIMP=.76]
00253>        [LOSS= 2 :CN=100.0]
00254>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00255>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00256>        [IaRECimp=   1.50: IaRECper=   6.00]
00257>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
00258> R0067:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00259>      CONTINUOUS STANDHYD    5.0 01:INF-W4     10.11     .616 1967.0921_17:00  258.82 .669     .000
00260>        [XIMP=.60:TIMP=.70]
00261>        [LOSS= 2 :CN=100.0]
00262>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00263>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00264>        [IaRECimp=   1.50: IaRECper=   6.00]
00265>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
00266> R0067:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00267>      CONTINUOUS STANDHYD    5.0 01:INF-W5      6.20     .377 1967.0921_17:00  254.30 .657     .000
00268>        [XIMP=.57:TIMP=.67]
00269>        [LOSS= 2 :CN=100.0]
00270>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00271>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00272>        [IaRECimp=   1.50: IaRECper=   6.00]
00273>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
00274> R0067:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00275>      CONTINUOUS STANDHYD    5.0 01:INF-W6      7.81     .500 1967.0921_17:00  275.68 .713     .000
00276>        [XIMP=.71:TIMP=.81]
00277>        [LOSS= 2 :CN=100.0]
00278>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00279>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00280>        [IaRECimp=   1.50: IaRECper=   6.00]
00281>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
00282> R0067:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00283>      ADD HYD                5.0 02:INF-W1      5.76     .349 1967.0921_17:00  252.77  n/a     .000
00284>                       +     5.0 02:INF-W2      8.51     .499 1967.0921_17:00  243.78  n/a     .000
00285>                       +     5.0 02:INF-W3     10.03     .627 1967.0921_17:00  267.93  n/a     .000
00286>                       +     5.0 02:INF-W4     10.11     .616 1967.0921_17:00  258.82  n/a     .000
00287>                       +     5.0 02:INF-W5      6.20     .377 1967.0921_17:00  254.30  n/a     .000
00288>                       +     5.0 02:INF-W6      7.81     .500 1967.0921_17:00  275.68  n/a     .000
00289>                     SUM=    5.0 01:INF-BCD-PH 48.42    2.968 1967.0921_17:00  259.49  n/a     .000
00290> ##########################################################################
00291> # CONTINUOUS RAINFALL DATA
00292> ##########################################################################
00293>  ** END OF RUN :   67
00294>
00295> ********************************************************************************
00296>
00297>
00298>
00299>
00300>
00301>  RUN#:COMMAND#
00302> R0068:C00001-------------------------------------------------------------------------------
00303>      START
00304>        [TZERO =    .00 hrs on 19680101]
00305>        [METOUT=   2   (1=imperial, 2=metric output)]
00306>        [NSTORM=   0 ]
00307>        [NRUN  = 0068 ]
00308> #*******************************************************************************************************
00309> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00310> #*******************************************************************************************************
00311> #  Project Name: Barrhaven Conservancy Development
00312> #  Project Number: 1474
00313> #  Date        : 2021/Oct/18
00314> #  Modeller    : J.Burnett, P.Eng.
00315> #  Updated     : 2024/Mar/14 [LP]
00316> #  Company     : J.F. Sabourin and Associates
00317> #  License #   : 2582634
00318> #*******************************************************************************************************
00319> # Ottawa International Airport (1967 - 2003)
00320> R0068:C00002-------------------------------------------------------------------------------
00321>  *  READ AES DATA
00322>        [Filename  = YOW_1967_2007.123                                  ]
00323>        [Start_date= 1968.0101: End_date= 1968.1230]
00324>        [DT= 60.min: Length= 8760.hrs: WetHrs=  413: DryHrs= 8347: PTOT= 592.80)
00325>        Maximum average rainfall intensities over
00326>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00327>         33.30    17.05    11.37     6.23     3.74     1.87     1.26      .95      .70    mm/hr
00328>         33.30    34.10    34.10    37.40    44.90    44.90    45.40    45.40    50.20    mm
00329>       19680817 19680817 19680817 19680808 19680817 19680818 19680817 19680808 19680820  date
00330>       Number of rainfall events per following interevent time
00331>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00332>           137      105       93       84       72       63       48       43       36
00333>       Number of events with at least the following durations
00334>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00335>           136       76       49       18        5        0        0        0        0
00336> R0068:C00003-------------------------------------------------------------------------------
00337>      COMPUTE API
00338>        [APIinit= 50.00: APIkdt= .9000: APIkdt= .9956]
00339>        [APImax= 67.52: APIavg= 16.74: APImin=  .27)
00340> #*******************************************************************************************************
00341> #                    Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
00342> #*******************************************************************************************************
00343> R0068:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00344>      CONTINUOUS STANDHYD    5.0 01:W1          5.76     .361 1968.0817_ 5:00  284.26 .480     .000
00345>        [XIMP=.55:TIMP=.66]
00346>        [LOSS= 2 :CN= 71.0]
00347>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00348>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00349>        [IaRECimp=   1.50: IaRECper=   6.00]
00350>        [SMIN= 41.38: SMAX=275.84: SK= .030]
00351> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
00352> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00353> # Total Volume provided by LID  - 96 m³
00354> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00355> R0068:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00356>      ROUTE RESERVOIR ->     5.0 02:W1          5.76     .361 1968.0817_ 5:00  284.27  n/a     .000
00357>                   out <=    5.0 01:W1-LID      1.46     .001 1968.0130_ 4:05  284.27  n/a     .000
00358>              overflow <=    5.0 03:W1-LID-Out  4.30     .350 1968.0817_ 5:00  284.27  n/a     .000
00359>       (MxStoUsed=.9598E-02  m3, TotOvfVol=.1222E+01  m3, N-Ovf=  113, TotDurOvf=  168.hrs)
00360> R0068:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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00361>     CONTINUOUS STANDHYD   5.0 01:W2              8.51     .496 1968.0817_ 5:00  263.54 .445     .000
00362>       [XIMP=.50:TIMP=.60]
00363>       [LOSS= 2 :CN= 71.0]
00364>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00365>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00366>       [IaRECimp=   1.50: IaRECper=   6.00]
00367>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00368> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
00369> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00370> # Total Volume provided by LID  - 131 m³
00371> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00372> R0068:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00373>     ROUTE RESERVOIR ->    5.0 02:W2              8.51     .496 1968.0817_ 5:00  263.54  n/a     .000
00374>                 out <=    5.0 01:W2-LID          2.17     .001 1968.0202_ 3:15  263.55  n/a     .000
00375>           overflow <=    5.0 03:W2-LID-Out      6.34     .479 1968.0817_ 5:00  263.54  n/a     .000
00376>      (MxStoUsed=.1310E-01  m3, TotOvfVol=.1671E-01  m3, N-Ovf=  114, TotDurOvf=  169.hrs)
00377> R0068:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00378>     CONTINUOUS STANDHYD   5.0 01:W3              10.03     .704 1968.0817_ 5:00  326.57 .551     .000
00379>       [XIMP=.66:TIMP=.76]
00380>       [LOSS= 2 :CN= 71.0]
00381>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00382>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00383>       [IaRECimp=   1.50: IaRECper=   6.00]
00384>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00385> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
00386> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00387> # Total Volume provided by LID  - 193 m³
00388> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00389> R0068:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00390>     ROUTE RESERVOIR ->    5.0 02:W3              10.03     .704 1968.0817_ 5:00  326.57  n/a     .000
00391>                 out <=    5.0 01:W3-LID          2.65     .001 1968.0130_ 4:00  326.56  n/a     .000
00392>           overflow <=    5.0 03:W3-LID-Out      7.38     .689 1968.0817_ 5:00  326.57  n/a     .000
00393>      (MxStoUsed=.1930E-01  m3, TotOvfVol=.2411E+01  m3, N-Ovf=  110, TotDurOvf=  167.hrs)
00394> R0068:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00395>     CONTINUOUS STANDHYD   5.0 01:W4              10.11     .663 1968.0817_ 5:00  302.84 .511     .000
00396>       [XIMP=.60:TIMP=.70]
00397>       [LOSS= 2 :CN= 71.0]
00398>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00399>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00400>       [IaRECimp=   1.50: IaRECper=   6.00]
00401>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00402> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
00403> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00404> # Total Volume provided by LID  - 186 m³
00405> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00406> R0068:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00407>     ROUTE RESERVOIR ->    5.0 02:W4              10.11     .663 1968.0817_ 5:00  302.84  n/a     .000
00408>                 out <=    5.0 01:W4-LID          2.69     .001 1968.0202_ 3:15  302.85  n/a     .000
00409>           overflow <=    5.0 03:W4-LID-Out      7.42     .646 1968.0817_ 5:00  302.84  n/a     .000
00410>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.2246E+01  m3, N-Ovf=  109, TotDurOvf=  166.hrs)
00411> R0068:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00412>     CONTINUOUS STANDHYD   5.0 01:W5              6.20     .395 1968.0817_ 5:00  291.03 .491     .000
00413>       [XIMP=.57:TIMP=.67]
00414>       [LOSS= 2 :CN= 71.0]
00415>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00416>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00417>       [IaRECimp=   1.50: IaRECper=   6.00]
00418>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00419> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
00420> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00421> # Total Volume provided by LID  - 110 m³
00422> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00423> R0068:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00424>     ROUTE RESERVOIR ->    5.0 02:W5              6.20     .395 1968.0817_ 5:00  291.03  n/a     .000
00425>                 out <=    5.0 01:W5-LID          1.65     .001 1968.0202_ 3:20  291.03  n/a     .000
00426>           overflow <=    5.0 03:W5-LID-Out      4.55     .384 1968.0817_ 5:00  291.03  n/a     .000
00427>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1324E+01  m3, N-Ovf=  110, TotDurOvf=  165.hrs)
00428> R0068:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00429>     CONTINUOUS STANDHYD   5.0 01:W6              7.81     .580 1968.0817_ 5:00  346.56 .585     .000
00430>       [XIMP=.71:TIMP=.81]
00431>       [LOSS= 2 :CN= 71.0]
00432>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00433>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00434>       [IaRECimp=   1.50: IaRECper=   6.00]
00435>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00436> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
00437> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00438> # Total Volume provided by LID  - 165 m³
00439> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00440> R0068:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00441>     ROUTE RESERVOIR ->    5.0 02:W6              7.81     .580 1968.0817_ 5:00  346.56  n/a     .000
00442>                 out <=    5.0 01:W6-LID          2.10     .001 1968.0130_ 4:05  346.56  n/a     .000
00443>           overflow <=    5.0 03:W6-LID-Out      5.71     .569 1968.0817_ 5:00  346.56  n/a     .000
00444>      (MxStoUsed=.1650E-01  m3, TotOvfVol=.1979E+01  m3, N-Ovf=  103, TotDurOvf=  165.hrs)
00445> R0068:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00446>     ADD HYD               5.0 02:W1              5.76     .361 1968.0817_ 5:00  284.27  n/a     .000
00447>                     +     5.0 02:W2              8.51     .496 1968.0817_ 5:00  263.54  n/a     .000
00448>                     +     5.0 02:W3             10.03     .704 1968.0817_ 5:00  326.57  n/a     .000
00449>                     +     5.0 02:W4             10.11     .663 1968.0817_ 5:00  302.84  n/a     .000
00450>                     +     5.0 02:W5              6.20     .395 1968.0817_ 5:00  291.03  n/a     .000
00451>                     +     5.0 02:W6              7.81     .580 1968.0817_ 5:00  346.56  n/a     .000
00452>                   SUM=    5.0 01:BCD-PH3        48.42    3.199 1968.0817_ 5:00  304.18  n/a     .000
00453> R0068:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00454>     ADD HYD               5.0 02:W1-LID-Out      4.30     .350 1968.0817_ 5:00  284.27  n/a     .000
00455>                     +     5.0 02:W2-LID-Out      6.34     .479 1968.0817_ 5:00  263.54  n/a     .000
00456>                     +     5.0 02:W3-LID-Out      7.38     .689 1968.0817_ 5:00  326.57  n/a     .000
00457>                     +     5.0 02:W4-LID-Out      7.42     .646 1968.0817_ 5:00  302.84  n/a     .000
00458>                     +     5.0 02:W5-LID-Out      4.55     .384 1968.0817_ 5:00  291.03  n/a     .000
00459>                     +     5.0 02:W6-LID-Out      5.71     .569 1968.0817_ 5:00  346.56  n/a     .000
00460>                   SUM=    5.0 01:BCD-PH3-LI     35.70    3.117 1968.0817_ 5:00  304.02  n/a     .000
00461> #*************************************************************************************************************
00462> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)    - POST DEVELOPMENT CONDITIONS
00463> #*************************************************************************************************************
00464> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
00465> #*************************************************************************************************************
00466> R0068:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00467>     CONTINUOUS STANDHYD   5.0 01:INF-W1            5.76     .496 1968.0817_ 5:00  362.10 .611     .000
00468>       [XIMP=.55:TIMP=.66]
00469>       [LOSS= 2 :CN=100.0]
00470>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00471>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00472>       [IaRECimp=   1.50: IaRECper=   6.00]
00473>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00474> R0068:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00475>     CONTINUOUS STANDHYD   5.0 01:INF-W2            8.51     .707 1968.0817_ 5:00  347.68 .587     .000
00476>       [XIMP=.50:TIMP=.60]
00477>       [LOSS= 2 :CN=100.0]
00478>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00479>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00480>       [IaRECimp=   1.50: IaRECper=   6.00]
00481>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00482> R0068:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00483>     CONTINUOUS STANDHYD   5.0 01:INF-W3            10.03     .870 1968.0817_ 5:00  387.27 .653     .000
00484>       [XIMP=.66:TIMP=.76]
00485>       [LOSS= 2 :CN=100.0]
00486>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00487>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00488>       [IaRECimp=   1.50: IaRECper=   6.00]
00489>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00490> R0068:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00491>     CONTINUOUS STANDHYD   5.0 01:INF-W4            10.11     .862 1968.0817_ 5:00  372.28 .628     .000
00492>       [XIMP=.60:TIMP=.70]
00493>       [LOSS= 2 :CN=100.0]
00494>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00495>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00496>       [IaRECimp=   1.50: IaRECper=   6.00]
00497>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00498> R0068:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00499>     CONTINUOUS STANDHYD   5.0 01:INF-W5            6.20     .528 1968.0817_ 5:00  364.85 .615     .000
00500>       [XIMP=.57:TIMP=.67]
00501>       [LOSS= 2 :CN=100.0]
00502>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00503>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00504>       [IaRECimp=   1.50: IaRECper=   6.00]
00505>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00506> R0068:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00507>     CONTINUOUS STANDHYD   5.0 01:INF-W6            7.81     .693 1968.0817_ 5:00  399.98 .675     .000
00508>       [XIMP=.71:TIMP=.81]
00509>       [LOSS= 2 :CN=100.0]
00510>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00511>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00512>       [IaRECimp=   1.50: IaRECper=   6.00]
00513>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00514> R0068:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00515>     ADD HYD               5.0 02:INF-W1            5.76     .496 1968.0817_ 5:00  362.10  n/a     .000
00516>                     +     5.0 02:INF-W2            8.51     .707 1968.0817_ 5:00  347.68  n/a     .000
00517>                     +     5.0 02:INF-W3           10.03     .870 1968.0817_ 5:00  387.27  n/a     .000
00518>                     +     5.0 02:INF-W4           10.11     .862 1968.0817_ 5:00  372.28  n/a     .000
00519>                     +     5.0 02:INF-W5            6.20     .528 1968.0817_ 5:00  364.85  n/a     .000
00520>                     +     5.0 02:INF-W6            7.81     .693 1968.0817_ 5:00  399.98  n/a     .000
00521>                   SUM=    5.0 01:INF-BCD-PH       48.42    4.157 1968.0817_ 5:00  373.37  n/a     .000
00522> ###############################################################################
00523> # CONTINUOUS RAINFALL DATA
00524> ###############################################################################
00525>  ** END OF RUN :  68
00526>
00527> ************************************************************************************
00528>
00529>
00530>
00531>
00532>
00533>  RUN#:COMMAND#
00534> R0069:C00001------------------------------------------------------------------------
00535>       START
00536>       [TZERO =    .00 hrs on 19690101]
00537>       [METOUT=  2    (1=imperial, 2=metric output)]
00538>       [NSTORM=  0 ]
00539>       [NRUN  = 0069 ]
00540> #*************************************************************************************************************

00541> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00542> #*************************************************************************************************************
00543> #  Project Name: Barrhaven Conservancy Development
00544> #  Project Number: 1474
00545> #  Date        : 2021/Oct/18
00546> #  Modeller    : J.Burnett, P.Eng.
00547> #  Updated     : 2024/Mar/14 [LP]
00548> #  Company     : J.F. Sabourin and Associates
00549> #  License #   : 2582634
00550> #*************************************************************************************************************
00551> # Ottawa International Airport (1967 - 2003)
00552> R0069:C00002------------------------------------------------------------------------
00553>  *  READ ARS DATA
00554>       [Filename  = YOW_1967_2007.123                                    ]
00555>       [Start_date= 1969.0101: End_date= 1969.1231]
00556>       [DT= 60.min: Length= 8760.hrs: WetHrs=  470: DryHrs=  8290: PTOT=  570.30)
00557>       Maximum average rainfall intensities over
00558>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00559>        21.10    16.25    10.83     7.78     3.93     2.10     1.40     1.09      .75    mm/hr
00560>        21.10    32.50    32.50    46.70    47.20    50.30    50.30    52.10    54.00    mm
00561>       19690818 19690818 19690818 19690818 19690819 19690819 19690819 19690819 19690819  date
00562>       Number of rainfall events per following interevent time
00563>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00564>          157      119      107       92       72       58       49       43       32
00565>       Number of events with at least the following durations
00566>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00567>          156       84       58       21        5        0        0        0        0
00568> R0069:C00003------------------------------------------------------------------------
00569>       COMPUTE APY
00570>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00571>       [APImax= 56.77: APIavg= 16.06: APImin=  .06]
00572> #*************************************************************************************************************
00573> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
00574> #*************************************************************************************************************
00575> R0069:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00576>     CONTINUOUS STANDHYD   5.0 01:W1              5.76     .225 1969.0818_22:00  259.68 .455     .000
00577>       [XIMP=.55:TIMP=.66]
00578>       [LOSS= 2 :CN= 71.0]
00579>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00580>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00581>       [IaRECimp=   1.50: IaRECper=   6.00]
00582>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00583> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
00584> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00585> # Total Volume provided by LID  - 96 m³
00586> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00587> R0069:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00588>     ROUTE RESERVOIR ->    5.0 02:W1              5.76     .225 1969.0818_22:00  259.68  n/a     .000
00589>                 out <=    5.0 01:W1-LID          1.47     .001 1969.0124_11:10  259.68  n/a     .000
00590>           overflow <=    5.0 03:W1-LID-Out      4.29     .220 1969.0818_22:00  259.68  n/a     .000
00591>      (MxStoUsed=.9599E-02  m3, TotOvfVol=.1115E+01  m3, N-Ovf=   96, TotDurOvf=  178.hrs)
00592> R0069:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00593>     CONTINUOUS STANDHYD   5.0 01:W2              8.51     .309 1969.0818_22:00  240.14 .421     .000
00594>       [XIMP=.50:TIMP=.60]
00595>       [LOSS= 2 :CN= 71.0]
00596>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00597>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00598>       [IaRECimp=   1.50: IaRECper=   6.00]
00599>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00600> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
00601> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00602> # Total Volume provided by LID  - 131 m³
00603> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00604> R0069:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00605>     ROUTE RESERVOIR ->    5.0 02:W2              8.51     .309 1969.0818_22:00  240.14  n/a     .000
00606>                 out <=    5.0 01:W2-LID          2.17     .001 1969.0124_11:15  240.15  n/a     .000
00607>           overflow <=    5.0 03:W2-LID-Out      6.34     .302 1969.0818_22:00  240.14  n/a     .000
00608>      (MxStoUsed=.1310E-01  m3, TotOvfVol=.1521E+01  m3, N-Ovf=   96, TotDurOvf=  180.hrs)
00609> R0069:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00610>     CONTINUOUS STANDHYD   5.0 01:W3             10.03     .441 1969.0818_22:00  299.51 .525     .000
00611>       [XIMP=.66:TIMP=.76]
00612>       [LOSS= 2 :CN= 71.0]
00613>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00614>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00615>       [IaRECimp=   1.50: IaRECper=   6.00]
00616>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00617> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
00618> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00619> # Total Volume provided by LID  - 193 m³
00620> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00621> R0069:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00622>     ROUTE RESERVOIR ->    5.0 02:W3             10.03     .441 1969.0818_22:00  299.51  n/a     .000
00623>                 out <=    5.0 01:W3-LID          2.64     .001 1969.0124_11:05  299.51  n/a     .000
00624>           overflow <=    5.0 03:W3-LID-Out      7.39     .435 1969.0818_22:00  299.51  n/a     .000
00625>      (MxStoUsed=.1929E-01  m3, TotOvfVol=.2213E+01  m3, N-Ovf=   92, TotDurOvf=  179.hrs)
00626> R0069:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00627>     CONTINUOUS STANDHYD   5.0 01:W4             10.11     .415 1969.0818_22:00  277.15 .486     .000
00628>       [XIMP=.60:TIMP=.70]
00629>       [LOSS= 2 :CN= 71.0]
00630>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00631>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00632>       [IaRECimp=   1.50: IaRECper=   6.00]
00633>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00634> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
00635> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00636> # Total Volume provided by LID  - 186 m³
00637> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00638> R0069:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00639>     ROUTE RESERVOIR ->    5.0 02:W4             10.11     .415 1969.0818_22:00  277.15  n/a     .000
00640>                 out <=    5.0 01:W4-LID          2.68     .001 1969.0124_11:15  277.16  n/a     .000
00641>           overflow <=    5.0 03:W4-LID-Out      7.43     .408 1969.0818_22:00  277.15  n/a     .000
00642>      (MxStoUsed=.1859E-01  m3, TotOvfVol=.2058E+01  m3, N-Ovf=   96, TotDurOvf=  178.hrs)
00643> R0069:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00644>     CONTINUOUS STANDHYD   5.0 01:W5              6.20     .247 1969.0818_22:00  266.02 .466     .000
00645>       [XIMP=.57:TIMP=.67]
00646>       [LOSS= 2 :CN= 71.0]
00647>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00648>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00649>       [IaRECimp=   1.50: IaRECper=   6.00]
00650>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00651> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
00652> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00653> # Total Volume provided by LID  - 110 m³
00654> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00655> R0069:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00656>     ROUTE RESERVOIR ->    5.0 02:W5              6.20     .247 1969.0818_22:00  266.02  n/a     .000
00657>                 out <=    5.0 01:W5-LID          1.65     .001 1969.0124_11:15  266.02  n/a     .000
00658>           overflow <=    5.0 03:W5-LID-Out      4.55     .242 1969.0818_22:00  266.02  n/a     .000
00659>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1211E+01  m3, N-Ovf=   93, TotDurOvf=  176.hrs)
00660> R0069:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00661>     CONTINUOUS STANDHYD   5.0 01:W6              7.81     .368 1969.0818_22:00  318.32 .558     .000
00662>       [XIMP=.71:TIMP=.81]
00663>       [LOSS= 2 :CN= 71.0]
00664>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00665>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00666>       [IaRECimp=   1.50: IaRECper=   6.00]
00667>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00668> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
00669> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00670> # Total Volume provided by LID  - 165 m³
00671> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00672> R0069:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00673>     ROUTE RESERVOIR ->    5.0 02:W6              7.81     .368 1969.0818_22:00  318.32  n/a     .000
00674>                 out <=    5.0 01:W6-LID          2.09     .001 1969.0124_11:10  318.33  n/a     .000
00675>           overflow <=    5.0 03:W6-LID-Out      5.72     .362 1969.0818_22:00  318.32  n/a     .000
00676>      (MxStoUsed=.1650E-01  m3, TotOvfVol=.1821E+01  m3, N-Ovf=   89, TotDurOvf=  176.hrs)
00677> R0069:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00678>     ADD HYD               5.0 02:W1              5.76     .225 1969.0818_22:00  259.68  n/a     .000
00679>                     +     5.0 02:W2              8.51     .309 1969.0818_22:00  240.14  n/a     .000
00680>                     +     5.0 02:W3             10.03     .441 1969.0818_22:00  299.51  n/a     .000
00681>                     +     5.0 02:W4             10.11     .415 1969.0818_22:00  277.15  n/a     .000
00682>                     +     5.0 02:W5              6.20     .247 1969.0818_22:00  266.02  n/a     .000
00683>                     +     5.0 02:W6              7.81     .368 1969.0818_22:00  318.32  n/a     .000
00684>                   SUM=    5.0 01:BCD-PH3        48.42    2.004 1969.0818_22:00  278.42  n/a     .000
00685> R0069:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00686>     ADD HYD               5.0 02:W1-LID-Out      4.29     .220 1969.0818_22:00  259.68  n/a     .000
00687>                     +     5.0 02:W2-LID-Out      6.34     .302 1969.0818_22:00  240.14  n/a     .000
00688>                     +     5.0 02:W3-LID-Out      7.39     .435 1969.0818_22:00  299.51  n/a     .000
00689>                     +     5.0 02:W4-LID-Out      7.43     .408 1969.0818_22:00  277.15  n/a     .000
00690>                     +     5.0 02:W5-LID-Out      4.55     .242 1969.0818_22:00  266.02  n/a     .000
00691>                     +     5.0 02:W6-LID-Out      5.72     .362 1969.0818_22:00  318.32  n/a     .000
00692>                   SUM=    5.0 01:BCD-PH3-LI     35.72    1.968 1969.0818_22:00  278.29  n/a     .000
00693> #*************************************************************************************************************
00694> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
00695> #*************************************************************************************************************
00696> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
00697> #*************************************************************************************************************
00698> R0069:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00699>     CONTINUOUS STANDHYD   5.0 01:INF-W1            5.76     .318 1969.0818_22:00  334.54 .587     .000
00700>       [XIMP=.55:TIMP=.66]
00701>       [LOSS= 2 :CN=100.0]
00702>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00703>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00704>       [IaRECimp=   1.50: IaRECper=   6.00]
00705>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00706> R0069:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00707>     CONTINUOUS STANDHYD   5.0 01:INF-W2            8.51     .462 1969.0818_22:00  321.07 .563     .000
00708>       [XIMP=.50:TIMP=.60]
00709>       [LOSS= 2 :CN=100.0]
00710>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00711>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00712>       [IaRECimp=   1.50: IaRECper=   6.00]
00713>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00714> R0069:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00715>     CONTINUOUS STANDHYD   5.0 01:INF-W3            10.03     .561 1969.0818_22:00  357.79 .627     .000
00716>       [XIMP=.66:TIMP=.76]
00717>       [LOSS= 2 :CN=100.0]
00718>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00719>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00720>       [IaRECimp=   1.50: IaRECper=   6.00]
```

```
00721>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00722> R0069:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00723>     CONTINUOUS STANDHYD    5.0 01:INF-W4          10.11     .559 1969.0818_22:00  343.93 .603     .000
00724>       [XIMP=.60:TIMP=.70]
00725>       [LOSS= 2 :CN=100.0]
00726>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00727>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00728>       [IaRECimp=   1.50: IaRECper=   6.00]
00729>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00730> R0069:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00731>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .343 1969.0818_22:00  337.04 .591     .000
00732>       [XIMP=.57:TIMP=.67]
00733>       [LOSS= 2 :CN=100.0]
00734>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00735>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00736>       [IaRECimp=   1.50: IaRECper=   6.00]
00737>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00738> R0069:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00739>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .443 1969.0818_22:00  369.49 .648     .000
00740>       [XIMP=.71:TIMP=.81]
00741>       [LOSS= 2 :CN=100.0]
00742>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00743>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00744>       [IaRECimp=   1.50: IaRECper=   6.00]
00745>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00746> R0069:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00747>     ADD HYD                5.0 02:INF-W1          5.76      .318 1969.0818_22:00  334.54  n/a     .000
00748>                        +    5.0 02:INF-W2          8.51      .462 1969.0818_22:00  321.07  n/a     .000
00749>                        +    5.0 02:INF-W3         10.03      .561 1969.0818_22:00  357.79  n/a     .000
00750>                        +    5.0 02:INF-W4         10.11      .559 1969.0818_22:00  343.93  n/a     .000
00751>                        +    5.0 02:INF-W5          6.20      .343 1969.0818_22:00  337.04  n/a     .000
00752>                        +    5.0 02:INF-W6          7.81      .443 1969.0818_22:00  369.49  n/a     .000
00753>                    SUM=     5.0 01:INF-BCD-PH     48.42     2.685 1969.0818_22:00  344.91  n/a     .000
00754> ##############################################################################
00755> # CONTINUOUS RAINFALL DATA
00756> ##############################################################################
00757>   ** END OF RUN :   69
00758>
00759> ******************************************************************************************
00760>
00761>
00762>
00763>
00764>
00765>  RUN#:COMMAND#
00766> R0070:C00001------------------------------------------------------------------------------
00767>       START
00768>       [TZERO =    .00 hrs on 19700101]
00769>       [METOUT=   2    (1=imperial, 2=metric output)]
00770>       [NSTORM=   0 ]
00771>       [NRUN  = 0070 ]
00772> ******************************************************************************************
00773> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
00774> ******************************************************************************************
00775> #  Project Name: Barrhaven Conservancy Development
00776> #  Project Number: 1474
00777> #  Date       : 2021/Oct/18
00778> #  Modeller   : J.Burnett, P.Eng.
00779> #  Updated    : 2024/Mar/14 [LP]
00780> #  Company    : J.F. Sabourin and Associates
00781> #  License #  : 2582634
00782> ******************************************************************************************
00783> # Ottawa International Airport (1967 - 2003)
00784> R0070:C00002------------------------------------------------------------------------------
00785>   *  READ AES DATA
00786>       [Filename  = YOW_1967_2007.123                                          ]
00787>       [Start_date= 1970.0101: End_date= 1970.1231]
00788>       [DT= 60.min: Length= 8760.hrs: WetHrs=  373: DryHrs= 8387: PTOT= 558.90)
00789>       Maximum average rainfall intensities over
00790>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00791>        35.30    18.30    12.20     6.10     3.63     1.81     1.21     1.46      .99    mm/hr
00792>        35.30    36.60    36.60    36.60    43.50    43.50    43.50    69.90    71.20    mm
00793>      19700926 19700926 19700926 19700927 19700817 19700817 19700818 19700926 19700927  date
00794>       Number of rainfall events per following interevent time
00795>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00796>          148      127      109       84       72       60       54       41       30
00797>       Number of events with at least the following durations
00798>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
00799>          147       79       40       15        3        0        0        0        0
00800> R0070:C00003------------------------------------------------------------------------------
00801>       COMPUTE API
00802>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
00803>       [APImax= 76.00: APIavg= 15.84: APImin=  .07]
00804> ******************************************************************************************
00805> #                 Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
00806> ******************************************************************************************
00807> R0070:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00808>     CONTINUOUS STANDHYD    5.0 01:W1              5.76      .398 1970.0926_21:00  254.24 .455     .000
00809>       [XIMP=.55:TIMP=.66]
00810>       [LOSS= 2 :CN= 71.0]
00811>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00812>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00813>       [IaRECimp=   1.50: IaRECper=   6.00]
00814>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00815> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
00816> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00817> # Total Volume provided by LID  - 96 m³
00818> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00819> R0070:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00820>     ROUTE RESERVOIR ->     5.0 02:W1              5.76      .398 1970.0926_21:00  254.24  n/a     .000
00821>                        out <=    5.0 01:W1-LID       1.46      .001 1970.0202_11:45  254.25  n/a     .000
00822>                  overflow <=    5.0 03:W1-LID-Out     4.30      .386 1970.0926_21:00  254.24  n/a     .000
00823>      (MxStoUsed=.9598E-02  m3, TotOvfVol=.1094E+01  m3, N-Ovf=   91, TotDurOvf=  138.hrs)
00824> R0070:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00825>     CONTINUOUS STANDHYD    5.0 01:W2              8.51      .550 1970.0926_21:00  234.94 .420     .000
00826>       [XIMP=.50:TIMP=.60]
00827>       [LOSS= 2 :CN= 71.0]
00828>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00829>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00830>       [IaRECimp=   1.50: IaRECper=   6.00]
00831>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00832> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
00833> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00834> # Total Volume provided by LID  - 131 m³
00835> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00836> R0070:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00837>     ROUTE RESERVOIR ->     5.0 02:W2              8.51      .550 1970.0926_21:00  234.94  n/a     .000
00838>                        out <=    5.0 01:W2-LID       2.17      .001 1970.0202_11:50  234.95  n/a     .000
00839>                  overflow <=    5.0 03:W2-LID-Out     6.34      .531 1970.0926_21:00  234.94  n/a     .000
00840>      (MxStoUsed=.1309E-01  m3, TotOvfVol=.1490E+01  m3, N-Ovf=   95, TotDurOvf=  137.hrs)
00841> R0070:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00842>     CONTINUOUS STANDHYD    5.0 01:W3             10.03      .767 1970.0926_21:00  293.73 .526     .000
00843>       [XIMP=.66:TIMP=.76]
00844>       [LOSS= 2 :CN= 71.0]
00845>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00846>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00847>       [IaRECimp=   1.50: IaRECper=   6.00]
00848>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00849> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
00850> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00851> # Total Volume provided by LID  - 193 m³
00852> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00853> R0070:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00854>     ROUTE RESERVOIR ->     5.0 02:W3             10.03      .767 1970.0926_21:00  293.73  n/a     .000
00855>                        out <=    5.0 01:W3-LID       2.63      .001 1970.0202_11:50  293.73  n/a     .000
00856>                  overflow <=    5.0 03:W3-LID-Out     7.40      .750 1970.0926_21:00  293.73  n/a     .000
00857>      (MxStoUsed=.1930E-01  m3, TotOvfVol=.2175E+01  m3, N-Ovf=   92, TotDurOvf=  138.hrs)
00858> R0070:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00859>     CONTINUOUS STANDHYD    5.0 01:W4             10.11      .727 1970.0926_21:00  271.59 .486     .000
00860>       [XIMP=.60:TIMP=.70]
00861>       [LOSS= 2 :CN= 71.0]
00862>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00863>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00864>       [IaRECimp=   1.50: IaRECper=   6.00]
00865>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00866> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
00867> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00868> # Total Volume provided by LID  - 186 m³
00869> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00870> R0070:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00871>     ROUTE RESERVOIR ->     5.0 02:W4             10.11      .727 1970.0926_21:00  271.59  n/a     .000
00872>                        out <=    5.0 01:W4-LID       2.68      .001 1970.0202_11:50  271.59  n/a     .000
00873>                  overflow <=    5.0 03:W4-LID-Out     7.43      .708 1970.0926_21:00  271.59  n/a     .000
00874>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.2019E+01  m3, N-Ovf=   87, TotDurOvf=  137.hrs)
00875> R0070:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00876>     CONTINUOUS STANDHYD    5.0 01:W5              6.20      .435 1970.0926_21:00  260.57 .466     .000
00877>       [XIMP=.57:TIMP=.67]
00878>       [LOSS= 2 :CN= 71.0]
00879>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00880>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00881>       [IaRECimp=   1.50: IaRECper=   6.00]
00882>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00883> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
00884> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00885> # Total Volume provided by LID  - 110 m³
00886> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00887> R0070:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00888>     ROUTE RESERVOIR ->     5.0 02:W5              6.20      .435 1970.0926_21:00  260.57  n/a     .000
00889>                        out <=    5.0 01:W5-LID       1.64      .001 1970.0202_11:50  260.56  n/a     .000
00890>                  overflow <=    5.0 03:W5-LID-Out     4.56      .422 1970.0926_21:00  260.57  n/a     .000
00891>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1187E+01  m3, N-Ovf=   96, TotDurOvf=  134.hrs)
00892> R0070:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00893>     CONTINUOUS STANDHYD    5.0 01:W6              7.81      .642 1970.0926_21:00  312.37 .559     .000
00894>       [XIMP=.71:TIMP=.81]
00895>       [LOSS= 2 :CN= 71.0]
00896>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00897>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00898>       [IaRECimp=   1.50: IaRECper=   6.00]
00899>       [SMIN= 41.38: SMAX=275.84: SK= .030]
00900> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
00901> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
00902> # Total Volume provided by LID  - 165 m³
00903> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
00904> R0070:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00905>     ROUTE RESERVOIR ->     5.0 02:W6              7.81      .642 1970.0926_21:00  312.37  n/a     .000
00906>                        out <=    5.0 01:W6-LID       2.08      .001 1970.0202_11:50  312.38  n/a     .000
00907>                  overflow <=    5.0 03:W6-LID-Out     5.73      .627 1970.0926_21:00  312.37  n/a     .000
00908>      (MxStoUsed=.1650E-01  m3, TotOvfVol=.1791E+01  m3, N-Ovf=   87, TotDurOvf=  134.hrs)
00909> R0070:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00910>     ADD HYD                5.0 02:W1              5.76      .398 1970.0926_21:00  254.24  n/a     .000
00911>                        +    5.0 02:W2              8.51      .550 1970.0926_21:00  234.94  n/a     .000
00912>                        +    5.0 02:W3             10.03      .767 1970.0926_21:00  293.73  n/a     .000
00913>                        +    5.0 02:W4             10.11      .727 1970.0926_21:00  271.59  n/a     .000
00914>                        +    5.0 02:W5              6.20      .435 1970.0926_21:00  260.57  n/a     .000
00915>                        +    5.0 02:W6              7.81      .642 1970.0926_21:00  312.37  n/a     .000
00916>                    SUM=     5.0 01:BCD-PH3        48.42     3.519 1970.0926_21:00  272.84  n/a     .000
00917> R0070:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00918>     ADD HYD                5.0 02:W1-LID-Out      4.30      .386 1970.0926_21:00  254.24  n/a     .000
00919>                        +    5.0 02:W2-LID-Out      6.34      .531 1970.0926_21:00  234.94  n/a     .000
00920>                        +    5.0 02:W3-LID-Out      7.40      .750 1970.0926_21:00  293.73  n/a     .000
00921>                        +    5.0 02:W4-LID-Out      7.43      .708 1970.0926_21:00  271.59  n/a     .000
00922>                        +    5.0 02:W5-LID-Out      4.56      .422 1970.0926_21:00  260.57  n/a     .000
00923>                        +    5.0 02:W6-LID-Out      5.73      .627 1970.0926_21:00  312.37  n/a     .000
00924>                    SUM=     5.0 01:BCD-PH3-LI     35.77     3.423 1970.0926_21:00  272.72  n/a     .000
00925> #*****************************************************************************************
00926> #                 Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
00927> #*****************************************************************************************
00928> #                 Set infiltration to 0 (CN = 99.99) for water balance analysis
00929> #*****************************************************************************************
00930> R0070:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00931>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76      .526 1970.0926_21:00  325.35 .582     .000
00932>       [XIMP=.55:TIMP=.66]
00933>       [LOSS= 2 :CN=100.0]
00934>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00935>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
00936>       [IaRECimp=   1.50: IaRECper=   6.00]
00937>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00938> R0070:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00939>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51      .751 1970.0926_21:00  311.41 .557     .000
00940>       [XIMP=.50:TIMP=.60]
00941>       [LOSS= 2 :CN=100.0]
00942>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00943>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
00944>       [IaRECimp=   1.50: IaRECper=   6.00]
00945>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00946> R0070:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00947>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03      .923 1970.0926_21:00  349.41 .625     .000
00948>       [XIMP=.66:TIMP=.76]
00949>       [LOSS= 2 :CN=100.0]
00950>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00951>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
00952>       [IaRECimp=   1.50: IaRECper=   6.00]
00953>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00954> R0070:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00955>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11      .915 1970.0926_21:00  335.05 .599     .000
00956>       [XIMP=.60:TIMP=.70]
00957>       [LOSS= 2 :CN=100.0]
00958>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00959>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
00960>       [IaRECimp=   1.50: IaRECper=   6.00]
00961>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00962> R0070:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00963>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .567 1970.0926_21:00  327.92 .587     .000
00964>       [XIMP=.57:TIMP=.67]
00965>       [LOSS= 2 :CN=100.0]
00966>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00967>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
00968>       [IaRECimp=   1.50: IaRECper=   6.00]
00969>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00970> R0070:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00971>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .736 1970.0926_21:00  361.56 .647     .000
00972>       [XIMP=.71:TIMP=.81]
00973>       [LOSS= 2 :CN=100.0]
00974>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00975>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
00976>       [IaRECimp=   1.50: IaRECper=   6.00]
00977>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
00978> R0070:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00979>     ADD HYD                5.0 02:INF-W1          5.76      .526 1970.0926_21:00  325.35  n/a     .000
00980>                        +    5.0 02:INF-W2          8.51      .751 1970.0926_21:00  311.41  n/a     .000
00981>                        +    5.0 02:INF-W3         10.03      .923 1970.0926_21:00  349.41  n/a     .000
00982>                        +    5.0 02:INF-W4         10.11      .915 1970.0926_21:00  335.05  n/a     .000
00983>                        +    5.0 02:INF-W5          6.20      .567 1970.0926_21:00  327.92  n/a     .000
00984>                        +    5.0 02:INF-W6          7.81      .736 1970.0926_21:00  361.56  n/a     .000
00985>                    SUM=     5.0 01:INF-BCD-PH     48.42     4.419 1970.0926_21:00  336.08  n/a     .000
00986> ##############################################################################
00987> # CONTINUOUS RAINFALL DATA
00988> ##############################################################################
00989>   ** END OF RUN :   70
00990>
00991> ******************************************************************************************
00992>
00993>
00994>
00995>
00996>
00997>  RUN#:COMMAND#
00998> R0071:C00001------------------------------------------------------------------------------
00999>       START
01000>       [TZERO =    .00 hrs on 19710101]
01001>       [METOUT=   2    (1=imperial, 2=metric output)]
01002>       [NSTORM=   0 ]
01003>       [NRUN  = 0071 ]
01004> ******************************************************************************************
01005> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01006> ******************************************************************************************
01007> #  Project Name: Barrhaven Conservancy Development
01008> #  Project Number: 1474
01009> #  Date       : 2021/Oct/18
01010> #  Modeller   : J.Burnett, P.Eng.
01011> #  Updated    : 2024/Mar/14 [LP]
01012> #  Company    : J.F. Sabourin and Associates
01013> #  License #  : 2582634
01014> ******************************************************************************************
01015> # Ottawa International Airport (1967 - 2003)
01016> R0071:C00002------------------------------------------------------------------------------
01017>   *  READ AES DATA
01018>       [Filename  = YOW_1967_2007.123                                          ]
01019>       [Start_date= 1971.0101: End_date= 1971.1231]
01020>       [DT= 60.min: Length= 8760.hrs: WetHrs=  412: DryHrs= 8348: PTOT= 522.10)
01021>       Maximum average rainfall intensities over
01022>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01023>        24.60    16.60    11.67     6.13     3.09     1.56     1.06      .79      .54    mm/hr
01024>        24.60    33.20    35.00    36.80    37.10    37.40    38.00    38.00    38.90    mm
01025>      19710810 19710810 19710810 19710810 19710810 19710810 19710811 19710812 19710830  date
01026>       Number of rainfall events per following interevent time
01027>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01028>          156      123      113       93       72       61       52       42       33
01029>       Number of events with at least the following durations
01030>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01031>          155       81       59       21        2        0        0        0        0
01032> R0071:C00003------------------------------------------------------------------------------
01033>       COMPUTE API
01034>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01035>       [APImax= 62.22: APIavg= 14.84: APImin=  .36]
01036> ******************************************************************************************
01037> #                 Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01038> ******************************************************************************************
01039> R0071:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01040>     CONTINUOUS STANDHYD    5.0 01:W1              5.76      .248 1971.0810_15:00  225.61 .432     .000
01041>       [XIMP=.55:TIMP=.66]
01042>       [LOSS= 2 :CN= 71.0]
01043>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01044>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01045>       [IaRECimp=   1.50: IaRECper=   6.00]
01046>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01047> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
01048> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01049> # Total Volume provided by LID  - 96 m³
01050> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01051> R0071:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01052>     ROUTE RESERVOIR ->     5.0 02:W1              5.76      .248 1971.0810_15:00  225.61  n/a     .000
01053>                        out <=    5.0 01:W1-LID       1.69      .001 1971.0402_ 2:55  225.62  n/a     .000
01054>                  overflow <=    5.0 03:W1-LID-Out     4.07      .243 1971.0810_15:00  225.61  n/a     .000
01055>      (MxStoUsed=.9597E-02  m3, TotOvfVol=.9176E+00  m3, N-Ovf=   95, TotDurOvf=  121.hrs)
01056> R0071:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01057>     CONTINUOUS STANDHYD    5.0 01:W2              8.51      .337 1971.0810_15:00  207.90 .398     .000
01058>       [XIMP=.50:TIMP=.60]
01059>       [LOSS= 2 :CN= 71.0]
01060>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01061>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01062>       [IaRECimp=   1.50: IaRECper=   6.00]
01063>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01064> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
01065> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01066> # Total Volume provided by LID  - 131 m³
01067> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01068> R0071:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01069>     ROUTE RESERVOIR ->     5.0 02:W2              8.51      .337 1971.0810_15:00  207.90  n/a     .000
01070>                        out <=    5.0 01:W2-LID       2.53      .001 1971.0402_ 3:00  207.90  n/a     .000
01071>                  overflow <=    5.0 03:W2-LID-Out     5.98      .330 1971.0810_15:00  207.90  n/a     .000
01072>      (MxStoUsed=.1310E-01  m3, TotOvfVol=.1244E+01  m3, N-Ovf=   94, TotDurOvf=  121.hrs)
01073> R0071:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01074>     CONTINUOUS STANDHYD    5.0 01:W3             10.03      .495 1971.0810_15:00  262.19 .502     .000
01075>       [XIMP=.66:TIMP=.76]
01076>       [LOSS= 2 :CN= 71.0]
01077>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01078>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01079>       [IaRECimp=   1.50: IaRECper=   6.00]
01080>       [SMIN= 41.38: SMAX=275.84: SK= .030]
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01081> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
01082> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01083> # Total Volume provided by LID  - 193 m³
01084> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01085> R0071:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01086>      ROUTE RESERVOIR ->    5.0 02:W3            10.03      .495 1971.0810_15:00  262.19  n/a     .000
01087>                  out <=    5.0 01:W3-LID         3.02      .001 1971.0402_2:50   262.18  n/a     .000
01088>              overflow <=   5.0 03:W3-LID-Out      7.01      .487 1971.0810_15:00  262.19  n/a     .000
01089>       (MxStoUsed=.1929E-01  m3, TotOvrFlVol=.1837E+01  m3, N-Ovf=  100, TotDurOvf=  120.hrs)
01090> R0071:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01091>      CONTINUOUS STANDHYD    5.0 01:W4            10.11      .461 1971.0810_15:00  241.75 .463     .000
01092>        [XIMP=.60:TIMP=.70]
01093>        [LOSS= 2 :CN= 71.0]
01094>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01095>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01096>        [IaRECimp=   1.50: IaRECper=   6.00]
01097>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01098> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
01099> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01100> # Total Volume provided by LID  - 186 m³
01101> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01102> R0071:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01103>      ROUTE RESERVOIR ->    5.0 02:W4            10.11      .461 1971.0810_15:00  241.75  n/a     .000
01104>                  out <=    5.0 01:W4-LID         3.10      .001 1971.0402_ 3:00  241.75  n/a     .000
01105>              overflow <=   5.0 03:W4-LID-Out      7.01      .453 1971.0810_15:00  241.75  n/a     .000
01106>       (MxStoUsed=.1858E-01  m3, TotOvrFlVol=.1696E+01  m3, N-Ovf=  103, TotDurOvf=  119.hrs)
01107> R0071:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01108>      CONTINUOUS STANDHYD    5.0 01:W5            6.20       .273 1971.0810_15:00  231.57 .444     .000
01109>        [XIMP=.57:TIMP=.67]
01110>        [LOSS= 2 :CN= 71.0]
01111>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01112>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01113>        [IaRECimp=   1.50: IaRECper=   6.00]
01114>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01115> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
01116> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01117> # Total Volume provided by LID  - 110 m³
01118> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01119> R0071:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01120>      ROUTE RESERVOIR ->    5.0 02:W5            6.20       .273 1971.0810_15:00  231.57  n/a     .000
01121>                  out <=    5.0 01:W5-LID         1.90      .001 1971.0402_ 3:05  231.57  n/a     .000
01122>              overflow <=   5.0 03:W5-LID-Out      4.30      .268 1971.0810_15:00  231.57  n/a     .000
01123>       (MxStoUsed=.1100E-01  m3, TotOvrFlVol=.9950E+00  m3, N-Ovf=   89, TotDurOvf=  117.hrs)
01124> R0071:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01125>      CONTINUOUS STANDHYD    5.0 01:W6            7.81       .410 1971.0810_15:00  279.38 .535     .000
01126>        [XIMP=.71:TIMP=.81]
01127>        [LOSS= 2 :CN= 71.0]
01128>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01129>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01130>        [IaRECimp=   1.50: IaRECper=   6.00]
01131>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01132> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
01133> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01134> # Total Volume provided by LID  - 165 m³
01135> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01136> R0071:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01137>      ROUTE RESERVOIR ->    5.0 02:W6            7.81       .410 1971.0810_15:00  279.38  n/a     .000
01138>                  out <=    5.0 01:W6-LID         2.39      .001 1971.0402_ 2:50  279.38  n/a     .000
01139>              overflow <=   5.0 03:W6-LID-Out      5.42      .405 1971.0810_15:00  279.38  n/a     .000
01140>       (MxStoUsed=.1650E-01  m3, TotOvrFlVol=.1514E+01  m3, N-Ovf=   92, TotDurOvf=  118.hrs)
01141> R0071:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01142>      ADD HYD               5.0 02:W1            5.76       .248 1971.0810_15:00  225.61  n/a     .000
01143>                      +     5.0 02:W2            8.51       .337 1971.0810_15:00  207.90  n/a     .000
01144>                      +     5.0 02:W3           10.03       .495 1971.0810_15:00  262.19  n/a     .000
01145>                      +     5.0 02:W4           10.11       .461 1971.0810_15:00  241.75  n/a     .000
01146>                      +     5.0 02:W5            6.20       .273 1971.0810_15:00  231.57  n/a     .000
01147>                      +     5.0 02:W6            7.81       .410 1971.0810_15:00  279.38  n/a     .000
01148>                    SUM=    5.0 01:BCD-PH3      48.42     2.223 1971.0810_15:00  242.88  n/a     .000
01149> R0071:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01150>      ADD HYD               5.0 02:W1-LID-Out    4.07       .243 1971.0810_15:00  225.61  n/a     .000
01151>                      +     5.0 02:W2-LID-Out    5.98       .330 1971.0810_15:00  207.90  n/a     .000
01152>                      +     5.0 02:W3-LID-Out    7.01       .487 1971.0810_15:00  262.19  n/a     .000
01153>                      +     5.0 02:W4-LID-Out    7.01       .453 1971.0810_15:00  241.75  n/a     .000
01154>                      +     5.0 02:W5-LID-Out    4.30       .268 1971.0810_15:00  231.57  n/a     .000
01155>                      +     5.0 02:W6-LID-Out    5.42       .405 1971.0810_15:00  279.38  n/a     .000
01156>                    SUM=    5.0 01:BCD-PH3-LI   33.79     2.186 1971.0810_15:00  242.79  n/a     .000
01157> ********************************************************************************************************************
01158> #              Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01159> ********************************************************************************************************************
01160> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
01161> ********************************************************************************************************************
01162> R0071:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01163>      CONTINUOUS STANDHYD    5.0 01:INF-W1        5.76       .357 1971.0810_15:00  286.42 .549     .000
01164>        [XIMP=.55:TIMP=.66]
01165>        [LOSS= 2 :CN=100.0]
01166>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01167>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01168>        [IaRECimp=   1.50: IaRECper=   6.00]
01169>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01170> R0071:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01171>      CONTINUOUS STANDHYD    5.0 01:INF-W2        8.51       .513 1971.0810_15:00  272.87 .523     .000
01172>        [XIMP=.50:TIMP=.60]
01173>        [LOSS= 2 :CN=100.0]
01174>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01175>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01176>        [IaRECimp=   1.50: IaRECper=   6.00]
01177>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01178> R0071:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01179>      CONTINUOUS STANDHYD    5.0 01:INF-W3       10.03       .636 1971.0810_15:00  310.20 .594     .000
01180>        [XIMP=.66:TIMP=.76]
01181>        [LOSS= 2 :CN=100.0]
01182>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01183>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01184>        [IaRECimp=   1.50: IaRECper=   6.00]
01185>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01186> R0071:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01187>      CONTINUOUS STANDHYD    5.0 01:INF-W4       10.11       .629 1971.0810_15:00  296.07 .567     .000
01188>        [XIMP=.60:TIMP=.70]
01189>        [LOSS= 2 :CN=100.0]
01190>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01191>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01192>        [IaRECimp=   1.50: IaRECper=   6.00]
01193>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01194> R0071:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01195>      CONTINUOUS STANDHYD    5.0 01:INF-W5        6.20       .385 1971.0810_15:00  289.07 .554     .000
01196>        [XIMP=.57:TIMP=.67]
01197>        [LOSS= 2 :CN=100.0]
01198>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01199>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01200>        [IaRECimp=   1.50: IaRECper=   6.00]
01201>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01202> R0071:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01203>      CONTINUOUS STANDHYD    5.0 01:INF-W6        7.81       .505 1971.0810_15:00  322.18 .617     .000
01204>        [XIMP=.71:TIMP=.81]
01205>        [LOSS= 2 :CN=100.0]
01206>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01207>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01208>        [IaRECimp=   1.50: IaRECper=   6.00]
01209>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01210> R0071:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01211>      ADD HYD               5.0 02:INF-W1        5.76       .357 1971.0810_15:00  286.42  n/a     .000
01212>                      +     5.0 02:INF-W2        8.51       .513 1971.0810_15:00  272.86  n/a     .000
01213>                      +     5.0 02:INF-W3       10.03       .636 1971.0810_15:00  310.20  n/a     .000
01214>                      +     5.0 02:INF-W4       10.11       .629 1971.0810_15:00  296.07  n/a     .000
01215>                      +     5.0 02:INF-W5        6.20       .385 1971.0810_15:00  289.07  n/a     .000
01216>                      +     5.0 02:INF-W6        7.81       .505 1971.0810_15:00  322.18  n/a     .000
01217>                    SUM=    5.0 01:INF-BCD-PH   48.42     3.025 1971.0810_15:00  297.09  n/a     .000
01218> ###################################################################################
01219> # CONTINUOUS RAINFALL DATA
01220> ###################################################################################
01221>  ** END OF RUN :  71
01222>
01223> ********************************************************************************
01224>
01225>
01226>
01227>
01228>
01229>  RUN#:COMMAND#
01230> R0072:C00001------------------------------------------------------------------------------
01231>      START
01232>        [TZERO =      .00 hrs on 19720101]
01233>        [METOUT=   2     (1=imperial, 2=metric output)]
01234>        [NSTORM=   0 ]
01235>        [NRUN  = 0072 ]
01236> ********************************************************************************************************************
01237> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01238> ********************************************************************************************************************
01239> #  Project Name: Barrhaven Conservancy Development
01240> #  Project Number: 1474
01241> #  Date     : 2021/Oct/18
01242> #  Modeller    : J.Burnett, P.Eng.
01243> #  Updated     : 2024/Mar/14 [LP]
01244> #  Company     : J.F. Sabourin and Associates
01245> #  License #   : 2582634
01246> ********************************************************************************************************************
01247> # Ottawa International Airport (1967 - 2003)
01248> R0072:C00002------------------------------------------------------------------------------
01249>    * READ AES DATA
01250>        [Filename  = YOW_1967_2007.123                                          ]
01251>        [Start_date= 1972.0101: End_date= 1972.1230]
01252>        [DT= 60.min; Length= 8760.hrs: WetHrs=  489: DryHrs= 8271: PTOT= 784.30)
01253>        Maximum average rainfall intensities over
01254>          1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01255>         37.30    19.15    12.97     8.15     4.50     2.53     2.00     1.71     1.17    mm/hr
01256>         37.30    38.30    38.90    48.90    54.00    60.70    72.10    82.20    84.20    mm
01257>        19720712 19720712 19720807 19720808 19720808 19720808 19720713 19720714 19720715  date
01258>        Number of rainfall events per following interevent time
01259>          1 hr   2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01260>           170      133      122       86       76       60       45       41       31
01261>        Number of events with at least the following durations
01262>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01263>           169       96       58       21        5        0        0        0        0
01264> R0072:C00003------------------------------------------------------------------------------
01265>      COMPUTE API
01266>        [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01267>        [APImax=108.88: APIavg= 21.70: APImin=    .00]
01268> ********************************************************************************************************************
01269> #              Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01270> ********************************************************************************************************************
01271> R0072:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01272>      CONTINUOUS STANDHYD    5.0 01:W1            5.76       .432 1972.0712_ 4:00  403.12 .514     .000
01273>        [XIMP=.55:TIMP=.66]
01274>        [LOSS= 2 :CN= 71.0]
01275>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01276>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01277>        [IaRECimp=   1.50: IaRECper=   6.00]
01278>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01279> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
01280> # Assumed 420 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01281> # Total Volume provided by LID  - 96 m³
01282> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01283> R0072:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01284>      ROUTE RESERVOIR ->    5.0 02:W1            5.76       .432 1972.0712_ 4:00  403.12  n/a     .000
01285>                  out <=    5.0 01:W1-LID         1.13      .001 1972.0413_ 9:55  403.13  n/a     .000
01286>              overflow <=   5.0 03:W1-LID-Out      4.63      .413 1972.0712_ 4:00  403.12  n/a     .000
01287>       (MxStoUsed=.9597E-02  m3, TotOvrFlVol=.1868E+01  m3, N-Ovf=  132, TotDurOvf=  202.hrs)
01288> R0072:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01289>      CONTINUOUS STANDHYD    5.0 01:W2            8.51       .574 1972.0712_ 4:00  376.14 .480     .000
01290>        [XIMP=.50:TIMP=.60]
01291>        [LOSS= 2 :CN= 71.0]
01292>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01293>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01294>        [IaRECimp=   1.50: IaRECper=   6.00]
01295>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01296> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
01297> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01298> # Total Volume provided by LID  - 131 m³
01299> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01300> R0072:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01301>      ROUTE RESERVOIR ->    5.0 02:W2            8.51       .574 1972.0712_ 4:00  376.14  n/a     .000
01302>                  out <=    5.0 01:W2-LID         1.66      .001 1972.0413_10:00  376.14  n/a     .000
01303>              overflow <=   5.0 03:W2-LID-Out      6.85      .552 1972.0712_ 4:00  376.14  n/a     .000
01304>       (MxStoUsed=.1310E-01  m3, TotOvrFlVol=.2575E+01  m3, N-Ovf=  141, TotDurOvf=  205.hrs)
01305> R0072:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01306>      CONTINUOUS STANDHYD    5.0 01:W3           10.03       .805 1972.0712_ 4:00  457.01 .583     .000
01307>        [XIMP=.66:TIMP=.76]
01308>        [LOSS= 2 :CN= 71.0]
01309>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01310>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01311>        [IaRECimp=   1.50: IaRECper=   6.00]
01312>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01313> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
01314> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01315> # Total Volume provided by LID  - 193 m³
01316> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01317> R0072:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01318>      ROUTE RESERVOIR ->    5.0 02:W3           10.03       .805 1972.0712_ 4:00  457.01  n/a     .000
01319>                  out <=    5.0 01:W3-LID         2.08      .001 1972.0413_ 9:55  457.00  n/a     .000
01320>              overflow <=   5.0 03:W3-LID-Out      7.95      .785 1972.0712_ 4:00  457.01  n/a     .000
01321>       (MxStoUsed=.1930E-01  m3, TotOvrFlVol=.3635E+01  m3, N-Ovf=  143, TotDurOvf=  203.hrs)
01322> R0072:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01323>      CONTINUOUS STANDHYD    5.0 01:W4           10.11       .762 1972.0712_ 4:00  426.51 .544     .000
01324>        [XIMP=.60:TIMP=.70]
01325>        [LOSS= 2 :CN= 71.0]
01326>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01327>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01328>        [IaRECimp=   1.50: IaRECper=   6.00]
01329>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01330> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
01331> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01332> # Total Volume provided by LID  - 186 m³
01333> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01334> R0072:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01335>      ROUTE RESERVOIR ->    5.0 02:W4           10.11       .762 1972.0712_ 4:00  426.51  n/a     .000
01336>                  out <=    5.0 01:W4-LID         2.09      .001 1972.0413_10:00  426.53  n/a     .000
01337>              overflow <=   5.0 03:W4-LID-Out      8.02      .740 1972.0712_ 4:00  426.51  n/a     .000
01338>       (MxStoUsed=.1858E-01  m3, TotOvrFlVol=.3419E+01  m3, N-Ovf=  141, TotDurOvf=  201.hrs)
01339> R0072:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01340>      CONTINUOUS STANDHYD    5.0 01:W5            6.20       .471 1972.0712_ 4:00  411.36 .525     .000
01341>        [XIMP=.57:TIMP=.67]
01342>        [LOSS= 2 :CN= 71.0]
01343>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01344>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01345>        [IaRECimp=   1.50: IaRECper=   6.00]
01346>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01347> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
01348> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01349> # Total Volume provided by LID  - 110 m³
01350> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01351> R0072:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01352>      ROUTE RESERVOIR ->    5.0 02:W5            6.20       .471 1972.0712_ 4:00  411.36  n/a     .000
01353>                  out <=    5.0 01:W5-LID         1.28      .001 1972.0413_ 9:55  411.35  n/a     .000
01354>              overflow <=   5.0 03:W5-LID-Out      4.92      .452 1972.0712_ 4:00  411.36  n/a     .000
01355>       (MxStoUsed=.1100E-01  m3, TotOvrFlVol=.2024E+01  m3, N-Ovf=  139, TotDurOvf=  198.hrs)
01356> R0072:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01357>      CONTINUOUS STANDHYD    5.0 01:W6            7.81       .675 1972.0712_ 4:00  482.65 .615     .000
01358>        [XIMP=.71:TIMP=.81]
01359>        [LOSS= 2 :CN= 71.0]
01360>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01361>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01362>        [IaRECimp=   1.50: IaRECper=   6.00]
01363>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01364> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
01365> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01366> # Total Volume provided by LID  - 165 m³
01367> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01368> R0072:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01369>      ROUTE RESERVOIR ->    5.0 02:W6            7.81       .675 1972.0712_ 4:00  482.65  n/a     .000
01370>                  out <=    5.0 01:W6-LID         1.65      .001 1972.0413_ 9:55  482.66  n/a     .000
01371>              overflow <=   5.0 03:W6-LID-Out      6.16      .657 1972.0712_ 4:00  482.65  n/a     .000
01372>       (MxStoUsed=.1649E-01  m3, TotOvrFlVol=.2973E+01  m3, N-Ovf=  131, TotDurOvf=  198.hrs)
01373> R0072:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01374>      ADD HYD               5.0 02:W1            5.76       .432 1972.0712_ 4:00  403.12  n/a     .000
01375>                      +     5.0 02:W2            8.51       .574 1972.0712_ 4:00  376.14  n/a     .000
01376>                      +     5.0 02:W3           10.03       .805 1972.0712_ 4:00  457.01  n/a     .000
01377>                      +     5.0 02:W4           10.11       .762 1972.0712_ 4:00  426.51  n/a     .000
01378>                      +     5.0 02:W5            6.20       .471 1972.0712_ 4:00  411.36  n/a     .000
01379>                      +     5.0 02:W6            7.81       .675 1972.0712_ 4:00  482.65  n/a     .000
01380>                    SUM=    5.0 01:BCD-PH3      48.42     3.718 1972.0712_ 4:00  428.31  n/a     .000
01381> R0072:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01382>      ADD HYD               5.0 02:W1-LID-Out    4.63       .413 1972.0712_ 4:00  403.12  n/a     .000
01383>                      +     5.0 02:W2-LID-Out    6.85       .552 1972.0712_ 4:00  376.14  n/a     .000
01384>                      +     5.0 02:W3-LID-Out    7.95       .785 1972.0712_ 4:00  457.01  n/a     .000
01385>                      +     5.0 02:W4-LID-Out    8.02       .740 1972.0712_ 4:00  426.51  n/a     .000
01386>                      +     5.0 02:W5-LID-Out    4.92       .452 1972.0712_ 4:00  411.36  n/a     .000
01387>                      +     5.0 02:W6-LID-Out    6.16       .657 1972.0712_ 4:00  482.65  n/a     .000
01388>                    SUM=    5.0 01:BCD-PH3-LI   38.53     3.600 1972.0712_ 4:00  428.08  n/a     .000
01389> ********************************************************************************************************************
01390> #              Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01391> ********************************************************************************************************************
01392> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
01393> ********************************************************************************************************************
01394> R0072:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01395>      CONTINUOUS STANDHYD    5.0 01:INF-W1        5.76       .560 1972.0712_ 4:00  501.39 .639     .000
01396>        [XIMP=.55:TIMP=.66]
01397>        [LOSS= 2 :CN=100.0]
01398>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01399>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01400>        [IaRECimp=   1.50: IaRECper=   6.00]
01401>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01402> R0072:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01403>      CONTINUOUS STANDHYD    5.0 01:INF-W2        8.51       .800 1972.0712_ 4:00  482.92 .616     .000
01404>        [XIMP=.50:TIMP=.60]
01405>        [LOSS= 2 :CN=100.0]
01406>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01407>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01408>        [IaRECimp=   1.50: IaRECper=   6.00]
01409>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01410> R0072:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01411>      CONTINUOUS STANDHYD    5.0 01:INF-W3       10.03       .980 1972.0712_ 4:00  533.03 .680     .000
01412>        [XIMP=.66:TIMP=.76]
01413>        [LOSS= 2 :CN=100.0]
01414>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01415>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01416>        [IaRECimp=   1.50: IaRECper=   6.00]
01417>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01418> R0072:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01419>      CONTINUOUS STANDHYD    5.0 01:INF-W4       10.11       .973 1972.0712_ 4:00  514.10 .656     .000
01420>        [XIMP=.60:TIMP=.70]
01421>        [LOSS= 2 :CN=100.0]
01422>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01423>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01424>        [IaRECimp=   1.50: IaRECper=   6.00]
01425>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01426> R0072:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01427>      CONTINUOUS STANDHYD    5.0 01:INF-W5        6.20       .603 1972.0712_ 4:00  504.71 .644     .000
01428>        [XIMP=.57:TIMP=.67]
01429>        [LOSS= 2 :CN=100.0]
01430>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01431>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01432>        [IaRECimp=   1.50: IaRECper=   6.00]
01433>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01434> R0072:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01435>      CONTINUOUS STANDHYD    5.0 01:INF-W6        7.81       .780 1972.0712_ 4:00  549.01 .700     .000
01436>        [XIMP=.71:TIMP=.81]
01437>        [LOSS= 2 :CN=100.0]
01438>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01439>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01440>        [IaRECimp=   1.50: IaRECper=   6.00]
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01441>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
01442> R0072:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01443>     ADD HYD              5.0 02:INF-W1         5.76     .560 1972.0712_ 4:00  501.39  n/a     .000
01444>                    +     5.0 02:INF-W2         8.51     .800 1972.0712_ 4:00  482.92  n/a     .000
01445>                    +     5.0 02:INF-W3        10.03     .980 1972.0712_ 4:00  533.03  n/a     .000
01446>                    +     5.0 02:INF-W4        10.11     .973 1972.0712_ 4:00  514.10  n/a     .000
01447>                    +     5.0 02:INF-W5         6.20     .603 1972.0712_ 4:00  504.71  n/a     .000
01448>                    +     5.0 02:INF-W6         7.81     .780 1972.0712_ 4:00  549.01  n/a     .000
01449>                   SUM=   5.0 01:INF-BCD-PH    48.42    4.696 1972.0712_ 4:00  515.46  n/a     .000
01450> ##############################################################################
01451> # CONTINUOUS RAINFALL DATA
01452> ##############################################################################
01453>  ** END OF RUN :   72
01454>
01455> ************************************************************************************
01456>
01457>
01458>
01459>
01460>
01461>  RUN#:COMMAND#
01462> R0073:C00001------------------------------------------------------------------------
01463>       START
01464>       [TZERO =    .00 hrs on 19730101]
01465>       [METOUT=   2    (1=imperial, 2=metric output)]
01466>       [NSTORM=   0 ]
01467>       [NRUN  = 0073 ]
01468> ************************************************************************************
01469> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01470> ************************************************************************************
01471> #  Project Name: Barrhaven Conservancy Development
01472> #  Project Number: 1474
01473> #  Date        : 2021/Oct/18
01474> #  Modeller    : J.Burnett, P.Eng.
01475> #  Updated     : 2024/Mar/14 [LP]
01476> #  Company     : J.F. Sabourin and Associates
01477> #  License #   : 2582634
01478> ************************************************************************************
01479> # Ottawa International Airport (1967 - 2003)
01480> R0073:C00002------------------------------------------------------------------------
01481>  *  READ AES DATA
01482>       [Filename  = YOW_1967_2007.123                                    ]
01483>       [Start_date= 1973.0101: End_date= 1973.1231]
01484>       [DT= 60.min: Length= 8760.hrs: WetHrs=  549: DryHrs= 8211: PTOT= 744.90)
01485>       Maximum average rainfall intensities over
01486>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01487>        30.00    17.25    12.33     7.10     3.63     1.89     1.28      .96      .96    mm/hr
01488>        30.00    34.50    37.00    42.60    43.60    45.40    46.00    46.00    69.20    mm
01489>       19730611 19730808 19730808 19730808 19730808 19730808 19730616 19730616 19731005  date
01490>       Number of rainfall events per following interevent time
01491>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01492>          200      164      143      108       79       61       54       43       37
01493>       Number of events with at least the following durations
01494>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01495>          200      102       66       20        4        0        0        0        0
01496> R0073:C00003------------------------------------------------------------------------
01497>       COMPUTE API
01498>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01499>       [APImax= 78.26: APIavg= 20.56: APImin=  .06]
01500> ************************************************************************************
01501> #              Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01502> ************************************************************************************
01503> R0073:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01504>     CONTINUOUS STANDHYD   5.0 01:W1           5.76     .317 1973.0808_20:00  356.07 .478     .000
01505>       [XIMP=.55:TIMP=.66]
01506>       [LOSS= 2 :CN= 71.0]
01507>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01508>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01509>       [IaRECimp=   1.50: IaRECper=   6.00]
01510>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01511> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
01512> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01513> # Total Volume provided by LID  - 96 m³
01514> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01515> R0073:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01516>     ROUTE RESERVOIR ->    5.0 02:W1           5.76     .317 1973.0808_20:00  356.07  n/a     .000
01517>                  out <=   5.0 01:W1-LID       1.22     .001 1973.0317_ 7:55  356.08  n/a     .000
01518>             overflow <=   5.0 03:W1-LID-Out    4.54     .308 1973.0611_17:00  356.07  n/a     .000
01519>       (MxStoUsed=.9595E-02  m3, TotOvfVol=.1615E+01  m3, N-Ovf=  105, TotDurOvf=  193.hrs)
01520> R0073:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01521>     CONTINUOUS STANDHYD   5.0 01:W2           8.51     .443 1973.0808_20:00  330.43 .444     .000
01522>       [XIMP=.50:TIMP=.60]
01523>       [LOSS= 2 :CN= 71.0]
01524>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01525>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01526>       [IaRECimp=   1.50: IaRECper=   6.00]
01527>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01528> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
01529> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01530> # Total Volume provided by LID  - 131 m³
01531> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01532> R0073:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01533>     ROUTE RESERVOIR ->    5.0 02:W2           8.51     .443 1973.0808_20:00  330.43  n/a     .000
01534>                  out <=   5.0 01:W2-LID       1.82     .001 1973.0317_ 7:55  330.43  n/a     .000
01535>             overflow <=   5.0 03:W2-LID-Out    6.69     .428 1973.0808_20:00  330.43  n/a     .000
01536>       (MxStoUsed=.1309E-01  m3, TotOvfVol=.2211E+01  m3, N-Ovf=  116, TotDurOvf=  193.hrs)
01537> R0073:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01538>     CONTINUOUS STANDHYD   5.0 01:W3          10.03     .622 1973.0611_17:00  408.11 .548     .000
01539>       [XIMP=.66:TIMP=.76]
01540>       [LOSS= 2 :CN= 71.0]
01541>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01542>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01543>       [IaRECimp=   1.50: IaRECper=   6.00]
01544>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01545> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
01546> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01547> # Total Volume provided by LID  - 193 m³
01548> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01549> R0073:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01550>     ROUTE RESERVOIR ->    5.0 02:W3          10.03     .622 1973.0611_17:00  408.11  n/a     .000
01551>                  out <=   5.0 01:W3-LID       2.23     .001 1973.0317_ 7:55  408.11  n/a     .000
01552>             overflow <=   5.0 03:W3-LID-Out    7.80     .610 1973.0611_17:00  408.11  n/a     .000
01553>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.3182E+01  m3, N-Ovf=  107, TotDurOvf=  192.hrs)
01554> R0073:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01555>     CONTINUOUS STANDHYD   5.0 01:W4          10.11     .584 1973.0611_17:00  378.84 .509     .000
01556>       [XIMP=.60:TIMP=.70]
01557>       [LOSS= 2 :CN= 71.0]
01558>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01559>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01560>       [IaRECimp=   1.50: IaRECper=   6.00]
01561>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01562> # LID for Outlet W4 (24 catchbasins, 30 m long trench each)
01563> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01564> # Total Volume provided by LID  - 186 m³
01565> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01566> R0073:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01567>     ROUTE RESERVOIR ->    5.0 02:W4          10.11     .584 1973.0611_17:00  378.84  n/a     .000
01568>                  out <=   5.0 01:W4-LID       2.26     .001 1973.0317_ 7:55  378.86  n/a     .000
01569>             overflow <=   5.0 03:W4-LID-Out    7.85     .571 1973.0611_17:00  378.84  n/a     .000
01570>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.2973E+01  m3, N-Ovf=  118, TotDurOvf=  192.hrs)
01571> R0073:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01572>     CONTINUOUS STANDHYD   5.0 01:W5           6.20     .347 1973.0611_17:00  364.28 .489     .000
01573>       [XIMP=.57:TIMP=.67]
01574>       [LOSS= 2 :CN= 71.0]
01575>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01576>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01577>       [IaRECimp=   1.50: IaRECper=   6.00]
01578>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01579> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
01580> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01581> # Total Volume provided by LID  - 110 m³
01582> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01583> R0073:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01584>     ROUTE RESERVOIR ->    5.0 02:W5           6.20     .347 1973.0611_17:00  364.28  n/a     .000
01585>                  out <=   5.0 01:W5-LID       1.39     .001 1973.0317_ 7:55  364.28  n/a     .000
01586>             overflow <=   5.0 03:W5-LID-Out    4.81     .338 1973.0611_17:00  364.28  n/a     .000
01587>       (MxStoUsed=.1054E-01  m3, TotOvfVol=.1754E+01  m3, N-Ovf=  109, TotDurOvf=  189.hrs)
01588> R0073:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01589>     CONTINUOUS STANDHYD   5.0 01:W6           7.81     .514 1973.0611_17:00  432.79 .581     .000
01590>       [XIMP=.71:TIMP=.81]
01591>       [LOSS= 2 :CN= 71.0]
01592>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01593>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01594>       [IaRECimp=   1.50: IaRECper=   6.00]
01595>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01596> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
01597> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01598> # Total Volume provided by LID  - 165 m³
01599> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01600> R0073:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01601>     ROUTE RESERVOIR ->    5.0 02:W6           7.81     .514 1973.0611_17:00  432.79  n/a     .000
01602>                  out <=   5.0 01:W6-LID       1.77     .001 1973.0317_ 7:55  432.80  n/a     .000
01603>             overflow <=   5.0 03:W6-LID-Out    6.04     .505 1973.0611_17:00  432.79  n/a     .000
01604>       (MxStoUsed=.1650E-01  m3, TotOvfVol=.2615E+01  m3, N-Ovf=  107, TotDurOvf=  191.hrs)
01605> R0073:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01606>     ADD HYD              5.0 02:W1           5.76     .317 1973.0808_20:00  356.07  n/a     .000
01607>                    +     5.0 02:W2           8.51     .443 1973.0808_20:00  330.43  n/a     .000
01608>                    +     5.0 02:W3          10.03     .622 1973.0611_17:00  408.11  n/a     .000
01609>                    +     5.0 02:W4          10.11     .584 1973.0611_17:00  378.84  n/a     .000
01610>                    +     5.0 02:W5           6.20     .347 1973.0611_17:00  364.28  n/a     .000
01611>                    +     5.0 02:W6           7.81     .514 1973.0611_17:00  432.79  n/a     .000
01612>                   SUM=   5.0 01:BCD-PH3      48.42    2.817 1973.0611_17:00  380.52  n/a     .000
01613> R0073:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01614>     ADD HYD              5.0 02:W1-LID-Out     4.54     .308 1973.0611_17:00  356.07  n/a     .000
01615>                    +     5.0 02:W2-LID-Out     6.69     .428 1973.0808_20:00  330.43  n/a     .000
01616>                    +     5.0 02:W3-LID-Out     7.80     .610 1973.0611_17:00  408.11  n/a     .000
01617>                    +     5.0 02:W4-LID-Out     7.85     .571 1973.0611_17:00  378.84  n/a     .000
01618>                    +     5.0 02:W5-LID-Out     4.81     .338 1973.0611_17:00  364.28  n/a     .000
01619>                    +     5.0 02:W6-LID-Out     6.04     .505 1973.0611_17:00  432.79  n/a     .000
01620>                   SUM=   5.0 01:BCD-PH3-LI    37.73    2.751 1973.0611_17:00  380.35  n/a     .000
01621> ************************************************************************************
01622> #              Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01623> ************************************************************************************
01624> #                 Set infiltration to 0 (CN = 99.99) for water balance analysis
01625> ************************************************************************************
01626> R0073:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01627>     CONTINUOUS STANDHYD   5.0 01:INF-W1         5.76     .433 1973.0611_17:00  456.76 .613     .000
01628>       [XIMP=.55:TIMP=.66]
01629>       [LOSS= 2 :CN=100.0]
01630>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01631>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01632>       [IaRECimp=   1.50: IaRECper=   6.00]
01633>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
01634> R0073:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01635>     CONTINUOUS STANDHYD   5.0 01:INF-W2         8.51     .621 1973.0611_17:00  439.71 .590     .000
01636>       [XIMP=.50:TIMP=.60]
01637>       [LOSS= 2 :CN=100.0]
01638>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01639>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01640>       [IaRECimp=   1.50: IaRECper=   6.00]
01641>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
01642> R0073:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01643>     CONTINUOUS STANDHYD   5.0 01:INF-W3        10.03     .772 1973.0611_17:00  486.10 .653     .000
01644>       [XIMP=.66:TIMP=.76]
01645>       [LOSS= 2 :CN=100.0]
01646>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01647>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01648>       [IaRECimp=   1.50: IaRECper=   6.00]
01649>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
01650> R0073:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01651>     CONTINUOUS STANDHYD   5.0 01:INF-W4        10.11     .762 1973.0611_17:00  468.59 .629     .000
01652>       [XIMP=.60:TIMP=.70]
01653>       [LOSS= 2 :CN=100.0]
01654>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01655>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01656>       [IaRECimp=   1.50: IaRECper=   6.00]
01657>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
01658> R0073:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01659>     CONTINUOUS STANDHYD   5.0 01:INF-W5         6.20     .466 1973.0611_17:00  459.90 .617     .000
01660>       [XIMP=.57:TIMP=.67]
01661>       [LOSS= 2 :CN=100.0]
01662>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01663>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01664>       [IaRECimp=   1.50: IaRECper=   6.00]
01665>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
01666> R0073:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01667>     CONTINUOUS STANDHYD   5.0 01:INF-W6         7.81     .613 1973.0611_17:00  501.00 .673     .000
01668>       [XIMP=.71:TIMP=.81]
01669>       [LOSS= 2 :CN=100.0]
01670>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01671>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01672>       [IaRECimp=   1.50: IaRECper=   6.00]
01673>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
01674> R0073:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01675>     ADD HYD              5.0 02:INF-W1         5.76     .433 1973.0611_17:00  456.76  n/a     .000
01676>                    +     5.0 02:INF-W2         8.51     .621 1973.0611_17:00  439.71  n/a     .000
01677>                    +     5.0 02:INF-W3        10.03     .772 1973.0611_17:00  486.10  n/a     .000
01678>                    +     5.0 02:INF-W4        10.11     .762 1973.0611_17:00  468.59  n/a     .000
01679>                    +     5.0 02:INF-W5         6.20     .466 1973.0611_17:00  459.90  n/a     .000
01680>                    +     5.0 02:INF-W6         7.81     .613 1973.0611_17:00  501.00  n/a     .000
01681>                   SUM=   5.0 01:INF-BCD-PH    48.42    3.668 1973.0611_17:00  469.85  n/a     .000
01682> ##############################################################################
01683> # CONTINUOUS RAINFALL DATA
01684> ##############################################################################
01685>  ** END OF RUN :   73
01686>
01687> ************************************************************************************
01688>
01689>
01690>
01691>
01692>
01693>  RUN#:COMMAND#
01694> R0074:C00001------------------------------------------------------------------------
01695>       START
01696>       [TZERO =    .00 hrs on 19740101]
01697>       [METOUT=   2    (1=imperial, 2=metric output)]
01698>       [NSTORM=   0 ]
01699>       [NRUN  = 0074 ]
01700> ************************************************************************************
01701> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01702> ************************************************************************************
01703> #  Project Name: Barrhaven Conservancy Development
01704> #  Project Number: 1474
01705> #  Date        : 2021/Oct/18
01706> #  Modeller    : J.Burnett, P.Eng.
01707> #  Updated     : 2024/Mar/14 [LP]
01708> #  Company     : J.F. Sabourin and Associates
01709> #  License #   : 2582634
01710> ************************************************************************************
01711> # Ottawa International Airport (1967 - 2003)
01712> R0074:C00002------------------------------------------------------------------------
01713>  *  READ AES DATA
01714>       [Filename  = YOW_1967_2007.123                                    ]
01715>       [Start_date= 1974.0101: End_date= 1974.1231]
01716>       [DT= 60.min: Length= 8760.hrs: WetHrs=  320: DryHrs= 8440: PTOT= 386.20)
01717>       Maximum average rainfall intensities over
01718>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01719>        20.60    15.40    10.27     5.18     2.98     1.63     1.08      .81      .54    mm/hr
01720>        20.60    30.80    31.10    31.10    35.70    39.00    39.00    39.00    39.00    mm
01721>       19740718 19740719 19740719 19740719 19740305 19740305 19740306 19740306 19740307  date
01722>       Number of rainfall events per following interevent time
01723>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01724>          129      105       93       77       63       50       38       33       23
01725>       Number of events with at least the following durations
01726>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01727>          128       66       32       10        3        0        0        0        0
01728> R0074:C00003------------------------------------------------------------------------
01729>       COMPUTE API
01730>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01731>       [APImax= 52.93: APIavg= 11.36: APImin=  .00]
01732> ************************************************************************************
01733> #              Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01734> ************************************************************************************
01735> R0074:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01736>     CONTINUOUS STANDHYD   5.0 01:W1           5.76     .191 1974.0719_ 0:00  159.37 .413     .000
01737>       [XIMP=.55:TIMP=.66]
01738>       [LOSS= 2 :CN= 71.0]
01739>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01740>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01741>       [IaRECimp=   1.50: IaRECper=   6.00]
01742>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01743> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
01744> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01745> # Total Volume provided by LID  - 96 m³
01746> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01747> R0074:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01748>     ROUTE RESERVOIR ->    5.0 02:W1           5.76     .191 1974.0719_ 0:00  159.37  n/a     .000
01749>                  out <=   5.0 01:W1-LID       1.87     .001 1974.0222_14:40  159.37  n/a     .000
01750>             overflow <=   5.0 03:W1-LID-Out    3.89     .189 1974.0719_ 0:00  159.37  n/a     .000
01751>       (MxStoUsed=.9601E-02  m3, TotOvfVol=.6200E+00  m3, N-Ovf=  100, TotDurOvf=   99.hrs)
01752> R0074:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01753>     CONTINUOUS STANDHYD   5.0 01:W2           8.51     .257 1974.0719_ 0:00  146.54 .379     .000
01754>       [XIMP=.50:TIMP=.60]
01755>       [LOSS= 2 :CN= 71.0]
01756>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01757>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01758>       [IaRECimp=   1.50: IaRECper=   6.00]
01759>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01760> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
01761> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01762> # Total Volume provided by LID  - 131 m³
01763> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01764> R0074:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01765>     ROUTE RESERVOIR ->    5.0 02:W2           8.51     .257 1974.0719_ 0:00  146.54  n/a     .000
01766>                  out <=   5.0 01:W2-LID       2.80     .001 1974.0222_14:45  146.54  n/a     .000
01767>             overflow <=   5.0 03:W2-LID-Out    5.71     .253 1974.0719_ 0:00  146.54  n/a     .000
01768>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.8360E+00  m3, N-Ovf=   83, TotDurOvf=  100.hrs)
01769> R0074:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01770>     CONTINUOUS STANDHYD   5.0 01:W3          10.03     .391 1974.0719_ 0:00  186.12 .482     .000
01771>       [XIMP=.66:TIMP=.76]
01772>       [LOSS= 2 :CN= 71.0]
01773>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01774>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01775>       [IaRECimp=   1.50: IaRECper=   6.00]
01776>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01777> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
01778> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01779> # Total Volume provided by LID  - 193 m³
01780> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01781> R0074:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01782>     ROUTE RESERVOIR ->    5.0 02:W3          10.03     .391 1974.0719_ 0:00  186.12  n/a     .000
01783>                  out <=   5.0 01:W3-LID       3.33     .001 1974.0222_14:35  186.12  n/a     .000
01784>             overflow <=   5.0 03:W3-LID-Out    6.70     .386 1974.0719_ 0:00  186.12  n/a     .000
01785>       (MxStoUsed=.1930E-01  m3, TotOvfVol=.1246E+01  m3, N-Ovf=   91, TotDurOvf=   97.hrs)
01786> R0074:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01787>     CONTINUOUS STANDHYD   5.0 01:W4          10.11     .360 1974.0719_ 0:00  171.22 .443     .000
01788>       [XIMP=.60:TIMP=.70]
01789>       [LOSS= 2 :CN= 71.0]
01790>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01791>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01792>       [IaRECimp=   1.50: IaRECper=   6.00]
01793>       [SMIN= 41.38: SMAX=275.84: SK= .030]
01794> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
01795> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01796> # Total Volume provided by LID  - 186 m³
01797> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01798> R0074:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01799>     ROUTE RESERVOIR ->    5.0 02:W4          10.11     .360 1974.0719_ 0:00  171.22  n/a     .000
01800>                  out <=   5.0 01:W4-LID       3.42     .001 1974.0222_14:45  171.22  n/a     .000
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01801>              overflow <=    5.0 03:W4-LID-Out     6.69     .356 1974.0719_ 0:00  171.22  n/a     .000
01802>       (MxStoUsed=.1858E-01  m3, TotOvfVol=.1145E+01  m3, N-Ovf=   77, TotDurOvf=   98.hrs)
01803> R0074:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01804>      CONTINUOUS STANDHYD    5.0 01:W5              6.20     .212 1974.0719_ 0:00  163.80 .424     .000
01805>        [XIMP=.57:TIMP=.67]
01806>        [LOSS= 2 :CN= 71.0]
01807>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01808>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01809>        [IaRECimp=   1.50: IaRECper=   6.00]
01810>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01811> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
01812> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01813> # Total Volume provided by LID  - 110 m³
01814> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01815> R0074:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01816>      ROUTE RESERVOIR ->    5.0 02:W5              6.20     .212 1974.0719_ 0:00  163.80  n/a     .000
01817>                    out <=    5.0 01:W5-LID          2.11     .001 1974.0222_14:45  163.80  n/a     .000
01818>                overflow <=    5.0 03:W5-LID-Out     4.09     .209 1974.0719_ 0:00  163.80  n/a     .000
01819>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.6704E+00  m3, N-Ovf=   81, TotDurOvf=   95.hrs)
01820> R0074:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01821>      CONTINUOUS STANDHYD    5.0 01:W6              7.81     .327 1974.0719_ 0:00  198.65 .514     .000
01822>        [XIMP=.71:TIMP=.81]
01823>        [LOSS= 2 :CN= 71.0]
01824>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01825>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01826>        [IaRECimp=   1.50: IaRECper=   6.00]
01827>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01828> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
01829> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01830> # Total Volume provided by LID  - 165 m³
01831> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01832> R0074:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01833>      ROUTE RESERVOIR ->    5.0 02:W6              7.81     .327 1974.0719_ 0:00  198.65  n/a     .000
01834>                    out <=    5.0 01:W6-LID          2.63     .001 1974.0222_14:40  198.65  n/a     .000
01835>                overflow <=    5.0 03:W6-LID-Out     5.18     .324 1974.0719_ 0:00  198.65  n/a     .000
01836>       (MxStoUsed=.1650E-01  m3, TotOvfVol=.1029E+01  m3, N-Ovf=   97, TotDurOvf=   96.hrs)
01837> R0074:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01838>      ADD HYD                5.0 02:W1              5.76     .191 1974.0719_ 0:00  159.37  n/a     .000
01839>                         +    5.0 02:W2              8.51     .257 1974.0719_ 0:00  146.54  n/a     .000
01840>                         +    5.0 02:W3             10.03     .391 1974.0719_ 0:00  186.12  n/a     .000
01841>                         +    5.0 02:W4             10.11     .360 1974.0719_ 0:00  171.22  n/a     .000
01842>                         +    5.0 02:W5              6.20     .212 1974.0719_ 0:00  163.80  n/a     .000
01843>                         +    5.0 02:W6              7.81     .327 1974.0719_ 0:00  198.65  n/a     .000
01844>                       SUM=    5.0 01:BCD-PH3        48.42    1.736 1974.0719_ 0:00  172.03  n/a     .000
01845> R0074:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01846>      ADD HYD                5.0 02:W1-LID-Out      3.89     .189 1974.0719_ 0:00  159.37  n/a     .000
01847>                         +    5.0 02:W2-LID-Out      5.71     .253 1974.0719_ 0:00  146.54  n/a     .000
01848>                         +    5.0 02:W3-LID-Out      6.70     .386 1974.0719_ 0:00  186.12  n/a     .000
01849>                         +    5.0 02:W4-LID-Out      6.69     .356 1974.0719_ 0:00  171.22  n/a     .000
01850>                         +    5.0 02:W5-LID-Out      4.09     .209 1974.0719_ 0:00  163.80  n/a     .000
01851>                         +    5.0 02:W6-LID-Out      5.18     .324 1974.0719_ 0:00  198.65  n/a     .000
01852>                       SUM=    5.0 01:BCD-PH3-LI     32.25    1.717 1974.0719_ 0:00  171.98  n/a     .000
01853> #*******************************************************************************************************************
01854> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01855> #*******************************************************************************************************************
01856> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
01857> #*******************************************************************************************************************
01858> R0074:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01859>      CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76     .279 1974.0719_ 0:00  202.28 .524     .000
01860>        [XIMP=.55:TIMP=.66]
01861>        [LOSS= 2 :CN=100.0]
01862>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01863>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01864>        [IaRECimp=   1.50: IaRECper=   6.00]
01865>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01866> R0074:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01867>      CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51     .385 1974.0719_ 0:00  192.08 .497     .000
01868>        [XIMP=.50:TIMP=.60]
01869>        [LOSS= 2 :CN=100.0]
01870>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01871>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01872>        [IaRECimp=   1.50: IaRECper=   6.00]
01873>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01874> R0074:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01875>      CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03     .498 1974.0719_ 0:00  220.24 .570     .000
01876>        [XIMP=.66:TIMP=.76]
01877>        [LOSS= 2 :CN=100.0]
01878>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01879>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
01880>        [IaRECimp=   1.50: IaRECper=   6.00]
01881>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01882> R0074:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01883>      CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11     .485 1974.0719_ 0:00  209.58 .543     .000
01884>        [XIMP=.60:TIMP=.70]
01885>        [LOSS= 2 :CN=100.0]
01886>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01887>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
01888>        [IaRECimp=   1.50: IaRECper=   6.00]
01889>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01890> R0074:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01891>      CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .301 1974.0719_ 0:00  204.30 .529     .000
01892>        [XIMP=.57:TIMP=.67]
01893>        [LOSS= 2 :CN=100.0]
01894>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01895>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
01896>        [IaRECimp=   1.50: IaRECper=   6.00]
01897>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01898> R0074:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01899>      CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .406 1974.0719_ 0:00  229.31 .594     .000
01900>        [XIMP=.71:TIMP=.81]
01901>        [LOSS= 2 :CN=100.0]
01902>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01903>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
01904>        [IaRECimp=   1.50: IaRECper=   6.00]
01905>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
01906> R0074:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01907>      ADD HYD                5.0 02:INF-W1          5.76     .279 1974.0719_ 0:00  202.28  n/a     .000
01908>                         +    5.0 02:INF-W2          8.51     .385 1974.0719_ 0:00  192.08  n/a     .000
01909>                         +    5.0 02:INF-W3         10.03     .498 1974.0719_ 0:00  220.24  n/a     .000
01910>                         +    5.0 02:INF-W4         10.11     .485 1974.0719_ 0:00  209.58  n/a     .000
01911>                         +    5.0 02:INF-W5          6.20     .301 1974.0719_ 0:00  204.30  n/a     .000
01912>                         +    5.0 02:INF-W6          7.81     .406 1974.0719_ 0:00  229.31  n/a     .000
01913>                       SUM=    5.0 01:INF-BCD-PH     48.42    2.354 1974.0719_ 0:00  210.35  n/a     .000
01914> ###############################################################################
01915> # CONTINUOUS RAINFALL DATA
01916> ###############################################################################
01917>  ** END OF RUN :   74
01918>
01919> *******************************************************************************
01920>
01921>
01922>
01923>
01924>
01925>  RUN#:COMMAND#
01926> R0075:C00001------------------------------------------------------------------
01927>      START
01928>        [TZERO =     .00 hrs on 19750101]
01929>        [METOUT=   2    (1=imperial, 2=metric output)]
01930>        [NSTORM=   0 ]
01931>        [NRUN  = 0075 ]
01932> #*******************************************************************************************************************
01933> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
01934> #*******************************************************************************************************************
01935> #  Project Name: Barrhaven Conservancy Development
01936> #  Project Number: 1474
01937> #  Date        : 2021/Oct/18
01938> #  Modeller    : J.Burnett, P.Eng.
01939> #  Updated     : 2024/Mar/14 [LP]
01940> #  Company     : J.F. Sabourin and Associates
01941> #  License #   : 2582634
01942> #*******************************************************************************************************************
01943> # Ottawa International Airport (1967 - 2003)
01944> R0075:C00002------------------------------------------------------------------
01945>  *  READ AES DATA
01946>        [Filename  = YOW_1967_2007.123                                        ]
01947>        [Start_date= 1975.0101: End_date= 1975.1231]
01948>        [DT= 60.min: Length= 8760.hrs: WetHrs=  344: DryHrs= 8416: PTOT= 535.50]
01949>        Maximum average rainfall intensities over
01950>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01951>         34.80    18.40    12.53     6.32     3.33     1.73     1.15      .87      .62    mm/hr
01952>         34.80    36.80    37.60    37.90    40.00    41.50    41.50    41.80    44.40    mm
01953>       19750708 19750720 19750720 19750720 19750721 19750721 19750721 19750721 19750928  date
01954>        Number of rainfall events per following intervent time
01955>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01956>           136      118       99       78       61       49       40       33       25
01957>        Number of events with at least the following durations
01958>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
01959>           135       70       40       17        1        0        0        0        0
01960> R0075:C00003------------------------------------------------------------------
01961>      COMPUTE API
01962>        [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
01963>        [APImax= 73.23: APIayo= 15.16: APImin=  .00]
01964> #*******************************************************************************************************************
01965> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
01966> #*******************************************************************************************************************
01967> R0075:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01968>      CONTINUOUS STANDHYD    5.0 01:W1              5.76     .359 1975.0708_17:00  250.69 .468     .000
01969>        [XIMP=.55:TIMP=.66]
01970>        [LOSS= 2 :CN= 71.0]
01971>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01972>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
01973>        [IaRECimp=   1.50: IaRECper=   6.00]
01974>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01975> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
01976> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01977> # Total Volume provided by LID  - 96 m³
01978> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01979> R0075:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01980>      ROUTE RESERVOIR ->    5.0 02:W1              5.76     .359 1975.0708_17:00  250.69  n/a     .000
01981>                    out <=    5.0 01:W1-LID          1.39     .001 1975.0109_ 8:35  250.70  n/a     .000
01982>                overflow <=    5.0 03:W1-LID-Out     4.37     .349 1975.0708_17:00  250.69  n/a     .000
01983>       (MxStoUsed=.9599E-02  m3, TotOvfVol=.1095E+01  m3, N-Ovf=   99, TotDurOvf=  123.hrs)
01984> R0075:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01985>      CONTINUOUS STANDHYD    5.0 01:W2              8.51     .491 1975.0708_17:00  231.77 .433     .000
01986>        [XIMP=.50:TIMP=.60]
01987>        [LOSS= 2 :CN= 71.0]
01988>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01989>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
01990>        [IaRECimp=   1.50: IaRECper=   6.00]
01991>        [SMIN= 41.38: SMAX=275.84: SK= .030]
01992> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
01993> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
01994> # Total Volume provided by LID  - 131 m³
01995> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
01996> R0075:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01997>      ROUTE RESERVOIR ->    5.0 02:W2              8.51     .491 1975.0708_17:00  231.77  n/a     .000
01998>                    out <=    5.0 01:W2-LID          2.08     .001 1975.0109_ 8:45  231.77  n/a     .000
01999>                overflow <=    5.0 03:W2-LID-Out     6.43     .475 1975.0708_17:00  231.77  n/a     .000
02000>       (MxStoUsed=.1309E-01  m3, TotOvfVol=.1490E+01  m3, N-Ovf=   98, TotDurOvf=  122.hrs)
02001> R0075:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02002>      CONTINUOUS STANDHYD    5.0 01:W3             10.03     .712 1975.0708_17:00  289.41 .540     .000
02003>        [XIMP=.66:TIMP=.76]
02004>        [LOSS= 2 :CN= 71.0]
02005>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02006>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02007>        [IaRECimp=   1.50: IaRECper=   6.00]
02008>        [SMIN= 41.38: SMAX=275.84: SK= .030]
02009> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
02010> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02011> # Total Volume provided by LID  - 193 m³
02012> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02013> R0075:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02014>      ROUTE RESERVOIR ->    5.0 02:W3             10.03     .712 1975.0708_17:00  289.41  n/a     .000
02015>                    out <=    5.0 01:W3-LID          2.53     .001 1975.0109_ 8:40  289.41  n/a     .000
02016>                overflow <=    5.0 03:W3-LID-Out     7.50     .697 1975.0708_17:00  289.41  n/a     .000
02017>       (MxStoUsed=.1930E-01  m3, TotOvfVol=.2170E+01  m3, N-Ovf=   97, TotDurOvf=  120.hrs)
02018> R0075:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02019>      CONTINUOUS STANDHYD    5.0 01:W4             10.11     .666 1975.0708_17:00  267.71 .500     .000
02020>        [XIMP=.60:TIMP=.70]
02021>        [LOSS= 2 :CN= 71.0]
02022>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02023>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02024>        [IaRECimp=   1.50: IaRECper=   6.00]
02025>        [SMIN= 41.38: SMAX=275.84: SK= .030]
02026> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
02027> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02028> # Total Volume provided by LID  - 186 m³
02029> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02030> R0075:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02031>      ROUTE RESERVOIR ->    5.0 02:W4             10.11     .666 1975.0708_17:00  267.71  n/a     .000
02032>                    out <=    5.0 01:W4-LID          2.57     .001 1975.0109_ 8:45  267.72  n/a     .000
02033>                overflow <=    5.0 03:W4-LID-Out     7.54     .650 1975.0708_17:00  267.71  n/a     .000
02034>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.2017E+01  m3, N-Ovf=   97, TotDurOvf=  120.hrs)
02035> R0075:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02036>      CONTINUOUS STANDHYD    5.0 01:W5              6.20     .395 1975.0708_17:00  256.90 .480     .000
02037>        [XIMP=.57:TIMP=.67]
02038>        [LOSS= 2 :CN= 71.0]
02039>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02040>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02041>        [IaRECimp=   1.50: IaRECper=   6.00]
02042>        [SMIN= 41.38: SMAX=275.84: SK= .030]
02043> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
02044> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02045> # Total Volume provided by LID  - 110 m³
02046> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02047> R0075:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02048>      ROUTE RESERVOIR ->    5.0 02:W5              6.20     .395 1975.0708_17:00  256.90  n/a     .000
02049>                    out <=    5.0 01:W5-LID          1.58     .001 1975.0109_ 8:40  256.90  n/a     .000
02050>                overflow <=    5.0 03:W5-LID-Out     4.62     .384 1975.0708_17:00  256.90  n/a     .000
02051>       (MxStoUsed=.1099E-01  m3, TotOvfVol=.1187E+01  m3, N-Ovf=   98, TotDurOvf=  119.hrs)
02052> R0075:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02053>      CONTINUOUS STANDHYD    5.0 01:W6              7.81     .589 1975.0708_17:00  307.71 .575     .000
02054>        [XIMP=.71:TIMP=.81]
02055>        [LOSS= 2 :CN= 71.0]
02056>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02057>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02058>        [IaRECimp=   1.50: IaRECper=   6.00]
02059>        [SMIN= 41.38: SMAX=275.84: SK= .030]
02060> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
02061> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02062> # Total Volume provided by LID  - 165 m³
02063> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02064> R0075:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02065>      ROUTE RESERVOIR ->    5.0 02:W6              7.81     .589 1975.0708_17:00  307.72  n/a     .000
02066>                    out <=    5.0 01:W6-LID          2.00     .001 1975.0109_ 8:40  307.72  n/a     .000
02067>                overflow <=    5.0 03:W6-LID-Out     5.81     .578 1975.0708_17:00  307.72  n/a     .000
02068>       (MxStoUsed=.1649E-01  m3, TotOvfVol=.1788E+01  m3, N-Ovf=   97, TotDurOvf=  119.hrs)
02069> R0075:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02070>      ADD HYD                5.0 02:W1              5.76     .359 1975.0708_17:00  250.69  n/a     .000
02071>                         +    5.0 02:W2              8.51     .491 1975.0708_17:00  231.77  n/a     .000
02072>                         +    5.0 02:W3             10.03     .712 1975.0708_17:00  289.41  n/a     .000
02073>                         +    5.0 02:W4             10.11     .666 1975.0708_17:00  267.71  n/a     .000
02074>                         +    5.0 02:W5              6.20     .395 1975.0708_17:00  256.90  n/a     .000
02075>                         +    5.0 02:W6              7.81     .589 1975.0708_17:00  307.72  n/a     .000
02076>                       SUM=    5.0 01:BCD-PH3        48.42    3.212 1975.0708_17:00  268.93  n/a     .000
02077> R0075:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02078>      ADD HYD                5.0 02:W1-LID-Out      4.37     .349 1975.0708_17:00  250.69  n/a     .000
02079>                         +    5.0 02:W2-LID-Out      6.43     .475 1975.0708_17:00  231.77  n/a     .000
02080>                         +    5.0 02:W3-LID-Out      7.50     .697 1975.0708_17:00  289.41  n/a     .000
02081>                         +    5.0 02:W4-LID-Out      7.54     .650 1975.0708_17:00  267.71  n/a     .000
02082>                         +    5.0 02:W5-LID-Out      4.62     .384 1975.0708_17:00  256.90  n/a     .000
02083>                         +    5.0 02:W6-LID-Out      5.81     .578 1975.0708_17:00  307.72  n/a     .000
02084>                       SUM=    5.0 01:BCD-PH3-LI     36.26    3.132 1975.0708_17:00  268.81  n/a     .000
02085> #*******************************************************************************************************************
02086> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
02087> #*******************************************************************************************************************
02088> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
02089> #*******************************************************************************************************************
02090> R0075:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02091>      CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76     .518 1975.0708_17:00  319.75 .597     .000
02092>        [XIMP=.55:TIMP=.66]
02093>        [LOSS= 2 :CN=100.0]
02094>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02095>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02096>        [IaRECimp=   1.50: IaRECper=   6.00]
02097>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
02098> R0075:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02099>      CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51     .739 1975.0708_17:00  305.94 .571     .000
02100>        [XIMP=.50:TIMP=.60]
02101>        [LOSS= 2 :CN=100.0]
02102>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02103>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02104>        [IaRECimp=   1.50: IaRECper=   6.00]
02105>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
02106> R0075:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02107>      CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03     .909 1975.0708_17:00  343.56 .642     .000
02108>        [XIMP=.66:TIMP=.76]
02109>        [LOSS= 2 :CN=100.0]
02110>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02111>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02112>        [IaRECimp=   1.50: IaRECper=   6.00]
02113>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
02114> R0075:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02115>      CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11     .901 1975.0708_17:00  329.34 .615     .000
02116>        [XIMP=.60:TIMP=.70]
02117>        [LOSS= 2 :CN=100.0]
02118>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02119>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02120>        [IaRECimp=   1.50: IaRECper=   6.00]
02121>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
02122> R0075:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02123>      CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .558 1975.0708_17:00  322.28 .602     .000
02124>        [XIMP=.57:TIMP=.67]
02125>        [LOSS= 2 :CN=100.0]
02126>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02127>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02128>        [IaRECimp=   1.50: IaRECper=   6.00]
02129>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
02130> R0075:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02131>      CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .725 1975.0708_17:00  355.58 .664     .000
02132>        [XIMP=.71:TIMP=.81]
02133>        [LOSS= 2 :CN=100.0]
02134>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02135>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02136>        [IaRECimp=   1.50: IaRECper=   6.00]
02137>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
02138> R0075:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02139>      ADD HYD                5.0 02:INF-W1          5.76     .518 1975.0708_17:00  319.75  n/a     .000
02140>                         +    5.0 02:INF-W2          8.51     .739 1975.0708_17:00  305.94  n/a     .000
02141>                         +    5.0 02:INF-W3         10.03     .909 1975.0708_17:00  343.56  n/a     .000
02142>                         +    5.0 02:INF-W4         10.11     .901 1975.0708_17:00  329.34  n/a     .000
02143>                         +    5.0 02:INF-W5          6.20     .558 1975.0708_17:00  322.28  n/a     .000
02144>                         +    5.0 02:INF-W6          7.81     .725 1975.0708_17:00  355.58  n/a     .000
02145>                       SUM=    5.0 01:INF-BCD-PH     48.42    4.350 1975.0708_17:00  330.36  n/a     .000
02146> ###############################################################################
02147> # CONTINUOUS RAINFALL DATA
02148> ###############################################################################
02149>  ** END OF RUN :   75
02150>
02151> *******************************************************************************
02152>
02153>
02154>
02155>
02156>
02157>  RUN#:COMMAND#
02158> R0076:C00001------------------------------------------------------------------
02159>      START
02160>        [TZERO =     .00 hrs on 19760101]
```

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02161>       [METOUT=   2    (1=imperial, 2=metric output)]
02162>       [NSTORM=   0 ]
02163>       [NRUN  = 0076 ]
02164> ********************************************************************************************************************
02165> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02166> ********************************************************************************************************************
02167> #  Project Name: Barrhaven Conservancy Development
02168> #  Project Number: 1474
02169> #  Date       : 2021/Oct/18
02170> #  Modeller   : J.Burnett, P.Eng.
02171> #  Updated    : 2024/Mar/14 [LP]
02172> #  Company    : J.F. Sabourin and Associates
02173> #  License #  : 2582634
02174> ********************************************************************************************************************
02175> # Ottawa International Airport (1967 - 2003)
02176> R0076:C00002-------------------------------------------------------------------------
02177>   *  READ AES DATA
02178>       [Filename  = YOW_1967_2007.123                                                ]
02179>       [Start_date= 1976.0101: End_date= 1976.1230]
02180>       [DT= 60.min: Length= 8064.hrs: WetHrs=  390: DryHrs= 7674: PTOT= 493.20]
02181>       Maximum average rainfall intensities over
02182>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02183>        14.00     8.90     6.43     4.65     2.35     1.39     .97      .99      .80     mm/hr
02184>        14.00    17.80    19.30    27.90    28.20    33.30    35.10    47.60    57.50    mm
02185>      19760828 19760828 19760828 19760828 19760828 19760920 19760520 19760520 19760921  date
02186>      Number of rainfall events per following interevent time
02187>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02188>          164      133      117       89       72       62       46       40       28
02189>      Number of events with at least the following durations
02190>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02191>          163       80       47       15        2        0        0        0        0
02192> R0076:C00003-------------------------------------------------------------------------
02193>     COMPUTE API
02194>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02195>       [APImax= 59.66: APIavg= 15.35: APImin=   .02]
02196> ********************************************************************************************************************
02197> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
02198> ********************************************************************************************************************
02199> R0076:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02200>     CONTINUOUS STANDHYD   5.0 01:W1              5.76     .125 1976.0828_19:00  209.98 .426     .000
02201>       [XIMP=.55:TIMP=.66]
02202>       [LOSS= 2 :CN= 71.0]
02203>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02204>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02205>       [IaRECimp=   1.50: IaRECper=   6.00]
02206>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02207> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
02208> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02209> # Total Volume provided by LID  - 96 m³
02210> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02211> R0076:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02212>     ROUTE RESERVOIR ->     5.0 02:W1              5.76     .125 1976.0828_19:00  209.98  n/a     .000
02213>                  out <=    5.0 01:W1-LID          1.66     .001 1976.0331_15:10  209.98  n/a     .000
02214>              overflow <=   5.0 03:W1-LID-Out      4.10     .124 1976.0828_19:00  209.98  n/a     .000
02215>       (MxStoUsed=.9600E-02  m3, TotOvrFlo=.8613E+00  m3, N-Ovf=  125, TotDurOvf=  145.hrs)
02216> R0076:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02217>     CONTINUOUS STANDHYD   5.0 01:W2              8.51     .167 1976.0828_19:00  193.59 .393     .000
02218>       [XIMP=.50:TIMP=.60]
02219>       [LOSS= 2 :CN= 71.0]
02220>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02221>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02222>       [IaRECimp=   1.50: IaRECper=   6.00]
02223>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02224> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
02225> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02226> # Total Volume provided by LID  - 131 m³
02227> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02228> R0076:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02229>     ROUTE RESERVOIR ->     5.0 02:W2              8.51     .167 1976.0828_19:00  193.59  n/a     .000
02230>                  out <=    5.0 01:W2-LID          2.48     .001 1976.0331_15:15  193.59  n/a     .000
02231>              overflow <=   5.0 03:W2-LID-Out      6.03     .165 1976.0828_19:00  193.59  n/a     .000
02232>       (MxStoUsed=.1310E-01  m3, TotOvrFlo=.1168E+01  m3, N-Ovf=  124, TotDurOvf=  148.hrs)
02233> R0076:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02234>     CONTINUOUS STANDHYD   5.0 01:W3             10.03     .258 1976.0828_19:00  243.72 .494     .000
02235>       [XIMP=.66:TIMP=.76]
02236>       [LOSS= 2 :CN= 71.0]
02237>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02238>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02239>       [IaRECimp=   1.50: IaRECper=   6.00]
02240>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02241> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
02242> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02243> # Total Volume provided by LID  - 193 m³
02244> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02245> R0076:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02246>     ROUTE RESERVOIR ->     5.0 02:W3             10.03     .258 1976.0828_19:00  243.72  n/a     .000
02247>                  out <=    5.0 01:W3-LID          2.97     .001 1976.0331_15:10  243.72  n/a     .000
02248>              overflow <=   5.0 03:W3-LID-Out      7.06     .255 1976.0828_19:00  243.72  n/a     .000
02249>       (MxStoUsed=.1929E-01  m3, TotOvrFlo=.1720E+01  m3, N-Ovf=  114, TotDurOvf=  143.hrs)
02250> R0076:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02251>     CONTINUOUS STANDHYD   5.0 01:W4             10.11     .236 1976.0828_19:00  224.84 .456     .000
02252>       [XIMP=.60:TIMP=.70]
02253>       [LOSS= 2 :CN= 71.0]
02254>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02255>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02256>       [IaRECimp=   1.50: IaRECper=   6.00]
02257>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02258> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
02259> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02260> # Total Volume provided by LID  - 186 m³
02261> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02262> R0076:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02263>     ROUTE RESERVOIR ->    10.11     .236 1976.0828_19:00  224.84  n/a     .000
02264>                  out <=    5.0 01:W4-LID          3.04     .001 1976.0331_15:15  224.84  n/a     .000
02265>              overflow <=   5.0 03:W4-LID-Out      7.07     .234 1976.0828_19:00  224.84  n/a     .000
02266>       (MxStoUsed=.1859E-01  m3, TotOvrFlo=.1590E+01  m3, N-Ovf=  121, TotDurOvf=  143.hrs)
02267> R0076:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02268>     CONTINUOUS STANDHYD   5.0 01:W5              6.20     .139 1976.0828_19:00  215.45 .437     .000
02269>       [XIMP=.57:TIMP=.67]
02270>       [LOSS= 2 :CN= 71.0]
02271>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02272>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02273>       [IaRECimp=   1.50: IaRECper=   6.00]
02274>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02275> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
02276> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02277> # Total Volume provided by LID  - 110 m³
02278> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02279> R0076:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02280>     ROUTE RESERVOIR ->     5.0 02:W5              6.20     .139 1976.0828_19:00  215.45  n/a     .000
02281>                  out <=    5.0 01:W5-LID          1.87     .001 1976.0331_15:15  215.45  n/a     .000
02282>              overflow <=   5.0 03:W5-LID-Out      4.33     .138 1976.0828_19:00  215.45  n/a     .000
02283>       (MxStoUsed=.1100E-01  m3, TotOvrFlo=.9331E+00  m3, N-Ovf=  120, TotDurOvf=  141.hrs)
02284> R0076:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02285>     CONTINUOUS STANDHYD   5.0 01:W6              7.81     .217 1976.0828_19:00  259.60 .526     .000
02286>       [XIMP=.71:TIMP=.81]
02287>       [LOSS= 2 :CN= 71.0]
02288>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02289>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02290>       [IaRECimp=   1.50: IaRECper=   6.00]
02291>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02292> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
02293> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02294> # Total Volume provided by LID  - 165 m³
02295> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02296> R0076:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02297>     ROUTE RESERVOIR ->     5.0 02:W6              7.81     .217 1976.0828_19:00  259.60  n/a     .000
02298>                  out <=    5.0 01:W6-LID          2.35     .001 1976.0331_15:10  259.61  n/a     .000
02299>              overflow <=   5.0 03:W6-LID-Out      5.46     .215 1976.0828_19:00  259.60  n/a     .000
02300>       (MxStoUsed=.1650E-01  m3, TotOvrFlo=.1419E+01  m3, N-Ovf=  121, TotDurOvf=  137.hrs)
02301> R0076:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02302>     ADD HYD               5.0 02:W1              5.76     .125 1976.0828_19:00  209.98  n/a     .000
02303>                     +     5.0 02:W2              8.51     .167 1976.0828_19:00  193.59  n/a     .000
02304>                     +     5.0 02:W3             10.03     .258 1976.0828_19:00  243.72  n/a     .000
02305>                     +     5.0 02:W4             10.11     .236 1976.0828_19:00  224.84  n/a     .000
02306>                     +     5.0 02:W5              6.20     .139 1976.0828_19:00  215.45  n/a     .000
02307>                     +     5.0 02:W6              7.81     .217 1976.0828_19:00  259.60  n/a     .000
02308>                   SUM=    5.0 01:BCD-PH3        48.42    1.142 1976.0828_19:00  225.90  n/a     .000
02309> R0076:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02310>     ADD HYD               5.0 02:W1-LID-Out      4.10     .124 1976.0828_19:00  209.98  n/a     .000
02311>                     +     5.0 02:W2-LID-Out      6.03     .165 1976.0828_19:00  193.59  n/a     .000
02312>                     +     5.0 02:W3-LID-Out      7.06     .255 1976.0828_19:00  243.72  n/a     .000
02313>                     +     5.0 02:W4-LID-Out      7.07     .234 1976.0828_19:00  224.84  n/a     .000
02314>                     +     5.0 02:W5-LID-Out      4.33     .138 1976.0828_19:00  215.45  n/a     .000
02315>                     +     5.0 02:W6-LID-Out      5.46     .215 1976.0828_19:00  259.60  n/a     .000
02316>                   SUM=    5.0 01:BCD-PH3-LI     34.06    1.131 1976.0828_19:00  225.81  n/a     .000
02317> ********************************************************************************************************************
02318> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
02319> ********************************************************************************************************************
02320> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
02321> ********************************************************************************************************************
02322> R0076:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02323>     CONTINUOUS STANDHYD   5.0 01:INF-W1            5.76     .169 1976.0828_19:00  268.14 .544     .000
02324>       [XIMP=.55:TIMP=.66]
02325>       [LOSS= 2 :CN=100.0]
02326>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02327>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02328>       [IaRECimp=   1.50: IaRECper=   6.00]
02329>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02330> R0076:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02331>     CONTINUOUS STANDHYD   5.0 01:INF-W2            8.51     .226 1976.0828_19:00  255.68 .518     .000
02332>       [XIMP=.50:TIMP=.60]
02333>       [LOSS= 2 :CN=100.0]
02334>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02335>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02336>       [IaRECimp=   1.50: IaRECper=   6.00]
02337>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02338> R0076:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02339>     CONTINUOUS STANDHYD   5.0 01:INF-W3            10.03     .316 1976.0828_19:00  289.67 .587     .000
02340>       [XIMP=.66:TIMP=.76]
02341>       [LOSS= 2 :CN=100.0]
02342>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02343>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02344>       [IaRECimp=   1.50: IaRECper=   6.00]
02345>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02346> R0076:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02347>     CONTINUOUS STANDHYD   5.0 01:INF-W4            10.11     .296 1976.0828_19:00  276.80 .561     .000
02348>       [XIMP=.60:TIMP=.70]
02349>       [LOSS= 2 :CN=100.0]
02350>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02351>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02352>       [IaRECimp=   1.50: IaRECper=   6.00]
02353>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02354> R0076:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02355>     CONTINUOUS STANDHYD   5.0 01:INF-W5            6.20     .183 1976.0828_19:00  270.43 .548     .000
02356>       [XIMP=.57:TIMP=.67]
02357>       [LOSS= 2 :CN=100.0]
02358>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02359>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02360>       [IaRECimp=   1.50: IaRECper=   6.00]
02361>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02362> R0076:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02363>     CONTINUOUS STANDHYD   5.0 01:INF-W6            7.81     .259 1976.0828_19:00  300.63 .610     .000
02364>       [XIMP=.71:TIMP=.81]
02365>       [LOSS= 2 :CN=100.0]
02366>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02367>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02368>       [IaRECimp=   1.50: IaRECper=   6.00]
02369>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02370> R0076:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02371>     ADD HYD               5.0 02:INF-W1            5.76     .169 1976.0828_19:00  268.14  n/a     .000
02372>                     +     5.0 02:INF-W2            8.51     .226 1976.0828_19:00  255.68  n/a     .000
02373>                     +     5.0 02:INF-W3           10.03     .316 1976.0828_19:00  289.67  n/a     .000
02374>                     +     5.0 02:INF-W4           10.11     .296 1976.0828_19:00  276.80  n/a     .000
02375>                     +     5.0 02:INF-W5            6.20     .183 1976.0828_19:00  270.43  n/a     .000
02376>                     +     5.0 02:INF-W6            7.81     .259 1976.0828_19:00  300.63  n/a     .000
02377>                   SUM=    5.0 01:INF-BCD-PH       48.42    1.449 1976.0828_19:00  277.75  n/a     .000
02378> ##################################################################################
02379> # CONTINUOUS RAINFALL DATA
02380> ##################################################################################
02381>  ** END OF RUN :   76
02382>
02383> ********************************************************************************************************************
02384>
02385>
02386>
02387>
02388>
02389>  RUN#:COMMAND#
02390> R0077:C00001-------------------------------------------------------------------------
02391>      START
02392>       [TZERO =    .00 hrs on 19770101]
02393>       [METOUT=   2   (1=imperial, 2=metric output)]
02394>       [NSTORM=   0 ]
02395>       [NRUN  = 0077 ]
02396> ********************************************************************************************************************
02397> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02398> ********************************************************************************************************************
02399> #  Project Name: Barrhaven Conservancy Development
02400> #  Project Number: 1474
02401> #  Date       : 2021/Oct/18
02402> #  Modeller   : J.Burnett, P.Eng.
02403> #  Updated    : 2024/Mar/14 [LP]
02404> #  Company    : J.F. Sabourin and Associates
02405> #  License #  : 2582634
02406> ********************************************************************************************************************
02407> # Ottawa International Airport (1967 - 2003)
02408> R0077:C00002-------------------------------------------------------------------------
02409>   *  READ AES DATA
02410>       [Filename  = YOW_1967_2007.123                                                ]
02411>       [Start_date= 1977.0101: End_date= 1977.1231]
02412>       [DT= 60.min: Length= 8016.hrs: WetHrs=  512: DryHrs= 7504: PTOT= 677.80]
02413>       Maximum average rainfall intensities over
02414>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02415>        21.30    15.20    10.40     6.53     3.30     1.66     1.40     1.06      .73     mm/hr
02416>        21.30    30.40    31.20    39.20    39.60    39.80    50.40    51.00    52.40     mm
02417>      19770717 19770717 19770717 19770717 19770901 19770902 19770314 19770314 19770314  date
02418>      Number of rainfall events per following interevent time
02419>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02420>          172      142      126       99       78       63       53       42       30
02421>      Number of events with at least the following durations
02422>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02423>          171       88       60       22        5        1        0        0        0
02424> R0077:C00003-------------------------------------------------------------------------
02425>     COMPUTE API
02426>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02427>       [APImax= 74.80: APIavg= 20.62: APImin=  1.63]
02428> ********************************************************************************************************************
02429> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
02430> ********************************************************************************************************************
02431> R0077:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02432>     CONTINUOUS STANDHYD   5.0 01:W1              5.76     .220 1977.0901_23:00  321.78 .475     .000
02433>       [XIMP=.55:TIMP=.66]
02434>       [LOSS= 2 :CN= 71.0]
02435>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02436>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02437>       [IaRECimp=   1.50: IaRECper=   6.00]
02438>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02439> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
02440> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02441> # Total Volume provided by LID  - 96 m³
02442> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02443> R0077:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02444>     ROUTE RESERVOIR ->     5.0 02:W1              5.76     .220 1977.0901_23:00  321.78  n/a     .000
02445>                  out <=    5.0 01:W1-LID          1.43     .001 1977.0304_20:50  321.79  n/a     .000
02446>              overflow <=   5.0 03:W1-LID-Out      4.33     .213 1977.0901_23:00  321.78  n/a     .000
02447>       (MxStoUsed=.9584E-02  m3, TotOvrFlo=.1395E+01  m3, N-Ovf=  122, TotDurOvf=  216.hrs)
02448> R0077:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02449>     CONTINUOUS STANDHYD   5.0 01:W2              8.51     .298 1977.0901_23:00  297.80 .439     .000
02450>       [XIMP=.50:TIMP=.60]
02451>       [LOSS= 2 :CN= 71.0]
02452>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02453>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02454>       [IaRECimp=   1.50: IaRECper=   6.00]
02455>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02456> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
02457> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02458> # Total Volume provided by LID  - 131 m³
02459> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02460> R0077:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02461>     ROUTE RESERVOIR ->     5.0 02:W2              8.51     .298 1977.0901_23:00  297.80  n/a     .000
02462>                  out <=    5.0 01:W2-LID          2.14     .001 1977.0304_20:50  297.80  n/a     .000
02463>              overflow <=   5.0 03:W2-LID-Out      6.37     .291 1977.0901_23:00  297.80  n/a     .000
02464>       (MxStoUsed=.1310E-01  m3, TotOvrFlo=.1898E+01  m3, N-Ovf=  124, TotDurOvf=  217.hrs)
02465> R0077:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02466>     CONTINUOUS STANDHYD   5.0 01:W3             10.03     .421 1977.0717_16:00  370.99 .547     .000
02467>       [XIMP=.66:TIMP=.76]
02468>       [LOSS= 2 :CN= 71.0]
02469>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02470>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02471>       [IaRECimp=   1.50: IaRECper=   6.00]
02472>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02473> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
02474> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02475> # Total Volume provided by LID  - 193 m³
02476> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02477> R0077:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02478>     ROUTE RESERVOIR ->     5.0 02:W3             10.03     .421 1977.0717_16:00  370.99  n/a     .000
02479>                  out <=    5.0 01:W3-LID          2.59     .001 1977.0304_20:50  370.98  n/a     .000
02480>              overflow <=   5.0 03:W3-LID-Out      7.44     .415 1977.0717_16:00  370.99  n/a     .000
02481>       (MxStoUsed=.1929E-01  m3, TotOvrFlo=.2759E+01  m3, N-Ovf=  118, TotDurOvf=  215.hrs)
02482> R0077:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02483>     CONTINUOUS STANDHYD   5.0 01:W4             10.11     .393 1977.0901_23:00  343.43 .507     .000
02484>       [XIMP=.60:TIMP=.70]
02485>       [LOSS= 2 :CN= 71.0]
02486>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02487>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02488>       [IaRECimp=   1.50: IaRECper=   6.00]
02489>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02490> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
02491> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02492> # Total Volume provided by LID  - 186 m³
02493> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02494> R0077:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02495>     ROUTE RESERVOIR ->    10.11     .393 1977.0901_23:00  343.43  n/a     .000
02496>                  out <=    5.0 01:W4-LID          2.64     .001 1977.0304_20:50  343.44  n/a     .000
02497>              overflow <=   5.0 03:W4-LID-Out      7.47     .385 1977.0901_23:00  343.43  n/a     .000
02498>       (MxStoUsed=.1860E-01  m3, TotOvrFlo=.2564E+01  m3, N-Ovf=  128, TotDurOvf=  213.hrs)
02499> R0077:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02500>     CONTINUOUS STANDHYD   5.0 01:W5              6.20     .235 1977.0901_23:00  329.71 .486     .000
02501>       [XIMP=.57:TIMP=.67]
02502>       [LOSS= 2 :CN= 71.0]
02503>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02504>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02505>       [IaRECimp=   1.50: IaRECper=   6.00]
02506>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02507> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
02508> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02509> # Total Volume provided by LID  - 110 m³
02510> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02511> R0077:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02512>     ROUTE RESERVOIR ->     5.0 02:W5              6.20     .235 1977.0901_23:00  329.71  n/a     .000
02513>                  out <=    5.0 01:W5-LID          1.62     .001 1977.0304_20:50  329.71  n/a     .000
02514>              overflow <=   5.0 03:W5-LID-Out      4.58     .230 1977.0901_23:00  329.71  n/a     .000
02515>       (MxStoUsed=.1100E-01  m3, TotOvrFlo=.1509E+01  m3, N-Ovf=  122, TotDurOvf=  211.hrs)
02516> R0077:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02517>     CONTINUOUS STANDHYD   5.0 01:W6              7.81     .353 1977.0717_16:00  394.17 .582     .000
02518>       [XIMP=.71:TIMP=.81]
02519>       [LOSS= 2 :CN= 71.0]
02520>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
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02521>       [Impervious   area: IAimp= 1.57:SLPI=  .50:LGI= 228.:MNI=.013:SCI=   .0]
02522>       [IaRECimp=   1.50: IaRECper=   6.00]
02523>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02524> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
02525> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02526> # Total Volume provided by LID  - 165 m³
02527> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02528> R0077:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02529>     ROUTE RESERVOIR ->    5.0 02:W6          7.81      .353 1977.0717_16:00  394.17  n/a     .000
02530>               out <=     5.0 03:W6-LID      2.05      .001 1977.0306_20:50  394.18  n/a     .000
02531>           overflow <=    5.0 03:W6-LID-Out  5.76      .349 1977.0717_16:00  394.17  n/a     .000
02532>      (MxStoUsed=.1648E-01  m3, TotOvfVol=.2270E+01  m3, N-Ovf=  126, TotDurOvf=  211.hrs)
02533> R0077:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02534>     ADD HYD               5.0 02:W1          5.76      .220 1977.0901_23:00  321.78  n/a     .000
02535>                     +     5.0 02:W2          8.51      .298 1977.0901_23:00  297.80  n/a     .000
02536>                     +     5.0 02:W3         10.03      .421 1977.0717_16:00  370.99  n/a     .000
02537>                     +     5.0 02:W4         10.11      .393 1977.0901_23:00  343.43  n/a     .000
02538>                     +     5.0 02:W5          6.20      .235 1977.0901_23:00  329.71  n/a     .000
02539>                     +     5.0 02:W6          7.81      .353 1977.0717_16:00  394.17  n/a     .000
02540>                   SUM=    5.0 01:BCD-PH3    48.42     1.903 1977.0901_23:00  344.97  n/a     .000
02541> R0077:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02542>     ADD HYD               5.0 02:W1-LID-Out  4.33      .213 1977.0901_23:00  321.78  n/a     .000
02543>                     +     5.0 02:W2-LID-Out  6.37      .291 1977.0901_23:00  297.80  n/a     .000
02544>                     +     5.0 02:W3-LID-Out  7.44      .415 1977.0717_16:00  370.99  n/a     .000
02545>                     +     5.0 02:W4-LID-Out  7.47      .385 1977.0901_23:00  343.43  n/a     .000
02546>                     +     5.0 02:W5-LID-Out  4.58      .230 1977.0901_23:00  329.71  n/a     .000
02547>                     +     5.0 02:W6-LID-Out  5.76      .349 1977.0717_16:00  394.17  n/a     .000
02548>                   SUM=    5.0 01:BCD-PH3-LI  35.95     1.863 1977.0717_16:00  344.81  n/a     .000
02549> #*************************************************************************************************************
02550> #                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
02551> #*************************************************************************************************************
02552> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
02553> #*************************************************************************************************************
02554> R0077:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02555>     CONTINUOUS STANDHYD   5.0 01:INF-W1        5.76      .292 1977.0717_16:00  410.97 .606     .000
02556>       [XIMP=.55:TIMP=.66]
02557>       [LOSS= 2 :CN=100.0]
02558>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02559>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02560>       [IaRECimp=   1.50: IaRECper=   6.00]
02561>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02562> R0077:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02563>     CONTINUOUS STANDHYD   5.0 01:INF-W2        8.51      .418 1977.0901_23:00  393.74 .581     .000
02564>       [XIMP=.50:TIMP=.60]
02565>       [LOSS= 2 :CN=100.0]
02566>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02567>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02568>       [IaRECimp=   1.50: IaRECper=   6.00]
02569>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02570> R0077:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02571>     CONTINUOUS STANDHYD   5.0 01:INF-W3       10.03      .529 1977.0717_16:00  440.83 .650     .000
02572>       [XIMP=.66:TIMP=.76]
02573>       [LOSS= 2 :CN=100.0]
02574>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02575>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02576>       [IaRECimp=   1.50: IaRECper=   6.00]
02577>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02578> R0077:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02579>     CONTINUOUS STANDHYD   5.0 01:INF-W4       10.11      .509 1977.0717_16:00  423.03 .624     .000
02580>       [XIMP=.60:TIMP=.70]
02581>       [LOSS= 2 :CN=100.0]
02582>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02583>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02584>       [IaRECimp=   1.50: IaRECper=   6.00]
02585>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02586> R0077:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02587>     CONTINUOUS STANDHYD   5.0 01:INF-W5        6.20      .316 1977.0717_16:00  414.20 .611     .000
02588>       [XIMP=.57:TIMP=.67]
02589>       [LOSS= 2 :CN=100.0]
02590>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02591>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02592>       [IaRECimp=   1.50: IaRECper=   6.00]
02593>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02594> R0077:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02595>     CONTINUOUS STANDHYD   5.0 01:INF-W6        7.81      .424 1977.0717_16:00  455.90 .673     .000
02596>       [XIMP=.71:TIMP=.81]
02597>       [LOSS= 2 :CN=100.0]
02598>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02599>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02600>       [IaRECimp=   1.50: IaRECper=   6.00]
02601>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02602> R0077:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02603>     ADD HYD               5.0 02:INF-W1        5.76      .292 1977.0717_16:00  410.97  n/a     .000
02604>                     +     5.0 02:INF-W2        8.51      .418 1977.0901_23:00  393.74  n/a     .000
02605>                     +     5.0 02:INF-W3       10.03      .529 1977.0717_16:00  440.83  n/a     .000
02606>                     +     5.0 02:INF-W4       10.11      .509 1977.0717_16:00  423.03  n/a     .000
02607>                     +     5.0 02:INF-W5        6.20      .316 1977.0717_16:00  414.20  n/a     .000
02608>                     +     5.0 02:INF-W6        7.81      .424 1977.0717_16:00  455.90  n/a     .000
02609>                   SUM=    5.0 01:INF-BCD-PH   48.42     2.485 1977.0717_16:00  424.30  n/a     .000
02610> ##############################################################################
02611> # CONTINUOUS RAINFALL DATA
02612> ##############################################################################
02613>  ** END OF RUN :   77
02614>
02615>  ************************************************************************************
02616>
02617>
02618>
02619>
02620>
02621>  RUN#:COMMAND#
02622> R0078:C00001------------------------------------------------------------------------
02623>      START
02624>       [TZERO =    .00 hrs on 19780101]
02625>       [METOUT=   2   (1=imperial, 2=metric output)]
02626>       [NSTORM=   0 ]
02627>       [NRUN  = 0078 ]
02628> #*************************************************************************************************************
02629> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02630> #*************************************************************************************************************
02631> #  Project Name: Barrhaven Conservancy Development
02632> #  Project Number: 1474
02633> #  Date        : 2021/Oct/18
02634> #  Modeller    : J.Burnett, P.Eng.
02635> #  Updated     : 2024/Mar/14 [LP]
02636> #  Company     : J.F. Sabourin and Associates
02637> #  License #   : 2582634
02638> #*************************************************************************************************************
02639> # Ottawa International Airport (1967 - 2003)
02640> R0078:C00002------------------------------------------------------------------------
02641>  *  READ AES DATA
02642>       [Filename  = YOW_1967_2007.123                                    ]
02643>       [Start_date= 1978.0101: End_date= 1978.1231]
02644>       [DT= 60.min: Length= 8040.hrs: WetHrs=  409: DryHrs= 7631: PTOT= 641.40)
02645>       Maximum average rainfall intensities over
02646>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02647>        36.00    18.15    12.10     6.05     3.04     1.64     1.13      .87      .58    mm/hr
02648>        36.00    36.30    36.30    36.30    36.50    39.40    40.60    41.60    41.60    mm
02649>      19780618 19780618 19780618 19780618 19780619 19780411 19780412 19780620 19780621  date
02650>      Number of rainfall events per following interevent time
02651>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02652>          154      128      118       97       71       58       51       46       33
02653>      Number of events with at least the following durations
02654>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02655>          154       75       44       18        5        0        0        0        0
02656> R0078:C00003------------------------------------------------------------------------
02657>      COMPUTE API
02658>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02659>       [APImax= 65.36: APIavg= 19.25: APImin=  .25]
02660> #*************************************************************************************************************
02661> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
02662> #*************************************************************************************************************
02663> R0078:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02664>     CONTINUOUS STANDHYD   5.0 01:W1            5.76      .398 1978.0618_17:00  302.94 .472     .000
02665>       [XIMP=.55:TIMP=.66]
02666>       [LOSS= 2 :CN= 71.0]
02667>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02668>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02669>       [IaRECimp=   1.50: IaRECper=   6.00]
02670>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02671> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
02672> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02673> # Total Volume provided by LID  - 86 m³
02674> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02675> R0078:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02676>     ROUTE RESERVOIR ->    5.0 02:W1          5.76      .398 1978.0618_17:00  302.94  n/a     .000
02677>               out <=     5.0 01:W1-LID      1.44      .001 1978.0108_ 3:30  302.95  n/a     .000
02678>           overflow <=    5.0 03:W1-LID-Out  4.32      .385 1978.0618_17:00  302.94  n/a     .000
02679>      (MxStoUsed=.9600E-02  m3, TotOvfVol=.1307E+01  m3, N-Ovf=  100, TotDurOvf=  164.hrs)
02680> R0078:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02681>     CONTINUOUS STANDHYD   5.0 01:W2            8.51      .548 1978.0618_17:00  279.22 .435     .000
02682>       [XIMP=.50:TIMP=.60]
02683>       [LOSS= 2 :CN= 71.0]
02684>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02685>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02686>       [IaRECimp=   1.50: IaRECper=   6.00]
02687>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02688> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
02689> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02690> # Total Volume provided by LID  - 131 m³
02691> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02692> R0078:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02693>     ROUTE RESERVOIR ->    5.0 02:W2          8.51      .548 1978.0618_17:00  279.22  n/a     .000
02694>               out <=     5.0 01:W2-LID      2.15      .001 1978.0108_ 3:30  279.22  n/a     .000
02695>           overflow <=    5.0 03:W2-LID-Out  6.36      .529 1978.0618_17:00  279.22  n/a     .000
02696>      (MxStoUsed=.1310E-01  m3, TotOvfVol=.1776E+01  m3, N-Ovf=  100, TotDurOvf=  164.hrs)
02697> R0078:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02698>     CONTINUOUS STANDHYD   5.0 01:W3           10.03      .772 1978.0618_17:00  352.12 .549     .000
02699>       [XIMP=.66:TIMP=.76]
02700>       [LOSS= 2 :CN= 71.0]
02701>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02702>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02703>       [IaRECimp=   1.50: IaRECper=   6.00]
02704>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02705> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
02706> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02707> # Total Volume provided by LID  - 193 m³
02708> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02709> R0078:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02710>     ROUTE RESERVOIR ->    5.0 02:W3         10.03      .772 1978.0618_17:00  352.12  n/a     .000
02711>               out <=     5.0 01:W3-LID      2.57      .001 1978.0108_ 3:30  352.11  n/a     .000
02712>           overflow <=    5.0 03:W3-LID-Out  7.46      .754 1978.0618_17:00  352.12  n/a     .000
02713>      (MxStoUsed=.1929E-01  m3, TotOvfVol=.2628E+01  m3, N-Ovf=  102, TotDurOvf=  162.hrs)
02714> R0078:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02715>     CONTINUOUS STANDHYD   5.0 01:W4           10.11      .730 1978.0618_17:00  324.67 .506     .000
02716>       [XIMP=.60:TIMP=.70]
02717>       [LOSS= 2 :CN= 71.0]
02718>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02719>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02720>       [IaRECimp=   1.50: IaRECper=   6.00]
02721>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02722> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
02723> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02724> # Total Volume provided by LID  - 186 m³
02725> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02726> R0078:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02727>     ROUTE RESERVOIR ->    5.0 02:W4         10.11      .730 1978.0618_17:00  324.67  n/a     .000
02728>               out <=     5.0 01:W4-LID      2.63      .001 1978.0108_ 3:30  324.68  n/a     .000
02729>           overflow <=    5.0 03:W4-LID-Out  7.48      .710 1978.0618_17:00  324.67  n/a     .000
02730>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.2428E+01  m3, N-Ovf=  100, TotDurOvf=  163.hrs)
02731> R0078:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02732>     CONTINUOUS STANDHYD   5.0 01:W5            6.20      .435 1978.0618_17:00  311.00 .485     .000
02733>       [XIMP=.57:TIMP=.67]
02734>       [LOSS= 2 :CN= 71.0]
02735>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02736>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02737>       [IaRECimp=   1.50: IaRECper=   6.00]
02738>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02739> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
02740> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02741> # Total Volume provided by LID  - 110 m³
02742> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02743> R0078:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02744>     ROUTE RESERVOIR ->    5.0 02:W5          6.20      .435 1978.0618_17:00  311.00  n/a     .000
02745>               out <=     5.0 01:W5-LID      1.62      .001 1978.0108_ 3:30  311.00  n/a     .000
02746>           overflow <=    5.0 03:W5-LID-Out  4.58      .422 1978.0618_17:00  311.00  n/a     .000
02747>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1424E+01  m3, N-Ovf=   93, TotDurOvf=  162.hrs)
02748> R0078:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02749>     CONTINUOUS STANDHYD   5.0 01:W6            7.81      .648 1978.0618_17:00  375.18 .585     .000
02750>       [XIMP=.71:TIMP=.81]
02751>       [LOSS= 2 :CN= 71.0]
02752>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02753>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02754>       [IaRECimp=   1.50: IaRECper=   6.00]
02755>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02756> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
02757> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02758> # Total Volume provided by LID  - 165 m³
02759> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02760> R0078:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02761>     ROUTE RESERVOIR ->    5.0 02:W6          7.81      .648 1978.0618_17:00  375.18  n/a     .000
02762>               out <=     5.0 01:W6-LID      2.03      .001 1978.0108_ 3:30  375.19  n/a     .000
02763>           overflow <=    5.0 03:W6-LID-Out  5.78      .631 1978.0618_17:00  375.18  n/a     .000
02764>      (MxStoUsed=.165GE-01  m3, TotOvfVol=.2168E+01  m3, N-Ovf=   98, TotDurOvf=  159.hrs)
02765> R0078:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02766>     ADD HYD               5.0 02:W1          5.76      .398 1978.0618_17:00  302.94  n/a     .000
02767>                     +     5.0 02:W2          8.51      .548 1978.0618_17:00  279.22  n/a     .000
02768>                     +     5.0 02:W3         10.03      .772 1978.0618_17:00  352.12  n/a     .000
02769>                     +     5.0 02:W4         10.11      .730 1978.0618_17:00  324.67  n/a     .000
02770>                     +     5.0 02:W5          6.20      .435 1978.0618_17:00  311.00  n/a     .000
02771>                     +     5.0 02:W6          7.81      .648 1978.0618_17:00  375.18  n/a     .000
02772>                   SUM=    5.0 01:BCD-PH3    48.42     3.532 1978.0618_17:00  326.18  n/a     .000
02773> R0078:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02774>     ADD HYD               5.0 02:W1-LID-Out  4.32      .385 1978.0618_17:00  302.94  n/a     .000
02775>                     +     5.0 02:W2-LID-Out  6.36      .529 1978.0618_17:00  279.22  n/a     .000
02776>                     +     5.0 02:W3-LID-Out  7.46      .754 1978.0618_17:00  352.12  n/a     .000
02777>                     +     5.0 02:W4-LID-Out  7.48      .710 1978.0618_17:00  324.67  n/a     .000
02778>                     +     5.0 02:W5-LID-Out  4.58      .422 1978.0618_17:00  311.00  n/a     .000
02779>                     +     5.0 02:W6-LID-Out  5.78      .631 1978.0618_17:00  375.18  n/a     .000
02780>                   SUM=    5.0 01:BCD-PH3-LI  35.98     3.431 1978.0618_17:00  326.09  n/a     .000
02781> #*************************************************************************************************************
02782> #                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
02783> #*************************************************************************************************************
02784> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
02785> #*************************************************************************************************************
02786> R0078:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02787>     CONTINUOUS STANDHYD   5.0 01:INF-W1        5.76      .538 1978.0618_17:00  393.23 .613     .000
02788>       [XIMP=.55:TIMP=.66]
02789>       [LOSS= 2 :CN=100.0]
02790>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02791>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02792>       [IaRECimp=   1.50: IaRECper=   6.00]
02793>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02794> R0078:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02795>     CONTINUOUS STANDHYD   5.0 01:INF-W2        8.51      .768 1978.0618_17:00  376.38 .587     .000
02796>       [XIMP=.50:TIMP=.60]
02797>       [LOSS= 2 :CN=100.0]
02798>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02799>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02800>       [IaRECimp=   1.50: IaRECper=   6.00]
02801>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02802> R0078:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02803>     CONTINUOUS STANDHYD   5.0 01:INF-W3       10.03      .943 1978.0618_17:00  422.77 .659     .000
02804>       [XIMP=.66:TIMP=.76]
02805>       [LOSS= 2 :CN=100.0]
02806>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02807>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02808>       [IaRECimp=   1.50: IaRECper=   6.00]
02809>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02810> R0078:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02811>     CONTINUOUS STANDHYD   5.0 01:INF-W4       10.11      .935 1978.0618_17:00  405.25 .632     .000
02812>       [XIMP=.60:TIMP=.70]
02813>       [LOSS= 2 :CN=100.0]
02814>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02815>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02816>       [IaRECimp=   1.50: IaRECper=   6.00]
02817>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02818> R0078:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02819>     CONTINUOUS STANDHYD   5.0 01:INF-W5        6.20      .580 1978.0618_17:00  396.55 .618     .000
02820>       [XIMP=.57:TIMP=.67]
02821>       [LOSS= 2 :CN=100.0]
02822>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02823>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02824>       [IaRECimp=   1.50: IaRECper=   6.00]
02825>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02826> R0078:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02827>     CONTINUOUS STANDHYD   5.0 01:INF-W6        7.81      .751 1978.0618_17:00  437.59 .682     .000
02828>       [XIMP=.71:TIMP=.81]
02829>       [LOSS= 2 :CN=100.0]
02830>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02831>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02832>       [IaRECimp=   1.50: IaRECper=   6.00]
02833>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
02834> R0078:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02835>     ADD HYD               5.0 02:INF-W1        5.76      .538 1978.0618_17:00  393.23  n/a     .000
02836>                     +     5.0 02:INF-W2        8.51      .768 1978.0618_17:00  376.38  n/a     .000
02837>                     +     5.0 02:INF-W3       10.03      .943 1978.0618_17:00  422.77  n/a     .000
02838>                     +     5.0 02:INF-W4       10.11      .935 1978.0618_17:00  405.25  n/a     .000
02839>                     +     5.0 02:INF-W5        6.20      .580 1978.0618_17:00  396.55  n/a     .000
02840>                     +     5.0 02:INF-W6        7.81      .751 1978.0618_17:00  437.59  n/a     .000
02841>                   SUM=    5.0 01:INF-BCD-PH   48.42     4.516 1978.0618_17:00  406.48  n/a     .000
02842> ##############################################################################
02843> # CONTINUOUS RAINFALL DATA
02844> ##############################################################################
02845>  ** END OF RUN :   78
02846>
02847>  ************************************************************************************
02848>
02849>
02850>
02851>
02852>
02853>  RUN#:COMMAND#
02854> R0079:C00001------------------------------------------------------------------------
02855>      START
02856>       [TZERO =    .00 hrs on 19790101]
02857>       [METOUT=   2   (1=imperial, 2=metric output)]
02858>       [NSTORM=   0 ]
02859>       [NRUN  = 0079 ]
02860> #*************************************************************************************************************
02861> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
02862> #*************************************************************************************************************
02863> #  Project Name: Barrhaven Conservancy Development
02864> #  Project Number: 1474
02865> #  Date        : 2021/Oct/18
02866> #  Modeller    : J.Burnett, P.Eng.
02867> #  Updated     : 2024/Mar/14 [LP]
02868> #  Company     : J.F. Sabourin and Associates
02869> #  License #   : 2582634
02870> #*************************************************************************************************************
02871> # Ottawa International Airport (1967 - 2003)
02872> R0079:C00002------------------------------------------------------------------------
02873>  *  READ AES DATA
02874>       [Filename  = YOW_1967_2007.123                                    ]
02875>       [Start_date= 1979.0101: End_date= 1979.1231]
02876>       [DT= 60.min: Length= 8760.hrs: WetHrs=  546: DryHrs= 8214: PTOT= 866.50)
02877>       Maximum average rainfall intensities over
02878>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02879>        34.90    22.00    14.67     7.33     5.14     2.63     1.75     1.31      .88    mm/hr
02880>        34.90    44.00    44.00    44.00    61.70    63.00    63.00    63.00    63.00    mm
```

```
02881>       19790616 19790616 19790616 19790616 19790914 19790915 19790915 19790915 19790917  date
02882>       Number of rainfall events per following interevent time
02883>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02884>          188      147      129      103       86       60       53       43       36
02885>       Number of events with at least the following durations
02886>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
02887>          187       97       65       25        6        1        0        0        0
02888> R0079:C00003-----------------------------------------------------------------------------
02889>       COMPUTE API
02890>         [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
02891>         [APImax= 78.42: APIavg= 23.13: APImin=  .13]
02892> #*******************************************************************************************************
02893> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)   - POST DEVELOPMENT CONDITIONS
02894> #*******************************************************************************************************
02895> R0079:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02896>     CONTINUOUS STANDHYD    5.0 01:W1            5.76     .431 1979.0616_14:00  455.94 .526    .000
02897>       [XIMP=.55:TIMP=.66]
02898>       [LOSS= 2 :CN= 71.0]
02899>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02900>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
02901>       [IaRECimp=   1.50: IaRECper=   6.00]
02902>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02903> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
02904> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02905> # Total Volume provided by LID  - 96 m³
02906> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02907> R0079:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02908>     ROUTE RESERVOIR ->     5.0 02:W1            5.76     .431 1979.0616_14:00  455.94  n/a     .000
02909>                  out <=    5.0 01:W1-LID        1.04     .001 1979.0101_19:45  455.95  n/a     .000
02910>               overflow <=    5.0 03:W1-LID-Out    4.72     .411 1979.0616_14:00  455.94  n/a     .000
02911>       (MxStoUsed=.9599E-02  m3, TotOvfVol=.2151E+01  m3, N-Ovf=  119, TotDurOvf=  213.hrs)
02912> R0079:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02913>     CONTINUOUS STANDHYD    5.0 01:W2            8.51     .578 1979.0616_14:00  425.51 .491    .000
02914>       [XIMP=.50:TIMP=.60]
02915>       [LOSS= 2 :CN= 71.0]
02916>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02917>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
02918>       [IaRECimp=   1.50: IaRECper=   6.00]
02919>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02920> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
02921> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02922> # Total Volume provided by LID  - 131 m³
02923> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02924> R0079:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02925>     ROUTE RESERVOIR ->     5.0 02:W2            8.51     .578 1979.0616_14:00  425.51  n/a     .000
02926>                  out <=    5.0 01:W2-LID        1.54     .001 1979.0101_19:55  425.51  n/a     .000
02927>               overflow <=    5.0 03:W2-LID-Out    6.97     .557 1979.0616_14:00  425.51  n/a     .000
02928>       (MxStoUsed=.1309E-01  m3, TotOvfVol=.2966E+01  m3, N-Ovf=  124, TotDurOvf=  214.hrs)
02929> R0079:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02930>     CONTINUOUS STANDHYD    5.0 01:W3            10.03     .788 1979.0616_14:00  516.68 .596    .000
02931>       [XIMP=.66:TIMP=.76]
02932>       [LOSS= 2 :CN= 71.0]
02933>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02934>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
02935>       [IaRECimp=   1.50: IaRECper=   6.00]
02936>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02937> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
02938> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02939> # Total Volume provided by LID  - 193 m³
02940> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02941> R0079:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02942>     ROUTE RESERVOIR ->     5.0 02:W3            10.03     .788 1979.0616_14:00  516.68  n/a     .000
02943>                  out <=    5.0 01:W3-LID        1.92     .001 1979.0101_19:45  516.68  n/a     .000
02944>               overflow <=    5.0 03:W3-LID-Out    8.11     .767 1979.0616_14:00  516.68  n/a     .000
02945>       (MxStoUsed=.1930E-01  m3, TotOvfVol=.4192E+01  m3, N-Ovf=  125, TotDurOvf=  212.hrs)
02946> R0079:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02947>     CONTINUOUS STANDHYD    5.0 01:W4            10.11     .753 1979.0616_14:00  482.39 .557    .000
02948>       [XIMP=.60:TIMP=.70]
02949>       [LOSS= 2 :CN= 71.0]
02950>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02951>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
02952>       [IaRECimp=   1.50: IaRECper=   6.00]
02953>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02954> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
02955> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02956> # Total Volume provided by LID  - 186 m³
02957> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02958> R0079:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02959>     ROUTE RESERVOIR ->     5.0 02:W4            10.11     .753 1979.0616_14:00  482.39  n/a     .000
02960>                  out <=    5.0 01:W4-LID        1.94     .001 1979.0101_19:55  482.40  n/a     .000
02961>               overflow <=    5.0 03:W4-LID-Out    8.17     .729 1979.0616_14:00  482.39  n/a     .000
02962>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.3942E+01  m3, N-Ovf=  128, TotDurOvf=  211.hrs)
02963> R0079:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02964>     CONTINUOUS STANDHYD    5.0 01:W5             6.20     .468 1979.0616_14:00  465.26 .537    .000
02965>       [XIMP=.57:TIMP=.67]
02966>       [LOSS= 2 :CN= 71.0]
02967>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02968>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
02969>       [IaRECimp=   1.50: IaRECper=   6.00]
02970>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02971> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
02972> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02973> # Total Volume provided by LID  - 110 m³
02974> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02975> R0079:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02976>     ROUTE RESERVOIR ->     5.0 02:W5             6.20     .468 1979.0616_14:00  465.26  n/a     .000
02977>                  out <=    5.0 01:W5-LID        1.18     .001 1979.0101_19:50  465.25  n/a     .000
02978>               overflow <=    5.0 03:W5-LID-Out    5.02     .448 1979.0616_14:00  465.26  n/a     .000
02979>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.2334E+01  m3, N-Ovf=  117, TotDurOvf=  209.hrs)
02980> R0079:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02981>     CONTINUOUS STANDHYD    5.0 01:W6             7.81     .657 1979.0616_14:00  545.65 .630    .000
02982>       [XIMP=.71:TIMP=.81]
02983>       [LOSS= 2 :CN= 71.0]
02984>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02985>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
02986>       [IaRECimp=   1.50: IaRECper=   6.00]
02987>       [SMIN= 41.38: SMAX=275.84: SK= .030]
02988> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
02989> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
02990> # Total Volume provided by LID  - 165 m³
02991> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
02992> R0079:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02993>     ROUTE RESERVOIR ->     5.0 02:W6             7.81     .657 1979.0616_14:00  545.65  n/a     .000
02994>                  out <=    5.0 01:W6-LID        1.53     .001 1979.0101_19:45  545.66  n/a     .000
02995>               overflow <=    5.0 03:W6-LID-Out    6.28     .637 1979.0616_14:00  545.65  n/a     .000
02996>       (MxStoUsed=.1649E-01  m3, TotOvfVol=.3428E+01  m3, N-Ovf=  124, TotDurOvf=  209.hrs)
02997> R0079:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02998>     ADD HYD                5.0 02:W1             5.76     .431 1979.0616_14:00  455.94  n/a     .000
02999>                  +         5.0 02:W2             8.51     .578 1979.0616_14:00  425.51  n/a     .000
03000>                  +         5.0 02:W3            10.03     .788 1979.0616_14:00  516.68  n/a     .000
03001>                  +         5.0 02:W4            10.11     .753 1979.0616_14:00  482.39  n/a     .000
03002>                  +         5.0 02:W5             6.20     .468 1979.0616_14:00  465.26  n/a     .000
03003>                  +         5.0 02:W6             7.81     .657 1979.0616_14:00  545.65  n/a     .000
03004>                SUM=        5.0 01:BCD-PH3       48.42    3.675 1979.0616_14:00  484.36  n/a     .000
03005> R0079:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03006>     ADD HYD                5.0 02:W1-LID-Out     4.72     .411 1979.0616_14:00  455.94  n/a     .000
03007>                  +         5.0 02:W2-LID-Out     6.97     .557 1979.0616_14:05  425.51  n/a     .000
03008>                  +         5.0 02:W3-LID-Out     8.11     .767 1979.0616_14:00  516.68  n/a     .000
03009>                  +         5.0 02:W4-LID-Out     8.17     .729 1979.0616_14:00  482.39  n/a     .000
03010>                  +         5.0 02:W5-LID-Out     5.02     .448 1979.0616_14:00  465.26  n/a     .000
03011>                  +         5.0 02:W6-LID-Out     6.28     .637 1979.0616_14:00  545.65  n/a     .000
03012>                SUM=        5.0 01:BCD-PH3-LI    39.27    3.547 1979.0616_14:00  484.14  n/a     .000
03013> #*******************************************************************************************************
03014> #                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)   - POST DEVELOPMENT CONDITIONS
03015> #*******************************************************************************************************
03016> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
03017> #*******************************************************************************************************
03018> R0079:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03019>     CONTINUOUS STANDHYD    5.0 01:INF-W1        5.76     .538 1979.0616_14:00  577.15 .666    .000
03020>       [XIMP=.55:TIMP=.66]
03021>       [LOSS= 2 :CN=100.0]
03022>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03023>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03024>       [IaRECimp=   1.50: IaRECper=   6.00]
03025>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03026> R0079:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03027>     CONTINUOUS STANDHYD    5.0 01:INF-W2        8.51     .780 1979.0616_14:00  557.82 .644    .000
03028>       [XIMP=.50:TIMP=.60]
03029>       [LOSS= 2 :CN=100.0]
03030>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03031>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03032>       [IaRECimp=   1.50: IaRECper=   6.00]
03033>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03034> R0079:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03035>     CONTINUOUS STANDHYD    5.0 01:INF-W3        10.03     .940 1979.0616_14:00  610.15 .704    .000
03036>       [XIMP=.66:TIMP=.76]
03037>       [LOSS= 2 :CN=100.0]
03038>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03039>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03040>       [IaRECimp=   1.50: IaRECper=   6.00]
03041>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03042> R0079:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03043>     CONTINUOUS STANDHYD    5.0 01:INF-W4        10.11     .939 1979.0616_14:00  590.39 .681    .000
03044>       [XIMP=.60:TIMP=.70]
03045>       [LOSS= 2 :CN=100.0]
03046>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03047>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03048>       [IaRECimp=   1.50: IaRECper=   6.00]
03049>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03050> R0079:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03051>     CONTINUOUS STANDHYD    5.0 01:INF-W5        6.20     .579 1979.0616_14:00  580.57 .670    .000
03052>       [XIMP=.57:TIMP=.67]
03053>       [LOSS= 2 :CN=100.0]
03054>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03055>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03056>       [IaRECimp=   1.50: IaRECper=   6.00]
03057>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03058> R0079:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03059>     CONTINUOUS STANDHYD    5.0 01:INF-W6        7.81     .741 1979.0616_14:00  626.86 .723    .000
03060>       [XIMP=.71:TIMP=.81]
03061>       [LOSS= 2 :CN=100.0]
03062>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03063>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03064>       [IaRECimp=   1.50: IaRECper=   6.00]
03065>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03066> R0079:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03067>     ADD HYD                5.0 02:INF-W1        5.76     .538 1979.0616_14:00  577.15  n/a     .000
03068>                  +         5.0 02:INF-W2        8.51     .780 1979.0616_14:00  557.82  n/a     .000
03069>                  +         5.0 02:INF-W3       10.03     .940 1979.0616_14:00  610.15  n/a     .000
03070>                  +         5.0 02:INF-W4       10.11     .939 1979.0616_14:00  590.39  n/a     .000
03071>                  +         5.0 02:INF-W5        6.20     .579 1979.0616_14:00  580.57  n/a     .000
03072>                  +         5.0 02:INF-W6        7.81     .741 1979.0616_14:00  626.86  n/a     .000
03073>                SUM=        5.0 01:INF-BCD-PH   48.42    4.516 1979.0616_14:00  591.81  n/a     .000
03074> ################################################################################
03075> # CONTINUOUS RAINFALL DATA
03076> ################################################################################
03077>   ** END OF RUN :  79
03078>
03079> *******************************************************************************************************
03080>
03081>
03082>
03083>
03084>
03085>  RUN#:COMMAND#
03086> R0080:C00001-----------------------------------------------------------------------------
03087>       START
03088>       [TZERO =    .00 hrs on 19801001]
03089>       [METOUT=    2     (1=imperial, 2=metric output)]
03090>       [NSTORM=    0 ]
03091>       [NRUN  = 0080 ]
03092> #*******************************************************************************************************
03093> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03094> #*******************************************************************************************************
03095> #  Project Name: Barrhaven Conservancy Development
03096> #  Project Number: 1474
03097> #  Date        : 2021/Oct/18
03098> #  Modeller    : J.Burnett, P.Eng.
03099> #  Updated     : 2024/Mar/14 [LP]
03100> #  Company     : J.F. Sabourin and Associates
03101> #  License #   : 2582634
03102> #*******************************************************************************************************
03103> # Ottawa International Airport (1967 - 2003)
03104> R0080:C00002-----------------------------------------------------------------------------
03105>   *  READ AES DATA
03106>       [Filename  = YOW_1967_2007.123                                          ]
03107>       [Start_date= 1980.0101: End_date= 1980.1230]
03108>       [DT= 60.min: Length= 8760.hrs: WetHrs=  427: DryHrs= 8333: PTOT= 622.00)
03109>       Maximum average rainfall intensities over
03110>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03111>        15.00     9.20     6.50     4.72     3.57     1.97     1.35     1.01      .86    mm/hr
03112>        15.00    18.40    19.50    28.30    42.80    47.20    48.60    48.60    62.00    mm
03113>       19800830 19800830 19801025 19801025 19801026 19801026 19801026 19801027 19800902  date
03114>       Number of rainfall events per following interevent time
03115>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03116>          151      125      112       93       79       62       49       44       28
03117>       Number of events with at least the following durations
03118>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03119>          150       85       54       16        4        0        0        0        0
03120> R0080:C00003-----------------------------------------------------------------------------
03121>       COMPUTE API
03122>         [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03123>         [APImax= 68.72: APIavg= 17.50: APImin=  .06]
03124> #*******************************************************************************************************
03125> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)   - POST DEVELOPMENT CONDITIONS
03126> #*******************************************************************************************************
03127> R0080:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03128>     CONTINUOUS STANDHYD    5.0 01:W1            5.76     .136 1980.0830_14:00  292.96 .471    .000
03129>       [XIMP=.55:TIMP=.66]
03130>       [LOSS= 2 :CN= 71.0]
03131>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03132>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03133>       [IaRECimp=   1.50: IaRECper=   6.00]
03134>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03135> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
03136> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03137> # Total Volume provided by LID  - 96 m³
03138> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03139> R0080:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03140>     ROUTE RESERVOIR ->     5.0 02:W1            5.76     .136 1980.0830_14:00  292.96  n/a     .000
03141>                  out <=    5.0 01:W1-LID        1.42     .001 1980.0111_21:05  292.97  n/a     .000
03142>               overflow <=    5.0 03:W1-LID-Out    4.34     .135 1980.0830_14:00  292.96  n/a     .000
03143>       (MxStoUsed=.9599E-02  m3, TotOvfVol=.1272E+01  m3, N-Ovf=  121, TotDurOvf=  170.hrs)
03144> R0080:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03145>     CONTINUOUS STANDHYD    5.0 01:W2            8.51     .182 1980.0830_14:00  270.58 .435    .000
03146>       [XIMP=.50:TIMP=.60]
03147>       [LOSS= 2 :CN= 71.0]
03148>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03149>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03150>       [IaRECimp=   1.50: IaRECper=   6.00]
03151>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03152> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
03153> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03154> # Total Volume provided by LID  - 131 m³
03155> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03156> R0080:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03157>     ROUTE RESERVOIR ->     5.0 02:W2            8.51     .182 1980.0830_14:00  270.58  n/a     .000
03158>                  out <=    5.0 01:W2-LID        2.11     .001 1980.0111_21:10  270.58  n/a     .000
03159>               overflow <=    5.0 03:W2-LID-Out    6.40     .180 1980.0830_14:00  270.58  n/a     .000
03160>       (MxStoUsed=.1309E-01  m3, TotOvfVol=.1731E+01  m3, N-Ovf=  125, TotDurOvf=  169.hrs)
03161> R0080:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03162>     CONTINUOUS STANDHYD    5.0 01:W3            10.03     .279 1980.0830_14:00  338.87 .545    .000
03163>       [XIMP=.66:TIMP=.76]
03164>       [LOSS= 2 :CN= 71.0]
03165>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03166>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03167>       [IaRECimp=   1.50: IaRECper=   6.00]
03168>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03169> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
03170> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03171> # Total Volume provided by LID  - 193 m³
03172> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03173> R0080:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03174>     ROUTE RESERVOIR ->     5.0 02:W3            10.03     .279 1980.0830_14:00  338.87  n/a     .000
03175>                  out <=    5.0 01:W3-LID        2.55     .001 1980.0111_21:05  338.86  n/a     .000
03176>               overflow <=    5.0 03:W3-LID-Out    7.48     .276 1980.0830_14:00  338.87  n/a     .000
03177>       (MxStoUsed=.1930E-01  m3, TotOvfVol=.2535E+01  m3, N-Ovf=  119, TotDurOvf=  166.hrs)
03178> R0080:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03179>     CONTINUOUS STANDHYD    5.0 01:W4            10.11     .257 1980.0830_14:00  313.16 .503    .000
03180>       [XIMP=.60:TIMP=.70]
03181>       [LOSS= 2 :CN= 71.0]
03182>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03183>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03184>       [IaRECimp=   1.50: IaRECper=   6.00]
03185>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03186> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
03187> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03188> # Total Volume provided by LID  - 186 m³
03189> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03190> R0080:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03191>     ROUTE RESERVOIR ->     5.0 02:W4            10.11     .257 1980.0830_14:00  313.16  n/a     .000
03192>                  out <=    5.0 01:W4-LID        2.60     .001 1980.0111_21:10  313.17  n/a     .000
03193>               overflow <=    5.0 03:W4-LID-Out    7.51     .253 1980.0830_14:00  313.16  n/a     .000
03194>       (MxStoUsed=.1859E-01  m3, TotOvfVol=.2351E+01  m3, N-Ovf=  119, TotDurOvf=  166.hrs)
03195> R0080:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03196>     CONTINUOUS STANDHYD    5.0 01:W5             6.20     .151 1980.0830_14:00  300.36 .483    .000
03197>       [XIMP=.57:TIMP=.67]
03198>       [LOSS= 2 :CN= 71.0]
03199>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03200>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03201>       [IaRECimp=   1.50: IaRECper=   6.00]
03202>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03203> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
03204> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03205> # Total Volume provided by LID  - 110 m³
03206> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03207> R0080:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03208>     ROUTE RESERVOIR ->     5.0 02:W5             6.20     .151 1980.0830_14:00  300.36  n/a     .000
03209>                  out <=    5.0 01:W5-LID        1.60     .001 1980.0111_21:10  300.35  n/a     .000
03210>               overflow <=    5.0 03:W5-LID-Out    4.60     .149 1980.0830_14:00  300.36  n/a     .000
03211>       (MxStoUsed=.1099E-01  m3, TotOvfVol=.1382E+01  m3, N-Ovf=  118, TotDurOvf=  164.hrs)
03212> R0080:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03213>     CONTINUOUS STANDHYD    5.0 01:W6             7.81     .234 1980.0830_14:00  360.51 .580    .000
03214>       [XIMP=.71:TIMP=.81]
03215>       [LOSS= 2 :CN= 71.0]
03216>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03217>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03218>       [IaRECimp=   1.50: IaRECper=   6.00]
03219>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03220> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
03221> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03222> # Total Volume provided by LID  - 165 m³
03223> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03224> R0080:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03225>     ROUTE RESERVOIR ->     5.0 02:W6             7.81     .234 1980.0830_14:00  360.51  n/a     .000
03226>                  out <=    5.0 01:W6-LID        2.02     .001 1980.0111_21:05  360.52  n/a     .000
03227>               overflow <=    5.0 03:W6-LID-Out    5.79     .232 1980.0830_14:00  360.51  n/a     .000
03228>       (MxStoUsed=.1650E-01  m3, TotOvfVol=.2088E+01  m3, N-Ovf=  121, TotDurOvf=  162.hrs)
03229> R0080:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03230>     ADD HYD                5.0 02:W1             5.76     .136 1980.0830_14:00  292.96  n/a     .000
03231>                  +         5.0 02:W2             8.51     .182 1980.0830_14:00  270.58  n/a     .000
03232>                  +         5.0 02:W3            10.03     .279 1980.0830_14:00  338.87  n/a     .000
03233>                  +         5.0 02:W4            10.11     .257 1980.0830_14:00  313.16  n/a     .000
03234>                  +         5.0 02:W5             6.20     .151 1980.0830_14:00  300.36  n/a     .000
03235>                  +         5.0 02:W6             7.81     .234 1980.0830_14:00  360.51  n/a     .000
03236>                SUM=        5.0 01:BCD-PH3       48.42    1.239 1980.0830_14:00  314.60  n/a     .000
03237> R0080:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03238>     ADD HYD                5.0 02:W1-LID-Out     4.34     .135 1980.0830_14:00  292.96  n/a     .000
03239>                  +         5.0 02:W2-LID-Out     6.40     .180 1980.0830_14:00  270.58  n/a     .000
03240>                  +         5.0 02:W3-LID-Out     7.48     .276 1980.0830_14:00  338.87  n/a     .000
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03241>                    +     5.0 02:W4-LID-Out     7.51      .253 1980.0830_14:00  313.16  n/a     .000
03242>                    +     5.0 02:W5-LID-Out     4.60      .149 1980.0830_14:00  300.36  n/a     .000
03243>                    +     5.0 02:W6-LID-Out     5.79      .232 1980.0830_14:00  360.51  n/a     .000
03244>                  SUM=    5.0 01:BCD-PH3-LI    36.12    1.225 1980.0830_14:00  314.48  n/a     .000
03245> #*******************************************************************************************************
03246> #                 Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
03247> #*******************************************************************************************************
03248> #                 Set infiltration to 0 (CN = 99.99) for water balance analysis
03249> #*******************************************************************************************************
03250> R0080:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03251>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76      .181 1980.0830_14:00  374.57 .602     .000
03252>       [XIMP=.55:TIMP=.66]
03253>       [LOSS= 2 :CN=100.0]
03254>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03255>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03256>       [IaRECimp=   1.50: IaRECper=   6.00]
03257>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03258> R0080:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03259>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51      .251 1980.0830_14:00  358.25 .576     .000
03260>       [XIMP=.50:TIMP=.60]
03261>       [LOSS= 2 :CN=100.0]
03262>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03263>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03264>       [IaRECimp=   1.50: IaRECper=   6.00]
03265>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03266> R0080:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03267>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03      .339 1980.0830_14:00  402.83 .648     .000
03268>       [XIMP=.66:TIMP=.76]
03269>       [LOSS= 2 :CN=100.0]
03270>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03271>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03272>       [IaRECimp=   1.50: IaRECper=   6.00]
03273>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03274> R0080:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03275>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11      .325 1980.0830_14:00  385.99 .621     .000
03276>       [XIMP=.60:TIMP=.70]
03277>       [LOSS= 2 :CN=100.0]
03278>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03279>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03280>       [IaRECimp=   1.50: IaRECper=   6.00]
03281>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03282> R0080:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03283>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .197 1980.0830_14:00  377.63 .607     .000
03284>       [XIMP=.57:TIMP=.67]
03285>       [LOSS= 2 :CN=100.0]
03286>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03287>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03288>       [IaRECimp=   1.50: IaRECper=   6.00]
03289>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03290> R0080:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03291>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .277 1980.0830_14:00  417.08 .671     .000
03292>       [XIMP=.71:TIMP=.81]
03293>       [LOSS= 2 :CN=100.0]
03294>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03295>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03296>       [IaRECimp=   1.50: IaRECper=   6.00]
03297>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03298> R0080:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03299>     ADD HYD                5.0 02:INF-W1          5.76      .181 1980.0830_14:00  374.57  n/a     .000
03300>                        +   5.0 02:INF-W2          8.51      .251 1980.0830_14:00  358.25  n/a     .000
03301>                        +   5.0 02:INF-W3         10.03      .339 1980.0830_14:00  402.83  n/a     .000
03302>                        +   5.0 02:INF-W4         10.11      .325 1980.0830_14:00  385.99  n/a     .000
03303>                        +   5.0 02:INF-W5          6.20      .197 1980.0830_14:00  377.63  n/a     .000
03304>                        +   5.0 02:INF-W6          7.81      .277 1980.0830_14:00  417.08  n/a     .000
03305>                      SUM=  5.0 01:INF-BCD-PH     48.42    1.570 1980.0830_14:00  387.19  n/a     .000
03306> ##############################################################################
03307> # CONTINUOUS RAINFALL DATA
03308> ##############################################################################
03309>   ** END OF RUN :   80
03310>
03311> ***********************************************************************************************
03312>
03313>
03314>
03315>
03316>
03317>  RUN#:COMMAND#
03318> R0081:C00001------------------------------------------------------------------------------------
03319>       START
03320>       [TZERO =    .00 hrs on 19810101]
03321>       [METOUT=   2    (1=imperial, 2=metric output)]
03322>       [NSTORM=   0 ]
03323>       [NRUN   = 0081 ]
03324> #*******************************************************************************************************
03325> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03326> #*******************************************************************************************************
03327> #  Project Name: Barrhaven Conservancy Development
03328> #  Project Number: 1474
03329> #  Date       : 2021/Oct/18
03330> #  Modeller   : J.Burnett, P.Eng.
03331> #  Updated    : 2024/Mar/14 [LP]
03332> #  Company    : J.F. Sabourin and Associates
03333> #  License #  : 2582634
03334> #*******************************************************************************************************
03335> # Ottawa International Airport (1967 - 2003)
03336> R0081:C00002------------------------------------------------------------------------------------
03337>  *  READ AES DATA
03338>       [Filename  = YOW_1967_2007.123                                                  ]
03339>       [Start_date= 1981.0101: End_date= 1981.1231]
03340>       (DT= 60.min: Length= 8760.hrs: WetHrs=  641: DryHrs= 8119: PTOT= 936.40)
03341>       Maximum average rainfall intensities over
03342>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03343>        35.30    31.85    26.20    18.15     9.27     4.83     3.22     2.41     1.62    mm/hr
03344>        35.30    63.70    78.60   108.90   111.30   115.90   115.90   115.90   116.70    mm
03345>       19810805 19810805 19810805 19810805 19810805 19810805 19810805 19810806 19810805  date
03346>       Number of rainfall events per following interevent time
03347>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03348>          226      171      136      109       83       68       59       47       30
03349>       Number of events with at least the following durations
03350>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03351>          225      128       79       28        7        0        0        0        0
03352> R0081:C00003------------------------------------------------------------------------------------
03353>       COMPUTE API
03354>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03355>       [APImax=123.49: APIavg= 25.69: APImin=   .26]
03356> #*******************************************************************************************************
03357> #                 Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
03358> #*******************************************************************************************************
03359> R0081:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03360>     CONTINUOUS STANDHYD    5.0 01:W1              5.76      .552 1981.0805_ 2:00  494.90 .529     .000
03361>       [XIMP=.55:TIMP=.66]
03362>       [LOSS= 2 :CN= 71.0]
03363>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03364>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03365>       [IaRECimp=   1.50: IaRECper=   6.00]
03366>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03367> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
03368> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03369> # Total Volume provided by LID  - 96 m³
03370> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03371> R0081:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03372>       ROUTE RESERVOIR ->     5.0 02:W1              5.76      .552 1981.0805_ 2:00  494.90  n/a     .000
03373>                          out <=    5.0 01:W1-LID         1.11      .001 1981.0202_12:25  494.91  n/a     .000
03374>                    overflow <=     5.0 03:W1-LID-Out     4.65      .528 1981.0805_ 2:00  494.90  n/a     .000
03375>       (MxStoUsed=.9588E-02  m3, TotOvfVol=.2299E+01  m3, N-Ovf=  151, TotDurOvf=  223.hrs)
03376> R0081:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03377>     CONTINUOUS STANDHYD    5.0 01:W2              8.51      .812 1981.0805_ 2:05  464.51 .496     .000
03378>       [XIMP=.50:TIMP=.60]
03379>       [LOSS= 2 :CN= 71.0]
03380>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03381>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03382>       [IaRECimp=   1.50: IaRECper=   6.00]
03383>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03384> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
03385> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03386> # Total Volume provided by LID  - 131 m³
03387> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03388> R0081:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03389>       ROUTE RESERVOIR ->     5.0 02:W2              8.51      .812 1981.0805_ 2:05  464.51  n/a     .000
03390>                          out <=    5.0 01:W2-LID         1.64      .001 1981.0202_12:35  464.52  n/a     .000
03391>                    overflow <=     5.0 03:W2-LID-Out     6.87      .807 1981.0805_ 2:05  464.51  n/a     .000
03392>       (MxStoUsed=.1309E-01  m3, TotOvfVol=.3191E+01  m3, N-Ovf=  152, TotDurOvf=  223.hrs)
03393> R0081:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03394>     CONTINUOUS STANDHYD    5.0 01:W3             10.03      .969 1981.0805_ 2:00  555.60 .593     .000
03395>       [XIMP=.66:TIMP=.76]
03396>       [LOSS= 2 :CN= 71.0]
03397>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03398>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03399>       [IaRECimp=   1.50: IaRECper=   6.00]
03400>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03401> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
03402> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03403> # Total Volume provided by LID  - 193 m³
03404> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03405> R0081:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03406>       ROUTE RESERVOIR ->     5.0 02:W3             10.03      .969 1981.0805_ 2:00  555.60  n/a     .000
03407>                          out <=    5.0 01:W3-LID         2.08      .001 1981.0202_12:25  555.60  n/a     .000
03408>                    overflow <=     5.0 03:W3-LID-Out     7.95      .952 1981.0805_ 2:05  555.60  n/a     .000
03409>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.4416E+01  m3, N-Ovf=  151, TotDurOvf=  222.hrs)
03410> R0081:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03411>     CONTINUOUS STANDHYD    5.0 01:W4             10.11      .968 1981.0805_ 2:00  521.27 .557     .000
03412>       [XIMP=.60:TIMP=.70]
03413>       [LOSS= 2 :CN= 71.0]
03414>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03415>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03416>       [IaRECimp=   1.50: IaRECper=   6.00]
03417>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03418> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
03419> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03420> # Total Volume provided by LID  - 186 m³

03421> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03422> R0081:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03423>       ROUTE RESERVOIR ->     5.0 02:W4             10.11      .968 1981.0805_ 2:00  521.27  n/a     .000
03424>                          out <=    5.0 01:W4-LID         2.09      .001 1981.0202_12:35  521.27  n/a     .000
03425>                    overflow <=     5.0 03:W4-LID-Out     8.02      .959 1981.0805_ 2:05  521.27  n/a     .000
03426>       (MxStoUsed=.1858E-01  m3, TotOvfVol=.4181E+01  m3, N-Ovf=  153, TotDurOvf=  221.hrs)
03427> R0081:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03428>     CONTINUOUS STANDHYD    5.0 01:W5              6.20      .594 1981.0805_ 2:00  504.21 .538     .000
03429>       [XIMP=.57:TIMP=.67]
03430>       [LOSS= 2 :CN= 71.0]
03431>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03432>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03433>       [IaRECimp=   1.50: IaRECper=   6.00]
03434>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03435> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
03436> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03437> # Total Volume provided by LID  - 110 m³
03438> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03439> R0081:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03440>       ROUTE RESERVOIR ->     5.0 02:W5              6.20      .594 1981.0805_ 2:00  504.21  n/a     .000
03441>                          out <=    5.0 01:W5-LID         1.27      .001 1981.0202_12:35  504.21  n/a     .000
03442>                    overflow <=     5.0 03:W5-LID-Out     4.93      .569 1981.0805_ 2:00  504.21  n/a     .000
03443>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.2484E+01  m3, N-Ovf=  145, TotDurOvf=  219.hrs)
03444> R0081:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03445>     CONTINUOUS STANDHYD    5.0 01:W6              7.81      .761 1981.0805_ 2:00  584.48 .624     .000
03446>       [XIMP=.71:TIMP=.81]
03447>       [LOSS= 2 :CN= 71.0]
03448>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03449>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03450>       [IaRECimp=   1.50: IaRECper=   6.00]
03451>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03452> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
03453> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03454> # Total Volume provided by LID  - 165 m³
03455> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03456> R0081:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03457>       ROUTE RESERVOIR ->     5.0 02:W6              7.81      .761 1981.0805_ 2:00  584.48  n/a     .000
03458>                          out <=    5.0 01:W6-LID         1.66      .001 1981.0202_12:30  584.48  n/a     .000
03459>                    overflow <=     5.0 03:W6-LID-Out     6.15      .742 1981.0805_ 2:05  584.48  n/a     .000
03460>       (MxStoUsed=.1649E-01  m3, TotOvfVol=.3593E+01  m3, N-Ovf=  158, TotDurOvf=  220.hrs)
03461> R0081:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03462>     ADD HYD                5.0 02:W1              5.76      .552 1981.0805_ 2:00  494.90  n/a     .000
03463>                        +   5.0 02:W2              8.51      .812 1981.0805_ 2:05  464.51  n/a     .000
03464>                        +   5.0 02:W3             10.03      .969 1981.0805_ 2:00  555.60  n/a     .000
03465>                        +   5.0 02:W4             10.11      .968 1981.0805_ 2:00  521.27  n/a     .000
03466>                        +   5.0 02:W5              6.20      .594 1981.0805_ 2:00  504.21  n/a     .000
03467>                        +   5.0 02:W6              7.81      .761 1981.0805_ 2:00  584.48  n/a     .000
03468>                      SUM=  5.0 01:BCD-PH3        48.42    4.648 1981.0805_ 2:00  523.28  n/a     .000
03469> R0081:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03470>     ADD HYD                5.0 02:W1-LID-Out      4.65      .528 1981.0805_ 2:00  494.90  n/a     .000
03471>                        +   5.0 02:W2-LID-Out      6.87      .807 1981.0805_ 2:05  464.51  n/a     .000
03472>                        +   5.0 02:W3-LID-Out      7.95      .952 1981.0805_ 2:05  555.60  n/a     .000
03473>                        +   5.0 02:W4-LID-Out      8.02      .959 1981.0805_ 2:05  521.27  n/a     .000
03474>                        +   5.0 02:W5-LID-Out      4.93      .569 1981.0805_ 2:00  504.21  n/a     .000
03475>                        +   5.0 02:W6-LID-Out      6.15      .742 1981.0805_ 2:05  584.48  n/a     .000
03476>                      SUM=  5.0 01:BCD-PH3-LI     38.56    4.534 1981.0805_ 2:05  522.96  n/a     .000
03477> #*******************************************************************************************************
03478> #                 Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
03479> #*******************************************************************************************************
03480> #                 Set infiltration to 0 (CN = 99.99) for water balance analysis
03481> #*******************************************************************************************************
03482> R0081:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03483>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76      .560 1981.0805_ 2:00  603.20 .644     .000
03484>       [XIMP=.55:TIMP=.66]
03485>       [LOSS= 2 :CN=100.0]
03486>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03487>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03488>       [IaRECimp=   1.50: IaRECper=   6.00]
03489>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03490> R0081:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03491>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51      .824 1981.0805_ 2:00  582.16 .622     .000
03492>       [XIMP=.50:TIMP=.60]
03493>       [LOSS= 2 :CN=100.0]
03494>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03495>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03496>       [IaRECimp=   1.50: IaRECper=   6.00]
03497>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03498> R0081:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03499>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03      .976 1981.0805_ 2:00  639.50 .683     .000
03500>       [XIMP=.66:TIMP=.76]
03501>       [LOSS= 2 :CN=100.0]
03502>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03503>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03504>       [IaRECimp=   1.50: IaRECper=   6.00]
03505>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03506> R0081:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03507>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11      .982 1981.0805_ 2:00  617.81 .660     .000
03508>       [XIMP=.60:TIMP=.70]
03509>       [LOSS= 2 :CN=100.0]
03510>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03511>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03512>       [IaRECimp=   1.50: IaRECper=   6.00]
03513>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03514> R0081:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03515>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .603 1981.0805_ 2:00  607.05 .648     .000
03516>       [XIMP=.57:TIMP=.67]
03517>       [LOSS= 2 :CN=100.0]
03518>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03519>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03520>       [IaRECimp=   1.50: IaRECper=   6.00]
03521>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03522> R0081:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03523>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .762 1981.0805_ 2:00  657.84 .703     .000
03524>       [XIMP=.71:TIMP=.81]
03525>       [LOSS= 2 :CN=100.0]
03526>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03527>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03528>       [IaRECimp=   1.50: IaRECper=   6.00]
03529>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03530> R0081:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03531>     ADD HYD                5.0 02:INF-W1          5.76      .560 1981.0805_ 2:00  603.20  n/a     .000
03532>                        +   5.0 02:INF-W2          8.51      .824 1981.0805_ 2:00  582.16  n/a     .000
03533>                        +   5.0 02:INF-W3         10.03      .976 1981.0805_ 2:00  639.50  n/a     .000
03534>                        +   5.0 02:INF-W4         10.11      .982 1981.0805_ 2:00  617.82  n/a     .000
03535>                        +   5.0 02:INF-W5          6.20      .603 1981.0805_ 2:00  607.05  n/a     .000
03536>                        +   5.0 02:INF-W6          7.81      .762 1981.0805_ 2:00  657.84  n/a     .000
03537>                      SUM=  5.0 01:INF-BCD-PH     48.42    4.708 1981.0805_ 2:00  619.38  n/a     .000
03538> ##############################################################################
03539> # CONTINUOUS RAINFALL DATA
03540> ##############################################################################
03541>   ** END OF RUN :   81
03542>
03543> ***********************************************************************************************
03544>
03545>
03546>
03547>
03548>
03549>  RUN#:COMMAND#
03550> R0082:C00001------------------------------------------------------------------------------------
03551>       START
03552>       [TZERO =    .00 hrs on 19820101]
03553>       [METOUT=   2    (1=imperial, 2=metric output)]
03554>       [NSTORM=   0 ]
03555>       [NRUN   = 0082 ]
03556> #*******************************************************************************************************
03557> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03558> #*******************************************************************************************************
03559> #  Project Name: Barrhaven Conservancy Development
03560> #  Project Number: 1474
03561> #  Date       : 2021/Oct/18
03562> #  Modeller   : J.Burnett, P.Eng.
03563> #  Updated    : 2024/Mar/14 [LP]
03564> #  Company    : J.F. Sabourin and Associates
03565> #  License #  : 2582634
03566> #*******************************************************************************************************
03567> # Ottawa International Airport (1967 - 2003)
03568> R0082:C00002------------------------------------------------------------------------------------
03569>  *  READ AES DATA
03570>       [Filename  = YOW_1967_2007.123                                                  ]
03571>       [Start_date= 1982.0101: End_date= 1982.1231]
03572>       (DT= 60.min: Length= 8760.hrs: WetHrs=  436: DryHrs= 8324: PTOT= 596.10)
03573>       Maximum average rainfall intensities over
03574>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03575>        19.80    10.75     7.60     5.83     3.36     1.68     1.12      .96      .80    mm/hr
03576>        19.80    21.50    22.80    35.00    40.30    40.30    40.30    46.30    57.30    mm
03577>       19820801 19820901 19820825 19820825 19820825 19820826 19820826 19820825 19820825  date
03578>       Number of rainfall events per following interevent time
03579>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03580>          134      110       78       66       57       48       41       33
03581>       Number of events with at least the following durations
03582>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03583>          133       81       58       18        4        1        1        0        0
03584> R0082:C00003------------------------------------------------------------------------------------
03585>       COMPUTE API
03586>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03587>       [APImax= 56.66: APIavg= 16.78: APImin=   .03]
03588> #*******************************************************************************************************
03589> #                 Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
03590> #*******************************************************************************************************
03591> R0082:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03592>     CONTINUOUS STANDHYD    5.0 01:W1              5.76      .185 1982.0801_19:00  277.52 .466     .000
03593>       [XIMP=.55:TIMP=.66]
03594>       [LOSS= 2 :CN= 71.0]
03595>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03596>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03597>       [IaRECimp=   1.50: IaRECper=   6.00]
03598>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03599> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
03600> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
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03601> # Total Volume provided by LID  - 96 m³
03602> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03603> R0082:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03604>     ROUTE RESERVOIR ->    5.0 02:W1          5.76     .185 1982.0801_19:00  277.52  n/a     .000
03605>                 out <=    5.0 01:W1-LID      1.58     .001 1982.0313_11:15  277.52  n/a     .000
03606>             overflow <=   5.0 03:W1-LID-Out   4.18     .183 1982.0801_19:00  277.52  n/a     .000
03607>       (MxStoUsed=.9598E-02  m3, TotOvfVol=.1161E+01  m3, N-Ovf=  125, TotDurOvf=  182.hrs)
03608> R0082:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03609>     CONTINUOUS STANDHYD    5.0 01:W2          8.51     .249 1982.0801_19:00  255.70 .429     .000
03610>       [XIMP=.50:TIMP=.60]
03611>       [LOSS= 2 :CN= 71.0]
03612>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03613>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03614>       [IaRECimp=   1.50: IaRECper=   6.00]
03615>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03616> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
03617> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03618> # Total Volume provided by LID  - 131 m³
03619> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03620> R0082:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03621>     ROUTE RESERVOIR ->    5.0 02:W2          8.51     .249 1982.0801_19:00  255.70  n/a     .000
03622>                 out <=    5.0 01:W2-LID      2.35     .001 1982.0313_11:20  255.70  n/a     .000
03623>             overflow <=   5.0 03:W2-LID-Out   6.16     .246 1982.0801_19:00  255.70  n/a     .000
03624>       (MxStoUsed=.1309E-01  m3, TotOvfVol=.1574E+01  m3, N-Ovf=  126, TotDurOvf=  182.hrs)
03625> R0082:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03626>     CONTINUOUS STANDHYD    5.0 01:W3         10.03     .378 1982.0801_19:00  322.88 .542     .000
03627>       [XIMP=.66:TIMP=.76]
03628>       [LOSS= 2 :CN= 71.0]
03629>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03630>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03631>       [IaRECimp=   1.50: IaRECper=   6.00]
03632>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03633> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
03634> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03635> # Total Volume provided by LID  - 193 m³
03636> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03637> R0082:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03638>     ROUTE RESERVOIR ->    5.0 02:W3         10.03     .378 1982.0801_19:00  322.88  n/a     .000
03639>                 out <=    5.0 01:W3-LID      2.80     .001 1982.0313_11:15  322.88  n/a     .000
03640>             overflow <=   5.0 03:W3-LID-Out   7.23     .373 1982.0801_19:00  322.88  n/a     .000
03641>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.2335E+01  m3, N-Ovf=  121, TotDurOvf=  181.hrs)
03642> R0082:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03643>     CONTINUOUS STANDHYD    5.0 01:W4         10.11     .349 1982.0801_19:00  297.60 .499     .000
03644>       [XIMP=.60:TIMP=.70]
03645>       [LOSS= 2 :CN= 71.0]
03646>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03647>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03648>       [IaRECimp=   1.50: IaRECper=   6.00]
03649>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03650> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
03651> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03652> # Total Volume provided by LID  - 186 m³
03653> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03654> R0082:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03655>     ROUTE RESERVOIR ->    5.0 02:W4         10.11     .349 1982.0801_19:00  297.60  n/a     .000
03656>                 out <=    5.0 01:W4-LID      2.88     .001 1982.0313_11:20  297.61  n/a     .000
03657>             overflow <=   5.0 03:W4-LID-Out   7.23     .344 1982.0801_19:00  297.60  n/a     .000
03658>       (MxStoUsed=.1859E-01  m3, TotOvfVol=.2152E+01  m3, N-Ovf=  125, TotDurOvf=  180.hrs)
03659> R0082:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03660>     CONTINUOUS STANDHYD    5.0 01:W5          6.20     .205 1982.0801_19:00  285.01 .478     .000
03661>       [XIMP=.57:TIMP=.67]
03662>       [LOSS= 2 :CN= 71.0]
03663>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03664>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03665>       [IaRECimp=   1.50: IaRECper=   6.00]
03666>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03667> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
03668> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03669> # Total Volume provided by LID  - 110 m³
03670> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03671> R0082:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03672>     ROUTE RESERVOIR ->    5.0 02:W5          6.20     .205 1982.0801_19:00  285.01  n/a     .000
03673>                 out <=    5.0 01:W5-LID      1.77     .001 1982.0313_11:20  285.00  n/a     .000
03674>             overflow <=   5.0 03:W5-LID-Out   4.43     .203 1982.0801_19:00  285.01  n/a     .000
03675>       (MxStoUsed=.1099E-01  m3, TotOvfVol=.1261E+01  m3, N-Ovf=  126, TotDurOvf=  178.hrs)
03676> R0082:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03677>     CONTINUOUS STANDHYD    5.0 01:W6          7.81     .316 1982.0801_19:00  344.12 .577     .000
03678>       [XIMP=.71:TIMP=.81]
03679>       [LOSS= 2 :CN= 71.0]
03680>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03681>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03682>       [IaRECimp=   1.50: IaRECper=   6.00]
03683>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03684> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
03685> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03686> # Total Volume provided by LID  - 165 m³
03687> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03688> R0082:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03689>     ROUTE RESERVOIR ->    5.0 02:W6          7.81     .316 1982.0801_19:00  344.12  n/a     .000
03690>                 out <=    5.0 01:W6-LID      2.21     .001 1982.0313_11:15  344.13  n/a     .000
03691>             overflow <=   5.0 03:W6-LID-Out   5.60     .312 1982.0801_19:00  344.12  n/a     .000
03692>       (MxStoUsed=.1648E-01  m3, TotOvfVol=.1925E+01  m3, N-Ovf=  117, TotDurOvf=  178.hrs)
03693> R0082:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03694>     ADD HYD                5.0 02:W1          5.76     .185 1982.0801_19:00  277.52  n/a     .000
03695>                      +    5.0 02:W2          8.51     .249 1982.0801_19:00  255.70  n/a     .000
03696>                      +    5.0 02:W3         10.03     .378 1982.0801_19:00  322.88  n/a     .000
03697>                      +    5.0 02:W4         10.11     .349 1982.0801_19:00  297.60  n/a     .000
03698>                      +    5.0 02:W5          6.20     .205 1982.0801_19:00  285.01  n/a     .000
03699>                      +    5.0 02:W6          7.81     .316 1982.0801_19:00  344.12  n/a     .000
03700>                    SUM=   5.0 01:BCD-PH3    48.42    1.681 1982.0801_19:00  298.98  n/a     .000
03701> R0082:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03702>     ADD HYD                5.0 02:W1-LID-Out  4.18     .183 1982.0801_19:00  277.52  n/a     .000
03703>                      +    5.0 02:W2-LID-Out  6.16     .246 1982.0801_19:00  255.70  n/a     .000
03704>                      +    5.0 02:W3-LID-Out  7.23     .373 1982.0801_19:00  322.88  n/a     .000
03705>                      +    5.0 02:W4-LID-Out  7.23     .344 1982.0801_19:00  297.60  n/a     .000
03706>                      +    5.0 02:W5-LID-Out  4.43     .203 1982.0801_19:00  285.01  n/a     .000
03707>                      +    5.0 02:W6-LID-Out  5.60     .312 1982.0801_19:00  344.12  n/a     .000
03708>                    SUM=   5.0 01:BCD-PH3-LI  34.82    1.661 1982.0801_19:00  298.90  n/a     .000
03709> ********************************************************************************************************************
03710> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
03711> ********************************************************************************************************************
03712> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
03713> ********************************************************************************************************************
03714> R0082:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03715>     CONTINUOUS STANDHYD    5.0 01:INF-W1      5.76     .264 1982.0801_19:00  355.55 .596     .000
03716>       [XIMP=.55:TIMP=.66]
03717>       [LOSS= 2 :CN=100.0]
03718>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03719>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03720>       [IaRECimp=   1.50: IaRECper=   6.00]
03721>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03722> R0082:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03723>     CONTINUOUS STANDHYD    5.0 01:INF-W2      8.51     .363 1982.0801_19:00  339.12 .569     .000
03724>       [XIMP=.50:TIMP=.60]
03725>       [LOSS= 2 :CN=100.0]
03726>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03727>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03728>       [IaRECimp=   1.50: IaRECper=   6.00]
03729>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03730> R0082:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03731>     CONTINUOUS STANDHYD    5.0 01:INF-W3     10.03     .474 1982.0801_19:00  384.48 .645     .000
03732>       [XIMP=.66:TIMP=.76]
03733>       [LOSS= 2 :CN=100.0]
03734>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03735>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03736>       [IaRECimp=   1.50: IaRECper=   6.00]
03737>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03738> R0082:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03739>     CONTINUOUS STANDHYD    5.0 01:INF-W4     10.11     .459 1982.0801_19:00  367.31 .616     .000
03740>       [XIMP=.60:TIMP=.70]
03741>       [LOSS= 2 :CN=100.0]
03742>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03743>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03744>       [IaRECimp=   1.50: IaRECper=   6.00]
03745>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03746> R0082:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03747>     CONTINUOUS STANDHYD    5.0 01:INF-W5      6.20     .285 1982.0801_19:00  358.79 .602     .000
03748>       [XIMP=.57:TIMP=.67]
03749>       [LOSS= 2 :CN=100.0]
03750>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03751>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03752>       [IaRECimp=   1.50: IaRECper=   6.00]
03753>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03754> R0082:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03755>     CONTINUOUS STANDHYD    5.0 01:INF-W6      7.81     .387 1982.0801_19:00  399.02 .669     .000
03756>       [XIMP=.71:TIMP=.81]
03757>       [LOSS= 2 :CN=100.0]
03758>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03759>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03760>       [IaRECimp=   1.50: IaRECper=   6.00]
03761>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03762> R0082:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03763>     ADD HYD                5.0 02:INF-W1      5.76     .264 1982.0801_19:00  355.56  n/a     .000
03764>                      +    5.0 02:INF-W2      8.51     .363 1982.0801_19:00  339.12  n/a     .000
03765>                      +    5.0 02:INF-W3     10.03     .474 1982.0801_19:00  384.48  n/a     .000
03766>                      +    5.0 02:INF-W4     10.11     .459 1982.0801_19:00  367.31  n/a     .000
03767>                      +    5.0 02:INF-W5      6.20     .285 1982.0801_19:00  358.79  n/a     .000
03768>                      +    5.0 02:INF-W6      7.81     .387 1982.0801_19:00  399.02  n/a     .000
03769>                    SUM=   5.0 01:INF-BCD-PH   48.42    2.232 1982.0801_19:00  368.54  n/a     .000
03770> ##############################################################################
03771> # CONTINUOUS RAINFALL DATA
03772> ##############################################################################
03773>  ** END OF RUN :  82
03774>
03775> ********************************************************************************************************************
03776>
03777>
03778>
03779>
03780>
```

```
03781> RUN#:COMMAND#
03782> R0083:C00001------------------------------------------------------------------------------
03783>      START
03784>        [TZERO =    .00 hrs on 19830101]
03785>        [METOUT=   2    (1=imperial, 2=metric output)]
03786>        [NSTORM=   0 ]
03787>        [NRUN  = 0083 ]
03788> ********************************************************************************************************************
03789> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
03790> ********************************************************************************************************************
03791> #  Project Name: Barrhaven Conservancy Development
03792> #  Project Number: 1474
03793> #  Date        : 2023/Oct/18
03794> #  Modeller    : J.Burnett, P.Eng.
03795> #  Updated     : 2024/Mar/14 [LP]
03796> #  Company     : J.F. Sabourin and Associates
03797> #  License #   : 2582634
03798> ********************************************************************************************************************
03799> # Ottawa International Airport (1967 - 2003)
03800> R0083:C00002------------------------------------------------------------------------------
03801>  *  READ AES DATA
03802>        [Filename  = YOW_1967_2007.123                                                  ]
03803>        [Start_date= 1983.0101: End_date= 1983.1231]
03804>        (DT= 60.min: Length= 8760.hrs: WetHrs=  462: DryHrs= 8298: PTOT= 587.50)
03805>        Maximum average rainfall intensities over
03806>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03807>         10.40    9.70     7.53     5.43     3.18     2.36     1.68     1.32      .92     mm/hr
03808>         10.40   19.40    22.60    32.60    38.20    56.70    60.40    63.20    66.00     mm
03809>        19831004 19830921 19830921 19831005 19831005 19831005 19831005 19831006 19831008  date
03810>        Number of rainfall events per following interevent time
03811>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03812>           143      115      103       85       70       55       50       45       35
03813>        Number of events with at least the following durations
03814>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
03815>           142       87       56       28        5        0        0        0        0
03816> R0083:C00003------------------------------------------------------------------------------
03817>      COMPUTE API
03818>      [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
03819>      [APImax= 79.86: APIavg= 16.57: APImin=   .05]
03820> ********************************************************************************************************************
03821> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
03822> ********************************************************************************************************************
03823> R0083:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03824>     CONTINUOUS STANDHYD    5.0 01:W1          5.76     .121 1983.1005_15:00  268.59 .457     .000
03825>       [XIMP=.55:TIMP=.66]
03826>       [LOSS= 2 :CN= 71.0]
03827>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03828>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03829>       [IaRECimp=   1.50: IaRECper=   6.00]
03830>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03831> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
03832> # Assumed 420 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03833> # Total Volume provided by LID  - 96 m³
03834> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03835> R0083:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03836>     ROUTE RESERVOIR ->    5.0 02:W1          5.76     .121 1983.1005_15:00  268.59  n/a     .000
03837>                 out <=    5.0 01:W1-LID      1.60     .001 1983.0318_23:30  268.60  n/a     .000
03838>             overflow <=   5.0 03:W1-LID-Out   4.16     .119 1983.1005_15:00  268.59  n/a     .000
03839>       (MxStoUsed=.9596E-02  m3, TotOvfVol=.1116E+01  m3, N-Ovf=  129, TotDurOvf=  189.hrs)
03840> R0083:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03841>     CONTINUOUS STANDHYD    5.0 01:W2          8.51     .168 1983.1005_15:00  248.06 .422     .000
03842>       [XIMP=.50:TIMP=.60]
03843>       [LOSS= 2 :CN= 71.0]
03844>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03845>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03846>       [IaRECimp=   1.50: IaRECper=   6.00]
03847>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03848> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
03849> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03850> # Total Volume provided by LID  - 131 m³
03851> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03852> R0083:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03853>     ROUTE RESERVOIR ->    5.0 02:W2          8.51     .168 1983.1005_15:00  248.06  n/a     .000
03854>                 out <=    5.0 01:W2-LID      2.39     .001 1983.0318_23:35  248.06  n/a     .000
03855>             overflow <=   5.0 03:W2-LID-Out   6.12     .167 1983.1005_15:05  248.06  n/a     .000
03856>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.1519E+01  m3, N-Ovf=  128, TotDurOvf=  190.hrs)
03857> R0083:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03858>     CONTINUOUS STANDHYD    5.0 01:W3         10.03     .229 1983.1005_15:00  310.81 .529     .000
03859>       [XIMP=.66:TIMP=.76]
03860>       [LOSS= 2 :CN= 71.0]
03861>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03862>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03863>       [IaRECimp=   1.50: IaRECper=   6.00]
03864>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03865> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
03866> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03867> # Total Volume provided by LID  - 193 m³
03868> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03869> R0083:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03870>     ROUTE RESERVOIR ->    5.0 02:W3         10.03     .229 1983.1005_15:00  310.81  n/a     .000
03871>                 out <=    5.0 01:W3-LID      2.87     .001 1983.0318_23:35  310.80  n/a     .000
03872>             overflow <=   5.0 03:W3-LID-Out   7.16     .226 1983.1005_15:05  310.81  n/a     .000
03873>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.2225E+01  m3, N-Ovf=  122, TotDurOvf=  188.hrs)
03874> R0083:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03875>     CONTINUOUS STANDHYD    5.0 01:W4         10.11     .219 1983.1005_15:00  287.18 .489     .000
03876>       [XIMP=.60:TIMP=.70]
03877>       [LOSS= 2 :CN= 71.0]
03878>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03879>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03880>       [IaRECimp=   1.50: IaRECper=   6.00]
03881>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03882> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
03883> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03884> # Total Volume provided by LID  - 186 m³
03885> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03886> R0083:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03887>     ROUTE RESERVOIR ->    5.0 02:W4         10.11     .219 1983.1005_15:00  287.18  n/a     .000
03888>                 out <=    5.0 01:W4-LID      2.94     .001 1983.0318_23:40  287.19  n/a     .000
03889>             overflow <=   5.0 03:W4-LID-Out   7.17     .217 1983.1005_15:05  287.18  n/a     .000
03890>       (MxStoUsed=.1859E-01  m3, TotOvfVol=.2060E+01  m3, N-Ovf=  130, TotDurOvf=  187.hrs)
03891> R0083:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03892>     CONTINUOUS STANDHYD    5.0 01:W5          6.20     .132 1983.1005_15:00  275.42 .469     .000
03893>       [XIMP=.57:TIMP=.67]
03894>       [LOSS= 2 :CN= 71.0]
03895>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03896>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03897>       [IaRECimp=   1.50: IaRECper=   6.00]
03898>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03899> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
03900> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03901> # Total Volume provided by LID  - 110 m³
03902> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03903> R0083:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03904>     ROUTE RESERVOIR ->    5.0 02:W5          6.20     .132 1983.1005_15:00  275.42  n/a     .000
03905>                 out <=    5.0 01:W5-LID      1.81     .001 1983.0318_23:35  275.41  n/a     .000
03906>             overflow <=   5.0 03:W5-LID-Out   4.39     .130 1983.1005_15:00  275.42  n/a     .000
03907>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.1210E+01  m3, N-Ovf=  130, TotDurOvf=  184.hrs)
03908> R0083:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03909>     CONTINUOUS STANDHYD    5.0 01:W6          7.81     .187 1983.1005_15:00  330.68 .563     .000
03910>       [XIMP=.71:TIMP=.81]
03911>       [LOSS= 2 :CN= 71.0]
03912>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03913>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03914>       [IaRECimp=   1.50: IaRECper=   6.00]
03915>       [SMIN= 41.38: SMAX=275.84: SK= .030]
03916> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
03917> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
03918> # Total Volume provided by LID  - 165 m³
03919> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
03920> R0083:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03921>     ROUTE RESERVOIR ->    5.0 02:W6          7.81     .187 1983.1005_15:00  330.68  n/a     .000
03922>                 out <=    5.0 01:W6-LID      2.27     .001 1983.0318_23:35  330.68  n/a     .000
03923>             overflow <=   5.0 03:W6-LID-Out   5.54     .184 1983.1005_15:00  330.68  n/a     .000
03924>       (MxStoUsed=.1650E-01  m3, TotOvfVol=.1831E+01  m3, N-Ovf=  119, TotDurOvf=  185.hrs)
03925> R0083:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03926>     ADD HYD                5.0 02:W1          5.76     .121 1983.1005_15:00  268.59  n/a     .000
03927>                      +    5.0 02:W2          8.51     .168 1983.1005_15:00  248.06  n/a     .000
03928>                      +    5.0 02:W3         10.03     .229 1983.1005_15:00  310.81  n/a     .000
03929>                      +    5.0 02:W4         10.11     .219 1983.1005_15:00  287.18  n/a     .000
03930>                      +    5.0 02:W5          6.20     .132 1983.1005_15:00  275.42  n/a     .000
03931>                      +    5.0 02:W6          7.81     .187 1983.1005_15:00  330.68  n/a     .000
03932>                    SUM=   5.0 01:BCD-PH3    48.42    1.056 1983.1005_15:00  288.50  n/a     .000
03933> R0083:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03934>     ADD HYD                5.0 02:W1-LID-Out  4.16     .119 1983.1005_15:00  268.59  n/a     .000
03935>                      +    5.0 02:W2-LID-Out  6.12     .167 1983.1005_15:05  248.06  n/a     .000
03936>                      +    5.0 02:W3-LID-Out  7.16     .226 1983.1005_15:05  310.81  n/a     .000
03937>                      +    5.0 02:W4-LID-Out  7.17     .217 1983.1005_15:05  287.18  n/a     .000
03938>                      +    5.0 02:W5-LID-Out  4.39     .130 1983.1005_15:00  275.42  n/a     .000
03939>                      +    5.0 02:W6-LID-Out  5.54     .184 1983.1005_15:00  330.68  n/a     .000
03940>                    SUM=   5.0 01:BCD-PH3-LI  34.54    1.042 1983.1005_15:05  288.38  n/a     .000
03941> ********************************************************************************************************************
03942> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
03943> ********************************************************************************************************************
03944> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
03945> ********************************************************************************************************************
03946> R0083:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03947>     CONTINUOUS STANDHYD    5.0 01:INF-W1      5.76     .153 1983.1005_15:00  339.17 .577     .000
03948>       [XIMP=.55:TIMP=.66]
03949>       [LOSS= 2 :CN=100.0]
03950>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03951>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
03952>       [IaRECimp=   1.50: IaRECper=   6.00]
03953>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03954> R0083:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03955>     CONTINUOUS STANDHYD    5.0 01:INF-W2      8.51     .222 1983.1005_15:00  323.35 .550     .000
03956>       [XIMP=.50:TIMP=.60]
03957>       [LOSS= 2 :CN=100.0]
03958>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03959>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
03960>       [IaRECimp=   1.50: IaRECper=   6.00]
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03961>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03962> R0083:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03963>     CONTINUOUS STANDHYD    5.0 01:INF-W3          10.03     .268 1983.1005_15:00  366.59 .624     .000
03964>       [XINF=.66:TIMF=.76]
03965>       [LOSS= 2 :CN=100.0]
03966>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03967>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
03968>       [IaRECimp=   1.50: IaRECper=   6.00]
03969>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03970> R0083:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03971>     CONTINUOUS STANDHYD    5.0 01:INF-W4          10.11     .268 1983.1005_15:00  350.25 .596     .000
03972>       [XINF=.60:TIMF=.70]
03973>       [LOSS= 2 :CN=100.0]
03974>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03975>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
03976>       [IaRECimp=   1.50: IaRECper=   6.00]
03977>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03978> R0083:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03979>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .164 1983.1005_15:00  342.14 .582     .000
03980>       [XINF=.57:TIMF=.67]
03981>       [LOSS= 2 :CN=100.0]
03982>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03983>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
03984>       [IaRECimp=   1.50: IaRECper=   6.00]
03985>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03986> R0083:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03987>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .211 1983.1005_15:00  380.42 .648     .000
03988>       [XINF=.71:TIMF=.81]
03989>       [LOSS= 2 :CN=100.0]
03990>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03991>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
03992>       [IaRECimp=   1.50: IaRECper=   6.00]
03993>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
03994> R0083:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03995>     ADD HYD                5.0 02:INF-W1          5.76      .153 1983.1005_15:00  339.17  n/a     .000
03996>                          +  5.0 02:INF-W2          8.51      .222 1983.1005_15:00  323.35  n/a     .000
03997>                          +  5.0 02:INF-W3         10.03      .268 1983.1005_15:00  366.59  n/a     .000
03998>                          +  5.0 02:INF-W4         10.11      .268 1983.1005_15:00  350.25  n/a     .000
03999>                          +  5.0 02:INF-W5          6.20      .164 1983.1005_15:00  342.14  n/a     .000
04000>                          +  5.0 02:INF-W6          7.81      .211 1983.1005_15:00  380.42  n/a     .000
04001>                        SUM=  5.0 01:INF-BCD-PH    48.42     1.286 1983.1005_15:00  351.42  n/a     .000
04002> ##############################################################################
04003> # CONTINUOUS RAINFALL DATA
04004> ##############################################################################
04005>  ** END OF RUN :   83
04006>
04007> ************************************************************************************
04008>
04009>
04010>
04011>
04012>
04013>  RUN#:COMMAND#
04014> R0084:C00001------------------------------------------------------------------------
04015>     START
04016>       [TZERO =    .00 hrs on 19840101]
04017>       [METOUT=  2     (1=imperial, 2=metric output)]
04018>       [NSTORM=  0 ]
04019>       [NRUN  = 0084 ]
04020> ************************************************************************************
04021> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
04022> ************************************************************************************
04023> #  Project Name: Barrhaven Conservancy Development
04024> #  Project Number: 1474
04025> #  Date     : 2021/Oct/18
04026> #  Modeller    : J.Burnett, P.Eng.
04027> #  Updated     : 2024/Mar/14 [LP]
04028> #  Company     : J.F. Sabourin and Associates
04029> #  License #   : 2582634
04030> ************************************************************************************
04031> # Ottawa International Airport (1967 - 2003)
04032> R0084:C00002------------------------------------------------------------------------
04033>  *  READ AES DATA
04034>       [Filename  = YOW_1967_2007.123                                    ]
04035>       [Start_date= 1984.0101: End_date= 1984.1230]
04036>       [DT= 60.min: Length= 8760.hrs: WetHrs=  308: DryHrs= 8452: PTOT= 459.40)
04037>       Maximum average rainfall intensities over
04038>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04039>        17.80     9.70     7.57     4.33     3.01     1.85     1.58     1.19     1.00    mm/hr
04040>        17.80    19.40    22.70    26.00    36.10    44.30    57.00    57.00    72.20    mm
04041>       19840812 19840812 19840812 19840806 19840812 19840813 19840813 19840814 19840813  date
04042>       Number of rainfall events per following interevent time
04043>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04044>           98       80       75       63       55       48       40       34       26
04045>       Number of events with at least the following durations
04046>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04047>           97       58       39       11        3        1        0        0        0
04048> R0084:C00003------------------------------------------------------------------------
04049>     COMPUTE API
04050>       [APIinit= 50.00: APIkdy= .9000: APIkdt= .9956]
04051>       [APImax= 86.83: APIavg= 13.22: APImin=  .00)
04052> ************************************************************************************
04053> #              Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04054> ************************************************************************************
04055> R0084:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04056>     CONTINUOUS STANDHYD    5.0 01:W1              5.76      .184 1984.0812_ 7:00  224.78 .489     .000
04057>       [XINF=.55:TIMF=.66]
04058>       [LOSS= 2 :CN= 71.0]
04059>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04060>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
04061>       [IaRECimp=   1.50: IaRECper=   6.00]
04062>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04063> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
04064> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04065> # Total Volume provided by LID  - 96 m³
04066> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04067> R0084:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04068>     ROUTE RESERVOIR ->     5.0 02:W1              5.76      .184 1984.0812_ 7:00  224.78  n/a     .000
04069>                      out <=    5.0 01:W1-LID        1.28      .001 1984.0214_ 9:05  224.79  n/a     .000
04070>               overflow <=    5.0 03:W1-LID-Out    4.48      .181 1984.0812_ 7:00  224.78  n/a     .000
04071>         (MxStoUsed=.9596E-02  m3, TotOvfVol=.1008E+01  m3, N-Ovf=   89, TotDurOvf=  144.hrs)
04072> R0084:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04073>     CONTINUOUS STANDHYD    5.0 01:W2              8.51      .251 1984.0812_ 7:00  208.10 .453     .000
04074>       [XINF=.50:TIMF=.60]
04075>       [LOSS= 2 :CN= 71.0]
04076>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04077>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
04078>       [IaRECimp=   1.50: IaRECper=   6.00]
04079>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04080> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
04081> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04082> # Total Volume provided by LID  - 131 m³
04083> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04084> R0084:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04085>     ROUTE RESERVOIR ->     5.0 02:W2              8.51      .251 1984.0812_ 7:00  208.10  n/a     .000
04086>                      out <=    5.0 01:W2-LID        1.89      .001 1984.0214_ 9:10  208.10  n/a     .000
04087>               overflow <=    5.0 03:W2-LID-Out    6.62      .246 1984.0812_ 7:00  208.10  n/a     .000
04088>         (MxStoUsed=.1310E-01  m3, TotOvfVol=.1377E+01  m3, N-Ovf=   99, TotDurOvf=  144.hrs)
04089> R0084:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04090>     CONTINUOUS STANDHYD    5.0 01:W3             10.03      .364 1984.0812_ 7:00  258.62 .563     .000
04091>       [XINF=.66:TIMF=.76]
04092>       [LOSS= 2 :CN= 71.0]
04093>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04094>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
04095>       [IaRECimp=   1.50: IaRECper=   6.00]
04096>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04097> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
04098> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04099> # Total Volume provided by LID  - 193 m³
04100> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04101> R0084:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04102>     ROUTE RESERVOIR ->     5.0 02:W3             10.03      .364 1984.0812_ 7:00  258.62  n/a     .000
04103>                      out <=    5.0 01:W3-LID        2.30      .001 1984.0214_ 9:00  258.62  n/a     .000
04104>               overflow <=    5.0 03:W3-LID-Out    7.73      .358 1984.0812_ 7:00  258.62  n/a     .000
04105>         (MxStoUsed=.1929E-01  m3, TotOvfVol=.2000E+01  m3, N-Ovf=   88, TotDurOvf=  142.hrs)
04106> R0084:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04107>     CONTINUOUS STANDHYD    5.0 01:W4             10.11      .340 1984.0812_ 7:00  239.62 .522     .000
04108>       [XINF=.60:TIMF=.70]
04109>       [LOSS= 2 :CN= 71.0]
04110>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04111>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
04112>       [IaRECimp=   1.50: IaRECper=   6.00]
04113>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04114> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
04115> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04116> # Total Volume provided by LID  - 186 m³
04117> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04118> R0084:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04119>     ROUTE RESERVOIR ->     5.0 02:W4             10.11      .340 1984.0812_ 7:00  239.62  n/a     .000
04120>                      out <=    5.0 01:W4-LID        2.34      .001 1984.0214_ 9:10  239.62  n/a     .000
04121>               overflow <=    5.0 03:W4-LID-Out    7.77      .335 1984.0812_ 7:00  239.62  n/a     .000
04122>         (MxStoUsed=.1860E-01  m3, TotOvfVol=.1862E+01  m3, N-Ovf=   91, TotDurOvf=  142.hrs)
04123> R0084:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04124>     CONTINUOUS STANDHYD    5.0 01:W5              6.20      .202 1984.0812_ 7:00  230.18 .501     .000
04125>       [XINF=.57:TIMF=.67]
04126>       [LOSS= 2 :CN= 71.0]
04127>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04128>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
04129>       [IaRECimp=   1.50: IaRECper=   6.00]
04130>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04131> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
04132> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04133> # Total Volume provided by LID  - 110 m³
04134> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04135> R0084:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04136>     ROUTE RESERVOIR ->     5.0 02:W5              6.20      .202 1984.0812_ 7:00  230.18  n/a     .000
04137>                      out <=    5.0 01:W5-LID        1.44      .001 1984.0214_ 9:10  230.17  n/a     .000
04138>               overflow <=    5.0 03:W5-LID-Out    4.76      .199 1984.0812_ 7:00  230.18  n/a     .000
04139>         (MxStoUsed=.1098E-01  m3, TotOvfVol=.1096E+01  m3, N-Ovf=   91, TotDurOvf=  140.hrs)
04140> R0084:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04141>     CONTINUOUS STANDHYD    5.0 01:W6              7.81      .301 1984.0812_ 7:00  274.64 .598     .000
04142>       [XIMP=.71:TIMP=.81]
04143>       [LOSS= 2 :CN= 71.0]
04144>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04145>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
04146>       [IaRECimp=   1.50: IaRECper=   6.00]
04147>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04148> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
04149> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04150> # Total Volume provided by LID  - 165 m³
04151> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04152> R0084:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04153>     ROUTE RESERVOIR ->     5.0 02:W6              7.81      .301 1984.0812_ 7:00  274.64  n/a     .000
04154>                      out <=    5.0 01:W6-LID        1.82      .001 1984.0214_ 9:05  274.64  n/a     .000
04155>               overflow <=    5.0 03:W6-LID-Out    5.99      .297 1984.0812_ 7:00  274.64  n/a     .000
04156>         (MxStoUsed=.1650E-01  m3, TotOvfVol=.1645E+01  m3, N-Ovf=   88, TotDurOvf=  140.hrs)
04157> R0084:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04158>     ADD HYD                5.0 02:W1              5.76      .184 1984.0812_ 7:00  224.78  n/a     .000
04159>                          +  5.0 02:W2              8.51      .251 1984.0812_ 7:00  208.10  n/a     .000
04160>                          +  5.0 02:W3             10.03      .364 1984.0812_ 7:00  258.62  n/a     .000
04161>                          +  5.0 02:W4             10.11      .340 1984.0812_ 7:00  239.62  n/a     .000
04162>                          +  5.0 02:W5              6.20      .202 1984.0812_ 7:00  230.18  n/a     .000
04163>                          +  5.0 02:W6              7.81      .301 1984.0812_ 7:00  274.64  n/a     .000
04164>                        SUM=  5.0 01:BCD-PH3       48.42     1.641 1984.0812_ 7:00  240.69  n/a     .000
04165> R0084:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04166>     ADD HYD                5.0 02:W1-LID-Out      4.48      .181 1984.0812_ 7:00  224.78  n/a     .000
04167>                          +  5.0 02:W2-LID-Out      6.62      .246 1984.0812_ 7:00  208.10  n/a     .000
04168>                          +  5.0 02:W3-LID-Out      7.73      .358 1984.0812_ 7:00  258.62  n/a     .000
04169>                          +  5.0 02:W4-LID-Out      7.77      .335 1984.0812_ 7:00  239.62  n/a     .000
04170>                          +  5.0 02:W5-LID-Out      4.76      .199 1984.0812_ 7:00  230.18  n/a     .000
04171>                          +  5.0 02:W6-LID-Out      5.99      .297 1984.0812_ 7:00  274.64  n/a     .000
04172>                        SUM=  5.0 01:BCD-PH3-LI    37.36     1.615 1984.0812_ 7:00  240.60  n/a     .000
04173> ************************************************************************************
04174> #              Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04175> ************************************************************************************
04176> #              Set infiltration to 0 (CN = 99.99) for water balance analysis
04177> ************************************************************************************
04178> R0084:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04179>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76      .253 1984.0812_ 7:00  289.40 .630     .000
04180>       [XIMP=.55:TIMP=.66]
04181>       [LOSS= 2 :CN=100.0]
04182>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04183>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
04184>       [IaRECimp=   1.50: IaRECper=   6.00]
04185>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04186> R0084:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04187>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51      .357 1984.0812_ 7:00  277.94 .605     .000
04188>       [XIMP=.50:TIMP=.60]
04189>       [LOSS= 2 :CN=100.0]
04190>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04191>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
04192>       [IaRECimp=   1.50: IaRECper=   6.00]
04193>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04194> R0084:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04195>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03      .449 1984.0812_ 7:00  308.99 .673     .000
04196>       [XIMP=.66:TIMP=.76]
04197>       [LOSS= 2 :CN=100.0]
04198>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04199>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
04200>       [IaRECimp=   1.50: IaRECper=   6.00]
04201>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04202> R0084:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04203>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11      .441 1984.0812_ 7:00  297.26 .647     .000
04204>       [XIMP=.60:TIMP=.70]
04205>       [LOSS= 2 :CN=100.0]
04206>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04207>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
04208>       [IaRECimp=   1.50: IaRECper=   6.00]
04209>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04210> R0084:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04211>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .270 1984.0812_ 7:00  291.44 .634     .000
04212>       [XIMP=.57:TIMP=.67]
04213>       [LOSS= 2 :CN=100.0]
04214>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04215>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
04216>       [IaRECimp=   1.50: IaRECper=   6.00]
04217>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04218> R0084:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04219>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .358 1984.0812_ 7:00  318.96 .694     .000
04220>       [XIMP=.71:TIMP=.81]
04221>       [LOSS= 2 :CN=100.0]
04222>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04223>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
04224>       [IaRECimp=   1.50: IaRECper=   6.00]
04225>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04226> R0084:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04227>     ADD HYD                5.0 02:INF-W1          5.76      .253 1984.0812_ 7:00  289.40  n/a     .000
04228>                          +  5.0 02:INF-W2          8.51      .357 1984.0812_ 7:00  277.94  n/a     .000
04229>                          +  5.0 02:INF-W3         10.03      .449 1984.0812_ 7:00  308.99  n/a     .000
04230>                          +  5.0 02:INF-W4         10.11      .441 1984.0812_ 7:00  297.26  n/a     .000
04231>                          +  5.0 02:INF-W5          6.20      .270 1984.0812_ 7:00  291.44  n/a     .000
04232>                          +  5.0 02:INF-W6          7.81      .358 1984.0812_ 7:00  318.96  n/a     .000
04233>                        SUM=  5.0 01:INF-BCD-PH    48.42     2.127 1984.0812_ 7:00  298.11  n/a     .000
04234> ##############################################################################
04235> # CONTINUOUS RAINFALL DATA
04236> ##############################################################################
04237>  ** END OF RUN :   84
04238>
04239> ************************************************************************************
04240>
04241>
04242>
04243>
04244>
04245>  RUN#:COMMAND#
04246> R0085:C00001------------------------------------------------------------------------
04247>     START
04248>       [TZERO =    .00 hrs on 19850101]
04249>       [METOUT=  2     (1=imperial, 2=metric output)]
04250>       [NSTORM=  0 ]
04251>       [NRUN  = 0085 ]
04252> ************************************************************************************
04253> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
04254> ************************************************************************************
04255> #  Project Name: Barrhaven Conservancy Development
04256> #  Project Number: 1474
04257> #  Date     : 2021/Oct/18
04258> #  Modeller    : J.Burnett, P.Eng.
04259> #  Updated     : 2024/Mar/14 [LP]
04260> #  Company     : J.F. Sabourin and Associates
04261> #  License #   : 2582634
04262> ************************************************************************************
04263> # Ottawa International Airport (1967 - 2003)
04264> R0085:C00002------------------------------------------------------------------------
04265>  *  READ AES DATA
04266>       [Filename  = YOW_1967_2007.123                                    ]
04267>       [Start_date= 1985.0101: End_date= 1985.1231]
04268>       [DT= 60.min: Length= 8760.hrs: WetHrs=  354: DryHrs= 8406: PTOT= 559.90)
04269>       Maximum average rainfall intensities over
04270>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04271>        19.00    13.60    11.23     7.53     6.60     3.30     1.65     1.11      .89      .60    mm/hr
04272>        19.00    27.20    35.20    39.60    39.60    39.60    40.10    42.80    43.40     mm
04273>       19850716 19850617 19850617 19850618 19850618 19850618 19850618 19850827 19850827  date
04274>       Number of rainfall events per following interevent time
04275>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04276>          108       88       84       74       69       56       49       43       32
04277>       Number of events with at least the following durations
04278>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04279>          107       70       43       13        4        1        0        0        0
04280> R0085:C00003------------------------------------------------------------------------
04281>     COMPUTE API
04282>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
04283>       [APImax= 57.29: APIavg= 15.86: APImin=  .20)
04284> ************************************************************************************
04285> #              Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04286> ************************************************************************************
04287> R0085:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04288>     CONTINUOUS STANDHYD    5.0 01:W1              5.76      .178 1985.0716_14:00  274.48 .490     .000
04289>       [XIMP=.55:TIMP=.66]
04290>       [LOSS= 2 :CN= 71.0]
04291>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04292>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
04293>       [IaRECimp=   1.50: IaRECper=   6.00]
04294>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04295> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
04296> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04297> # Total Volume provided by LID  - 96 m³
04298> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04299> R0085:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04300>     ROUTE RESERVOIR ->     5.0 02:W1              5.76      .178 1985.0716_14:00  274.48  n/a     .000
04301>                      out <=    5.0 01:W1-LID        1.27      .001 1985.0223_12:20  274.49  n/a     .000
04302>               overflow <=    5.0 03:W1-LID-Out    4.49      .176 1985.0716_14:00  274.48  n/a     .000
04303>         (MxStoUsed=.9596E-02  m3, TotOvfVol=.1231E+01  m3, N-Ovf=   77, TotDurOvf=  150.hrs)
04304> R0085:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04305>     CONTINUOUS STANDHYD    5.0 01:W2              8.51      .240 1985.0716_14:00  253.27 .452     .000
04306>       [XIMP=.50:TIMP=.60]
04307>       [LOSS= 2 :CN= 71.0]
04308>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04309>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
04310>       [IaRECimp=   1.50: IaRECper=   6.00]
04311>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04312> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
04313> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04314> # Total Volume provided by LID  - 131 m³
04315> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04316> R0085:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04317>     ROUTE RESERVOIR ->     5.0 02:W2              8.51      .240 1985.0716_14:00  253.27  n/a     .000
04318>                      out <=    5.0 01:W2-LID        1.90      .001 1985.0223_12:25  253.28  n/a     .000
04319>               overflow <=    5.0 03:W2-LID-Out    6.61      .237 1985.0716_14:00  253.27  n/a     .000
04320>         (MxStoUsed=.1310E-01  m3, TotOvfVol=.1675E+01  m3, N-Ovf=   84, TotDurOvf=  151.hrs)
```

```
04321> R0085:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04322>     CONTINUOUS STANDHYD   5.0 01:W3            10.03     .363 1985.0716_14:00  318.35 .569     .000
04323>       [XIMP=.66:TIMP=.76]
04324>       [LOSS= 2 :CN= 71.0]
04325>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04326>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
04327>       [IaRECimp=   1.50: IaRECper=   6.00]
04328>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04329> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
04330> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04331> # Total Volume provided by LID  - 193 m³
04332> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04333> R0085:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04334>     ROUTE RESERVOIR ->    5.0 02:W3            10.03     .363 1985.0716_14:00  318.35  n/a     .000
04335>                 out <=    5.0 01:W3-LID        2.27     .001 1985.0222_ 9:15  318.34  n/a     .000
04336>             overflow <=   5.0 03:W3-LID-Out     7.76     .359 1985.0716_14:00  318.35  n/a     .000
04337>       (MxStoUsed=.1930E-01  m3, TotOvfVol=.2470E+01  m3, N-Ovf=   85, TotDurOvf=  148.hrs)
04338> R0085:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04339>     CONTINUOUS STANDHYD   5.0 01:W4            10.11     .336 1985.0716_14:00  293.85 .525     .000
04340>       [XIMP=.60:TIMP=.70]
04341>       [LOSS= 2 :CN= 71.0]
04342>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04343>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
04344>       [IaRECimp=   1.50: IaRECper=   6.00]
04345>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04346> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
04347> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04348> # Total Volume provided by LID  - 186 m³
04349> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04350> R0085:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04351>     ROUTE RESERVOIR ->    5.0 02:W4            10.11     .336 1985.0716_14:00  293.85  n/a     .000
04352>                 out <=    5.0 01:W4-LID        2.33     .001 1985.0223_12:30  293.85  n/a     .000
04353>             overflow <=   5.0 03:W4-LID-Out     7.78     .332 1985.0716_14:00  293.85  n/a     .000
04354>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.2287E+01  m3, N-Ovf=   74, TotDurOvf=  148.hrs)
04355> R0085:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04356>     CONTINUOUS STANDHYD   5.0 01:W5            6.20     .198 1985.0716_14:00  281.65 .503     .000
04357>       [XIMP=.57:TIMP=.67]
04358>       [LOSS= 2 :CN= 71.0]
04359>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04360>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
04361>       [IaRECimp=   1.50: IaRECper=   6.00]
04362>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04363> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
04364> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04365> # Total Volume provided by LID  - 110 m³
04366> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04367> R0085:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04368>     ROUTE RESERVOIR ->    5.0 02:W5            6.20     .198 1985.0716_14:00  281.65  n/a     .000
04369>                 out <=    5.0 01:W5-LID        1.43     .001 1985.0223_12:30  281.65  n/a     .000
04370>             overflow <=   5.0 03:W5-LID-Out     4.77     .195 1985.0716_14:00  281.65  n/a     .000
04371>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.1343E+01  m3, N-Ovf=   85, TotDurOvf=  147.hrs)
04372> R0085:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04373>     CONTINUOUS STANDHYD   5.0 01:W6            7.81     .306 1985.0716_14:00  338.94 .605     .000
04374>       [XIMP=.71:TIMP=.81]
04375>       [LOSS= 2 :CN= 71.0]
04376>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04377>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
04378>       [IaRECimp=   1.50: IaRECper=   6.00]
04379>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04380> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
04381> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04382> # Total Volume provided by LID  - 165 m³
04383> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04384> R0085:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04385>     ROUTE RESERVOIR ->    5.0 02:W6            7.81     .306 1985.0716_14:00  338.94  n/a     .000
04386>                 out <=    5.0 01:W6-LID        1.80     .001 1985.0222_ 9:25  338.94  n/a     .000
04387>             overflow <=   5.0 03:W6-LID-Out     6.01     .302 1985.0716_14:00  338.94  n/a     .000
04388>       (MxStoUsed=.1649E-01  m3, TotOvfVol=.2038E+01  m3, N-Ovf=   82, TotDurOvf=  145.hrs)
04389> R0085:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04390>     ADD HYD               5.0 02:W1            5.76     .178 1985.0716_14:00  274.48  n/a     .000
04391>                   +       5.0 02:W2            8.51     .240 1985.0716_14:00  253.27  n/a     .000
04392>                   +       5.0 02:W3           10.03     .363 1985.0716_14:00  318.35  n/a     .000
04393>                   +       5.0 02:W4           10.11     .336 1985.0716_14:00  293.85  n/a     .000
04394>                   +       5.0 02:W5            6.20     .198 1985.0716_14:00  281.65  n/a     .000
04395>                   +       5.0 02:W6            7.81     .306 1985.0716_14:00  338.94  n/a     .000
04396>                 SUM=      5.0 01:BCD-PH3      48.42    1.621 1985.0716_14:00  295.20  n/a     .000
04397> R0085:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04398>     ADD HYD               5.0 02:W1-LID-Out    4.49     .176 1985.0716_14:00  274.48  n/a     .000
04399>                   +       5.0 02:W2-LID-Out    6.61     .237 1985.0716_14:00  253.27  n/a     .000
04400>                   +       5.0 02:W3-LID-Out    7.76     .359 1985.0716_14:00  318.35  n/a     .000
04401>                   +       5.0 02:W4-LID-Out    7.78     .332 1985.0716_14:00  293.85  n/a     .000
04402>                   +       5.0 02:W5-LID-Out    4.77     .195 1985.0716_14:00  281.65  n/a     .000
04403>                   +       5.0 02:W6-LID-Out    6.01     .302 1985.0716_14:00  338.94  n/a     .000
04404>                 SUM=      5.0 01:BCD-PH3-LI   37.42    1.601 1985.0716_14:00  295.13  n/a     .000
04405> ********************************************************************************************************************
04406> #                    Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04407> ********************************************************************************************************************
04408> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
04409> ********************************************************************************************************************
04410> R0085:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04411>     CONTINUOUS STANDHYD   5.0 01:INF-W1          5.76     .254 1985.0716_14:00  361.80 .646     .000
04412>       [XIMP=.55:TIMP=.66]
04413>       [LOSS= 2 :CN=100.0]
04414>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04415>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
04416>       [IaRECimp=   1.50: IaRECper=   6.00]
04417>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04418> R0085:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04419>     CONTINUOUS STANDHYD   5.0 01:INF-W2          8.51     .350 1985.0716_14:00  347.74 .621     .000
04420>       [XIMP=.50:TIMP=.60]
04421>       [LOSS= 2 :CN=100.0]
04422>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04423>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
04424>       [IaRECimp=   1.50: IaRECper=   6.00]
04425>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04426> R0085:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04427>     CONTINUOUS STANDHYD   5.0 01:INF-W3         10.03     .456 1985.0716_14:00  386.27 .690     .000
04428>       [XIMP=.66:TIMP=.76]
04429>       [LOSS= 2 :CN=100.0]
04430>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04431>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
04432>       [IaRECimp=   1.50: IaRECper=   6.00]
04433>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04434> R0085:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04435>     CONTINUOUS STANDHYD   5.0 01:INF-W4         10.11     .442 1985.0716_14:00  371.72 .664     .000
04436>       [XIMP=.60:TIMP=.70]
04437>       [LOSS= 2 :CN=100.0]
04438>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04439>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
04440>       [IaRECimp=   1.50: IaRECper=   6.00]
04441>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04442> R0085:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04443>     CONTINUOUS STANDHYD   5.0 01:INF-W5          6.20     .274 1985.0716_14:00  364.50 .651     .000
04444>       [XIMP=.57:TIMP=.67]
04445>       [LOSS= 2 :CN=100.0]
04446>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04447>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
04448>       [IaRECimp=   1.50: IaRECper=   6.00]
04449>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04450> R0085:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04451>     CONTINUOUS STANDHYD   5.0 01:INF-W6          7.81     .372 1985.0716_14:00  398.56 .712     .000
04452>       [XIMP=.71:TIMP=.81]
04453>       [LOSS= 2 :CN=100.0]
04454>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04455>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
04456>       [IaRECimp=   1.50: IaRECper=   6.00]
04457>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04458> R0085:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04459>     ADD HYD               5.0 02:INF-W1          5.76     .254 1985.0716_14:00  361.80  n/a     .000
04460>                   +       5.0 02:INF-W2          8.51     .350 1985.0716_14:00  347.74  n/a     .000
04461>                   +       5.0 02:INF-W3         10.03     .456 1985.0716_14:00  386.27  n/a     .000
04462>                   +       5.0 02:INF-W4         10.11     .442 1985.0716_14:00  371.72  n/a     .000
04463>                   +       5.0 02:INF-W5          6.20     .274 1985.0716_14:00  364.50  n/a     .000
04464>                   +       5.0 02:INF-W6          7.81     .372 1985.0716_14:00  398.56  n/a     .000
04465>                 SUM=      5.0 01:INF-BCD-PH     48.42    2.148 1985.0716_14:00  372.74  n/a     .000
04466> ##############################################################################
04467> # CONTINUOUS RAINFALL DATA
04468> ##############################################################################
04469>  ** END OF RUN :   85
04470>
04471> ********************************************************************************************************************
04472>
04473>
04474>
04475>
04476>
04477>  RUN#:COMMAND#
04478> R0086:C00001------------------------------------------------------------------------------------------------------
04479>       START
04480>       [TZERO =    .00 hrs on 19860101]
04481>       [METOUT=   2    (1=imperial, 2=metric output)]
04482>       [NSTORM=   0 ]
04483>       [NRUN  = 0086 ]
04484> ********************************************************************************************************************
04485> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
04486> ********************************************************************************************************************
04487> #  Project Name: Barrhaven Conservancy Development
04488> #  Project Number: 1474
04489> #  Date        : 2021/Oct/18
04490> #  Modeller    : J.Burnett, P.Eng.
04491> #  Updated     : 2024/Mar/14 [LP]
04492> #  Company     : J.F. Sabourin and Associates
04493> #  License #   : 2582634
04494> ********************************************************************************************************************
04495> # Ottawa International Airport (1967 - 2003)
04496> R0086:C00002------------------------------------------------------------------------------------------------------
04497>   *  READ AES DATA
04498>       [Filename  = YOW_1967_2007.123                                    ]
04499>       [Start_date= 1986.0101: End_date= 1986.1231]
04500>       (DT= 60.min: Length= 8040.hrs: WetHrs=  520: DryHrs= 7520: PTOT= 849.40)
04501>
04502>       Maximum average rainfall intensities over
04503>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04503>        18.30    17.80    13.57     7.07     4.84     2.89     2.42     1.85     1.31    mm/hr
04504>        18.30    35.60    40.70    42.40    58.10    69.30    87.00    88.60    94.40    mm
04505>       19860729 19860729 19860729 19860729 19860912 19860912 19860912 19860912 19860913  date
04506>       Number of rainfall events per following interevent time
04507>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04508>          178      144      131      104       80       63       53       48       33
04509>       Number of events with at least the following durations
04510>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04511>          177      104       76       24        2        0        0        0        0
04512> R0086:C00003------------------------------------------------------------------------------------------------------
04513>       COMPUTE API
04514>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
04515>       [APImax=102.23: APIavg= 25.30: APImin=   .17]
04516> ********************************************************************************************************************
04517> #                    Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04518> ********************************************************************************************************************
04519> R0086:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04520>     CONTINUOUS STANDHYD   5.0 01:W1            5.76     .222 1986.0729_15:00  447.81 .527     .000
04521>       [XIMP=.55:TIMP=.66]
04522>       [LOSS= 2 :CN= 71.0]
04523>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04524>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
04525>       [IaRECimp=   1.50: IaRECper=   6.00]
04526>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04527> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
04528> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04529> # Total Volume provided by LID  - 96 m³
04530> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04531> R0086:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04532>     ROUTE RESERVOIR ->    5.0 02:W1            5.76     .222 1986.0729_15:00  447.81  n/a     .000
04533>                 out <=    5.0 01:W1-LID        1.11     .001 1986.0119_19:25  447.82  n/a     .000
04534>             overflow <=   5.0 03:W1-LID-Out     4.65     .218 1986.0729_15:00  447.81  n/a     .000
04535>       (MxStoUsed=.9601E-02  m3, TotOvfVol=.2082E+01  m3, N-Ovf=  161, TotDurOvf=  209.hrs)
04536> R0086:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04537>     CONTINUOUS STANDHYD   5.0 01:W2            8.51     .311 1986.0729_15:00  418.92 .493     .000
04538>       [XIMP=.50:TIMP=.60]
04539>       [LOSS= 2 :CN= 71.0]
04540>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04541>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
04542>       [IaRECimp=   1.50: IaRECper=   6.00]
04543>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04544> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
04545> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04546> # Total Volume provided by LID  - 131 m³
04547> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04548> R0086:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04549>     ROUTE RESERVOIR ->    5.0 02:W2            8.51     .311 1986.0729_15:00  418.93  n/a     .000
04550>                 out <=    5.0 01:W2-LID        1.64     .001 1986.0119_19:30  418.93  n/a     .000
04551>             overflow <=   5.0 03:W2-LID-Out     6.87     .304 1986.0729_15:00  418.93  n/a     .000
04552>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.2878E+01  m3, N-Ovf=  166, TotDurOvf=  212.hrs)
04553> R0086:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04554>     CONTINUOUS STANDHYD   5.0 01:W3           10.03     .420 1986.0729_15:00  505.22 .595     .000
04555>       [XIMP=.66:TIMP=.76]
04556>       [LOSS= 2 :CN= 71.0]
04557>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04558>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
04559>       [IaRECimp=   1.50: IaRECper=   6.00]
04560>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04561> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
04562> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04563> # Total Volume provided by LID  - 193 m³
04564> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04565> R0086:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04566>     ROUTE RESERVOIR ->    5.0 02:W3           10.03     .420 1986.0729_15:00  505.22  n/a     .000
04567>                 out <=    5.0 01:W3-LID        2.06     .001 1986.0119_19:25  505.21  n/a     .000
04568>             overflow <=   5.0 03:W3-LID-Out     7.97     .414 1986.0729_15:00  505.22  n/a     .000
04569>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.4026E+01  m3, N-Ovf=  159, TotDurOvf=  206.hrs)
04570> R0086:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04571>     CONTINUOUS STANDHYD   5.0 01:W4           10.11     .402 1986.0729_15:00  472.67 .556     .000
04572>       [XIMP=.60:TIMP=.70]
04573>       [LOSS= 2 :CN= 71.0]
04574>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04575>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
04576>       [IaRECimp=   1.50: IaRECper=   6.00]
04577>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04578> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
04579> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04580> # Total Volume provided by LID  - 186 m³
04581> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04582> R0086:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04583>     ROUTE RESERVOIR ->    5.0 02:W4           10.11     .402 1986.0729_15:00  472.68  n/a     .000
04584>                 out <=    5.0 01:W4-LID        2.07     .001 1986.0119_19:30  472.69  n/a     .000
04585>             overflow <=   5.0 03:W4-LID-Out     8.04     .396 1986.0729_15:00  472.68  n/a     .000
04586>       (MxStoUsed=.1859E-01  m3, TotOvfVol=.3799E+01  m3, N-Ovf=  160, TotDurOvf=  209.hrs)
04587> R0086:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04588>     CONTINUOUS STANDHYD   5.0 01:W5            6.20     .241 1986.0729_15:00  456.50 .537     .000
04589>       [XIMP=.57:TIMP=.67]
04590>       [LOSS= 2 :CN= 71.0]
04591>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04592>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
04593>       [IaRECimp=   1.50: IaRECper=   6.00]
04594>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04595> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
04596> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04597> # Total Volume provided by LID  - 110 m³
04598> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04599> R0086:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04600>     ROUTE RESERVOIR ->    5.0 02:W5            6.20     .241 1986.0729_15:00  456.50  n/a     .000
04601>                 out <=    5.0 01:W5-LID        1.26     .001 1986.0119_19:30  456.50  n/a     .000
04602>             overflow <=   5.0 03:W5-LID-Out     4.94     .237 1986.0729_15:00  456.50  n/a     .000
04603>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.2253E+01  m3, N-Ovf=  170, TotDurOvf=  203.hrs)
04604> R0086:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04605>     CONTINUOUS STANDHYD   5.0 01:W6            7.81     .341 1986.0729_15:00  532.62 .627     .000
04606>       [XIMP=.71:TIMP=.81]
04607>       [LOSS= 2 :CN= 71.0]
04608>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04609>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
04610>       [IaRECimp=   1.50: IaRECper=   6.00]
04611>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04612> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
04613> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04614> # Total Volume provided by LID  - 165 m³
04615> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04616> R0086:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04617>     ROUTE RESERVOIR ->    5.0 02:W6            7.81     .341 1986.0729_15:00  532.62  n/a     .000
04618>                 out <=    5.0 01:W6-LID        1.64     .001 1986.0119_19:25  532.63  n/a     .000
04619>             overflow <=   5.0 03:W6-LID-Out     6.17     .337 1986.0729_15:00  532.62  n/a     .000
04620>       (MxStoUsed=.1648E-01  m3, TotOvfVol=.3286E+01  m3, N-Ovf=  154, TotDurOvf=  204.hrs)
04621> R0086:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04622>     ADD HYD               5.0 02:W1            5.76     .222 1986.0729_15:00  447.81  n/a     .000
04623>                   +       5.0 02:W2            8.51     .311 1986.0729_15:00  418.93  n/a     .000
04624>                   +       5.0 02:W3           10.03     .420 1986.0729_15:00  505.22  n/a     .000
04625>                   +       5.0 02:W4           10.11     .402 1986.0729_15:00  472.68  n/a     .000
04626>                   +       5.0 02:W5            6.20     .241 1986.0729_15:00  456.50  n/a     .000
04627>                   +       5.0 02:W6            7.81     .341 1986.0729_15:00  532.62  n/a     .000
04628>                 SUM=      5.0 01:BCD-PH3      48.42    1.937 1986.0729_15:00  474.61  n/a     .000
04629> R0086:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04630>     ADD HYD               5.0 02:W1-LID-Out    4.65     .218 1986.0729_15:00  447.81  n/a     .000
04631>                   +       5.0 02:W2-LID-Out    6.87     .304 1986.0729_15:00  418.93  n/a     .000
04632>                   +       5.0 02:W3-LID-Out    7.97     .414 1986.0729_15:00  505.22  n/a     .000
04633>                   +       5.0 02:W4-LID-Out    8.04     .396 1986.0729_15:00  472.68  n/a     .000
04634>                   +       5.0 02:W5-LID-Out    4.94     .237 1986.0729_15:00  456.50  n/a     .000
04635>                   +       5.0 02:W6-LID-Out    6.17     .337 1986.0729_15:00  532.62  n/a     .000
04636>                 SUM=      5.0 01:BCD-PH3-LI   38.63    1.905 1986.0729_15:00  474.34  n/a     .000
04637> ********************************************************************************************************************
04638> #                    Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04639> ********************************************************************************************************************
04640> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
04641> ********************************************************************************************************************
04642> R0086:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04643>     CONTINUOUS STANDHYD   5.0 01:INF-W1          5.76     .283 1986.0729_15:00  551.31 .649     .000
04644>       [XIMP=.55:TIMP=.66]
04645>       [LOSS= 2 :CN=100.0]
04646>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04647>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
04648>       [IaRECimp=   1.50: IaRECper=   6.00]
04649>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04650> R0086:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04651>     CONTINUOUS STANDHYD   5.0 01:INF-W2          8.51     .412 1986.0729_15:00  531.43 .626     .000
04652>       [XIMP=.50:TIMP=.60]
04653>       [LOSS= 2 :CN=100.0]
04654>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04655>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
04656>       [IaRECimp=   1.50: IaRECper=   6.00]
04657>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04658> R0086:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04659>     CONTINUOUS STANDHYD   5.0 01:INF-W3         10.03     .496 1986.0729_15:00  585.29 .689     .000
04660>       [XIMP=.66:TIMP=.76]
04661>       [LOSS= 2 :CN=100.0]
04662>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04663>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
04664>       [IaRECimp=   1.50: IaRECper=   6.00]
04665>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04666> R0086:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04667>     CONTINUOUS STANDHYD   5.0 01:INF-W4         10.11     .495 1986.0729_15:00  564.94 .665     .000
04668>       [XIMP=.60:TIMP=.70]
04669>       [LOSS= 2 :CN=100.0]
04670>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04671>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
04672>       [IaRECimp=   1.50: IaRECper=   6.00]
04673>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04674> R0086:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04675>     CONTINUOUS STANDHYD   5.0 01:INF-W5          6.20     .304 1986.0729_15:00  554.85 .653     .000
04676>       [XIMP=.57:TIMP=.67]
04677>       [LOSS= 2 :CN=100.0]
04678>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04679>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
04680>       [IaRECimp=   1.50: IaRECper=   6.00]
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04681>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04682> R0086:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04683>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .390 1986.0729_15:00  602.49 .709     .000
04684>       [XINF=.71:TIMF=.81]
04685>       [LOSS= 2 :CN=100.0]
04686>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04687>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 228.:MNI=.013:SCI=   .0]
04688>       [IaRECimp=   1.50: IaRECper=   6.00]
04689>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04690> R0086:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04691>     ADD HYD                5.0 02:INF-W1          5.76     .283 1986.0729_15:00  551.31  n/a     .000
04692>                  +     5.0 02:INF-W2          8.51     .412 1986.0729_15:00  531.43  n/a     .000
04693>                  +     5.0 02:INF-W3         10.03     .496 1986.0729_15:00  585.29  n/a     .000
04694>                  +     5.0 02:INF-W4         10.11     .495 1986.0729_15:00  564.95  n/a     .000
04695>                  +     5.0 02:INF-W5          6.20     .304 1986.0729_15:00  554.85  n/a     .000
04696>                  +     5.0 02:INF-W6          7.81     .390 1986.0729_15:00  602.49  n/a     .000
04697>               SUM=     5.0 01:INF-BCD-PH     48.42    2.379 1986.0729_15:00  566.41  n/a     .000
04698> ##############################################################################
04699> # CONTINUOUS RAINFALL DATA
04700> ##############################################################################
04701>   ** END OF RUN :   86
04702>
04703> ********************************************************************************************************
04704>
04705>
04706>
04707>
04708>
04709>  RUN#:COMMAND#
04710> R0087:C00001------------------------------------------------------------------------------------------
04711>       START
04712>       [TZERO =    .00 hrs on 19870101]
04713>       [METOUT=   2    (1=imperial, 2=metric output)]
04714>       [NSTORM=   0 ]
04715>       [NRUN   = 0087 ]
04716> ********************************************************************************************************
04717> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
04718> ********************************************************************************************************
04719> #  Project Name: Barrhaven Conservancy Development
04720> #  Project Number: 1474
04721> #  Date        : 2021/Oct/18
04722> #  Modeller    : J.Burnett, P.Eng.
04723> #  Updated     : 2024/Mar/14 [LP]
04724> #  Company     : J.F. Sabourin and Associates
04725> #  License #   : 2582634
04726> ********************************************************************************************************
04727> # Ottawa International Airport (1967 - 2003)
04728> R0087:C00002------------------------------------------------------------------------------------------
04729>   *  READ AES DATA
04730>       [Filename  = YOW_1967_2007.123                                    ]
04731>       [Start_date= 1987.0101: End_date= 1987.1231]
04732>       [DT= 60.min: Length= 7344.hrs: WetHrs=  492: DryHrs= 6852: PTOT= 640.10)
04733>       Maximum average rainfall intensities over
04734>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04735>        20.00    13.90    14.03     7.05     4.87     2.46     1.84     1.40      .93    mm/hr
04736>        20.00    27.80    42.10    42.30    58.40    59.00    66.40    67.00    67.00    mm
04737>      19870724 19870724 19870724 19870724 19870724 19870725 19870725 19870726 19870726  date
04738>       Number of rainfall events per following interevent time
04739>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04740>          180      147      128       93       74       55       49       41       28
04741>       Number of events with at least the following durations
04742>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04743>          179       94       60       20        3        0        0        0        0
04744> R0087:C00003------------------------------------------------------------------------------------------
04745>       COMPUTE API
04746>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
04747>       [APImax= 75.76: APIavg= 21.41: APImin=  1.18]
04748> ********************************************************************************************************
04749> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04750> ********************************************************************************************************
04751> R0087:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04752>     CONTINUOUS STANDHYD    5.0 01:W1              5.76     .190 1987.0724_13:00  294.46 .460     .000
04753>       [XINF=.55:TIMF=.66]
04754>       [LOSS= 2 :CN= 71.0]
04755>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04756>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 196.:MNI=.013:SCI=   .0]
04757>       [IaRECimp=   1.50: IaRECper=   6.00]
04758>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04759> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
04760> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04761> # Total Volume provided by LID  - 96 m³
04762> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04763> R0087:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04764>     ROUTE RESERVOIR ->     5.0 02:W1              5.76     .190 1987.0724_13:00  294.46  n/a     .000
04765>                  out <=    5.0 01:W1-LID          1.50     .001 1987.0326_15:25  294.46  n/a     .000
04766>               overflow <=  5.0 03:W1-LID-Out      4.26     .187 1987.0724_13:00  294.46  n/a     .000
04767>       (MxStoUsed=.9600E-02  m3, TotOvfVol=.1255E+01  m3, N-Ovf=  131, TotDurOvf=  163.hrs)
04768> R0087:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04769>     CONTINUOUS STANDHYD    5.0 01:W2              8.51     .257 1987.0724_13:00  272.79 .426     .000
04770>       [XINF=.50:TIMF=.60]
04771>       [LOSS= 2 :CN= 71.0]
04772>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04773>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 238.:MNI=.013:SCI=   .0]
04774>       [IaRECimp=   1.50: IaRECper=   6.00]
04775>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04776> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
04777> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04778> # Total Volume provided by LID  - 131 m³
04779> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04780> R0087:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04781>     ROUTE RESERVOIR ->     5.0 02:W2              8.51     .257 1987.0724_13:00  272.78  n/a     .000
04782>                  out <=    5.0 01:W2-LID          2.23     .001 1987.0326_15:45  272.79  n/a     .000
04783>               overflow <=  5.0 03:W2-LID-Out      6.28     .252 1987.0724_13:00  272.78  n/a     .000
04784>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.1714E+01  m3, N-Ovf=  128, TotDurOvf=  165.hrs)
04785> R0087:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04786>     CONTINUOUS STANDHYD    5.0 01:W3             10.03     .386 1987.0724_13:00  338.63 .529     .000
04787>       [XINF=.66:TIMF=.76]
04788>       [LOSS= 2 :CN= 71.0]
04789>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04790>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 259.:MNI=.013:SCI=   .0]
04791>       [IaRECimp=   1.50: IaRECper=   6.00]
04792>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04793> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
04794> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04795> # Total Volume provided by LID  - 193 m³
04796> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04797> R0087:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04798>     ROUTE RESERVOIR ->     5.0 02:W3             10.03     .386 1987.0724_13:00  338.63  n/a     .000
04799>                  out <=    5.0 01:W3-LID          2.72     .001 1987.0326_15:20  338.62  n/a     .000
04800>               overflow <=  5.0 03:W3-LID-Out      7.31     .381 1987.0724_13:00  338.63  n/a     .000
04801>       (MxStoUsed=.1928E-01  m3, TotOvfVol=.2476E+01  m3, N-Ovf=  136, TotDurOvf=  163.hrs)
04802> R0087:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04803>     CONTINUOUS STANDHYD    5.0 01:W4             10.11     .357 1987.0724_13:00  313.83 .490     .000
04804>       [XINF=.60:TIMF=.70]
04805>       [LOSS= 2 :CN= 71.0]
04806>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04807>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 260.:MNI=.013:SCI=   .0]
04808>       [IaRECimp=   1.50: IaRECper=   6.00]
04809>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04810> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
04811> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04812> # Total Volume provided by LID  - 186 m³
04813> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04814> R0087:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04815>     ROUTE RESERVOIR ->     5.0 02:W4             10.11     .357 1987.0724_13:00  313.83  n/a     .000
04816>                  out <=    5.0 01:W4-LID          2.77     .001 1987.0326_15:50  313.84  n/a     .000
04817>               overflow <=  5.0 03:W4-LID-Out      7.34     .352 1987.0724_13:00  313.83  n/a     .000
04818>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.2305E+01  m3, N-Ovf=  134, TotDurOvf=  162.hrs)
04819> R0087:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04820>     CONTINUOUS STANDHYD    5.0 01:W5              6.20     .211 1987.0724_13:00  301.51 .471     .000
04821>       [XINF=.57:TIMF=.67]
04822>       [LOSS= 2 :CN= 71.0]
04823>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04824>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 203.:MNI=.013:SCI=   .0]
04825>       [IaRECimp=   1.50: IaRECper=   6.00]
04826>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04827> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
04828> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04829> # Total Volume provided by LID  - 110 m³
04830> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04831> R0087:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04832>     ROUTE RESERVOIR ->     5.0 02:W5              6.20     .211 1987.0724_13:00  301.51  n/a     .000
04833>                  out <=    5.0 01:W5-LID          1.70     .001 1987.0326_16:00  301.51  n/a     .000
04834>               overflow <=  5.0 03:W5-LID-Out      4.50     .208 1987.0724_13:00  301.51  n/a     .000
04835>       (MxStoUsed=.1099E-01  m3, TotOvfVol=.1358E+01  m3, N-Ovf=  130, TotDurOvf=  159.hrs)
04836> R0087:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04837>     CONTINUOUS STANDHYD    5.0 01:W6              7.81     .322 1987.0724_13:00  359.51 .562     .000
04838>       [XINF=.71:TIMF=.81]
04839>       [LOSS= 2 :CN= 71.0]
04840>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04841>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 228.:MNI=.013:SCI=   .0]
04842>       [IaRECimp=   1.50: IaRECper=   6.00]
04843>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04844> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
04845> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04846> # Total Volume provided by LID  - 165 m³
04847> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04848> R0087:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04849>     ROUTE RESERVOIR ->     5.0 02:W6              7.81     .322 1987.0724_13:00  359.51  n/a     .000
04850>                  out <=    5.0 01:W6-LID          2.15     .001 1987.0326_15:25  359.52  n/a     .000
04851>               overflow <=  5.0 03:W6-LID-Out      5.66     .319 1987.0724_13:00  359.51  n/a     .000
04852>       (MxStoUsed=.1649E-01  m3, TotOvfVol=.2033E+01  m3, N-Ovf=  137, TotDurOvf=  162.hrs)
04853> R0087:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04854>     ADD HYD                5.0 02:W1              5.76     .190 1987.0724_13:00  294.46  n/a     .000
04855>                  +     5.0 02:W2              8.51     .257 1987.0724_13:00  272.78  n/a     .000
04856>                  +     5.0 02:W3             10.03     .386 1987.0724_13:00  338.63  n/a     .000
04857>                  +     5.0 02:W4             10.11     .357 1987.0724_13:00  313.83  n/a     .000
04858>                  +     5.0 02:W5              6.20     .211 1987.0724_13:00  301.51  n/a     .000
04859>                  +     5.0 02:W6              7.81     .322 1987.0724_13:00  359.51  n/a     .000
04860>               SUM=     5.0 01:BCD-PH3        48.42    1.723 1987.0724_13:00  315.24  n/a     .000
04861> R0087:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04862>     ADD HYD                5.0 02:W1-LID-Out      4.26     .187 1987.0724_13:00  294.46  n/a     .000
04863>                  +     5.0 02:W2-LID-Out      6.28     .252 1987.0724_13:00  272.78  n/a     .000
04864>                  +     5.0 02:W3-LID-Out      7.31     .381 1987.0724_13:00  338.63  n/a     .000
04865>                  +     5.0 02:W4-LID-Out      7.34     .352 1987.0724_13:00  313.83  n/a     .000
04866>                  +     5.0 02:W5-LID-Out      4.50     .208 1987.0724_13:00  301.51  n/a     .000
04867>                  +     5.0 02:W6-LID-Out      5.66     .319 1987.0724_13:00  359.51  n/a     .000
04868>               SUM=     5.0 01:BCD-PH3-LI     35.36    1.699 1987.0724_13:00  315.07  n/a     .000
04869> ********************************************************************************************************
04870> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04871> ********************************************************************************************************
04872> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
04873> ********************************************************************************************************
04874> R0087:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04875>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76     .267 1987.0724_13:00  367.26 .574     .000
04876>       [XIMP=.55:TIMP=.66]
04877>       [LOSS= 2 :CN=100.0]
04878>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04879>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 196.:MNI=.013:SCI=   .0]
04880>       [IaRECimp=   1.50: IaRECper=   6.00]
04881>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04882> R0087:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04883>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51     .368 1987.0724_13:00  350.74 .548     .000
04884>       [XIMP=.50:TIMP=.60]
04885>       [LOSS= 2 :CN=100.0]
04886>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04887>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 238.:MNI=.013:SCI=   .0]
04888>       [IaRECimp=   1.50: IaRECper=   6.00]
04889>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04890> R0087:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04891>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03     .479 1987.0724_13:00  396.13 .619     .000
04892>       [XIMP=.66:TIMP=.76]
04893>       [LOSS= 2 :CN=100.0]
04894>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04895>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 259.:MNI=.013:SCI=   .0]
04896>       [IaRECimp=   1.50: IaRECper=   6.00]
04897>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04898> R0087:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04899>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11     .465 1987.0724_13:00  378.87 .592     .000
04900>       [XIMP=.60:TIMP=.70]
04901>       [LOSS= 2 :CN=100.0]
04902>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04903>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 260.:MNI=.013:SCI=   .0]
04904>       [IaRECimp=   1.50: IaRECper=   6.00]
04905>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04906> R0087:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04907>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .289 1987.0724_13:00  370.36 .579     .000
04908>       [XIMP=.57:TIMP=.67]
04909>       [LOSS= 2 :CN=100.0]
04910>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04911>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 203.:MNI=.013:SCI=   .0]
04912>       [IaRECimp=   1.50: IaRECper=   6.00]
04913>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04914> R0087:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04915>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .392 1987.0724_13:00  410.80 .642     .000
04916>       [XIMP=.71:TIMP=.81]
04917>       [LOSS= 2 :CN=100.0]
04918>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04919>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 228.:MNI=.013:SCI=   .0]
04920>       [IaRECimp=   1.50: IaRECper=   6.00]
04921>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
04922> R0087:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04923>     ADD HYD                5.0 02:INF-W1          5.76     .267 1987.0724_13:00  367.27  n/a     .000
04924>                  +     5.0 02:INF-W2          8.51     .368 1987.0724_13:00  350.74  n/a     .000
04925>                  +     5.0 02:INF-W3         10.03     .479 1987.0724_13:00  396.13  n/a     .000
04926>                  +     5.0 02:INF-W4         10.11     .465 1987.0724_13:00  378.87  n/a     .000
04927>                  +     5.0 02:INF-W5          6.20     .289 1987.0724_13:00  370.36  n/a     .000
04928>                  +     5.0 02:INF-W6          7.81     .392 1987.0724_13:00  410.80  n/a     .000
04929>               SUM=     5.0 01:INF-BCD-PH     48.42    2.260 1987.0724_13:00  380.18  n/a     .000
04930> ##############################################################################
04931> # CONTINUOUS RAINFALL DATA
04932> ##############################################################################
04933>   ** END OF RUN :   87
04934>
04935> ********************************************************************************************************
04936>
04937>
04938>
04939>
04940>
04941>  RUN#:COMMAND#
04942> R0088:C00001------------------------------------------------------------------------------------------
04943>       START
04944>       [TZERO =    .00 hrs on 19880101]
04945>       [METOUT=   2    (1=imperial, 2=metric output)]
04946>       [NSTORM=   0 ]
04947>       [NRUN   = 0088 ]
04948> ********************************************************************************************************
04949> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
04950> ********************************************************************************************************
04951> #  Project Name: Barrhaven Conservancy Development
04952> #  Project Number: 1474
04953> #  Date        : 2021/Oct/18
04954> #  Modeller    : J.Burnett, P.Eng.
04955> #  Updated     : 2024/Mar/14 [LP]
04956> #  Company     : J.F. Sabourin and Associates
04957> #  License #   : 2582634
04958> ********************************************************************************************************
04959> # Ottawa International Airport (1967 - 2003)
04960> R0088:C00002------------------------------------------------------------------------------------------
04961>   *  READ AES DATA
04962>       [Filename  = YOW_1967_2007.123                                    ]
04963>       [Start_date= 1988.0101: End_date= 1988.1230]
04964>       [DT= 60.min: Length= 8760.hrs: WetHrs=  487: DryHrs= 8273: PTOT= 643.80)
04965>       Maximum average rainfall intensities over
04966>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04967>        25.50    18.20    12.77     7.37     3.78     1.91     1.27      .95      .94    mm/hr
04968>        25.50    36.40    38.30    44.20    45.40    45.80    45.80    45.80    67.40    mm
04969>      19880917 19880726 19880625 19880625 19880625 19880625 19880625 19880626 19880625  date
04970>       Number of rainfall events per following interevent time
04971>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04972>          165      130       80       66       56       49       42       26
04973>       Number of events with at least the following durations
04974>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
04975>          164      102       71       20        5        0        0        0        0
04976> R0088:C00003------------------------------------------------------------------------------------------
04977>       COMPUTE API
04978>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
04979>       [APImax= 66.04: APIavg= 18.06: APImin=  .03)
04980> ********************************************************************************************************
04981> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
04982> ********************************************************************************************************
04983> R0088:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04984>     CONTINUOUS STANDHYD    5.0 01:W1              5.76     .259 1988.0726_13:00  295.21 .459     .000
04985>       [XIMP=.55:TIMP=.66]
04986>       [LOSS= 2 :CN= 71.0]
04987>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04988>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 196.:MNI=.013:SCI=   .0]
04989>       [IaRECimp=   1.50: IaRECper=   6.00]
04990>       [SMIN= 41.38: SMAX=275.84: SK= .030]
04991> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
04992> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
04993> # Total Volume provided by LID  - 96 m³
04994> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
04995> R0088:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04996>     ROUTE RESERVOIR ->     5.0 02:W1              5.76     .259 1988.0726_13:00  295.21  n/a     .000
04997>                  out <=    5.0 01:W1-LID          1.50     .001 1988.0117_22:45  295.22  n/a     .000
04998>               overflow <=  5.0 03:W1-LID-Out      4.26     .253 1988.0726_13:00  295.21  n/a     .000
04999>       (MxStoUsed=.9601E-02  m3, TotOvfVol=.1258E+01  m3, N-Ovf=  120, TotDurOvf=  165.hrs)
05000> R0088:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05001>     CONTINUOUS STANDHYD    5.0 01:W2              8.51     .353 1988.0726_13:00  273.19 .424     .000
05002>       [XIMP=.50:TIMP=.60]
05003>       [LOSS= 2 :CN= 71.0]
05004>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05005>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 238.:MNI=.013:SCI=   .0]
05006>       [IaRECimp=   1.50: IaRECper=   6.00]
05007>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05008> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
05009> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05010> # Total Volume provided by LID  - 131 m³
05011> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05012> R0088:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05013>     ROUTE RESERVOIR ->     5.0 02:W2              8.51     .353 1988.0726_13:00  273.19  n/a     .000
05014>                  out <=    5.0 01:W2-LID          2.23     .001 1988.0117_22:50  273.19  n/a     .000
05015>               overflow <=  5.0 03:W2-LID-Out      6.28     .345 1988.0726_13:05  273.19  n/a     .000
05016>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.1714E+01  m3, N-Ovf=  119, TotDurOvf=  165.hrs)
05017> R0088:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05018>     CONTINUOUS STANDHYD    5.0 01:W3             10.03     .514 1988.0726_13:00  340.15 .528     .000
05019>       [XIMP=.66:TIMP=.76]
05020>       [LOSS= 2 :CN= 71.0]
05021>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05022>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 259.:MNI=.013:SCI=   .0]
05023>       [IaRECimp=   1.50: IaRECper=   6.00]
05024>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05025> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
05026> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05027> # Total Volume provided by LID  - 193 m³
05028> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05029> R0088:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05030>     ROUTE RESERVOIR ->     5.0 02:W3             10.03     .514 1988.0726_13:00  340.15  n/a     .000
05031>                  out <=    5.0 01:W3-LID          2.72     .001 1988.0117_22:40  340.14  n/a     .000
05032>               overflow <=  5.0 03:W3-LID-Out      7.31     .505 1988.0726_13:00  340.15  n/a     .000
05033>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.2487E+01  m3, N-Ovf=  131, TotDurOvf=  165.hrs)
05034> R0088:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05035>     CONTINUOUS STANDHYD    5.0 01:W4             10.11     .480 1988.0726_13:00  314.93 .489     .000
05036>       [XIMP=.60:TIMP=.70]
05037>       [LOSS= 2 :CN= 71.0]
05038>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05039>       [Impervious  area: IAimp= 1.57:SLPI=  .50:LGI= 260.:MNI=.013:SCI=   .0]
05040>       [IaRECimp=   1.50: IaRECper=   6.00]
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05041>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05042> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
05043> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05044> # Total Volume provided by LID  - 186 m³
05045> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05046> R0088:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05047>     ROUTE RESERVOIR ->    5.0 02:W4          10.11      .480 1988.0726_13:00  314.93  n/a     .000
05048>               out <=    5.0 01:W4-LID        2.77      .001 1988.0117_22:50  314.95  n/a     .000
05049>           overflow <=   5.0 03:W4-LID-Out     7.34      .471 1988.0726_13:00  314.93  n/a     .000
05050>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.2313E+01  m3, N-Ovf=  126, TotDurOvf=  163.hrs)
05051> R0088:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05052>     CONTINUOUS STANDHYD    5.0 01:W5          6.20      .285 1988.0726_13:00  302.40  .470     .000
05053>       [XIMP=.57:TIMP=.67]
05054>       [LOSS= 2 :CN= 71.0]
05055>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05056>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05057>       [IaRECimp=   1.50: IaRECper=   6.00]
05058>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05059> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
05060> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05061> # Total Volume provided by LID  - 110 m³
05062> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05063> R0088:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05064>     ROUTE RESERVOIR ->    5.0 02:W5          6.20      .285 1988.0726_13:00  302.40  n/a     .000
05065>               out <=    5.0 01:W5-LID        1.70      .001 1988.0117_22:50  302.39  n/a     .000
05066>           overflow <=   5.0 03:W5-LID-Out     4.50      .279 1988.0726_13:00  302.40  n/a     .000
05067>      (MxStoUsed=.1099E-01  m3, TotOvfVol=.1362E+01  m3, N-Ovf=  122, TotDurOvf=  159.hrs)
05068> R0088:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05069>     CONTINUOUS STANDHYD    5.0 01:W6          7.81      .426 1988.0726_13:00  361.38  .561     .000
05070>       [XIMP=.71:TIMP=.81]
05071>       [LOSS= 2 :CN= 71.0]
05072>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05073>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05074>       [IaRECimp=   1.50: IaRECper=   6.00]
05075>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05076> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
05077> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05078> # Total Volume provided by LID  - 165 m³
05079> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05080> R0088:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05081>     ROUTE RESERVOIR ->    5.0 02:W6          7.81      .426 1988.0726_13:00  361.38  n/a     .000
05082>               out <=    5.0 01:W6-LID        2.15      .001 1988.0117_22:40  361.38  n/a     .000
05083>           overflow <=   5.0 03:W6-LID-Out     5.66      .419 1988.0726_13:00  361.38  n/a     .000
05084>      (MxStoUsed=.1647E-01  m3, TotOvfVol=.2045E+01  m3, N-Ovf=  127, TotDurOvf=  162.hrs)
05085> R0088:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05086>     ADD HYD                5.0 02:W1          5.76      .259 1988.0726_13:00  295.21  n/a     .000
05087>                          +  5.0 02:W2          8.51      .353 1988.0726_13:00  273.19  n/a     .000
05088>                          +  5.0 02:W3         10.03      .514 1988.0726_13:00  340.15  n/a     .000
05089>                          +  5.0 02:W4         10.11      .480 1988.0726_13:00  314.93  n/a     .000
05090>                          +  5.0 02:W5          6.20      .285 1988.0726_13:00  302.40  n/a     .000
05091>                          +  5.0 02:W6          7.81      .426 1988.0726_13:00  361.38  n/a     .000
05092>                        SUM=  48.42    2.318 1988.0726_13:00  316.86  n/a     .000
05093> R0088:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05094>     ADD HYD                5.0 02:W1-LID-Out     4.26      .253 1988.0726_13:00  295.21  n/a     .000
05095>                          +  5.0 02:W2-LID-Out     6.28      .345 1988.0726_13:05  273.19  n/a     .000
05096>                          +  5.0 02:W3-LID-Out     7.31      .505 1988.0726_13:00  340.15  n/a     .000
05097>                          +  5.0 02:W4-LID-Out     7.34      .471 1988.0726_13:00  314.93  n/a     .000
05098>                          +  5.0 02:W5-LID-Out     4.50      .279 1988.0726_13:00  302.40  n/a     .000
05099>                          +  5.0 02:W6-LID-Out     5.66      .419 1988.0726_13:00  361.38  n/a     .000
05100>                        SUM=  5.0 01:BCD-PH3-LI   35.35    2.271 1988.0726_13:00  316.20  n/a     .000
05101> #*************************************************************************************************************
05102> #                    Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05103> #*************************************************************************************************************
05104> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
05105> #*************************************************************************************************************
05106> R0088:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05107>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76      .358 1988.0917_19:00  373.38  .580     .000
05108>       [XIMP=.55:TIMP=.66]
05109>       [LOSS= 2 :CN=100.0]
05110>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05111>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05112>       [IaRECimp=   1.50: IaRECper=   6.00]
05113>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05114> R0088:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05115>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51      .511 1988.0917_19:00  357.59  .555     .000
05116>       [XIMP=.50:TIMP=.60]
05117>       [LOSS= 2 :CN=100.0]
05118>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05119>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05120>       [IaRECimp=   1.50: IaRECper=   6.00]
05121>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05122> R0088:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05123>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03      .643 1988.0917_19:00  401.25  .623     .000
05124>       [XIMP=.66:TIMP=.76]
05125>       [LOSS= 2 :CN=100.0]
05126>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05127>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05128>       [IaRECimp=   1.50: IaRECper=   6.00]
05129>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05130> R0088:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05131>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11      .632 1988.0917_19:00  384.68  .598     .000
05132>       [XIMP=.60:TIMP=.70]
05133>       [LOSS= 2 :CN=100.0]
05134>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05135>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05136>       [IaRECimp=   1.50: IaRECper=   6.00]
05137>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05138> R0088:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05139>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .386 1988.0917_19:00  376.49  .585     .000
05140>       [XIMP=.57:TIMP=.67]
05141>       [LOSS= 2 :CN=100.0]
05142>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05143>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05144>       [IaRECimp=   1.50: IaRECper=   6.00]
05145>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05146> R0088:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05147>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .514 1988.0917_19:00  415.36  .645     .000
05148>       [XIMP=.71:TIMP=.81]
05149>       [LOSS= 2 :CN=100.0]
05150>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05151>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05152>       [IaRECimp=   1.50: IaRECper=   6.00]
05153>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05154> R0088:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05155>     ADD HYD                5.0 02:INF-W1          5.76      .358 1988.0917_19:00  373.38  n/a     .000
05156>                          +  5.0 02:INF-W2          8.51      .511 1988.0917_19:00  357.59  n/a     .000
05157>                          +  5.0 02:INF-W3         10.03      .643 1988.0917_19:00  401.25  n/a     .000
05158>                          +  5.0 02:INF-W4         10.11      .632 1988.0917_19:00  384.68  n/a     .000
05159>                          +  5.0 02:INF-W5          6.20      .386 1988.0917_19:00  376.49  n/a     .000
05160>                          +  5.0 02:INF-W6          7.81      .514 1988.0917_19:00  415.36  n/a     .000
05161>                        SUM=  5.0 01:INF-BCD-PH    48.42    3.044 1988.0917_19:00  385.91  n/a     .000
05162> ##############################################################################
05163> # CONTINUOUS RAINFALL DATA
05164> ##############################################################################
05165>   ** END OF RUN :   88
05166>
05167> ***************************************************************************
05168>
05169>
05170>
05171>
05172>
05173>  RUN#:COMMAND#
05174> R0089:C00001-------------------------------------------------------------------------
05175>       START
05176>         [TZERO =      .00 hrs on 19890101]
05177>         [METOUT=   2     (1=imperial, 2=metric output)]
05178>         [NSTORM=   0 ]
05179>         [NRUN   = 0089 ]
05180> #*************************************************************************************************************
05181> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
05182> #*************************************************************************************************************
05183> #  Project Name: Barrhaven Conservancy Development
05184> #  Project Number: 1474
05185> #  Date        : 2021/Oct/18
05186> #  Modeller    : J.Burnett, P.Eng.
05187> #  Updated     : 2024/Mar/14 [LP]
05188> #  Company     : J.F. Sabourin and Associates
05189> #  License #   : 2582634
05190> #*************************************************************************************************************
05191> # Ottawa International Airport (1967 - 2003)
05192> R0089:C00002-------------------------------------------------------------------------
05193>   * READ AES DATA
05194>       [Filename  = YOW_1967_2007.123                                  ]
05195>       [Start_date= 1989.0101: End_date= 1989.1231]
05196>       [DT= 60.min: Length= 8040.hrs: WetHrs=  422: DryHrs= 7618: PTOT= 523.20)
05197>       Maximum average rainfall intensities over
05198>         1 hr   2 hrs   3 hrs   6 hrs  12 hrs  24 hrs  36 hrs  48 hrs  72 hrs
05199>        22.70   12.60    8.93    5.75    3.03    1.69    1.14    .86     .59    mm/hr
05200>        22.70   25.40   26.80   34.50   36.30   40.60   40.90   41.30   42.50   mm
05201>      19890727 19890727 19890727 19890727 19890727 19891020 19891021 19891021 19891022  date
05202>      Number of rainfall events per following interevent time
05203>         1 hr   2 hrs   3 hrs   6 hrs  12 hrs  24 hrs  36 hrs  48 hrs  72 hrs
05204>          151     125     108      89      67      53      42      37      29
05205>      Number of events with at least the following durations
05206>         1 hr   2 hrs   3 hrs   6 hrs  12 hrs  24 hrs  36 hrs  48 hrs  72 hrs
05207>          150      81      52      19       5       0       0       0       0
05208> R0089:C00003-------------------------------------------------------------------------
05209>       COMPUTE API
05210>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
05211>       [APImax= 55.10: APIavg= 16.03: APImin=  .02]
05212> #*************************************************************************************************************
05213> #                    Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05214> #*************************************************************************************************************
05215> R0089:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05216>     CONTINUOUS STANDHYD    5.0 01:W1          5.76      .231 1989.0727_15:00  233.88  .447     .000
05217>       [XIMP=.55:TIMP=.66]
05218>       [LOSS= 2 :CN= 71.0]
05219>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05220>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05221>       [IaRECimp=   1.50: IaRECper=   6.00]
05222>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05223> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
05224> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05225> # Total Volume provided by LID  - 96 m³
05226> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05227> R0089:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05228>     ROUTE RESERVOIR ->    5.0 02:W1          5.76      .231 1989.0727_15:00  233.88  n/a     .000
05229>               out <=    5.0 01:W1-LID        1.54      .001 1989.0325_13:30  233.89  n/a     .000
05230>           overflow <=   5.0 03:W1-LID-Out     4.22      .227 1989.0727_15:00  233.88  n/a     .000
05231>      (MxStoUsed=.9599E-02  m3, TotOvfVol=.9859E+00  m3, N-Ovf=  100, TotDurOvf=  156.hrs)
05232> R0089:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05233>     CONTINUOUS STANDHYD    5.0 01:W2          8.51      .315 1989.0727_15:00  215.57  .412     .000
05234>       [XIMP=.50:TIMP=.60]
05235>       [LOSS= 2 :CN= 71.0]
05236>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05237>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05238>       [IaRECimp=   1.50: IaRECper=   6.00]
05239>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05240> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
05241> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05242> # Total Volume provided by LID  - 131 m³
05243> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05244> R0089:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05245>     ROUTE RESERVOIR ->    5.0 02:W2          8.51      .315 1989.0727_15:00  215.57  n/a     .000
05246>               out <=    5.0 01:W2-LID        2.31      .001 1989.0325_13:35  215.57  n/a     .000
05247>           overflow <=   5.0 03:W2-LID-Out     6.20      .308 1989.0727_15:00  215.57  n/a     .000
05248>      (MxStoUsed=.1310E-01  m3, TotOvfVol=.1337E+01  m3, N-Ovf=  103, TotDurOvf=  156.hrs)
05249> R0089:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05250>     CONTINUOUS STANDHYD    5.0 01:W3         10.03      .460 1989.0727_15:00  271.80  .520     .000
05251>       [XIMP=.66:TIMP=.76]
05252>       [LOSS= 2 :CN= 71.0]
05253>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05254>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05255>       [IaRECimp=   1.50: IaRECper=   6.00]
05256>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05257> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
05258> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05259> # Total Volume provided by LID  - 193 m³
05260> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05261> R0089:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05262>     ROUTE RESERVOIR ->    5.0 02:W3         10.03      .460 1989.0727_15:00  271.80  n/a     .000
05263>               out <=    5.0 01:W3-LID        2.78      .001 1989.0325_13:30  271.80  n/a     .000
05264>           overflow <=   5.0 03:W3-LID-Out     7.25      .452 1989.0727_15:00  271.80  n/a     .000
05265>      (MxStoUsed=.1930E-01  m3, TotOvfVol=.1971E+01  m3, N-Ovf=  100, TotDurOvf=  156.hrs)
05266> R0089:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05267>     CONTINUOUS STANDHYD    5.0 01:W4         10.11      .429 1989.0727_15:00  250.63  .479     .000
05268>       [XIMP=.60:TIMP=.70]
05269>       [LOSS= 2 :CN= 71.0]
05270>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05271>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05272>       [IaRECimp=   1.50: IaRECper=   6.00]
05273>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05274> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
05275> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05276> # Total Volume provided by LID  - 186 m³
05277> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05278> R0089:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05279>     ROUTE RESERVOIR ->    5.0 02:W4         10.11      .429 1989.0727_15:00  250.63  n/a     .000
05280>               out <=    5.0 01:W4-LID        2.83      .001 1989.0325_13:35  250.63  n/a     .000
05281>           overflow <=   5.0 03:W4-LID-Out     7.28      .422 1989.0727_15:00  250.63  n/a     .000
05282>      (MxStoUsed=.1859E-01  m3, TotOvfVol=.1824E+01  m3, N-Ovf=   97, TotDurOvf=  155.hrs)
05283> R0089:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05284>     CONTINUOUS STANDHYD    5.0 01:W5          6.20      .254 1989.0727_15:00  240.09  .459     .000
05285>       [XIMP=.57:TIMP=.67]
05286>       [LOSS= 2 :CN= 71.0]
05287>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05288>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05289>       [IaRECimp=   1.50: IaRECper=   6.00]
05290>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05291> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
05292> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05293> # Total Volume provided by LID  - 110 m³
05294> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05295> R0089:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05296>     ROUTE RESERVOIR ->    5.0 02:W5          6.20      .254 1989.0727_15:00  240.09  n/a     .000
05297>               out <=    5.0 01:W5-LID        1.74      .001 1989.0325_13:35  240.09  n/a     .000
05298>           overflow <=   5.0 03:W5-LID-Out     4.46      .250 1989.0727_15:00  240.09  n/a     .000
05299>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1071E+01  m3, N-Ovf=   99, TotDurOvf=  154.hrs)
05300> R0089:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05301>     CONTINUOUS STANDHYD    5.0 01:W6          7.81      .381 1989.0727_15:00  289.61  .554     .000
05302>       [XIMP=.71:TIMP=.81]
05303>       [LOSS= 2 :CN= 71.0]
05304>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05305>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05306>       [IaRECimp=   1.50: IaRECper=   6.00]
05307>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05308> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
05309> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05310> # Total Volume provided by LID  - 165 m³
05311> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05312> R0089:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05313>     ROUTE RESERVOIR ->    5.0 02:W6          7.81      .381 1989.0727_15:00  289.61  n/a     .000
05314>               out <=    5.0 01:W6-LID        2.19      .001 1989.0325_13:30  289.61  n/a     .000
05315>           overflow <=   5.0 03:W6-LID-Out     5.62      .376 1989.0727_15:00  289.61  n/a     .000
05316>      (MxStoUsed=.1649E-01  m3, TotOvfVol=.1627E+01  m3, N-Ovf=   99, TotDurOvf=  154.hrs)
05317> R0089:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05318>     ADD HYD                5.0 02:W1          5.76      .231 1989.0727_15:00  233.88  n/a     .000
05319>                          +  5.0 02:W2          8.51      .315 1989.0727_15:00  215.57  n/a     .000
05320>                          +  5.0 02:W3         10.03      .460 1989.0727_15:00  271.80  n/a     .000
05321>                          +  5.0 02:W4         10.11      .429 1989.0727_15:00  250.63  n/a     .000
05322>                          +  5.0 02:W5          6.20      .254 1989.0727_15:00  240.09  n/a     .000
05323>                          +  5.0 02:W6          7.81      .381 1989.0727_15:00  289.61  n/a     .000
05324>                        SUM=  5.0 01:BCD-PH3    48.42    2.071 1989.0727_15:00  251.80  n/a     .000
05325> R0089:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05326>     ADD HYD                5.0 02:W1-LID-Out     4.22      .227 1989.0727_15:00  233.88  n/a     .000
05327>                          +  5.0 02:W2-LID-Out     6.20      .308 1989.0727_15:00  215.57  n/a     .000
05328>                          +  5.0 02:W3-LID-Out     7.25      .452 1989.0727_15:00  271.80  n/a     .000
05329>                          +  5.0 02:W4-LID-Out     7.28      .422 1989.0727_15:00  250.63  n/a     .000
05330>                          +  5.0 02:W5-LID-Out     4.46      .250 1989.0727_15:00  240.09  n/a     .000
05331>                          +  5.0 02:W6-LID-Out     5.62      .376 1989.0727_15:00  289.61  n/a     .000
05332>                        SUM=  5.0 01:BCD-PH3-LI   35.03    2.034 1989.0727_15:00  251.70  n/a     .000
05333> #*************************************************************************************************************
05334> #                    Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05335> #*************************************************************************************************************
05336> #                    Set infiltration to 0 (CN = 99.99) for water balance analysis
05337> #*************************************************************************************************************
05338> R0089:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05339>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76      .334 1989.0727_15:00  301.09  .575     .000
05340>       [XIMP=.55:TIMP=.66]
05341>       [LOSS= 2 :CN=100.0]
05342>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05343>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05344>       [IaRECimp=   1.50: IaRECper=   6.00]
05345>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05346> R0089:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05347>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51      .482 1989.0727_15:00  287.73  .550     .000
05348>       [XIMP=.50:TIMP=.60]
05349>       [LOSS= 2 :CN=100.0]
05350>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05351>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05352>       [IaRECimp=   1.50: IaRECper=   6.00]
05353>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05354> R0089:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05355>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03      .592 1989.0727_15:00  324.51  .620     .000
05356>       [XIMP=.66:TIMP=.76]
05357>       [LOSS= 2 :CN=100.0]
05358>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05359>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05360>       [IaRECimp=   1.50: IaRECper=   6.00]
05361>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05362> R0089:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05363>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11      .587 1989.0727_15:00  310.62  .594     .000
05364>       [XIMP=.60:TIMP=.70]
05365>       [LOSS= 2 :CN=100.0]
05366>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05367>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05368>       [IaRECimp=   1.50: IaRECper=   6.00]
05369>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05370> R0089:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05371>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20      .360 1989.0727_15:00  303.72  .581     .000
05372>       [XIMP=.57:TIMP=.67]
05373>       [LOSS= 2 :CN=100.0]
05374>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05375>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05376>       [IaRECimp=   1.50: IaRECper=   6.00]
05377>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05378> R0089:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05379>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81      .469 1989.0727_15:00  336.27  .643     .000
05380>       [XIMP=.71:TIMP=.81]
05381>       [LOSS= 2 :CN=100.0]
05382>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05383>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05384>       [IaRECimp=   1.50: IaRECper=   6.00]
05385>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05386> R0089:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05387>     ADD HYD                5.0 02:INF-W1          5.76      .334 1989.0727_15:00  301.09  n/a     .000
05388>                          +  5.0 02:INF-W2          8.51      .482 1989.0727_15:00  287.73  n/a     .000
05389>                          +  5.0 02:INF-W3         10.03      .592 1989.0727_15:00  324.51  n/a     .000
05390>                          +  5.0 02:INF-W4         10.11      .587 1989.0727_15:00  310.62  n/a     .000
05391>                          +  5.0 02:INF-W5          6.20      .360 1989.0727_15:00  303.72  n/a     .000
05392>                          +  5.0 02:INF-W6          7.81      .469 1989.0727_15:00  336.27  n/a     .000
05393>                        SUM=  5.0 01:INF-BCD-PH    48.42    2.824 1989.0727_15:00  311.59  n/a     .000
05394> ##############################################################################
05395> # CONTINUOUS RAINFALL DATA
05396> ##############################################################################
05397>   ** END OF RUN :   89
05398>
05399> ***************************************************************************
05400>
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05401>
05402>
05403>
05404>
05405>  RUN#:COMMAND#
05406> R0090:C00001-------------------------------------------------------------------------------
05407>      START
05408>        [TZERO =    .00 hrs on 19900101]
05409>        [METOUT=   2    (1=imperial, 2=metric output)]
05410>        [NSTORM=   0 ]
05411>        [NRUN  = 0090 ]
05412> #*****************************************************************************************************
05413> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
05414> #*****************************************************************************************************
05415> #  Project Name: Barrhaven Conservancy Development
05416> #  Project Number: 1474
05417> #  Date        : 2021/Oct/18
05418> #  Modeller    : J.Burnett, P.Eng.
05419> #  Updated     : 2024/Mar/14 [LP]
05420> #  Company     : J.F. Sabourin and Associates
05421> #  License #   : 2582634
05422> #*****************************************************************************************************
05423> # Ottawa International Airport (1967 - 2003)
05424> R0090:C00002-------------------------------------------------------------------------------
05425>   *  READ AES DATA
05426>        [Filename  = YOW_1967_2007.123                                          ]
05427>        [Start_date= 1990.0101: End_date= 1990.1231]
05428>        [DT= 60.min: Length= 7344.hrs: WetHrs=  618: DryHrs= 6726: PTOT= 727.80)
05429>        Maximum average rainfall intensities over
05430>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05431>         20.60    12.25     9.60     5.58     4.43     2.25     1.50     1.23     1.06    mm/hr
05432>         20.60    24.50    28.80    33.50    53.20    54.00    54.00    59.00    76.60    mm
05433>        19900720 19900720 19900828 19900828 19900720 19900720 19900720 19900722 19900723  date
05434>        Number of rainfall events per following interevent time
05435>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05436>           204      156      141      107       84       66       56       47       33
05437>        Number of events with at least the following durations
05438>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05439>           203      116       75       31        6        1        0        0        0
05440> R0090:C00003-------------------------------------------------------------------------------
05441>      COMPUTE API
05442>        [APIinit= 50.00: APIkdy= .9000: APIkdt= .9956]
05443>        [APImax= 75.10: APIavg= 23.47: APImin=  3.10]
05444> #*****************************************************************************************************
05445> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05446> #*****************************************************************************************************
05447> R0090:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05448>      CONTINUOUS STANDHYD    5.0 01:W1          5.76     .205 1990.0720_ 5:00  343.66 .472     .000
05449>        [XIMP=.55:TIMP=.66]
05450>        [LOSS= 2 :CN= 71.0]
05451>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05452>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05453>        [IaRECimp=   1.50: IaRECper=   6.00]
05454>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05455> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
05456> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05457> # Total Volume provided by LID  - 96 m³
05458> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05459> R0090:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05460>      ROUTE RESERVOIR ->     5.0 02:W1          5.76     .205 1990.0720_ 5:00  343.66  n/a     .000
05461>                  out <=     5.0 01:W1-LID      1.38     .001 1990.0312_17:15  343.66  n/a     .000
05462>              overflow <=    5.0 03:W1-LID-Out  4.38     .202 1990.0720_ 5:00  343.66  n/a     .000
05463>       (MxStoUsed=.9601E-02  m3, TotOvfVol=.1506E+01  m3, N-Ovf=  133, TotDurOvf=  230.hrs)
05464> R0090:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05465>      CONTINUOUS STANDHYD    5.0 01:W2          8.51     .279 1990.0720_ 5:00  318.93 .438     .000
05466>        [XIMP=.50:TIMP=.60]
05467>        [LOSS= 2 :CN= 71.0]
05468>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05469>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05470>        [IaRECimp=   1.50: IaRECper=   6.00]
05471>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05472> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
05473> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05474> # Total Volume provided by LID  - 131 m³
05475> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05476> R0090:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05477>      ROUTE RESERVOIR ->     5.0 02:W2          8.51     .279 1990.0720_ 5:00  318.93  n/a     .000
05478>                  out <=     5.0 01:W2-LID      2.04     .001 1990.0312_17:20  318.94  n/a     .000
05479>              overflow <=    5.0 03:W2-LID-Out  6.47     .273 1990.0720_ 5:00  318.93  n/a     .000
05480>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.2063E+01  m3, N-Ovf=  116, TotDurOvf=  230.hrs)
05481> R0090:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05482>      CONTINUOUS STANDHYD    5.0 01:W3         10.03     .411 1990.0720_ 5:00  393.94 .541     .000
05483>        [XIMP=.66:TIMP=.76]
05484>        [LOSS= 2 :CN= 71.0]
05485>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05486>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05487>        [IaRECimp=   1.50: IaRECper=   6.00]
05488>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05489> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
05490> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05491> # Total Volume provided by LID  - 193 m³
05492> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05493> R0090:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05494>      ROUTE RESERVOIR ->     5.0 02:W3         10.03     .411 1990.0720_ 5:00  393.94  n/a     .000
05495>                  out <=     5.0 01:W3-LID      2.50     .001 1990.0312_17:15  393.93  n/a     .000
05496>              overflow <=    5.0 03:W3-LID-Out  7.53     .405 1990.0720_ 5:00  393.94  n/a     .000
05497>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.2675E+01  m3, N-Ovf=  125, TotDurOvf=  229.hrs)
05498> R0090:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05499>      CONTINUOUS STANDHYD    5.0 01:W4         10.11     .383 1990.0720_ 5:00  365.69 .502     .000
05500>        [XIMP=.60:TIMP=.70]
05501>        [LOSS= 2 :CN= 71.0]
05502>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05503>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05504>        [IaRECimp=   1.50: IaRECper=   6.00]
05505>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05506> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
05507> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05508> # Total Volume provided by LID  - 186 m³
05509> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05510> R0090:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05511>      ROUTE RESERVOIR ->     5.0 02:W4         10.11     .383 1990.0720_ 5:00  365.69  n/a     .000
05512>                  out <=     5.0 01:W4-LID      2.54     .001 1990.0312_17:20  365.70  n/a     .000
05513>              overflow <=    5.0 03:W4-LID-Out  7.57     .377 1990.0720_ 5:00  365.69  n/a     .000
05514>       (MxStoUsed=.1859E-01  m3, TotOvfVol=.2768E+01  m3, N-Ovf=  122, TotDurOvf=  228.hrs)
05515> R0090:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05516>      CONTINUOUS STANDHYD    5.0 01:W5          6.20     .226 1990.0720_ 5:00  351.63 .483     .000
05517>        [XIMP=.57:TIMP=.67]
05518>        [LOSS= 2 :CN= 71.0]
05519>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05520>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05521>        [IaRECimp=   1.50: IaRECper=   6.00]
05522>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05523> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
05524> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05525> # Total Volume provided by LID  - 110 m³
05526> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05527> R0090:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05528>      ROUTE RESERVOIR ->     5.0 02:W5          6.20     .226 1990.0720_ 5:00  351.63  n/a     .000
05529>                  out <=     5.0 01:W5-LID      1.56     .001 1990.0312_17:20  351.62  n/a     .000
05530>              overflow <=    5.0 03:W5-LID-Out  4.64     .222 1990.0720_ 5:00  351.63  n/a     .000
05531>       (MxStoUsed=.1100E-01  m3, TotOvfVol=.1632E+01  m3, N-Ovf=  113, TotDurOvf=  225.hrs)
05532> R0090:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05533>      CONTINUOUS STANDHYD    5.0 01:W6          7.81     .341 1990.0720_ 5:00  417.73 .574     .000
05534>        [XIMP=.71:TIMP=.81]
05535>        [LOSS= 2 :CN= 71.0]
05536>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05537>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05538>        [IaRECimp=   1.50: IaRECper=   6.00]
05539>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05540> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
05541> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05542> # Total Volume provided by LID  - 165 m³
05543> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05544> R0090:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05545>      ROUTE RESERVOIR ->     5.0 02:W6          7.81     .341 1990.0720_ 5:00  417.73  n/a     .000
05546>                  out <=     5.0 01:W6-LID      1.99     .001 1990.0312_17:15  417.73  n/a     .000
05547>              overflow <=    5.0 03:W6-LID-Out  5.82     .337 1990.0720_ 5:00  417.73  n/a     .000
05548>       (MxStoUsed=.1650E-01  m3, TotOvfVol=.2433E+01  m3, N-Ovf=  120, TotDurOvf=  227.hrs)
05549> R0090:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05550>      ADD HYD                1     5.0 02:W1          5.76     .205 1990.0720_ 5:00  343.66  n/a     .000
05551>                         +     5.0 02:W2          8.51     .279 1990.0720_ 5:00  318.93  n/a     .000
05552>                         +     5.0 02:W3         10.03     .411 1990.0720_ 5:00  393.94  n/a     .000
05553>                         +     5.0 02:W4         10.11     .383 1990.0720_ 5:00  365.69  n/a     .000
05554>                         +     5.0 02:W5          6.20     .226 1990.0720_ 5:00  351.63  n/a     .000
05555>                         +     5.0 02:W6          7.81     .341 1990.0720_ 5:00  417.73  n/a     .000
05556>                       SUM=    5.0 01:BCD-PH3    48.42    1.844 1990.0720_ 5:00  367.30  n/a     .000
05557> R0090:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05558>      ADD HYD                2     5.0 02:W1-LID-Out  4.38     .202 1990.0720_ 5:00  343.66  n/a     .000
05559>                         +     5.0 02:W2-LID-Out  6.47     .273 1990.0720_ 5:00  318.93  n/a     .000
05560>                         +     5.0 02:W3-LID-Out  7.53     .405 1990.0720_ 5:00  393.94  n/a     .000
05561>                         +     5.0 02:W4-LID-Out  7.57     .377 1990.0720_ 5:00  365.69  n/a     .000
05562>                         +     5.0 02:W5-LID-Out  4.64     .222 1990.0720_ 5:00  351.63  n/a     .000
05563>                         +     5.0 02:W6-LID-Out  5.82     .337 1990.0720_ 5:00  417.73  n/a     .000
05564>                       SUM=    5.0 01:BCD-PH3-LI  36.41   1.816 1990.0720_ 5:00  367.10  n/a     .000
05565> #*****************************************************************************************************
05566> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05567> #*****************************************************************************************************
05568> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
05569> #*****************************************************************************************************
05570> R0090:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05571>      CONTINUOUS STANDHYD    5.0 01:INF-W1      5.76     .299 1990.0720_ 5:00  434.49 .597     .000
05572>        [XIMP=.55:TIMP=.66]
05573>        [LOSS= 2 :CN=100.0]
05574>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05575>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05576>        [IaRECimp=   1.50: IaRECper=   6.00]
05577>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
05578> R0090:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05579>      CONTINUOUS STANDHYD    5.0 01:INF-W2      8.51     .424 1990.0720_ 5:00  417.09 .573     .000
05580>        [XIMP=.50:TIMP=.60]
05581>        [LOSS= 2 :CN=100.0]
05582>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05583>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05584>        [IaRECimp=   1.50: IaRECper=   6.00]
05585>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
05586> R0090:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05587>      CONTINUOUS STANDHYD    5.0 01:INF-W3     10.03     .532 1990.0720_ 5:00  464.71 .639     .000
05588>        [XIMP=.66:TIMP=.76]
05589>        [LOSS= 2 :CN=100.0]
05590>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05591>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05592>        [IaRECimp=   1.50: IaRECper=   6.00]
05593>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
05594> R0090:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05595>      CONTINUOUS STANDHYD    5.0 01:INF-W4     10.11     .521 1990.0720_ 5:00  446.71 .614     .000
05596>        [XIMP=.60:TIMP=.70]
05597>        [LOSS= 2 :CN=100.0]
05598>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05599>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05600>        [IaRECimp=   1.50: IaRECper=   6.00]
05601>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
05602> R0090:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05603>      CONTINUOUS STANDHYD    5.0 01:INF-W5      6.20     .322 1990.0720_ 5:00  437.78 .602     .000
05604>        [XIMP=.57:TIMP=.67]
05605>        [LOSS= 2 :CN=100.0]
05606>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05607>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05608>        [IaRECimp=   1.50: IaRECper=   6.00]
05609>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
05610> R0090:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05611>      CONTINUOUS STANDHYD    5.0 01:INF-W6      7.81     .423 1990.0720_ 5:00  480.01 .660     .000
05612>        [XIMP=.71:TIMP=.81]
05613>        [LOSS= 2 :CN=100.0]
05614>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05615>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05616>        [IaRECimp=   1.50: IaRECper=   6.00]
05617>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
05618> R0090:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05619>      ADD HYD                1     5.0 02:INF-W1      5.76     .299 1990.0720_ 5:00  434.49  n/a     .000
05620>                         +     5.0 02:INF-W2      8.51     .424 1990.0720_ 5:00  417.09  n/a     .000
05621>                         +     5.0 02:INF-W3     10.03     .532 1990.0720_ 5:00  464.71  n/a     .000
05622>                         +     5.0 02:INF-W4     10.11     .521 1990.0720_ 5:00  446.71  n/a     .000
05623>                         +     5.0 02:INF-W5      6.20     .322 1990.0720_ 5:00  437.78  n/a     .000
05624>                         +     5.0 02:INF-W6      7.81     .423 1990.0720_ 5:00  480.01  n/a     .000
05625>                       SUM=    5.0 01:INF-BCD-PH  48.42    2.520 1990.0720_ 5:00  448.01  n/a     .000
05626> ################################################################################
05627> # CONTINUOUS RAINFALL DATA
05628> ################################################################################
05629>  ** END OF RUN :  90
05630>
05631> *****************************************************************************************************
05632>
05633>
05634>
05635>
05636>
05637>  RUN#:COMMAND#
05638> R0091:C00001-------------------------------------------------------------------------------
05639>      START
05640>        [TZERO =    .00 hrs on 19910101]
05641>        [METOUT=   2    (1=imperial, 2=metric output)]
05642>        [NSTORM=   0 ]
05643>        [NRUN  = 0091 ]
05644> #*****************************************************************************************************
05645> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
05646> #*****************************************************************************************************
05647> #  Project Name: Barrhaven Conservancy Development
05648> #  Project Number: 1474
05649> #  Date        : 2021/Oct/18
05650> #  Modeller    : J.Burnett, P.Eng.
05651> #  Updated     : 2024/Mar/14 [LP]
05652> #  Company     : J.F. Sabourin and Associates
05653> #  License #   : 2582634
05654> #*****************************************************************************************************
05655> # Ottawa International Airport (1967 - 2003)
05656> R0091:C00002-------------------------------------------------------------------------------
05657>   *  READ AES DATA
05658>        [Filename  = YOW_1967_2007.123                                          ]
05659>        [Start_date= 1991.0101: End_date= 1991.1231]
05660>        [DT= 60.min: Length= 8040.hrs: WetHrs=  486: DryHrs= 7554: PTOT= 556.00)
05661>        Maximum average rainfall intensities over
05662>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05663>         11.30     9.90     6.87     4.10     2.53     1.72     1.28     1.08      .79    mm/hr
05664>         11.30    19.80    20.60    24.60    30.40    41.20    46.00    51.60    57.00    mm
05665>        19910409 19910409 19910409 19910409 19910409 19911016 19910422 19910410 19910410 19910423  date
05666>        Number of rainfall events per following interevent time
05667>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05668>           165      137      127      102       80       63       52       45       38
05669>        Number of events with at least the following durations
05670>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05671>           164       89       56       21        6        1        0        0        0
05672> R0091:C00003-------------------------------------------------------------------------------
05673>      COMPUTE API
05674>        [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
05675>        [APImax= 72.80: APIavg= 16.88: APImin=  .26]
05676> #*****************************************************************************************************
05677> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05678> #*****************************************************************************************************
05679> R0091:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05680>      CONTINUOUS STANDHYD    5.0 01:W1          5.76     .123 1991.0410_ 3:00  252.05 .453     .000
05681>        [XIMP=.55:TIMP=.66]
05682>        [LOSS= 2 :CN= 71.0]
05683>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05684>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05685>        [IaRECimp=   1.50: IaRECper=   6.00]
05686>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05687> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
05688> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05689> # Total Volume provided by LID  - 96 m³
05690> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05691> R0091:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05692>      ROUTE RESERVOIR ->     5.0 02:W1          5.76     .123 1991.0410_ 3:00  252.05  n/a     .000
05693>                  out <=     5.0 01:W1-LID      1.72     .001 1991.0302_ 6:45  252.06  n/a     .000
05694>              overflow <=    5.0 03:W1-LID-Out  4.04     .119 1991.0410_ 3:00  252.05  n/a     .000
05695>       (MxStoUsed=.9596E-02  m3, TotOvfVol=.1017E+01  m3, N-Ovf=  108, TotDurOvf=  190.hrs)
05696> R0091:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05697>      CONTINUOUS STANDHYD    5.0 01:W2          8.51     .167 1991.0410_ 3:00  232.57 .418     .000
05698>        [XIMP=.50:TIMP=.60]
05699>        [LOSS= 2 :CN= 71.0]
05700>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05701>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05702>        [IaRECimp=   1.50: IaRECper=   6.00]
05703>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05704> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
05705> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05706> # Total Volume provided by LID  - 131 m³
05707> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05708> R0091:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05709>      ROUTE RESERVOIR ->     5.0 02:W2          8.51     .167 1991.0410_ 3:00  232.57  n/a     .000
05710>                  out <=     5.0 01:W2-LID      2.58     .001 1991.0302_ 6:50  232.57  n/a     .000
05711>              overflow <=    5.0 03:W2-LID-Out  5.93     .166 1991.0410_ 3:05  232.57  n/a     .000
05712>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.1380E+01  m3, N-Ovf=  116, TotDurOvf=  188.hrs)
05713> R0091:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05714>      CONTINUOUS STANDHYD    5.0 01:W3         10.03     .232 1991.0410_ 3:00  292.35 .526     .000
05715>        [XIMP=.66:TIMP=.76]
05716>        [LOSS= 2 :CN= 71.0]
05717>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05718>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05719>        [IaRECimp=   1.50: IaRECper=   6.00]
05720>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05721> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
05722> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05723> # Total Volume provided by LID  - 193 m³
05724> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05725> R0091:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05726>      ROUTE RESERVOIR ->     5.0 02:W3         10.03     .232 1991.0410_ 3:00  292.35  n/a     .000
05727>                  out <=     5.0 01:W3-LID      3.11     .001 1991.0302_ 6:50  292.35  n/a     .000
05728>              overflow <=    5.0 03:W3-LID-Out  6.92     .227 1991.0410_ 3:05  292.35  n/a     .000
05729>       (MxStoUsed=.1930E-01  m3, TotOvfVol=.2024E+01  m3, N-Ovf=  108, TotDurOvf=  189.hrs)
05730> R0091:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05731>      CONTINUOUS STANDHYD    5.0 01:W4         10.11     .220 1991.0410_ 3:00  269.85 .485     .000
05732>        [XIMP=.60:TIMP=.70]
05733>        [LOSS= 2 :CN= 71.0]
05734>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05735>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05736>        [IaRECimp=   1.50: IaRECper=   6.00]
05737>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05738> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
05739> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05740> # Total Volume provided by LID  - 186 m³
05741> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05742> R0091:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05743>      ROUTE RESERVOIR ->     5.0 02:W4         10.11     .220 1991.0410_ 3:00  269.85  n/a     .000
05744>                  out <=     5.0 01:W4-LID      3.17     .001 1991.0302_ 6:50  269.85  n/a     .000
05745>              overflow <=    5.0 03:W4-LID-Out  6.94     .216 1991.0410_ 3:05  269.85  n/a     .000
05746>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.1872E+01  m3, N-Ovf=  109, TotDurOvf=  188.hrs)
05747> R0091:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05748>      CONTINUOUS STANDHYD    5.0 01:W5          6.20     .134 1991.0410_ 3:00  258.64 .465     .000
05749>        [XIMP=.57:TIMP=.67]
05750>        [LOSS= 2 :CN= 71.0]
05751>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05752>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05753>        [IaRECimp=   1.50: IaRECper=   6.00]
05754>        [SMIN= 41.38: SMAX=275.84: SK= .030]
05755> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
05756> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05757> # Total Volume provided by LID  - 110 m³
05758> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05759> R0091:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
05760>      ROUTE RESERVOIR ->     5.0 02:W5          6.20     .134 1991.0410_ 3:00  258.64  n/a     .000
```

```
05761>                out <=    5.0 01:W5-LID        1.95      .001 1991.0302_ 6:45  258.64  n/a     .000
05762>            overflow <=   5.0 03:W5-LID-Out     4.25      .130 1991.0410_ 3:00  258.64  n/a     .000
05763>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1100E+01  m3, N-Ovf=  113, TotDurOvf=  185.hrs)
05764> R0091:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05765>     CONTINUOUS STANDHYD    5.0 01:W6             7.81      .192 1991.0410_ 3:00  311.26 .560     .000
05766>       [XIMP=.71:TIMP=.81]
05767>       [LOSS= 2 :CN= 71.0]
05768>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05769>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05770>       [IaRECimp=   1.50: IaRECper=   6.00]
05771>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05772> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
05773> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05774> # Total Volume provided by LID  - 165 m³
05775> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05776> R0091:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05777>     ROUTE RESERVOIR ->    5.0 02:W6             7.81      .192 1991.0410_ 3:00  311.27  n/a     .000
05778>                   out <=    5.0 01:W6-LID       2.45      .001 1991.0302_ 6:45  311.27  n/a     .000
05779>               overflow <=   5.0 03:W6-LID-Out    5.36      .188 1991.0410_ 3:00  311.27  n/a     .000
05780>      (MxStoUsed=.1648E-01  m3, TotOvfVol=.1668E+01  m3, N-Ovf=  108, TotDurOvf=  186.hrs)
05781> R0091:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05782>     ADD HYD               5.0 02:W1             5.76      .123 1991.0410_ 3:00  252.05  n/a     .000
05783>                     +     5.0 02:W2             8.51      .167 1991.0410_ 3:00  232.57  n/a     .000
05784>                     +     5.0 02:W3            10.03      .232 1991.0410_ 3:00  292.35  n/a     .000
05785>                     +     5.0 02:W4            10.11      .220 1991.0410_ 3:00  269.85  n/a     .000
05786>                     +     5.0 02:W5             6.20      .134 1991.0410_ 3:00  258.64  n/a     .000
05787>                     +     5.0 02:W6             7.81      .192 1991.0410_ 3:00  311.27  n/a     .000
05788>                   SUM=    5.0 01:BCD-PH3       48.42     1.067 1991.0410_ 3:00  271.09  n/a     .000
05789> R0091:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05790>     ADD HYD               5.0 02:W1-LID-Out     4.04      .119 1991.0410_ 3:00  252.05  n/a     .000
05791>                     +     5.0 02:W2-LID-Out     5.93      .166 1991.0410_ 3:05  232.57  n/a     .000
05792>                     +     5.0 02:W3-LID-Out     6.92      .227 1991.0410_ 3:05  292.35  n/a     .000
05793>                     +     5.0 02:W4-LID-Out     6.94      .216 1991.0410_ 3:05  269.85  n/a     .000
05794>                     +     5.0 02:W5-LID-Out     4.25      .130 1991.0410_ 3:00  258.64  n/a     .000
05795>                     +     5.0 02:W6-LID-Out     5.36      .188 1991.0410_ 3:00  311.27  n/a     .000
05796>                   SUM=    5.0 01:BCD-PH3-LI    33.44    1.040 1991.0410_ 3:00  270.96  n/a     .000
05797> #*******************************************************************************************************
05798> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05799> #*******************************************************************************************************
05800> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
05801> #*******************************************************************************************************
05802> R0091:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05803>     CONTINUOUS STANDHYD    5.0 01:INF-W1         5.76      .163 1991.0409_ 1:00  317.67 .571     .000
05804>       [XIMP=.55:TIMP=.66]
05805>       [LOSS= 2 :CN=100.0]
05806>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05807>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05808>       [IaRECimp=   1.50: IaRECper=   6.00]
05809>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05810> R0091:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05811>     CONTINUOUS STANDHYD    5.0 01:INF-W2         8.51      .231 1991.0409_ 1:00  302.66 .544     .000
05812>       [XIMP=.50:TIMP=.60]
05813>       [LOSS= 2 :CN=100.0]
05814>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05815>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05816>       [IaRECimp=   1.50: IaRECper=   6.00]
05817>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05818> R0091:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05819>     CONTINUOUS STANDHYD    5.0 01:INF-W3        10.03      .290 1991.0409_ 1:00  344.17 .619     .000
05820>       [XIMP=.66:TIMP=.76]
05821>       [LOSS= 2 :CN=100.0]
05822>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05823>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05824>       [IaRECimp=   1.50: IaRECper=   6.00]
05825>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05826> R0091:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05827>     CONTINUOUS STANDHYD    5.0 01:INF-W4        10.11      .285 1991.0409_ 1:00  328.46 .591     .000
05828>       [XIMP=.60:TIMP=.70]
05829>       [LOSS= 2 :CN=100.0]
05830>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05831>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05832>       [IaRECimp=   1.50: IaRECper=   6.00]
05833>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05834> R0091:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05835>     CONTINUOUS STANDHYD    5.0 01:INF-W5         6.20      .176 1991.0409_ 1:00  320.69 .577     .000
05836>       [XIMP=.57:TIMP=.67]
05837>       [LOSS= 2 :CN=100.0]
05838>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05839>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05840>       [IaRECimp=   1.50: IaRECper=   6.00]
05841>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05842> R0091:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05843>     CONTINUOUS STANDHYD    5.0 01:INF-W6         7.81      .232 1991.0409_ 1:00  357.50 .643     .000
05844>       [XIMP=.71:TIMP=.81]
05845>       [LOSS= 2 :CN=100.0]
05846>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05847>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
05848>       [IaRECimp=   1.50: IaRECper=   6.00]
05849>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
05850> R0091:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05851>     ADD HYD               5.0 02:INF-W1         5.76      .163 1991.0409_ 1:00  317.67  n/a     .000
05852>                     +     5.0 02:INF-W2         8.51      .231 1991.0409_ 1:00  302.66  n/a     .000
05853>                     +     5.0 02:INF-W3        10.03      .290 1991.0409_ 1:00  344.17  n/a     .000
05854>                     +     5.0 02:INF-W4        10.11      .285 1991.0409_ 1:00  328.46  n/a     .000
05855>                     +     5.0 02:INF-W5         6.20      .176 1991.0409_ 1:00  320.69  n/a     .000
05856>                     +     5.0 02:INF-W6         7.81      .232 1991.0409_ 1:00  357.50  n/a     .000
05857>                   SUM=    5.0 01:INF-BCD-PH    48.42     1.376 1991.0409_ 1:00  329.59  n/a     .000
05858> ##############################################################################
05859> # CONTINUOUS RAINFALL DATA
05860> ##############################################################################
05861>   ** END OF RUN :   91
05862>
05863> ***************************************************************************************************
05864>
05865>
05866>
05867>
05868>
05869>  RUN#:COMMAND#
05870> R0092:C00001------------------------------------------------------------------------------
05871>       START
05872>       [TZERO =    .00 hrs on 19920101]
05873>       [METOUT=  2    (1=imperial, 2=metric output)]
05874>       [NSTORM=  0 ]
05875>       [NRUN  = 0092 ]
05876> #*******************************************************************************************************
05877> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
05878> #*******************************************************************************************************
05879> #  Project Name: Barrhaven Conservancy Development
05880> #  Project Number: 1474
05881> #  Date       : 2021/Oct/18
05882> #  Modeller   : J.Burnett, P.Eng.
05883> #  Updated    : 2024/Mar/14 [LP]
05884> #  Company    : J.F. Sabourin and Associates
05885> #  License #  : 2582634
05886> #*******************************************************************************************************
05887> # Ottawa International Airport (1967 - 2003)
05888> R0092:C00002------------------------------------------------------------------------------
05889>   *  READ AES DATA
05890>       [Filename  = YOW_1967_2007.123                                          ]
05891>       [Start_date= 1992.0101: End_date= 1992.1230]
05892>       [DT= 60.min: Length= 8760.hrs: WetHrs=  551: DryHrs= 8209: PTOT= 732.80)
05893>       Maximum average rainfall intensities over
05894>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05895>        31.50    18.00    13.30     7.22     4.14     2.26     1.51     1.51     1.02    mm/hr
05896>        31.50    36.00    39.90    43.30    49.70    54.20    54.20    72.60    73.60    mm
05897>       19920804 19920804 19920804 19920804 19920717 19920718 19920718 19920719 19920720  date
05898>       Number of rainfall events per following intervent time
05899>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05900>          190      151      132      100       84       69       55       47       38
05901>       Number of events with at least the following durations
05902>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
05903>          189      109       70       22        5        1        0        0        0
05904> R0092:C00003------------------------------------------------------------------------------
05905>       COMPUTE API
05906>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
05907>       [APImax= 97.62: APIfac= 20.33: APImin=  1.07]
05908> #*******************************************************************************************************
05909> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
05910> #*******************************************************************************************************
05911> R0092:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05912>     CONTINUOUS STANDHYD    5.0 01:W1             5.76      .373 1992.0804_14:00  356.10 .486     .000
05913>       [XIMP=.55:TIMP=.66]
05914>       [LOSS= 2 :CN= 71.0]
05915>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05916>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
05917>       [IaRECimp=   1.50: IaRECper=   6.00]
05918>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05919> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
05920> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05921> # Total Volume provided by LID  - 96 m³
05922> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05923> R0092:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05924>     ROUTE RESERVOIR ->    5.0 02:W1             5.76      .373 1992.0804_14:00  356.10  n/a     .000
05925>                   out <=    5.0 01:W1-LID       1.35      .001 1992.0104_21:50  356.11  n/a     .000
05926>               overflow <=   5.0 03:W1-LID-Out    4.41      .363 1992.0804_14:00  356.10  n/a     .000
05927>      (MxStoUsed=.9585E-02  m3, TotOvfVol=.1571E+01  m3, N-Ovf=  122, TotDurOvf=  191.hrs)
05928> R0092:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05929>     CONTINUOUS STANDHYD    5.0 01:W2             8.51      .519 1992.0804_14:00  331.08 .452     .000
05930>       [XIMP=.50:TIMP=.60]
05931>       [LOSS= 2 :CN= 71.0]
05932>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05933>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
05934>       [IaRECimp=   1.50: IaRECper=   6.00]
05935>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05936> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
05937> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05938> # Total Volume provided by LID  - 131 m³
05939> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05940> R0092:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05941>     ROUTE RESERVOIR ->    5.0 02:W2             8.51      .519 1992.0804_14:00  331.08  n/a     .000
05942>                   out <=    5.0 01:W2-LID       2.00      .001 1992.0104_22:00  331.08  n/a     .000
05943>               overflow <=   5.0 03:W2-LID-Out    6.51      .503 1992.0804_14:00  331.08  n/a     .000
05944>      (MxStoUsed=.1310E-01  m3, TotOvfVol=.2155E+01  m3, N-Ovf=  120, TotDurOvf=  190.hrs)
05945> R0092:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05946>     CONTINUOUS STANDHYD    5.0 01:W3            10.03      .709 1992.0804_14:00  407.08 .556     .000
05947>       [XIMP=.66:TIMP=.76]
05948>       [LOSS= 2 :CN= 71.0]
05949>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05950>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
05951>       [IaRECimp=   1.50: IaRECper=   6.00]
05952>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05953> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
05954> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05955> # Total Volume provided by LID  - 193 m³
05956> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05957> R0092:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05958>     ROUTE RESERVOIR ->    5.0 02:W3            10.03      .709 1992.0804_14:00  407.08  n/a     .000
05959>                   out <=    5.0 01:W3-LID       2.46      .001 1992.0104_21:50  407.07  n/a     .000
05960>               overflow <=   5.0 03:W3-LID-Out    7.57      .694 1992.0804_14:00  407.08  n/a     .000
05961>      (MxStoUsed=.1928E-01  m3, TotOvfVol=.3082E+01  m3, N-Ovf=  115, TotDurOvf=  191.hrs)
05962> R0092:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05963>     CONTINUOUS STANDHYD    5.0 01:W4            10.11      .677 1992.0804_14:00  378.45 .516     .000
05964>       [XIMP=.60:TIMP=.70]
05965>       [LOSS= 2 :CN= 71.0]
05966>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05967>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
05968>       [IaRECimp=   1.50: IaRECper=   6.00]
05969>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05970> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
05971> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05972> # Total Volume provided by LID  - 186 m³
05973> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05974> R0092:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05975>     ROUTE RESERVOIR ->    5.0 02:W4            10.11      .677 1992.0804_14:00  378.45  n/a     .000
05976>                   out <=    5.0 01:W4-LID       2.50      .001 1992.0104_22:00  378.46  n/a     .000
05977>               overflow <=   5.0 03:W4-LID-Out    7.61      .660 1992.0804_14:00  378.45  n/a     .000
05978>      (MxStoUsed=.1859E-01  m3, TotOvfVol=.2882E+01  m3, N-Ovf=  125, TotDurOvf=  189.hrs)
05979> R0092:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05980>     CONTINUOUS STANDHYD    5.0 01:W5             6.20      .406 1992.0804_14:00  364.21 .497     .000
05981>       [XIMP=.57:TIMP=.67]
05982>       [LOSS= 2 :CN= 71.0]
05983>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
05984>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
05985>       [IaRECimp=   1.50: IaRECper=   6.00]
05986>       [SMIN= 41.38: SMAX=275.84: SK= .030]
05987> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
05988> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
05989> # Total Volume provided by LID  - 110 m³
05990> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
05991> R0092:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05992>     ROUTE RESERVOIR ->    5.0 02:W5             6.20      .406 1992.0804_14:00  364.21  n/a     .000
05993>                   out <=    5.0 01:W5-LID       1.53      .001 1992.0104_22:00  364.21  n/a     .000
05994>               overflow <=   5.0 03:W5-LID-Out    4.67      .395 1992.0804_14:00  364.21  n/a     .000
05995>      (MxStoUsed=.1097E-01  m3, TotOvfVol=.1701E+01  m3, N-Ovf=  112, TotDurOvf=  185.hrs)
05996> R0092:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05997>     CONTINUOUS STANDHYD    5.0 01:W6             7.81      .578 1992.0804_14:00  431.16 .588     .000
05998>       [XIMP=.71:TIMP=.81]
05999>       [LOSS= 2 :CN= 71.0]
06000>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06001>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06002>       [IaRECimp=   1.50: IaRECper=   6.00]
06003>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06004> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
06005> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06006> # Total Volume provided by LID  - 165 m³
06007> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06008> R0092:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06009>     ROUTE RESERVOIR ->    5.0 02:W6             7.81      .578 1992.0804_14:00  431.16  n/a     .000
06010>                   out <=    5.0 01:W6-LID       1.95      .001 1992.0104_21:50  431.17  n/a     .000
06011>               overflow <=   5.0 03:W6-LID-Out    5.86      .568 1992.0804_14:00  431.16  n/a     .000
06012>      (MxStoUsed=.1648E-01  m3, TotOvfVol=.2525E+01  m3, N-Ovf=  122, TotDurOvf=  189.hrs)
06013> R0092:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06014>     ADD HYD               5.0 02:W1             5.76      .373 1992.0804_14:00  356.10  n/a     .000
06015>                     +     5.0 02:W2             8.51      .519 1992.0804_14:00  331.08  n/a     .000
06016>                     +     5.0 02:W3            10.03      .709 1992.0804_14:00  407.08  n/a     .000
06017>                     +     5.0 02:W4            10.11      .677 1992.0804_14:00  378.45  n/a     .000
06018>                     +     5.0 02:W5             6.20      .406 1992.0804_14:00  364.21  n/a     .000
06019>                     +     5.0 02:W6             7.81      .578 1992.0804_14:00  431.16  n/a     .000
06020>                   SUM=    5.0 01:BCD-PH3       48.42     3.263 1992.0804_14:00  380.07  n/a     .000
06021> R0092:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06022>     ADD HYD               5.0 02:W1-LID-Out     4.41      .363 1992.0804_14:00  356.10  n/a     .000
06023>                     +     5.0 02:W2-LID-Out     6.51      .503 1992.0804_14:00  331.08  n/a     .000
06024>                     +     5.0 02:W3-LID-Out     7.57      .694 1992.0804_14:00  407.08  n/a     .000
06025>                     +     5.0 02:W4-LID-Out     7.61      .660 1992.0804_14:00  378.45  n/a     .000
06026>                     +     5.0 02:W5-LID-Out     4.67      .395 1992.0804_14:00  364.21  n/a     .000
06027>                     +     5.0 02:W6-LID-Out     5.86      .568 1992.0804_14:00  431.16  n/a     .000
06028>                   SUM=    5.0 01:BCD-PH3-LI    36.64     3.183 1992.0804_14:00  379.87  n/a     .000
06029> #*******************************************************************************************************
06030> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06031> #*******************************************************************************************************
06032> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
06033> #*******************************************************************************************************
06034> R0092:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06035>     CONTINUOUS STANDHYD    5.0 01:INF-W1         5.76      .474 1992.0804_14:00  449.91 .614     .000
06036>       [XIMP=.55:TIMP=.66]
06037>       [LOSS= 2 :CN=100.0]
06038>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06039>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06040>       [IaRECimp=   1.50: IaRECper=   6.00]
06041>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06042> R0092:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06043>     CONTINUOUS STANDHYD    5.0 01:INF-W2         8.51      .688 1992.0804_14:00  432.52 .590     .000
06044>       [XIMP=.50:TIMP=.60]
06045>       [LOSS= 2 :CN=100.0]
06046>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06047>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06048>       [IaRECimp=   1.50: IaRECper=   6.00]
06049>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06050> R0092:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06051>     CONTINUOUS STANDHYD    5.0 01:INF-W3        10.03      .837 1992.0804_14:00  480.12 .655     .000
06052>       [XIMP=.66:TIMP=.76]
06053>       [LOSS= 2 :CN=100.0]
06054>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06055>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06056>       [IaRECimp=   1.50: IaRECper=   6.00]
06057>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06058> R0092:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06059>     CONTINUOUS STANDHYD    5.0 01:INF-W4        10.11      .833 1992.0804_14:00  462.13 .631     .000
06060>       [XIMP=.60:TIMP=.70]
06061>       [LOSS= 2 :CN=100.0]
06062>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06063>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06064>       [IaRECimp=   1.50: IaRECper=   6.00]
06065>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06066> R0092:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06067>     CONTINUOUS STANDHYD    5.0 01:INF-W5         6.20      .511 1992.0804_14:00  453.20 .618     .000
06068>       [XIMP=.57:TIMP=.67]
06069>       [LOSS= 2 :CN=100.0]
06070>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06071>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06072>       [IaRECimp=   1.50: IaRECper=   6.00]
06073>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06074> R0092:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06075>     CONTINUOUS STANDHYD    5.0 01:INF-W6         7.81      .660 1992.0804_14:00  495.39 .676     .000
06076>       [XIMP=.71:TIMP=.81]
06077>       [LOSS= 2 :CN=100.0]
06078>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06079>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06080>       [IaRECimp=   1.50: IaRECper=   6.00]
06081>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06082> R0092:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06083>     ADD HYD               5.0 02:INF-W1         5.76      .474 1992.0804_14:00  449.91  n/a     .000
06084>                     +     5.0 02:INF-W2         8.51      .688 1992.0804_14:00  432.52  n/a     .000
06085>                     +     5.0 02:INF-W3        10.03      .837 1992.0804_14:00  480.12  n/a     .000
06086>                     +     5.0 02:INF-W4        10.11      .833 1992.0804_14:00  462.12  n/a     .000
06087>                     +     5.0 02:INF-W5         6.20      .511 1992.0804_14:00  453.20  n/a     .000
06088>                     +     5.0 02:INF-W6         7.81      .660 1992.0804_14:00  495.39  n/a     .000
06089>                   SUM=    5.0 01:INF-BCD-PH    48.42     4.003 1992.0804_14:00  463.42  n/a     .000
06090> ##############################################################################
06091> # CONTINUOUS RAINFALL DATA
06092> ##############################################################################
06093>   ** END OF RUN :   92
06094>
06095> ***************************************************************************************************
06096>
06097>
06098>
06099>
06100>
06101>  RUN#:COMMAND#
06102> R0093:C00001------------------------------------------------------------------------------
06103>       START
06104>       [TZERO =    .00 hrs on 19930101]
06105>       [METOUT=  2    (1=imperial, 2=metric output)]
06106>       [NSTORM=  0 ]
06107>       [NRUN  = 0093 ]
06108> #*******************************************************************************************************
06109> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
06110> #*******************************************************************************************************
06111> #  Project Name: Barrhaven Conservancy Development
06112> #  Project Number: 1474
06113> #  Date       : 2021/Oct/18
06114> #  Modeller   : J.Burnett, P.Eng.
06115> #  Updated    : 2024/Mar/14 [LP]
06116> #  Company    : J.F. Sabourin and Associates
06117> #  License #  : 2582634
06118> #*******************************************************************************************************
06119> # Ottawa International Airport (1967 - 2003)
06120> R0093:C00002------------------------------------------------------------------------------
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06121>   *  READ AES DATA
06122>        [Filename  = YOW_1967_2007.123                                    ]
06123>        [Start_date= 1993.0101: End_date= 1993.1231]
06124>        [DT= 60.min: Length= 8760.hrs: WetHrs=  585: DryHrs= 8175: PTOT= 721.30)
06125>        Maximum average rainfall intensities over
06126>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06127>         12.60     6.60     4.83     3.72     3.58     2.31     1.61     1.21      .81    mm/hr
06128>         12.60    13.20    14.50    22.30    43.00    55.50    58.10    58.10    58.10    mm
06129>        19930703 19930703 19931127 19931128 19931128 19931128 19931128 19931128 19931129  date
06130>        Number of rainfall events per following interevent time
06131>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06132>           191      154      137      111       91       73       57       48       34
06133>        Number of events with at least the following durations
06134>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06135>           190      110       66       27        7        2        0        0        0
06136> R0093:C00003-----------------------------------------------------------------------------------------------------------
06137>        COMPUTE API
06138>        [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
06139>        [APImax= 66.56: APIavg= 20.01: APImin=  .11]
06140> #*****************************************************************************************************************
06141> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06142> #*****************************************************************************************************************
06143> R0093:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06144>      CONTINUOUS STANDHYD   5.0 01:W1              5.76     .113 1993.0703_ 9:00  330.14 .458     .000
06145>        [XIMP=.55:TIMP=.66]
06146>        [LOSS= 2 :CN= 71.0]
06147>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06148>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06149>        [IaRECimp=   1.50: IaRECper=   6.00]
06150>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06151> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
06152> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06153> # Total Volume provided by LID  - 96 m³
06154> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06155> R0093:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06156>      ROUTE RESERVOIR ->     5.0 02:W1             5.76     .113 1993.0703_ 9:00  330.14  n/a     .000
06157>                  out <=    5.0 01:W1-LID         1.64     .001 1993.0104_ 1:00  330.14  n/a     .000
06158>                overflow <= 5.0 03:W1-LID-Out     4.12     .111 1993.0703_ 9:00  330.14  n/a     .000
06159>        (MxStoUsed=.9596E-02  m3, TotOvfVol=.1359E+01  m3, N-Ovf=  150, TotDurOvf=  232.hrs)
06160> R0093:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06161>      CONTINUOUS STANDHYD   5.0 01:W2              8.51     .150 1993.0703_ 9:00  304.80 .423     .000
06162>        [XIMP=.50:TIMP=.60]
06163>        [LOSS= 2 :CN= 71.0]
06164>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06165>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06166>        [IaRECimp=   1.50: IaRECper=   6.00]
06167>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06168> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
06169> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06170> # Total Volume provided by LID  - 131 m³
06171> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06172> R0093:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06173>      ROUTE RESERVOIR ->     5.0 02:W2             8.51     .150 1993.0703_ 9:00  304.80  n/a     .000
06174>                  out <=    5.0 01:W2-LID         2.45     .001 1993.0104_ 1:05  304.80  n/a     .000
06175>                overflow <= 5.0 03:W2-LID-Out     6.06     .148 1993.0703_ 9:00  304.80  n/a     .000
06176>        (MxStoUsed=.1310E-01  m3, TotOvfVol=.1847E+01  m3, N-Ovf=  153, TotDurOvf=  234.hrs)
06177> R0093:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06178>      CONTINUOUS STANDHYD   5.0 01:W3             10.03     .229 1993.0703_ 9:00  382.29 .530     .000
06179>        [XIMP=.66:TIMP=.76]
06180>        [LOSS= 2 :CN= 71.0]
06181>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06182>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06183>        [IaRECimp=   1.50: IaRECper=   6.00]
06184>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06185> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
06186> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06187> # Total Volume provided by LID  - 193 m³
06188> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06189> R0093:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06190>      ROUTE RESERVOIR ->     5.0 02:W3             10.03     .229 1993.0703_ 9:00  382.29  n/a     .000
06191>                  out <=    5.0 01:W3-LID         2.96     .001 1993.0104_ 1:00  382.29  n/a     .000
06192>                overflow <= 5.0 03:W3-LID-Out     7.07     .226 1993.0703_ 9:00  382.29  n/a     .000
06193>        (MxStoUsed=.1930E-01  m3, TotOvfVol=.2702E+01  m3, N-Ovf=  153, TotDurOvf=  229.hrs)
06194> R0093:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06195>      CONTINUOUS STANDHYD   5.0 01:W4             10.11     .211 1993.0703_ 9:00  353.08 .490     .000
06196>        [XIMP=.60:TIMP=.70]
06197>        [LOSS= 2 :CN= 71.0]
06198>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06199>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06200>        [IaRECimp=   1.50: IaRECper=   6.00]
06201>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06202> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
06203> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06204> # Total Volume provided by LID  - 186 m³
06205> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06206> R0093:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06207>      ROUTE RESERVOIR ->     5.0 02:W4             10.11     .211 1993.0703_ 9:00  353.08  n/a     .000
06208>                  out <=    5.0 01:W4-LID         3.01     .001 1993.0104_ 1:10  353.08  n/a     .000
06209>                overflow <= 5.0 03:W4-LID-Out     7.10     .208 1993.0703_ 9:00  353.08  n/a     .000
06210>        (MxStoUsed=.1860E-01  m3, TotOvfVol=.2505E+01  m3, N-Ovf=  150, TotDurOvf=  229.hrs)
06211> R0093:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06212>      CONTINUOUS STANDHYD   5.0 01:W5             6.20     .125 1993.0703_ 9:00  338.57 .469     .000
06213>        [XIMP=.57:TIMP=.67]
06214>        [LOSS= 2 :CN= 71.0]
06215>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06216>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06217>        [IaRECimp=   1.50: IaRECper=   6.00]
06218>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06219> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
06220> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06221> # Total Volume provided by LID  - 110 m³
06222> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06223> R0093:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06224>      ROUTE RESERVOIR ->     5.0 02:W5             6.20     .125 1993.0703_ 9:00  338.57  n/a     .000
06225>                  out <=    5.0 01:W5-LID         1.85     .001 1993.0104_ 1:05  338.56  n/a     .000
06226>                overflow <= 5.0 03:W5-LID-Out     4.35     .124 1993.0703_ 9:00  338.57  n/a     .000
06227>        (MxStoUsed=.1100E-01  m3, TotOvfVol=.1472E+01  m3, N-Ovf=  151, TotDurOvf=  226.hrs)
06228> R0093:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06229>      CONTINUOUS STANDHYD   5.0 01:W6             7.81     .195 1993.0703_ 9:00  406.85 .564     .000
06230>        [XIMP=.71:TIMP=.81]
06231>        [LOSS= 2 :CN= 71.0]
06232>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06233>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06234>        [IaRECimp=   1.50: IaRECper=   6.00]
06235>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06236> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
06237> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06238> # Total Volume provided by LID  - 165 m³
06239> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06240> R0093:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06241>      ROUTE RESERVOIR ->     5.0 02:W6             7.81     .195 1993.0703_ 9:00  406.85  n/a     .000
06242>                  out <=    5.0 01:W6-LID         2.34     .001 1993.0104_ 1:00  406.85  n/a     .000
06243>                overflow <= 5.0 03:W6-LID-Out     5.47     .193 1993.0703_ 9:00  406.85  n/a     .000
06244>        (MxStoUsed=.1650E-01  m3, TotOvfVol=.2227E+01  m3, N-Ovf=  156, TotDurOvf=  225.hrs)
06245> R0093:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06246>      ADD HYD               5.0 02:W1             5.76     .113 1993.0703_ 9:00  330.14  n/a     .000
06247>                      +     5.0 02:W2             8.51     .150 1993.0703_ 9:00  304.80  n/a     .000
06248>                      +     5.0 02:W3            10.03     .229 1993.0703_ 9:00  382.29  n/a     .000
06249>                      +     5.0 02:W4            10.11     .211 1993.0703_ 9:00  353.08  n/a     .000
06250>                      +     5.0 02:W5             6.20     .125 1993.0703_ 9:00  338.57  n/a     .000
06251>                      +     5.0 02:W6             7.81     .195 1993.0703_ 9:00  406.85  n/a     .000
06252>                    SUM=    5.0 01:BCD-PH3       48.42    1.023 1993.0703_ 9:00  354.73  n/a     .000
06253> R0093:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06254>      ADD HYD               5.0 02:W1-LID-Out     4.12     .111 1993.0703_ 9:00  330.14  n/a     .000
06255>                      +     5.0 02:W2-LID-Out     6.06     .148 1993.0703_ 9:00  304.80  n/a     .000
06256>                      +     5.0 02:W3-LID-Out     7.07     .226 1993.0703_ 9:00  382.29  n/a     .000
06257>                      +     5.0 02:W4-LID-Out     7.10     .208 1993.0703_ 9:00  353.08  n/a     .000
06258>                      +     5.0 02:W5-LID-Out     4.35     .124 1993.0703_ 9:00  338.57  n/a     .000
06259>                      +     5.0 02:W6-LID-Out     5.47     .193 1993.0703_ 9:00  406.85  n/a     .000
06260>                    SUM=    5.0 01:BCD-PH3-LI    34.16    1.009 1993.0703_ 9:00  354.56  n/a     .000
06261> #*****************************************************************************************************************
06262> #                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06263> #*****************************************************************************************************************
06264> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
06265> #*****************************************************************************************************************
06266> R0093:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06267>      CONTINUOUS STANDHYD   5.0 01:INF-W1           5.76     .144 1993.0703_ 9:00  415.48 .576     .000
06268>        [XIMP=.55:TIMP=.66]
06269>        [LOSS= 2 :CN=100.0]
06270>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06271>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06272>        [IaRECimp=   1.50: IaRECper=   6.00]
06273>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
06274> R0093:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06275>      CONTINUOUS STANDHYD   5.0 01:INF-W2           8.51     .191 1993.0703_ 9:00  396.17 .549     .000
06276>        [XIMP=.50:TIMP=.60]
06277>        [LOSS= 2 :CN=100.0]
06278>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06279>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06280>        [IaRECimp=   1.50: IaRECper=   6.00]
06281>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
06282> R0093:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06283>      CONTINUOUS STANDHYD   5.0 01:INF-W3          10.03     .267 1993.0703_ 9:00  449.47 .623     .000
06284>        [XIMP=.66:TIMP=.76]
06285>        [LOSS= 2 :CN=100.0]
06286>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06287>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06288>        [IaRECimp=   1.50: IaRECper=   6.00]
06289>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
06290> R0093:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06291>      CONTINUOUS STANDHYD   5.0 01:INF-W4          10.11     .252 1993.0703_ 9:00  429.29 .595     .000
06292>        [XIMP=.60:TIMP=.70]
06293>        [LOSS= 2 :CN=100.0]
06294>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06295>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06296>        [IaRECimp=   1.50: IaRECper=   6.00]
06297>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
06298> R0093:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06299>      CONTINUOUS STANDHYD   5.0 01:INF-W5           6.20     .152 1993.0703_ 9:00  419.30 .581     .000
06300>        [XIMP=.57:TIMP=.67]
06301>        [LOSS= 2 :CN=100.0]
06302>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06303>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06304>        [IaRECimp=   1.50: IaRECper=   6.00]
06305>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
06306> R0093:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06307>      CONTINUOUS STANDHYD   5.0 01:INF-W6           7.81     .225 1993.0703_ 9:00  466.63 .647     .000
06308>        [XIMP=.71:TIMP=.81]
06309>        [LOSS= 2 :CN=100.0]
06310>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06311>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06312>        [IaRECimp=   1.50: IaRECper=   6.00]
06313>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
06314> R0093:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06315>      ADD HYD               5.0 02:INF-W1           5.76     .144 1993.0703_ 9:00  415.48  n/a     .000
06316>                      +     5.0 02:INF-W2           8.51     .191 1993.0703_ 9:00  396.17  n/a     .000
06317>                      +     5.0 02:INF-W3          10.03     .267 1993.0703_ 9:00  449.48  n/a     .000
06318>                      +     5.0 02:INF-W4          10.11     .252 1993.0703_ 9:00  429.29  n/a     .000
06319>                      +     5.0 02:INF-W5           6.20     .152 1993.0703_ 9:00  419.30  n/a     .000
06320>                      +     5.0 02:INF-W6           7.81     .225 1993.0703_ 9:00  466.63  n/a     .000
06321>                    SUM=    5.0 01:INF-BCD-PH      48.42    1.232 1993.0703_ 9:00  430.75  n/a     .000
06322> ###############################################################################
06323> # CONTINUOUS RAINFALL DATA
06324> ###############################################################################
06325>  ** END OF RUN :   93
06326>
06327> ********************************************************************************
06328>
06329>
06330>
06331>
06332>
06333>  RUN#:COMMAND#
06334> R0094:C00001-----------------------------------------------------------------------------------------------------------
06335>        START
06336>        [TZERO =    .00 hrs on 19940101]
06337>        [METOUT=   2    (1=imperial, 2=metric output)]
06338>        [NSTORM=   0 ]
06339>        [NRUN  = 0094 ]
06340> #*****************************************************************************************************************
06341> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
06342> #*****************************************************************************************************************
06343> #  Project Name: Barrhaven Conservancy Development
06344> #  Project Number: 1474
06345> #  Date        : 2021/Oct/18
06346> #  Modeller    : J.Burnett, P.Eng.
06347> #  Updated     : 2024/Mar/14 [LP]
06348> #  Company     : J.F. Sabourin and Associates
06349> #  License #   : 2582634
06350> #*****************************************************************************************************************
06351> # Ottawa International Airport (1967 - 2003)
06352> R0094:C00002-----------------------------------------------------------------------------------------------------------
06353>  *  READ AES DATA
06354>        [Filename  = YOW_1967_2007.123                                    ]
06355>        [Start_date= 1994.0101: End_date= 1994.1231]
06356>        [DT= 60.min: Length= 8760.hrs: WetHrs=  342: DryHrs= 8418: PTOT= 540.20)
06357>        Maximum average rainfall intensities over
06358>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06359>         22.60    11.90     8.43     5.42     2.92     1.79     1.19      .89     1.15    mm/hr
06360>         22.60    23.80    25.30    32.50    35.00    42.90    42.90    42.90    82.60    mm
06361>        19940629 19940629 19940627 19940627 19940625 19940625 19940625 19940626 19940626 19940627  date
06362>        Number of rainfall events per following interevent time
06363>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06364>           138      115      101       79       62       48       39       34       26
06365>        Number of events with at least the following durations
06366>          1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06367>           137       72       48       12        1        0        0        0        0
06368> R0094:C00003-----------------------------------------------------------------------------------------------------------
06369>        COMPUTE API
06370>        [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
06371>        [APImax= 97.84: APIavg= 15.35: APImin=  .02]
06372> #*****************************************************************************************************************
06373> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06374> #*****************************************************************************************************************
06375> R0094:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06376>      CONTINUOUS STANDHYD   5.0 01:W1              5.76     .236 1994.0629_13:00  256.11 .474     .000
06377>        [XIMP=.55:TIMP=.66]
06378>        [LOSS= 2 :CN= 71.0]
06379>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06380>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06381>        [IaRECimp=   1.50: IaRECper=   6.00]
06382>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06383> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
06384> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06385> # Total Volume provided by LID  - 96 m³
06386> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06387> R0094:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06388>      ROUTE RESERVOIR ->     5.0 02:W1             5.76     .236 1994.0629_13:00  256.11  n/a     .000
06389>                  out <=    5.0 01:W1-LID         1.35     .001 1994.0322_ 1:30  256.11  n/a     .000
06390>                overflow <= 5.0 03:W1-LID-Out     4.41     .231 1994.0629_13:00  256.11  n/a     .000
06391>        (MxStoUsed=.9596E-02  m3, TotOvfVol=.1129E+01  m3, N-Ovf=  107, TotDurOvf=  122.hrs)
06392> R0094:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06393>      CONTINUOUS STANDHYD   5.0 01:W2              8.51     .322 1994.0629_13:00  237.25 .439     .000
06394>        [XIMP=.50:TIMP=.60]
06395>        [LOSS= 2 :CN= 71.0]
06396>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06397>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06398>        [IaRECimp=   1.50: IaRECper=   6.00]
06399>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06400> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
06401> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06402> # Total Volume provided by LID  - 131 m³
06403> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06404> R0094:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06405>      ROUTE RESERVOIR ->     5.0 02:W2             8.51     .322 1994.0629_13:00  237.25  n/a     .000
06406>                  out <=    5.0 01:W2-LID         2.02     .001 1994.0322_ 1:35  237.26  n/a     .000
06407>                overflow <= 5.0 03:W2-LID-Out     6.49     .315 1994.0629_13:00  237.25  n/a     .000
06408>        (MxStoUsed=.1309E-01  m3, TotOvfVol=.1540E+01  m3, N-Ovf=  112, TotDurOvf=  123.hrs)
06409> R0094:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06410>      CONTINUOUS STANDHYD   5.0 01:W3             10.03     .465 1994.0629_13:00  294.56 .545     .000
06411>        [XIMP=.66:TIMP=.76]
06412>        [LOSS= 2 :CN= 71.0]
06413>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06414>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06415>        [IaRECimp=   1.50: IaRECper=   6.00]
06416>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06417> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
06418> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06419> # Total Volume provided by LID  - 193 m³
06420> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06421> R0094:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06422>      ROUTE RESERVOIR ->     5.0 02:W3            10.03     .465 1994.0629_13:00  294.56  n/a     .000
06423>                  out <=    5.0 01:W3-LID         2.46     .001 1994.0322_ 1:30  294.56  n/a     .000
06424>                overflow <= 5.0 03:W3-LID-Out     7.57     .458 1994.0629_13:00  294.56  n/a     .000
06425>        (MxStoUsed=.1928E-01  m3, TotOvfVol=.2229E+01  m3, N-Ovf=  107, TotDurOvf=  121.hrs)
06426> R0094:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06427>      CONTINUOUS STANDHYD   5.0 01:W4             10.11     .436 1994.0629_13:00  272.95 .505     .000
06428>        [XIMP=.60:TIMP=.70]
06429>        [LOSS= 2 :CN= 71.0]
06430>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06431>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06432>        [IaRECimp=   1.50: IaRECper=   6.00]
06433>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06434> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
06435> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06436> # Total Volume provided by LID  - 186 m³
06437> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06438> R0094:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06439>      ROUTE RESERVOIR ->     5.0 02:W4            10.11     .436 1994.0629_13:00  272.94  n/a     .000
06440>                  out <=    5.0 01:W4-LID         2.50     .001 1994.0322_ 1:35  272.95  n/a     .000
06441>                overflow <= 5.0 03:W4-LID-Out     7.61     .428 1994.0629_13:00  272.94  n/a     .000
06442>        (MxStoUsed=.1860E-01  m3, TotOvfVol=.2076E+01  m3, N-Ovf=  111, TotDurOvf=  120.hrs)
06443> R0094:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06444>      CONTINUOUS STANDHYD   5.0 01:W5             6.20     .259 1994.0629_13:00  262.21 .485     .000
06445>        [XIMP=.57:TIMP=.67]
06446>        [LOSS= 2 :CN= 71.0]
06447>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06448>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06449>        [IaRECimp=   1.50: IaRECper=   6.00]
06450>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06451> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
06452> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06453> # Total Volume provided by LID  - 110 m³
06454> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06455> R0094:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06456>      ROUTE RESERVOIR ->     5.0 02:W5             6.20     .259 1994.0629_13:00  262.21  n/a     .000
06457>                  out <=    5.0 01:W5-LID         1.54     .001 1994.0322_ 1:40  262.21  n/a     .000
06458>                overflow <= 5.0 03:W5-LID-Out     4.66     .254 1994.0629_13:00  262.21  n/a     .000
06459>        (MxStoUsed=.1100E-01  m3, TotOvfVol=.1223E+01  m3, N-Ovf=  108, TotDurOvf=  118.hrs)
06460> R0094:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06461>      CONTINUOUS STANDHYD   5.0 01:W6             7.81     .385 1994.0629_13:00  312.81 .579     .000
06462>        [XIMP=.71:TIMP=.81]
06463>        [LOSS= 2 :CN= 71.0]
06464>        [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06465>        [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06466>        [IaRECimp=   1.50: IaRECper=   6.00]
06467>        [SMIN= 41.38: SMAX=275.84: SK= .030]
06468> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
06469> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06470> # Total Volume provided by LID  - 165 m³
06471> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06472> R0094:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06473>      ROUTE RESERVOIR ->     5.0 02:W6             7.81     .385 1994.0629_13:00  312.81  n/a     .000
06474>                  out <=    5.0 01:W6-LID         1.95     .001 1994.0322_ 1:30  312.81  n/a     .000
06475>                overflow <= 5.0 03:W6-LID-Out     5.86     .380 1994.0629_13:00  312.81  n/a     .000
06476>        (MxStoUsed=.1650E-01  m3, TotOvfVol=.1834E+01  m3, N-Ovf=  105, TotDurOvf=  118.hrs)
06477> R0094:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06478>      ADD HYD               5.0 02:W1             5.76     .236 1994.0629_13:00  256.11  n/a     .000
06479>                      +     5.0 02:W2             8.51     .322 1994.0629_13:00  237.25  n/a     .000
06480>                      +     5.0 02:W3            10.03     .465 1994.0629_13:00  294.56  n/a     .000
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06481>                    +     5.0 02:W4             10.11     .436 1994.0629_13:00  272.94  n/a     .000
06482>                    +     5.0 02:W5              6.20     .259 1994.0629_13:00  262.21  n/a     .000
06483>                    +     5.0 02:W6              7.81     .385 1994.0629_13:00  312.81  n/a     .000
06484>                  SUM=    5.0 01:BCD-PH3        48.42    2.102 1994.0629_13:00  274.20  n/a     .000
06485> R0094:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06486>     ADD HYD                5.0 02:W1-LID-Out     4.41     .231 1994.0629_13:00  256.11  n/a     .000
06487>                    +     5.0 02:W2-LID-Out      6.49     .315 1994.0629_13:00  237.25  n/a     .000
06488>                    +     5.0 02:W3-LID-Out      7.57     .458 1994.0629_13:00  294.56  n/a     .000
06489>                    +     5.0 02:W4-LID-Out      7.61     .428 1994.0629_13:00  272.94  n/a     .000
06490>                    +     5.0 02:W5-LID-Out      4.66     .254 1994.0629_13:00  262.21  n/a     .000
06491>                    +     5.0 02:W6-LID-Out      5.86     .380 1994.0629_13:00  312.81  n/a     .000
06492>                  SUM=    5.0 01:BCD-PH3-LI     36.60    2.066 1994.0629_13:00  274.07  n/a     .000
06493> #*************************************************************************************************************
06494> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06495> #*************************************************************************************************************
06496> #                     Set infiltration to 0 (CN = 99.99) for water balance analysis
06497> #*************************************************************************************************************
06498> R0094:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06499>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76     .310 1994.0629_13:00  325.37 .602     .000
06500>       [XIMP=.55:TIMP=.66]
06501>       [LOSS= 2 :CN=100.0]
06502>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06503>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06504>       [IaRECimp=   1.50: IaRECper=   6.00]
06505>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06506> R0094:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06507>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51     .440 1994.0629_13:00  311.75 .577     .000
06508>       [XIMP=.50:TIMP=.60]
06509>       [LOSS= 2 :CN=100.0]
06510>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06511>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06512>       [IaRECimp=   1.50: IaRECper=   6.00]
06513>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06514> R0094:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06515>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03     .561 1994.0629_13:00  348.77 .646     .000
06516>       [XIMP=.66:TIMP=.76]
06517>       [LOSS= 2 :CN=100.0]
06518>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06519>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06520>       [IaRECimp=   1.50: IaRECper=   6.00]
06521>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06522> R0094:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06523>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11     .548 1994.0629_13:00  334.76 .620     .000
06524>       [XIMP=.60:TIMP=.70]
06525>       [LOSS= 2 :CN=100.0]
06526>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06527>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06528>       [IaRECimp=   1.50: IaRECper=   6.00]
06529>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06530> R0094:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06531>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .335 1994.0629_13:00  327.82 .607     .000
06532>       [XIMP=.57:TIMP=.67]
06533>       [LOSS= 2 :CN=100.0]
06534>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06535>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06536>       [IaRECimp=   1.50: IaRECper=   6.00]
06537>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06538> R0094:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06539>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .449 1994.0629_13:00  360.68 .668     .000
06540>       [XIMP=.71:TIMP=.81]
06541>       [LOSS= 2 :CN=100.0]
06542>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06543>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06544>       [IaRECimp=   1.50: IaRECper=   6.00]
06545>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06546> R0094:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06547>     ADD HYD                5.0 02:INF-W1          5.76     .310 1994.0629_13:00  325.37  n/a     .000
06548>                    +     5.0 02:INF-W2          8.51     .440 1994.0629_13:00  311.75  n/a     .000
06549>                    +     5.0 02:INF-W3         10.03     .561 1994.0629_13:00  348.77  n/a     .000
06550>                    +     5.0 02:INF-W4         10.11     .548 1994.0629_13:00  334.76  n/a     .000
06551>                    +     5.0 02:INF-W5          6.20     .335 1994.0629_13:00  327.83  n/a     .000
06552>                    +     5.0 02:INF-W6          7.81     .449 1994.0629_13:00  360.68  n/a     .000
06553>                  SUM=    5.0 01:INF-BCD-PH     48.42    2.643 1994.0629_13:00  335.79  n/a     .000
06554> ###########################################################################
06555> # CONTINUOUS RAINFALL DATA
06556> ###########################################################################
06557>   ** END OF RUN :   94
06558>
06559> *************************************************************************************
06560>
06561>
06562>
06563>
06564>
06565>  RUN#:COMMAND#
06566> R0095:C00001------------------------------------------------------------------------------------
06567>       START
06568>       [TZERO =    .00 hrs on 19950101]
06569>       [METOUT=   2     (1=imperial, 2=metric output)]
06570>       [NSTORM=   0 ]
06571>       [NRUN  = 0095 ]
06572> ************************************************************************************************************
06573> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
06574> ************************************************************************************************************
06575> #  Project Name: Barrhaven Conservancy Development
06576> #  Project Number: 1474
06577> #  Date     : 2021/Oct/18
06578> #  Modeller    : J.Burnett, P.Eng.
06579> #  Updated     : 2024/Mar/14 [LP]
06580> #  Company     : J.F. Sabourin and Associates
06581> #  License #   : 2582634
06582> ************************************************************************************************************
06583> # Ottawa International Airport (1967 - 2003)
06584> R0095:C00002------------------------------------------------------------------------------------
06585>  *  READ AES DATA
06586>       [Filename  = YOW_1967_2007.123                                          ]
06587>       [Start_date= 1995.0101: End_date= 1995.1231]
06588>       [DT= 60.min: Length= 8040.hrs: WetHrs=  332: DryHrs= 7708: PTOT= 538.50)
06589>       Maximum average rainfall intensities over
06590>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06591>        16.90    13.25    11.33     8.98     6.35     3.48     2.95     2.21     1.48    mm/hr
06592>        16.90    26.50    34.00    53.90    76.20    83.40   106.20   106.20   106.20    mm
06593>       19950603 19950603 19951006 19951006 19951006 19951006 19951007 19951007 19951008  date
06594>       Number of rainfall events per following interevent time
06595>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06596>           91       73       65       55       47       41       34       31       25
06597>       Number of events with at least the following durations
06598>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06599>           90       54       35       16        7        1        0        0        0
06600> R0095:C00003------------------------------------------------------------------------------------
06601>       COMPUTE API
06602>         [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
06603>         [APImax= 99.57: APIavg= 16.58: APImin=   .00]
06604> ************************************************************************************************************
06605> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06606> ************************************************************************************************************
06607> R0095:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06608>     CONTINUOUS STANDHYD    5.0 01:W1              5.76     .188 1995.0603_ 8:05  326.81 .607     .000
06609>       [XIMP=.55:TIMP=.66]
06610>       [LOSS= 2 :CN= 71.0]
06611>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06612>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06613>       [IaRECimp=   1.50: IaRECper=   6.00]
06614>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06615> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
06616> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06617> # Total Volume provided by LID  - 86 m³
06618> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06619> R0095:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06620>     ROUTE RESERVOIR ->     5.0 02:W1              5.76     .188 1995.0603_ 8:05  326.81  n/a     .000
06621>                       out <=    5.0 01:W1-LID     4.93     .001 1995.0113_15:35  326.81  n/a     .000
06622>               overflow <=    5.0 03:W1-LID-Out    4.93     .187 1995.0603_ 8:05  326.81  n/a     .000
06623>      (MxStoUsed=.9595E-02  m3, TotOvfVol=.1612E+01  m3, N-Ovf=    61, TotDurOvf=  157.hrs)
06624> R0095:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06625>     CONTINUOUS STANDHYD    5.0 01:W2              8.51     .271 1995.0603_ 8:05  310.39 .576     .000
06626>       [XIMP=.50:TIMP=.60]
06627>       [LOSS= 2 :CN= 71.0]
06628>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06629>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06630>       [IaRECimp=   1.50: IaRECper=   6.00]
06631>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06632> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
06633> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06634> # Total Volume provided by LID  - 131 m³
06635> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06636> R0095:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06637>     ROUTE RESERVOIR ->     8.51     .271 1995.0603_ 8:05  310.39  n/a     .000
06638>                       out <=    5.0 01:W2-LID     1.20     .001 1995.0113_15:35  310.39  n/a     .000
06639>               overflow <=    5.0 03:W2-LID-Out    7.31     .268 1995.0603_ 8:05  310.39  n/a     .000
06640>      (MxStoUsed=.1395E-01  m3, TotOvfVol=.2270E+01  m3, N-Ovf=    71, TotDurOvf=  157.hrs)
06641> R0095:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06642>     CONTINUOUS STANDHYD    5.0 01:W3             10.03     .359 1995.0603_ 2:00  358.83 .666     .000
06643>       [XIMP=.66:TIMP=.76]
06644>       [LOSS= 2 :CN= 71.0]
06645>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06646>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06647>       [IaRECimp=   1.50: IaRECper=   6.00]
06648>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06649> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
06650> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06651> # Total Volume provided by LID  - 193 m³
06652> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06653> R0095:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06654>     ROUTE RESERVOIR ->     5.0 02:W3             10.03     .359 1995.0603_ 2:00  358.83  n/a     .000
06655>                       out <=    5.0 01:W3-LID     1.56     .001 1995.0113_15:35  358.83  n/a     .000
06656>               overflow <=    5.0 03:W3-LID-Out    8.47     .354 1995.0603_ 2:00  358.83  n/a     .000
06657>      (MxStoUsed=.1930E-01  m3, TotOvfVol=.3038E+01  m3, N-Ovf=    66, TotDurOvf=  156.hrs)
06658> R0095:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06659>     CONTINUOUS STANDHYD    5.0 01:W4             10.11     .339 1995.0603_ 2:00  340.59 .632     .000
06660>       [XIMP=.60:TIMP=.70]
06661>       [LOSS= 2 :CN= 71.0]
06662>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06663>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06664>       [IaRECimp=   1.50: IaRECper=   6.00]
06665>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06666> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
06667> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06668> # Total Volume provided by LID  - 186 m³
06669> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06670> R0095:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06671>     ROUTE RESERVOIR ->     5.0 02:W4             10.11     .339 1995.0603_ 2:00  340.59  n/a     .000
06672>                       out <=    5.0 01:W4-LID     1.55     .001 1995.0113_15:35  340.60  n/a     .000
06673>               overflow <=    5.0 03:W4-LID-Out    8.56     .333 1995.0603_ 2:00  340.59  n/a     .000
06674>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.2914E+01  m3, N-Ovf=    71, TotDurOvf=  156.hrs)
06675> R0095:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06676>     CONTINUOUS STANDHYD    5.0 01:W5              6.20     .203 1995.0603_ 8:05  331.54 .616     .000
06677>       [XIMP=.57:TIMP=.67]
06678>       [LOSS= 2 :CN= 71.0]
06679>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06680>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06681>       [IaRECimp=   1.50: IaRECper=   6.00]
06682>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06683> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
06684> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06685> # Total Volume provided by LID  - 110 m³
06686> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06687> R0095:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06688>     ROUTE RESERVOIR ->     5.0 02:W5              6.20     .203 1995.0603_ 8:05  331.54  n/a     .000
06689>                       out <=    5.0 01:W5-LID     .94     .001 1995.0113_15:35  331.53  n/a     .000
06690>               overflow <=    5.0 03:W5-LID-Out    5.26     .202 1995.0603_ 8:05  331.54  n/a     .000
06691>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1744E+01  m3, N-Ovf=    65, TotDurOvf=  154.hrs)
06692> R0095:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06693>     CONTINUOUS STANDHYD    5.0 01:W6              7.81     .295 1995.0603_ 2:00  374.12 .695     .000
06694>       [XIMP=.71:TIMP=.81]
06695>       [LOSS= 2 :CN= 71.0]
06696>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06697>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06698>       [IaRECimp=   1.50: IaRECper=   6.00]
06699>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06700> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
06701> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06702> # Total Volume provided by LID  - 165 m³
06703> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06704> R0095:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06705>     ROUTE RESERVOIR ->     5.0 02:W6              7.81     .295 1995.0603_ 2:00  374.12  n/a     .000
06706>                       out <=    5.0 01:W6-LID     1.26     .001 1995.0113_15:35  374.12  n/a     .000
06707>               overflow <=    5.0 03:W6-LID-Out    6.55     .292 1995.0603_ 2:00  374.12  n/a     .000
06708>      (MxStoUsed=.1649E-01  m3, TotOvfVol=.2449E+01  m3, N-Ovf=    69, TotDurOvf=  155.hrs)
06709> R0095:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06710>     ADD HYD                5.0 02:W1              5.76     .188 1995.0603_ 8:05  326.81  n/a     .000
06711>                    +     5.0 02:W2              8.51     .271 1995.0603_ 8:05  310.39  n/a     .000
06712>                    +     5.0 02:W3             10.03     .359 1995.0603_ 2:00  358.83  n/a     .000
06713>                    +     5.0 02:W4             10.11     .339 1995.0603_ 2:00  340.59  n/a     .000
06714>                    +     5.0 02:W5              6.20     .203 1995.0603_ 8:05  331.54  n/a     .000
06715>                    +     5.0 02:W6              7.81     .295 1995.0603_ 2:00  374.12  n/a     .000
06716>                  SUM=    5.0 01:BCD-PH3        48.42    1.635 1995.0603_ 2:00  341.67  n/a     .000
06717> R0095:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06718>     ADD HYD                5.0 02:W1-Out          4.93     .187 1995.0603_ 8:05  326.81  n/a     .000
06719>                    +     5.0 02:W2-LID-Out      7.31     .268 1995.0603_ 8:05  310.39  n/a     .000
06720>                    +     5.0 02:W3-LID-Out      8.47     .354 1995.0603_ 2:00  358.83  n/a     .000
06721>                    +     5.0 02:W4-LID-Out      8.56     .333 1995.0603_ 2:00  340.59  n/a     .000
06722>                    +     5.0 02:W5-LID-Out      5.26     .202 1995.0603_ 8:05  331.54  n/a     .000
06723>                    +     5.0 02:W6-LID-Out      6.55     .292 1995.0603_ 2:00  374.12  n/a     .000
06724>                  SUM=    5.0 01:BCD-PH3-LI     41.07    1.608 1995.0603_ 2:00  341.50  n/a     .000
06725> #*************************************************************************************************************
06726> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06727> #*************************************************************************************************************
06728> #                     Set infiltration to 0 (CN = 99.99) for water balance analysis
06729> #*************************************************************************************************************
06730> R0095:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06731>     CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76     .252 1995.0603_ 2:00  389.39 .723     .000
06732>       [XIMP=.55:TIMP=.66]
06733>       [LOSS= 2 :CN=100.0]
06734>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06735>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06736>       [IaRECimp=   1.50: IaRECper=   6.00]
06737>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06738> R0095:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06739>     CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51     .365 1995.0603_ 2:00  379.39 .705     .000
06740>       [XIMP=.50:TIMP=.60]
06741>       [LOSS= 2 :CN=100.0]
06742>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06743>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06744>       [IaRECimp=   1.50: IaRECper=   6.00]
06745>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06746> R0095:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06747>     CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03     .446 1995.0603_ 2:00  406.52 .755     .000
06748>       [XIMP=.66:TIMP=.76]
06749>       [LOSS= 2 :CN=100.0]
06750>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06751>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06752>       [IaRECimp=   1.50: IaRECper=   6.00]
06753>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06754> R0095:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06755>     CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11     .443 1995.0603_ 2:00  396.28 .736     .000
06756>       [XIMP=.60:TIMP=.70]
06757>       [LOSS= 2 :CN=100.0]
06758>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06759>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06760>       [IaRECimp=   1.50: IaRECper=   6.00]
06761>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06762> R0095:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06763>     CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .271 1995.0603_ 2:00  391.20 .726     .000
06764>       [XIMP=.57:TIMP=.67]
06765>       [LOSS= 2 :CN=100.0]
06766>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06767>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06768>       [IaRECimp=   1.50: IaRECper=   6.00]
06769>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06770> R0095:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06771>     CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .352 1995.0603_ 2:00  415.16 .771     .000
06772>       [XIMP=.71:TIMP=.81]
06773>       [LOSS= 2 :CN=100.0]
06774>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06775>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06776>       [IaRECimp=   1.50: IaRECper=   6.00]
06777>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06778> R0095:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06779>     ADD HYD                5.0 02:INF-W1          5.76     .252 1995.0603_ 2:00  389.39  n/a     .000
06780>                    +     5.0 02:INF-W2          8.51     .365 1995.0603_ 2:00  379.39  n/a     .000
06781>                    +     5.0 02:INF-W3         10.03     .446 1995.0603_ 2:00  406.52  n/a     .000
06782>                    +     5.0 02:INF-W4         10.11     .443 1995.0603_ 2:00  396.28  n/a     .000
06783>                    +     5.0 02:INF-W5          6.20     .271 1995.0603_ 2:00  391.20  n/a     .000
06784>                    +     5.0 02:INF-W6          7.81     .352 1995.0603_ 2:00  415.16  n/a     .000
06785>                  SUM=    5.0 01:INF-BCD-PH     48.42    2.128 1995.0603_ 2:00  397.01  n/a     .000
06786> ###########################################################################
06787> # CONTINUOUS RAINFALL DATA
06788> ###########################################################################
06789>   ** END OF RUN :   95
06790>
06791> *************************************************************************************
06792>
06793>
06794>
06795>
06796>
06797>  RUN#:COMMAND#
06798> R0096:C00001------------------------------------------------------------------------------------
06799>       START
06800>       [TZERO =    .00 hrs on 19960101]
06801>       [METOUT=   2     (1=imperial, 2=metric output)]
06802>       [NSTORM=   0 ]
06803>       [NRUN  = 0096 ]
06804> ************************************************************************************************************
06805> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
06806> ************************************************************************************************************
06807> #  Project Name: Barrhaven Conservancy Development
06808> #  Project Number: 1474
06809> #  Date     : 2021/Oct/18
06810> #  Modeller    : J.Burnett, P.Eng.
06811> #  Updated     : 2024/Mar/14 [LP]
06812> #  Company     : J.F. Sabourin and Associates
06813> #  License #   : 2582634
06814> ************************************************************************************************************
06815> # Ottawa International Airport (1967 - 2003)
06816> R0096:C00002------------------------------------------------------------------------------------
06817>  *  READ AES DATA
06818>       [Filename  = YOW_1967_2007.123                                          ]
06819>       [Start_date= 1996.0101: End_date= 1996.1230]
06820>       [DT= 60.min: Length= 8784.hrs: WetHrs=  387: DryHrs= 6165: PTOT= 512.20)
06821>       Maximum average rainfall intensities over
06822>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06823>        18.50    13.55     9.23     5.42     2.93     1.84     1.32     1.02      .70    mm/hr
06824>        18.50    27.10    27.10    32.50    35.10    44.10    47.50    49.00    50.30    mm
06825>       19960731 19960731 19960731 19960731 19960731 19961109 19961109 19961109 19961109  date
06826>       Number of rainfall events per following interevent time
06827>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06828>          132      104       93       71       59       43       36       31       24
06829>       Number of events with at least the following durations
06830>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
06831>          131       72       50       19        2        1        0        0        0
06832> R0096:C00003------------------------------------------------------------------------------------
06833>       COMPUTE API
06834>         [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
06835>         [APImax= 63.22: APIavg= 19.39: APImin=   .71]
06836> ************************************************************************************************************
06837> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06838> ************************************************************************************************************
06839> R0096:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
06840>     CONTINUOUS STANDHYD    5.0 01:W1              5.76     .185 1996.0731_15:00  236.06 .461     .000
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06841>       [XIMP=.55:TIMP=.66]
06842>       [LOSS= 2 :CN= 71.0]
06843>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06844>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06845>       [IaRECimp=   1.50: IaRECper=   6.00]
06846>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06847> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
06848> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06849> # Total Volume provided by LID  - 96 m³
06850> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06851> R0096:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06852>      ROUTE RESERVOIR ->    5.0 02:W1            5.76     .185 1996.0731_15:00  236.06  n/a     .000
06853>                out <=     5.0 01:W1-LID        1.51     .001 1996.0416_16:20  236.07  n/a     .000
06854>              overflow <=  5.0 03:W1-LID-Out    4.25     .182 1996.0731_15:00  236.06  n/a     .000
06855>      (MxStoUsed=.9594E-02  m3, TotOvfVol=.1003E+01  m3, N-Ovf=  108, TotDurOvf=  150.hrs)
06856> R0096:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06857>      CONTINUOUS STANDHYD   5.0 01:W2            8.51     .247 1996.0731_15:00  218.08  .426    .000
06858>       [XIMP=.50:TIMP=.60]
06859>       [LOSS= 2 :CN= 71.0]
06860>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06861>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06862>       [IaRECimp=   1.50: IaRECper=   6.00]
06863>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06864> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
06865> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06866> # Total Volume provided by LID  - 131 m³
06867> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06868> R0096:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06869>      ROUTE RESERVOIR ->    5.0 02:W2            8.51     .247 1996.0731_15:00  218.08  n/a     .000
06870>                out <=     5.0 01:W2-LID        2.25     .001 1996.0416_16:20  218.08  n/a     .000
06871>              overflow <=  5.0 03:W2-LID-Out    6.26     .242 1996.0731_15:00  218.08  n/a     .000
06872>      (MxStoUsed=.1309E-01  m3, TotOvfVol=.1364E+01  m3, N-Ovf=  113, TotDurOvf=  152.hrs)
06873> R0096:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06874>      CONTINUOUS STANDHYD   5.0 01:W3           10.03     .367 1996.0731_15:00  272.95 .533     .000
06875>       [XIMP=.66:TIMP=.76]
06876>       [LOSS= 2 :CN= 71.0]
06877>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06878>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06879>       [IaRECimp=   1.50: IaRECper=   6.00]
06880>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06881> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
06882> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06883> # Total Volume provided by LID  - 193 m³
06884> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06885> R0096:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06886>      ROUTE RESERVOIR ->    5.0 02:W3           10.03     .367 1996.0731_15:00  272.95  n/a     .000
06887>                out <=     5.0 01:W3-LID        2.73     .001 1996.0416_16:15  272.95  n/a     .000
06888>              overflow <=  5.0 03:W3-LID-Out    7.30     .362 1996.0731_15:00  272.95  n/a     .000
06889>      (MxStoUsed=.1929E-01  m3, TotOvfVol=.1993E+01  m3, N-Ovf=  106, TotDurOvf=  149.hrs)
06890> R0096:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06891>      CONTINUOUS STANDHYD   5.0 01:W4           10.11     .341 1996.0731_15:00  252.25 .492     .000
06892>       [XIMP=.60:TIMP=.70]
06893>       [LOSS= 2 :CN= 71.0]
06894>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06895>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06896>       [IaRECimp=   1.50: IaRECper=   6.00]
06897>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06898> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
06899> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06900> # Total Volume provided by LID  - 186 m³
06901> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06902> R0096:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06903>      ROUTE RESERVOIR ->    5.0 02:W4           10.11     .341 1996.0731_15:00  252.25  n/a     .000
06904>                out <=     5.0 01:W4-LID        2.78     .001 1996.0416_16:25  252.26  n/a     .000
06905>              overflow <=  5.0 03:W4-LID-Out    7.33     .335 1996.0731_15:00  252.25  n/a     .000
06906>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.1849E+01  m3, N-Ovf=  110, TotDurOvf=  149.hrs)
06907> R0096:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06908>      CONTINUOUS STANDHYD   5.0 01:W5            6.20     .201 1996.0731_15:00  241.96 .472     .000
06909>       [XIMP=.57:TIMP=.67]
06910>       [LOSS= 2 :CN= 71.0]
06911>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06912>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
06913>       [IaRECimp=   1.50: IaRECper=   6.00]
06914>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06915> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
06916> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06917> # Total Volume provided by LID  - 110 m³
06918> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06919> R0096:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06920>      ROUTE RESERVOIR ->    5.0 02:W5            6.20     .201 1996.0731_15:00  241.96  n/a     .000
06921>                out <=     5.0 01:W5-LID        1.71     .001 1996.0416_16:25  241.96  n/a     .000
06922>              overflow <=  5.0 03:W5-LID-Out    4.49     .198 1996.0731_15:00  241.96  n/a     .000
06923>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1087E+01  m3, N-Ovf=  104, TotDurOvf=  147.hrs)
06924> R0096:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06925>      CONTINUOUS STANDHYD   5.0 01:W6            7.81     .309 1996.0731_15:00  290.36 .567     .000
06926>       [XIMP=.71:TIMP=.81]
06927>       [LOSS= 2 :CN= 71.0]
06928>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06929>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
06930>       [IaRECimp=   1.50: IaRECper=   6.00]
06931>       [SMIN= 41.38: SMAX=275.84: SK= .030]
06932> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
06933> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
06934> # Total Volume provided by LID  - 165 m³
06935> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
06936> R0096:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06937>      ROUTE RESERVOIR ->    5.0 02:W6            7.81     .309 1996.0731_15:00  290.36  n/a     .000
06938>                out <=     5.0 01:W6-LID        2.15     .001 1996.0416_16:15  290.36  n/a     .000
06939>              overflow <=  5.0 03:W6-LID-Out    5.66     .305 1996.0731_15:00  290.36  n/a     .000
06940>      (MxStoUsed=.1649E-01  m3, TotOvfVol=.1642E+01  m3, N-Ovf=   99, TotDurOvf=  146.hrs)
06941> R0096:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06942>      ADD HYD               5.0 02:W1            5.76     .185 1996.0731_15:00  236.06  n/a     .000
06943>                        +    5.0 02:W2            8.51     .247 1996.0731_15:00  218.08  n/a     .000
06944>                        +    5.0 02:W3           10.03     .367 1996.0731_15:00  272.95  n/a     .000
06945>                        +    5.0 02:W4           10.11     .341 1996.0731_15:00  252.25  n/a     .000
06946>                        +    5.0 02:W5            6.20     .201 1996.0731_15:00  241.96  n/a     .000
06947>                        +    5.0 02:W6            7.81     .309 1996.0731_15:00  290.36  n/a     .000
06948>                      SUM=   5.0 01:BCD-PH3      48.42    1.650 1996.0731_15:00  253.44  n/a     .000
06949> R0096:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06950>      ADD HYD               5.0 02:W1-LID-Out    4.25     .182 1996.0731_15:00  236.06  n/a     .000
06951>                        +    5.0 02:W2-LID-Out    6.26     .242 1996.0731_15:00  218.08  n/a     .000
06952>                        +    5.0 02:W3-LID-Out    7.30     .362 1996.0731_15:00  272.95  n/a     .000
06953>                        +    5.0 02:W4-LID-Out    7.33     .335 1996.0731_15:00  252.25  n/a     .000
06954>                        +    5.0 02:W5-LID-Out    4.49     .198 1996.0731_15:00  241.96  n/a     .000
06955>                        +    5.0 02:W6-LID-Out    5.66     .305 1996.0731_15:00  290.36  n/a     .000
06956>                      SUM=   5.0 01:BCD-PH3-LI    35.29    1.624 1996.0731_15:00  253.33  n/a     .000
06957> ##############################################################################################################
06958> #                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
06959> ##############################################################################################################
06960> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
06961> ##############################################################################################################
06962> R0096:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06963>      CONTINUOUS STANDHYD   5.0 01:INF-W1        5.76     .259 1996.0731_15:00  299.13 .584     .000
06964>       [XIMP=.55:TIMP=.66]
06965>       [LOSS= 2 :CN=100.0]
06966>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06967>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
06968>       [IaRECimp=   1.50: IaRECper=   6.00]
06969>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06970> R0096:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06971>      CONTINUOUS STANDHYD   5.0 01:INF-W2        8.51     .361 1996.0731_15:00  285.70 .558     .000
06972>       [XIMP=.50:TIMP=.60]
06973>       [LOSS= 2 :CN=100.0]
06974>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06975>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
06976>       [IaRECimp=   1.50: IaRECper=   6.00]
06977>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06978> R0096:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06979>      CONTINUOUS STANDHYD   5.0 01:INF-W3       10.03     .461 1996.0731_15:00  322.49 .630     .000
06980>       [XIMP=.66:TIMP=.76]
06981>       [LOSS= 2 :CN=100.0]
06982>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06983>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
06984>       [IaRECimp=   1.50: IaRECper=   6.00]
06985>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06986> R0096:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06987>      CONTINUOUS STANDHYD   5.0 01:INF-W4       10.11     .450 1996.0731_15:00  308.57 .602     .000
06988>       [XIMP=.60:TIMP=.70]
06989>       [LOSS= 2 :CN=100.0]
06990>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06991>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
06992>       [IaRECimp=   1.50: IaRECper=   6.00]
06993>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
06994> R0096:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
06995>      CONTINUOUS STANDHYD   5.0 01:INF-W5        6.20     .279 1996.0731_15:00  301.66 .589     .000
06996>       [XIMP=.57:TIMP=.67]
06997>       [LOSS= 2 :CN=100.0]
06998>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
06999>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07000>       [IaRECimp=   1.50: IaRECper=   6.00]
07001>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
07002> R0096:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07003>      CONTINUOUS STANDHYD   5.0 01:INF-W6        7.81     .373 1996.0731_15:00  334.27 .653     .000
07004>       [XIMP=.71:TIMP=.81]
07005>       [LOSS= 2 :CN=100.0]
07006>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07007>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07008>       [IaRECimp=   1.50: IaRECper=   6.00]
07009>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
07010> R0096:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07011>      ADD HYD               5.0 02:INF-W1        5.76     .259 1996.0731_15:00  299.13  n/a     .000
07012>                        +    5.0 02:INF-W2        8.51     .361 1996.0731_15:00  285.70  n/a     .000
07013>                        +    5.0 02:INF-W3       10.03     .461 1996.0731_15:00  322.49  n/a     .000
07014>                        +    5.0 02:INF-W4       10.11     .450 1996.0731_15:00  308.57  n/a     .000
07015>                        +    5.0 02:INF-W5        6.20     .279 1996.0731_15:00  301.66  n/a     .000
07016>                        +    5.0 02:INF-W6        7.81     .373 1996.0731_15:00  334.27  n/a     .000
07017>                      SUM=   5.0 01:INF-BCD-PH    48.42    2.182 1996.0731_15:00  309.57  n/a     .000
07018> ##############################################################################
07019> # CONTINUOUS RAINFALL DATA
07020> ##############################################################################

07021>  ** END OF RUN :   96
07022>
07023> ************************************************************************************
07024>
07025>
07026>
07027>
07028>
07029>  RUN#:COMMAND#
07030> R0097:C00001------------------------------------------------------------------------
07031>       START
07032>       [TZERO =    .00 hrs on 19970101]
07033>       [METOUT=   2      (1=imperial, 2=metric output)]
07034>       [NSTORM=   0 ]
07035>       [NRUN  = 0097 ]
07036> #*********************************************************************************
07037> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
07038> #*********************************************************************************
07039> #  Project Name: Barrhaven Conservancy Development
07040> #  Project Number: 1474
07041> #  Date        : 2021/Oct/18
07042> #  Modeller    : J.Burnett, P.Eng.
07043> #  Updated     : 2024/Mar/14 [LP]
07044> #  Company     : J.F. Sabourin and Associates
07045> #  License #   : 2582634
07046> #*********************************************************************************
07047> # Ottawa International Airport (1967 - 2003)
07048> R0097:C00002------------------------------------------------------------------------
07049> *  READ AES DATA
07050>       [Filename  = YOW_1967_2007.123                                    ]
07051>       [Start_date= 1997.0101: End_date= 1997.1231]
07052>       [DT= 60.min: Length= 8760.hrs: WetHrs=  379: DryHrs= 7661: PTOT= 433.20]
07053>       Maximum average rainfall intensities over
07054>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07055>        12.50     7.60     5.67     4.43     2.91     1.68     1.12      .84      .63    mm/hr
07056>        12.50    15.20    17.00    26.60    34.90    40.40    40.40    40.40    45.30    mm
07057>  19970622 19970622 19970622 19970221 19970222 19970222 19970222 19970222 19970222  date
07058>       Number of rainfall events per following interevent time
07059>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07060>          113       92       83       67       61       55       48       43       30
07061>       Number of events with at least the following durations
07062>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07063>          112       70       46       20        4        0        0        0        0
07064> R0097:C00003------------------------------------------------------------------------
07065>       COMPUTE APY
07066>       [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
07067>       [APImax= 50.00: APIavg= 13.66: APImin=  .27]
07068> #*********************************************************************************
07069> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07070> #*********************************************************************************
07071> R0097:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07072>      CONTINUOUS STANDHYD   5.0 01:W1            5.76     .119 1997.0622_ 4:00  196.28 .453     .000
07073>       [XIMP=.55:TIMP=.66]
07074>       [LOSS= 2 :CN= 71.0]
07075>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07076>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07077>       [IaRECimp=   1.50: IaRECper=   6.00]
07078>       [SMIN= 41.38: SMAX=275.84: SK= .030]
07079> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
07080> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07081> # Total Volume provided by LID  - 96 m³
07082> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07083> R0097:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07084>      ROUTE RESERVOIR ->    5.0 02:W1            5.76     .119 1997.0622_ 4:00  196.28  n/a     .000
07085>                out <=     5.0 01:W1-LID        1.64     .001 1997.0219_19:10  196.29  n/a     .000
07086>              overflow <=  5.0 03:W1-LID-Out    4.12     .118 1997.0622_ 4:00  196.28  n/a     .000
07087>      (MxStoUsed=.9599E-02  m3, TotOvfVol=.8095E+00  m3, N-Ovf=   81, TotDurOvf=  164.hrs)
07088> R0097:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07089>      CONTINUOUS STANDHYD   5.0 01:W2            8.51     .161 1997.0622_ 4:00  180.37 .416     .000
07090>       [XIMP=.50:TIMP=.60]
07091>       [LOSS= 2 :CN= 71.0]
07092>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07093>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07094>       [IaRECimp=   1.50: IaRECper=   6.00]
07095>       [SMIN= 41.38: SMAX=275.84: SK= .030]
07096> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
07097> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07098> # Total Volume provided by LID  - 131 m³
07099> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07100> R0097:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07101>      ROUTE RESERVOIR ->    5.0 02:W2            8.51     .161 1997.0622_ 4:00  180.37  n/a     .000
07102>                out <=     5.0 01:W2-LID        2.46     .001 1997.0219_19:25  180.37  n/a     .000
07103>              overflow <=  5.0 03:W2-LID-Out    6.05     .159 1997.0622_ 4:00  180.37  n/a     .000
07104>      (MxStoUsed=.1310E-01  m3, TotOvfVol=.1092E+01  m3, N-Ovf=   87, TotDurOvf=  164.hrs)
07105> R0097:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07106>      CONTINUOUS STANDHYD   5.0 01:W3           10.03     .241 1997.0622_ 4:00  229.41 .530     .000
07107>       [XIMP=.66:TIMP=.76]
07108>       [LOSS= 2 :CN= 71.0]
07109>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07110>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07111>       [IaRECimp=   1.50: IaRECper=   6.00]
07112>       [SMIN= 41.38: SMAX=275.84: SK= .030]
07113> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
07114> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07115> # Total Volume provided by LID  - 193 m³
07116> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07117> R0097:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07118>      ROUTE RESERVOIR ->    5.0 02:W3           10.03     .241 1997.0622_ 4:00  229.41  n/a     .000
07119>                out <=     5.0 01:W3-LID        2.92     .001 1997.0219_19:05  229.40  n/a     .000
07120>              overflow <=  5.0 03:W3-LID-Out    7.11     .238 1997.0622_ 4:00  229.41  n/a     .000
07121>      (MxStoUsed=.1930E-01  m3, TotOvfVol=.1632E+01  m3, N-Ovf=   91, TotDurOvf=  162.hrs)
07122> R0097:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07123>      CONTINUOUS STANDHYD   5.0 01:W4           10.11     .223 1997.0622_ 4:00  210.95 .487     .000
07124>       [XIMP=.60:TIMP=.70]
07125>       [LOSS= 2 :CN= 71.0]
07126>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07127>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07128>       [IaRECimp=   1.50: IaRECper=   6.00]
07129>       [SMIN= 41.38: SMAX=275.84: SK= .030]
07130> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
07131> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07132> # Total Volume provided by LID  - 186 m³
07133> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07134> R0097:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07135>      ROUTE RESERVOIR ->    5.0 02:W4           10.11     .223 1997.0622_ 4:00  210.95  n/a     .000
07136>                out <=     5.0 01:W4-LID        2.99     .001 1997.0219_19:30  210.95  n/a     .000
07137>              overflow <=  5.0 03:W4-LID-Out    7.12     .220 1997.0622_ 4:00  210.95  n/a     .000
07138>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.1501E+01  m3, N-Ovf=   84, TotDurOvf=  162.hrs)
07139> R0097:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07140>      CONTINUOUS STANDHYD   5.0 01:W5            6.20     .132 1997.0622_ 4:00  201.76 .466     .000
07141>       [XIMP=.57:TIMP=.67]
07142>       [LOSS= 2 :CN= 71.0]
07143>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07144>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07145>       [IaRECimp=   1.50: IaRECper=   6.00]
07146>       [SMIN= 41.38: SMAX=275.84: SK= .030]
07147> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
07148> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07149> # Total Volume provided by LID  - 110 m³
07150> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07151> R0097:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07152>      ROUTE RESERVOIR ->    5.0 02:W5            6.20     .132 1997.0622_ 4:00  201.76  n/a     .000
07153>                out <=     5.0 01:W5-LID        1.84     .001 1997.0221_12:10  201.76  n/a     .000
07154>              overflow <=  5.0 03:W5-LID-Out    4.36     .130 1997.0622_ 4:00  201.76  n/a     .000
07155>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.8788E+00  m3, N-Ovf=   81, TotDurOvf=  160.hrs)
07156> R0097:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07157>      CONTINUOUS STANDHYD   5.0 01:W6            7.81     .203 1997.0622_ 4:00  244.92 .565     .000
07158>       [XIMP=.71:TIMP=.81]
07159>       [LOSS= 2 :CN= 71.0]
07160>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07161>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07162>       [IaRECimp=   1.50: IaRECper=   6.00]
07163>       [SMIN= 41.38: SMAX=275.84: SK= .030]
07164> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
07165> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07166> # Total Volume provided by LID  - 165 m³
07167> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07168> R0097:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07169>      ROUTE RESERVOIR ->    5.0 02:W6            7.81     .203 1997.0622_ 4:00  244.92  n/a     .000
07170>                out <=     5.0 01:W6-LID        2.30     .001 1997.0219_19:05  244.92  n/a     .000
07171>              overflow <=  5.0 03:W6-LID-Out    5.51     .201 1997.0622_ 4:00  244.92  n/a     .000
07172>      (MxStoUsed=.1650E-01  m3, TotOvfVol=.1350E+01  m3, N-Ovf=   82, TotDurOvf=  159.hrs)
07173> R0097:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07174>      ADD HYD               5.0 02:W1            5.76     .119 1997.0622_ 4:00  196.28  n/a     .000
07175>                        +    5.0 02:W2            8.51     .161 1997.0622_ 4:00  180.37  n/a     .000
07176>                        +    5.0 02:W3           10.03     .241 1997.0622_ 4:00  229.41  n/a     .000
07177>                        +    5.0 02:W4           10.11     .223 1997.0622_ 4:00  210.95  n/a     .000
07178>                        +    5.0 02:W5            6.20     .132 1997.0622_ 4:00  201.76  n/a     .000
07179>                        +    5.0 02:W6            7.81     .203 1997.0622_ 4:00  244.92  n/a     .000
07180>                      SUM=   5.0 01:BCD-PH3      48.42    1.080 1997.0622_ 4:00  211.96  n/a     .000
07181> R0097:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07182>      ADD HYD               5.0 02:W1-LID-Out    4.12     .118 1997.0622_ 4:00  196.28  n/a     .000
07183>                        +    5.0 02:W2-LID-Out    6.05     .159 1997.0622_ 4:00  180.37  n/a     .000
07184>                        +    5.0 02:W3-LID-Out    7.11     .238 1997.0622_ 4:00  229.41  n/a     .000
07185>                        +    5.0 02:W4-LID-Out    7.12     .220 1997.0622_ 4:00  210.95  n/a     .000
07186>                        +    5.0 02:W5-LID-Out    4.36     .130 1997.0622_ 4:00  201.76  n/a     .000
07187>                        +    5.0 02:W6-LID-Out    5.51     .201 1997.0622_ 4:00  244.92  n/a     .000
07188>                      SUM=   5.0 01:BCD-PH3-LI    34.28    1.066 1997.0622_ 4:00  211.91  n/a     .000
07189> #*********************************************************************************
07190> #                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07191> #*********************************************************************************
07192> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
07193> #*********************************************************************************
07194> R0097:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07195>      CONTINUOUS STANDHYD   5.0 01:INF-W1        5.76     .171 1997.0622_ 4:00  255.46 .590     .000
07196>       [XIMP=.55:TIMP=.66]
07197>       [LOSS= 2 :CN=100.0]
07198>       [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07199>       [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07200>       [IaRECimp=   1.50: IaRECper=   6.00]
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```
07201>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
07202> R0097:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07203>      CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51     .239 1997.0622_ 4:00  243.46 .562     .000
07204>         [XIMP=.50:TIMP=.60]
07205>         [LOSS= 2 :CN=100.0]
07206>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07207>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07208>         [IaRECimp=   1.50: IaRECper=   6.00]
07209>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07210> R0097:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07211>      CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03     .307 1997.0622_ 4:00  276.18 .638     .000
07212>         [XIMP=.66:TIMP=.76]
07213>         [LOSS= 2 :CN=100.0]
07214>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07215>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07216>         [IaRECimp=   1.50: IaRECper=   6.00]
07217>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07218> R0097:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07219>      CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11     .299 1997.0622_ 4:00  263.82 .609     .000
07220>         [XIMP=.60:TIMP=.70]
07221>         [LOSS= 2 :CN=100.0]
07222>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07223>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07224>         [IaRECimp=   1.50: IaRECper=   6.00]
07225>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07226> R0097:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07227>      CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .185 1997.0622_ 4:00  257.69 .595     .000
07228>         [XIMP=.57:TIMP=.67]
07229>         [LOSS= 2 :CN=100.0]
07230>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07231>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07232>         [IaRECimp=   1.50: IaRECper=   6.00]
07233>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07234> R0097:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07235>      CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .249 1997.0622_ 4:00  286.64 .662     .000
07236>         [XIMP=.71:TIMP=.81]
07237>         [LOSS= 2 :CN=100.0]
07238>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07239>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07240>         [IaRECimp=   1.50: IaRECper=   6.00]
07241>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07242> R0097:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07243>      ADD HYD                5.0 02:INF-W1          5.76     .171 1997.0622_ 4:00  255.46  n/a     .000
07244>                           +  5.0 02:INF-W2          8.51     .239 1997.0622_ 4:00  243.46  n/a     .000
07245>                           +  5.0 02:INF-W3         10.03     .307 1997.0622_ 4:00  276.18  n/a     .000
07246>                           +  5.0 02:INF-W4         10.11     .299 1997.0622_ 4:00  263.82  n/a     .000
07247>                           +  5.0 02:INF-W5          6.20     .185 1997.0622_ 4:00  257.68  n/a     .000
07248>                           +  5.0 02:INF-W6          7.81     .249 1997.0622_ 4:00  286.64  n/a     .000
07249>                         SUM=   5.0 01:INF-BCD-PH   48.42    1.450 1997.0622_ 4:00  264.70  n/a     .000
07250> ##############################################################################
07251> # CONTINUOUS RAINFALL DATA
07252> ##############################################################################
07253>  ** END OF RUN :   97
07254>
07255> ********************************************************************************
07256>
07257>
07258>
07259>
07260>
07261>  RUN#:COMMAND#
07262> R0098:C00001------------------------------------------------------------------------
07263>      START
07264>         [TZERO =    .00 hrs on 19980101]
07265>         [METOUT=  2    (1=imperial, 2=metric output)]
07266>         [NSTORM=  0 ]
07267>         [NRUN  = 0098 ]
07268> ********************************************************************************
07269> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
07270> ********************************************************************************
07271> #  Project Name: Barrhaven Conservancy Development
07272> #  Project Number: 1474
07273> #  Date       : 2021/Oct/18
07274> #  Modeller   : J.Burnett, P.Eng.
07275> #  Updated    : 2024/Mar/14 [LP]
07276> #  Company    : J.F. Sabourin and Associates
07277> #  License #  : 2582634
07278> ********************************************************************************
07279> # Ottawa International Airport (1967 - 2003)
07280> R0098:C00002------------------------------------------------------------------------
07281>  *  READ AES DATA
07282>         [Filename  = YOW_1967_2007.123                                          ]
07283>         [Start_date= 1998.0101: End_date= 1998.1231]
07284>         [DT= 60.min: Length= 5040.hrs: WetHrs=  291: DryHrs= 4797: PTOT= 440.30)
07285>         Maximum average rainfall intensities over
07286>           1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07287>         15.80     8.90     7.60     4.00     2.54     1.82     1.27      .95      .76    mm/hr
07288>         15.80    17.80    22.80    24.00    30.50    43.60    45.80    45.80    54.60    mm
07289>       19980716 19980627 19980927 19980927 19980927 19980927 19980928 19980928 19980615  date
07290>         Number of rainfall events per following interevent time
07291>           1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07292>            126      104       95       78       63       42       37       32       21
07293>         Number of events with at least the following durations
07294>           1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07295>            125       64       43        8        1        0        0        0        0
07296> R0098:C00003------------------------------------------------------------------------
07297>      COMPUTE API
07298>         [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
07299>         [APImax= 57.22: APIavg= 21.28: APImin=  1.69]
07300> ********************************************************************************
07301> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07302> ********************************************************************************
07303> R0098:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07304>      CONTINUOUS STANDHYD    5.0 01:W1              5.76     .154 1998.0627_ 1:00  193.13 .439     .000
07305>         [XIMP=.55:TIMP=.66]
07306>         [LOSS= 2 :CN= 71.0]
07307>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07308>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07309>         [IaRECimp=   1.50: IaRECper=   6.00]
07310>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07311> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
07312> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07313> # Total Volume provided by LID  - 96 m³
07314> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07315> R0098:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07316>      ROUTE RESERVOIR ->     5.0 02:W1              5.76     .154 1998.0627_ 1:00  193.13  n/a     .000
07317>                       out <=    5.0 01:W1-LID       1.54     .001 1998.0424_17:30  193.13  n/a     .000
07318>                  overflow <=    5.0 03:W1-LID-Out   4.22     .152 1998.0627_ 1:00  193.13  n/a     .000
07319>        (MxStoUsed=.9597E-02  m3, TotOvfVol=.8148E+00  m3, N-Ovf=   93, TotDurOvf=  108.hrs)
07320> R0098:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07321>      CONTINUOUS STANDHYD    5.0 01:W2              8.51     .207 1998.0627_ 1:00  177.91 .404     .000
07322>         [XIMP=.50:TIMP=.60]
07323>         [LOSS= 2 :CN= 71.0]
07324>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07325>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07326>         [IaRECimp=   1.50: IaRECper=   6.00]
07327>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07328> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
07329> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07330> # Total Volume provided by LID  - 131 m³
07331> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07332> R0098:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07333>      ROUTE RESERVOIR ->     5.0 02:W2              8.51     .207 1998.0627_ 1:00  177.91  n/a     .000
07334>                       out <=    5.0 01:W2-LID       2.30     .001 1998.0424_17:35  177.91  n/a     .000
07335>                  overflow <=    5.0 03:W2-LID-Out   6.21     .203 1998.0627_ 1:00  177.91  n/a     .000
07336>        (MxStoUsed=.1310E-01  m3, TotOvfVol=.1104E+01  m3, N-Ovf=   92, TotDurOvf=  110.hrs)
07337> R0098:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07338>      CONTINUOUS STANDHYD    5.0 01:W3             10.03     .309 1998.0627_ 1:00  224.60 .510     .000
07339>         [XIMP=.66:TIMP=.76]
07340>         [LOSS= 2 :CN= 71.0]
07341>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07342>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07343>         [IaRECimp=   1.50: IaRECper=   6.00]
07344>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07345> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
07346> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07347> # Total Volume provided by LID  - 193 m³
07348> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07349> R0098:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07350>      ROUTE RESERVOIR ->     5.0 02:W3             10.03     .309 1998.0627_ 1:00  224.60  n/a     .000
07351>                       out <=    5.0 01:W3-LID       2.76     .001 1998.0424_17:30  224.59  n/a     .000
07352>                  overflow <=    5.0 03:W3-LID-Out   7.27     .305 1998.0627_ 1:00  224.60  n/a     .000
07353>        (MxStoUsed=.1929E-01  m3, TotOvfVol=.1632E+01  m3, N-Ovf=   95, TotDurOvf=  108.hrs)
07354> R0098:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07355>      CONTINUOUS STANDHYD    5.0 01:W4             10.11     .286 1998.0627_ 1:00  206.97 .470     .000
07356>         [XIMP=.60:TIMP=.70]
07357>         [LOSS= 2 :CN= 71.0]
07358>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07359>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07360>         [IaRECimp=   1.50: IaRECper=   6.00]
07361>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07362> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
07363> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07364> # Total Volume provided by LID  - 186 m³
07365> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07366> R0098:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07367>      ROUTE RESERVOIR ->     5.0 02:W4             10.11     .286 1998.0627_ 1:00  206.97  n/a     .000
07368>                       out <=    5.0 01:W4-LID       2.82     .001 1998.0424_17:35  206.97  n/a     .000
07369>                  overflow <=    5.0 03:W4-LID-Out   7.29     .282 1998.0627_ 1:00  206.97  n/a     .000
07370>        (MxStoUsed=.1860E-01  m3, TotOvfVol=.1508E+01  m3, N-Ovf=   91, TotDurOvf=  108.hrs)
07371> R0098:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07372>      CONTINUOUS STANDHYD    5.0 01:W5              6.20     .170 1998.0627_ 1:00  198.22 .450     .000
07373>         [XIMP=.57:TIMP=.67]
07374>         [LOSS= 2 :CN= 71.0]
07375>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07376>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07377>         [IaRECimp=   1.50: IaRECper=   6.00]
07378>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07379> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
07380> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07381> # Total Volume provided by LID  - 110 m³
07382> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07383> R0098:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07384>      ROUTE RESERVOIR ->     5.0 02:W5              6.20     .170 1998.0627_ 1:00  198.22  n/a     .000
07385>                       out <=    5.0 01:W5-LID       1.73     .001 1998.0424_17:35  198.22  n/a     .000
07386>                  overflow <=    5.0 03:W5-LID-Out   4.47     .168 1998.0627_ 1:00  198.22  n/a     .000
07387>        (MxStoUsed=.1100E-01  m3, TotOvfVol=.8852E+00  m3, N-Ovf=   91, TotDurOvf=  104.hrs)
07388> R0098:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07389>      CONTINUOUS STANDHYD    5.0 01:W6              7.81     .259 1998.0627_ 1:00  239.36 .544     .000
07390>         [XIMP=.71:TIMP=.81]
07391>         [LOSS= 2 :CN= 71.0]
07392>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07393>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07394>         [IaRECimp=   1.50: IaRECper=   6.00]
07395>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07396> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
07397> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07398> # Total Volume provided by LID  - 165 m³
07399> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07400> R0098:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07401>      ROUTE RESERVOIR ->     5.0 02:W6              7.81     .259 1998.0627_ 1:00  239.36  n/a     .000
07402>                       out <=    5.0 01:W6-LID       2.18     .001 1998.0424_17:30  239.37  n/a     .000
07403>                  overflow <=    5.0 03:W6-LID-Out   5.63     .256 1998.0627_ 1:00  239.36  n/a     .000
07404>        (MxStoUsed=.1650E-01  m3, TotOvfVol=.1348E+01  m3, N-Ovf=   98, TotDurOvf=  105.hrs)
07405> R0098:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07406>      ADD HYD                5.0 02:W1              5.76     .154 1998.0627_ 1:00  193.13  n/a     .000
07407>                           +  5.0 02:W2              8.51     .207 1998.0627_ 1:00  177.91  n/a     .000
07408>                           +  5.0 02:W3             10.03     .309 1998.0627_ 1:00  224.60  n/a     .000
07409>                           +  5.0 02:W4             10.11     .286 1998.0627_ 1:00  206.97  n/a     .000
07410>                           +  5.0 02:W5              6.20     .170 1998.0627_ 1:00  198.22  n/a     .000
07411>                           +  5.0 02:W6              7.81     .259 1998.0627_ 1:00  239.36  n/a     .000
07412>                         SUM=   5.0 01:BCD-PH3      48.42    1.385 1998.0627_ 1:00  207.97  n/a     .000
07413> R0098:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07414>      ADD HYD                5.0 02:W1-LID-Out      4.22     .152 1998.0627_ 1:00  193.13  n/a     .000
07415>                           +  5.0 02:W2-LID-Out      6.21     .203 1998.0627_ 1:00  177.91  n/a     .000
07416>                           +  5.0 02:W3-LID-Out      7.27     .305 1998.0627_ 1:00  224.60  n/a     .000
07417>                           +  5.0 02:W4-LID-Out      7.29     .282 1998.0627_ 1:00  206.97  n/a     .000
07418>                           +  5.0 02:W5-LID-Out      4.47     .168 1998.0627_ 1:00  198.22  n/a     .000
07419>                           +  5.0 02:W6-LID-Out      5.63     .256 1998.0627_ 1:00  239.36  n/a     .000
07420>                         SUM=   5.0 01:BCD-PH3-LI   35.08    1.366 1998.0627_ 1:00  207.90  n/a     .000
07421> ********************************************************************************
07422> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07423> ********************************************************************************
07424> #                Set infiltration to 0 (CN = 99.99) for water balance analysis
07425> ********************************************************************************
07426> R0098:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07427>      CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76     .214 1998.0627_ 1:00  247.71 .563     .000
07428>         [XIMP=.55:TIMP=.66]
07429>         [LOSS= 2 :CN=100.0]
07430>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07431>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07432>         [IaRECimp=   1.50: IaRECper=   6.00]
07433>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07434> R0098:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07435>      CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51     .303 1998.0627_ 1:00  236.31 .537     .000
07436>         [XIMP=.50:TIMP=.60]
07437>         [LOSS= 2 :CN=100.0]
07438>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07439>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07440>         [IaRECimp=   1.50: IaRECper=   6.00]
07441>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07442> R0098:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07443>      CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03     .389 1998.0627_ 1:00  267.49 .608     .000
07444>         [XIMP=.66:TIMP=.76]
07445>         [LOSS= 2 :CN=100.0]
07446>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07447>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07448>         [IaRECimp=   1.50: IaRECper=   6.00]
07449>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07450> R0098:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07451>      CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11     .379 1998.0627_ 1:00  255.71 .581     .000
07452>         [XIMP=.60:TIMP=.70]
07453>         [LOSS= 2 :CN=100.0]
07454>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07455>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07456>         [IaRECimp=   1.50: IaRECper=   6.00]
07457>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07458> R0098:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07459>      CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .231 1998.0627_ 1:00  249.86 .567     .000
07460>         [XIMP=.57:TIMP=.67]
07461>         [LOSS= 2 :CN=100.0]
07462>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07463>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07464>         [IaRECimp=   1.50: IaRECper=   6.00]
07465>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07466> R0098:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07467>      CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .312 1998.0627_ 1:00  277.45 .630     .000
07468>         [XIMP=.71:TIMP=.81]
07469>         [LOSS= 2 :CN=100.0]
07470>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07471>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07472>         [IaRECimp=   1.50: IaRECper=   6.00]
07473>         [SMIN=  1.39: SMAX=  9.24: SK= .000]
07474> R0098:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07475>      ADD HYD                5.0 02:INF-W1          5.76     .214 1998.0627_ 1:00  247.71  n/a     .000
07476>                           +  5.0 02:INF-W2          8.51     .303 1998.0627_ 1:00  236.31  n/a     .000
07477>                           +  5.0 02:INF-W3         10.03     .389 1998.0627_ 1:00  267.49  n/a     .000
07478>                           +  5.0 02:INF-W4         10.11     .379 1998.0627_ 1:00  255.71  n/a     .000
07479>                           +  5.0 02:INF-W5          6.20     .231 1998.0627_ 1:00  249.86  n/a     .000
07480>                           +  5.0 02:INF-W6          7.81     .312 1998.0627_ 1:00  277.45  n/a     .000
07481>                         SUM=   5.0 01:INF-BCD-PH   48.42    1.829 1998.0627_ 1:00  256.54  n/a     .000
07482> ##############################################################################
07483> # CONTINUOUS RAINFALL DATA
07484> ##############################################################################
07485>  ** END OF RUN :   98
07486>
07487> ********************************************************************************
07488>
07489>
07490>
07491>
07492>
07493>  RUN#:COMMAND#
07494> R0099:C00001------------------------------------------------------------------------
07495>      START
07496>         [TZERO =    .00 hrs on 19990101]
07497>         [METOUT=  2    (1=imperial, 2=metric output)]
07498>         [NSTORM=  0 ]
07499>         [NRUN  = 0099 ]
07500> ********************************************************************************
07501> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
07502> ********************************************************************************
07503> #  Project Name: Barrhaven Conservancy Development
07504> #  Project Number: 1474
07505> #  Date       : 2021/Oct/18
07506> #  Modeller   : J.Burnett, P.Eng.
07507> #  Updated    : 2024/Mar/14 [LP]
07508> #  Company    : J.F. Sabourin and Associates
07509> #  License #  : 2582634
07510> ********************************************************************************
07511> # Ottawa International Airport (1967 - 2003)
07512> R0099:C00002------------------------------------------------------------------------
07513>  *  READ AES DATA
07514>         [Filename  = YOW_1967_2007.123                                          ]
07515>         [Start_date= 1999.0101: End_date= 1999.1231]
07516>         [DT= 60.min: Length= 4440.hrs: WetHrs=  247: DryHrs= 4193: PTOT= 424.40)
07517>         Maximum average rainfall intensities over
07518>           1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07519>         17.50    10.10     9.03     6.57     3.31     1.65     1.45     1.22      .97    mm/hr
07520>         17.50    20.20    27.10    39.40    39.70    39.70    52.20    58.60    69.50    mm
07521>       19990717 19990717 19990906 19990906 19990906 19990906 19990907 19990908 19990908  date
07522>         Number of rainfall events per following interevent time
07523>           1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07524>            102       82       70       56       39       31       28       18
07525>         Number of events with at least the following durations
07526>           1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07527>            101       57       31       10        1        0        0        0        0
07528> R0099:C00003------------------------------------------------------------------------
07529>      COMPUTE API
07530>         [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
07531>         [APImax= 69.51: APIavg= 23.97: APImin=  1.93]
07532> ********************************************************************************
07533> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07534> ********************************************************************************
07535> R0099:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07536>      CONTINUOUS STANDHYD    5.0 01:W1              5.76     .167 1999.0717_15:00  195.66 .461     .000
07537>         [XIMP=.55:TIMP=.66]
07538>         [LOSS= 2 :CN= 71.0]
07539>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07540>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07541>         [IaRECimp=   1.50: IaRECper=   6.00]
07542>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07543> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
07544> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07545> # Total Volume provided by LID  - 96 m³
07546> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07547> R0099:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07548>      ROUTE RESERVOIR ->     5.0 02:W1              5.76     .167 1999.0717_15:00  195.66  n/a     .000
07549>                       out <=    5.0 01:W1-LID       1.33     .001 1999.0508_17:45  195.66  n/a     .000
07550>                  overflow <=    5.0 03:W1-LID-Out   4.43     .165 1999.0717_15:00  195.66  n/a     .000
07551>        (MxStoUsed=.9594E-02  m3, TotOvfVol=.8665E+00  m3, N-Ovf=   99, TotDurOvf=  101.hrs)
07552> R0099:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07553>      CONTINUOUS STANDHYD    5.0 01:W2              8.51     .223 1999.0717_15:00  180.18 .425     .000
07554>         [XIMP=.50:TIMP=.60]
07555>         [LOSS= 2 :CN= 71.0]
07556>         [Pervious    area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07557>         [Impervious  area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07558>         [IaRECimp=   1.50: IaRECper=   6.00]
07559>         [SMIN= 41.38: SMAX=275.84: SK= .030]
07560> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
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07561> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07562> # Total Volume provided by LID  - 131 m³
07563> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07564> R0099:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07565>      ROUTE RESERVOIR ->     5.0 02:W2           8.51     .223 1999.0717_15:00  180.18  n/a     .000
07566>                out <=     5.0 01:W2-LID       2.00     .001 1999.0508_17:50  180.19  n/a     .000
07567>           overflow <=     5.0 03:W2-LID-Out    6.51     .220 1999.0717_15:00  180.18  n/a     .000
07568>     (MxStoUsed=.1310E-01  m3, TotOvfVol=.1173E+01  m3, N-Ovf=   90, TotDurOvf=  104.hrs)
07569> R0099:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07570>      CONTINUOUS STANDHYD    5.0 01:W3          10.03     .339 1999.0717_15:00  227.58 .536     .000
07571>        [XIMP=.66:TIMP=.76]
07572>        [LOSS= 2 :CN= 71.0]
07573>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07574>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07575>        [IaRECimp=   1.50: IaRECper=   6.00]
07576>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07577> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
07578> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07579> # Total Volume provided by LID  - 193 m³
07580> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07581> R0099:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07582>      ROUTE RESERVOIR ->     5.0 02:W3          10.03     .339 1999.0717_15:00  227.58  n/a     .000
07583>                out <=     5.0 01:W3-LID       2.40     .001 1999.0508_17:45  227.58  n/a     .000
07584>           overflow <=     5.0 03:W3-LID-Out    7.63     .335 1999.0717_15:00  227.58  n/a     .000
07585>     (MxStoUsed=.1930E-01  m3, TotOvfVol=.1738E+01  m3, N-Ovf=   93, TotDurOvf=   98.hrs)
07586> R0099:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07587>      CONTINUOUS STANDHYD    5.0 01:W4          10.11     .311 1999.0717_15:00  209.73 .494     .000
07588>        [XIMP=.60:TIMP=.70]
07589>        [LOSS= 2 :CN= 71.0]
07590>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07591>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07592>        [IaRECimp=   1.50: IaRECper=   6.00]
07593>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07594> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
07595> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07596> # Total Volume provided by LID  - 186 m³
07597> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07598> R0099:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07599>      ROUTE RESERVOIR ->     5.0 02:W4          10.11     .311 1999.0717_15:00  209.73  n/a     .000
07600>                out <=     5.0 01:W4-LID       2.46     .001 1999.0508_17:50  209.73  n/a     .000
07601>           overflow <=     5.0 03:W4-LID-Out    7.65     .308 1999.0717_15:00  209.73  n/a     .000
07602>     (MxStoUsed=.1859E-01  m3, TotOvfVol=.1605E+01  m3, N-Ovf=  100, TotDurOvf=  101.hrs)
07603> R0099:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07604>      CONTINUOUS STANDHYD    5.0 01:W5           6.20     .185 1999.0717_15:00  200.84 .473     .000
07605>        [XIMP=.57:TIMP=.67]
07606>        [LOSS= 2 :CN= 71.0]
07607>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07608>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07609>        [IaRECimp=   1.50: IaRECper=   6.00]
07610>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07611> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
07612> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07613> # Total Volume provided by LID  - 110 m³
07614> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07615> R0099:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07616>      ROUTE RESERVOIR ->     5.0 02:W5           6.20     .185 1999.0717_15:00  200.84  n/a     .000
07617>                out <=     5.0 01:W5-LID       1.51     .001 1999.0508_17:50  200.84  n/a     .000
07618>           overflow <=     5.0 03:W5-LID-Out    4.69     .182 1999.0717_15:00  200.84  n/a     .000
07619>     (MxStoUsed=.1100E-01  m3, TotOvfVol=.9419E+00  m3, N-Ovf=   96, TotDurOvf=   98.hrs)
07620> R0099:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07621>      CONTINUOUS STANDHYD    5.0 01:W6           7.81     .283 1999.0717_15:00  242.59 .572     .000
07622>        [XIMP=.71:TIMP=.81]
07623>        [LOSS= 2 :CN= 71.0]
07624>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07625>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07626>        [IaRECimp=   1.50: IaRECper=   6.00]
07627>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07628> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
07629> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07630> # Total Volume provided by LID  - 165 m³
07631> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07632> R0099:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07633>      ROUTE RESERVOIR ->     5.0 02:W6           7.81     .283 1999.0717_15:00  242.59  n/a     .000
07634>                out <=     5.0 01:W6-LID       1.89     .001 1999.0508_17:45  242.59  n/a     .000
07635>           overflow <=     5.0 03:W6-LID-Out    5.92     .280 1999.0717_15:00  242.59  n/a     .000
07636>     (MxStoUsed=.1648E-01  m3, TotOvfVol=.1437E+01  m3, N-Ovf=   96, TotDurOvf=   96.hrs)
07637> R0099:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07638>      ADD HYD                5.0 02:W1           5.76     .167 1999.0717_15:00  195.66  n/a     .000
07639>                           +    5.0 02:W2           8.51     .223 1999.0717_15:00  180.18  n/a     .000
07640>                           +    5.0 02:W3          10.03     .339 1999.0717_15:00  227.58  n/a     .000
07641>                           +    5.0 02:W4          10.11     .311 1999.0717_15:00  209.73  n/a     .000
07642>                           +    5.0 02:W5           6.20     .185 1999.0717_15:00  200.84  n/a     .000
07643>                           +    5.0 02:W6           7.81     .283 1999.0717_15:00  242.59  n/a     .000
07644>                     SUM=       5.0 01:BCD-PH3     48.42    1.509 1999.0717_15:00  210.72  n/a     .000
07645> R0099:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07646>      ADD HYD                5.0 02:W1-LID-Out    4.43     .165 1999.0717_15:00  195.66  n/a     .000
07647>                           +    5.0 02:W2-LID-Out    6.51     .220 1999.0717_15:00  180.18  n/a     .000
07648>                           +    5.0 02:W3-LID-Out    7.63     .335 1999.0717_15:00  227.58  n/a     .000
07649>                           +    5.0 02:W4-LID-Out    7.65     .308 1999.0717_15:00  209.73  n/a     .000
07650>                           +    5.0 02:W5-LID-Out    4.69     .182 1999.0717_15:00  200.84  n/a     .000
07651>                           +    5.0 02:W6-LID-Out    5.92     .280 1999.0717_15:00  242.59  n/a     .000
07652>                     SUM=       5.0 01:BCD-PH3-LI   36.84    1.491 1999.0717_15:00  210.67  n/a     .000
07653> #*******************************************************************************************************************
07654> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07655> #*******************************************************************************************************************
07656> #                          Set infiltration to 0 (CN = 99.99) for water balance analysis
07657> #*******************************************************************************************************************
07658> R0099:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07659>      CONTINUOUS STANDHYD    5.0 01:INF-W1       5.76     .235 1999.0717_15:00  252.69 .595     .000
07660>        [XIMP=.55:TIMP=.66]
07661>        [LOSS= 2 :CN=100.0]
07662>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07663>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07664>        [IaRECimp=   1.50: IaRECper=   6.00]
07665>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07666> R0099:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07667>      CONTINUOUS STANDHYD    5.0 01:INF-W2       8.51     .333 1999.0717_15:00  241.19 .568     .000
07668>        [XIMP=.50:TIMP=.60]
07669>        [LOSS= 2 :CN=100.0]
07670>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07671>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07672>        [IaRECimp=   1.50: IaRECper=   6.00]
07673>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07674> R0099:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07675>      CONTINUOUS STANDHYD    5.0 01:INF-W3      10.03     .428 1999.0717_15:00  272.46 .642     .000
07676>        [XIMP=.66:TIMP=.76]
07677>        [LOSS= 2 :CN=100.0]
07678>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07679>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07680>        [IaRECimp=   1.50: IaRECper=   6.00]
07681>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07682> R0099:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07683>      CONTINUOUS STANDHYD    5.0 01:INF-W4      10.11     .417 1999.0717_15:00  260.65 .614     .000
07684>        [XIMP=.60:TIMP=.70]
07685>        [LOSS= 2 :CN=100.0]
07686>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07687>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07688>        [IaRECimp=   1.50: IaRECper=   6.00]
07689>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07690> R0099:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07691>      CONTINUOUS STANDHYD    5.0 01:INF-W5       6.20     .254 1999.0717_15:00  254.79 .600     .000
07692>        [XIMP=.57:TIMP=.67]
07693>        [LOSS= 2 :CN=100.0]
07694>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07695>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07696>        [IaRECimp=   1.50: IaRECper=   6.00]
07697>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07698> R0099:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07699>      CONTINUOUS STANDHYD    5.0 01:INF-W6       7.81     .344 1999.0717_15:00  282.44 .666     .000
07700>        [XIMP=.71:TIMP=.81]
07701>        [LOSS= 2 :CN=100.0]
07702>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07703>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07704>        [IaRECimp=   1.50: IaRECper=   6.00]
07705>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07706> R0099:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07707>      ADD HYD                5.0 02:INF-W1       5.76     .235 1999.0717_15:00  252.69  n/a     .000
07708>                           +    5.0 02:INF-W2       8.51     .333 1999.0717_15:00  241.19  n/a     .000
07709>                           +    5.0 02:INF-W3      10.03     .428 1999.0717_15:00  272.46  n/a     .000
07710>                           +    5.0 02:INF-W4      10.11     .417 1999.0717_15:00  260.65  n/a     .000
07711>                           +    5.0 02:INF-W5       6.20     .254 1999.0717_15:00  254.79  n/a     .000
07712>                           +    5.0 02:INF-W6       7.81     .344 1999.0717_15:00  282.44  n/a     .000
07713>                     SUM=       5.0 01:INF-BCD-PH   48.42    2.012 1999.0717_15:00  261.49  n/a     .000
07714> ################################################################################
07715> # CONTINUOUS RAINFALL DATA
07716> ################################################################################
07717>  ** END OF RUN :  99
07718>
07719> *******************************************************************************************************************
07720>
07721>
07722>
07723>
07724>
07725>  RUN#:COMMAND#
07726> R0100:C00001------------------------------------------------------------------------------------------------------
07727>      START
07728>        [TZERO =      .00 hrs on 20000101]
07729>        [METOUT=   2     (1=imperial, 2=metric output)]
07730>        [NSTORM=   0 ]
07731>        [NRUN   = 0100 ]
07732> *******************************************************************************************************************
07733> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
07734> *******************************************************************************************************************
07735> #  Project Name: Barrhaven Conservancy Development
07736> #  Project Number: 1474
07737> #  Date        : 2021/Oct/18
07738> #  Modeller    : J.Burnett, F.Eng.
07739> #  Updated     : 2024/Mar/14 [LP]
07740> #  Company     : J.F. Sabourin and Associates
07741> #  License #   : 2582634
07742> #*******************************************************************************************************************
07743> # Ottawa International Airport (1967 - 2003)
07744> R0100:C00002------------------------------------------------------------------------------------------------------
07745>  *  READ AES DATA
07746>        [Filename  = YOW_1967_2007.123                                                    ]
07747>        [Start_date= 2000.0101: End_date= 2000.1230]
07748>        [DT= 60.min: Length= 5160.hrs: WetHrs=  401: DryHrs= 4759: PTOT= 535.90)
07749>        Maximum average rainfall intensities over
07750>          1 hr     2 hrs     3 hrs     6 hrs    12 hrs    24 hrs    36 hrs    48 hrs    72 hrs
07751>         14.70     9.60      8.03      6.43      3.89      1.95      1.30      1.03       .84    mm/hr
07752>         14.70    19.20     24.10     38.60     46.70     46.70     46.80     49.30     60.40    mm
07753>        20000625 20000625 20000625 20000625 20000625 20000625 20000625 20000625 20000510 20000511  date
07754>        Number of rainfall events per following interevent time
07755>          1 hr     2 hrs     3 hrs     6 hrs    12 hrs    24 hrs    36 hrs    48 hrs    72 hrs
07756>           156       125       110        86        67        46        34        30        23
07757>        Number of events with at least the following durations
07758>          1 hr     2 hrs     3 hrs     6 hrs    12 hrs    24 hrs    36 hrs    48 hrs    72 hrs
07759>           155        82        49        16         2         0         0         0         0
07760> R0100:C00003------------------------------------------------------------------------------------------------------
07761>      COMPUTE API
07762>        [APIini= 50.00: APIkdy= .9000: APIkdt= .9956]
07763>        [APImax= 76.65: APIsmp= 25.66: APImin=  5.70]
07764> *******************************************************************************************************************
07765> #                Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07766> *******************************************************************************************************************
07767> R0100:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07768>      CONTINUOUS STANDHYD    5.0 01:W1           5.76     .192 2000.0625_10:00  246.57 .460     .000
07769>        [XIMP=.55:TIMP=.66]
07770>        [LOSS= 2 :CN= 71.0]
07771>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07772>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07773>        [IaRECimp=   1.50: IaRECper=   6.00]
07774>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07775> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
07776> # Assumed 420 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07777> # Total Volume provided by LID  - 96 m³
07778> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07779> R0100:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07780>      ROUTE RESERVOIR ->     5.0 02:W1           5.76     .192 2000.0625_10:00  246.57  n/a     .000
07781>                out <=     5.0 01:W1-LID       1.38     .001 2000.0421_ 4:25  246.57  n/a     .000
07782>           overflow <=     5.0 03:W1-LID-Out    4.38     .188 2000.0625_10:00  246.57  n/a     .000
07783>     (MxStoUsed=.9597E-02  m3, TotOvfVol=.1080E+01  m3, N-Ovf=  106, TotDurOvf=  138.hrs)
07784> R0100:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07785>      CONTINUOUS STANDHYD    5.0 01:W2           8.51     .272 2000.0625_10:00  228.22 .426     .000
07786>        [XIMP=.50:TIMP=.60]
07787>        [LOSS= 2 :CN= 71.0]
07788>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07789>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07790>        [IaRECimp=   1.50: IaRECper=   6.00]
07791>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07792> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
07793> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07794> # Total Volume provided by LID  - 131 m³
07795> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07796> R0100:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07797>      ROUTE RESERVOIR ->     5.0 02:W2           8.51     .272 2000.0625_10:00  228.22  n/a     .000
07798>                out <=     5.0 01:W2-LID       2.05     .001 2000.0421_ 4:30  228.22  n/a     .000
07799>           overflow <=     5.0 03:W2-LID-Out    6.46     .266 2000.0625_10:00  228.22  n/a     .000
07800>     (MxStoUsed=.1309E-01  m3, TotOvfVol=.1475E+01  m3, N-Ovf=  101, TotDurOvf=  139.hrs)
07801> R0100:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07802>      CONTINUOUS STANDHYD    5.0 01:W3          10.03     .354 2000.0625_10:00  283.49 .529     .000
07803>        [XIMP=.66:TIMP=.76]
07804>        [LOSS= 2 :CN= 71.0]
07805>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07806>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07807>        [IaRECimp=   1.50: IaRECper=   6.00]
07808>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07809> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
07810> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07811> # Total Volume provided by LID  - 193 m³
07812> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07813> R0100:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07814>      ROUTE RESERVOIR ->     5.0 02:W3          10.03     .354 2000.0625_10:00  283.49  n/a     .000
07815>                out <=     5.0 01:W3-LID       2.50     .001 2000.0421_ 4:25  283.48  n/a     .000
07816>           overflow <=     5.0 03:W3-LID-Out    7.53     .348 2000.0625_10:00  283.49  n/a     .000
07817>     (MxStoUsed=.1930E-01  m3, TotOvfVol=.2135E+01  m3, N-Ovf=   94, TotDurOvf=  137.hrs)
07818> R0100:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07819>      CONTINUOUS STANDHYD    5.0 01:W4          10.11     .343 2000.0625_10:00  262.71 .490     .000
07820>        [XIMP=.60:TIMP=.70]
07821>        [LOSS= 2 :CN= 71.0]
07822>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07823>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07824>        [IaRECimp=   1.50: IaRECper=   6.00]
07825>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07826> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
07827> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07828> # Total Volume provided by LID  - 186 m³
07829> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07830> R0100:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07831>      ROUTE RESERVOIR ->     5.0 02:W4          10.11     .343 2000.0625_10:00  262.71  n/a     .000
07832>                out <=     5.0 01:W4-LID       2.54     .001 2000.0421_ 4:30  262.72  n/a     .000
07833>           overflow <=     5.0 03:W4-LID-Out    7.57     .337 2000.0625_10:00  262.71  n/a     .000
07834>     (MxStoUsed=.1859E-01  m3, TotOvfVol=.1990E+01  m3, N-Ovf=   96, TotDurOvf=  137.hrs)
07835> R0100:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07836>      CONTINUOUS STANDHYD    5.0 01:W5           6.20     .208 2000.0625_10:00  252.42 .471     .000
07837>        [XIMP=.57:TIMP=.67]
07838>        [LOSS= 2 :CN= 71.0]
07839>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07840>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07841>        [IaRECimp=   1.50: IaRECper=   6.00]
07842>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07843> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
07844> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07845> # Total Volume provided by LID  - 110 m³
07846> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07847> R0100:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07848>      ROUTE RESERVOIR ->     5.0 02:W5           6.20     .208 2000.0625_10:00  252.42  n/a     .000
07849>                out <=     5.0 01:W5-LID       1.56     .001 2000.0421_ 4:30  252.42  n/a     .000
07850>           overflow <=     5.0 03:W5-LID-Out    4.64     .204 2000.0625_10:00  252.42  n/a     .000
07851>     (MxStoUsed=.1099E-01  m3, TotOvfVol=.1172E+01  m3, N-Ovf=   97, TotDurOvf=  135.hrs)
07852> R0100:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07853>      CONTINUOUS STANDHYD    5.0 01:W6           7.81     .285 2000.0625_10:00  301.01 .562     .000
07854>        [XIMP=.71:TIMP=.81]
07855>        [LOSS= 2 :CN= 71.0]
07856>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07857>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07858>        [IaRECimp=   1.50: IaRECper=   6.00]
07859>        [SMIN= 41.38: SMAX=275.84: SK= .030]
07860> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
07861> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
07862> # Total Volume provided by LID  - 165 m³
07863> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
07864> R0100:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07865>      ROUTE RESERVOIR ->     5.0 02:W6           7.81     .285 2000.0625_10:00  301.01  n/a     .000
07866>                out <=     5.0 01:W6-LID       1.98     .001 2000.0421_ 4:25  301.01  n/a     .000
07867>           overflow <=     5.0 03:W6-LID-Out    5.83     .281 2000.0625_10:00  301.01  n/a     .000
07868>     (MxStoUsed=.1649E-01  m3, TotOvfVol=.1755E+01  m3, N-Ovf=   97, TotDurOvf=  135.hrs)
07869> R0100:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07870>      ADD HYD                5.0 02:W1           5.76     .192 2000.0625_10:00  246.57  n/a     .000
07871>                           +    5.0 02:W2           8.51     .272 2000.0625_10:00  228.22  n/a     .000
07872>                           +    5.0 02:W3          10.03     .354 2000.0625_10:00  283.49  n/a     .000
07873>                           +    5.0 02:W4          10.11     .343 2000.0625_10:00  262.71  n/a     .000
07874>                           +    5.0 02:W5           6.20     .208 2000.0625_10:00  252.42  n/a     .000
07875>                           +    5.0 02:W6           7.81     .285 2000.0625_10:00  301.01  n/a     .000
07876>                     SUM=       5.0 01:BCD-PH3     48.42    1.654 2000.0625_10:00  263.89  n/a     .000
07877> R0100:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07878>      ADD HYD                5.0 02:W1-LID-Out    4.38     .188 2000.0625_10:00  246.57  n/a     .000
07879>                           +    5.0 02:W2-LID-Out    6.46     .266 2000.0625_10:00  228.22  n/a     .000
07880>                           +    5.0 02:W3-LID-Out    7.53     .348 2000.0625_10:00  283.49  n/a     .000
07881>                           +    5.0 02:W4-LID-Out    7.57     .337 2000.0625_10:00  262.71  n/a     .000
07882>                           +    5.0 02:W5-LID-Out    4.64     .204 2000.0625_10:00  252.42  n/a     .000
07883>                           +    5.0 02:W6-LID-Out    5.83     .281 2000.0625_10:00  301.01  n/a     .000
07884>                     SUM=       5.0 01:BCD-PH3-LI   36.42    1.624 2000.0625_10:00  263.76  n/a     .000
07885> #*******************************************************************************************************************
07886> #                Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07887> #*******************************************************************************************************************
07888> #                          Set infiltration to 0 (CN = 99.99) for water balance analysis
07889> #*******************************************************************************************************************
07890> R0100:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07891>      CONTINUOUS STANDHYD    5.0 01:INF-W1       5.76     .222 2000.0625_10:00  310.34 .579     .000
07892>        [XIMP=.55:TIMP=.66]
07893>        [LOSS= 2 :CN=100.0]
07894>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07895>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
07896>        [IaRECimp=   1.50: IaRECper=   6.00]
07897>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07898> R0100:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07899>      CONTINUOUS STANDHYD    5.0 01:INF-W2       8.51     .323 2000.0625_10:00  297.12 .554     .000
07900>        [XIMP=.50:TIMP=.60]
07901>        [LOSS= 2 :CN=100.0]
07902>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07903>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
07904>        [IaRECimp=   1.50: IaRECper=   6.00]
07905>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07906> R0100:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07907>      CONTINUOUS STANDHYD    5.0 01:INF-W3      10.03     .390 2000.0625_10:00  333.34 .622     .000
07908>        [XIMP=.66:TIMP=.76]
07909>        [LOSS= 2 :CN=100.0]
07910>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07911>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
07912>        [IaRECimp=   1.50: IaRECper=   6.00]
07913>        [SMIN=  1.39: SMAX=  9.24: SK= .000]
07914> R0100:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07915>      CONTINUOUS STANDHYD    5.0 01:INF-W4      10.11     .389 2000.0625_10:00  319.63 .596     .000
07916>        [XIMP=.60:TIMP=.70]
07917>        [LOSS= 2 :CN=100.0]
07918>        [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07919>        [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
07920>        [IaRECimp=   1.50: IaRECper=   6.00]
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07921>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
07922> R0100:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07923>      CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .239 2000.0625_10:00  312.83 .584     .000
07924>       [XIMP=.57:TIMP=.67]
07925>       [LOSS= 2 :CN=100.0]
07926>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07927>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
07928>       [IaRECimp=   1.50: IaRECper=   6.00]
07929>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
07930> R0100:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07931>      CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .307 2000.0625_10:00  344.99 .644     .000
07932>       [XIMP=.71:TIMP=.81]
07933>       [LOSS= 2 :CN=100.0]
07934>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
07935>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
07936>       [IaRECimp=   1.50: IaRECper=   6.00]
07937>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
07938> R0100:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
07939>     ADD HYD              5.0 02:INF-W1          5.76     .222 2000.0625_10:00  310.34  n/a     .000
07940>                    +     5.0 02:INF-W2          8.51     .323 2000.0625_10:00  297.12  n/a     .000
07941>                    +     5.0 02:INF-W3         10.03     .390 2000.0625_10:00  333.34  n/a     .000
07942>                    +     5.0 02:INF-W4         10.11     .389 2000.0625_10:00  319.63  n/a     .000
07943>                    +     5.0 02:INF-W5          6.20     .239 2000.0625_10:00  312.83  n/a     .000
07944>                    +     5.0 02:INF-W6          7.81     .307 2000.0625_10:00  344.99  n/a     .000
07945>                   SUM=   5.0 01:INF-BCD-PH    48.42    1.872 2000.0625_10:00  320.63  n/a     .000
07946> ##############################################################################
07947> # CONTINUOUS RAINFALL DATA
07948> ##############################################################################
07949>  ** END OF RUN :  101
07950>
07951> ********************************************************************************
07952>
07953>
07954>
07955>
07956>
07957>  RUN#:COMMAND#
07958> R0102:C00001------------------------------------------------------------------------
07959>      START
07960>       [TZERO =    .00 hrs on 20020101]
07961>       [METOUT=   2    (1=imperial, 2=metric output)]
07962>       [NSTORM=   0 ]
07963>       [NRUN  = 0102 ]
07964> ********************************************************************************
07965> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
07966> ********************************************************************************
07967> #  Project Name: Barrhaven Conservancy Development
07968> #  Project Number: 1474
07969> #  Date        : 2021/Oct/18
07970> #  Modeller    : J.Burnett, P.Eng.
07971> #  Updated     : 2024/Mar/14 [LP]
07972> #  Company     : J.F. Sabourin and Associates
07973> #  License #   : 2582634
07974> ********************************************************************************
07975> # Ottawa International Airport (1967 - 2003)
07976> R0102:C00002------------------------------------------------------------------------
07977>   *  READ AES DATA
07978>       [Filename  = YOW_1967_2007.123                                    ]
07979>       [Start_date= 2002.0101: End_date= 2002.1231]
07980>       [DT= 60.min: Length= 5088.hrs: WetHrs=  304: DryHrs= 4784: PTOT= 551.50)
07981>       Maximum average rainfall intensities over
07982>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07983>        45.00    26.75    18.40     9.48     4.74     2.48     2.08     1.56     1.04    mm/hr
07984>        45.00    53.50    55.20    56.90    56.90    59.50    74.90    74.90    74.90    mm
07985>       20020627 20020627 20020627 20020627 20020627 20020627 20020627 20020628 20020629  date
07986>       Number of rainfall events per following interevent time
07987>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07988>          100       83       78       56       47       41       36       34       25
07989>       Number of events with at least the following durations
07990>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
07991>          100       59       33       13        5        0        0        0        0
07992> R0102:C00003------------------------------------------------------------------------
07993>      COMPUTE API
07994>       [APIini= 50.00: APIkdt= .9000: APIkdt= .9956]
07995>       (APImax=114.06: APIavg= 26.37: APImin=  4.40)
07996> ********************************************************************************
07997> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
07998> ********************************************************************************
07999> R0102:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08000>      CONTINUOUS STANDHYD    5.0 01:W1              5.76     .621 2002.0627_14:00  299.25 .543     .000
08001>       [XIMP=.55:TIMP=.66]
08002>       [LOSS= 2 :CN= 71.0]
08003>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08004>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
08005>       [IaRECimp=   1.50: IaRECper=   6.00]
08006>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08007> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
08008> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08009> # Total Volume provided by LID  - 96 m³
08010> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08011> R0102:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08012>      ROUTE RESERVOIR ->     5.0 02:W1              5.76     .621 2002.0627_14:00  299.25  n/a     .000
08013>                       out <=    5.0 01:W1-LID        .97     .001 2002.0412_23:20  299.25  n/a     .000
08014>                   overflow <=    5.0 03:W1-LID-Out    4.79     .600 2002.0627_14:00  299.25  n/a     .000
08015>       (MxStoUsed=.9597E-02  m3, TotOvfVol=.1432E+01  m3, N-Ovf=   79, TotDurOvf=  143.hrs)
08016> R0102:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08017>      CONTINUOUS STANDHYD    5.0 01:W2              8.51     .885 2002.0627_14:00  280.37 .508     .000
08018>       [XIMP=.50:TIMP=.60]
08019>       [LOSS= 2 :CN= 71.0]
08020>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08021>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
08022>       [IaRECimp=   1.50: IaRECper=   6.00]
08023>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08024> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
08025> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08026> # Total Volume provided by LID  - 131 m³
08027> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08028> R0102:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08029>      ROUTE RESERVOIR ->     5.0 02:W2              8.51     .885 2002.0627_14:00  280.37  n/a     .000
08030>                       out <=    5.0 01:W2-LID        1.43     .001 2002.0412_23:25  280.37  n/a     .000
08031>                   overflow <=    5.0 03:W2-LID-Out    7.08     .851 2002.0627_14:00  280.37  n/a     .000
08032>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.1984E+01  m3, N-Ovf=   86, TotDurOvf=  143.hrs)
08033> R0102:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08034>      CONTINUOUS STANDHYD    5.0 01:W3             10.03    1.128 2002.0627_14:00  337.10 .611     .000
08035>       [XIMP=.66:TIMP=.76]
08036>       [LOSS= 2 :CN= 71.0]
08037>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08038>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
08039>       [IaRECimp=   1.50: IaRECper=   6.00]
08040>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08041> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
08042> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08043> # Total Volume provided by LID  - 193 m³
08044> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08045> R0102:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08046>      ROUTE RESERVOIR ->     5.0 02:W3             10.03    1.128 2002.0627_14:00  337.10  n/a     .000
08047>                       out <=    5.0 01:W3-LID        1.79     .001 2002.0412_23:20  337.10  n/a     .000
08048>                   overflow <=    5.0 03:W3-LID-Out    8.24    1.099 2002.0627_14:00  337.10  n/a     .000
08049>       (MxStoUsed=.1929E-01  m3, TotOvfVol=.2777E+01  m3, N-Ovf=   89, TotDurOvf=  143.hrs)
08050> R0102:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08051>      CONTINUOUS STANDHYD    5.0 01:W4             10.11    1.103 2002.0627_14:00  315.73 .572     .000
08052>       [XIMP=.60:TIMP=.70]
08053>       [LOSS= 2 :CN= 71.0]
08054>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08055>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
08056>       [IaRECimp=   1.50: IaRECper=   6.00]
08057>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08058> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
08059> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08060> # Total Volume provided by LID  - 186 m³
08061> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08062> R0102:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08063>      ROUTE RESERVOIR ->     5.0 02:W4             10.11    1.103 2002.0627_14:00  315.73  n/a     .000
08064>                       out <=    5.0 01:W4-LID        1.81     .001 2002.0412_23:25  315.73  n/a     .000
08065>                   overflow <=    5.0 03:W4-LID-Out    8.30    1.070 2002.0627_14:00  315.73  n/a     .000
08066>       (MxStoUsed=.1860E-01  m3, TotOvfVol=.2620E+01  m3, N-Ovf=   83, TotDurOvf=  142.hrs)
08067> R0102:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08068>      CONTINUOUS STANDHYD    5.0 01:W5              6.20     .671 2002.0627_14:00  305.09 .553     .000
08069>       [XIMP=.57:TIMP=.67]
08070>       [LOSS= 2 :CN= 71.0]
08071>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08072>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
08073>       [IaRECimp=   1.50: IaRECper=   6.00]
08074>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08075> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
08076> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08077> # Total Volume provided by LID  - 110 m³
08078> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08079> R0102:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08080>      ROUTE RESERVOIR ->     5.0 02:W5              6.20     .671 2002.0627_14:00  305.09  n/a     .000
08081>                       out <=    5.0 01:W5-LID        1.11     .001 2002.0412_23:25  305.10  n/a     .000
08082>                   overflow <=    5.0 03:W5-LID-Out    5.09     .649 2002.0627_14:00  305.09  n/a     .000
08083>       (MxStoUsed=.1110E-01  m3, TotOvfVol=.1554E+01  m3, N-Ovf=   82, TotDurOvf=  141.hrs)
08084> R0102:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08085>      CONTINUOUS STANDHYD    5.0 01:W6              7.81     .902 2002.0627_14:00  355.25 .644     .000
08086>       [XIMP=.71:TIMP=.81]
08087>       [LOSS= 2 :CN= 71.0]
08088>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08089>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
08090>       [IaRECimp=   1.50: IaRECper=   6.00]
08091>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08092> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
08093> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08094> # Total Volume provided by LID  - 165 m³
08095> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08096> R0102:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08097>      ROUTE RESERVOIR ->     5.0 02:W6              7.81     .902 2002.0627_14:00  355.25  n/a     .000
08098>                       out <=    5.0 01:W6-LID        1.43     .001 2002.0412_23:20  355.25  n/a     .000
08099>                   overflow <=    5.0 03:W6-LID-Out    6.38     .883 2002.0627_14:00  355.25  n/a     .000
08100>       (MxStoUsed=.1650E-01  m3, TotOvfVol=.2266E+01  m3, N-Ovf=   76, TotDurOvf=  141.hrs)
08101> R0102:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08102>     ADD HYD              5.0 02:W1              5.76     .621 2002.0627_14:00  299.25  n/a     .000
08103>                    +     5.0 02:W2              8.51     .885 2002.0627_14:00  280.37  n/a     .000
08104>                    +     5.0 02:W3             10.03    1.128 2002.0627_14:00  337.10  n/a     .000
08105>                    +     5.0 02:W4             10.11    1.103 2002.0627_14:00  315.73  n/a     .000
08106>                    +     5.0 02:W5              6.20     .671 2002.0627_14:00  305.09  n/a     .000
08107>                    +     5.0 02:W6              7.81     .902 2002.0627_14:00  355.25  n/a     .000
08108>                   SUM=   5.0 01:BCD-PH3        48.42    5.311 2002.0627_14:00  316.99  n/a     .000
08109> R0102:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08110>     ADD HYD              5.0 02:W1-LID-Out      4.79     .600 2002.0627_14:00  299.25  n/a     .000
08111>                    +     5.0 02:W2-LID-Out      7.08     .851 2002.0627_14:00  280.37  n/a     .000
08112>                    +     5.0 02:W3-LID-Out      8.24    1.099 2002.0627_14:00  337.10  n/a     .000
08113>                    +     5.0 02:W4-LID-Out      8.30    1.070 2002.0627_14:00  315.73  n/a     .000
08114>                    +     5.0 02:W5-LID-Out      5.09     .649 2002.0627_14:00  305.09  n/a     .000
08115>                    +     5.0 02:W6-LID-Out      6.38     .883 2002.0627_14:00  355.25  n/a     .000
08116>                   SUM=   5.0 01:BCD-PH3-LI     39.87    5.152 2002.0627_14:00  316.85  n/a     .000
08117> ********************************************************************************
08118> #                  Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
08119> ********************************************************************************
08120> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
08121> ********************************************************************************
08122> R0102:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08123>      CONTINUOUS STANDHYD    5.0 01:INF-W1          5.76     .700 2002.0627_14:00  373.71 .678     .000
08124>       [XIMP=.55:TIMP=.66]
08125>       [LOSS= 2 :CN=100.0]
08126>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08127>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
08128>       [IaRECimp=   1.50: IaRECper=   6.00]
08129>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08130> R0102:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08131>      CONTINUOUS STANDHYD    5.0 01:INF-W2          8.51    1.025 2002.0627_14:00  361.44 .655     .000
08132>       [XIMP=.50:TIMP=.60]
08133>       [LOSS= 2 :CN=100.0]
08134>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08135>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
08136>       [IaRECimp=   1.50: IaRECper=   6.00]
08137>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08138> R0102:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08139>      CONTINUOUS STANDHYD    5.0 01:INF-W3         10.03    1.226 2002.0627_14:00  394.64 .716     .000
08140>       [XIMP=.66:TIMP=.76]
08141>       [LOSS= 2 :CN=100.0]
08142>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08143>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
08144>       [IaRECimp=   1.50: IaRECper=   6.00]
08145>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08146> R0102:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08147>      CONTINUOUS STANDHYD    5.0 01:INF-W4         10.11    1.228 2002.0627_14:00  382.09 .693     .000
08148>       [XIMP=.60:TIMP=.70]
08149>       [LOSS= 2 :CN=100.0]
08150>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08151>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
08152>       [IaRECimp=   1.50: IaRECper=   6.00]
08153>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08154> R0102:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08155>      CONTINUOUS STANDHYD    5.0 01:INF-W5          6.20     .754 2002.0627_14:00  375.85 .682     .000
08156>       [XIMP=.57:TIMP=.67]
08157>       [LOSS= 2 :CN=100.0]
08158>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08159>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
08160>       [IaRECimp=   1.50: IaRECper=   6.00]
08161>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08162> R0102:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08163>      CONTINUOUS STANDHYD    5.0 01:INF-W6          7.81     .961 2002.0627_14:00  405.25 .735     .000
08164>       [XIMP=.71:TIMP=.81]
08165>       [LOSS= 2 :CN=100.0]
08166>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08167>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
08168>       [IaRECimp=   1.50: IaRECper=   6.00]
08169>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08170> R0102:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08171>     ADD HYD              5.0 02:INF-W1          5.76     .700 2002.0627_14:00  373.71  n/a     .000
08172>                    +     5.0 02:INF-W2          8.51    1.025 2002.0627_14:00  361.44  n/a     .000
08173>                    +     5.0 02:INF-W3         10.03    1.226 2002.0627_14:00  394.64  n/a     .000
08174>                    +     5.0 02:INF-W4         10.11    1.228 2002.0627_14:00  382.09  n/a     .000
08175>                    +     5.0 02:INF-W5          6.20     .754 2002.0627_14:00  375.85  n/a     .000
08176>                    +     5.0 02:INF-W6          7.81     .961 2002.0627_14:00  405.25  n/a     .000
08177>                   SUM=   5.0 01:INF-BCD-PH     48.42    5.894 2002.0627_14:00  383.00  n/a     .000
08178> ##############################################################################
08179> # CONTINUOUS RAINFALL DATA
08180> ##############################################################################
08181>  ** END OF RUN :  102
08182>
08183> ********************************************************************************
08184>
08185>
08186>
08187>
08188>
08189>  RUN#:COMMAND#
08190> R0103:C00001------------------------------------------------------------------------
08191>      START
08192>       [TZERO =    .00 hrs on 20030101]
08193>       [METOUT=   2    (1=imperial, 2=metric output)]
08194>       [NSTORM=   0 ]
08195>       [NRUN  = 0103 ]
08196> ********************************************************************************
08197> #  SWMHYMO Ver:5.02/Jan 2001 <BETA> / INPUT DATA FILE
08198> ********************************************************************************
08199> #  Project Name: Barrhaven Conservancy Development
08200> #  Project Number: 1474
08201> #  Date        : 2021/Oct/18
08202> #  Modeller    : J.Burnett, P.Eng.
08203> #  Updated     : 2024/Mar/14 [LP]
08204> #  Company     : J.F. Sabourin and Associates
08205> #  License #   : 2582634
08206> ********************************************************************************
08207> # Ottawa International Airport (1967 - 2003)
08208> R0103:C00002------------------------------------------------------------------------
08209> *  READ AES DATA
08210>       [Filename  = YOW_1967_2007.123                                    ]
08211>       [Start_date= 2003.0101: End_date= 2003.1231]
08212>       [DT= 60.min: Length= 4440.hrs: WetHrs=  406: DryHrs= 4034: PTOT= 554.60)
08213>       Maximum average rainfall intensities over
08214>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
08215>        15.10    10.00     7.13     4.28     3.18     1.86     1.25      .94      .81    mm/hr
08216>        15.10    20.00    21.40    25.70    38.20    44.60    44.90    45.10    58.30    mm
08217>       20030711 20030711 20030711 20030711 20031021 20031015 20030525 20030526 20030527  date
08218>       Number of rainfall events per following interevent time
08219>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
08220>          145      127      109       86       64       45       38       25       15
08221>       Number of events with at least the following durations
08222>         1 hr    2 hrs    3 hrs    6 hrs   12 hrs   24 hrs   36 hrs   48 hrs   72 hrs
08223>          144       80       43       13        5        1        0        0        0
08224> R0103:C00003------------------------------------------------------------------------
08225>      COMPUTE API
08226>       [APIini= 50.00: APIkdt= .9000: APIkdt= .9956]
08227>       [APImax= 72.10: APIavg= 28.54: APImin=  4.70]
08228> ********************************************************************************
08229> #                  Barrhaven Conservancy Development Phase 3 (WITH INFILTRATION)  - POST DEVELOPMENT CONDITIONS
08230> ********************************************************************************
08231> R0103:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08232>      CONTINUOUS STANDHYD    5.0 01:W1              5.76     .182 2003.0711_17:00  273.32 .493     .000
08233>       [XIMP=.55:TIMP=.66]
08234>       [LOSS= 2 :CN= 71.0]
08235>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08236>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
08237>       [IaRECimp=   1.50: IaRECper=   6.00]
08238>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08239> # LID for Outlet W1 (14 catchbasins, 30 m long trench each)
08240> # Assumed 420 m long trench 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08241> # Total Volume provided by LID  - 96 m³
08242> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08243> R0103:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08244>      ROUTE RESERVOIR ->     5.0 02:W1              5.76     .182 2003.0711_17:00  273.32  n/a     .000
08245>                       out <=    5.0 01:W1-LID        1.35     .001 2003.0501_10:20  273.32  n/a     .000
08246>                   overflow <=    5.0 03:W1-LID-Out    4.41     .178 2003.0711_17:00  273.32  n/a     .000
08247>       (MxStoUsed=.9597E-02  m3, TotOvfVol=.1206E+01  m3, N-Ovf=   96, TotDurOvf=  165.hrs)
08248> R0103:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08249>      CONTINUOUS STANDHYD    5.0 01:W2              8.51     .253 2003.0711_17:00  254.44 .459     .000
08250>       [XIMP=.50:TIMP=.60]
08251>       [LOSS= 2 :CN= 71.0]
08252>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08253>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
08254>       [IaRECimp=   1.50: IaRECper=   6.00]
08255>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08256> # LID for Outlet W2 (19 catchbasins, 30 m long trench each)
08257> # Assumed 570 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08258> # Total Volume provided by LID  - 131 m³
08259> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08260> R0103:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08261>      ROUTE RESERVOIR ->     5.0 02:W2              8.51     .253 2003.0711_17:00  254.44  n/a     .000
08262>                       out <=    5.0 01:W2-LID        1.99     .001 2003.0501_10:25  254.44  n/a     .000
08263>                   overflow <=    5.0 03:W2-LID-Out    6.52     .247 2003.0711_17:00  254.44  n/a     .000
08264>       (MxStoUsed=.1310E-01  m3, TotOvfVol=.1659E+01  m3, N-Ovf=   97, TotDurOvf=  165.hrs)
08265> R0103:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08266>      CONTINUOUS STANDHYD    5.0 01:W3             10.03     .343 2003.0711_17:00  311.42 .562     .000
08267>       [XIMP=.66:TIMP=.76]
08268>       [LOSS= 2 :CN= 71.0]
08269>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08270>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
08271>       [IaRECimp=   1.50: IaRECper=   6.00]
08272>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08273> # LID for Outlet W3 (28 catchbasins, 30 m long trench each)
08274> # Assumed 840 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08275> # Total Volume provided by LID  - 193 m³
08276> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08277> R0103:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08278>      ROUTE RESERVOIR ->     5.0 02:W3             10.03     .343 2003.0711_17:00  311.42  n/a     .000
08279>                       out <=    5.0 01:W3-LID        2.47     .001 2003.0501_10:20  311.41  n/a     .000
08280>                   overflow <=    5.0 03:W3-LID-Out    7.56     .337 2003.0711_17:00  311.42  n/a     .000
```

```
08281>      (MxStoUsed=.1930E-01  m3, TotOvfVol=.2355E+01  m3, N-Ovf=  100, TotDurOvf=  164.hrs)
08282> R0103:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08283>     CONTINUOUS STANDHYD    5.0 01:W4           10.11     .328 2003.0711_17:00  289.96 .523     .000
08284>       [XIMP=.60:TIMP=.70]
08285>       [LOSS= 2 :CN= 71.0]
08286>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08287>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
08288>       [IaRECimp=   1.50: IaRECper=   6.00]
08289>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08290> # LID for Outlet W4 (27 catchbasins, 30 m long trench each)
08291> # Assumed 810 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08292> # Total Volume provided by LID  - 186 m³
08293> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08294> R0103:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08295>     ROUTE RESERVOIR ->    5.0 02:W4           10.11     .328 2003.0711_17:00  289.96  n/a     .000
08296>                  out <=   5.0 01:W4-LID        2.49     .001 2003.0501_10:25  289.97  n/a     .000
08297>            overflow <=   5.0 03:W4-LID-Out     7.62     .322 2003.0711_17:00  289.96  n/a     .000
08298>      (MxStoUsed=.1860E-01  m3, TotOvfVol=.2209E+01  m3, N-Ovf=   96, TotDurOvf=  163.hrs)
08299> R0103:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08300>     CONTINUOUS STANDHYD    5.0 01:W5           6.20     .198 2003.0711_17:00  279.28 .504     .000
08301>       [XIMP=.57:TIMP=.67]
08302>       [LOSS= 2 :CN= 71.0]
08303>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08304>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
08305>       [IaRECimp=   1.50: IaRECper=   6.00]
08306>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08307> # LID for Outlet W5 (16 catchbasins, 30 m long trench each)
08308> # Assumed 480 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08309> # Total Volume provided by LID  - 110 m³
08310> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08311> R0103:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08312>     ROUTE RESERVOIR ->    5.0 02:W5           6.20     .198 2003.0711_17:00  279.28  n/a     .000
08313>                  out <=   5.0 01:W5-LID        1.52     .001 2003.0501_10:25  279.27  n/a     .000
08314>            overflow <=   5.0 03:W5-LID-Out     4.68     .193 2003.0711_17:00  279.28  n/a     .000
08315>      (MxStoUsed=.1100E-01  m3, TotOvfVol=.1306E+01  m3, N-Ovf=   95, TotDurOvf=  161.hrs)
08316> R0103:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08317>     CONTINUOUS STANDHYD    5.0 01:W6           7.81     .279 2003.0711_17:00  329.54 .594     .000
08318>       [XIMP=.71:TIMP=.81]
08319>       [LOSS= 2 :CN= 71.0]
08320>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08321>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
08322>       [IaRECimp=   1.50: IaRECper=   6.00]
08323>       [SMIN= 41.38: SMAX=275.84: SK= .030]
08324> # LID for Outlet W6 (24 catchbasins, 30 m long trench each)
08325> # Assumed 720 m long trench, 1.25 m wide by 0.40 m deep, porosity of 0.40 with 250 mm diameter perforated pipe
08326> # Total Volume provided by LID  - 165 m³
08327> # Soil infiltration rates assumed at 9mm/hr with a safety factor of 2.5
08328> R0103:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08329>     ROUTE RESERVOIR ->    5.0 02:W6           7.81     .279 2003.0711_17:00  329.54  n/a     .000
08330>                  out <=   5.0 01:W6-LID        1.96     .001 2003.0501_10:20  329.54  n/a     .000
08331>            overflow <=   5.0 03:W6-LID-Out     5.85     .275 2003.0711_17:00  329.54  n/a     .000
08332>      (MxStoUsed=.1650E-01  m3, TotOvfVol=.1928E+01  m3, N-Ovf=   99, TotDurOvf=  162.hrs)
08333> R0103:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08334>     ADD HYD                5.0 02:W1           5.76     .182 2003.0711_17:00  273.32  n/a     .000
08335>                       +    5.0 02:W2           8.51     .253 2003.0711_17:00  254.44  n/a     .000
08336>                       +    5.0 02:W3          10.03     .343 2003.0711_17:00  311.42  n/a     .000
08337>                       +    5.0 02:W4          10.11     .328 2003.0711_17:00  289.96  n/a     .000
08338>                       +    5.0 02:W5           6.20     .198 2003.0711_17:00  279.28  n/a     .000
08339>                       +    5.0 02:W6           7.81     .279 2003.0711_17:00  329.54  n/a     .000
08340>                     SUM=   5.0 01:BCD-PH3      48.42    1.583 2003.0711_17:00  291.20  n/a     .000
08341> R0103:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08342>     ADD HYD                5.0 02:W1-LID-Out     4.41     .178 2003.0711_17:00  273.32  n/a     .000
08343>                       +    5.0 02:W2-LID-Out     6.52     .247 2003.0711_17:00  254.44  n/a     .000
08344>                       +    5.0 02:W3-LID-Out     7.56     .337 2003.0711_17:00  311.42  n/a     .000
08345>                       +    5.0 02:W4-LID-Out     7.62     .322 2003.0711_17:00  289.96  n/a     .000
08346>                       +    5.0 02:W5-LID-Out     4.68     .193 2003.0711_17:00  279.28  n/a     .000
08347>                       +    5.0 02:W6-LID-Out     5.85     .275 2003.0711_17:00  329.54  n/a     .000
08348>                   SUM=     5.0 01:BCD-PH3-LI    36.64    1.551 2003.0711_17:00  291.02  n/a     .000
08349> #*************************************************************************************************************
08350> #                    Barrhaven Conservancy Development Phase 3 (WITHOUT INFILTRATION)  - POST DEVELOPMENT CONDITIONS
08351> #*************************************************************************************************************
08352> #                  Set infiltration to 0 (CN = 99.99) for water balance analysis
08353> #*************************************************************************************************************
08354> R0103:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08355>     CONTINUOUS STANDHYD    5.0 01:INF-W1       5.76     .228 2003.0711_17:00  341.42 .616     .000
08356>       [XIMP=.55:TIMP=.66]
08357>       [LOSS= 2 :CN=100.0]
08358>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08359>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 196.:MNI=.013:SCI=   .0]
08360>       [IaRECimp=   1.50: IaRECper=   6.00]
08361>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08362> R0103:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08363>     CONTINUOUS STANDHYD    5.0 01:INF-W2       8.51     .331 2003.0711_17:00  328.44 .592     .000
08364>       [XIMP=.50:TIMP=.60]
08365>       [LOSS= 2 :CN=100.0]
08366>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08367>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 238.:MNI=.013:SCI=   .0]
08368>       [IaRECimp=   1.50: IaRECper=   6.00]
08369>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08370> R0103:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08371>     CONTINUOUS STANDHYD    5.0 01:INF-W3      10.03     .400 2003.0711_17:00  364.17 .657     .000
08372>       [XIMP=.66:TIMP=.76]
08373>       [LOSS= 2 :CN=100.0]
08374>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08375>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 259.:MNI=.013:SCI=   .0]
08376>       [IaRECimp=   1.50: IaRECper=   6.00]
08377>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08378> R0103:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08379>     CONTINUOUS STANDHYD    5.0 01:INF-W4      10.11     .399 2003.0711_17:00  350.68 .632     .000
08380>       [XIMP=.60:TIMP=.70]
08381>       [LOSS= 2 :CN=100.0]
08382>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08383>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 260.:MNI=.013:SCI=   .0]
08384>       [IaRECimp=   1.50: IaRECper=   6.00]
08385>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08386> R0103:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08387>     CONTINUOUS STANDHYD    5.0 01:INF-W5       6.20     .245 2003.0711_17:00  343.98 .620     .000
08388>       [XIMP=.57:TIMP=.67]
08389>       [LOSS= 2 :CN=100.0]
08390>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08391>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 203.:MNI=.013:SCI=   .0]
08392>       [IaRECimp=   1.50: IaRECper=   6.00]
08393>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08394> R0103:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08395>     CONTINUOUS STANDHYD    5.0 01:INF-W6       7.81     .315 2003.0711_17:00  375.60 .677     .000
08396>       [XIMP=.71:TIMP=.81]
08397>       [LOSS= 2 :CN=100.0]
08398>       [Pervious     area: IAper= 4.67:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
08399>       [Impervious   area: IAimp= 1.57:SLPI= .50:LGI= 228.:MNI=.013:SCI=   .0]
08400>       [IaRECimp=   1.50: IaRECper=   6.00]
08401>       [SMIN=  1.39: SMAX=  9.24: SK= .000]
08402> R0103:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
08403>     ADD HYD                5.0 02:INF-W1       5.76     .228 2003.0711_17:00  341.42  n/a     .000
08404>                       +    5.0 02:INF-W2       8.51     .331 2003.0711_17:00  328.44  n/a     .000
08405>                       +    5.0 02:INF-W3      10.03     .400 2003.0711_17:00  364.17  n/a     .000
08406>                       +    5.0 02:INF-W4      10.11     .399 2003.0711_17:00  350.68  n/a     .000
08407>                       +    5.0 02:INF-W5       6.20     .245 2003.0711_17:00  343.98  n/a     .000
08408>                       +    5.0 02:INF-W6       7.81     .315 2003.0711_17:00  375.60  n/a     .000
08409>                   SUM=     5.0 01:INF-BCD-PH   48.42    1.919 2003.0711_17:00  351.63  n/a     .000
08410> ##############################################################################
08411> # CONTINUOUS RAINFALL DATA
08412> ##############################################################################
08413> R0103:C00002------------------------------------------------------------------------------------------------
08414>     FINISH
08415> ------------------------------------------------------------------------------------------------
08416> *************************************************************************************************************
08417>      WARNINGS / ERRORS / NOTES
08418>      -------------------------
08419> R0067:C00002  READ AES DATA
08420> *** WARNING: Requested start date is less than start date in file.
08421> *** WARNING: Missing rainfall increments were set to 0.
08422> *** WARNING: Missing rainfall increments were set to 0.
08423> *** WARNING: Missing rainfall increments were set to 0.
08424> *** WARNING: Missing rainfall increments were set to 0.
08425> *** WARNING: Missing rainfall increments were set to 0.
08426> *** WARNING: Missing rainfall increments were set to 0.
08427> *** WARNING: Missing rainfall increments were set to 0.
08428> *** WARNING: Missing rainfall increments were set to 0.
08429> *** WARNING: Missing rainfall increments were set to 0.
08430> *** WARNING: Missing rainfall increments were set to 0.
08431> *** WARNING: Requested start date is less than start date in file.
08432> *** WARNING: Missing rainfall increments were set to 0.
08433> *** WARNING: Missing rainfall increments were set to 0.
08434> *** WARNING: Missing rainfall increments were set to 0.
08435> *** WARNING: Missing rainfall increments were set to 0.
08436> *** WARNING: Missing rainfall increments were set to 0.
08437> *** WARNING: Missing rainfall increments were set to 0.
08438> *** WARNING: Missing rainfall increments were set to 0.
08439> *** WARNING: Missing rainfall increments were set to 0.
08440> *** WARNING: Missing rainfall increments were set to 0.
08441> *** WARNING: Missing rainfall increments were set to 0.
08442> *** WARNING: Requested start date is less than start date in file.
08443> *** WARNING: Missing rainfall increments were set to 0.
08444> *** WARNING: Missing rainfall increments were set to 0.
08445> *** WARNING: Missing rainfall increments were set to 0.
08446> *** WARNING: Requested start date is less than start date in file.
08447> *** WARNING: Missing rainfall increments were set to 0.
08448> *** WARNING: Missing rainfall increments were set to 0.
08449> *** WARNING: Missing rainfall increments were set to 0.
08450> *** WARNING: Missing rainfall increments were set to 0.
08451> *** WARNING: Missing rainfall increments were set to 0.
08452> *** WARNING: Missing rainfall increments were set to 0.
08453> *** WARNING: Requested start date is less than start date in file.
08454> *** WARNING: Missing rainfall increments were set to 0.
08455> *** WARNING: Missing rainfall increments were set to 0.
08456> *** WARNING: Requested start date is less than start date in file.
08457> *** WARNING: Missing rainfall increments were set to 0.
08458> *** WARNING: Requested start date is less than start date in file.
08459> *** WARNING: Missing rainfall increments were set to 0.
08460> *** WARNING: Requested start date is less than start date in file.
08461> *** WARNING: Missing rainfall increments were set to 0.
08462> *** WARNING: Requested start date is less than start date in file.
08463> *** WARNING: Missing rainfall increments were set to 0.
08464> *** WARNING: Requested start date is less than start date in file.
08465> *** WARNING: Missing rainfall increments were set to 0.
08466>    Simulation ended on 2024-03-14     at 20:59:26
08467> ===============================================================================================
08468>
```

JFSA
WATER RESOURCES AND
ENVIRONMENTAL CONSULTANTS

Ottawa. ON
Paris. ON
Gatineau. QC
Montréal. QC
Québec. QC

Attachment B

Water Budget Results

Table B1: BCD West - Pre Development Water Budget

Year	Total Rainfall		Evaporation		Runoff		Infiltration	
	(mm)	(m^3)	(mm)	(m^3)	(mm)	(m^3)	(mm)	(m^3)
1967	386.9	187,337	229.3	111,037	65.9	31,914	91.7	44,387
1968	592.8	287,034	382.3	185,124	71.2	34,465	139.3	67,444
1969	570.3	276,139	378.9	183,439	58.3	28,214	133.2	64,486
1970	558.9	270,619	380.2	184,107	55.5	26,888	123.1	59,624
1971	522.1	252,801	378.6	183,304	41.8	20,249	101.7	49,248
1972	784.3	379,758	478.9	231,859	127.3	61,648	178.1	86,251
1973	744.9	360,681	469.3	227,221	93.8	45,413	181.8	88,047
1974	386.2	186,998	290.8	140,781	25.3	12,265	70.1	33,952
1975	535.5	259,289	361.0	174,801	56.4	27,309	118.1	57,179
1976	493.2	238,807	356.1	172,399	38.8	18,782	98.4	47,626
1977	677.8	328,191	448.3	217,086	74.1	35,894	155.3	75,211
1978	641.4	310,566	426.9	206,690	56.6	27,415	157.9	76,460
1979	866.5	419,559	494.4	239,393	147.9	71,603	224.2	108,562
1980	622	301,172	419.0	202,885	61.5	29,778	141.5	68,509
1981	936.4	453,405	555.7	269,070	185.9	90,008	194.8	94,327
1982	596.1	288,632	413.7	200,333	49.7	24,055	132.7	64,244
1983	587.5	284,468	414.5	200,706	54.4	26,326	118.6	57,436
1984	459.4	222,441	291.7	141,241	52.5	25,396	115.3	55,804
1985	559.9	271,104	347.4	168,211	55.3	26,796	157.2	76,097
1986	849.4	411,279	509.1	246,487	152.7	73,918	187.7	90,875
1987	640.1	309,936	445.0	215,484	71.6	34,683	123.4	59,770
1988	643.8	311,728	434.9	210,583	69.8	33,802	139.1	67,343
1989	523.2	253,333	363.5	175,997	43.7	21,140	116.1	56,196
1990	727.8	352,401	477.1	230,992	89.2	43,195	161.5	78,213
1991	556	269,215	396.2	191,826	48.5	23,484	111.3	53,906
1992	732.8	354,822	466.6	225,923	99.1	47,970	167.1	80,929
1993	721.3	349,253	509.6	246,763	65.8	31,860	145.9	70,630
1994	540.2	261,565	357.7	173,213	62.7	30,369	119.8	57,983
1995	538.5	260,742	254.9	123,403	163.8	79,322	119.8	58,017
1996	512.2	248,007	354.7	171,755	49.0	23,711	108.5	52,541
1997	433.2	209,755	304.7	147,512	29.5	14,294	99.0	47,950
1998	440.3	213,193	313.0	151,550	34.5	16,681	92.9	44,963
1999	424.4	205,494	293.0	141,856	35.3	17,112	96.1	46,527
2000	535.9	259,483	363.9	176,196	59.0	28,587	113.0	54,700
2002	551.5	267,036	307.6	148,945	107.2	51,926	136.7	66,166
2003	554.6	268,537	349.9	169,431	79.7	38,610	124.9	60,496
Minimum	386.2	186,998	229.3	111,037	25.3	12,265	70.1	33,952
Maximum	936.4	453,405	555.7	269,070	185.9	90,008	224.2	108,562
Average	595.8	288,466	389.4	188,545	73.1	35,419	133.2	64,503
Percentage	100.0%	100.0%	65.4%	65.4%	12.3%	12.3%	22.4%	22.4%

Table B2: BCD West - Post Development Water Budget - Without LIDs

Year	Total Rainfall		Evaporation		Runoff		Infiltration	
	(mm)	(m^3)	(mm)	(m^3)	(mm)	(m^3)	(mm)	(m^3)
1967	386.9	187,337	127.4	61,692	215.6	104,398	43.9	21,247
1968	592.8	287,034	219.4	106,248	304.2	147,284	69.2	33,502
1969	570.3	276,139	225.4	109,134	278.4	134,811	66.5	32,194
1970	558.9	270,619	222.8	107,889	272.8	132,109	63.2	30,621
1971	522.1	252,801	225.0	108,950	242.9	117,602	54.2	26,248
1972	784.3	379,758	268.8	130,172	428.3	207,388	87.2	42,198
1973	744.9	360,681	275.1	133,179	380.5	184,248	89.3	43,254
1974	386.2	186,998	175.9	85,147	172.0	83,297	38.3	18,555
1975	535.5	259,289	205.1	99,329	268.9	130,216	61.4	29,744
1976	493.2	238,807	215.5	104,321	225.9	109,381	51.9	25,106
1977	677.8	328,191	253.5	122,745	345.0	167,034	79.3	38,412
1978	641.4	310,566	234.9	113,748	326.2	157,936	80.3	38,881
1979	866.5	419,559	274.7	133,005	484.4	234,527	107.5	52,027
1980	622	301,172	234.8	113,695	314.6	152,329	72.6	35,148
1981	936.4	453,405	317.0	153,501	523.3	253,372	96.1	46,532
1982	596.1	288,632	227.6	110,185	299.0	144,766	69.6	33,681
1983	587.5	284,468	236.1	114,310	288.5	139,692	62.9	30,466
1984	459.4	222,441	161.3	78,097	240.7	116,542	57.4	27,803
1985	559.9	271,104	187.2	90,623	295.2	142,936	77.5	37,545
1986	849.4	411,279	283.0	137,024	474.6	229,806	91.8	44,450
1987	640.1	309,936	259.9	125,853	315.2	152,639	64.9	31,444
1988	643.8	311,728	257.9	124,870	316.4	153,182	69.6	33,676
1989	523.2	253,333	211.6	102,462	251.8	121,922	59.8	28,950
1990	727.8	352,401	279.8	135,474	367.3	177,847	80.7	39,080
1991	556	269,215	226.4	109,628	271.1	131,262	58.5	28,326
1992	732.8	354,822	269.4	130,434	380.1	184,030	83.4	40,358
1993	721.3	349,253	290.6	140,684	354.7	171,760	76.0	36,809
1994	540.2	261,565	204.4	98,975	274.2	132,768	61.6	29,822
1995	538.5	260,742	141.5	68,509	341.7	165,437	55.3	26,796
1996	512.2	248,007	202.6	98,113	253.4	122,716	56.1	27,178
1997	433.2	209,755	168.5	81,588	212.0	102,631	52.7	25,537
1998	440.3	213,193	183.8	88,977	208.0	100,699	48.6	23,518
1999	424.4	205,494	162.9	78,881	210.7	102,031	50.8	24,583
2000	535.9	259,483	215.3	104,234	263.9	127,776	56.7	27,474
2002	551.5	267,036	168.5	81,588	317.0	153,487	66.0	31,962
2003	554.6	268,537	203.0	98,278	291.2	140,999	60.4	29,260
Minimum	386.2	186,998	127.4	61,692	172.0	83,297	38.3	18,555
Maximum	936.4	453,405	317.0	153,501	523.3	253,372	107.5	52,027
Average	595.8	288,466	222.7	107,821	305.8	148,079	67.3	32,566
Percentage	100.0%	100.0%	37.4%	37.4%	51.3%	51.3%	11.3%	11.3%

Table B3: BCD West - Post Development Water Budget - With LIDs

Year	Total Rainfall		Evaporation		Runoff		Infiltration	
	(mm)	(m^3)	(mm)	(m^3)	(mm)	(m^3)	(mm)	(m^3)
1967	386.9	187,337	127.4	61,692	173.4	83,976	86.1	41,669
1968	592.8	287,034	219.4	106,248	224.2	108,535	149.2	72,251
1969	570.3	276,139	225.4	109,134	205.3	99,405	139.6	67,600
1970	558.9	270,619	222.8	107,889	201.5	97,552	134.6	65,178
1971	522.1	252,801	225.0	108,950	169.4	82,039	127.7	61,812
1972	784.3	379,758	268.8	130,172	340.6	164,939	174.8	84,647
1973	744.9	360,681	275.1	133,179	296.4	143,506	173.5	83,995
1974	386.2	186,998	175.9	85,147	114.5	55,464	95.8	46,388
1975	535.5	259,289	205.1	99,329	201.3	97,471	129.1	62,490
1976	493.2	238,807	215.5	104,321	158.8	76,911	118.9	57,576
1977	677.8	328,191	253.5	122,745	256.0	123,959	168.3	81,487
1978	641.4	310,566	234.9	113,748	242.3	117,327	164.2	79,490
1979	866.5	419,559	274.7	133,005	392.7	190,122	199.2	96,433
1980	622	301,172	234.8	113,695	234.6	113,590	152.6	73,887
1981	936.4	453,405	317.0	153,501	416.5	201,653	202.9	98,250
1982	596.1	288,632	227.6	110,185	214.9	104,077	153.6	74,370
1983	587.5	284,468	236.1	114,310	205.7	99,606	145.7	70,551
1984	459.4	222,441	161.3	78,097	185.6	89,888	112.5	54,457
1985	559.9	271,104	187.2	90,623	228.1	110,438	144.7	70,043
1986	849.4	411,279	283.0	137,024	378.4	183,238	188.0	91,018
1987	640.1	309,936	259.9	125,853	230.1	111,409	150.1	72,674
1988	643.8	311,728	257.9	124,870	230.8	111,777	155.1	75,081
1989	523.2	253,333	211.6	102,462	182.1	88,171	129.5	62,701
1990	727.8	352,401	279.8	135,474	276.0	133,661	172.0	83,265
1991	556	269,215	226.4	109,628	187.1	90,609	142.5	68,978
1992	732.8	354,822	269.4	130,434	287.5	139,184	176.0	85,204
1993	721.3	349,253	290.6	140,684	250.1	121,118	180.6	87,451
1994	540.2	261,565	204.4	98,975	207.2	100,310	128.6	62,280
1995	538.5	260,742	141.5	68,509	289.7	140,254	107.3	51,978
1996	512.2	248,007	202.6	98,113	184.6	89,400	124.9	60,494
1997	433.2	209,755	168.5	81,588	150.0	72,643	114.7	55,525
1998	440.3	213,193	183.8	88,977	150.6	72,931	105.9	51,285
1999	424.4	205,494	162.9	78,881	160.3	77,611	101.2	49,003
2000	535.9	259,483	215.3	104,234	198.4	96,061	122.2	59,188
2002	551.5	267,036	168.5	81,588	260.9	126,328	122.1	59,121
2003	554.6	268,537	203.0	98,278	220.2	106,630	131.4	63,630
Minimum	386.2	186,998	127.4	61,692	114.5	55,464	86.1	41,669
Maximum	936.4	453,405	317.0	153,501	416.5	201,653	202.9	98,250
Average	595.8	288,466	222.7	107,821	230.7	111,716	142.4	68,929
Percentage	100.0%	100.0%	37.4%	37.4%	38.7%	38.7%	23.9%	23.9%

Table B4 - LID Infiltration Summary

LID	Area (ha)	Average Annual LID Infiltration Volume (m^3/Yr)	Average Annual LID Infiltration Volume (mm/Yr)
W1	5.76	3,893	68
W2	8.51	5,365	63
W3	10.03	8,117	81
W4	10.11	7,650	76
W5	6.20	4,509	73
W6	7.81	6,826	87
Total/Average	**48.42**	**36,361**	**75**