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September 11, 2025 Project Number: P2710(e01)

Stratford Foxrun
6286 Prince of Wales Drive
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Attention: **Joshua Laginski, P.Eng**

Subject: **Stratford Foxrun Development- 5923 Ottawa Street, Richmond Ditch Hydrologic and Hydraulic Analysis**

RATIONALE FOR UPDATE

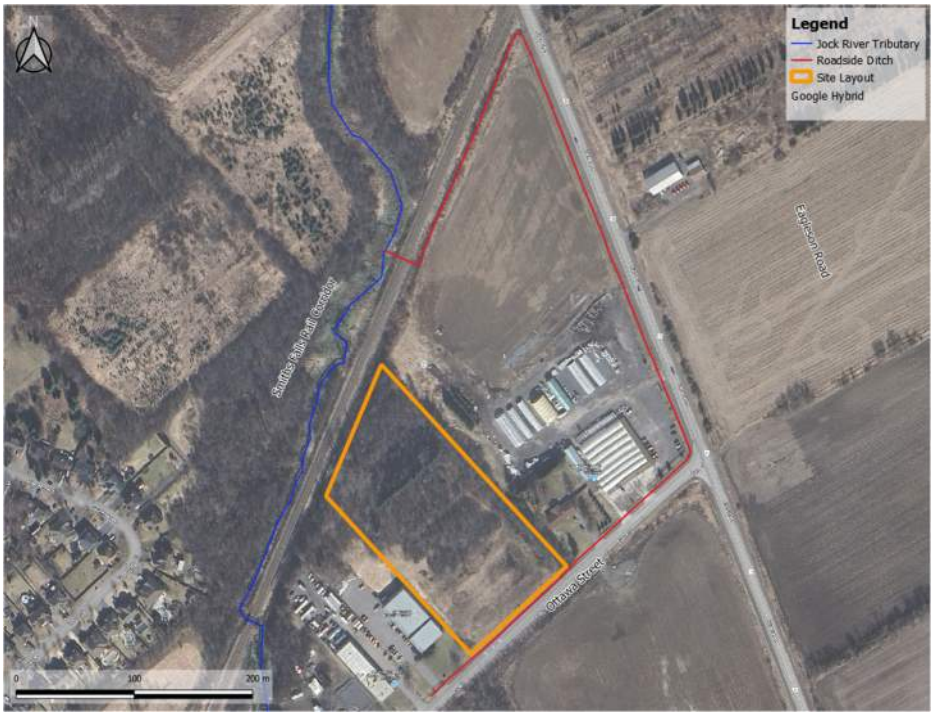
The following memo has been revised to address comments received from the City of Ottawa on July 3, 2025, titled "*Feedback Form – Completeness Review #1 Site Plan Control 5923 Ottawa Street".* Updates in this memo include refinements to the site grading and stormwater management design, as well as the incorporation of additional calculations and supporting text for justification of selected model parameters, as requested by the city review comments provided. These updates ensure consistency with the latest design information and compliance with applicable City of Ottawa guidelines.

OVERVIEW

Egis Group has commissioned JFSA Canada Inc. to develop detailed hydrologic and hydraulic models for the proposed Stratford Foxrun development. This development, located at 5923 Ottawa Street in Richmond, Ontario, will include local depressions within the site that will act as stormwater management controls to mitigate increases in peak flows resulting from the development. The site will outlet into an existing roadside ditch on Ottawa Street before proceeding east to Eagleson Road and then turning north towards the rail corridor before finally discharging into Marlborough Creek, which is a tributary of the Jock River.

This memo presents a downstream hydrologic and hydraulic analysis of the aforementioned roadside ditch, specifically quantifying its capacity from 5923 Ottawa Street to the Marlborough Creek. **Figure 1** illustrates the development's location and extent, as well as the road site ditch relative to its outlet at Marlborough Creek.

Figure 1:Site Boundary and Existing Watercourse



HYDROLOGY

Existing Conditions

Drainage Areas

Existing drainage areas for this study were delineated using a comprehensive Digital Terrain Model (DTM). This DTM was developed from two primary sources: LiDAR data, obtained from the LIO (Land Information Ontario) Digital Terrain Model and flown in 2019-2020, and a detailed topographic survey of the existing ditch and associated crossings completed by Egis in January 2025. This combined data was then imported into GIS software. Watershed delineation algorithms were subsequently applied to the DTM to automatically define the drainage areas. These automated delineations were manually reviewed against relevant previous studies and existing drainage delineations for accuracy and consistency. **Figure A1 in Attachment A** provides a visual overview of the existing drainage areas within the study area.

Land Use

Land use data has been taken from Land Information Ontario's (LIO) Land Use Data and then discretized based on the respective subcatchments. **Figure A2 in Attachment** A provides a visual overview of the respective land use data for each of the subcatchments within the study area.

Soil/Infiltration Data

Soil data within the study area has been taken from the Soil Survey Complex Data available on Land Information Ontario (LIO). **Figure A3 in Attachment** A provides a visual overview of the respective soil type data for each of the subcatchments within the study area. A full breakdown of the soil data for each drainage area has also been provided in **Table A1 in Attachment A**.

Curve Number (CN)

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 a given subcatchment to determine the weighted CN for that subcatchment. The CN values calculated were then converted to CN*. Note that the traditional CN procedure assumes that Initial Abstraction (IA) = 0.2S. However, the traditional CN method is subject to errors because of this assumption, particularly for smaller rainfall events. Instead, it is recommended that a modified CN* and a user-defined IA value be used for SWMHYMO modelling. Modified 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). The CN values derived were converted to CN* based on the formula provided in the November 2002 Runoff Curve Number Method: Examination of the Initial Abstract Ratio paper, and applied to the hydrologic model.

$$CN^* = \frac{100}{1.879\left[\frac{100}{CN-1}\right]^{1.15} + 1}$$

Table A1 in Attachment provides a full summary of the CN/CN* calculations for each of the predevelopment subcatchments.

Time to Peak (t_p)

For natural areas within the study area, the time to peak values for each of the subcatchments 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 each subcatchment has been identified; refer to Figure B6 in Attachment B for the flow paths discretized for each subcatchment. The upstream and downstream topographic elevations and flow lengths were identified for each subcatchment and used in the calculations. For these natural subcatchments, the Federal Aviation Administration (FAA) method was determined to be the most appropriate method to calculate the Time to Peak.

Other methods, such as the Uplands method, were also included in that analysis. The FAA method was selected for use in the final model because it produced longer time-to-peak (Tp) values for the same catchments, resulting in lower peak flows under pre-development conditions. These lower peak flows were then used to establish allowable release rates for the proposed stormwater management facilities.

This approach results in a more conservative design, as the SWM controls are sized to ensure post-development flows do not exceed these lower pre-development thresholds. While the Uplands method is preferred in the Sewer Design Guidelines (Appendix 5-D), the FAA method remains suitable for flat, rural catchments with longer overland flow paths, which characterizes the study area. Therefore, the FAA-based design applied in this analysis is more conservative and protective of downstream infrastructure.

Full details of these calculations have been provided in **Table A2 in Attachment A**, along with other time-to-peak values using alternative tp calculation methods.

Existing SWMHYMO modelling

An existing conditions SWMHYMO model of the drainage areas was developed based on the pre-development drainage areas provided. To represent the existing undeveloped lands, CALIB NASHYDs have been used, with Initial Abstraction (IA)=4.67 mm, and Number of Linear Reservoirs (N)=3. Full input and summary files of the existing conditions model have been provided in Attachment A

Channel Routing

To account for channel routing throughout the study area, LiDAR has been used to approximate the channel cross-section and associated flow parameters (length & slope). **Figure A4 in Attachment A** outlines the major flow paths within the study area, which have been used to account for channel routing and time to peak calculations within the subcatchments.

Design & Historical Storms

The stormwater management analysis incorporates both standard design storms and historical storm events in accordance with the City of Ottawa's guidelines. The selected design storms include the 3-hour Chicago distribution and the 24-hour SCS distribution, which are consistent with standard practice for stormwater management design in the region.

The 3-hour Chicago storm is widely used for urban infrastructure analysis because it provides a balanced representation of peak intensity and total rainfall volume. This duration is sufficient to generate meaningful runoff volumes for sizing stormwater management controls while capturing peak intensities that challenge conveyance systems. Although shorter-duration storms (e.g., 1-hour 100-year) exhibit higher peak intensities, their lower total rainfall volume often results in less conservative storage sizing. Conversely, the 24-hour SCS storm is included to assess broader floodplain impacts and downstream conveyance performance.

In addition to these design storms, the following historical events were simulated as per City requirements: July 1, 1979, August 4, 1988, and August 8, 1996. These events provide additional validation of system performance under real-world conditions and help ensure resiliency of the proposed stormwater management system.

Proposed Conditions

Drainage Areas & Imperviousness

For the Stratford Foxrun development under proposed conditions, Egis provided JFSA with detailed design drawings that included drainage areas and associated imperviousness. The proposed development lot layout and the associated drainage areas have been provided in **Figure B1 of Attachment B**. To represent the proposed Stratford Foxrun development lands, DESIGN STANDHYDs have been used, with default parameters per the city of Ottawa Storm Sewer Design Guidelines.

Onsite SWM Controls

Egis's design for the proposed development included detailed grading of localized depressions within the site that will act as onsite stormwater management controls, along with corresponding stage-storage tables. These stage-storage tables were directly incorporated into the hydrologic model. This integration allowed for the determination of appropriate outlet configurations for these facilities, as well as an accurate assessment of the storage volumes provided by the proposed depressions. Full detailed Stage/Storage/Outflow curves have been provided in **Tables B1 and B2 in Attachment B.** Based on this analysis, both sites will have a **75 mm** orifice at the bottom of the localized depression area and a **30cm** overflow weir at an elevation of **94.40m** and for extreme events.

Results

Onsite Controls Summary

Table 2 provides a comprehensive overview of the maximum storage volumes achieved at each of these locations across various return periods, in addition to their associated peak outflows and maximum water levels.

Table 1:Site Release Rates / Required Storage Volume / Ponding Depth/WSE

Event	Site 1 (0.480 ha)				Site 2 (0.447 ha)			
	Peak Outflow (m^3/s)	Pond Volume (m^3)	Pond WSE (m)	Depth (m)	Peak Outflow (m^3/s)	Pond Volume (m^3)	Pond WSE (m)	Depth (m)
2YrCHI3Hr	0.033	34	94.113	0.273	0.031	38	94.058	0.348
5YrCHI3Hr	0.054	64	94.189	0.349	0.049	65	94.167	0.447
10YrCHI3Hr	0.072	85	94.231	0.391	0.064	84	94.220	0.490
25YrCHI3Hr	0.094	113	94.284	0.444	0.083	109	94.280	0.540
50YrCHI3Hr	0.109	134	94.323	0.483	0.096	129	94.323	0.573
100YrCHI3Hr	0.130	158	94.364	0.524	0.114	150	94.366	0.606
2YrSCS24Hr	0.036	43	94.139	0.299	0.034	45	94.091	0.321
5YrSCS24Hr	0.056	72	94.205	0.365	0.051	71	94.185	0.405
10YrSCS24Hr	0.070	91	94.244	0.404	0.064	89	94.232	0.442
25YrSCS24Hr	0.088	117	94.292	0.452	0.080	112	94.286	0.486
50YrSCS24Hr	0.101	136	94.327	0.487	0.090	130	94.325	0.515
100YrSCS24Hr	0.115	157	94.362	0.522	0.103	149	94.364	0.544
July 1st, 1979	0.091	206	94.443	0.603	0.082	192	94.449	0.619
August 4th, 1988	0.108	173	94.389	0.549	0.096	165	94.396	0.556
August 8th, 1996	0.071	146	94.344	0.504	0.065	139	94.344	0.494
100YrCHI+20%	0.165	203	94.438	0.598	0.144	188	94.439	0.579

Peak Flows at Key Locations

The model was run for both existing and proposed conditions, and peak flows were extracted from the key nodes within the watercourse (refer to **Figure A4** for locations). **Table 2** outlines the peak flows for various return periods at each node, covering both the 3-hour Chicago and 24-hour SCS storms for 2- to 100-year events, along with the stress test and historical events.

This analysis indicates minor increases in peak flows to the roadside ditch for lower return period events under post-development conditions (2YrCHI3Hr, 5YrCHI3Hr & 2YRSCS24Hr). However, for larger events (e.g., the 100-year storm), peak flows are equal to or less than those under existing conditions. For the lower return period events (2YrCHI3Hr, 5YrCHI3Hr & 2YRSCS24Hr) that exhibit slight increases in peak flows, the hydraulic modelling indicates that maximum velocities within the ditch remain below 1.5 m/s. This threshold aligns with the maximum permissible velocity for grassed roadside ditches without requiring bioengineering stabilization measures, as outlined in Section 2.3 of SD-9 Roadside Ditches (Conveyance Only) from the MTO Highway Drainage Design Standards. Therefore, it can be concluded that the modest increase in flow rates during smaller storm events will not result in adverse erosion within the grassed channel.

Additionally, both sites will utilize a **75 mm** orifice at the outlet to maximize the storage capacity of these depression areas; this is the smallest allowable outlet size per MECP SWM guidelines.

Table 2: Pre and Post Development Peak Flow Summary

Event	Node	J1		Node	J2		Node	J3		Node	J4	
	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
Area (ha)	0.85	1.23	0.38	4.62	5	0.38	4.93	5.31	0.38	5.52	5.9	0.38
2YrCHI3Hr	0.015	0.019	0.004	0.057	0.062	0.005	0.061	0.066	0.005	0.067	0.072	0.005
5YrCHI3Hr	0.026	0.027	0.001	0.102	0.102	0.000	0.109	0.109	0.000	0.121	0.122	0.001
10YrCHI3Hr	0.035	0.032	-0.003	0.136	0.132	-0.004	0.145	0.141	-0.004	0.162	0.159	-0.003
25YrCHI3Hr	0.047	0.038	-0.009	0.181	0.172	-0.009	0.194	0.185	-0.009	0.218	0.209	-0.009
50YrCHI3Hr	0.057	0.043	-0.014	0.219	0.205	-0.014	0.234	0.220	-0.014	0.263	0.249	-0.014
100YrCHI3Hr	0.067	0.048	-0.019	0.258	0.239	-0.019	0.277	0.258	-0.019	0.311	0.292	-0.019
2YrSCS24Hr	0.024	0.024	0.000	0.090	0.091	0.001	0.096	0.097	0.001	0.107	0.108	0.001
5YrSCS24Hr	0.038	0.032	-0.006	0.148	0.142	-0.006	0.158	0.152	-0.006	0.177	0.171	-0.006
10YrSCS24Hr	0.049	0.037	-0.012	0.189	0.178	-0.011	0.202	0.191	-0.011	0.227	0.216	-0.011
25YrSCS24Hr	0.062	0.044	-0.018	0.242	0.224	-0.018	0.259	0.242	-0.017	0.291	0.274	-0.017
50YrSCS24Hr	0.073	0.049	-0.024	0.284	0.260	-0.024	0.305	0.281	-0.024	0.343	0.320	-0.023
100YrSCS24Hr	0.084	0.055	-0.029	0.329	0.300	-0.029	0.354	0.325	-0.029	0.399	0.370	-0.029
July 1st, 1979	0.090	0.060	-0.030	0.372	0.345	-0.027	0.399	0.371	-0.028	0.448	0.420	-0.028
August 4th, 1988	0.079	0.053	-0.026	0.314	0.287	-0.027	0.338	0.313	-0.025	0.379	0.354	-0.025
August 8th, 1996	0.052	0.040	-0.012	0.210	0.199	-0.011	0.226	0.215	-0.011	0.254	0.243	-0.011
100YrCHI+20%	0.090	0.061	-0.029	0.346	0.321	-0.025	0.372	0.345	-0.027	0.419	0.392	-0.027

Table 2: Pre and Post Development Peak Flow Summary

Event	Node	J5		Node	J6		Node	J7		Node	J8	
	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
Area (ha)	6.86	7.23	0.37	1.01	1.02	0.01	1.83	1.46	-0.37	13.1	13.09	-0.01
2YrCHI3Hr	0.080	0.086	0.006	0.016	0.021	0.005	0.019	0.018	-0.001	0.141	0.146	0.005
5YrCHI3Hr	0.147	0.149	0.002	0.025	0.028	0.003	0.035	0.034	-0.001	0.264	0.265	0.001
10YrCHI3Hr	0.197	0.196	-0.001	0.034	0.034	0.000	0.047	0.047	0.000	0.361	0.357	-0.004
25YrCHI3Hr	0.267	0.260	-0.007	0.047	0.047	0.000	0.065	0.064	-0.001	0.493	0.483	-0.010
50YrCHI3Hr	0.323	0.312	-0.011	0.057	0.057	0.000	0.079	0.078	-0.001	0.602	0.586	-0.016
100YrCHI3Hr	0.384	0.368	-0.016	0.069	0.069	0.000	0.095	0.094	-0.001	0.721	0.700	-0.021
2YrSCS24Hr	0.128	0.130	0.002	0.023	0.023	0.000	0.032	0.031	-0.001	0.233	0.234	0.001
5YrSCS24Hr	0.215	0.211	-0.004	0.039	0.039	0.000	0.054	0.053	-0.001	0.400	0.393	-0.007
10YrSCS24Hr	0.277	0.268	-0.009	0.051	0.051	0.000	0.070	0.069	-0.001	0.517	0.505	-0.012
25YrSCS24Hr	0.357	0.342	-0.015	0.066	0.066	0.000	0.092	0.090	-0.002	0.675	0.656	-0.019
50YrSCS24Hr	0.421	0.400	-0.021	0.079	0.079	0.000	0.110	0.107	-0.003	0.800	0.776	-0.024
100YrSCS24Hr	0.491	0.465	-0.026	0.093	0.093	0.000	0.129	0.126	-0.003	0.939	0.906	-0.033
July 1st, 1979	0.557	0.530	-0.027	0.094	0.094	0.000	0.137	0.130	-0.007	1.057	1.018	-0.039
August 4th, 1988	0.462	0.440	-0.022	0.085	0.085	0.000	0.121	0.115	-0.006	0.883	0.857	-0.026
August 8th, 1996	0.308	0.300	-0.008	0.058	0.058	0.000	0.082	0.079	-0.003	0.586	0.576	-0.010
100YrCHI+20%	0.519	0.495	-0.024	0.095	0.095	0.000	0.131	0.129	-0.002	0.984	0.951	-0.033

HYDRAULICS

The detailed hydraulic analysis of the downstream study area was conducted using the US Army Corps of Engineers HEC-RAS software (version 6.6). The purpose of this hydraulic analysis is to assess the hydraulic impacts that the proposed Stratford Foxrun development may have on existing water levels for the applicable design storms.

Model Development & Parameters

The primary method used to establish cross-sections involved detailed topographic surveying, typically conducted at approximately 50-meter intervals along the watercourse. These measurements were supplemented with LiDAR data in the floodplain to enhance spatial coverage and resolution. This close spacing is essential for accurately representing the hydraulic characteristics and flow conveyance capacity of the existing channel. The selected interval aligns with HEC-RAS best practices for open-channel flow modelling in rural systems, particularly where channel geometry and slope are relatively uniform. In general, cross-section spacing between 30 and 100 meters is considered appropriate for natural channels, unless abrupt changes in geometry, slope, or hydraulic controls are present.

To ensure the model captured localized hydraulic effects, additional cross-sections were inserted at key hydraulic structures (e.g., culverts and driveway crossings) and at locations where notable changes in channel geometry or slope occurred. This approach allowed for an accurate representation of hydraulic behaviour without introducing unnecessary complexity or instability into the model. In areas not explicitly surveyed, supplementary cross-sections were generated by sampling the merged LiDAR and topographic Digital Terrain Model (DTM). This ensured that all critical sections were included to accurately reflect channel hydraulics. The extent and location of all model cross-sections are illustrated in **Figure C1** of **Attachment C**.

Existing hydraulic infrastructure, such as culverts, on the respective watercourses, was incorporated into the model based on the details obtained from the topographic surveys. Consistent with HEC-RAS technical guidelines, ineffective flow areas and expansion-contraction coefficients were appropriately applied at these locations. Typical Manning's values of 0.035 and 0.05 were applied to the roadside ditch channel bottom and over banks, respectively.

A normal downstream boundary condition was applied for all events due to the substantial difference in drainage area between Marlborough Creek and the roadside ditch. The study area at the confluence with Marlborough Creek has a drainage area of **13.1 ha**, with a channel length of **1.034 km** and an average slope of **0.6%,** based on detailed modelling presented in this report. In contrast, Marlborough Creek at the same location has a drainage area of **437.4 ha**, a channel length of **5.120 km**, and an average slope of **0.26%,** as per the Ontario Watershed Information Tool. Using the velocity method outlined in Chapter 15 of the USDA's Hydrology National Engineering Handbook, the time to peak for the study area was calculated to be **1.2 hours**, while the time to peak for Marlborough Creek was estimated at **8.8 hours**. A full summary of these calculations is provided in **Table 3** below. Given the significant difference in time to peak between the two systems, it is evident that peak flows from the study area and Marlborough Creek cannot coincide. Therefore, the application of a normal downstream boundary condition is considered appropriate.

Table 3: Watercourse Time to Peak Calculations

Parameter	Units	Study Area	Malbrough Creek
Area	(ha)	13.1	437.4
Channel Length	(m)	1034	5120
Slope	(%)	0.60%	0.26%
Flow Type	-	Short grass	Short grass
Average Velocity	(m/s)	0.165	0.108
Time of Concentration	(secs)	6,275	47,262
Time of Concentration	(hrs)	1.7	13.1
Time to Peak	**(hrs)**	**1.2**	**8.8**

Results

The pre- and post-development models were run for the full range of design storms (2- to 100-Year Events) to accurately establish the existing and proposed floodplain extents within the study area. **Figures C2 and C3** illustrate the flood extents for both existing and proposed conditions during the 24-hour SCS-type storms (the critical design storm). **Figure C4** provide a comparison between the 100-year floodplain under both existing and proposed conditions. From this figure, it is shown that the 100-year floodplain extents along the ditch are reduced under post-development conditions. This demonstrates that the proposed stormwater management solution is effective and that the proposed development will not worsen existing flood conditions along the ditch. **Attachment C** also includes pre- and post-development long- and cross-section plots, along with summary tables.

This analysis also revealed that flows in the roadside ditch overtop the banks during 5- to 10-year events (depending on the design storm). This is expected, as the typical level of service for driveway crossings is generally in this range. It's crucial to note that existing driveway crossings, not the channel itself, are constricting flows and causing them to overtop the bank. Upsizing several culverts along this stretch of roadside ditch would significantly reduce the floodplain in this area.

Along Eagleson Road, approximately halfway between the railway and the Ottawa Street intersection, flows will overtop the bank and spill west to the culvert under the railway. For a conservative design, the hydraulic modelling does not account for this spill, assuming all flows proceed to the next downstream cross-section. It's also important to emphasize that for all events (up to and including the 100-year event), water levels in the roadside ditch do not reach an elevation that would impede traffic on either Eagleson Road or Ottawa Street, as the flood extents do not touch the shoulder of the road. Furthermore, the maximum 100-year floodplain extents do not affect any nearby buildings, meaning the current and proposed flood extents pose no danger to existing structures.

CONCLUSION

In summary, JFSA Canada Inc.'s hydrologic and hydraulic modelling confirms that the proposed Stratford Foxrun development's stormwater management plan effectively mitigates downstream impacts. The on-site localized depressions, with **75 mm** orifice outlets, will manage post-development runoff, ensuring peak flows for major storm events (up to 100-year) remain at or below pre-development levels.

The HEC-RAS analysis further demonstrates that the proposed SWM measures will lead to a reduction in the 100-year floodplain extent along the receiving roadside ditch. While existing culverts contribute to minor, more frequent overtopping, the development itself will not worsen these conditions or cause flooding that impedes traffic or endangers structures during major events. The findings indicate that the proposed SWM strategy for this site is sufficient and will not adversely impact downstream lands.

Yours truly,
JFSA Canada Inc.

Jonathon Burnett, B.Eng, P.Eng
Water Resource Engineer

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

Figures
Figure 1: Site Boundary and Existing Watercourse

Tables
Table 1: Site Release Rates / Required Storage Volume / Ponding Depth
Table 2: Peak Flows at Key Locations

Attachments
Attachment A: Pre-Development Hydrology
Attachment B: Post Development Hydrology
Attachment C: Hydraulic Analysis

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Attachment A

Pre-Development Hydrology

N

Legend

- Jock River Tributary
- Pre-dev. Subcatchments

Google Hybrid

EXT1 3.212 ha — Subcatchment Name; Subcatchment Area (ha)

SCALE: 1:3000

0 50 100 150 m

JFSA CANADA INC
WATER RESOURCE ENGINEERING, ENVIRONMENTAL MANAGEMENT AND LAND PLANNING CONSULTANTS

egis

5923 Ottawa St – Richmond

Figure A1: Existing Drainage Areas

PROJECT	P2710(e01)
DRAWN	MM
DATE	04-06-2025

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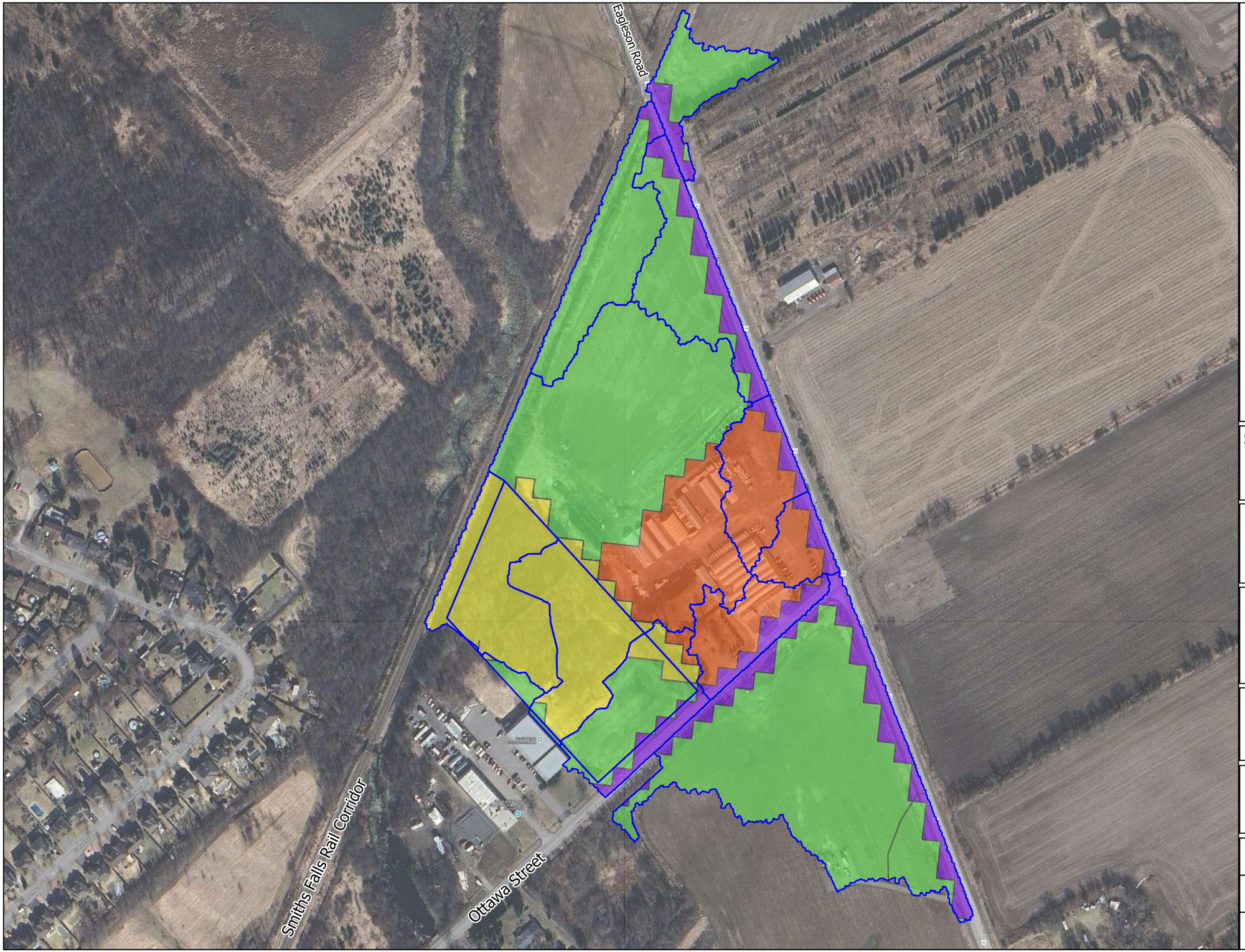

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Legend

- Pre-dev. Subcatchments

CN

- Built Up Area - Pervious
- Transportation
- Forest
- Tilled

Google Hybrid

SCALE: 1:3000

0 50 100 150 m

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5923 Ottawa St – Richmond

Figure A2: Land Use Data

PROJECT	P2710(e01)
DRAWN	MM
DATE	04-06-2025

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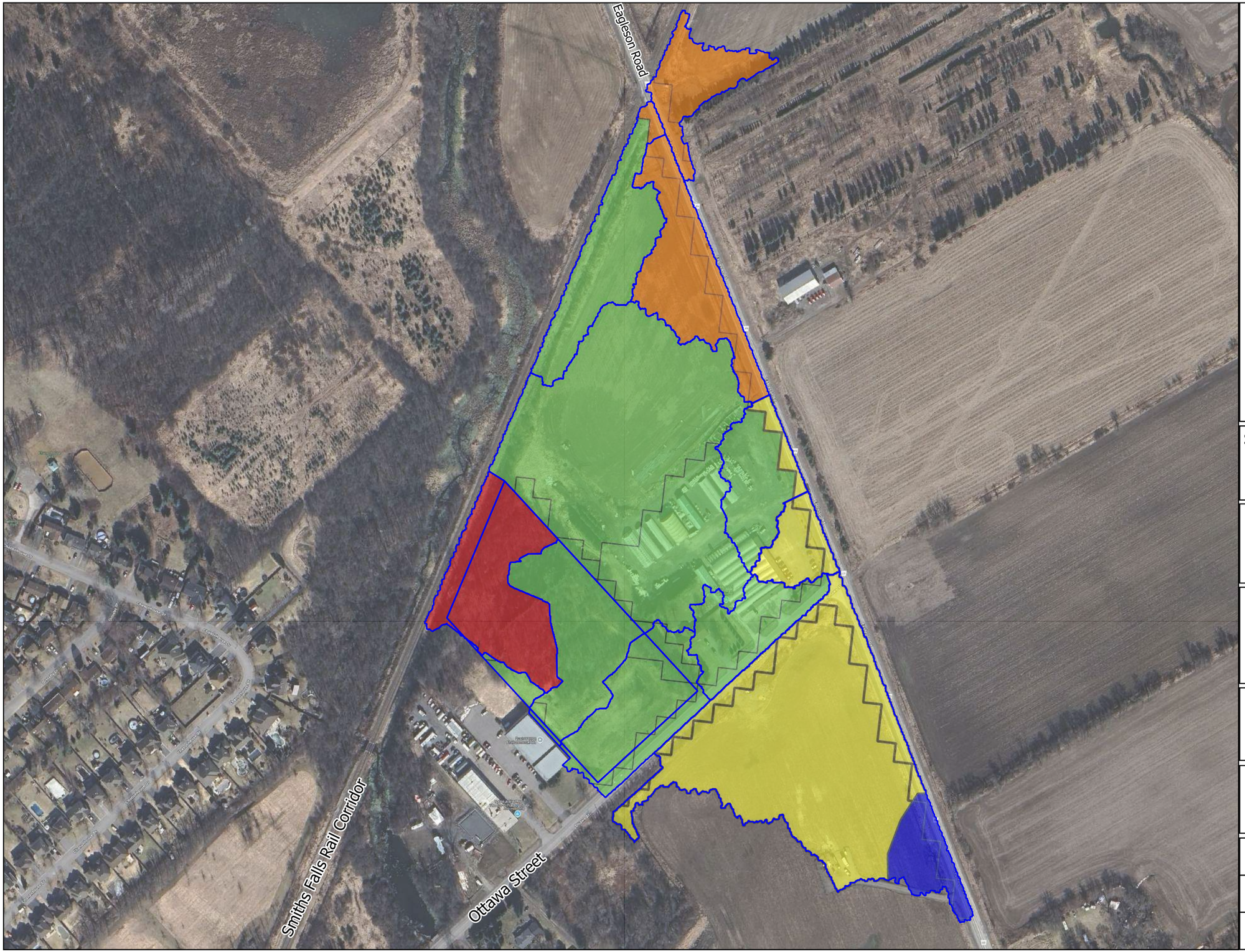

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Legend

- Pre-dev. Subcatchments

Soil Name (Soil Type)

- ERODED CHANNEL (D)
- NORTH GOWER (D)
- DALHOUSIE (D)
- BRANDON (D)
- GRENVILLE (B)

Google Hybrid

SCALE: 1:3000

0 50 100 150 m

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5923 Ottawa St – Richmond

Figure A3: Soil Type

PROJECT	P2710(e01)
DRAWN	MM
DATE	04-06-2025

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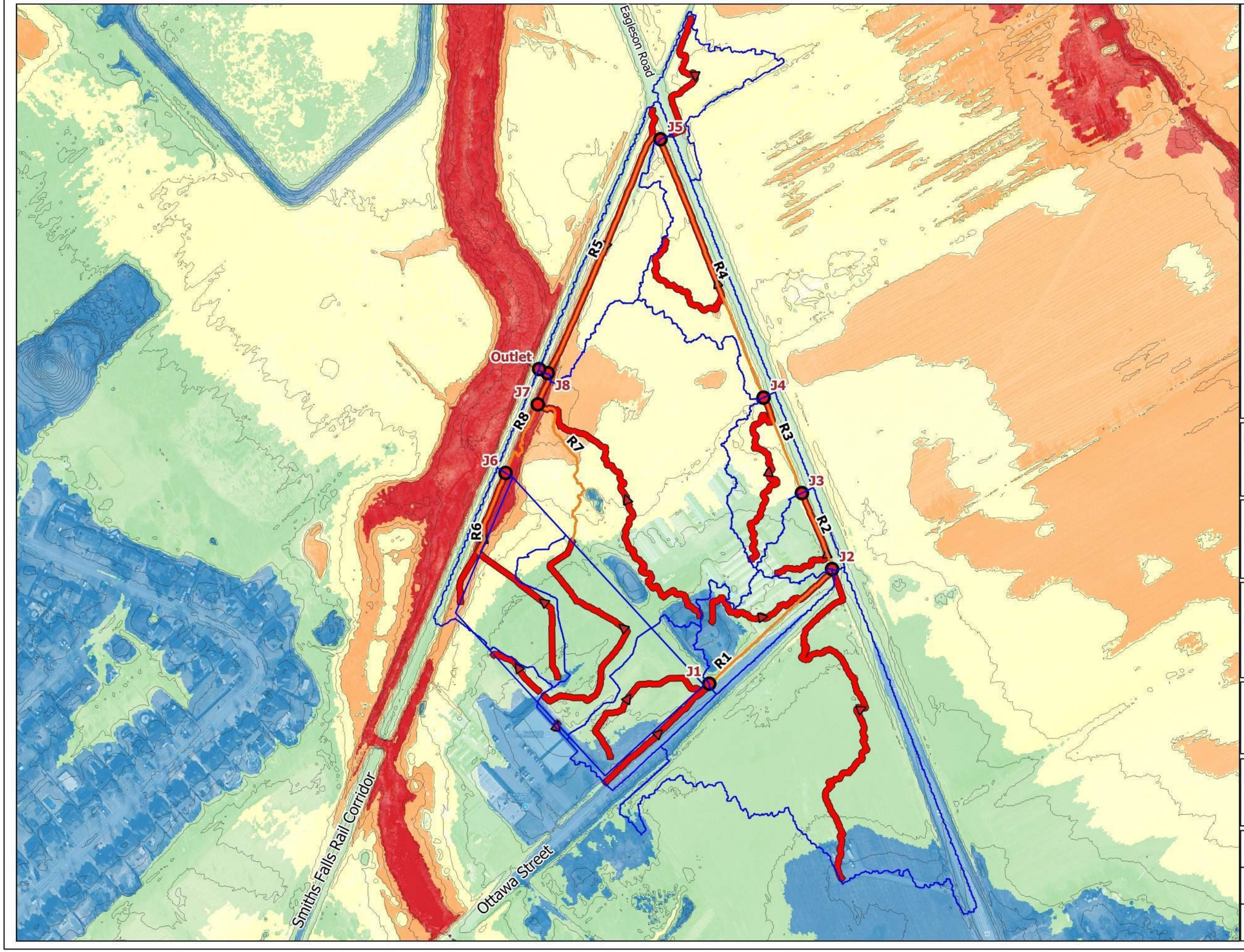

Legend

- Pre-dev. Subcatchments
- Flow Path

LiDAR

- 91.65
- 92.48
- 93.32
- 94.15

LiDAR Contour

- 0.5

SCALE: 1:3000

0 50 100 150 m

JFSA CANADA INC
WATER RESOURCE ENGINEERING, ENVIRONMENTAL MANAGEMENT AND LAND PLANNING CONSULTANTS

egis

5923 Ottawa St – Richmond

Figure A4: Flow Paths and Route Channels

PROJECT	P2710(e01)
DRAWN	MM
DATE	04-06-2025

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Table A1: Calculation of SCS Curve Number (CN) and Modified Curve Number (CN*)

EXT1 (3.212 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.107	Transportation	GRENVILLE	Fair	B	98	3.3%	3.3
0.229	Tilled	GRENVILLE	Fair	B	69	7.1%	4.9
0.403	Transportation	BRANDON	Fair	D	98	12.5%	12.3
2.472	Tilled	BRANDON	Fair	D	84	77.0%	64.6
						CN	**85**
						CN*	**80**

EXT2 (0.285 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.04	Built Up Area - Pervious	NORTH GOWER	Fair	D	80	14.0%	11.2
0.051	Tilled	NORTH GOWER	Fair	D	84	17.9%	15.0
0.067	Forest	NORTH GOWER	Fair	D	79	23.5%	18.6
0.127	Transportation	NORTH GOWER	Fair	D	98	44.6%	43.7
						CN	**89**
						CN*	**85**

EXT3 (0.56 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0	Forest	NORTH GOWER	Fair	D	79	0.0%	0.0
0.17	Transportation	NORTH GOWER	Fair	D	98	30.4%	29.8
0.39	Built Up Area - Pervious	NORTH GOWER	Fair	D	80	69.6%	55.7
						CN	**85**
						CN*	**80**

EXT4 (0.309 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.074	Transportation	BRANDON	Fair	D	98	23.9%	23.5
0.235	Built Up Area - Pervious	BRANDON	Fair	D	80	76.1%	60.8
						CN	**84**
						CN*	**79**

EXT5 (0.594 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.084	Transportation	BRANDON	Fair	D	98	14.1%	13.9
0.51	Built Up Area - Pervious	NORTH GOWER	Fair	D	80	85.9%	68.7
						CN	**83**
						CN*	**76**

Table A1: Calculation of SCS Curve Number (CN) and Modified Curve Number (CN*)

EXT6 (0.864 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.271	Transportation	DALHOUSIE	Fair	D	98	31.4%	30.7
0.593	Tilled	DALHOUSIE	Fair	D	84	68.6%	57.7
						CN	**88**
						CN*	**85**

EXT7 (0.47 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.097	Transportation	DALHOUSIE	Fair	D	98	20.6%	20.2
0.374	Tilled	DALHOUSIE	Fair	D	84	79.6%	66.8
						CN	**87**
						CN*	**83**

EXT8 (0.835 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.036	Transportation	DALHOUSIE	Fair	D	98	4.3%	4.2
0.798	Tilled	NORTH GOWER	Fair	D	84	95.6%	80.3
						CN	**85**
						CN*	**79**

EXT9 (3.572 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.001	Transportation	NORTH GOWER	Fair	D	98	0.0%	0.0
0.126	Forest	NORTH GOWER	Fair	D	79	3.5%	2.8
0.998	Built Up Area - Pervious	NORTH GOWER	Fair	D	80	27.9%	22.4
2.446	Tilled	NORTH GOWER	Fair	D	84	68.5%	57.5
						CN	**83**
						CN*	**76**

EXT9a (0.011 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.011	Tilled	NORTH GOWER	Fair	D	84	100.0%	84.0
						CN	**84**
						CN*	**78**

EXT10 (0.203 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.203	Forest	ERODED CHANNEL	Fair	D	79	100.0%	79.0
						CN	**79**
						CN*	**71**

Table A1: Calculation of SCS Curve Number (CN) and Modified Curve Number (CN*)

Pre10 (0.803 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.803	Forest	ERODED CHANNEL	Fair	D	79	100.0%	79.0
						CN	**79**
						CN*	**71**

Pre11 (0.069 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.004	Forest	NORTH GOWER	Fair	D	79	5.8%	4.6
0.065	Tilled	NORTH GOWER	Fair	D	84	94.2%	79.1
						CN	**84**
						CN*	**78**

Pre2 (0.565 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0.017	Transportation	NORTH GOWER	Fair	D	98	3.0%	2.9
0.066	Forest	NORTH GOWER	Fair	D	79	11.7%	9.2
0.483	Tilled	NORTH GOWER	Fair	D	84	85.5%	71.8
						CN	**84**
						CN*	**78**

Pre9 (0.83 ha)							
Area (ha)	Land Type	Soil Name	Soil Condition	Soil Group	CN	% of Catchment	Weighted CN
0	Built Up Area - Pervious	NORTH GOWER	Fair	D	80	0.0%	0.0
0.014	Tilled	NORTH GOWER	Fair	D	84	1.7%	1.4
0.815	Forest	NORTH GOWER	Fair	D	79	98.2%	77.6
						CN	**79**
						CN*	**71**

Table A2: Time to Peak Calculations

Parameter	Units	EXT1	EXT2	EXT3	EXT4	EXT5	EXT6	EXT7	EXT8	EXT9	EXT9a	EXT10	Pre10	Pre11	Pre2	Pre9
Area	ha	3.211	0.285	0.560	0.309	0.594	0.864	0.471	0.834	3.571	0.011	0.203	0.803	0.069	0.566	0.829
CN	-	80	85	80	79	76	85	83	79	76	78	71	71	78	78	71
Ptotal to calc C from CN, use 2 yr 24 hr Chicago storm	P(mm)	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
	Ia(mm)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	RV(mm)	17.7	21.4	18.0	16.9	15.4	21.2	19.7	17.1	15.6	16.7	12.9	12.9	16.4	16.7	12.9
C (From Chicago storm)	-	0.363	0.439	0.370	0.348	0.317	0.436	0.404	0.351	0.319	0.342	0.265	0.265	0.337	0.342	0.265
Length of Channel	m	404	121	161	116	215	279	140	263	344	5	121	135	54	145	236
	ft	1327	397	527	381	705	916	459	862	1128	15	398	443	176	475	776
Elevation of Head Water	m	94.63	94.17	94.91	93.95	94.08	92.97	93.24	93.52	94.94	94.74	91.69	94.14	94.09	94.34	94.11
	ft	310	309	311	308	309	305	306	307	311	311	301	309	309	310	309
Elevation of Outlet	m	92.98	93.57	93.00	92.69	92.44	91.96	92.11	90.43	90.46	94.55	91.11	91.71	93.58	93.80	93.20
	ft	305	307	305	304	303	302	302	297	297	310	299	301	307	308	306
Average Slope	%	0.41%	0.50%	1.18%	1.08%	0.76%	0.36%	0.81%	1.17%	1.30%	4.28%	0.49%	1.80%	0.96%	0.38%	0.38%
Flow Type (Uplands)	-	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Kirpich																
Time of Concentration	mins	16	6	5	4	8	13	6	8	9	0	6	4	2	8	11
Time to Peak	min	11	4	4	3	5	9	4	5	6	0	4	3	2	5	7
Time to Peak	Hours	0.18	0.07	0.06	0.05	0.09	0.14	0.06	0.09	0.10	0.00	0.07	0.04	0.03	0.09	0.12
FAA (From Chicago storm)																
Time of Concentration	mins	65	30	29	26	41	51	29	37	43	3	38	26	18	41	58
Time to Peak	mins	43	20	19	17	27	34	19	25	29	2	25	17	12	27	38
Time to Peak	Hours	0.72	0.33	0.32	0.29	0.45	0.56	0.32	0.42	0.48	0.04	0.42	0.29	0.21	0.46	0.64
Barnsby Williams																
Time of Concentration	mins	25	9	9	7	14	20	9	15	17	0	9	7	4	11	17
Time to Peak	mins	17	6	6	5	9	13	6	10	11	0	6	5	3	7	11
Time to Peak	Hours	0.28	0.10	0.11	0.08	0.15	0.22	0.10	0.17	0.18	0.00	0.10	0.08	0.05	0.12	0.19
SCS																
Time of Concentration	mins	63	18	17	15	31	42	17	27	34	1	28	16	9	30	54
Time to Peak	mins	42	12	12	10	21	28	12	18	23	0	19	11	6	20	36
Time to Peak	Hours	0.70	0.20	0.19	0.16	0.34	0.47	0.19	0.30	0.38	0.01	0.31	0.18	0.10	0.34	0.61
Uplands																
Time of Concentration	mins	69	19	16	12	27	50	17	26	33	0	19	11	6	26	41
Time to Peak	mins	46	12	11	8	18	34	11	18	22	0	13	7	4	17	28
Time to Peak	Hours	0.76	0.21	0.18	0.13	0.30	0.56	0.19	0.29	0.36	0.00	0.21	0.12	0.07	0.28	0.46
Selected Method:	**FAA (From Chicago storm)**															
Time to Peak	min	43	20	19	17	27	34	19	25	29	2	25	17	12	27	38
Time to Peak	Hours	0.72	0.33	0.32	0.29	0.45	0.56	0.32	0.42	0.48	0.04	0.42	0.29	0.21	0.46	0.64
Velocity	m/s	0.16	0.10	0.14	0.11	0.13	0.14	0.12	0.18	0.20	0.04	0.08	0.13	0.07	0.09	0.10

```
20    Metric units / ID numbers OFF
*#*************************************************************************************************
*#  SWMHYMO  / INPUT DATA FILE
*#*************************************************************************************************
*#  Project Name  : [5923 Ottawa St]
*#  Project Number: [P2710(e01)]
*#  Date          : [2025 FEB 05]
*#  Modeller      : [MM]
*#  Company       : JFSA Canada Inc.
*#  License #     : 2549237
*#*************************************************************************************************
*# Model developed to simulate runoff from subcatchments under pre development conditions
*#*************************************************************************************************
*%  25 mm Storm based on 2-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[002]
                   ["002YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
READ STORM          STORM_FILENAME=["STORM.001"]
*%-----------------|-------------------------------------------------------|
*#*************************************************************************************************
*# EXT1
*#*************************************************************************************************
CALIB NASHYD        NHYD=["EXT1"], DT[1](min), AREA=[3.211](ha),
                    DWF=[0](cms), CN=[80],
                    IA=[4.67](mm), N=[3], TP[0.72](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# EXT2
*#*************************************************************************************************
CALIB NASHYD        NHYD=["EXT2"], DT[1](min), AREA=[0.285](ha),
                    DWF=[0](cms), CN=[85],
                    IA=[4.67](mm), N=[3], TP[0.33](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# EXT3
*#*************************************************************************************************
CALIB NASHYD        NHYD=["EXT3"], DT[1](min), AREA=[0.560](ha),
                    DWF=[0](cms), CN=[80],
                    IA=[4.67](mm), N=[3], TP[0.32](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# EXT4
*#*************************************************************************************************
CALIB NASHYD        NHYD=["EXT4"], DT[1](min), AREA=[0.309](ha),
                    DWF=[0](cms), CN=[79],
                    IA=[4.67](mm), N=[3], TP[0.29](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# EXT5
*#*************************************************************************************************
CALIB NASHYD        NHYD=["EXT5"], DT[1](min), AREA=[0.594](ha),
                    DWF=[0](cms), CN=[76],
                    IA=[4.67](mm), N=[3], TP[0.45](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
```

```
***********
*# EXT6
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["EXT6"], DT[1](min), AREA=[0.864](ha),
                    DWF=[0](cms), CN=[85],
                    IA=[4.67](mm), N=[3], TP[0.56](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************
***********
*# EXT7
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["EXT7"], DT[1](min), AREA=[0.471](ha),
                    DWF=[0](cms), CN=[83],
                    IA=[4.67](mm), N=[3], TP[0.32](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************
***********
*# EXT8
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["EXT8"], DT[1](min), AREA=[0.834](ha),
                    DWF=[0](cms), CN=[79],
                    IA=[4.67](mm), N=[3], TP[0.42](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************
***********
*# EXT9
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["EXT9"], DT[1](min), AREA=[3.571](ha),
                    DWF=[0](cms), CN=[76],
                    IA=[4.67](mm), N=[3], TP[0.48](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************
***********
*# EXT9a
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["EXT9a"], DT[1](min), AREA=[0.011](ha),
                    DWF=[0](cms), CN=[78],
                    IA=[4.67](mm), N=[3], TP[0.04](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************
***********
*# EXT10
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["EXT10"], DT[1](min), AREA=[0.203](ha),
                    DWF=[0](cms), CN=[71],
                    IA=[4.67](mm), N=[3], TP[0.42](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************
***********
*# Pre2
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["Pre2"], DT[1](min), AREA=[0.566](ha),
                    DWF=[0](cms), CN=[78],
                    IA=[4.67](mm), N=[3], TP[0.46](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************
***********
*# Pre9
*#*************************************************************************************
***********
CALIB NASHYD        NHYD=["Pre9"], DT[1](min), AREA=[0.829](ha),
                    DWF=[0](cms), CN=[71],
```

```
                    IA=[4.67](mm), N=[3], TP[0.64](hrs),
                    RAINFALL[ , , -1]
*#########################################################################################
***********
*# Pre10
*#########################################################################################
***********
CALIB NASHYD        NHYD=["Pre10"], DT[1](min), AREA=[0.803](ha),
                    DWF=[0](cms), CN=[71],
                    IA=[4.67](mm), N=[3], TP[0.29](hrs),
                    RAINFALL[ , , -1]
*#########################################################################################
***********
*# Pre11
*#########################################################################################
***********
CALIB NASHYD        NHYD=["Pre11"], DT[1](min), AREA=[0.069](ha),
                    DWF=[0](cms), CN=[78],
                    IA=[4.67](mm), N=[3], TP[0.21](hrs),
                    RAINFALL[ , , -1]
*#########################################################################################
***********
ADD HYD             NHYDsum=["J1"], NHYDs to add=["EXT2"+"Pre2"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 849.0434 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R1"], NHYDin=["J1"], RDT=[1](min),
                    CHLGTH=[143.151](m), CHSLOPE=[0.394](%), FPSLOPE=[0.394](%),
                    SECNUM=[849.0434], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,18.95 -0.035,26.78 0.08,35.18] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0.48, 94.05]
                                                     [3.19, 93.99]
                                                     [6.85, 93.91]
                                                     [10.48, 93.87]
                                                     [17.45, 93.85]
                                                     [18.95, 93.84]
                                                     [20.36, 93.81]
                                                     [22.3, 93.76]
                                                     [22.53, 93.72]
                                                     [23.98, 93.35]
                                                     [24.35, 93.33]
                                                     [24.65, 93.37]
                                                     [25.04, 93.45]
                                                     [26.04, 93.74]
                                                     [26.44, 93.82]
                                                     [26.78, 93.87]
                                                     [29.14, 94.11]
                                                     [33.98, 94.26]
                                                     [35.18, 94.26]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J2"], NHYDs to add=["R1"+"EXT3"+"EXT1"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 737.5813 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R2"], NHYDin=["J2"], RDT=[1](min),
                    CHLGTH=[73.338](m), CHSLOPE=[0.425](%), FPSLOPE=[0.425](%),
                    SECNUM=[737.5813], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,8.4 -0.035,16.42 0.08,22.6] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0, 93.52]
                                                     [1.08, 93.5]
                                                     [4.37, 93.48]
                                                     [6.31, 93.45]
                                                     [8.4, 93.38]
                                                     [9.5, 93.31]
                                                     [10.49, 93.23]
                                                     [10.99, 93.18]
                                                     [12.4, 92.94]
                                                     [13.11, 92.84]
                                                     [13.67, 92.92]
```

```
                                                    [16.42, 93.6]
                                                    [16.91, 93.65]
                                                    [17.97, 93.65]
                                                    [19, 93.83]
                                                    [19.51, 93.89]
                                                    [21.06, 93.94]
                                                    [22.6, 93.95]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J3"], NHYDs to add=["R2"+"EXT4"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 675.4097 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R3"], NHYDin=["J3"], RDT=[1](min),
                    CHLGTH=[92.08](m), CHSLOPE=[0.274](%), FPSLOPE=[0.274](%),
                    SECNUM=[675.4097], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,31.64 -0.035,42.44 0.08,48.87] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[30.59, 93.12]
                                                    [31.64, 93.13]
                                                    [34.35, 93.08]
                                                    [35.18, 93.03]
                                                    [37.78, 92.72]
                                                    [38.25, 92.64]
                                                    [38.7, 92.61]
                                                    [39.74, 92.76]
                                                    [42.44, 93.41]
                                                    [42.89, 93.49]
                                                    [43.97, 93.57]
                                                    [44.92, 93.6]
                                                    [46.07, 93.67]
                                                    [48.87, 93.74]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J4"], NHYDs to add=["R3"+"EXT5"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 518.7506 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R4"], NHYDin=["J4"], RDT=[1](min),
                    CHLGTH=[251.495](m), CHSLOPE=[0.19](%), FPSLOPE=[0.19](%),
                    SECNUM=[518.7506], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,51.48 -0.035,59.39 0.08,66.4] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0, 92.92]
                                                    [4.26, 92.9]
                                                    [48.31, 92.76]
                                                    [51.48, 92.76]
                                                    [53.64, 92.7]
                                                    [55.33, 92.29]
                                                    [55.44, 92.29]
                                                    [56.43, 92.37]
                                                    [56.97, 92.43]
                                                    [59.39, 93.27]
                                                    [59.74, 93.37]
                                                    [60.8, 93.52]
                                                    [63.31, 93.71]
                                                    [66.4, 93.76]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J5"], NHYDs to add=["R4"+"EXT6"+"EXT7"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 275.0857 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R5"], NHYDin=["J5"], RDT=[1](min),
                    CHLGTH=[237.343](m), CHSLOPE=[0.644](%), FPSLOPE=[0.644](%),
                    SECNUM=[275.0857], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,40.82 -0.035,53.64 0.08,57.93] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[36.16, 92.63]
                                                    [40.82, 92.97]
                                                    [41.39, 92.9]
                                                    [44.69, 91.72]
                                                    [45.24, 91.58]
                                                    [46.33, 91.43]
                                                    [47.41, 91.64]
```

```
                                                    [47.87, 91.75]
                                                    [49.59, 92.2]
                                                    [50.99, 92.36]
                                                    [51.44, 92.48]
                                                    [53.18, 92.98]
                                                    [53.64, 93.15]
                                                    [55.92, 93.66]
                                                    [57.93, 93.68]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 124 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R6"], NHYDin=["Pre10"], RDT=[1](min),
                    CHLGTH=[77.414](m), CHSLOPE=[0.776](%), FPSLOPE=[0.776](%),
                    SECNUM=[124], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,8.34 -0.035,31.31 0.08,84.97] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[1.78, 93.73]
                                                    [4.51, 93.54]
                                                    [5.06, 93.31]
                                                    [7.25, 92.98]
                                                    [7.79, 92.77]
                                                    [8.34, 92.49]
                                                    [9.43, 91.93]
                                                    [9.68, 91.81]
                                                    [10.53, 91.27]
                                                    [12.64, 90.92]
                                                    [14.44, 90.9]
                                                    [16.54, 91.06]
                                                    [17.64, 91.06]
                                                    [30.22, 92.3]
                                                    [31.31, 92.45]
                                                    [33.5, 92.41]
                                                    [55.37, 93.11]
                                                    [57.01, 93.2]
                                                    [84.97, 93.43]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 74 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R7"], NHYDin=["Pre9"], RDT=[1](min),
                    CHLGTH=[159.151](m), CHSLOPE=[1.576](%), FPSLOPE=[1.576](%),
                    SECNUM=[74], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,4.67 -0.035,81.24 0.08,82.88] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[1.94, 93.64]
                                                    [4.67, 93.32]
                                                    [5.77, 93.15]
                                                    [7.41, 92.69]
                                                    [7.95, 92.37]
                                                    [9.36, 91.71]
                                                    [10.12, 91.22]
                                                    [10.49, 91.06]
                                                    [12.64, 90.89]
                                                    [16.16, 90.92]
                                                    [18.83, 91.66]
                                                    [19.59, 92.02]
                                                    [21.62, 92.39]
                                                    [24.87, 92.48]
                                                    [30.37, 92.55]
                                                    [34.37, 92.65]
                                                    [77.41, 92.82]
                                                    [80.6, 93.25]
                                                    [81.24, 93.48]
                                                    [82.88, 93.79]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J6"], NHYDs to add=["R6"+"EXT10"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 49 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R8"], NHYDin=["J6"], RDT=[1](min),
                    CHLGTH=[78.801](m), CHSLOPE=[0.522](%), FPSLOPE=[0.522](%),
                    SECNUM=[49], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,8.71 -0.035,20.59 0.08,116.73] NSEG
```

```
                        times
304                     ( DISTANCE (m), ELEVATION (m))=[0, 93.36]
305                                                   [1.93, 93.63]
306                                                   [4.61, 93.26]
307                                                   [6.23, 93.1]
308                                                   [8.19, 92.26]
309                                                   [8.71, 91.84]
310                                                   [9.86, 91.47]
311                                                   [10.53, 91.04]
312                                                   [13.84, 91]
313                                                   [14.5, 91.11]
314                                                   [16.97, 91.27]
315                                                   [20.59, 91.76]
316                                                   [23.3, 91.64]
317                                                   [30.34, 91.85]
318                                                   [35.29, 91.92]
319                                                   [116.73, 92.96]
320 *%-----------------|-------------------------------------------------------|
321 ADD HYD             NHYDsum=["J7"], NHYDs to add=["R8"+"R7"]
322 *%-----------------|-------------------------------------------------------|
323 * NOTE: Cross-section number 7 is taken from HEC-RAS Model
324 ROUTE CHANNEL       NHYDout=["R9"], NHYDin=["J7"], RDT=[1](min),
325                     CHLGTH=[29.445](m), CHSLOPE=[0.887](%), FPSLOPE=[0.887](%),
326                     SECNUM=[7], NSEG=[3],
327                       ( SEGROUGH, SEGDIST (m))=[0.08,1.5 -0.035,22.44 0.08,100.08] NSEG
                          times
328                       ( DISTANCE (m), ELEVATION (m))=[0, 93.4]
329                                                   [1.5, 93.63]
330                                                   [3.13, 93.62]
331                                                   [4.76, 93.28]
332                                                   [5.3, 93.25]
333                                                   [6.52, 93.08]
334                                                   [6.96, 92.95]
335                                                   [10.57, 90.95]
336                                                   [13.59, 90.67]
337                                                   [15.83, 90.72]
338                                                   [16.42, 90.85]
339                                                   [18.66, 91.76]
340                                                   [20.82, 91.86]
341                                                   [22.44, 91.92]
342                                                   [27.84, 91.98]
343                                                   [30.15, 91.96]
344                                                   [100.08, 92.61]
345 *%-----------------|-------------------------------------------------------|
346 ADD HYD             NHYDsum=["J8"], NHYDs to add=["EXT9"+"R9"+"EXT8"+"R5"]
347 *%-----------------|-------------------------------------------------------|
348 * Note: The pipe needs to be adjusted based on the Culvert-under-railway information
349 ROUTE PIPE          PTYPE=[1]circ, NHYDout=["Outlet"], RNUMBER=[1.0],
350                     PDIAM=[525](mm), PLNGTH=[8.407](m), PROUGH=[0.013],
                        PSLOPE=[0.0001](m/m),
351                     NHYDin=["J8"], RDT=[1](min)
352 *%-----------------|-------------------------------------------------------|
353 *#########################################################################
354 *# STORMS
355 *#########################################################################
356 *%  2-Year, 3-Hour Chicago Storm
357 *START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[002]
358 *                    ["002YC3H.stm"] <--storm filename, one per line for NSTORM time
359 *%-----------------|-------------------------------------------------------|
360 *%  5-Year, 3-Hour Chicago Storm
361 START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[005]
362                     ["005YC3H.stm"] <--storm filename, one per line for NSTORM time
363 *%-----------------|-------------------------------------------------------|
364 *%  10-Year, 3-Hour Chicago Storm
365 START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[010]
366                     ["010YC3H.stm"] <--storm filename, one per line for NSTORM time
367 *%-----------------|-------------------------------------------------------|
368 *%  25-Year, 3-Hour Chicago Storm
369 START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[025]
```

```
                    ["025YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  50-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[050]
                    ["050YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  100-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[099]
                    ["100YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  2-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[102]
                    ["SC24002x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  5-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[105]
                    ["SC24005x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  10-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[110]
                    ["SC24010x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  25-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[125]
                    ["SC24025x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  50-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[150]
                    ["SC24050x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  100-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[199]
                    ["SC24100x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  July 1st, 1979 Storm - Ottawa International Airport
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1979]
                    ["19790701.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  August 4th, 1988 Storm - Ottawa International Airport
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1988]
                    ["19880804.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  August 8th, 1996 Storm - Ottawa International Airport
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1996]
                    ["19960808.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
*%  100-Year, 3-Hour Chicago Storm + 20%
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[9999]
                    ["100YC3H+.STM"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
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  111   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  111   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>  ***********************                ++++++ PROGRAM ARRAY DIMENSIONS ++++++          ***********************
00029>  ***********************                Maximum value for ID numbers  :    11          ***********************
00030>  ***********************                Max. number of rainfall points: 105408         ***********************
00031>  ***********************                Max. number of flow points    : 105408         ***********************
00032>  ********************************************************************************
00033>
00034>
00035>  ******************************  S U M M A R Y   O U T P U T  ************************
00036>  ********************************************************************************
00037>  *                                                                              *
00038>  *                    RUN DATE: 2025-09-10     TIME: 20:42:32     RUN COUNTER: 011829  *
00039>  ********************************************************************************
00040>  * Input   file: C:\Temp\Fox Run\20250205-PreDev\Ott_St-Pre_v04.dat               *
00041>  * Output  file: C:\Temp\Fox Run\20250205-PreDev\Ott_St-Pre_v04.out               *
00042>  * Summary file: C:\Temp\Fox Run\20250205-PreDev\Ott_St-Pre_v04.sum               *
00043>  * User comments:                                                               *
00044>  * 1:_____________________________________________________________________________*
00045>  * 2:_____________________________________________________________________________*
00046>  * 3:_____________________________________________________________________________*
00047>  ********************************************************************************
00048>
00049>
00050> #*******************************************************************************
00051> #  SWMHYMO  / INPUT DATA FILE
00052> #*******************************************************************************
00053> #  Project Name  : [5923 Ottawa St]
00054> #  Project Number: [P2710(e01)]
00055> #  Date          : [2025 FEB 05]
00056> #  Modeller      : [MM]
00057> #  Company       : JFSA Canada Inc.
00058> #  License #     : 2549237
00059> #*******************************************************************************
00060> # Model developed to simulate runoff from subcatchments under pre development conditions
00061> #*******************************************************************************
00062>   ** END OF RUN :   1
00063>
00064> ********************************************************************************
00065>
00066>
00067>
00068>
00069>
00070>  RUN#:COMMAND#
00071> R0002:C00001------------------------------------------------------------------------
00072>       START
00073>       [TZERO =    .00 hrs on       0]
00074>       [METOUT=   2    (1=imperial, 2=metric output)]
00075>       [NSTORM=   1 ]
00076>       [NRUN  = 0002 ]
00077> #*******************************************************************************
00078> #  SWMHYMO  / INPUT DATA FILE
00079> #*******************************************************************************
00080> #  Project Name  : [5923 Ottawa St]
00081> #  Project Number: [P2710(e01)]
00082> #  Date          : [2025 FEB 05]
00083> #  Modeller      : [MM]
00084> #  Company       : JFSA Canada Inc.
00085> #  License #     : 2549237
00086> #*******************************************************************************
00087> # Model developed to simulate runoff from subcatchments under pre development conditions
00088> #*******************************************************************************
00089> R0002:C00002------------------------------------------------------------------------
00090>       READ STORM
00091>        Filename = STORM.001
00092>        Comment  = CHICAGO STORM 2 Year, 3 Hours
00093>        [SDT=10.00:SDUR=   3.00:PTOT=  31.86]
00094> #*******************************************************************************
00095> # EXT1
00096> #*******************************************************************************
00097> R0002:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00098>       CALIB NASHYD           1.0 01:EXT1          3.21     .037 No_date    1:58    8.15 .256     .000
00099>         [CN= 80.0: N= 3.00: Tp=  .72]
00100> #*******************************************************************************
00101> # EXT2
00102> #*******************************************************************************
00103> R0002:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00104>       CALIB NASHYD           1.0 01:EXT2           .28     .007 No_date    1:25   10.26 .322     .000
00105>         [CN= 85.0: N= 3.00: Tp=  .33]
00106> #*******************************************************************************
00107> # EXT3
00108> #*******************************************************************************
00109> R0002:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00110>       CALIB NASHYD           1.0 01:EXT3           .56     .011 No_date    1:24    8.15 .256     .000
00111>         [CN= 80.0: N= 3.00: Tp=  .32]
00112> #*******************************************************************************
00113> # EXT4
00114> #*******************************************************************************
00115> R0002:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00116>       CALIB NASHYD           1.0 01:EXT4           .31     .006 No_date    1:22    7.80 .245     .000
00117>         [CN= 79.0: N= 3.00: Tp=  .29]
00118> #*******************************************************************************
00119> # EXT5
00120> #*******************************************************************************
00121> R0002:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00122>       CALIB NASHYD           1.0 01:EXT5           .59     .008 No_date    1:36    6.88 .216     .000
00123>         [CN= 76.0: N= 3.00: Tp=  .45]
00124> #*******************************************************************************
00125> # EXT6
00126> #*******************************************************************************
00127> R0002:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00128>       CALIB NASHYD           1.0 01:EXT6           .86     .015 No_date    1:44   10.27 .322     .000
00129>         [CN= 85.0: N= 3.00: Tp=  .56]
00130> #*******************************************************************************
00131> # EXT7
00132> #*******************************************************************************
00133> R0002:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00134>       CALIB NASHYD           1.0 01:EXT7           .47     .011 No_date    1:24    9.33 .293     .000
00135>         [CN= 83.0: N= 3.00: Tp=  .32]
00136> #*******************************************************************************
00137> # EXT8
00138> #*******************************************************************************
00139> R0002:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00140>       CALIB NASHYD           1.0 01:EXT8           .83     .013 No_date    1:33    7.81 .245     .000
00141>         [CN= 79.0: N= 3.00: Tp=  .42]
00142> #*******************************************************************************
00143> # EXT9
00144> #*******************************************************************************
00145> R0002:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00146>       CALIB NASHYD           1.0 01:EXT9          3.57     .045 No_date    1:38    6.88 .216     .000
00147>         [CN= 76.0: N= 3.00: Tp=  .48]
00148> #*******************************************************************************
00149> # EXT9a
00150> #*******************************************************************************
00151> R0002:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00152>       CALIB NASHYD           1.0 01:EXT9a          .01     .001 No_date    1:00    7.47 .234     .000
00153>         [CN= 78.0: N= 3.00: Tp=  .04]
00154> #*******************************************************************************
00155> # EXT10
00156> #*******************************************************************************
00157> R0002:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00158>       CALIB NASHYD           1.0 01:EXT10          .20     .002 No_date    1:34    5.64 .177     .000
00159>         [CN= 71.0: N= 3.00: Tp=  .42]
00160> #*******************************************************************************
00161> # Pre2
00162> #*******************************************************************************
00163> R0002:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00164>       CALIB NASHYD           1.0 01:Pre2           .57     .008 No_date    1:36    7.48 .235     .000
00165>         [CN= 78.0: N= 3.00: Tp=  .46]
00166> #*******************************************************************************
00167> # Pre9
00168> #*******************************************************************************
00169> R0002:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00170>       CALIB NASHYD           1.0 01:Pre9           .83     .007 No_date    1:52    5.65 .177     .000
00171>         [CN= 71.0: N= 3.00: Tp=  .64]
00172> #*******************************************************************************
00173> # Pre10
00174> #*******************************************************************************
00175> R0002:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00176>       CALIB NASHYD           1.0 01:Pre10          .80     .011 No_date    1:22    5.65 .177     .000
00177>         [CN= 71.0: N= 3.00: Tp=  .29]
00178> #*******************************************************************************
00179> # Pre11
00180> #*******************************************************************************
00181> R0002:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00182>       CALIB NASHYD           1.0 01:Pre11          .07     .002 No_date    1:15    7.47 .235     .000
00183>         [CN= 78.0: N= 3.00: Tp=  .21]
00184> #*******************************************************************************
00185> R0002:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00186>       ADD HYD                1.0 02:EXT2           .28     .007 No_date    1:25   10.26  n/a     .000
00187>                            +  1.0 02:Pre2           .57     .008 No_date    1:36    7.48  n/a     .000
00188>                          SUM=   1.0 01:J1           .85     .015 No_date    1:30    8.41  n/a     .000
00189> R0002:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00190>       ROUTE CHANNEL     ->   1.0 02:J1           .85     .015 No_date    1:30    8.41  n/a     .000
00191>        [RDT= 1.00] out<-     1.0 01:R1           .85     .014 No_date    1:40    8.41  n/a     .000
00192>         [L/S/n=  143./ .394/.035]
00193>         [Vmax=  .240:Dmax=  .082]
00194> R0002:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00195>       ADD HYD                1.0 02:R1           .85     .014 No_date    1:40    8.41  n/a     .000
00196>                            +  1.0 02:EXT3          .56     .011 No_date    1:24    8.15  n/a     .000
00197>                            +  1.0 02:EXT1         3.21     .037 No_date    1:58    8.15  n/a     .000
00198>                          SUM=   1.0 01:J2          4.62     .057 No_date    1:46    8.20  n/a     .000
00199> R0002:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00200>       ROUTE CHANNEL     ->   1.0 02:J2          4.62     .057 No_date    1:46    8.20  n/a     .000
00201>        [RDT= 1.00] out<-     1.0 01:R2          4.62     .057 No_date    1:49    8.20  n/a     .000
00202>         [L/S/n=   73./ .425/.035]
00203>         [Vmax=  .350:Dmax=  .155]
00204> R0002:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00205>       ADD HYD                1.0 02:R2          4.62     .057 No_date    1:49    8.20  n/a     .000
00206>                            +  1.0 02:EXT4          .31     .006 No_date    1:22    7.80  n/a     .000
00207>                          SUM=   1.0 01:J3          4.93     .061 No_date    1:46    8.17  n/a     .000
00208> R0002:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00209>       ROUTE CHANNEL     ->   1.0 02:J3          4.93     .061 No_date    1:46    8.17  n/a     .000
00210>        [RDT= 1.00] out<-     1.0 01:R3          4.93     .060 No_date    1:52    8.17  n/a     .000
00211>         [L/S/n=   92./ .274/.035]
00212>         [Vmax=  .288:Dmax=  .161]
00213> R0002:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00214>       ADD HYD                1.0 02:R3          4.93     .060 No_date    1:52    8.17  n/a     .000
00215>                            +  1.0 02:EXT5          .59     .008 No_date    1:36    6.88  n/a     .000
00216>                          SUM=   1.0 01:J4          5.52     .067 No_date    1:50    8.04  n/a     .000
00217> R0002:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00218>       ROUTE CHANNEL     ->   1.0 02:J4          5.52     .067 No_date    1:50    8.04  n/a     .000
00219>        [RDT= 1.00] out<-     1.0 01:R4          5.52     .061 No_date    2:05    8.04  n/a     .000
00220>         [L/S/n=  251./ .190/.035]
00221>         [Vmax=  .266:Dmax=  .173]
00222> R0002:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00223>       ADD HYD                1.0 02:R4          5.52     .061 No_date    2:05    8.04  n/a     .000
00224>                            +  1.0 02:EXT6          .86     .015 No_date    1:44   10.27  n/a     .000
00225>                            +  1.0 02:EXT7          .47     .011 No_date    1:24    9.33  n/a     .000
00226>                          SUM=   1.0 01:J5          6.86     .080 No_date    1:59    8.41  n/a     .000
00227> R0002:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00228>       ROUTE CHANNEL     ->   1.0 02:J5          6.86     .080 No_date    1:59    8.41  n/a     .000
00229>        [RDT= 1.00] out<-     1.0 01:R5          6.86     .078 No_date    2:07    8.41  n/a     .000
00230>         [L/S/n=  237./ .644/.035]
00231>         [Vmax=  .432:Dmax=  .166]
00232> R0002:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00233>       ROUTE CHANNEL     ->   1.0 02:Pre10         .80     .011 No_date    1:22    5.65  n/a     .000
00234>        [RDT= 1.00] out<-     1.0 01:R6          .80     .011 No_date    1:25    5.65  n/a     .000
00235>         [L/S/n=   77./ .776/.035]
00236>         [Vmax=  .492:Dmax=  .008]
00237> R0002:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00238>       ROUTE CHANNEL     ->   1.0 02:Pre9           .83     .007 No_date    1:52    5.65  n/a     .000
00239>        [RDT= 1.00] out<-     1.0 01:R7          .83     .007 No_date    1:56    5.65  n/a     .000
00240>         [L/S/n=  159./1.576/.035]
00241>         [Vmax=  .797:Dmax=  .002]
00242> R0002:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00243>       ADD HYD                1.0 02:R6          .80     .016 No_date    4:19    5.76  n/a     .000
00244>                            +  1.0 02:EXT10         .20     .002 No_date    1:34    5.64  n/a     .000
00245>                          SUM=   1.0 01:J6          1.01     .016 No_date    4:19    5.74  n/a     .000
00246> R0002:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00247>       ROUTE CHANNEL     ->   1.0 02:J6          1.01     .016 No_date    4:19    5.74  n/a     .000
00248>        [RDT= 1.00] out<-     1.0 01:R8          1.01     .013 No_date    1:30    5.74  n/a     .000
00249>         [L/S/n=   79./ .522/.035]
00250>         [Vmax=  .423:Dmax=  .011]
00251> R0002:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00252>       ADD HYD                1.0 02:R8          1.01     .013 No_date    1:30    5.74  n/a     .000
00253>                            +  1.0 02:R7           .83     .007 No_date    1:56    5.67  n/a     .000
00254>                          SUM=   1.0 01:J7          1.83     .019 No_date    1:35    5.71  n/a     .000
00255> R0002:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00256>       ROUTE CHANNEL     ->   1.0 02:J7          1.83     .019 No_date    1:35    5.71  n/a     .000
00257>        [RDT= 1.00] out<-     1.0 01:R9          1.83     .019 No_date    1:36    5.71  n/a     .000
00258>         [L/S/n=   29./ .887/.035]
00259>         [Vmax=  .543:Dmax=  .013]
00260> R0002:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00261>       ADD HYD                1.0 02:EXT9          3.57     .045 No_date    1:38    6.88  n/a     .000
00262>                            +  1.0 02:R9           1.83     .019 No_date    1:36    5.71  n/a     .000
00263>                            +  1.0 02:EXT8          .83     .013 No_date    1:33    7.81  n/a     .000
00264>                            +  1.0 02:R5           6.86     .078 No_date    2:07    8.41  n/a     .000
00265>                          SUM=   1.0 01:J8         13.10     .141 No_date    1:54    7.58  n/a     .000
00266> R0002:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00267>       ROUTE PIPE        ->   1.0 02:J8         13.10     .141 No_date    1:54    7.58  n/a     .000
00268> *     [RDT= 1.00] out<-     1.0 01:Outlet      13.10     .141 No_date    1:55    7.58  n/a     .000
00269>         [L/S/n=   9./ .010/.013]
00270>         [Vmax=  .304:Dmax=  .672]
00271>         [Din=  .53:Dused=  .82)
00272> ###############################################################################
00273> # STORMS
00274> ###############################################################################
00275>   ** END OF RUN :   4
00276>
00277> ********************************************************************************
00278>
00279>
00280>
00281>
00282>
00283>  RUN#:COMMAND#
00284> R0005:C00001------------------------------------------------------------------------
00285>       START
00286>       [TZERO =    .00 hrs on       0]
00287>       [METOUT=   2    (1=imperial, 2=metric output)]
00288>       [NSTORM=   1 ]
00289>       [NRUN  = 0005 ]
00290> #*******************************************************************************
00291> #  SWMHYMO  / INPUT DATA FILE
00292> #*******************************************************************************
00293> #  Project Name  : [5923 Ottawa St]
00294> #  Project Number: [P2710(e01)]
00295> #  Date          : [2025 FEB 05]
00296> #  Modeller      : [MM]
00297> #  Company       : JFSA Canada Inc.
00298> #  License #     : 2549237
00299> #*******************************************************************************
00300> # Model developed to simulate runoff from subcatchments under pre development conditions
00301> #*******************************************************************************
00302> R0005:C00002------------------------------------------------------------------------
00303>       READ STORM
00304>        Filename = STORM.001
00305>        Comment  = CHICAGO STORM  5 Year, 3 Hours
00306>        [SDT=10.00:SDUR=   3.00:PTOT=  42.51]
00307> #*******************************************************************************
00308> # EXT1
00309> #*******************************************************************************
00310> R0005:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00311>       CALIB NASHYD           1.0 01:EXT1          3.21     .066 No_date    1:55   14.13 .332     .000
00312>         [CN= 80.0: N= 3.00: Tp=  .72]
00313> #*******************************************************************************
00314> # EXT2
00315> #*******************************************************************************
00316> R0005:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00317>       CALIB NASHYD           1.0 01:EXT2           .28     .012 No_date    1:23   17.32 .407     .000
00318>         [CN= 85.0: N= 3.00: Tp=  .33]
00319> #*******************************************************************************
00320> # EXT3
00321> #*******************************************************************************
00322> R0005:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00323>       CALIB NASHYD           1.0 01:EXT3           .56     .020 No_date    1:23   14.13 .332     .000
00324>         [CN= 80.0: N= 3.00: Tp=  .32]
00325> #*******************************************************************************
00326> # EXT4
00327> #*******************************************************************************
00328> R0005:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00329>       CALIB NASHYD           1.0 01:EXT4           .31     .011 No_date    1:21   13.59 .320     .000
00330>         [CN= 79.0: N= 3.00: Tp=  .29]
00331> #*******************************************************************************
00332> # EXT5
00333> #*******************************************************************************
00334> R0005:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00335>       CALIB NASHYD           1.0 01:EXT5           .59     .014 No_date    1:34   12.13 .285     .000
00336>         [CN= 76.0: N= 3.00: Tp=  .45]
00337> #*******************************************************************************
00338> # EXT6
00339> #*******************************************************************************
00340> R0005:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00341>       CALIB NASHYD           1.0 01:EXT6           .86     .026 No_date    1:42   17.32 .407     .000
00342>         [CN= 85.0: N= 3.00: Tp=  .56]
00343> #*******************************************************************************
00344> # EXT7
00345> #*******************************************************************************
00346> R0005:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00347>       CALIB NASHYD           1.0 01:EXT7           .47     .019 No_date    1:23   15.94 .375     .000
00348>         [CN= 83.0: N= 3.00: Tp=  .32]
00349> #*******************************************************************************
00350> # EXT8
00351> #*******************************************************************************
00352> R0005:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00353>       CALIB NASHYD           1.0 01:EXT8           .83     .024 No_date    1:31   13.59 .320     .000
00354>         [CN= 79.0: N= 3.00: Tp=  .42]
00355> #*******************************************************************************
00356> # EXT9
00357> #*******************************************************************************
00358> R0005:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00359>       CALIB NASHYD           1.0 01:EXT9          3.57     .083 No_date    1:36   12.13 .285     .000
00360>         [CN= 76.0: N= 3.00: Tp=  .48]
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00361> #*******************************************************************************
00362> # EXT9a
00363> #*******************************************************************************
00364> R0005:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00365>      CALIB NASHYD            1.0 01:EXT9a          .01     .001 No_date    1:00   13.07 .307     .000
00366>        [CN= 78.0: N= 3.00: Tp=  .04]
00367> #*******************************************************************************
00368> # EXT10
00369> #*******************************************************************************
00370> R0005:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00371>      CALIB NASHYD            1.0 01:EXT10          .20     .004 No_date    1:32   10.11 .238     .000
00372>        [CN= 71.0: N= 3.00: Tp=  .42]
00373> #*******************************************************************************
00374> # Pre2
00375> #*******************************************************************************
00376> R0005:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00377>      CALIB NASHYD            1.0 01:Pre2           .57     .015 No_date    1:35   13.08 .308     .000
00378>        [CN= 78.0: N= 3.00: Tp=  .46]
00379> #*******************************************************************************
00380> # Pre9
00381> #*******************************************************************************
00382> R0005:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00383>      CALIB NASHYD            1.0 01:Pre9           .83     .013 No_date    1:50   10.11 .238     .000
00384>        [CN= 71.0: N= 3.00: Tp=  .64]
00385> #*******************************************************************************
00386> # Pre10
00387> #*******************************************************************************
00388> R0005:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00389>      CALIB NASHYD            1.0 01:Pre10          .80     .021 No_date    1:21   10.11 .238     .000
00390>        [CN= 71.0: N= 3.00: Tp=  .29]
00391> #*******************************************************************************
00392> # Pre11
00393> #*******************************************************************************
00394> R0005:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00395>      CALIB NASHYD            1.0 01:Pre11          .07     .003 No_date    1:14   13.07 .308     .000
00396>        [CN= 78.0: N= 3.00: Tp=  .21]
00397> #*******************************************************************************
00398> R0005:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00399>      ADD HYD                 .28     .012 No_date    1:23   17.32  n/a     .000
00400>                      +       1.0 02:Pre2           .57     .015 No_date    1:35   13.08  n/a     .000
00401>                    SUM=      1.0 01:J1             .85     .026 No_date    1:29   14.50  n/a     .000
00402> R0005:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00403>      ROUTE CHANNEL   ->      1.0 02:J1             .85     .026 No_date    1:29   14.50  n/a     .000
00404>        [RDT= 1.00] out<-     1.0 01:R1             .85     .025 No_date    1:36   14.50  n/a     .000
00405>          [L/S/n=  143./ .394/.035]
00406>          (Vmax=  .291:Dmax=  .109)
00407> R0005:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00408>      ADD HYD                 .56     .025 No_date    1:36   14.50  n/a     .000
00409>                      +       1.0 02:EXT3           .56     .020 No_date    1:23   14.13  n/a     .000
00410>                      +       1.0 02:EXT1          3.21     .066 No_date    1:55   14.13  n/a     .000
00411>                    SUM=      1.0 01:J2            4.62     .102 No_date    1:43   14.20  n/a     .000
00412> R0005:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00413>      ROUTE CHANNEL   ->      1.0 02:J2            4.62     .102 No_date    1:43   14.20  n/a     .000
00414>        [RDT= 1.00] out<-     1.0 01:R2            4.62     .101 No_date    1:45   14.20  n/a     .000
00415>          [L/S/n=   73./ .425/.035]
00416>          (Vmax=  .412:Dmax=  .195)
00417> R0005:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00418>      ADD HYD                4.62     .101 No_date    1:45   14.20  n/a     .000
00419>                      +       1.0 02:EXT4           .31     .011 No_date    1:21   13.59  n/a     .000
00420>                    SUM=      1.0 01:J3            4.93     .109 No_date    1:43   14.16  n/a     .000
00421> R0005:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00422>      ROUTE CHANNEL   ->      1.0 02:J3            4.93     .109 No_date    1:43   14.16  n/a     .000
00423>        [RDT= 1.00] out<-     1.0 01:R3            4.93     .108 No_date    1:47   14.16  n/a     .000
00424>          [L/S/n=   92./ .274/.035]
00425>          (Vmax=  .337:Dmax=  .202)
00426> R0005:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00427>      ADD HYD                4.93     .108 No_date    1:47   14.16  n/a     .000
00428>                      +       1.0 02:EXT5           .59     .014 No_date    1:34   12.13  n/a     .000
00429>                    SUM=      1.0 01:J4            5.52     .121 No_date    1:45   13.94  n/a     .000
00430> R0005:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00431>      ROUTE CHANNEL   ->      1.0 02:J4            5.52     .121 No_date    1:45   13.94  n/a     .000
00432>        [RDT= 1.00] out<-     1.0 01:R4            5.52     .112 No_date    1:58   13.94  n/a     .000
00433>          [L/S/n=  251./ .190/.035]
00434>          (Vmax=  .323:Dmax=  .221)
00435> R0005:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00436>      ADD HYD                5.52     .112 No_date    1:58   13.94  n/a     .000
00437>                      +       1.0 02:EXT6           .86     .026 No_date    1:42   17.32  n/a     .000
00438>                      +       1.0 02:EXT7           .47     .019 No_date    1:23   15.94  n/a     .000
00439>                    SUM=      1.0 01:J5            6.86     .147 No_date    1:53   14.51  n/a     .000
00440> R0005:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00441>      ROUTE CHANNEL   ->      1.0 02:J5            6.86     .147 No_date    1:53   14.51  n/a     .000
00442>        [RDT= 1.00] out<-     1.0 01:R5            6.86     .144 No_date    2:00   14.51  n/a     .000
00443>          [L/S/n=  237./ .644/.035]
00444>          (Vmax=  .519:Dmax=  .210)
00445> R0005:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00446>      ROUTE CHANNEL   ->      1.0 02:Pre10          .80     .021 No_date    1:21   10.11  n/a     .000
00447>        [RDT= 1.00] out<-     1.0 01:R6             .80     .021 No_date    1:24   10.11  n/a     .000
00448>          [L/S/n=   77./ .776/.035]
00449>          (Vmax=  .492:Dmax=  .015)
00450> R0005:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00451>      ROUTE CHANNEL   ->      1.0 02:Pre9           .83     .013 No_date    1:50   10.11  n/a     .000
00452>        [RDT= 1.00] out<-     1.0 01:R7             .83     .013 No_date    1:54   10.11  n/a     .000
00453>          [L/S/n=  159./1.576/.035]
00454>          (Vmax=  .797:Dmax=  .004)
00455> R0005:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00456>      ADD HYD                 .80     .021 No_date    1:24   10.26  n/a     .000
00457>                      +       1.0 02:EXT10          .20     .004 No_date    1:32   10.11  n/a     .000
00458>                    SUM=      1.0 01:J6            1.01     .025 No_date    1:25   10.23  n/a     .000
00459> R0005:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00460>      ROUTE CHANNEL   ->      1.0 02:J6            1.01     .025 No_date    1:25   10.23  n/a     .000
00461>        [RDT= 1.00] out<-     1.0 01:R8            1.01     .025 No_date    1:28   10.23  n/a     .000
00462>          [L/S/n=   79./ .522/.035]
00463>          (Vmax=  .423:Dmax=  .218)
00464> R0005:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00465>      ADD HYD                1.01     .025 No_date    1:28   10.23  n/a     .000
00466>                      +       1.0 02:R7             .83     .013 No_date    1:54   10.14  n/a     .000
00467>                    SUM=      1.0 01:J7            1.83     .035 No_date    1:34   10.19  n/a     .000
00468> R0005:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00469>      ROUTE CHANNEL   ->      1.0 02:J7            1.83     .035 No_date    1:34   10.19  n/a     .000
00470>        [RDT= 1.00] out<-     1.0 01:R9            1.83     .035 No_date    1:34   10.19  n/a     .000
00471>          [L/S/n=   29./ .887/.035]
00472>          (Vmax=  .543:Dmax=  .024)
00473> R0005:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00474>      ADD HYD                3.57     .083 No_date    1:36   12.13  n/a     .000
00475>                      +       1.0 02:R9             .83     .035 No_date    1:34   10.20  n/a     .000
00476>                      +       1.0 02:EXT8           .83     .024 No_date    1:31   13.59  n/a     .000
00477>                      +       1.0 02:R5            6.86     .144 No_date    2:00   14.51  n/a     .000
00478>                    SUM=      1.0 01:J8           13.10     .264 No_date    1:49   13.20  n/a     .000
00479> R0005:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00480>      ROUTE PIPE      ->      1.0 02:J8            13.10     .264 No_date    1:49   13.20  n/a     .000
00481> *    [RDT= 1.00] out<-     1.0 01:Outlet        13.10     .264 No_date    1:49   13.20  n/a     .000
00482>          [L/S/n=    8./ .010/.013]
00483>          (Vmax=  .356:Dmax=  .851)
00484>          [Din=  .53:Dused= 1.04)
00485> ###############################################################################
00486> # STORMS
00487> ###############################################################################
00488>  ** END OF RUN :   9
00489>
00490> *******************************************************************************
00491>
00492>
00493>
00494>
00495>
00496>  RUN#:COMMAND#
00497> R0010:C00001-----------------------------------------------------------------------
00498>       START
00499>        [TZERO =    .00 hrs on        0]
00500>        [METOUT=   2    (1=imperial, 2=metric output)]
00501>        [NSTORM=   1 ]
00502>        [NRUN  = 0010 ]
00503> #*******************************************************************************
00504> #  SWMHYMO  / INPUT DATA FILE
00505> #*******************************************************************************
00506> #  Project Name  : [5923 Ottawa St]
00507> #  Project Number: [P2710(e01)]
00508> #  Date          : [2025 FEB 05]
00509> #  Modeller      : [MM]
00510> #  Company       : JFSA Canada Inc.
00511> #  License #     : 2549237
00512> #*******************************************************************************
00513> # Model developed to simulate runoff from subcatchments under pre development conditions
00514> #*******************************************************************************
00515> R0010:C00002-----------------------------------------------------------------------
00516>       READ STORM
00517>        Filename = STORM.001
00518>        Comment  = CHICAGO STORM 10 Year, 3 Hours
00519>        [SDT=10.00:SDUR=   3.00:PTOT=  49.50]
00520> #*******************************************************************************
00521> # EXT1
00522> #*******************************************************************************
00523> R0010:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00524>      CALIB NASHYD            1.0 01:EXT1          3.21     .088 No_date    1:54   18.55 .375     .000
00525>        [CN= 80.0: N= 3.00: Tp=  .72]
00526> #*******************************************************************************
00527> # EXT2
00528> #*******************************************************************************
00529> R0010:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00530>      CALIB NASHYD            1.0 01:EXT2           .28     .016 No_date    1:23   22.42 .453     .000
00531>        [CN= 85.0: N= 3.00: Tp=  .33]
00532> #*******************************************************************************
00533> # EXT3
00534> #*******************************************************************************
00535> R0010:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00536>      CALIB NASHYD            1.0 01:EXT3           .56     .027 No_date    1:23   18.55 .375     .000
00537>        [CN= 80.0: N= 3.00: Tp=  .32]
00538> #*******************************************************************************
00539> # EXT4
00540> #*******************************************************************************
00541> R0010:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00542>      CALIB NASHYD            1.0 01:EXT4           .31     .015 No_date    1:20   17.89 .361     .000
00543>        [CN= 79.0: N= 3.00: Tp=  .29]
00544> #*******************************************************************************
00545> # EXT5
00546> #*******************************************************************************
00547> R0010:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00548>      CALIB NASHYD            1.0 01:EXT5           .59     .019 No_date    1:33   16.07 .325     .000
00549>        [CN= 76.0: N= 3.00: Tp=  .45]
00550> #*******************************************************************************
00551> # EXT6
00552> #*******************************************************************************
00553> R0010:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00554>      CALIB NASHYD            1.0 01:EXT6           .86     .035 No_date    1:41   22.42 .453     .000
00555>        [CN= 85.0: N= 3.00: Tp=  .56]
00556> #*******************************************************************************
00557> # EXT7
00558> #*******************************************************************************
00559> R0010:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00560>      CALIB NASHYD            1.0 01:EXT7           .47     .025 No_date    1:22   20.75 .419     .000
00561>        [CN= 83.0: N= 3.00: Tp=  .32]
00562> #*******************************************************************************
00563> # EXT8
00564> #*******************************************************************************
00565> R0010:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00566>      CALIB NASHYD            1.0 01:EXT8           .83     .032 No_date    1:31   17.89 .361     .000
00567>        [CN= 79.0: N= 3.00: Tp=  .42]
00568> #*******************************************************************************
00569> # EXT9
00570> #*******************************************************************************
00571> R0010:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00572>      CALIB NASHYD            1.0 01:EXT9          3.57     .111 No_date    1:36   16.08 .325     .000
00573>        [CN= 76.0: N= 3.00: Tp=  .48]
00574> #*******************************************************************************
00575> # EXT9a
00576> #*******************************************************************************
00577> R0010:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00578>      CALIB NASHYD            1.0 01:EXT9a          .01     .001 No_date    1:00   17.25 .348     .000
00579>        [CN= 78.0: N= 3.00: Tp=  .04]
00580> #*******************************************************************************
00581> # EXT10
00582> #*******************************************************************************
00583> R0010:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00584>      CALIB NASHYD            1.0 01:EXT10          .20     .006 No_date    1:31   13.53 .273     .000
00585>        [CN= 71.0: N= 3.00: Tp=  .42]
00586> #*******************************************************************************
00587> # Pre2
00588> #*******************************************************************************
00589> R0010:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00590>      CALIB NASHYD            1.0 01:Pre2           .57     .020 No_date    1:34   17.26 .349     .000
00591>        [CN= 78.0: N= 3.00: Tp=  .46]
00592> #*******************************************************************************
00593> # Pre9
00594> #*******************************************************************************
00595> R0010:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00596>      CALIB NASHYD            1.0 01:Pre9           .83     .018 No_date    1:49   13.53 .273     .000
00597>        [CN= 71.0: N= 3.00: Tp=  .64]
00598> #*******************************************************************************
00599> # Pre10
00600> #*******************************************************************************
00601> R0010:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00602>      CALIB NASHYD            1.0 01:Pre10          .80     .029 No_date    1:21   13.53 .273     .000
00603>        [CN= 71.0: N= 3.00: Tp=  .29]
00604> #*******************************************************************************
00605> # Pre11
00606> #*******************************************************************************
00607> R0010:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00608>      CALIB NASHYD            1.0 01:Pre11          .07     .004 No_date    1:14   17.25 .348     .000
00609>        [CN= 78.0: N= 3.00: Tp=  .21]
00610> #*******************************************************************************
00611> R0010:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00612>      ADD HYD                 .28     .016 No_date    1:23   22.42  n/a     .000
00613>                      +       1.0 02:Pre2           .57     .020 No_date    1:34   17.26  n/a     .000
00614>                    SUM=      1.0 01:J1             .85     .035 No_date    1:28   18.99  n/a     .000
00615> R0010:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00616>      ROUTE CHANNEL   ->      1.0 02:J1             .85     .035 No_date    1:28   18.99  n/a     .000
00617>        [RDT= 1.00] out<-     1.0 01:R1             .85     .033 No_date    1:35   18.99  n/a     .000
00618>          [L/S/n=  143./ .394/.035]
00619>          (Vmax=  .311:Dmax=  .122)
00620> R0010:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00621>      ADD HYD                 .85     .033 No_date    1:35   18.99  n/a     .000
00622>                      +       1.0 02:EXT3           .56     .027 No_date    1:23   18.55  n/a     .000
00623>                      +       1.0 02:EXT1          3.21     .088 No_date    1:54   18.55  n/a     .000
00624>                    SUM=      1.0 01:J2            4.62     .136 No_date    1:42   18.63  n/a     .000
00625> R0010:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00626>      ROUTE CHANNEL   ->      1.0 02:J2            4.62     .136 No_date    1:42   18.63  n/a     .000
00627>        [RDT= 1.00] out<-     1.0 01:R2            4.62     .135 No_date    1:45   18.63  n/a     .000
00628>          [L/S/n=   73./ .425/.035]
00629>          (Vmax=  .444:Dmax=  .219)
00630> R0010:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00631>      ADD HYD                4.62     .135 No_date    1:45   18.63  n/a     .000
00632>                      +       1.0 02:EXT4           .31     .015 No_date    1:20   17.89  n/a     .000
00633>                    SUM=      1.0 01:J3            4.93     .145 No_date    1:42   18.59  n/a     .000
00634> R0010:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00635>      ROUTE CHANNEL   ->      1.0 02:J3            4.93     .145 No_date    1:42   18.59  n/a     .000
00636>        [RDT= 1.00] out<-     1.0 01:R3            4.93     .144 No_date    1:46   18.59  n/a     .000
00637>          [L/S/n=   92./ .274/.035]
00638>          (Vmax=  .364:Dmax=  .227)
00639> R0010:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00640>      ADD HYD                4.93     .144 No_date    1:46   18.59  n/a     .000
00641>                      +       1.0 02:EXT5           .59     .019 No_date    1:33   16.07  n/a     .000
00642>                    SUM=      1.0 01:J4            5.52     .162 No_date    1:44   18.32  n/a     .000
00643> R0010:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00644>      ROUTE CHANNEL   ->      1.0 02:J4            5.52     .162 No_date    1:44   18.32  n/a     .000
00645>        [RDT= 1.00] out<-     1.0 01:R4            5.52     .151 No_date    1:56   18.32  n/a     .000
00646>          [L/S/n=  251./ .190/.035]
00647>          (Vmax=  .352:Dmax=  .250)
00648> R0010:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00649>      ADD HYD                5.52     .151 No_date    1:56   18.32  n/a     .000
00650>                      +       1.0 02:EXT6           .86     .035 No_date    1:41   22.42  n/a     .000
00651>                      +       1.0 02:EXT7           .47     .025 No_date    1:22   20.75  n/a     .000
00652>                    SUM=      1.0 01:J5            6.86     .197 No_date    1:51   19.00  n/a     .000
00653> R0010:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00654>      ROUTE CHANNEL   ->      1.0 02:J5            6.86     .197 No_date    1:51   19.00  n/a     .000
00655>        [RDT= 1.00] out<-     1.0 01:R5            6.86     .194 No_date    1:56   19.00  n/a     .000
00656>          [L/S/n=  237./ .644/.035]
00657>          (Vmax=  .573:Dmax=  .238)
00658> R0010:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00659>      ROUTE CHANNEL   ->      1.0 02:Pre10          .80     .029 No_date    1:21   13.53  n/a     .000
00660>        [RDT= 1.00] out<-     1.0 01:R6             .80     .029 No_date    1:24   13.53  n/a     .000
00661>          [L/S/n=   77./ .776/.035]
00662>          (Vmax=  .492:Dmax=  .021)
00663> R0010:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00664>      ROUTE CHANNEL   ->      1.0 02:Pre9           .83     .018 No_date    1:49   13.53  n/a     .000
00665>        [RDT= 1.00] out<-     1.0 01:R7             .83     .018 No_date    1:53   13.53  n/a     .000
00666>          [L/S/n=  159./1.576/.035]
00667>          (Vmax=  .797:Dmax=  .005)
00668> R0010:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00669>      ADD HYD                1.01     .034 No_date    1:24   13.70  n/a     .000
00670>                      +       1.0 02:EXT10          .20     .006 No_date    1:31   13.53  n/a     .000
00671>                    SUM=      1.0 01:J6            1.01     .034 No_date    1:24   13.66  n/a     .000
00672> R0010:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00673>      ROUTE CHANNEL   ->      1.0 02:J6            1.01     .034 No_date    1:24   13.66  n/a     .000
00674>        [RDT= 1.00] out<-     1.0 01:R8            1.01     .034 No_date    1:28   13.66  n/a     .000
00675>          [L/S/n=   79./ .522/.035]
00676>          (Vmax=  .423:Dmax=  .025)
00677> R0010:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00678>      ADD HYD                1.01     .034 No_date    1:28   13.66  n/a     .000
00679>                      +       1.0 02:R7             .83     .018 No_date    1:53   13.55  n/a     .000
00680>                    SUM=      1.0 01:J7            1.83     .047 No_date    1:33   13.61  n/a     .000
00681> R0010:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00682>      ROUTE CHANNEL   ->      1.0 02:J7            1.83     .047 No_date    1:33   13.61  n/a     .000
00683>        [RDT= 1.00] out<-     1.0 01:R9            1.83     .047 No_date    1:34   13.61  n/a     .000
00684>          [L/S/n=   29./ .887/.035]
00685>          (Vmax=  .543:Dmax=  .032)
00686> R0010:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00687>      ADD HYD                3.57     .111 No_date    1:36   16.08  n/a     .000
00688>                      +       1.0 02:R9             .83     .047 No_date    1:34   13.62  n/a     .000
00689>                      +       1.0 02:EXT8           .83     .032 No_date    1:31   17.89  n/a     .000
00690>                      +       1.0 02:R5            6.86     .194 No_date    1:56   19.00  n/a     .000
00691>                    SUM=      1.0 01:J8           13.10     .361 No_date    1:47   17.38  n/a     .000
00692> R0010:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00693>      ROUTE PIPE      ->      1.0 02:J8            13.10     .361 No_date    1:47   17.38  n/a     .000
00694> *    [RDT= 1.00] out<-     1.0 01:Outlet        13.10     .361 No_date    1:47   17.38  n/a     .000
00695>          [L/S/n=    8./ .010/.013]
00696>          (Vmax=  .385:Dmax=  .957)
00697>          [Din=  .53:Dused= 1.17)
00698> ###############################################################################
00699> # STORMS
00700> ###############################################################################
00701>  ** END OF RUN :   24
00702>
00703> *******************************************************************************
00704>
00705>
00706>
00707>
00708>
00709>  RUN#:COMMAND#
00710> R0025:C00001-----------------------------------------------------------------------
00711>       START
00712>        [TZERO =    .00 hrs on        0]
00713>        [METOUT=   2    (1=imperial, 2=metric output)]
00714>        [NSTORM=   1 ]
00715>        [NRUN  = 0025 ]
00716> #*******************************************************************************
00717> #  SWMHYMO  / INPUT DATA FILE
00718> #*******************************************************************************
00719> #  Project Name  : [5923 Ottawa St]
00720> #  Project Number: [P2710(e01)]
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00721> #  Date           : [2025 FEB 05]
00722> #  Modeller       : [MM]
00723> #  Company        : JFSA Canada Inc.
00724> #  License #      : 2549237
00725> #*************************************************************************************
00726> # Model developed to simulate runoff from subcatchments under pre development conditions
00727> #*************************************************************************************
00728> R0025:C00002-------------------------------------------------------------------------------
00729>       READ STORM
00730>        Filename = STORM.001
00731>        Comment  = CHICAGO STORM   25 Year, 3 Hours
00732>        [SDT=10.00:SDUR=   3.00:PTOT=  58.23]
00733> #*************************************************************************************
00734> # EXT1
00735> #*************************************************************************************
00736> R0025:C00003-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00737>      CALIB NASHYD             1.0 01:EXT1            3.21     .118 No_date    1:53   24.50  .421     .000
00738>        [CN= 80.0: N= 3.00: Tp=  .72]
00739> #*************************************************************************************
00740> # EXT2
00741> #*************************************************************************************
00742> R0025:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00743>      CALIB NASHYD             1.0 01:EXT2            .28     .022 No_date    1:22   29.15  .501     .000
00744>        [CN= 85.0: N= 3.00: Tp=  .33]
00745> #*************************************************************************************
00746> # EXT3
00747> #*************************************************************************************
00748> R0025:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00749>      CALIB NASHYD             1.0 01:EXT3            .56     .036 No_date    1:22   24.50  .421     .000
00750>        [CN= 80.0: N= 3.00: Tp=  .32]
00751> #*************************************************************************************
00752> # EXT4
00753> #*************************************************************************************
00754> R0025:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00755>      CALIB NASHYD             1.0 01:EXT4            .31     .020 No_date    1:20   23.69  .407     .000
00756>        [CN= 79.0: N= 3.00: Tp=  .29]
00757> #*************************************************************************************
00758> # EXT5
00759> #*************************************************************************************
00760> R0025:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00761>      CALIB NASHYD             1.0 01:EXT5            .59     .026 No_date    1:33   21.44  .368     .000
00762>        [CN= 76.0: N= 3.00: Tp=  .45]
00763> #*************************************************************************************
00764> # EXT6
00765> #*************************************************************************************
00766> R0025:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00767>      CALIB NASHYD             1.0 01:EXT6            .86     .046 No_date    1:40   29.15  .501     .000
00768>        [CN= 85.0: N= 3.00: Tp=  .56]
00769> #*************************************************************************************
00770> # EXT7
00771> #*************************************************************************************
00772> R0025:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00773>      CALIB NASHYD             1.0 01:EXT7            .47     .034 No_date    1:22   27.17  .467     .000
00774>        [CN= 83.0: N= 3.00: Tp=  .32]
00775> #*************************************************************************************
00776> # EXT8
00777> #*************************************************************************************
00778> R0025:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00779>      CALIB NASHYD             1.0 01:EXT8            .83     .043 No_date    1:30   23.69  .407     .000
00780>        [CN= 79.0: N= 3.00: Tp=  .42]
00781> #*************************************************************************************
00782> # EXT9
00783> #*************************************************************************************
00784> R0025:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00785>      CALIB NASHYD             1.0 01:EXT9            3.57     .151 No_date    1:35   21.44  .368     .000
00786>        [CN= 76.0: N= 3.00: Tp=  .48]
00787> #*************************************************************************************
00788> # EXT9a
00789> #*************************************************************************************
00790> R0025:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00791>      CALIB NASHYD             1.0 01:EXT9a           .01     .002 No_date    1:00   22.90  .393     .000
00792>        [CN= 78.0: N= 3.00: Tp=  .04]
00793> #*************************************************************************************
00794> # EXT10
00795> #*************************************************************************************
00796> R0025:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00797>      CALIB NASHYD             1.0 01:EXT10           .20     .008 No_date    1:31   18.23  .313     .000
00798>        [CN= 71.0: N= 3.00: Tp=  .42]
00799> #*************************************************************************************
00800> # Pre2
00801> #*************************************************************************************
00802> R0025:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00803>      CALIB NASHYD             1.0 01:Pre2            .57     .027 No_date    1:33   22.91  .393     .000
00804>        [CN= 78.0: N= 3.00: Tp=  .46]
00805> #*************************************************************************************
00806> # Pre9
00807> #*************************************************************************************
00808> R0025:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00809>      CALIB NASHYD             1.0 01:Pre9            .83     .024 No_date    1:48   18.23  .313     .000
00810>        [CN= 71.0: N= 3.00: Tp=  .64]
00811> #*************************************************************************************
00812> # Pre10
00813> #*************************************************************************************
00814> R0025:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00815>      CALIB NASHYD             1.0 01:Pre10           .80     .040 No_date    1:20   18.23  .313     .000
00816>        [CN= 71.0: N= 3.00: Tp=  .29]
00817> #*************************************************************************************
00818> # Pre11
00819> #*************************************************************************************
00820> R0025:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00821>      CALIB NASHYD             1.0 01:Pre11           .07     .005 No_date    1:13   22.90  .393     .000
00822>        [CN= 78.0: N= 3.00: Tp=  .21]
00823> #*************************************************************************************
00824> R0025:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00825>      ADD HYD                  1.0 02:EXT2            .28     .022 No_date    1:22   29.15  n/a      .000
00826>                             + 1.0 02:Pre2            .57     .027 No_date    1:33   22.91  n/a      .000
00827>                        SUM=   1.0 01:J1              .85     .047 No_date    1:27   25.00  n/a      .000
00828> R0025:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00829>      ROUTE CHANNEL    ->     1.0 02:J1              .85     .047 No_date    1:27   25.00  n/a      .000
00830>        [RDT= 1.00] out<-     1.0 01:R1              .85     .045 No_date    1:34   25.00  n/a      .000
00831>         [L/S/n=  143./ .394/.035]
00832>         [Vmax=  .340:Dmax=  .139]
00833> R0025:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00834>      ADD HYD                  1.0 02:R1              .85     .045 No_date    1:34   25.00  n/a      .000
00835>                             + 1.0 02:EXT3            .56     .036 No_date    1:22   24.50  n/a      .000
00836>                             + 1.0 02:EXT1           3.21     .118 No_date    1:53   24.50  n/a      .000
00837>                        SUM=   1.0 01:J2              4.62     .181 No_date    1:41   24.59  n/a      .000
00838> R0025:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00839>      ROUTE CHANNEL    ->     1.0 02:J2              4.62     .181 No_date    1:41   24.59  n/a      .000
00840>        [RDT= 1.00] out<-     1.0 01:R2              4.62     .181 No_date    1:43   24.59  n/a      .000
00841>         [L/S/n=  73./ .425/.035]
00842>         [Vmax=  .480:Dmax=  .246]
00843> R0025:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00844>      ADD HYD                  1.0 02:R2              4.62     .181 No_date    1:43   24.59  n/a      .000
00845>                             + 1.0 02:EXT4            .31     .020 No_date    1:20   23.69  n/a      .000
00846>                        SUM=   1.0 01:J3              4.93     .194 No_date    1:40   24.54  n/a      .000
00847> R0025:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00848>      ROUTE CHANNEL    ->     1.0 02:J3              4.93     .194 No_date    1:40   24.54  n/a      .000
00849>        [RDT= 1.00] out<-     1.0 01:R3              4.93     .193 No_date    1:44   24.54  n/a      .000
00850>         [L/S/n=  92./ .274/.035]
00851>         [Vmax=  .393:Dmax=  .255]
00852> R0025:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00853>      ADD HYD                  1.0 02:R3              4.93     .193 No_date    1:44   24.54  n/a      .000
00854>                             + 1.0 02:EXT5            .59     .026 No_date    1:33   21.44  n/a      .000
00855>                        SUM=   1.0 01:J4              5.52     .218 No_date    1:42   24.20  n/a      .000
00856> R0025:C00025-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00857>      ROUTE CHANNEL    ->     1.0 02:J4              5.52     .218 No_date    1:42   24.20  n/a      .000
00858>        [RDT= 1.00] out<-     1.0 01:R4              5.52     .205 No_date    1:53   24.20  n/a      .000
00859>         [L/S/n=  251./ .190/.035]
00860>         [Vmax=  .384:Dmax=  .285]
00861> R0025:C00026-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00862>      ADD HYD                  1.0 02:R4              5.52     .205 No_date    1:53   24.20  n/a      .000
00863>                             + 1.0 02:EXT6            .86     .046 No_date    1:40   29.15  n/a      .000
00864>                             + 1.0 02:EXT7            .47     .034 No_date    1:22   27.17  n/a      .000
00865>                        SUM=   1.0 01:J5              6.86     .267 No_date    1:49   25.03  n/a      .000
00866> R0025:C00027-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00867>      ROUTE CHANNEL    ->     1.0 02:J5              6.86     .267 No_date    1:49   25.03  n/a      .000
00868>        [RDT= 1.00] out<-     1.0 01:R5              6.86     .263 No_date    1:54   25.03  n/a      .000
00869>         [L/S/n=  237./ .644/.035]
00870>         [Vmax=  .623:Dmax=  .267]
00871> R0025:C00028-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00872>      ROUTE CHANNEL    ->     1.0 02:Pre10           .80     .040 No_date    1:20   18.23  n/a      .000
00873>        [RDT= 1.00] out<-     1.0 01:R6              .80     .039 No_date    1:23   18.23  n/a      .000
00874>         [L/S/n=  77./ .776/.035]
00875>         [Vmax=  .492:Dmax=  .029]
00876> R0025:C00029-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00877>      ROUTE CHANNEL    ->     1.0 02:Pre9            .83     .024 No_date    1:48   18.23  n/a      .000
00878>        [RDT= 1.00] out<-     1.0 01:R7              .83     .024 No_date    1:52   18.23  n/a      .000
00879>         [L/S/n=  159./1.576/.035]
00880>         [Vmax=  .797:Dmax=  .007]
00881> R0025:C00030-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00882>      ADD HYD                  1.0 02:R6              .80     .039 No_date    1:23   18.43  n/a      .000
00883>                             + 1.0 02:EXT10           .20     .008 No_date    1:31   18.23  n/a      .000
00884>                        SUM=   1.0 01:J6              1.01     .047 No_date    1:24   18.39  n/a      .000
00885> R0025:C00031-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00886>      ROUTE CHANNEL    ->     1.0 02:J6              1.01     .047 No_date    1:24   18.39  n/a      .000
00887>        [RDT= 1.00] out<-     1.0 01:R8              1.01     .046 No_date    1:27   18.39  n/a      .000
00888>         [L/S/n=  79./ .522/.035]
00889>         [Vmax=  .423:Dmax=  .034]
00890> R0025:C00032-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00891>      ADD HYD                  1.0 02:R8              1.01     .046 No_date    1:27   18.39  n/a      .000
00892>                             + 1.0 02:R7              .83     .024 No_date    1:52   18.26  n/a      .000
00893>                        SUM=   1.0 01:J7              1.83     .065 No_date    1:32   18.33  n/a      .000
00894> R0025:C00033-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00895>      ROUTE CHANNEL    ->     1.0 02:J7              1.83     .065 No_date    1:32   18.33  n/a      .000
00896>        [RDT= 1.00] out<-     1.0 01:R9              1.83     .065 No_date    1:33   18.33  n/a      .000
00897>         [L/S/n=  29./ .887/.035]
00898>         [Vmax=  .543:Dmax=  .044]
00899> R0025:C00034-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00900>      ADD HYD                  1.0 02:EXT9            3.57     .151 No_date    1:35   21.44  n/a      .000
00901>                             + 1.0 02:R9              1.83     .065 No_date    1:33   18.34  n/a      .000
00902>                             + 1.0 02:EXT8             .83     .043 No_date    1:30   23.69  n/a      .000
00903>                             + 1.0 02:R5              6.86     .263 No_date    1:54   25.03  n/a      .000
00904>                        SUM=   1.0 01:J8              13.10     .493 No_date    1:45   23.03  n/a      .000
00905> R0025:C00035-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00906>      ROUTE PIPE       ->     1.0 02:J8              13.10     .493 No_date    1:45   23.03  n/a      .000
00907> *    [RDT= 1.00] out<-     1.0 01:Outlet          13.10     .493 No_date    1:45   23.03  n/a      .000
00908>         [L/S/n=   8./ .010/.013]
00909>         [Vmax=  .417:Dmax= 1.075]
00910>         [Din=  .53:Dused= 1.31]
00911> ###########################################################################
00912> # STORMS
00913> ###########################################################################
00914>  ** END OF RUN :  49
00915>
00916> *************************************************************************************
00917>
00918>
00919>
00920>
00921>
00922>  RUN#:COMMAND#
00923> R0050:C00001-------------------------------------------------------------------------------
00924>    START
00925>       [TZERO =    .00 hrs on      0]
00926>       [METOUT=   2    (1=imperial, 2=metric output)]
00927>       [NSTORM=   1 ]
00928>       [NRUN  = 0050 ]
00929> #*************************************************************************************
00930> #  SWMHYMO  / INPUT DATA FILE
00931> #*************************************************************************************
00932> #  Project Name  : [5923 Octawa St]
00933> #  Project Number: [P2710(e01)]
00934> #  Date          : [2025 FEB 05]
00935> #  Modeller      : [MM]
00936> #  Company       : JFSA Canada Inc.
00937> #  License #     : 2549237
00938> #*************************************************************************************
00939> # Model developed to simulate runoff from subcatchments under pre development conditions
00940> #*************************************************************************************
00941> R0050:C00002-------------------------------------------------------------------------------
00942>       READ STORM
00943>        Filename = STORM.001
00944>        Comment  = CHICAGO STORM  50 Year, 3 Hours
00945>        [SDT=10.00:SDUR=   3.00:PTOT=  64.81]
00946> #*************************************************************************************
00947> # EXT1
00948> #*************************************************************************************
00949> R0050:C00003-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00950>      CALIB NASHYD             1.0 01:EXT1            3.21     .142 No_date    1:53   29.25  .451     .000
00951>        [CN= 80.0: N= 3.00: Tp=  .72]
00952> #*************************************************************************************
00953> # EXT2
00954> #*************************************************************************************
00955> R0050:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00956>      CALIB NASHYD             1.0 01:EXT2            .28     .026 No_date    1:22   34.45  .532     .000
00957>        [CN= 85.0: N= 3.00: Tp=  .33]
00958> #*************************************************************************************
00959> # EXT3
00960> #*************************************************************************************
00961> R0050:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00962>      CALIB NASHYD             1.0 01:EXT3            .56     .044 No_date    1:22   29.25  .451     .000
00963>        [CN= 80.0: N= 3.00: Tp=  .32]
00964> #*************************************************************************************
00965> # EXT4
00966> #*************************************************************************************
00967> R0050:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00968>      CALIB NASHYD             1.0 01:EXT4            .31     .025 No_date    1:19   28.33  .437     .000
00969>        [CN= 79.0: N= 3.00: Tp=  .29]
00970> #*************************************************************************************
00971> # EXT5
00972> #*************************************************************************************
00973> R0050:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00974>      CALIB NASHYD             1.0 01:EXT5            .59     .032 No_date    1:32   25.77  .398     .000
00975>        [CN= 76.0: N= 3.00: Tp=  .45]
00976> #*************************************************************************************
00977> # EXT6
00978> #*************************************************************************************
00979> R0050:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00980>      CALIB NASHYD             1.0 01:EXT6            .86     .055 No_date    1:40   34.45  .532     .000
00981>        [CN= 85.0: N= 3.00: Tp=  .56]
00982> #*************************************************************************************
00983> # EXT7
00984> #*************************************************************************************
00985> R0050:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00986>      CALIB NASHYD             1.0 01:EXT7            .47     .041 No_date    1:21   32.24  .498     .000
00987>        [CN= 83.0: N= 3.00: Tp=  .32]
00988> #*************************************************************************************
00989> # EXT8
00990> #*************************************************************************************
00991> R0050:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00992>      CALIB NASHYD             1.0 01:EXT8            .83     .052 No_date    1:30   28.33  .437     .000
00993>        [CN= 79.0: N= 3.00: Tp=  .42]
00994> #*************************************************************************************
00995> # EXT9
00996> #*************************************************************************************
00997> R0050:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00998>      CALIB NASHYD             1.0 01:EXT9            3.57     .183 No_date    1:35   25.77  .398     .000
00999>        [CN= 76.0: N= 3.00: Tp=  .48]
01000> #*************************************************************************************
01001> # EXT9a
01002> #*************************************************************************************
01003> R0050:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01004>      CALIB NASHYD             1.0 01:EXT9a           .01     .002 No_date    1:00   27.43  .423     .000
01005>        [CN= 78.0: N= 3.00: Tp=  .04]
01006> #*************************************************************************************
01007> # EXT10
01008> #*************************************************************************************
01009> R0050:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01010>      CALIB NASHYD             1.0 01:EXT10           .20     .010 No_date    1:30   22.06  .340     .000
01011>        [CN= 71.0: N= 3.00: Tp=  .42]
01012> #*************************************************************************************
01013> # Pre2
01014> #*************************************************************************************
01015> R0050:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01016>      CALIB NASHYD             1.0 01:Pre2            .57     .032 No_date    1:33   27.44  .423     .000
01017>        [CN= 78.0: N= 3.00: Tp=  .46]
01018> #*************************************************************************************
01019> # Pre9
01020> #*************************************************************************************
01021> R0050:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01022>      CALIB NASHYD             1.0 01:Pre9            .83     .029 No_date    1:48   22.07  .340     .000
01023>        [CN= 71.0: N= 3.00: Tp=  .64]
01024> #*************************************************************************************
01025> # Pre10
01026> #*************************************************************************************
01027> R0050:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01028>      CALIB NASHYD             1.0 01:Pre10           .80     .049 No_date    1:20   22.07  .340     .000
01029>        [CN= 71.0: N= 3.00: Tp=  .29]
01030> #*************************************************************************************
01031> # Pre11
01032> #*************************************************************************************
01033> R0050:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01034>      CALIB NASHYD             1.0 01:Pre11           .07     .007 No_date    1:13   27.44  .423     .000
01035>        [CN= 78.0: N= 3.00: Tp=  .21]
01036> #*************************************************************************************
01037> R0050:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01038>      ADD HYD                  1.0 02:EXT2            .28     .026 No_date    1:22   34.45  n/a      .000
01039>                             + 1.0 02:Pre2            .57     .032 No_date    1:33   27.44  n/a      .000
01040>                        SUM=   1.0 01:J1              .85     .057 No_date    1:27   29.79  n/a      .000
01041> R0050:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01042>      ROUTE CHANNEL    ->     1.0 02:J1              .85     .057 No_date    1:27   29.79  n/a      .000
01043>        [RDT= 1.00] out<-     1.0 01:R1              .85     .054 No_date    1:33   29.79  n/a      .000
01044>         [L/S/n=  143./ .394/.035]
01045>         [Vmax=  .360:Dmax=  .151]
01046> R0050:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01047>      ADD HYD                  1.0 02:R1              .85     .054 No_date    1:33   29.79  n/a      .000
01048>                             + 1.0 02:EXT3            .56     .044 No_date    1:22   29.25  n/a      .000
01049>                             + 1.0 02:EXT1           3.21     .142 No_date    1:53   29.25  n/a      .000
01050>                        SUM=   1.0 01:J2              4.62     .219 No_date    1:40   29.35  n/a      .000
01051> R0050:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01052>      ROUTE CHANNEL    ->     1.0 02:J2              4.62     .219 No_date    1:40   29.35  n/a      .000
01053>        [RDT= 1.00] out<-     1.0 01:R2              4.62     .218 No_date    1:42   29.35  n/a      .000
01054>         [L/S/n=  73./ .425/.035]
01055>         [Vmax=  .505:Dmax=  .266]
01056> R0050:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01057>      ADD HYD                  1.0 02:R2              4.62     .218 No_date    1:42   29.35  n/a      .000
01058>                             + 1.0 02:EXT4            .31     .025 No_date    1:19   28.33  n/a      .000
01059>                        SUM=   1.0 01:J3              4.93     .234 No_date    1:40   29.29  n/a      .000
01060> R0050:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01061>      ROUTE CHANNEL    ->     1.0 02:J3              4.93     .234 No_date    1:40   29.29  n/a      .000
01062>        [RDT= 1.00] out<-     1.0 01:R3              4.93     .232 No_date    1:42   29.29  n/a      .000
01063>         [L/S/n=  92./ .274/.035]
01064>         [Vmax=  .412:Dmax=  .274]
01065> R0050:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01066>      ADD HYD                  1.0 02:R3              4.93     .232 No_date    1:42   29.29  n/a      .000
01067>                             + 1.0 02:EXT5            .59     .032 No_date    1:32   25.77  n/a      .000
01068>                        SUM=   1.0 01:J4              5.52     .263 No_date    1:41   28.91  n/a      .000
01069> R0050:C00025-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01070>      ROUTE CHANNEL    ->     1.0 02:J4              5.52     .263 No_date    1:41   28.91  n/a      .000
01071>        [RDT= 1.00] out<-     1.0 01:R4              5.52     .248 No_date    1:52   28.91  n/a      .000
01072>         [L/S/n=  251./ .190/.035]
01073>         [Vmax=  .406:Dmax=  .309]
01074> R0050:C00026-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01075>      ADD HYD                  1.0 02:R4              5.52     .248 No_date    1:52   28.91  n/a      .000
01076>                             + 1.0 02:EXT6            .86     .055 No_date    1:40   34.45  n/a      .000
01077>                             + 1.0 02:EXT7            .47     .041 No_date    1:21   32.24  n/a      .000
01078>                        SUM=   1.0 01:J5              6.86     .323 No_date    1:47   29.83  n/a      .000
01079> R0050:C00027-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01080>      ROUTE CHANNEL    ->     1.0 02:J5              6.86     .323 No_date    1:47   29.83  n/a      .000
```

```
01081>       [RDT= 1.00] out<-    1.0 01:R5            6.86     .318 No_date    1:52   29.83  n/a     .000
01082>         [L/S/n=  237./ .644/.035]
01083>         (Vmax=  .658:Dmax=  .288]
01084> R0050:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01085>       ROUTE CHANNEL   ->    1.0 02:Pre10          .80     .049 No_date    1:20   22.07  n/a     .000
01086>       [RDT= 1.00] out<-    1.0 01:R6            .80     .048 No_date    1:23   22.07  n/a     .000
01087>         [L/S/n=   77./ .776/.035]
01088>         (Vmax=  .492:Dmax=  .036]
01089> R0050:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01090>       ROUTE CHANNEL   ->    1.0 02:Pre9           .83     .029 No_date    1:48   22.07  n/a     .000
01091>       [RDT= 1.00] out<-    1.0 01:R7            .83     .029 No_date    1:51   22.07  n/a     .000
01092>         [L/S/n=  159./1.576/.035]
01093>         (Vmax=  .797:Dmax=  .009]
01094> R0050:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01095>       ADD HYD              1.0 02:R6            .80     .048 No_date    1:23   22.28  n/a     .000
01096>                          +    1.0 02:EXT10         .20     .010 No_date    1:30   22.06  n/a     .000
01097>                    SUM=       1.0 01:J6            1.01     .057 No_date    1:24   22.24  n/a     .000
01098> R0050:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01099>       ROUTE CHANNEL   ->    1.0 02:J6            1.01     .057 No_date    1:24   22.24  n/a     .000
01100>       [RDT= 1.00] out<-    1.0 01:R8            1.01     .056 No_date    1:27   22.24  n/a     .000
01101>         [L/S/n=   79./ .522/.035]
01102>         (Vmax=  .423:Dmax=  .042]
01103> R0050:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01104>       ADD HYD              1.0 02:R8            1.01     .056 No_date    1:27   22.24  n/a     .000
01105>                          +    1.0 02:R7            .83     .029 No_date    1:51   22.09  n/a     .000
01106>                    SUM=       1.0 01:J7            1.83     .079 No_date    1:32   22.17  n/a     .000
01107> R0050:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01108>       ROUTE CHANNEL   ->    1.0 02:J7            1.83     .079 No_date    1:32   22.17  n/a     .000
01109>       [RDT= 1.00] out<-    1.0 01:R9            1.83     .079 No_date    1:33   22.17  n/a     .000
01110>         [L/S/n=   29./ .887/.035]
01111>         (Vmax=  .543:Dmax=  .054]
01112> R0050:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01113>       ADD HYD              1.0 02:EXT9          3.57     .183 No_date    1:35   25.77  n/a     .000
01114>                          +    1.0 02:R9            1.83     .079 No_date    1:33   22.18  n/a     .000
01115>                          +    1.0 02:EXT8          .83     .052 No_date    1:30   28.33  n/a     .000
01116>                          +    1.0 02:R5            6.86     .318 No_date    1:52   29.83  n/a     .000
01117>                    SUM=       1.0 01:J8           13.10     .602 No_date    1:44   27.56  n/a     .000
01118> R0050:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01119>       ROUTE PIPE      ->    1.0 02:J8           13.10     .602 No_date    1:44   27.56  n/a     .000
01120> *     [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .602 No_date    1:44   27.56  n/a     .000
01121>         [L/S/n=   8./ .010/.013]
01122>         (Vmax=  .438:Dmax= 1.159]
01123>         [Din=  .53:Dused= 1.41]
01124> ################################################################################
01125> # STORMS
01126> ################################################################################
01127>   ** END OF RUN :   98
01128>
01129> ********************************************************************************
01130>
01131>
01132>
01133>
01134>
01135>  RUN#:COMMAND#
01136> R0099:C00001------------------------------------------------------------------------------
01137>       START
01138>         [TZERO =    .00 hrs on        0]
01139>         [METOUT=   2    (1=imperial, 2=metric output)]
01140>         [NSTORM=   1 ]
01141>         [NRUN  = 0099 ]
01142> #*******************************************************************************
01143> #  SWMHYMO  / INPUT DATA FILE
01144> #*******************************************************************************
01145> #  Project Name  : [5923 Ottawa St]
01146> #  Project Number: [P2710(e01)]
01147> #  Date          : [2025 FEB 05]
01148> #  Modeller      : [MM]
01149> #  Company       : JFSA Canada Inc.
01150> #  License #     : 2549237
01151> #*******************************************************************************
01152> # Model developed to simulate runoff from subcatchments under pre development conditions
01153> #*******************************************************************************
01154> R0099:C00002------------------------------------------------------------------------------
01155>       READ STORM
01156>         Filename = STORM.001
01157>         Comment  = CHICAGO STORM   100 Year, 3 Hours
01158>         [SDT=10.00:SDUR=   3.00:PTOT=  71.66]
01159> #*******************************************************************************
01160> # EXT1
01161> #*******************************************************************************
01162> R0099:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01163>       CALIB NASHYD         1.0 01:EXT1          3.21     .167 No_date    1:52   34.39 .480     .000
01164>         [CN= 80.0: N= 3.00: Tp=  .72]
01165> #*******************************************************************************
01166> # EXT2
01167> #*******************************************************************************
01168> R0099:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01169>       CALIB NASHYD         1.0 01:EXT2          .28     .031 No_date    1:22   40.14 .560     .000
01170>         [CN= 85.0: N= 3.00: Tp=  .33]
01171> #*******************************************************************************
01172> # EXT3
01173> #*******************************************************************************
01174> R0099:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01175>       CALIB NASHYD         1.0 01:EXT3          .56     .052 No_date    1:21   34.39 .480     .000
01176>         [CN= 80.0: N= 3.00: Tp=  .32]
01177> #*******************************************************************************
01178> # EXT4
01179> #*******************************************************************************
01180> R0099:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01181>       CALIB NASHYD         1.0 01:EXT4          .31     .029 No_date    1:19   33.37 .466     .000
01182>         [CN= 79.0: N= 3.00: Tp=  .29]
01183> #*******************************************************************************
01184> # EXT5
01185> #*******************************************************************************
01186> R0099:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01187>       CALIB NASHYD         1.0 01:EXT5          .59     .038 No_date    1:32   30.49 .425     .000
01188>         [CN= 76.0: N= 3.00: Tp=  .45]
01189> #*******************************************************************************
01190> # EXT6
01191> #*******************************************************************************
01192> R0099:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01193>       CALIB NASHYD         1.0 01:EXT6          .86     .064 No_date    1:39   40.14 .560     .000
01194>         [CN= 85.0: N= 3.00: Tp=  .56]
01195> #*******************************************************************************
01196> # EXT7
01197> #*******************************************************************************
01198> R0099:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01199>       CALIB NASHYD         1.0 01:EXT7          .47     .048 No_date    1:21   37.71 .526     .000
01200>         [CN= 83.0: N= 3.00: Tp=  .32]
01201> #*******************************************************************************
01202> # EXT8
01203> #*******************************************************************************
01204> R0099:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01205>       CALIB NASHYD         1.0 01:EXT8          .83     .062 No_date    1:29   33.37 .466     .000
01206>         [CN= 79.0: N= 3.00: Tp=  .42]
01207> #*******************************************************************************
01208> # EXT9
01209> #*******************************************************************************
01210> R0099:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01211>       CALIB NASHYD         1.0 01:EXT9          3.57     .218 No_date    1:34   30.49 .425     .000
01212>         [CN= 76.0: N= 3.00: Tp=  .48]
01213> #*******************************************************************************
01214> # EXT9a
01215> #*******************************************************************************
01216> R0099:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01217>       CALIB NASHYD         1.0 01:EXT9a         .01     .003 No_date    1:00   32.37 .452     .000
01218>         [CN= 78.0: N= 3.00: Tp=  .04]
01219> #*******************************************************************************
01220> # EXT10
01221> #*******************************************************************************
01222> R0099:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01223>       CALIB NASHYD         1.0 01:EXT10         .20     .012 No_date    1:30   26.28 .367     .000
01224>         [CN= 71.0: N= 3.00: Tp=  .42]
01225> #*******************************************************************************
01226> # Pre2
01227> #*******************************************************************************
01228> R0099:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01229>       CALIB NASHYD         1.0 01:Pre2          .57     .038 No_date    1:32   32.37 .452     .000
01230>         [CN= 78.0: N= 3.00: Tp=  .46]
01231> #*******************************************************************************
01232> # Pre9
01233> #*******************************************************************************
01234> R0099:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01235>       CALIB NASHYD         1.0 01:Pre9          .83     .035 No_date    1:47   26.29 .367     .000
01236>         [CN= 71.0: N= 3.00: Tp=  .64]
01237> #*******************************************************************************
01238> # Pre10
01239> #*******************************************************************************
01240> R0099:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01241>       CALIB NASHYD         1.0 01:Pre10         .80     .058 No_date    1:20   26.29 .367     .000
01242>         [CN= 71.0: N= 3.00: Tp=  .29]
01243> #*******************************************************************************
01244> # Pre11
01245> #*******************************************************************************
01246> R0099:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01247>       CALIB NASHYD         1.0 01:Pre11         .07     .008 No_date    1:13   32.37 .452     .000
01248>         [CN= 78.0: N= 3.00: Tp=  .21]
01249> #*******************************************************************************
01250> R0099:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01251>       ADD HYD              1.0 02:EXT2          .28     .031 No_date    1:22   40.14  n/a     .000
01252>                          +    1.0 02:Pre2          .57     .038 No_date    1:32   32.37  n/a     .000
01253>                    SUM=       1.0 01:J1            .85     .067 No_date    1:27   34.97  n/a     .000
01254> R0099:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01255>       ROUTE CHANNEL   ->    1.0 02:J1            .85     .067 No_date    1:27   34.97  n/a     .000
01256>       [RDT= 1.00] out<-    1.0 01:R1            .85     .064 No_date    1:33   34.97  n/a     .000
01257>         [L/S/n=  143./ .394/.035]
01258>         (Vmax=  .375:Dmax=  .162]
01259> R0099:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01260>       ADD HYD              1.0 02:R1            .85     .064 No_date    1:33   34.97  n/a     .000
01261>                          +    1.0 02:EXT3          .56     .052 No_date    1:21   34.39  n/a     .000
01262>                          +    1.0 02:EXT1         3.21     .167 No_date    1:52   34.39  n/a     .000
01263>                    SUM=       1.0 01:J2           4.62     .258 No_date    1:40   34.50  n/a     .000
01264> R0099:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01265>       ROUTE CHANNEL   ->    1.0 02:J2           4.62     .258 No_date    1:40   34.50  n/a     .000
01266>       [RDT= 1.00] out<-    1.0 01:R2            4.62     .258 No_date    1:42   34.50  n/a     .000
01267>         [L/S/n=   73./ .425/.035]
01268>         (Vmax=  .526:Dmax=  .284]
01269> R0099:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01270>       ADD HYD              1.0 02:R2           4.62     .258 No_date    1:42   34.50  n/a     .000
01271>                          +    1.0 02:EXT4          .31     .029 No_date    1:19   33.37  n/a     .000
01272>                    SUM=       1.0 01:J3           4.93     .277 No_date    1:39   34.43  n/a     .000
01273> R0099:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01274>       ROUTE CHANNEL   ->    1.0 02:J3           4.93     .277 No_date    1:39   34.43  n/a     .000
01275>       [RDT= 1.00] out<-    1.0 01:R3            4.93     .275 No_date    1:42   34.43  n/a     .000
01276>         [L/S/n=   92./ .274/.035]
01277>         (Vmax=  .431:Dmax=  .239]
01278> R0099:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01279>       ADD HYD              1.0 02:R3           4.93     .275 No_date    1:42   34.43  n/a     .000
01280>                          +    1.0 02:EXT5          .59     .038 No_date    1:32   30.49  n/a     .000
01281>                    SUM=       1.0 01:J4           5.52     .311 No_date    1:40   34.01  n/a     .000
01282> R0099:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01283>       ROUTE CHANNEL   ->    1.0 02:J4           5.52     .311 No_date    1:40   34.01  n/a     .000
01284>       [RDT= 1.00] out<-    1.0 01:R4            5.52     .295 No_date    1:51   34.01  n/a     .000
01285>         [L/S/n=  251./ .190/.035]
01286>         (Vmax=  .425:Dmax=  .333]
01287> R0099:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01288>       ADD HYD              1.0 02:R4           5.52     .295 No_date    1:51   34.01  n/a     .000
01289>                          +    1.0 02:EXT6          .86     .064 No_date    1:39   40.14  n/a     .000
01290>                          +    1.0 02:EXT7          .47     .048 No_date    1:21   37.71  n/a     .000
01291>                    SUM=       1.0 01:J5           6.86     .384 No_date    1:46   35.03  n/a     .000
01292> R0099:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01293>       ROUTE CHANNEL   ->    1.0 02:J5           6.86     .384 No_date    1:46   35.03  n/a     .000
01294>       [RDT= 1.00] out<-    1.0 01:R5            6.86     .380 No_date    1:51   35.03  n/a     .000
01295>         [L/S/n=  237./ .644/.035]
01296>         (Vmax=  .699:Dmax=  .310]
01297> R0099:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01298>       ROUTE CHANNEL   ->    1.0 02:Pre10         .80     .058 No_date    1:20   26.29  n/a     .000
01299>       [RDT= 1.00] out<-    1.0 01:R6            .80     .058 No_date    1:23   26.29  n/a     .000
01300>         [L/S/n=   77./ .776/.035]
01301>         (Vmax=  .492:Dmax=  .043]
01302> R0099:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01303>       ROUTE CHANNEL   ->    1.0 02:Pre9          .83     .035 No_date    1:47   26.29  n/a     .000
01304>       [RDT= 1.00] out<-    1.0 01:R7            .83     .035 No_date    1:51   26.29  n/a     .000
01305>         [L/S/n=  159./1.576/.035]
01306>         (Vmax=  .797:Dmax=  .011]
01307> R0099:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01308>       ADD HYD              1.0 02:R6            .80     .058 No_date    1:23   26.52  n/a     .000
01309>                          +    1.0 02:EXT10         .20     .012 No_date    1:30   26.28  n/a     .000
01310>                    SUM=       1.0 01:J6           1.01     .069 No_date    1:23   26.47  n/a     .000
01311> R0099:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01312>       ROUTE CHANNEL   ->    1.0 02:J6           1.01     .069 No_date    1:23   26.47  n/a     .000
01313>       [RDT= 1.00] out<-    1.0 01:R8            1.01     .068 No_date    1:27   26.47  n/a     .000
01314>         [L/S/n=   79./ .522/.035]
01315>         (Vmax=  .423:Dmax=  .050]
01316> R0099:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01317>       ADD HYD              1.0 02:R8           1.01     .068 No_date    1:27   26.48  n/a     .000
01318>                          +    1.0 02:R7            .83     .035 No_date    1:51   26.32  n/a     .000
01319>                    SUM=       1.0 01:J7           1.83     .095 No_date    1:32   26.40  n/a     .000
01320> R0099:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01321>       ROUTE CHANNEL   ->    1.0 02:J7           1.83     .095 No_date    1:32   26.40  n/a     .000
01322>       [RDT= 1.00] out<-    1.0 01:R9            1.83     .095 No_date    1:32   26.40  n/a     .000
01323>         [L/S/n=   29./ .887/.035]
01324>         (Vmax=  .543:Dmax=  .064]
01325> R0099:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01326>       ADD HYD              1.0 02:EXT9          3.57     .218 No_date    1:34   30.49  n/a     .000
01327>                          +    1.0 02:R9           1.83     .095 No_date    1:32   26.42  n/a     .000
01328>                          +    1.0 02:EXT8          .83     .062 No_date    1:29   33.37  n/a     .000
01329>                          +    1.0 02:R5           6.86     .380 No_date    1:51   35.03  n/a     .000
01330>                    SUM=       1.0 01:J8           13.10     .721 No_date    1:42   32.48  n/a     .000
01331> R0099:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01332>       ROUTE PIPE      ->    1.0 02:J8           13.10     .721 No_date    1:42   32.48  n/a     .000
01333> *     [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .721 No_date    1:43   32.48  n/a     .000
01334>         [L/S/n=    8./ .010/.013]
01335>         (Vmax=  .458:Dmax= 1.240]
01336>         [Din=  .53:Dused= 1.51]
01337> ################################################################################
01338> # STORMS
01339> ################################################################################
01340>   ** END OF RUN :  101
01341>
01342> ********************************************************************************
01343>
01344>
01345>
01346>
01347>
01348>  RUN#:COMMAND#
01349> R0102:C00001------------------------------------------------------------------------------
01350>       START
01351>         [TZERO =    .00 hrs on        0]
01352>         [METOUT=   2    (1=imperial, 2=metric output)]
01353>         [NSTORM=   1 ]
01354>         [NRUN  = 0102 ]
01355> #*******************************************************************************
01356> #  SWMHYMO  / INPUT DATA FILE
01357> #*******************************************************************************
01358> #  Project Name  : [5923 Ottawa St]
01359> #  Project Number: [P2710(e01)]
01360> #  Date          : [2025 FEB 05]
01361> #  Modeller      : [MM]
01362> #  Company       : JFSA Canada Inc.
01363> #  License #     : 2549237
01364> #*******************************************************************************
01365> # Model developed to simulate runoff from subcatchments under pre development conditions
01366> #*******************************************************************************
01367> R0102:C00002------------------------------------------------------------------------------
01368>       READ STORM
01369>         Filename = STORM.001
01370>         Comment  = 2 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
01371>         [SDT=10.00:SDUR=  24.00:PTOT=  48.46]
01372> #*******************************************************************************
01373> # EXT1
01374> #*******************************************************************************
01375> R0102:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01376>       CALIB NASHYD         1.0 01:EXT1          3.21     .058 No_date   12:42   17.87 .369     .000
01377>         [CN= 80.0: N= 3.00: Tp=  .72]
01378> #*******************************************************************************
01379> # EXT2
01380> #*******************************************************************************
01381> R0102:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01382>       CALIB NASHYD         1.0 01:EXT2          .28     .011 No_date   12:14   21.63 .446     .000
01383>         [CN= 85.0: N= 3.00: Tp=  .33]
01384> #*******************************************************************************
01385> # EXT3
01386> #*******************************************************************************
01387> R0102:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01388>       CALIB NASHYD         1.0 01:EXT3          .56     .018 No_date   12:13   17.87 .369     .000
01389>         [CN= 80.0: N= 3.00: Tp=  .32]
01390> #*******************************************************************************
01391> # EXT4
01392> #*******************************************************************************
01393> R0102:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01394>       CALIB NASHYD         1.0 01:EXT4          .31     .010 No_date   12:12   17.22 .355     .000
01395>         [CN= 79.0: N= 3.00: Tp=  .29]
01396> #*******************************************************************************
01397> # EXT5
01398> #*******************************************************************************
01399> R0102:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01400>       CALIB NASHYD         1.0 01:EXT5          .59     .013 No_date   12:22   15.46 .319     .000
01401>         [CN= 76.0: N= 3.00: Tp=  .45]
01402> #*******************************************************************************
01403> # EXT6
01404> #*******************************************************************************
01405> R0102:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01406>       CALIB NASHYD         1.0 01:EXT6          .86     .023 No_date   12:30   21.64 .446     .000
01407>         [CN= 85.0: N= 3.00: Tp=  .56]
01408> #*******************************************************************************
01409> # EXT7
01410> #*******************************************************************************
01411> R0102:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01412>       CALIB NASHYD         1.0 01:EXT7          .47     .017 No_date   12:13   20.01 .413     .000
01413>         [CN= 83.0: N= 3.00: Tp=  .32]
01414> #*******************************************************************************
01415> # EXT8
01416> #*******************************************************************************
01417> R0102:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01418>       CALIB NASHYD         1.0 01:EXT8          .83     .021 No_date   12:20   17.22 .355     .000
01419>         [CN= 79.0: N= 3.00: Tp=  .42]
01420> #*******************************************************************************
01421> # EXT9
01422> #*******************************************************************************
01423> R0102:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01424>       CALIB NASHYD         1.0 01:EXT9          3.57     .074 No_date   12:25   15.46 .319     .000
01425>         [CN= 76.0: N= 3.00: Tp=  .48]
01426> #*******************************************************************************
01427> # EXT9a
01428> #*******************************************************************************
01429> R0102:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01430>       CALIB NASHYD         1.0 01:EXT9a         .01     .001 No_date   12:00   16.59 .342     .000
01431>         [CN= 78.0: N= 3.00: Tp=  .04]
01432> #*******************************************************************************
01433> # EXT10
01434> #*******************************************************************************
01435> R0102:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01436>       CALIB NASHYD         1.0 01:EXT10         .20     .004 No_date   12:20   12.99 .268     .000
01437>         [CN= 71.0: N= 3.00: Tp=  .42]
01438> #*******************************************************************************
01439> # Pre2
01440> #*******************************************************************************
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01441> R0102:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01442>      CALIB NASHYD           1.0 01:Pre2           .57     .013 No_date   12:23   16.61 .343     .000
01443>        [CN= 78.0: N= 3.00: Tp=  .46]
01444> ********************************************************************************
01445> # Pre9
01446> ********************************************************************************
01447> R0102:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01448>      CALIB NASHYD           1.0 01:Pre9           .83     .012 No_date   12:37   12.99 .268     .000
01449>        [CN= 71.0: N= 3.00: Tp=  .64]
01450> ********************************************************************************
01451> # Pre10
01452> ********************************************************************************
01453> R0102:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01454>      CALIB NASHYD           1.0 01:Pre10          .80     .020 No_date   12:12   12.99 .268     .000
01455>        [CN= 71.0: N= 3.00: Tp=  .29]
01456> ********************************************************************************
01457> # Pre11
01458> ********************************************************************************
01459> R0102:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01460>      CALIB NASHYD           1.0 01:Pre11          .07     .003 No_date   12:07   16.60 .343     .000
01461>        [CN= 78.0: N= 3.00: Tp=  .21]
01462> ********************************************************************************
01463> R0102:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01464>      ADD HYD                1.0 02:EXT2           .28     .011 No_date   12:14   21.63  n/a     .000
01465>                       +     1.0 02:Pre2           .57     .013 No_date   12:23   16.61  n/a     .000
01466>                     SUM=    1.0 01:J1             .85     .024 No_date   12:18   18.29  n/a     .000
01467> R0102:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01468>      ROUTE CHANNEL   ->     1.0 02:J1             .85     .024 No_date   12:18   18.29  n/a     .000
01469>        [RDT= 1.00] out<-    1.0 01:R1             .85     .022 No_date   12:25   18.29  n/a     .000
01470>        [L/S/n=  143./ .394/.035]
01471>        {Vmax=  .278:Dmax=  .103}
01472> R0102:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01473>      ADD HYD                1.0 02:R1             .85     .022 No_date   12:25   18.29  n/a     .000
01474>                       +     1.0 02:EXT3           .56     .018 No_date   12:13   17.87  n/a     .000
01475>                       +     1.0 02:EXT1          3.21     .058 No_date   12:42   17.87  n/a     .000
01476>                     SUM=    1.0 01:J2            4.62     .090 No_date   12:30   17.95  n/a     .000
01477> R0102:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01478>      ROUTE CHANNEL   ->     1.0 02:J2            4.62     .090 No_date   12:30   17.95  n/a     .000
01479>        [RDT= 1.00] out<-    1.0 01:R2            4.62     .090 No_date   12:33   17.95  n/a     .000
01480>        [L/S/n=   73./ .425/.035]
01481>        {Vmax=  .398:Dmax=  .186}
01482> R0102:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01483>      ADD HYD                1.0 02:R2            4.62     .090 No_date   12:33   17.95  n/a     .000
01484>                       +     1.0 02:EXT4           .31     .010 No_date   12:12   17.22  n/a     .000
01485>                     SUM=    1.0 01:J3            4.93     .096 No_date   12:30   17.90  n/a     .000
01486> R0102:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01487>      ROUTE CHANNEL   ->     1.0 02:J3            4.93     .096 No_date   12:30   17.90  n/a     .000
01488>        [RDT= 1.00] out<-    1.0 01:R3            4.93     .095 No_date   12:35   17.90  n/a     .000
01489>        [L/S/n=   92./ .274/.035]
01490>        {Vmax=  .326:Dmax=  .193}
01491> R0102:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01492>      ADD HYD                1.0 02:R3            4.93     .095 No_date   12:35   17.90  n/a     .000
01493>                       +     1.0 02:EXT5           .59     .013 No_date   12:22   15.46  n/a     .000
01494>                     SUM=    1.0 01:J4            5.52     .107 No_date   12:33   17.64  n/a     .000
01495> R0102:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01496>      ROUTE CHANNEL   ->     1.0 02:J4            5.52     .107 No_date   12:33   17.64  n/a     .000
01497>        [RDT= 1.00] out<-    1.0 01:R4            5.52     .098 No_date   12:46   17.64  n/a     .000
01498>        [L/S/n=   251./ .190/.035]
01499>        {Vmax=  .309:Dmax=  .210}
01500> R0102:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01501>      ADD HYD                1.0 02:R4            5.52     .098 No_date   12:46   17.64  n/a     .000
01502>                       +     1.0 02:EXT6           .86     .023 No_date   12:30   21.64  n/a     .000
01503>                       +     1.0 02:EXT7           .47     .017 No_date   12:13   20.01  n/a     .000
01504>                     SUM=    1.0 01:J5            6.86     .128 No_date   12:40   18.31  n/a     .000
01505> R0102:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01506>      ROUTE CHANNEL   ->     1.0 02:J5            6.86     .128 No_date   12:40   18.31  n/a     .000
01507>        [RDT= 1.00] out<-    1.0 01:R5            6.86     .125 No_date   12:47   18.31  n/a     .000
01508>        [L/S/n=  237./ .644/.035]
01509>        {Vmax=  .501:Dmax=  .200}
01510> R0102:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01511>      ROUTE CHANNEL   ->     1.0 02:Pre10          .80     .020 No_date   12:12   12.99  n/a     .000
01512>        [RDT= 1.00] out<-    1.0 01:R6            .80     .019 No_date   12:15   12.99  n/a     .000
01513>        [L/S/n=   77./ .776/.035]
01514>        {Vmax=  .492:Dmax=  .014}
01515> R0102:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01516>      ROUTE CHANNEL   ->     1.0 02:Pre9           .83     .012 No_date   12:37   12.99  n/a     .000
01517>        [RDT= 1.00] out<-    1.0 01:R7            .83     .011 No_date   12:40   12.99  n/a     .000
01518>        [L/S/n=  159./1.576/.035]
01519>        {Vmax=  .797:Dmax=  .003}
01520> R0102:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01521>      ADD HYD                1.0 02:R6            .80     .019 No_date   12:15   13.03  n/a     .000
01522>                       +     1.0 02:EXT10          .20     .004 No_date   12:20   12.99  n/a     .000
01523>                     SUM=    1.0 01:J6            1.01     .023 No_date   12:15   13.02  n/a     .000
01524> R0102:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01525>      ROUTE CHANNEL   ->     1.0 02:J6            1.01     .023 No_date   12:15   13.02  n/a     .000
01526>        [RDT= 1.00] out<-    1.0 01:R8            1.01     .023 No_date   12:19   13.02  n/a     .000
01527>        [L/S/n=   79./ .522/.035]
01528>        {Vmax=  .423:Dmax=  .017}
01529> R0102:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01530>      ADD HYD                1.0 02:R8            1.01     .023 No_date   12:19   13.02  n/a     .000
01531>                       +     1.0 02:R7            .83     .011 No_date   12:40   13.00  n/a     .000
01532>                     SUM=    1.0 01:J7            1.83     .032 No_date   12:22   13.01  n/a     .000
01533> R0102:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01534>      ROUTE CHANNEL   ->     1.0 02:J7            1.83     .032 No_date   12:22   13.01  n/a     .000
01535>        [RDT= 1.00] out<-    1.0 01:R9            1.83     .032 No_date   12:23   13.01  n/a     .000
01536>        [L/S/n=   29./ .887/.035]
01537>        {Vmax=  .543:Dmax=  .022}
01538> R0102:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01539>      ADD HYD                1.0 02:EXT9          3.57     .074 No_date   12:25   15.46  n/a     .000
01540>                       +     1.0 02:R9            1.83     .032 No_date   12:23   13.02  n/a     .000
01541>                       +     1.0 02:EXT8           .83     .021 No_date   12:20   17.22  n/a     .000
01542>                       +     1.0 02:R5            6.86     .125 No_date   12:47   18.31  n/a     .000
01543>                     SUM=    1.0 01:J8           13.10     .233 No_date   12:35   16.72  n/a     .000
01544> R0102:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01545>      ROUTE PIPE      ->     1.0 02:J8           13.10     .233 No_date   12:35   16.72  n/a     .000
01546> *    [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .229 No_date   12:42   16.72  n/a     .000
01547>        [L/S/n=    8./ .010/.013]
01548>        {Vmax=  .345:Dmax=  .812}
01549>        [Din=  .53:Dused=  .99]
01550> ##############################################################################
01551> # STORMS
01552> ##############################################################################
01553>   ** END OF RUN :  104
01554>
01555> ********************************************************************************
01556>
01557>
01558>
01559>
01560>
01561>  RUN#:COMMAND#
01562> R0105:C00001-----------------------------------------------------------------------
01563>      START
01564>        [TZERO =    .00 hrs on        0]
01565>        [METOUT=   2   (1=imperial, 2=metric output)]
01566>        [NSTORM=   1 ]
01567>        [NRUN   = 0105 ]
01568> ********************************************************************************
01569> #  SWMHYMO  / INPUT DATA FILE
01570> ********************************************************************************
01571> #  Project Name  : [5923 Ottawa St]
01572> #  Project Number: [P2710(e01)]
01573> #  Date          : [2025 FEB 05]
01574> #  Modeller      : [MM]
01575> #  Company       : JFSA Canada Inc.
01576> #  License #     : 2549237
01577> ********************************************************************************
01578> # Model developed to simulate runoff from subcatchments under pre development conditions
01579> ********************************************************************************
01580> R0105:C00002-----------------------------------------------------------------------
01581>      READ STORM
01582>       Filename = STORM.001
01583>       Comment  = 5 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
01584>       [SDT=10.00:SDUR=  24.00:PTOT=  64.11]
01585> ********************************************************************************
01586> # EXT1
01587> ********************************************************************************
01588> R0105:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01589>      CALIB NASHYD           1.0 01:EXT1          3.21     .095 No_date   12:41   28.73 .448     .000
01590>        [CN= 80.0: N= 3.00: Tp=  .72]
01591> ********************************************************************************
01592> # EXT2
01593> ********************************************************************************
01594> R0105:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01595>      CALIB NASHYD           1.0 01:EXT2           .28     .018 No_date   12:13   33.88 .529     .000
01596>        [CN= 85.0: N= 3.00: Tp=  .33]
01597> ********************************************************************************
01598> # EXT3
01599> ********************************************************************************
01600> R0105:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01601>      CALIB NASHYD           1.0 01:EXT3           .56     .030 No_date   12:13   28.73 .448     .000
01602>        [CN= 80.0: N= 3.00: Tp=  .32]
01603> ********************************************************************************
01604> # EXT4
01605> ********************************************************************************
01606> R0105:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01607>      CALIB NASHYD           1.0 01:EXT4           .31     .017 No_date   12:11   27.82 .434     .000
01608>        [CN= 79.0: N= 3.00: Tp=  .29]
01609> ********************************************************************************
01610> # EXT5
01611> ********************************************************************************
01612> R0105:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01613>      CALIB NASHYD           1.0 01:EXT5           .59     .021 No_date   12:22   25.29 .395     .000
01614>        [CN= 76.0: N= 3.00: Tp=  .45]
01615> ********************************************************************************
01616> # EXT6
01617> ********************************************************************************
01618> R0105:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01619>      CALIB NASHYD           1.0 01:EXT6           .86     .037 No_date   12:29   33.88 .529     .000
01620>        [CN= 85.0: N= 3.00: Tp=  .56]
01621> ********************************************************************************
01622> # EXT7
01623> ********************************************************************************
01624> R0105:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01625>      CALIB NASHYD           1.0 01:EXT7           .47     .028 No_date   12:13   31.69 .494     .000
01626>        [CN= 83.0: N= 3.00: Tp=  .32]
01627> ********************************************************************************
01628> # EXT8
01629> ********************************************************************************
01630> R0105:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01631>      CALIB NASHYD           1.0 01:EXT8           .83     .035 No_date   12:20   27.82 .434     .000
01632>        [CN= 79.0: N= 3.00: Tp=  .42]
01633> ********************************************************************************
01634> # EXT9
01635> ********************************************************************************
01636> R0105:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01637>      CALIB NASHYD           1.0 01:EXT9          3.57     .123 No_date   12:24   25.30 .395     .000
01638>        [CN= 76.0: N= 3.00: Tp=  .48]
01639> ********************************************************************************
01640> # EXT9a
01641> ********************************************************************************
01642> R0105:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01643>      CALIB NASHYD           1.0 01:EXT9a          .01     .001 No_date   12:00   26.94 .420     .000
01644>        [CN= 78.0: N= 3.00: Tp=  .04]
01645> ********************************************************************************
01646> # EXT10
01647> ********************************************************************************
01648> R0105:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01649>      CALIB NASHYD           1.0 01:EXT10          .20     .006 No_date   12:20   21.64 .338     .000
01650>        [CN= 71.0: N= 3.00: Tp=  .42]
01651> ********************************************************************************
01652> # Pre2
01653> ********************************************************************************
01654> R0105:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01655>      CALIB NASHYD           1.0 01:Pre2           .57     .022 No_date   12:22   26.95 .420     .000
01656>        [CN= 78.0: N= 3.00: Tp=  .46]
01657> ********************************************************************************
01658> # Pre9
01659> ********************************************************************************
01660> R0105:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01661>      CALIB NASHYD           1.0 01:Pre9           .83     .020 No_date   12:36   21.65 .338     .000
01662>        [CN= 71.0: N= 3.00: Tp=  .64]
01663> ********************************************************************************
01664> # Pre10
01665> ********************************************************************************
01666> R0105:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01667>      CALIB NASHYD           1.0 01:Pre10          .80     .033 No_date   12:11   21.65 .338     .000
01668>        [CN= 71.0: N= 3.00: Tp=  .29]
01669> ********************************************************************************
01670> # Pre11
01671> ********************************************************************************
01672> R0105:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01673>      CALIB NASHYD           1.0 01:Pre11          .07     .005 No_date   12:07   26.94 .420     .000
01674>        [CN= 78.0: N= 3.00: Tp=  .21]
01675> ********************************************************************************
01676> R0105:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01677>      ADD HYD                1.0 02:EXT2           .28     .018 No_date   12:13   33.88  n/a     .000
01678>                       +     1.0 02:Pre2           .57     .022 No_date   12:22   26.95  n/a     .000
01679>                     SUM=    1.0 01:J1             .85     .038 No_date   12:17   29.27  n/a     .000
01680> R0105:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01681>      ROUTE CHANNEL   ->     1.0 02:J1             .85     .038 No_date   12:17   29.27  n/a     .000
01682>        [RDT= 1.00] out<-    1.0 01:R1             .85     .036 No_date   12:24   29.27  n/a     .000
01683>        [L/S/n=  143./ .394/.035]
01684>        {Vmax=  .318:Dmax=  .127}
01685> R0105:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01686>      ADD HYD                1.0 02:R1             .85     .036 No_date   12:24   29.27  n/a     .000
01687>                       +     1.0 02:EXT3           .56     .030 No_date   12:13   28.73  n/a     .000
01688>                       +     1.0 02:EXT1          3.21     .095 No_date   12:41   28.73  n/a     .000
01689>                     SUM=    1.0 01:J2            4.62     .148 No_date   12:29   28.83  n/a     .000
01690> R0105:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01691>      ROUTE CHANNEL   ->     1.0 02:J2            4.62     .148 No_date   12:29   28.83  n/a     .000
01692>        [RDT= 1.00] out<-    1.0 01:R2            4.62     .147 No_date   12:32   28.83  n/a     .000
01693>        [L/S/n=   73./ .425/.035]
01694>        {Vmax=  .455:Dmax=  .227}
01695> R0105:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01696>      ADD HYD                1.0 02:R2            4.62     .147 No_date   12:32   28.83  n/a     .000
01697>                       +     1.0 02:EXT4           .31     .017 No_date   12:11   27.82  n/a     .000
01698>                     SUM=    1.0 01:J3            4.93     .158 No_date   12:29   28.77  n/a     .000
01699> R0105:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01700>      ROUTE CHANNEL   ->     1.0 02:J3            4.93     .158 No_date   12:29   28.77  n/a     .000
01701>        [RDT= 1.00] out<-    1.0 01:R3            4.93     .157 No_date   12:32   28.77  n/a     .000
01702>        [L/S/n=   92./ .274/.035]
01703>        {Vmax=  .373:Dmax=  .235}
01704> R0105:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01705>      ADD HYD                1.0 02:R3            4.93     .157 No_date   12:32   28.77  n/a     .000
01706>                       +     1.0 02:EXT5           .59     .021 No_date   12:22   25.29  n/a     .000
01707>                     SUM=    1.0 01:J4            5.52     .177 No_date   12:31   28.40  n/a     .000
01708> R0105:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01709>      ROUTE CHANNEL   ->     1.0 02:J4            5.52     .177 No_date   12:31   28.40  n/a     .000
01710>        [RDT= 1.00] out<-    1.0 01:R4            5.52     .165 No_date   12:42   28.40  n/a     .000
01711>        [L/S/n=  251./ .190/.035]
01712>        {Vmax=  .361:Dmax=  .260}
01713> R0105:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01714>      ADD HYD                1.0 02:R4            5.52     .165 No_date   12:42   28.40  n/a     .000
01715>                       +     1.0 02:EXT6           .86     .037 No_date   12:29   33.88  n/a     .000
01716>                       +     1.0 02:EXT7           .47     .028 No_date   12:13   31.69  n/a     .000
01717>                     SUM=    1.0 01:J5            6.86     .215 No_date   12:37   29.31  n/a     .000
01718> R0105:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01719>      ROUTE CHANNEL   ->     1.0 02:J5            6.86     .215 No_date   12:37   29.31  n/a     .000
01720>        [RDT= 1.00] out<-    1.0 01:R5            6.86     .212 No_date   12:42   29.31  n/a     .000
01721>        [L/S/n=  237./ .644/.035]
01722>        {Vmax=  .593:Dmax=  .247}
01723> R0105:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01724>      ROUTE CHANNEL   ->     1.0 02:Pre10          .80     .033 No_date   12:11   21.65  n/a     .000
01725>        [RDT= 1.00] out<-    1.0 01:R6            .80     .033 No_date   12:14   21.65  n/a     .000
01726>        [L/S/n=   77./ .776/.035]
01727>        {Vmax=  .492:Dmax=  .024}
01728> R0105:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01729>      ROUTE CHANNEL   ->     1.0 02:Pre9           .83     .020 No_date   12:36   21.65  n/a     .000
01730>        [RDT= 1.00] out<-    1.0 01:R7            .83     .019 No_date   12:40   21.65  n/a     .000
01731>        [L/S/n=  159./1.576/.035]
01732>        {Vmax=  .797:Dmax=  .006}
01733> R0105:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01734>      ADD HYD                1.0 02:R6            .80     .033 No_date   12:14   21.70  n/a     .000
01735>                       +     1.0 02:EXT10          .20     .006 No_date   12:20   21.64  n/a     .000
01736>                     SUM=    1.0 01:J6            1.01     .039 No_date   12:15   21.68  n/a     .000
01737> R0105:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01738>      ROUTE CHANNEL   ->     1.0 02:J6            1.01     .039 No_date   12:15   21.68  n/a     .000
01739>        [RDT= 1.00] out<-    1.0 01:R8            1.01     .038 No_date   12:18   21.68  n/a     .000
01740>        [L/S/n=   79./ .522/.035]
01741>        {Vmax=  .423:Dmax=  .029}
01742> R0105:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01743>      ADD HYD                1.0 02:R8            1.01     .038 No_date   12:18   21.69  n/a     .000
01744>                       +     1.0 02:R7            .83     .019 No_date   12:40   21.66  n/a     .000
01745>                     SUM=    1.0 01:J7            1.83     .054 No_date   12:22   21.67  n/a     .000
01746> R0105:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01747>      ROUTE CHANNEL   ->     1.0 02:J7            1.83     .054 No_date   12:22   21.67  n/a     .000
01748>        [RDT= 1.00] out<-    1.0 01:R9            1.83     .054 No_date   12:23   21.67  n/a     .000
01749>        [L/S/n=   29./ .887/.035]
01750>        {Vmax=  .543:Dmax=  .037}
01751> R0105:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01752>      ADD HYD                1.0 02:EXT9          3.57     .123 No_date   12:24   25.30  n/a     .000
01753>                       +     1.0 02:R9            1.83     .054 No_date   12:23   21.68  n/a     .000
01754>                       +     1.0 02:EXT8           .83     .035 No_date   12:20   27.82  n/a     .000
01755>                       +     1.0 02:R5            6.86     .212 No_date   12:42   29.31  n/a     .000
01756>                     SUM=    1.0 01:J8           13.10     .400 No_date   12:33   27.05  n/a     .000
01757> R0105:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01758>      ROUTE PIPE      ->     1.0 02:J8           13.10     .400 No_date   12:33   27.05  n/a     .000
01759> *    [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .398 No_date   12:35   27.05  n/a     .000
01760>        [L/S/n=    8./ .010/.013]
01761>        {Vmax=  .395:Dmax=  .994}
01762>        [Din=  .53:Dused=  1.21)
01763> ##############################################################################
01764> # STORMS
01765> ##############################################################################
01766>   ** END OF RUN :  109
01767>
01768> ********************************************************************************
01769>
01770>
01771>
01772>
01773>
01774>  RUN#:COMMAND#
01775> R0110:C00001-----------------------------------------------------------------------
01776>      START
01777>        [TZERO =    .00 hrs on        0]
01778>        [METOUT=   2   (1=imperial, 2=metric output)]
01779>        [NSTORM=   1 ]
01780>        [NRUN   = 0110 ]
01781> ********************************************************************************
01782> #  SWMHYMO  / INPUT DATA FILE
01783> ********************************************************************************
01784> #  Project Name  : [5923 Ottawa St]
01785> #  Project Number: [P2710(e01)]
01786> #  Date          : [2025 FEB 05]
01787> #  Modeller      : [MM]
01788> #  Company       : JFSA Canada Inc.
01789> #  License #     : 2549237
01790> ********************************************************************************
01791> # Model developed to simulate runoff from subcatchments under pre development conditions
01792> ********************************************************************************
01793> R0110:C00002-----------------------------------------------------------------------
01794>      READ STORM
01795>       Filename = STORM.001
01796>       Comment  = 10 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
01797>       [SDT=10.00:SDUR=  24.00:PTOT=  74.35]
01798> ********************************************************************************
01799> # EXT1
01800> ********************************************************************************
```

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01801> R0110:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01802>      CALIB NASHYD           1.0 01:EXT1          3.21     .121 No_date   12:40   36.46 .490     .000
01803>        [CN= 80.0: N= 3.00: Tp=  .72]
01804> #*******************************************************************************
01805> # EXT2
01806> #*******************************************************************************
01807> R0110:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01808>      CALIB NASHYD           1.0 01:EXT2           .28     .022 No_date   12:13   42.40 .570     .000
01809>        [CN= 85.0: N= 3.00: Tp=  .33]
01810> #*******************************************************************************
01811> # EXT3
01812> #*******************************************************************************
01813> R0110:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01814>      CALIB NASHYD           1.0 01:EXT3           .56     .038 No_date   12:13   36.46 .490     .000
01815>        [CN= 80.0: N= 3.00: Tp=  .32]
01816> #*******************************************************************************
01817> # EXT4
01818> #*******************************************************************************
01819> R0110:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01820>      CALIB NASHYD           1.0 01:EXT4           .31     .022 No_date   12:11   35.39 .476     .000
01821>        [CN= 79.0: N= 3.00: Tp=  .29]
01822> #*******************************************************************************
01823> # EXT5
01824> #*******************************************************************************
01825> R0110:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01826>      CALIB NASHYD           1.0 01:EXT5           .59     .028 No_date   12:22   32.39 .436     .000
01827>        [CN= 76.0: N= 3.00: Tp=  .45]
01828> #*******************************************************************************
01829> # EXT6
01830> #*******************************************************************************
01831> R0110:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01832>      CALIB NASHYD           1.0 01:EXT6           .86     .046 No_date   12:29   42.40 .570     .000
01833>        [CN= 85.0: N= 3.00: Tp=  .56]
01834> #*******************************************************************************
01835> # EXT7
01836> #*******************************************************************************
01837> R0110:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01838>      CALIB NASHYD           1.0 01:EXT7           .47     .035 No_date   12:13   39.90 .537     .000
01839>        [CN= 83.0: N= 3.00: Tp=  .32]
01840> #*******************************************************************************
01841> # EXT8
01842> #*******************************************************************************
01843> R0110:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01844>      CALIB NASHYD           1.0 01:EXT8           .83     .045 No_date   12:19   35.39 .476     .000
01845>        [CN= 79.0: N= 3.00: Tp=  .42]
01846> #*******************************************************************************
01847> # EXT9
01848> #*******************************************************************************
01849> R0110:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01850>      CALIB NASHYD           1.0 01:EXT9          3.57     .158 No_date   12:24   32.39 .436     .000
01851>        [CN= 76.0: N= 3.00: Tp=  .48]
01852> #*******************************************************************************
01853> # EXT9a
01854> #*******************************************************************************
01855> R0110:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01856>      CALIB NASHYD           1.0 01:EXT9a          .01     .002 No_date   12:00   34.35 .462     .000
01857>        [CN= 78.0: N= 3.00: Tp=  .04]
01858> #*******************************************************************************
01859> # EXT10
01860> #*******************************************************************************
01861> R0110:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01862>      CALIB NASHYD           1.0 01:EXT10          .20     .008 No_date   12:20   27.99 .377     .000
01863>        [CN= 71.0: N= 3.00: Tp=  .42]
01864> #*******************************************************************************
01865> # Pre2
01866> #*******************************************************************************
01867> R0110:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01868>      CALIB NASHYD           1.0 01:Pre2           .57     .028 No_date   12:22   34.36 .462     .000
01869>        [CN= 78.0: N= 3.00: Tp=  .46]
01870> #*******************************************************************************
01871> # Pre9
01872> #*******************************************************************************
01873> R0110:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01874>      CALIB NASHYD           1.0 01:Pre9           .83     .026 No_date   12:36   28.00 .377     .000
01875>        [CN= 71.0: N= 3.00: Tp=  .64]
01876> #*******************************************************************************
01877> # Pre10
01878> #*******************************************************************************
01879> R0110:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01880>      CALIB NASHYD           1.0 01:Pre10          .80     .043 No_date   12:11   28.00 .377     .000
01881>        [CN= 71.0: N= 3.00: Tp=  .29]
01882> #*******************************************************************************
01883> # Pre11
01884> #*******************************************************************************
01885> R0110:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01886>      CALIB NASHYD           1.0 01:Pre11          .07     .006 No_date   12:07   34.35 .462     .000
01887>        [CN= 78.0: N= 3.00: Tp=  .21]
01888> #*******************************************************************************
01889> R0110:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01890>      ADD HYD                1.0 02:EXT2           .28     .022 No_date   12:13   53.21 n/a      .000
01891>                           +    1.0 02:Pre2           .57     .028 No_date   12:22   34.36 n/a      .000
01892>                         SUM=   1.0 01:J1            .85     .049 No_date   12:17   37.05 n/a      .000
01893> R0110:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01894>      ROUTE CHANNEL    ->    1.0 02:J1            .85     .049 No_date   12:17   37.05 n/a      .000
01895>        [RDT= 1.00] out<-    1.0 01:R1            .85     .046 No_date   12:23   37.05 n/a      .000
01896>          [L/S/n=  143./ .394/.035]
01897>          (Vmax=  .345:Dmax=  .142)
01898> R0110:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01899>      ADD HYD                1.0 02:R1            .85     .046 No_date   12:23   37.05 n/a      .000
01900>                           +    1.0 02:EXT3          .56     .038 No_date   12:13   36.46 n/a      .000
01901>                           +    1.0 02:EXT1         3.21     .121 No_date   12:40   36.46 n/a      .000
01902>                         SUM=   1.0 01:J2           4.62     .189 No_date   12:29   36.57 n/a      .000
01903> R0110:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01904>      ROUTE CHANNEL    ->    1.0 02:J2           4.62     .189 No_date   12:29   36.57 n/a      .000
01905>        [RDT= 1.00] out<-    1.0 01:R2           4.62     .188 No_date   12:31   36.57 n/a      .000
01906>          [L/S/n=   73./ .425/.035]
01907>          (Vmax=  .485:Dmax=  .250)
01908> R0110:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01909>      ADD HYD                1.0 02:R2           4.62     .188 No_date   12:31   36.57 n/a      .000
01910>                           +    1.0 02:EXT4          .31     .022 No_date   12:11   35.39 n/a      .000
01911>                         SUM=   1.0 01:J3           4.93     .202 No_date   12:28   36.49 n/a      .000
01912> R0110:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01913>      ROUTE CHANNEL    ->    1.0 02:J3           4.93     .202 No_date   12:28   36.49 n/a      .000
01914>        [RDT= 1.00] out<-    1.0 01:R3           4.93     .200 No_date   12:31   36.49 n/a      .000
01915>          [L/S/n=   92./ .274/.035]
01916>          (Vmax=  .398:Dmax=  .259)
01917> R0110:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01918>      ADD HYD                1.0 02:R3           4.93     .200 No_date   12:31   36.49 n/a      .000
01919>                           +    1.0 02:EXT5          .59     .028 No_date   12:22   32.39 n/a      .000
01920>                         SUM=   1.0 01:J4           5.52     .227 No_date   12:30   36.05 n/a      .000
01921> R0110:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01922>      ROUTE CHANNEL    ->    1.0 02:J4           5.52     .227 No_date   12:30   36.05 n/a      .000
01923>        [RDT= 1.00] out<-    1.0 01:R4           5.52     .213 No_date   12:40   36.05 n/a      .000
01924>          [L/S/n=  251./ .190/.035]
01925>          (Vmax=  .388:Dmax=  .290)
01926> R0110:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01927>      ADD HYD                1.0 02:R4           5.52     .213 No_date   12:40   36.05 n/a      .000
01928>                           +    1.0 02:EXT6          .86     .046 No_date   12:29   42.40 n/a      .000
01929>                           +    1.0 02:EXT7          .47     .035 No_date   12:13   39.90 n/a      .000
01930>                         SUM=   1.0 01:J5           6.86     .277 No_date   12:36   37.12 n/a      .000
01931> R0110:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01932>      ROUTE CHANNEL    ->    1.0 02:J5           6.86     .277 No_date   12:36   37.12 n/a      .000
01933>        [RDT= 1.00] out<-    1.0 01:R5           6.86     .272 No_date   12:41   37.12 n/a      .000
01934>          [L/S/n=  237./ .644/.035]
01935>          (Vmax=  .628:Dmax=  .270)
01936> R0110:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01937>      ROUTE CHANNEL    ->    1.0 02:Pre10         .80     .043 No_date   12:11   28.00 n/a      .000
01938>        [RDT= 1.00] out<-    1.0 01:R6           .80     .043 No_date   12:14   28.00 n/a      .000
01939>          [L/S/n=   77./ .776/.035]
01940>          (Vmax=  .492:Dmax=  .032)
01941> R0110:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01942>      ROUTE CHANNEL    ->    1.0 02:Pre9          .83     .026 No_date   12:36   28.00 n/a      .000
01943>        [RDT= 1.00] out<-    1.0 01:R7           .83     .025 No_date   12:39   28.00 n/a      .000
01944>          [L/S/n=  159./1.576/.035]
01945>          (Vmax=  .797:Dmax=  .008)
01946> R0110:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01947>      ADD HYD                1.0 02:R6           .80     .043 No_date   12:14   28.05 n/a      .000
01948>                           +    1.0 02:EXT10         .20     .008 No_date   12:20   27.99 n/a      .000
01949>                         SUM=   1.0 01:J6           1.01     .051 No_date   12:15   28.04 n/a      .000
01950> R0110:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01951>      ROUTE CHANNEL    ->    1.0 02:J6           1.01     .051 No_date   12:15   28.04 n/a      .000
01952>        [RDT= 1.00] out<-    1.0 01:R8           1.01     .050 No_date   12:18   28.04 n/a      .000
01953>          [L/S/n=   79./ .522/.035]
01954>          (Vmax=  .423:Dmax=  .037)
01955> R0110:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01956>      ADD HYD                1.0 02:R8           1.01     .050 No_date   12:18   28.04 n/a      .000
01957>                           +    1.0 02:R7           .83     .025 No_date   12:39   28.01 n/a      .000
01958>                         SUM=   1.0 01:J7           1.83     .070 No_date   12:21   28.03 n/a      .000
01959> R0110:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01960>      ROUTE CHANNEL    ->    1.0 02:J7           1.83     .070 No_date   12:21   28.03 n/a      .000
01961>        [RDT= 1.00] out<-    1.0 01:R9           1.83     .070 No_date   12:22   28.03 n/a      .000
01962>          [L/S/n=   29./ .887/.035]
01963>          (Vmax=  .543:Dmax=  .048)
01964> R0110:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01965>      ADD HYD                1.0 02:EXT9         3.57     .158 No_date   12:24   32.39 n/a      .000
01966>                           +    1.0 02:R9           1.83     .070 No_date   12:22   28.03 n/a      .000
01967>                           +    1.0 02:EXT8          .83     .045 No_date   12:19   35.39 n/a      .000
01968>                           +    1.0 02:R5           6.86     .272 No_date   12:41   37.12 n/a      .000
01969>                         SUM=   1.0 01:J8          13.10     .517 No_date   12:32   34.45 n/a      .000
01970> R0110:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01971>      ROUTE PIPE       ->    1.0 02:J8          13.10     .517 No_date   12:32   34.45 n/a      .000
01972> *    [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .515 No_date   12:35   34.45 n/a      .000
01973>          [L/S/n=    8./ .010/.013]
01974>          (Vmax=  .422:Dmax= 1.095)
01975>          (Din=  .53:Dused= 1.33)
01976> ###############################################################################
01977> # STORMS
01978> ###############################################################################
01979> ** END OF RUN :  124
01980>
01981> *******************************************************************************
01982>
01983>
01984>
01985>
01986>
01987> RUN#:COMMAND#
01988> R0125:C00001------------------------------------------------------------------------------
01989>       START
01990>         [TZERO =    .00 hrs on        0]
01991>         [METOUT=   2    (1=imperial, 2=metric output)]
01992>         [NSTORM=   1 ]
01993>         [NRUN  = 0125 ]
01994> #*******************************************************************************
01995> #  SWMHYMO  / INPUT DATA FILE
01996> #*******************************************************************************
01997> #  Project Name  : [5923 Ottawa St]
01998> #  Project Number: [P2710(e01)]
01999> #  Date          : [2025 FEB 05]
02000> #  Modeller      : [MM]
02001> #  Company       : JFSA Canada Inc.
02002> #  License #     : 2549237
02003> #*******************************************************************************
02004> # Model developed to simulate runoff from subcatchments under pre development conditions
02005> #*******************************************************************************
02006> R0125:C00002------------------------------------------------------------------------------
02007>       READ STORM
02008>        Filename = STORM.001
02009>        Comment  = 25 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
02010>        [SDT=10.00:SDUR=  24.00:PTOT=  86.89]
02011> #*******************************************************************************
02012> # EXT1
02013> #*******************************************************************************
02014> R0125:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02015>      CALIB NASHYD           1.0 01:EXT1          3.21     .155 No_date   12:40   46.39 .534     .000
02016>        [CN= 80.0: N= 3.00: Tp=  .72]
02017> #*******************************************************************************
02018> # EXT2
02019> #*******************************************************************************
02020> R0125:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02021>      CALIB NASHYD           1.0 01:EXT2           .28     .028 No_date   12:13   53.21 .612     .000
02022>        [CN= 85.0: N= 3.00: Tp=  .33]
02023> #*******************************************************************************
02024> # EXT3
02025> #*******************************************************************************
02026> R0125:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02027>      CALIB NASHYD           1.0 01:EXT3           .56     .048 No_date   12:13   46.39 .534     .000
02028>        [CN= 80.0: N= 3.00: Tp=  .32]
02029> #*******************************************************************************
02030> # EXT4
02031> #*******************************************************************************
02032> R0125:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02033>      CALIB NASHYD           1.0 01:EXT4           .31     .028 No_date   12:11   45.14 .520     .000
02034>        [CN= 79.0: N= 3.00: Tp=  .29]
02035> #*******************************************************************************
02036> # EXT5
02037> #*******************************************************************************
02038> R0125:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02039>      CALIB NASHYD           1.0 01:EXT5           .59     .036 No_date   12:21   41.61 .479     .000
02040>        [CN= 76.0: N= 3.00: Tp=  .45]
02041> #*******************************************************************************
02042> # EXT6
02043> #*******************************************************************************
02044> R0125:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02045>      CALIB NASHYD           1.0 01:EXT6           .86     .058 No_date   12:28   53.21 .612     .000
02046>        [CN= 85.0: N= 3.00: Tp=  .56]
02047> #*******************************************************************************
02048> # EXT7
02049> #*******************************************************************************
02050> R0125:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02051>      CALIB NASHYD           1.0 01:EXT7           .47     .045 No_date   12:13   50.35 .580     .000
02052>        [CN= 83.0: N= 3.00: Tp=  .32]
02053> #*******************************************************************************
02054> # EXT8
02055> #*******************************************************************************
02056> R0125:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02057>      CALIB NASHYD           1.0 01:EXT8           .83     .058 No_date   12:19   45.14 .520     .000
02058>        [CN= 79.0: N= 3.00: Tp=  .42]
02059> #*******************************************************************************
02060> # EXT9
02061> #*******************************************************************************
02062> R0125:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02063>      CALIB NASHYD           1.0 01:EXT9          3.57     .205 No_date   12:23   41.62 .479     .000
02064>        [CN= 76.0: N= 3.00: Tp=  .48]
02065> #*******************************************************************************
02066> # EXT9a
02067> #*******************************************************************************
02068> R0125:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02069>      CALIB NASHYD           1.0 01:EXT9a          .01     .002 No_date   12:00   43.92 .506     .000
02070>        [CN= 78.0: N= 3.00: Tp=  .04]
02071> #*******************************************************************************
02072> # EXT10
02073> #*******************************************************************************
02074> R0125:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02075>      CALIB NASHYD           1.0 01:EXT10          .20     .011 No_date   12:20   36.34 .418     .000
02076>        [CN= 71.0: N= 3.00: Tp=  .42]
02077> #*******************************************************************************
02078> # Pre2
02079> #*******************************************************************************
02080> R0125:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02081>      CALIB NASHYD           1.0 01:Pre2           .57     .036 No_date   12:22   43.93 .506     .000
02082>        [CN= 78.0: N= 3.00: Tp=  .46]
02083> #*******************************************************************************
02084> # Pre9
02085> #*******************************************************************************
02086> R0125:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02087>      CALIB NASHYD           1.0 01:Pre9           .83     .033 No_date   12:35   36.35 .418     .000
02088>        [CN= 71.0: N= 3.00: Tp=  .64]
02089> #*******************************************************************************
02090> # Pre10
02091> #*******************************************************************************
02092> R0125:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02093>      CALIB NASHYD           1.0 01:Pre10          .80     .057 No_date   12:11   36.35 .418     .000
02094>        [CN= 71.0: N= 3.00: Tp=  .29]
02095> #*******************************************************************************
02096> # Pre11
02097> #*******************************************************************************
02098> R0125:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02099>      CALIB NASHYD           1.0 01:Pre11          .07     .007 No_date   12:06   43.93 .506     .000
02100>        [CN= 78.0: N= 3.00: Tp=  .21]
02101> #*******************************************************************************
02102> R0125:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02103>      ADD HYD                1.0 02:EXT2           .28     .028 No_date   12:13   53.21 n/a      .000
02104>                           +    1.0 02:Pre2           .57     .036 No_date   12:22   43.93 n/a      .000
02105>                         SUM=   1.0 01:J1            .85     .062 No_date   12:17   47.04 n/a      .000
02106> R0125:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02107>      ROUTE CHANNEL    ->    1.0 02:J1            .85     .062 No_date   12:17   47.04 n/a      .000
02108>        [RDT= 1.00] out<-    1.0 01:R1            .85     .060 No_date   12:23   47.04 n/a      .000
02109>          [L/S/n=  143./ .394/.035]
02110>          (Vmax=  .368:Dmax=  .157)
02111> R0125:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02112>      ADD HYD                1.0 02:R1            .85     .060 No_date   12:23   47.04 n/a      .000
02113>                           +    1.0 02:EXT3          .56     .048 No_date   12:13   46.39 n/a      .000
02114>                           +    1.0 02:EXT1         3.21     .155 No_date   12:40   46.39 n/a      .000
02115>                         SUM=   1.0 01:J2           4.62     .242 No_date   12:28   46.51 n/a      .000
02116> R0125:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02117>      ROUTE CHANNEL    ->    1.0 02:J2           4.62     .242 No_date   12:28   46.51 n/a      .000
02118>        [RDT= 1.00] out<-    1.0 01:R2           4.62     .241 No_date   12:30   46.51 n/a      .000
02119>          [L/S/n=   73./ .425/.035]
02120>          (Vmax=  .518:Dmax=  .277)
02121> R0125:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02122>      ADD HYD                1.0 02:R2           4.62     .241 No_date   12:30   46.51 n/a      .000
02123>                           +    1.0 02:EXT4          .31     .028 No_date   12:11   45.14 n/a      .000
02124>                         SUM=   1.0 01:J3           4.93     .259 No_date   12:28   46.42 n/a      .000
02125> R0125:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02126>      ROUTE CHANNEL    ->    1.0 02:J3           4.93     .259 No_date   12:28   46.42 n/a      .000
02127>        [RDT= 1.00] out<-    1.0 01:R3           4.93     .257 No_date   12:31   46.42 n/a      .000
02128>          [L/S/n=   92./ .274/.035]
02129>          (Vmax=  .424:Dmax=  .286)
02130> R0125:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02131>      ADD HYD                1.0 02:R3           4.93     .257 No_date   12:31   46.42 n/a      .000
02132>                           +    1.0 02:EXT5          .59     .036 No_date   12:21   41.61 n/a      .000
02133>                         SUM=   1.0 01:J4           5.52     .291 No_date   12:29   45.90 n/a      .000
02134> R0125:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02135>      ROUTE CHANNEL    ->    1.0 02:J4           5.52     .291 No_date   12:29   45.90 n/a      .000
02136>        [RDT= 1.00] out<-    1.0 01:R4           5.52     .275 No_date   12:39   45.90 n/a      .000
02137>          [L/S/n=  251./ .190/.035]
02138>          (Vmax=  .417:Dmax=  .323)
02139> R0125:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02140>      ADD HYD                1.0 02:R4           5.52     .275 No_date   12:39   45.90 n/a      .000
02141>                           +    1.0 02:EXT6          .86     .058 No_date   12:28   53.21 n/a      .000
02142>                           +    1.0 02:EXT7          .47     .045 No_date   12:13   50.35 n/a      .000
02143>                         SUM=   1.0 01:J5           6.86     .357 No_date   12:35   47.13 n/a      .000
02144> R0125:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02145>      ROUTE CHANNEL    ->    1.0 02:J5           6.86     .357 No_date   12:35   47.13 n/a      .000
02146>        [RDT= 1.00] out<-    1.0 01:R5           6.86     .352 No_date   12:39   47.13 n/a      .000
02147>          [L/S/n=  237./ .644/.035]
02148>          (Vmax=  .681:Dmax=  .301)
02149> R0125:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02150>      ROUTE CHANNEL    ->    1.0 02:Pre10         .80     .057 No_date   12:11   36.35 n/a      .000
02151>        [RDT= 1.00] out<-    1.0 01:R6           .80     .056 No_date   12:14   36.35 n/a      .000
02152>          [L/S/n=   77./ .776/.035]
02153>          (Vmax=  .492:Dmax=  .041)
02154> R0125:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02155>      ROUTE CHANNEL    ->    1.0 02:Pre9          .83     .033 No_date   12:35   36.35 n/a      .000
02156>        [RDT= 1.00] out<-    1.0 01:R7           .83     .033 No_date   12:39   36.35 n/a      .000
02157>          [L/S/n=  159./1.576/.035]
02158>          (Vmax=  .797:Dmax=  .010)
02159> R0125:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02160>      ADD HYD                1.0 02:R6           .80     .056 No_date   12:14   36.41 n/a      .000
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02161>                    +     1.0 02:EXT10          .20     .011 No_date   12:20   36.34  n/a     .000
02162>                  SUM=    1.0 01:J6            1.01     .066 No_date   12:15   36.40  n/a     .000
02163> R0125:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02164>     ROUTE CHANNEL   ->    1.0 02:J6            1.01     .066 No_date   12:15   36.40  n/a     .000
02165>      [RDT= 1.00] out<-    1.0 01:R8            1.01     .065 No_date   12:18   36.40  n/a     .000
02166>       [L/S/n=   79./ .522/.035]
02167>       {Vmax=  .423:Dmax=  .049}
02168> R0125:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02169>     ADD HYD             1.0 02:R8            1.01     .065 No_date   12:18   36.40  n/a     .000
02170>                    +    1.0 02:R7             .83     .033 No_date   12:39   36.36  n/a     .000
02171>                  SUM=    1.0 01:J7            1.83     .092 No_date   12:21   36.38  n/a     .000
02172> R0125:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02173>     ROUTE CHANNEL   ->    1.0 02:J7            1.83     .092 No_date   12:21   36.38  n/a     .000
02174>      [RDT= 1.00] out<-    1.0 01:R9            1.83     .092 No_date   12:22   36.38  n/a     .000
02175>       [L/S/n=   29./ .887/.035]
02176>       {Vmax=  .543:Dmax=  .062}
02177> R0125:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02178>     ADD HYD             1.0 02:EXT9          3.57     .205 No_date   12:23   41.62  n/a     .000
02179>                    +    1.0 02:R9            1.83     .092 No_date   12:22   36.39  n/a     .000
02180>                    +    1.0 02:EXT8           .83     .058 No_date   12:19   45.14  n/a     .000
02181>                    +    1.0 02:R5            6.86     .352 No_date   12:39   47.13  n/a     .000
02182>                  SUM=    1.0 01:J8           13.10     .675 No_date   12:31   44.00  n/a     .000
02183> R0125:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02184>     ROUTE PIPE      ->    1.0 02:J8           13.10     .675 No_date   12:31   44.00  n/a     .000
02185> *   [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .674 No_date   12:33   44.00  n/a     .000
02186>       [L/S/n=    8./ .010/.013]
02187>       {Vmax=  .451:Dmax= 1.210}
02188>       [Din=  .53:Dused= 1.47)
02189> ###############################################################################
02190> # STORMS
02191> ###############################################################################
02192>  ** END OF RUN :  149
02193>
02194> *******************************************************************************************************
02195>
02196>
02197>
02198>
02199>
02200>  RUN#:COMMAND#
02201> R0150:C00001------------------------------------------------------------------------------------------
02202>     START
02203>      [TZERO =    .00 hrs on        0]
02204>      [METOUT=   2   (1=imperial, 2=metric output)]
02205>      [NSTORM=   1 ]
02206>      [NRUN  = 0150 ]
02207> *******************************************************************************************************
02208> #  SWMHYMO  / INPUT DATA FILE
02209> *******************************************************************************************************
02210> #  Project Name  : [5923 Ottawa St]
02211> #  Project Number: [P2710(e01)]
02212> #  Date          : [2025 FEB 05]
02213> #  Modeller      : [MM]
02214> #  Company       : JFSA Canada Inc.
02215> #  License #     : 2549237
02216> *******************************************************************************************************
02217> # Model developed to simulate runoff from subcatchments under pre development conditions
02218> *******************************************************************************************************
02219> R0150:C00002------------------------------------------------------------------------------------------
02220>      READ STORM
02221>       Filename = STORM.001
02222>       Comment  = 50 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
02223>       [SDT=10.00:SDUR=  24.00:PTOT=  96.53]
02224> *******************************************************************************************************
02225> # EXT1
02226> *******************************************************************************************************
02227> R0150:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02228>     CALIB NASHYD        1.0 01:EXT1          3.21     .182 No_date   12:40   54.31 .563     .000
02229>       [CN= 80.0: N= 3.00: Tp=  .72]
02230> *******************************************************************************************************
02231> # EXT2
02232> *******************************************************************************************************
02233> R0150:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02234>     CALIB NASHYD        1.0 01:EXT2           .28     .033 No_date   12:13   61.73 .640     .000
02235>       [CN= 85.0: N= 3.00: Tp=  .33]
02236> *******************************************************************************************************
02237> # EXT3
02238> *******************************************************************************************************
02239> R0150:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02240>     CALIB NASHYD        1.0 01:EXT3           .56     .057 No_date   12:13   54.31 .563     .000
02241>       [CN= 80.0: N= 3.00: Tp=  .32]
02242> *******************************************************************************************************
02243> # EXT4
02244> *******************************************************************************************************
02245> R0150:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02246>     CALIB NASHYD        1.0 01:EXT4           .31     .033 No_date   12:11   52.94 .548     .000
02247>       [CN= 79.0: N= 3.00: Tp=  .29]
02248> *******************************************************************************************************
02249> # EXT5
02250> *******************************************************************************************************
02251> R0150:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02252>     CALIB NASHYD        1.0 01:EXT5           .59     .042 No_date   12:21   49.04 .508     .000
02253>       [CN= 76.0: N= 3.00: Tp=  .45]
02254> *******************************************************************************************************
02255> # EXT6
02256> *******************************************************************************************************
02257> R0150:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02258>     CALIB NASHYD        1.0 01:EXT6           .86     .068 No_date   12:28   61.73 .640     .000
02259>       [CN= 85.0: N= 3.00: Tp=  .56]
02260> *******************************************************************************************************
02261> # EXT7
02262> *******************************************************************************************************
02263> R0150:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02264>     CALIB NASHYD        1.0 01:EXT7           .47     .052 No_date   12:12   58.64 .608     .000
02265>       [CN= 83.0: N= 3.00: Tp=  .32]
02266> *******************************************************************************************************
02267> # EXT8
02268> *******************************************************************************************************
02269> R0150:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02270>     CALIB NASHYD        1.0 01:EXT8           .83     .068 No_date   12:19   52.94 .548     .000
02271>       [CN= 79.0: N= 3.00: Tp=  .42]
02272> *******************************************************************************************************
02273> # EXT9
02274> *******************************************************************************************************
02275> R0150:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02276>     CALIB NASHYD        1.0 01:EXT9          3.57     .242 No_date   12:23   49.04 .508     .000
02277>       [CN= 76.0: N= 3.00: Tp=  .48]
02278> *******************************************************************************************************
02279> # EXT9a
02280> *******************************************************************************************************
02281> R0150:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02282>     CALIB NASHYD        1.0 01:EXT9a          .01     .002 No_date   12:00   51.60 .535     .000
02283>       [CN= 78.0: N= 3.00: Tp=  .04]
02284> *******************************************************************************************************
02285> # EXT10
02286> *******************************************************************************************************
02287> R0150:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02288>     CALIB NASHYD        1.0 01:EXT10          .20     .013 No_date   12:19   43.13 .447     .000
02289>       [CN= 71.0: N= 3.00: Tp=  .42]
02290> *******************************************************************************************************
02291> # Pre2
02292> *******************************************************************************************************
02293> R0150:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02294>     CALIB NASHYD        1.0 01:Pre2           .57     .042 No_date   12:22   51.61 .535     .000
02295>       [CN= 78.0: N= 3.00: Tp=  .46]
02296> *******************************************************************************************************
02297> # Pre9
02298> *******************************************************************************************************
02299> R0150:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02300>     CALIB NASHYD        1.0 01:Pre9           .83     .040 No_date   12:35   43.14 .447     .000
02301>       [CN= 71.0: N= 3.00: Tp=  .64]
02302> *******************************************************************************************************
02303> # Pre10
02304> *******************************************************************************************************
02305> R0150:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02306>     CALIB NASHYD        1.0 01:Pre10          .80     .068 No_date   12:11   43.14 .447     .000
02307>       [CN= 71.0: N= 3.00: Tp=  .29]
02308> *******************************************************************************************************
02309> # Pre11
02310> *******************************************************************************************************
02311> R0150:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02312>     CALIB NASHYD        1.0 01:Pre11          .07     .009 No_date   12:06   51.60 .535     .000
02313>       [CN= 78.0: N= 3.00: Tp=  .21]
02314> *******************************************************************************************************
02315> R0150:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02316>     ADD HYD             1.0 02:EXT2           .28     .033 No_date   12:13   61.73  n/a     .000
02317>                    +    1.0 02:Pre2           .57     .042 No_date   12:22   51.61  n/a     .000
02318>                  SUM=    1.0 01:J1            .85     .073 No_date   12:17   55.00  n/a     .000
02319> R0150:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02320>     ROUTE CHANNEL   ->    1.0 02:J1            .85     .073 No_date   12:17   55.00  n/a     .000
02321>      [RDT= 1.00] out<-    1.0 01:R1            .85     .070 No_date   12:23   55.00  n/a     .000
02322>       [L/S/n=  143./ .394/.035]
02323>       {Vmax=  .384:Dmax=  .169}
02324> R0150:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02325>     ADD HYD             1.0 02:R1             .85     .070 No_date   12:23   55.00  n/a     .000
02326>                    +    1.0 02:EXT3           .56     .057 No_date   12:13   54.31  n/a     .000
02327>                    +    1.0 02:EXT1          3.21     .182 No_date   12:40   54.31  n/a     .000
02328>                  SUM=    1.0 01:J2            4.62     .284 No_date   12:28   54.44  n/a     .000
02329> R0150:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02330>     ROUTE CHANNEL   ->    1.0 02:J2            4.62     .284 No_date   12:28   54.44  n/a     .000
02331>      [RDT= 1.00] out<-    1.0 01:R2            4.62     .283 No_date   12:30   54.44  n/a     .000
02332>       [L/S/n=   73./ .425/.035]
02333>       {Vmax=  .540:Dmax=  .295}
02334> R0150:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02335>     ADD HYD             1.0 02:R2            4.62     .283 No_date   12:30   54.44  n/a     .000
02336>                    +    1.0 02:EXT4           .31     .033 No_date   12:11   52.94  n/a     .000
02337>                  SUM=    1.0 01:J3            4.93     .305 No_date   12:27   54.34  n/a     .000
02338> R0150:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02339>     ROUTE CHANNEL   ->    1.0 02:J3            4.93     .305 No_date   12:27   54.34  n/a     .000
02340>      [RDT= 1.00] out<-    1.0 01:R3            4.93     .302 No_date   12:30   54.34  n/a     .000
02341>       [L/S/n=   92./ .274/.035]
02342>       {Vmax=  .442:Dmax=  .305}
02343> R0150:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02344>     ADD HYD             1.0 02:R3            4.93     .302 No_date   12:30   54.34  n/a     .000
02345>                    +    1.0 02:EXT5           .59     .042 No_date   12:21   49.04  n/a     .000
02346>                  SUM=    1.0 01:J4            5.52     .343 No_date   12:28   53.77  n/a     .000
02347> R0150:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02348>     ROUTE CHANNEL   ->    1.0 02:J4            5.52     .343 No_date   12:28   53.77  n/a     .000
02349>      [RDT= 1.00] out<-    1.0 01:R4            5.52     .324 No_date   12:38   53.77  n/a     .000
02350>       [L/S/n=  251./ .190/.035]
02351>       {Vmax=  .438:Dmax=  .348}
02352> R0150:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02353>     ADD HYD             1.0 02:R4            5.52     .324 No_date   12:38   53.77  n/a     .000
02354>                    +    1.0 02:EXT6           .86     .068 No_date   12:28   61.73  n/a     .000
02355>                    +    1.0 02:EXT7           .47     .052 No_date   12:12   58.64  n/a     .000
02356>                  SUM=    1.0 01:J5            6.86     .421 No_date   12:34   55.11  n/a     .000
02357> R0150:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02358>     ROUTE CHANNEL   ->    1.0 02:J5            6.86     .421 No_date   12:34   55.11  n/a     .000
02359>      [RDT= 1.00] out<-    1.0 01:R5            6.86     .416 No_date   12:39   55.11  n/a     .000
02360>       [L/S/n=  237./ .644/.035]
02361>       {Vmax=  .714:Dmax=  .320}
02362> R0150:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02363>     ROUTE CHANNEL   ->    1.0 02:Pre10           .80     .068 No_date   12:11   43.14  n/a     .000
02364>      [RDT= 1.00] out<-    1.0 01:R6            .80     .066 No_date   12:14   43.14  n/a     .000
02365>       [L/S/n=   77./ .776/.035]
02366>       {Vmax=  .492:Dmax=  .049}
02367> R0150:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02368>     ROUTE CHANNEL   ->    1.0 02:Pre9           .83     .040 No_date   12:35   43.14  n/a     .000
02369>      [RDT= 1.00] out<-    1.0 01:R7            .83     .040 No_date   12:39   43.13  n/a     .000
02370>       [L/S/n=  159./1.576/.035]
02371>       {Vmax=  .797:Dmax=  .012}
02372> R0150:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02373>     ADD HYD             1.0 02:R6             .80     .066 No_date   12:14   43.21  n/a     .000
02374>                    +    1.0 02:EXT10          .20     .013 No_date   12:19   43.13  n/a     .000
02375>                  SUM=    1.0 01:J6            1.01     .079 No_date   12:15   43.19  n/a     .000
02376> R0150:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02377>     ROUTE CHANNEL   ->    1.0 02:J6            1.01     .079 No_date   12:15   43.19  n/a     .000
02378>      [RDT= 1.00] out<-    1.0 01:R8            1.01     .077 No_date   12:18   43.19  n/a     .000
02379>       [L/S/n=   79./ .522/.035]
02380>       {Vmax=  .423:Dmax=  .058}
02381> R0150:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02382>     ADD HYD             1.0 02:R8            1.01     .077 No_date   12:18   43.19  n/a     .000
02383>                    +    1.0 02:R7             .83     .040 No_date   12:39   43.15  n/a     .000
02384>                  SUM=    1.0 01:J7            1.83     .110 No_date   12:21   43.17  n/a     .000
02385> R0150:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02386>     ROUTE CHANNEL   ->    1.0 02:J7            1.83     .110 No_date   12:21   43.17  n/a     .000
02387>      [RDT= 1.00] out<-    1.0 01:R9            1.83     .110 No_date   12:22   43.17  n/a     .000
02388>       [L/S/n=   29./ .887/.035]
02389>       {Vmax=  .543:Dmax=  .074}
02390> R0150:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02391>     ADD HYD             1.0 02:EXT9          3.57     .242 No_date   12:23   49.04  n/a     .000
02392>                    +    1.0 02:R9            1.83     .110 No_date   12:22   43.18  n/a     .000
02393>                    +    1.0 02:EXT8           .83     .068 No_date   12:19   52.94  n/a     .000
02394>                    +    1.0 02:R5            6.86     .416 No_date   12:39   55.11  n/a     .000
02395>                  SUM=    1.0 01:J8           13.10     .800 No_date   12:30   51.64  n/a     .000
02396> R0150:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02397>     ROUTE PIPE      ->    1.0 02:J8           13.10     .800 No_date   12:30   51.64  n/a     .000
02398> *   [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .799 No_date   12:32   51.64  n/a     .000
02399>       [L/S/n=    8./ .010/.013]
02400>       {Vmax=  .470:Dmax= 1.290}
02401>       [Din=  .53:Dused= 1.57)
02402> ###############################################################################
02403> # STORMS
02404> ###############################################################################
02405>  ** END OF RUN :  198
02406>
02407> *******************************************************************************************************
02408>
02409>
02410>
02411>
02412>
02413>  RUN#:COMMAND#
02414> R0199:C00001------------------------------------------------------------------------------------------
02415>     START
02416>      [TZERO =    .00 hrs on        0]
02417>      [METOUT=   2   (1=imperial, 2=metric output)]
02418>      [NSTORM=   1 ]
02419>      [NRUN  = 0199 ]
02420> *******************************************************************************************************
02421> #  SWMHYMO  / INPUT DATA FILE
02422> *******************************************************************************************************
02423> #  Project Name  : [5923 Ottawa St]
02424> #  Project Number: [P2710(e01)]
02425> #  Date          : [2025 FEB 05]
02426> #  Modeller      : [MM]
02427> #  Company       : JFSA Canada Inc.
02428> #  License #     : 2549237
02429> *******************************************************************************************************
02430> # Model developed to simulate runoff from subcatchments under pre development conditions
02431> *******************************************************************************************************
02432> R0199:C00002------------------------------------------------------------------------------------------
02433>      READ STORM
02434>       Filename = STORM.001
02435>       Comment  = 100 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
02436>       [SDT=10.00:SDUR=  24.00:PTOT= 106.73]
02437> *******************************************************************************************************
02438> # EXT1
02439> *******************************************************************************************************
02440> R0199:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02441>     CALIB NASHYD        1.0 01:EXT1          3.21     .212 No_date   12:39   62.92 .589     .000
02442>       [CN= 80.0: N= 3.00: Tp=  .72]
02443> *******************************************************************************************************
02444> # EXT2
02445> *******************************************************************************************************
02446> R0199:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02447>     CALIB NASHYD        1.0 01:EXT2           .28     .037 No_date   12:13   70.91 .664     .000
02448>       [CN= 85.0: N= 3.00: Tp=  .33]
02449> *******************************************************************************************************
02450> # EXT3
02451> *******************************************************************************************************
02452> R0199:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02453>     CALIB NASHYD        1.0 01:EXT3           .56     .066 No_date   12:13   62.92 .589     .000
02454>       [CN= 80.0: N= 3.00: Tp=  .32]
02455> *******************************************************************************************************
02456> # EXT4
02457> *******************************************************************************************************
02458> R0199:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02459>     CALIB NASHYD        1.0 01:EXT4           .31     .038 No_date   12:11   61.42 .576     .000
02460>       [CN= 79.0: N= 3.00: Tp=  .29]
02461> *******************************************************************************************************
02462> # EXT5
02463> *******************************************************************************************************
02464> R0199:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02465>     CALIB NASHYD        1.0 01:EXT5           .59     .049 No_date   12:21   57.15 .535     .000
02466>       [CN= 76.0: N= 3.00: Tp=  .45]
02467> *******************************************************************************************************
02468> # EXT6
02469> *******************************************************************************************************
02470> R0199:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02471>     CALIB NASHYD        1.0 01:EXT6           .86     .078 No_date   12:28   70.92 .664     .000
02472>       [CN= 85.0: N= 3.00: Tp=  .56]
02473> *******************************************************************************************************
02474> # EXT7
02475> *******************************************************************************************************
02476> R0199:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02477>     CALIB NASHYD        1.0 01:EXT7           .47     .060 No_date   12:12   67.60 .633     .000
02478>       [CN= 83.0: N= 3.00: Tp=  .32]
02479> *******************************************************************************************************
02480> # EXT8
02481> *******************************************************************************************************
02482> R0199:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02483>     CALIB NASHYD        1.0 01:EXT8           .83     .079 No_date   12:19   61.42 .576     .000
02484>       [CN= 79.0: N= 3.00: Tp=  .42]
02485> *******************************************************************************************************
02486> # EXT9
02487> *******************************************************************************************************
02488> R0199:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02489>     CALIB NASHYD        1.0 01:EXT9          3.57     .284 No_date   12:23   57.15 .535     .000
02490>       [CN= 76.0: N= 3.00: Tp=  .48]
02491> *******************************************************************************************************
02492> # EXT9a
02493> *******************************************************************************************************
02494> R0199:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02495>     CALIB NASHYD        1.0 01:EXT9a          .01     .003 No_date   12:00   59.96 .562     .000
02496>       [CN= 78.0: N= 3.00: Tp=  .04]
02497> *******************************************************************************************************
02498> # EXT10
02499> *******************************************************************************************************
02500> R0199:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02501>     CALIB NASHYD        1.0 01:EXT10          .20     .016 No_date   12:19   50.61 .474     .000
02502>       [CN= 71.0: N= 3.00: Tp=  .42]
02503> *******************************************************************************************************
02504> # Pre2
02505> *******************************************************************************************************
02506> R0199:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02507>     CALIB NASHYD        1.0 01:Pre2           .57     .049 No_date   12:22   59.97 .562     .000
02508>       [CN= 78.0: N= 3.00: Tp=  .46]
02509> *******************************************************************************************************
02510> # Pre9
02511> *******************************************************************************************************
02512> R0199:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02513>     CALIB NASHYD        1.0 01:Pre9           .83     .047 No_date   12:35   50.61 .474     .000
02514>       [CN= 71.0: N= 3.00: Tp=  .64]
02515> *******************************************************************************************************
02516> # Pre10
02517> *******************************************************************************************************
02518> R0199:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02519>     CALIB NASHYD        1.0 01:Pre10          .80     .080 No_date   12:11   50.61 .474     .000
02520>       [CN= 71.0: N= 3.00: Tp=  .29]
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02521> #*******************************************************************************
02522> # Pre11
02523> #*******************************************************************************
02524> R0199:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02525>      CALIB NASHYD           1.0 01:Pre11          .07     .010 No_date   12:06   59.96 .562    .000
02526>        [CN= 78.0: N= 3.00: Tp=  .21]
02527> #*******************************************************************************
02528> R0199:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02529>      ADD HYD                1.0 02:EXT2           .28     .037 No_date   12:13   70.91  n/a    .000
02530>                         +    1.0 02:Pre2           .57     .049 No_date   12:22   59.97  n/a    .000
02531>                       SUM=   1.0 01:J1            .85     .084 No_date   12:17   63.63  n/a    .000
02532> R0199:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02533>      ROUTE CHANNEL    ->    1.0 02:J1            .85     .084 No_date   12:17   63.63  n/a    .000
02534>        [RD*= 1.00] out<-    1.0 01:R1            .85     .081 No_date   12:22   63.63  n/a    .000
02535>        [L/S/n=  143./ .394/.035]
02536>        [Vmax=  .404:Dmax=  .181]
02537> R0199:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02538>      ADD HYD                1.0 02:R1            .85     .081 No_date   12:22   63.63  n/a    .000
02539>                         +    1.0 02:EXT3           .56     .066 No_date   12:13   62.92  n/a    .000
02540>                         +    1.0 02:EXT1          3.21     .212 No_date   12:39   62.92  n/a    .000
02541>                       SUM=   1.0 01:J2            4.62     .329 No_date   12:27   63.05  n/a    .000
02542> R0199:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02543>      ROUTE CHANNEL    ->    1.0 02:J2            4.62     .329 No_date   12:27   63.05  n/a    .000
02544>        [RD*= 1.00] out<-    1.0 01:R2            4.62     .329 No_date   12:29   63.05  n/a    .000
02545>        [L/S/n=  73./ .425/.035]
02546>        [Vmax=  .561:Dmax=  .313]
02547> R0199:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02548>      ADD HYD                1.0 02:R2            4.62     .329 No_date   12:29   63.05  n/a    .000
02549>                         +    1.0 02:EXT4           .31     .038 No_date   12:11   61.42  n/a    .000
02550>                       SUM=   1.0 01:J3            4.93     .354 No_date   12:27   62.95  n/a    .000
02551> R0199:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02552>      ROUTE CHANNEL    ->    1.0 02:J3            4.93     .354 No_date   12:27   62.95  n/a    .000
02553>        [RD*= 1.00] out<-    1.0 01:R3            4.93     .352 No_date   12:30   62.95  n/a    .000
02554>        [L/S/n=  92./ .274/.035]
02555>        [Vmax=  .459:Dmax=  .323]
02556> R0199:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02557>      ADD HYD                1.0 02:R3            4.93     .352 No_date   12:30   62.95  n/a    .000
02558>                         +    1.0 02:EXT5           .59     .049 No_date   12:21   57.15  n/a    .000
02559>                       SUM=   1.0 01:J4            5.52     .399 No_date   12:28   62.32  n/a    .000
02560> R0199:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02561>      ROUTE CHANNEL    ->    1.0 02:J4            5.52     .399 No_date   12:28   62.32  n/a    .000
02562>        [RD*= 1.00] out<-    1.0 01:R4            5.52     .379 No_date   12:37   62.32  n/a    .000
02563>        [L/S/n=  251./ .190/.035]
02564>        [Vmax=  .456:Dmax=  .372]
02565> R0199:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02566>      ADD HYD                1.0 02:R4            5.52     .379 No_date   12:37   62.32  n/a    .000
02567>                         +    1.0 02:EXT6           .86     .078 No_date   12:28   70.92  n/a    .000
02568>                         +    1.0 02:EXT7           .47     .060 No_date   12:12   67.60  n/a    .000
02569>                       SUM=   1.0 01:J5            6.86     .491 No_date   12:33   63.77  n/a    .000
02570> R0199:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02571>      ROUTE CHANNEL    ->    1.0 02:J5            6.86     .491 No_date   12:33   63.77  n/a    .000
02572>        [RD*= 1.00] out<-    1.0 01:R5            6.86     .485 No_date   12:38   63.77  n/a    .000
02573>        [L/S/n=  237./ .644/.035]
02574>        [Vmax=  .744:Dmax=  .340]
02575> R0199:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02576>      ROUTE CHANNEL    ->    1.0 02:Pre10          .80     .080 No_date   12:11   50.61  n/a    .000
02577>        [RD*= 1.00] out<-    1.0 01:R6            .80     .078 No_date   12:14   50.61  n/a    .000
02578>        [L/S/n=  77./ .776/.035]
02579>        [Vmax=  .492:Dmax=  .058]
02580> R0199:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02581>      ROUTE CHANNEL    ->    1.0 02:Pre9           .83     .047 No_date   12:35   50.61  n/a    .000
02582>        [RD*= 1.00] out<-    1.0 01:R7            .83     .047 No_date   12:38   50.61  n/a    .000
02583>        [L/S/n=  159./1.576/.035]
02584>        [Vmax=  .797:Dmax=  .014]
02585> R0199:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02586>      ADD HYD                1.0 02:R6            .80     .078 No_date   12:14   50.69  n/a    .000
02587>                         +    1.0 02:EXT10          .20     .016 No_date   12:19   50.61  n/a    .000
02588>                       SUM=   1.0 01:J6            1.01     .093 No_date   12:14   50.67  n/a    .000
02589> R0199:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02590>      ROUTE CHANNEL    ->    1.0 02:J6            1.01     .093 No_date   12:14   50.67  n/a    .000
02591>        [RD*= 1.00] out<-    1.0 01:R8            1.01     .091 No_date   12:18   50.67  n/a    .000
02592>        [L/S/n=  79./ .522/.035]
02593>        [Vmax=  .423:Dmax=  .068]
02594> R0199:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02595>      ADD HYD                1.0 02:R8            1.01     .091 No_date   12:18   50.68  n/a    .000
02596>                         +    1.0 02:R7            .83     .047 No_date   12:38   50.63  n/a    .000
02597>                       SUM=   1.0 01:J7            1.83     .129 No_date   12:21   50.65  n/a    .000
02598> R0199:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02599>      ROUTE CHANNEL    ->    1.0 02:J7            1.83     .129 No_date   12:21   50.65  n/a    .000
02600>        [RD*= 1.00] out<-    1.0 01:R9            1.83     .129 No_date   12:22   50.65  n/a    .000
02601>        [L/S/n=  29./ .887/.035]
02602>        [Vmax=  .543:Dmax=  .088]
02603> R0199:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02604>      ADD HYD                1.0 02:EXT9          3.57     .284 No_date   12:23   57.15  n/a    .000
02605>                         +    1.0 02:R9            1.83     .129 No_date   12:22   50.66  n/a    .000
02606>                         +    1.0 02:EXT8           .83     .079 No_date   12:19   61.43  n/a    .000
02607>                         +    1.0 02:R5            6.86     .485 No_date   12:38   63.77  n/a    .000
02608>                       SUM=   1.0 01:J8           13.10     .939 No_date   12:30   59.98  n/a    .000
02609> R0199:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02610>      ROUTE PIPE       ->    1.0 02:J8           13.10     .939 No_date   12:30   59.98  n/a    .000
02611> *    [RD*= 1.00] out<-    1.0 01:Outlet        13.10     .937 No_date   12:31   59.98  n/a    .000
02612>        [L/S/n=   8./ .010/.013]
02613>        [Vmax=  .489:Dmax= 1.369]
02614>        [Din=  .53:Dused= 1.67)
02615> ###############################################################################
02616> # STORMS
02617> ###############################################################################
02618>   ** END OF RUN : 1978
02619>
02620> *******************************************************************************
02621>
02622>
02623>
02624>
02625>
02626>  RUN#:COMMAND#
02627> R1979:C00001------------------------------------------------------------------------
02628>      START
02629>        [TZERO =    .00 hrs on        0]
02630>        [METOUT=  2    (1=imperial, 2=metric output)]
02631>        [NSTORM=  1 ]
02632>        [NRUN  = 1979 ]
02633> #*******************************************************************************
02634> #  SWMHYMO  / INPUT DATA FILE
02635> #*******************************************************************************
02636> #  Project Name  : [5923 Ottawa St]
02637> #  Project Number: [P2710(e01)]
02638> #  Date          : [2025 FEB 05]
02639> #  Modeller      : [MM]
02640> #  Company       : JFSA Canada Inc.
02641> #  License #     : 2549237
02642> #*******************************************************************************
02643> # Model developed to simulate runoff from subcatchments under pre development conditions
02644> #*******************************************************************************
02645> R1979:C00002------------------------------------------------------------------------
02646>      READ STORM
02647>        Filename = STORM.001
02648>        Comment  = July 1st, 1979 Storm (3H) - Ottawa International Airport step 5 min
02649>        [SDT= 5.00:SDUR=   3.00:PTOT=  83.99]
02650> #*******************************************************************************
02651> # EXT1
02652> #*******************************************************************************
02653> R1979:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02654>      CALIB NASHYD           1.0 01:EXT1          3.21     .240 No_date   2:16   44.05 .524    .000
02655>        [CN= 80.0: N= 3.00: Tp=  .72]
02656> #*******************************************************************************
02657> # EXT2
02658> #*******************************************************************************
02659> R1979:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02660>      CALIB NASHYD           1.0 01:EXT2           .28     .039 No_date   1:50   50.68 .603    .000
02661>        [CN= 85.0: N= 3.00: Tp=  .33]
02662> #*******************************************************************************
02663> # EXT3
02664> #*******************************************************************************
02665> R1979:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02666>      CALIB NASHYD           1.0 01:EXT3           .56     .067 No_date   1:50   44.05 .524    .000
02667>        [CN= 80.0: N= 3.00: Tp=  .32]
02668> #*******************************************************************************
02669> # EXT4
02670> #*******************************************************************************
02671> R1979:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02672>      CALIB NASHYD           1.0 01:EXT4           .31     .038 No_date   1:48   42.84 .510    .000
02673>        [CN= 79.0: N= 3.00: Tp=  .29]
02674> #*******************************************************************************
02675> # EXT5
02676> #*******************************************************************************
02677> R1979:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02678>      CALIB NASHYD           1.0 01:EXT5           .59     .054 No_date   2:01   39.44 .470    .000
02679>        [CN= 76.0: N= 3.00: Tp=  .45]
02680> #*******************************************************************************
02681> # EXT6
02682> #*******************************************************************************
02683> R1979:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02684>      CALIB NASHYD           1.0 01:EXT6           .86     .088 No_date   2:06   50.68 .603    .000
02685>        [CN= 85.0: N= 3.00: Tp=  .56]
02686> #*******************************************************************************
02687> # EXT7
02688> #*******************************************************************************
02689> R1979:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02690>      CALIB NASHYD           1.0 01:EXT7           .47     .061 No_date   1:49   47.90 .570    .000
02691>        [CN= 83.0: N= 3.00: Tp=  .32]
02692> #*******************************************************************************
02693> # EXT8
02694> #*******************************************************************************
02695> R1979:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02696>      CALIB NASHYD           1.0 01:EXT8           .83     .085 No_date   1:58   42.85 .510    .000
02697>        [CN= 79.0: N= 3.00: Tp=  .42]
02698> #*******************************************************************************
02699> # EXT9
02700> #*******************************************************************************
02701> R1979:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02702>      CALIB NASHYD           1.0 01:EXT9          3.57     .311 No_date   2:03   39.44 .470    .000
02703>        [CN= 76.0: N= 3.00: Tp=  .48]
02704> #*******************************************************************************
02705> # EXT9a
02706> #*******************************************************************************
02707> R1979:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02708>      CALIB NASHYD           1.0 01:EXT9a          .01     .002 No_date   1:30   41.67 .496    .000
02709>        [CN= 78.0: N= 3.00: Tp=  .04]
02710> #*******************************************************************************
02711> # EXT10
02712> #*******************************************************************************
02713> R1979:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02714>      CALIB NASHYD           1.0 01:EXT10          .20     .017 No_date   1:59   34.36 .409    .000
02715>        [CN= 71.0: N= 3.00: Tp=  .42]
02716> #*******************************************************************************
02717> # Pre2
02718> #*******************************************************************************
02719> R1979:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02720>      CALIB NASHYD           1.0 01:Pre2           .57     .053 No_date   2:01   41.68 .496    .000
02721>        [CN= 78.0: N= 3.00: Tp=  .46]
02722> #*******************************************************************************
02723> # Pre9
02724> #*******************************************************************************
02725> R1979:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02726>      CALIB NASHYD           1.0 01:Pre9           .83     .053 No_date   2:12   34.37 .409    .000
02727>        [CN= 71.0: N= 3.00: Tp=  .64]
02728> #*******************************************************************************
02729> # Pre10
02730> #*******************************************************************************
02731> R1979:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02732>      CALIB NASHYD           1.0 01:Pre10          .80     .079 No_date   1:48   34.37 .409    .000
02733>        [CN= 71.0: N= 3.00: Tp=  .29]
02734> #*******************************************************************************
02735> # Pre11
02736> #*******************************************************************************
02737> R1979:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02738>      CALIB NASHYD           1.0 01:Pre11          .07     .009 No_date   1:43   41.67 .496    .000
02739>        [CN= 78.0: N= 3.00: Tp=  .21]
02740> #*******************************************************************************
02741> R1979:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02742>      ADD HYD                1.0 02:EXT2           .28     .039 No_date   1:50   50.68  n/a    .000
02743>                         +    1.0 02:Pre2           .57     .053 No_date   2:01   41.68  n/a    .000
02744>                       SUM=   1.0 01:J1            .85     .090 No_date   1:55   44.69  n/a    .000
02745> R1979:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02746>      ROUTE CHANNEL    ->    1.0 02:J1            .85     .090 No_date   1:55   44.69  n/a    .000
02747>        [RD*= 1.00] out<-    1.0 01:R1            .85     .088 No_date   2:01   44.69  n/a    .000
02748>        [L/S/n=  143./ .394/.035]
02749>        [Vmax=  .411:Dmax=  .186]
02750> R1979:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02751>      ADD HYD                1.0 02:R1            .85     .088 No_date   2:01   44.69  n/a    .000
02752>                         +    1.0 02:EXT3           .56     .067 No_date   1:50   44.05  n/a    .000
02753>                         +    1.0 02:EXT1          3.21     .240 No_date   2:16   44.05  n/a    .000
02754>                       SUM=   1.0 01:J2            4.62     .372 No_date   2:06   44.17  n/a    .000
02755> R1979:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02756>      ROUTE CHANNEL    ->    1.0 02:J2            4.62     .372 No_date   2:06   44.17  n/a    .000
02757>        [RD*= 1.00] out<-    1.0 01:R2            4.62     .371 No_date   2:08   44.17  n/a    .000
02758>        [L/S/n=  73./ .425/.035]
02759>        [Vmax=  .579:Dmax=  .329]
02760> R1979:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02761>      ADD HYD                1.0 02:R2            4.62     .371 No_date   2:08   44.17  n/a    .000
02762>                         +    1.0 02:EXT4           .31     .038 No_date   1:48   42.84  n/a    .000
02763>                       SUM=   1.0 01:J3            4.93     .399 No_date   2:06   44.09  n/a    .000
02764> R1979:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02765>      ROUTE CHANNEL    ->    1.0 02:J3            4.93     .399 No_date   2:06   44.09  n/a    .000
02766>        [RD*= 1.00] out<-    1.0 01:R3            4.93     .396 No_date   2:08   44.09  n/a    .000
02767>        [L/S/n=  92./ .274/.035]
02768>        [Vmax=  .474:Dmax=  .339]
02769> R1979:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02770>      ADD HYD                1.0 02:R3            4.93     .396 No_date   2:08   44.09  n/a    .000
02771>                         +    1.0 02:EXT5           .59     .054 No_date   2:01   39.44  n/a    .000
02772>                       SUM=   1.0 01:J4            5.52     .448 No_date   2:07   43.59  n/a    .000
02773> R1979:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02774>      ROUTE CHANNEL    ->    1.0 02:J4            5.52     .448 No_date   2:07   43.59  n/a    .000
02775>        [RD*= 1.00] out<-    1.0 01:R4            5.52     .429 No_date   2:14   43.59  n/a    .000
02776>        [L/S/n=  251./ .190/.035]
02777>        [Vmax=  .471:Dmax=  .391]
02778> R1979:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02779>      ADD HYD                1.0 02:R4            5.52     .429 No_date   2:14   43.59  n/a    .000
02780>                         +    1.0 02:EXT6           .86     .088 No_date   2:06   50.68  n/a    .000
02781>                         +    1.0 02:EXT7           .47     .061 No_date   1:49   47.90  n/a    .000
02782>                       SUM=   1.0 01:J5            6.86     .557 No_date   2:10   44.78  n/a    .000
02783> R1979:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02784>      ROUTE CHANNEL    ->    1.0 02:J5            6.86     .557 No_date   2:10   44.78  n/a    .000
02785>        [RD*= 1.00] out<-    1.0 01:R5            6.86     .551 No_date   2:14   44.78  n/a    .000
02786>        [L/S/n=  237./ .644/.035]
02787>        [Vmax=  .775:Dmax=  .358]
02788> R1979:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02789>      ROUTE CHANNEL    ->    1.0 02:Pre10          .80     .079 No_date   1:48   34.37  n/a    .000
02790>        [RD*= 1.00] out<-    1.0 01:R6            .80     .078 No_date   1:51   34.37  n/a    .000
02791>        [L/S/n=  77./ .776/.035]
02792>        [Vmax=  .492:Dmax=  .058]
02793> R1979:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02794>      ROUTE CHANNEL    ->    1.0 02:Pre9           .83     .053 No_date   2:12   34.37  n/a    .000
02795>        [RD*= 1.00] out<-    1.0 01:R7            .83     .052 No_date   2:16   34.37  n/a    .000
02796>        [L/S/n=  159./1.576/.035]
02797>        [Vmax=  .797:Dmax=  .016]
02798> R1979:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02799>      ADD HYD                1.0 02:R6            .80     .078 No_date   1:51   34.68  n/a    .000
02800>                         +    1.0 02:EXT10          .20     .017 No_date   1:59   34.36  n/a    .000
02801>                       SUM=   1.0 01:J6            1.01     .094 No_date   1:52   34.62  n/a    .000
02802> R1979:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02803>      ROUTE CHANNEL    ->    1.0 02:J6            1.01     .094 No_date   1:52   34.62  n/a    .000
02804>        [RD*= 1.00] out<-    1.0 01:R8            1.01     .093 No_date   1:56   34.62  n/a    .000
02805>        [L/S/n=  79./ .522/.035]
02806>        [Vmax=  .423:Dmax=  .069]
02807> R1979:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02808>      ADD HYD                1.0 02:R8            1.01     .093 No_date   1:56   34.62  n/a    .000
02809>                         +    1.0 02:R7            .83     .052 No_date   2:16   34.40  n/a    .000
02810>                       SUM=   1.0 01:J7            1.83     .137 No_date   2:01   34.52  n/a    .000
02811> R1979:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02812>      ROUTE CHANNEL    ->    1.0 02:J7            1.83     .137 No_date   2:01   34.52  n/a    .000
02813>        [RD*= 1.00] out<-    1.0 01:R9            1.83     .137 No_date   2:02   34.52  n/a    .000
02814>        [L/S/n=  29./ .887/.035]
02815>        [Vmax=  .543:Dmax=  .093]
02816> R1979:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02817>      ADD HYD                1.0 02:EXT9          3.57     .311 No_date   2:03   39.44  n/a    .000
02818>                         +    1.0 02:R9            1.83     .137 No_date   2:02   34.54  n/a    .000
02819>                         +    1.0 02:EXT8           .83     .085 No_date   1:58   42.85  n/a    .000
02820>                         +    1.0 02:R5            6.86     .551 No_date   2:14   44.78  n/a    .000
02821>                       SUM=   1.0 01:J8           13.10    1.057 No_date   2:08   41.76  n/a    .000
02822> R1979:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02823>      ROUTE PIPE       ->    1.0 02:J8           13.10    1.057 No_date   2:08   41.76  n/a    .000
02824> *    [RD*= 1.00] out<-    1.0 01:Outlet        13.10    1.057 No_date   2:09   41.76  n/a    .000
02825>        [L/S/n=   8./ .010/.013]
02826>        [Vmax=  .504:Dmax= 1.432]
02827>        [Din=  .53:Dused= 1.74)
02828> ###############################################################################
02829> # STORMS
02830> ###############################################################################
02831>   ** END OF RUN : 1987
02832>
02833> *******************************************************************************
02834>
02835>
02836>
02837>
02838>
02839>  RUN#:COMMAND#
02840> R1988:C00001------------------------------------------------------------------------
02841>      START
02842>        [TZERO =    .00 hrs on        0]
02843>        [METOUT=  2    (1=imperial, 2=metric output)]
02844>        [NSTORM=  1 ]
02845>        [NRUN  = 1988 ]
02846> #*******************************************************************************
02847> #  SWMHYMO  / INPUT DATA FILE
02848> #*******************************************************************************
02849> #  Project Name  : [5923 Ottawa St]
02850> #  Project Number: [P2710(e01)]
02851> #  Date          : [2025 FEB 05]
02852> #  Modeller      : [MM]
02853> #  Company       : JFSA Canada Inc.
02854> #  License #     : 2549237
02855> #*******************************************************************************
02856> # Model developed to simulate runoff from subcatchments under pre development conditions
02857> #*******************************************************************************
02858> R1988:C00002------------------------------------------------------------------------
02859>      READ STORM
02860>        Filename = STORM.001
02861>        Comment  = August 4th, 1988 Storm (5H+) - Ottawa International Airport step 5
02862>        [SDT= 5.00:SDUR=   5.58:PTOT=  80.59]
02863> #*******************************************************************************
02864> # EXT1
02865> #*******************************************************************************
02866> R1988:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02867>      CALIB NASHYD           1.0 01:EXT1          3.21     .197 No_date   2:30   41.34 .513    .000
02868>        [CN= 80.0: N= 3.00: Tp=  .72]
02869> #*******************************************************************************
02870> # EXT2
02871> #*******************************************************************************
02872> R1988:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02873>      CALIB NASHYD           1.0 01:EXT2           .28     .035 No_date   2:11   47.74 .592    .000
02874>        [CN= 85.0: N= 3.00: Tp=  .33]
02875> #*******************************************************************************
02876> # EXT3
02877> #*******************************************************************************
02878> R1988:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02879>      CALIB NASHYD           1.0 01:EXT3           .56     .061 No_date   2:11   41.34 .513    .000
02880>        [CN= 80.0: N= 3.00: Tp=  .32]
```

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02881> *****************************************************************************************
02882> # EXT4
02883> *****************************************************************************************
02884> R1988:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02885>      CALIB NASHYD            1.0 01:EXT4           .31     .035 No_date    2:10   40.18 .499     .000
02886>        [CN= 79.0: N= 3.00: Tp=  .29]
02887> *****************************************************************************************
02888> # EXT5
02889> *****************************************************************************************
02890> R1988:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02891>      CALIB NASHYD            1.0 01:EXT5           .59     .046 No_date    2:17   36.92 .458     .000
02892>        [CN= 76.0: N= 3.00: Tp=  .45]
02893> *****************************************************************************************
02894> # EXT6
02895> *****************************************************************************************
02896> R1988:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02897>      CALIB NASHYD            1.0 01:EXT6           .86     .074 No_date    2:21   47.74 .592     .000
02898>        [CN= 85.0: N= 3.00: Tp=  .56]
02899> *****************************************************************************************
02900> # EXT7
02901> *****************************************************************************************
02902> R1988:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02903>      CALIB NASHYD            1.0 01:EXT7           .47     .055 No_date    2:11   45.05 .559     .000
02904>        [CN= 83.0: N= 3.00: Tp=  .32]
02905> *****************************************************************************************
02906> # EXT8
02907> *****************************************************************************************
02908> R1988:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02909>      CALIB NASHYD            1.0 01:EXT8           .83     .074 No_date    2:15   40.18 .499     .000
02910>        [CN= 79.0: N= 3.00: Tp=  .42]
02911> *****************************************************************************************
02912> # EXT9
02913> *****************************************************************************************
02914> R1988:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02915>      CALIB NASHYD            1.0 01:EXT9           3.57     .266 No_date    2:18   36.92 .458     .000
02916>        [CN= 76.0: N= 3.00: Tp=  .48]
02917> *****************************************************************************************
02918> # EXT9a
02919> *****************************************************************************************
02920> R1988:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02921>      CALIB NASHYD            1.0 01:EXT9a           .01     .003 No_date    2:00   39.05 .485     .000
02922>        [CN= 78.0: N= 3.00: Tp=  .04]
02923> *****************************************************************************************
02924> # EXT10
02925> *****************************************************************************************
02926> R1988:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02927>      CALIB NASHYD            1.0 01:EXT10           .20     .014 No_date    2:16   32.08 .398     .000
02928>        [CN= 71.0: N= 3.00: Tp=  .42]
02929> *****************************************************************************************
02930> # Pre2
02931> *****************************************************************************************
02932> R1988:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02933>      CALIB NASHYD            1.0 01:Pre2            .57     .046 No_date    2:17   39.06 .485     .000
02934>        [CN= 78.0: N= 3.00: Tp=  .46]
02935> *****************************************************************************************
02936> # Pre9
02937> *****************************************************************************************
02938> R1988:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02939>      CALIB NASHYD            1.0 01:Pre9            .83     .043 No_date    2:27   32.08 .398     .000
02940>        [CN= 71.0: N= 3.00: Tp=  .64]
02941> *****************************************************************************************
02942> # Pre10
02943> *****************************************************************************************
02944> R1988:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02945>      CALIB NASHYD            1.0 01:Pre10           .80     .072 No_date    2:10   32.08 .398     .000
02946>        [CN= 71.0: N= 3.00: Tp=  .29]
02947> *****************************************************************************************
02948> # Pre11
02949> *****************************************************************************************
02950> R1988:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02951>      CALIB NASHYD            1.0 01:Pre11           .07     .009 No_date    2:06   39.06 .485     .000
02952>        [CN= 78.0: N= 3.00: Tp=  .21]
02953> *****************************************************************************************
02954> R1988:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02955>      ADD HYD                 1.0 02:EXT2            .28     .035 No_date    2:11   47.74  n/a     .000
02956>                          +   1.0 02:Pre2            .57     .046 No_date    2:17   39.06  n/a     .000
02957>                      SUM=    1.0 01:J1              .85     .079 No_date    2:14   41.97  n/a     .000
02958> R1988:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02959>      ROUTE CHANNEL    ->    1.0 02:J1              .85     .079 No_date    2:14   41.97  n/a     .000
02960>        [RDT= 1.00] out<-    1.0 01:R1              .85     .076 No_date    2:18   41.97  n/a     .000
02961>        [L/S/n=  143./ .394/.035]
02962>        [Vmax=  .396:Dmax=  .176]
02963> R1988:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02964>      ADD HYD                 1.0 02:R1              .85     .076 No_date    2:18   41.97  n/a     .000
02965>                          +   1.0 02:EXT3            .56     .061 No_date    2:11   41.34  n/a     .000
02966>                          +   1.0 02:EXT1           3.21     .197 No_date    2:30   41.34  n/a     .000
02967>                      SUM=    1.0 01:J2             4.62     .314 No_date    2:21   41.46  n/a     .000
02968> R1988:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02969>      ROUTE CHANNEL    ->    1.0 02:J2             4.62     .314 No_date    2:21   41.46  n/a     .000
02970>        [RDT= 1.00] out<-    1.0 01:R2             4.62     .313 No_date    2:22   41.46  n/a     .000
02971>        [L/S/n=   73./ .425/.035]
02972>        [Vmax=  .555:Dmax=  .308]
02973> R1988:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02974>      ADD HYD                 1.0 02:R2             4.62     .313 No_date    2:22   41.46  n/a     .000
02975>                          +   1.0 02:EXT4            .31     .035 No_date    2:10   40.18  n/a     .000
02976>                      SUM=    1.0 01:J3             4.93     .338 No_date    2:20   41.38  n/a     .000
02977> R1988:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02978>      ROUTE CHANNEL    ->    1.0 02:J3             4.93     .338 No_date    2:20   41.38  n/a     .000
02979>        [RDT= 1.00] out<-    1.0 01:R3             4.93     .335 No_date    2:23   41.38  n/a     .000
02980>        [L/S/n=   92./ .274/.035]
02981>        [Vmax=  .454:Dmax=  .318]
02982> R1988:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02983>      ADD HYD                 1.0 02:R3             4.93     .335 No_date    2:23   41.38  n/a     .000
02984>                          +   1.0 02:EXT5            .59     .046 No_date    2:17   36.92  n/a     .000
02985>                      SUM=    1.0 01:J4             5.52     .379 No_date    2:22   40.90  n/a     .000
02986> R1988:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02987>      ROUTE CHANNEL    ->    1.0 02:J4             5.52     .379 No_date    2:22   40.90  n/a     .000
02988>        [RDT= 1.00] out<-    1.0 01:R4             5.52     .355 No_date    2:30   40.90  n/a     .000
02989>        [L/S/n=  251./ .190/.035]
02990>        [Vmax=  .450:Dmax=  .363]
02991> R1988:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02992>      ADD HYD                 1.0 02:R4             5.52     .355 No_date    2:30   40.90  n/a     .000
02993>                          +   1.0 02:EXT6            .86     .074 No_date    2:21   47.74  n/a     .000
02994>                          +   1.0 02:EXT7            .47     .055 No_date    2:11   45.05  n/a     .000
02995>                      SUM=    1.0 01:J5             6.86     .462 No_date    2:26   42.04  n/a     .000
02996> R1988:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02997>      ROUTE CHANNEL    ->    1.0 02:J5             6.86     .462 No_date    2:26   42.04  n/a     .000
02998>        [RDT= 1.00] out<-    1.0 01:R5             6.86     .454 No_date    2:30   42.04  n/a     .000
02999>        [L/S/n=  237./ .644/.035]
03000>        [Vmax=  .731:Dmax=  .332]
03001> R1988:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03002>      ROUTE CHANNEL    ->    1.0 02:Pre10          .80     .072 No_date    2:10   32.08  n/a     .000
03003>        [RDT= 1.00] out<-    1.0 01:R6             .80     .071 No_date    2:12   32.08  n/a     .000
03004>        [L/S/n=   77./ .776/.035]
03005>        [Vmax=  .492:Dmax=  .053]
03006> R1988:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03007>      ROUTE CHANNEL    ->    1.0 02:Pre9           .83     .043 No_date    2:27   32.08  n/a     .000
03008>        [RDT= 1.00] out<-    1.0 01:R7             .83     .043 No_date    2:30   32.08  n/a     .000
03009>        [L/S/n=  159./1.576/.035]
03010>        [Vmax=  .797:Dmax=  .013]
03011> R1988:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03012>      ADD HYD                 1.0 02:R6             .80     .071 No_date    2:12   32.23  n/a     .000
03013>                          +   1.0 02:EXT10           .20     .014 No_date    2:16   32.08  n/a     .000
03014>                      SUM=    1.0 01:J6            1.01     .085 No_date    2:13   32.20  n/a     .000
03015> R1988:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03016>      ROUTE CHANNEL    ->    1.0 02:J6            1.01     .085 No_date    2:13   32.20  n/a     .000
03017>        [RDT= 1.00] out<-    1.0 01:R8            1.01     .083 No_date    2:16   32.20  n/a     .000
03018>        [L/S/n=   79./ .522/.035]
03019>        [Vmax=  .423:Dmax=  .062]
03020> R1988:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03021>      ADD HYD                 1.0 02:R8            1.01     .083 No_date    2:16   32.20  n/a     .000
03022>                          +   1.0 02:R7             .83     .043 No_date    2:30   32.10  n/a     .000
03023>                      SUM=    1.0 01:J7            1.83     .121 No_date    2:18   32.16  n/a     .000
03024> R1988:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03025>      ROUTE CHANNEL    ->    1.0 02:J7            1.83     .121 No_date    2:18   32.16  n/a     .000
03026>        [RDT= 1.00] out<-    1.0 01:R9            1.83     .120 No_date    2:19   32.16  n/a     .000
03027>        [L/S/n=   29./ .887/.035]
03028>        [Vmax=  .543:Dmax=  .082]
03029> R1988:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03030>      ADD HYD                 1.0 02:EXT9           3.57     .266 No_date    2:18   36.92  n/a     .000
03031>                          +   1.0 02:R9             1.83     .120 No_date    2:19   32.17  n/a     .000
03032>                          +   1.0 02:EXT8            .83     .074 No_date    2:15   40.18  n/a     .000
03033>                          +   1.0 02:R5              6.86     .454 No_date    2:30   42.04  n/a     .000
03034>                      SUM=    1.0 01:J8            13.10     .883 No_date    2:23   39.14  n/a     .000
03035> R1988:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03036>      ROUTE PIPE       ->    1.0 02:J8            13.10     .883 No_date    2:23   39.14  n/a     .000
03037> *    [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .883 No_date    2:24   39.14  n/a     .000
03038>        [L/S/n=    8./ .010/.013]
03039>        [Vmax=  .482:Dmax= 1.338]
03040>        [Din=  .53:Dused= 1.63]
03041> ###############################################################################
03042> # STORMS
03043> ###############################################################################
03044>  ** END OF RUN : 1995
03045>
03046> *****************************************************************************************
03047>
03048>
03049>
03050>
03051>
03052>  RUN#:COMMAND#
03053> R1996:C00001-------------------------------------------------------------------------------
03054>      START
03055>        [TZERO =    .00 hrs on        0]
03056>        [METOUT=   2    (1=imperial, 2=metric output)]
03057>        [NSTORM=   1 ]
03058>        [NRUN  = 1996 ]
03059> *****************************************************************************************
03060> #  SWMHYMO  / INPUT DATA FILE

03061> *****************************************************************************************
03062> #  Project Name  : [5923 Ottawa St]
03063> #  Project Number: [P2710(e01)]
03064> #  Date          : [2025 FEB 05]
03065> #  Modeller      : [MM]
03066> #  Company       : JFSA Canada Inc.
03067> #  License #     : 2549237
03068> *****************************************************************************************
03069> # Model developed to simulate runoff from subcatchments under pre development conditions
03070> *****************************************************************************************
03071> R1996:C00002-------------------------------------------------------------------------------
03072>      READ STORM
03073>        Filename = STORM.001
03074>        Comment  = August 8th, 1996 Storm (5H+) - Ottawa International Airport step 5
03075>        [SDT= 5.00:SDUR=   5.75:PTOT=  73.90]
03076> *****************************************************************************************
03077> # EXT1
03078> *****************************************************************************************
03079> R1996:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03080>      CALIB NASHYD            1.0 01:EXT1           3.21     .134 No_date    3:49   36.11 .489     .000
03081>        [CN= 80.0: N= 3.00: Tp=  .72]
03082> *****************************************************************************************
03083> # EXT2
03084> *****************************************************************************************
03085> R1996:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03086>      CALIB NASHYD            1.0 01:EXT2           .28     .023 No_date    3:26   42.02 .569     .000
03087>        [CN= 85.0: N= 3.00: Tp=  .33]
03088> *****************************************************************************************
03089> # EXT3
03090> *****************************************************************************************
03091> R1996:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03092>      CALIB NASHYD            1.0 01:EXT3           .56     .041 No_date    3:26   36.11 .489     .000
03093>        [CN= 80.0: N= 3.00: Tp=  .32]
03094> *****************************************************************************************
03095> # EXT4
03096> *****************************************************************************************
03097> R1996:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03098>      CALIB NASHYD            1.0 01:EXT4           .31     .023 No_date    3:24   35.05 .474     .000
03099>        [CN= 79.0: N= 3.00: Tp=  .29]
03100> *****************************************************************************************
03101> # EXT5
03102> *****************************************************************************************
03103> R1996:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03104>      CALIB NASHYD            1.0 01:EXT5           .59     .031 No_date    3:34   32.07 .434     .000
03105>        [CN= 76.0: N= 3.00: Tp=  .45]
03106> *****************************************************************************************
03107> # EXT6
03108> *****************************************************************************************
03109> R1996:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03110>      CALIB NASHYD            1.0 01:EXT6           .86     .048 No_date    3:40   42.02 .569     .000
03111>        [CN= 85.0: N= 3.00: Tp=  .56]
03112> *****************************************************************************************
03113> # EXT7
03114> *****************************************************************************************
03115> R1996:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03116>      CALIB NASHYD            1.0 01:EXT7           .47     .037 No_date    3:26   39.53 .535     .000
03117>        [CN= 83.0: N= 3.00: Tp=  .32]
03118> *****************************************************************************************
03119> # EXT8
03120> *****************************************************************************************
03121> R1996:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03122>      CALIB NASHYD            1.0 01:EXT8           .83     .049 No_date    3:32   35.05 .474     .000
03123>        [CN= 79.0: N= 3.00: Tp=  .42]
03124> *****************************************************************************************
03125> # EXT9
03126> *****************************************************************************************
03127> R1996:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03128>      CALIB NASHYD            1.0 01:EXT9           3.57     .177 No_date    3:36   32.07 .434     .000
03129>        [CN= 76.0: N= 3.00: Tp=  .48]
03130> *****************************************************************************************
03131> # EXT9a
03132> *****************************************************************************************
03133> R1996:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03134>      CALIB NASHYD            1.0 01:EXT9a           .01     .001 No_date    1:26   34.01 .460     .000
03135>        [CN= 78.0: N= 3.00: Tp=  .04]
03136> *****************************************************************************************
03137> # EXT10
03138> *****************************************************************************************
03139> R1996:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03140>      CALIB NASHYD            1.0 01:EXT10           .20     .010 No_date    3:32   27.70 .375     .000
03141>        [CN= 71.0: N= 3.00: Tp=  .42]
03142> *****************************************************************************************
03143> # Pre2
03144> *****************************************************************************************
03145> R1996:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03146>      CALIB NASHYD            1.0 01:Pre2            .57     .030 No_date    3:34   34.02 .460     .000
03147>        [CN= 78.0: N= 3.00: Tp=  .46]
03148> *****************************************************************************************
03149> # Pre9
03150> *****************************************************************************************
03151> R1996:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03152>      CALIB NASHYD            1.0 01:Pre9            .83     .030 No_date    3:45   27.71 .375     .000
03153>        [CN= 71.0: N= 3.00: Tp=  .64]
03154> *****************************************************************************************
03155> # Pre10
03156> *****************************************************************************************
03157> R1996:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03158>      CALIB NASHYD            1.0 01:Pre10           .80     .049 No_date    3:24   27.71 .375     .000
03159>        [CN= 71.0: N= 3.00: Tp=  .29]
03160> *****************************************************************************************
03161> # Pre11
03162> *****************************************************************************************
03163> R1996:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03164>      CALIB NASHYD            1.0 01:Pre11           .07     .006 No_date    3:19   34.01 .460     .000
03165>        [CN= 78.0: N= 3.00: Tp=  .21]
03166> *****************************************************************************************
03167> R1996:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03168>      ADD HYD                 1.0 02:EXT2            .28     .023 No_date    3:26   42.02  n/a     .000
03169>                          +   1.0 02:Pre2            .57     .030 No_date    3:34   34.02  n/a     .000
03170>                      SUM=    1.0 01:J1              .85     .052 No_date    3:30   36.70  n/a     .000
03171> R1996:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03172>      ROUTE CHANNEL    ->    1.0 02:J1              .85     .052 No_date    3:30   36.70  n/a     .000
03173>        [RDT= 1.00] out<-    1.0 01:R1              .85     .050 No_date    3:35   36.70  n/a     .000
03174>        [L/S/n=  143./ .394/.035]
03175>        [Vmax=  .354:Dmax=  .147]
03176> R1996:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03177>      ADD HYD                 1.0 02:R1              .85     .050 No_date    3:35   36.70  n/a     .000
03178>                          +   1.0 02:EXT3            .56     .041 No_date    3:26   36.11  n/a     .000
03179>                          +   1.0 02:EXT1           3.21     .134 No_date    3:49   36.11  n/a     .000
03180>                      SUM=    1.0 01:J2             4.62     .210 No_date    3:39   36.22  n/a     .000
03181> R1996:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03182>      ROUTE CHANNEL    ->    1.0 02:J2             4.62     .210 No_date    3:39   36.22  n/a     .000
03183>        [RDT= 1.00] out<-    1.0 01:R2             4.62     .210 No_date    3:40   36.22  n/a     .000
03184>        [L/S/n=   73./ .425/.035]
03185>        [Vmax=  .499:Dmax=  .262]
03186> R1996:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03187>      ADD HYD                 1.0 02:R2             4.62     .210 No_date    3:40   36.22  n/a     .000
03188>                          +   1.0 02:EXT4            .31     .023 No_date    3:24   35.05  n/a     .000
03189>                      SUM=    1.0 01:J3             4.93     .226 No_date    3:38   36.14  n/a     .000
03190> R1996:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03191>      ROUTE CHANNEL    ->    1.0 02:J3             4.93     .226 No_date    3:38   36.14  n/a     .000
03192>        [RDT= 1.00] out<-    1.0 01:R3             4.93     .224 No_date    3:41   36.14  n/a     .000
03193>        [L/S/n=   92./ .274/.035]
03194>        [Vmax=  .409:Dmax=  .271]
03195> R1996:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03196>      ADD HYD                 1.0 02:R3             4.93     .224 No_date    3:41   36.14  n/a     .000
03197>                          +   1.0 02:EXT5            .59     .031 No_date    3:34   32.07  n/a     .000
03198>                      SUM=    1.0 01:J4             5.52     .254 No_date    3:40   35.71  n/a     .000
03199> R1996:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03200>      ROUTE CHANNEL    ->    1.0 02:J4             5.52     .254 No_date    3:40   35.71  n/a     .000
03201>        [RDT= 1.00] out<-    1.0 01:R4             5.52     .238 No_date    3:49   35.71  n/a     .000
03202>        [L/S/n=  251./ .190/.035]
03203>        [Vmax=  .401:Dmax=  .304]
03204> R1996:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03205>      ADD HYD                 1.0 02:R4             5.52     .238 No_date    3:49   35.71  n/a     .000
03206>                          +   1.0 02:EXT6            .86     .048 No_date    3:40   42.02  n/a     .000
03207>                          +   1.0 02:EXT7            .47     .037 No_date    3:26   39.53  n/a     .000
03208>                      SUM=    1.0 01:J5             6.86     .308 No_date    3:45   36.76  n/a     .000
03209> R1996:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03210>      ROUTE CHANNEL    ->    1.0 02:J5             6.86     .308 No_date    3:45   36.76  n/a     .000
03211>        [RDT= 1.00] out<-    1.0 01:R5             6.86     .302 No_date    3:50   36.76  n/a     .000
03212>        [L/S/n=  237./ .644/.035]
03213>        [Vmax=  .648:Dmax=  .282]
03214> R1996:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03215>      ROUTE CHANNEL    ->    1.0 02:Pre10           .80     .049 No_date    3:24   27.71  n/a     .000
03216>        [RDT= 1.00] out<-    1.0 01:R6              .80     .049 No_date    3:27   27.71  n/a     .000
03217>        [L/S/n=   77./ .776/.035]
03218>        [Vmax=  .492:Dmax=  .036]
03219> R1996:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03220>      ROUTE CHANNEL    ->    1.0 02:Pre9            .83     .030 No_date    3:45   27.71  n/a     .000
03221>        [RDT= 1.00] out<-    1.0 01:R7              .83     .029 No_date    3:49   27.71  n/a     .000
03222>        [L/S/n=  159./1.576/.035]
03223>        [Vmax=  .797:Dmax=  .009]
03224> R1996:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03225>      ADD HYD                 1.0 02:R6              .80     .049 No_date    3:27   27.79  n/a     .000
03226>                          +   1.0 02:EXT10           .20     .010 No_date    3:32   27.70  n/a     .000
03227>                      SUM=    1.0 01:J6             1.01     .058 No_date    3:27   27.77  n/a     .000
03228> R1996:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03229>      ROUTE CHANNEL    ->    1.0 02:J6             1.01     .058 No_date    3:27   27.77  n/a     .000
03230>        [RDT= 1.00] out<-    1.0 01:R8             1.01     .057 No_date    3:31   27.77  n/a     .000
03231>        [L/S/n=   79./ .522/.035]
03232>        [Vmax=  .423:Dmax=  .042]
03233> R1996:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03234>      ADD HYD                 1.0 02:R8             1.01     .057 No_date    3:31   27.77  n/a     .000
03235>                          +   1.0 02:R7              .83     .029 No_date    3:49   27.72  n/a     .000
03236>                      SUM=    1.0 01:J7             1.83     .082 No_date    3:34   27.75  n/a     .000
03237> R1996:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03238>      ROUTE CHANNEL    ->    1.0 02:J7             1.83     .082 No_date    3:34   27.75  n/a     .000
03239>        [RDT= 1.00] out<-    1.0 01:R9             1.83     .082 No_date    3:35   27.75  n/a     .000
03240>        [L/S/n=   29./ .887/.035]
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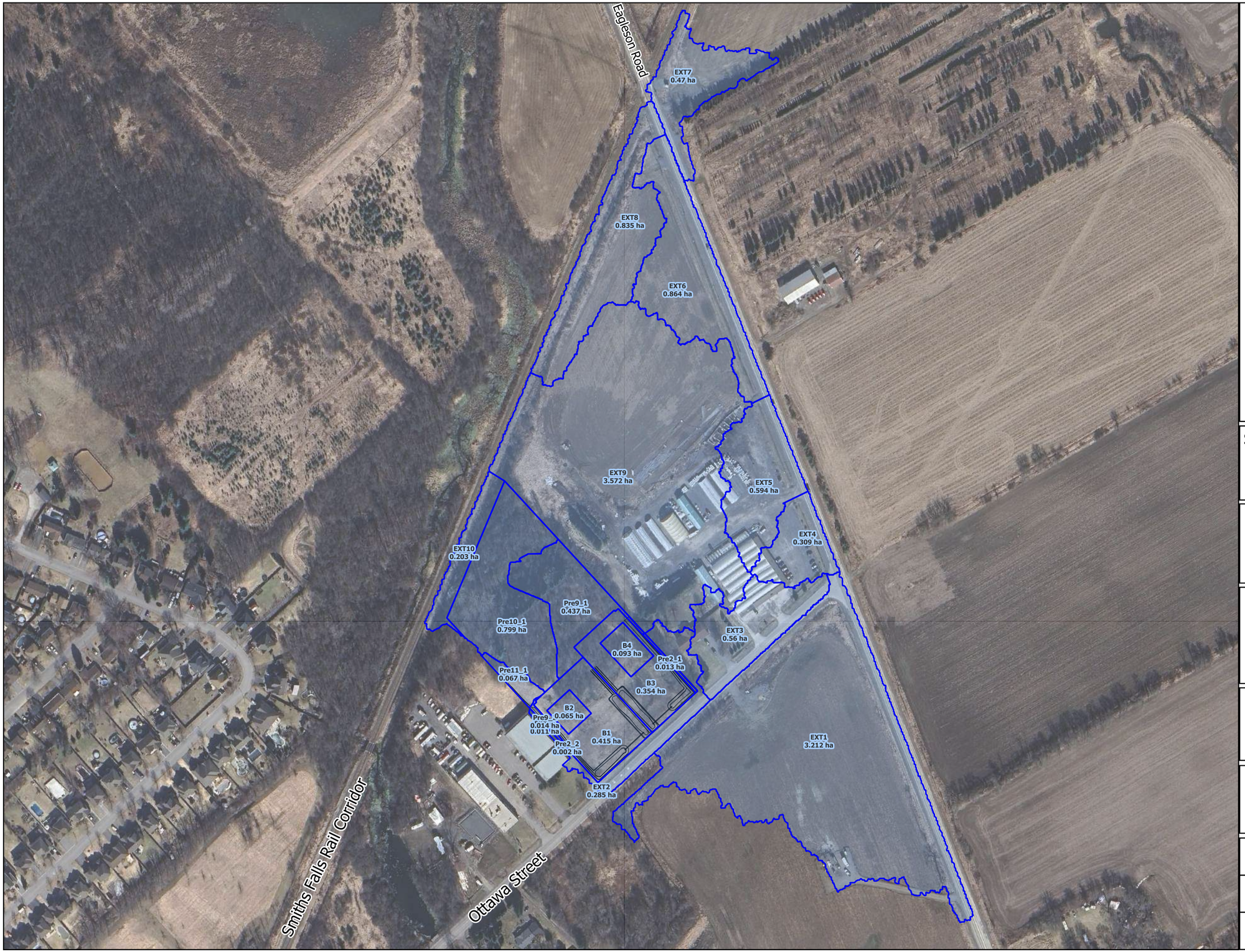
03241>       (Vmax=  .543:Dmax=  .056)
03242> R1996:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03243>     ADD HYD                 1.0 02:EXT9            3.57     .177 No_date    3:36   32.07  n/a     .000
03244>                       +     1.0 02:R9              1.83     .082 No_date    3:35   27.76  n/a     .000
03245>                       +     1.0 02:EXT8             .83     .049 No_date    3:32   35.05  n/a     .000
03246>                       +     1.0 02:R5              6.86     .302 No_date    3:50   36.76  n/a     .000
03247>                     SUM=    1.0 01:J8             13.10     .586 No_date    3:41   34.11  n/a     .000
03248> R1996:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03249>     ROUTE PIPE     ->    1.0 02:J8             13.10     .586 No_date    3:41   34.11  n/a     .000
03250> *   [RDT= 1.00] out<-    1.0 01:Outlet         13.10     .586 No_date    3:42   34.11  n/a     .000
03251>       [L/S/n=   8./ .010/.013]
03252>       (Vmax=  .435:Dmax= 1.148)
03253>       [Din=  .53:Dused= 1.40)
03254> ################################################################################
03255> # STORMS
03256> ################################################################################
03257>   ** END OF RUN : 9998
03258>
03259> ********************************************************************************************************
03260>
03261>
03262>
03263>
03264>
03265>  RUN#:COMMAND#
03266> R9999:C00001------------------------------------------------------------------------------------------
03267>     START
03268>       [TZERO =      .00 hrs on      0]
03269>       [METOUT=   2    (1=imperial, 2=metric output)]
03270>       [NSTORM=   1 ]
03271>       [NRUN  = 9999 ]
03272> ********************************************************************************************************
03273> #  SWMHYMO  / INPUT DATA FILE
03274> ********************************************************************************************************
03275> #  Project Name  : [5923 Ottawa St]
03276> #  Project Number: [P2710(e01)]
03277> #  Date          : [2025 FEB 05]
03278> #  Modeller      : [MM]
03279> #  Company       : JFSA Canada Inc.
03280> #  License #     : 2549237
03281> ********************************************************************************************************
03282> # Model developed to simulate runoff from subcatchments under pre development conditions
03283> ********************************************************************************************************
03284> R9999:C00002------------------------------------------------------------------------------------------
03285>       READ STORM
03286>        Filename = STORM.001
03287>       Comment  = CHICAGO STORM   100 Year, 3 Hours  +20% Stress Test
03288>       [SDT=10.00:SDUR=   3.00:PTOT=  86.00]
03289> ********************************************************************************************************
03290> # EXT1
03291> ********************************************************************************************************
03292> R9999:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03293>     CALIB NASHYD            1.0 01:EXT1            3.21     .224 No_date    1:51   45.67 .531     .000
03294>       [CN= 80.0: N= 3.00: Tp=  .72]
03295> ********************************************************************************************************
03296> # EXT2
03297> ********************************************************************************************************
03298> R9999:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03299>     CALIB NASHYD            1.0 01:EXT2             .28     .041 No_date    1:21   52.43 .610     .000
03300>       [CN= 85.0: N= 3.00: Tp=  .33]
03301> ********************************************************************************************************
03302> # EXT3
03303> ********************************************************************************************************
03304> R9999:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03305>     CALIB NASHYD            1.0 01:EXT3             .56     .070 No_date    1:21   45.67 .531     .000
03306>       [CN= 80.0: N= 3.00: Tp=  .32]
03307> ********************************************************************************************************
03308> # EXT4
03309> ********************************************************************************************************
03310> R9999:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03311>     CALIB NASHYD            1.0 01:EXT4             .31     .040 No_date    1:19   44.44 .517     .000
03312>       [CN= 79.0: N= 3.00: Tp=  .29]
03313> ********************************************************************************************************
03314> # EXT5
03315> ********************************************************************************************************
03316> R9999:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03317>     CALIB NASHYD            1.0 01:EXT5             .59     .052 No_date    1:31   40.94 .476     .000
03318>       [CN= 76.0: N= 3.00: Tp=  .45]
03319> ********************************************************************************************************
03320> # EXT6
03321> ********************************************************************************************************
03322> R9999:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03323>     CALIB NASHYD            1.0 01:EXT6             .86     .085 No_date    1:38   52.43 .610     .000
03324>       [CN= 85.0: N= 3.00: Tp=  .56]
03325> ********************************************************************************************************
03326> # EXT7
03327> ********************************************************************************************************
03328> R9999:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03329>     CALIB NASHYD            1.0 01:EXT7             .47     .064 No_date    1:21   49.60 .577     .000
03330>       [CN= 83.0: N= 3.00: Tp=  .32]
03331> ********************************************************************************************************
03332> # EXT8
03333> ********************************************************************************************************
03334> R9999:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03335>     CALIB NASHYD            1.0 01:EXT8             .83     .083 No_date    1:29   44.44 .517     .000
03336>       [CN= 79.0: N= 3.00: Tp=  .42]
03337> ********************************************************************************************************
03338> # EXT9
03339> ********************************************************************************************************
03340> R9999:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03341>     CALIB NASHYD            1.0 01:EXT9            3.57     .297 No_date    1:34   40.95 .476     .000
03342>       [CN= 76.0: N= 3.00: Tp=  .48]
03343> ********************************************************************************************************
03344> # EXT9a
03345> ********************************************************************************************************
03346> R9999:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03347>     CALIB NASHYD            1.0 01:EXT9a            .01     .004 No_date    1:00   43.23 .503     .000
03348>       [CN= 78.0: N= 3.00: Tp=  .04]
03349> ********************************************************************************************************
03350> # EXT10
03351> ********************************************************************************************************
03352> R9999:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03353>     CALIB NASHYD            1.0 01:EXT10            .20     .016 No_date    1:29   35.74 .416     .000
03354>       [CN= 71.0: N= 3.00: Tp=  .42]
03355> ********************************************************************************************************
03356> # Pre2
03357> ********************************************************************************************************
03358> R9999:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03359>     CALIB NASHYD            1.0 01:Pre2             .57     .051 No_date    1:32   43.24 .503     .000
03360>       [CN= 78.0: N= 3.00: Tp=  .46]
03361> ********************************************************************************************************
03362> # Pre9
03363> ********************************************************************************************************
03364> R9999:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03365>     CALIB NASHYD            1.0 01:Pre9             .83     .048 No_date    1:47   35.74 .416     .000
03366>       [CN= 71.0: N= 3.00: Tp=  .64]
03367> ********************************************************************************************************
03368> # Pre10
03369> ********************************************************************************************************
03370> R9999:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03371>     CALIB NASHYD            1.0 01:Pre10            .80     .081 No_date    1:19   35.74 .416     .000
03372>       [CN= 71.0: N= 3.00: Tp=  .29]
03373> ********************************************************************************************************
03374> # Pre11
03375> ********************************************************************************************************
03376> R9999:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03377>     CALIB NASHYD            1.0 01:Pre11            .07     .011 No_date    1:13   43.23 .503     .000
03378>       [CN= 78.0: N= 3.00: Tp=  .21]
03379> ********************************************************************************************************
03380> R9999:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03381>     ADD HYD                 1.0 02:EXT2             .28     .041 No_date    1:21   52.43  n/a     .000
03382>                       +     1.0 02:Pre2             .57     .051 No_date    1:32   43.24  n/a     .000
03383>                     SUM=    1.0 01:J1               .85     .090 No_date    1:26   46.32  n/a     .000
03384> R9999:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03385>     ROUTE CHANNEL   ->    1.0 02:J1               .85     .090 No_date    1:26   46.32  n/a     .000
03386>       [RDT= 1.00] out<-   1.0 01:R1               .85     .087 No_date    1:32   46.32  n/a     .000
03387>         [L/S/n=  143./ .394/.035]
03388>       (Vmax=  .410:Dmax=  .185)
03389> R9999:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03390>     ADD HYD                 1.0 02:R1               .85     .087 No_date    1:32   46.32  n/a     .000
03391>                       +     1.0 02:EXT3             .56     .070 No_date    1:21   45.67  n/a     .000
03392>                       +     1.0 02:EXT1            3.21     .224 No_date    1:51   45.67  n/a     .000
03393>                     SUM=    1.0 01:J2              4.62     .346 No_date    1:39   45.79  n/a     .000
03394> R9999:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03395>     ROUTE CHANNEL   ->    1.0 02:J2              4.62     .346 No_date    1:39   45.79  n/a     .000
03396>       [RDT= 1.00] out<-   1.0 01:R2              4.62     .346 No_date    1:40   45.79  n/a     .000
03397>         [L/S/n=   73./ .425/.035]
03398>       (Vmax=  .568:Dmax=  .320)
03399> R9999:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03400>     ADD HYD                 1.0 02:R2              4.62     .346 No_date    1:40   45.79  n/a     .000
03401>                       +     1.0 02:EXT4             .31     .040 No_date    1:19   44.44  n/a     .000
03402>                     SUM=    1.0 01:J3              4.93     .372 No_date    1:38   45.70  n/a     .000
03403> R9999:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03404>     ROUTE CHANNEL   ->    1.0 02:J3              4.93     .372 No_date    1:38   45.70  n/a     .000
03405>       [RDT= 1.00] out<-   1.0 01:R3              4.93     .369 No_date    1:40   45.70  n/a     .000
03406>         [L/S/n=   92./ .274/.035]
03407>       (Vmax=  .465:Dmax=  .330)
03408> R9999:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03409>     ADD HYD                 1.0 02:R3              4.93     .369 No_date    1:40   45.70  n/a     .000
03410>                       +     1.0 02:EXT5             .59     .052 No_date    1:31   40.94  n/a     .000
03411>                     SUM=    1.0 01:J4              5.52     .419 No_date    1:39   45.19  n/a     .000
03412> R9999:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03413>     ROUTE CHANNEL   ->    1.0 02:J4              5.52     .419 No_date    1:39   45.19  n/a     .000
03414>       [RDT= 1.00] out<-   1.0 01:R4              5.52     .399 No_date    1:48   45.19  n/a     .000
03415>         [L/S/n=  251./ .190/.035]
03416>       (Vmax=  .463:Dmax=  .380)
03417> R9999:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03418>     ADD HYD                 1.0 02:R4              5.52     .399 No_date    1:48   45.19  n/a     .000
03419>                       +     1.0 02:EXT6             .86     .085 No_date    1:38   52.43  n/a     .000
03420>                       +     1.0 02:EXT7             .47     .064 No_date    1:21   49.60  n/a     .000
03421>                     SUM=    1.0 01:J5              6.86     .519 No_date    1:44   46.41  n/a     .000
03422> R9999:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03423>     ROUTE CHANNEL   ->    1.0 02:J5              6.86     .519 No_date    1:44   46.41  n/a     .000
03424>       [RDT= 1.00] out<-   1.0 01:R5              6.86     .513 No_date    1:49   46.41  n/a     .000
03425>         [L/S/n=  237./ .644/.035]
03426>       (Vmax=  .757:Dmax=  .348)
03427> R9999:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03428>     ROUTE CHANNEL   ->    1.0 02:Pre10            .80     .081 No_date    1:19   35.74 .416     .000
03429>       [RDT= 1.00] out<-   1.0 01:R6               .80     .080 No_date    1:22   35.74  n/a     .000
03430>         [L/S/n=   77./ .776/.035]
03431>       (Vmax=  .492:Dmax=  .059)
03432> R9999:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03433>     ROUTE CHANNEL   ->    1.0 02:Pre9             .83     .048 No_date    1:47   35.74  n/a     .000
03434>       [RDT= 1.00] out<-   1.0 01:R7               .83     .048 No_date    1:50   35.74  n/a     .000
03435>         [L/S/n=  159./1.576/.035]
03436>       (Vmax=  .797:Dmax=  .014)
03437> R9999:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03438>     ADD HYD                 1.0 02:R6               .80     .080 No_date    1:22   36.02  n/a     .000
03439>                       +     1.0 02:EXT10            .20     .016 No_date    1:29   35.74  n/a     .000
03440>                     SUM=    1.0 01:J6              1.01     .095 No_date    1:23   35.96  n/a     .000
03441> R9999:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03442>     ROUTE CHANNEL   ->    1.0 02:J6              1.01     .095 No_date    1:23   35.96  n/a     .000
03443>       [RDT= 1.00] out<-   1.0 01:R8              1.01     .093 No_date    1:26   35.96  n/a     .000
03444>         [L/S/n=   79./ .522/.035]
03445>       (Vmax=  .423:Dmax=  .070)
03446> R9999:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03447>     ADD HYD                 1.0 02:R8              1.01     .093 No_date    1:26   35.96  n/a     .000
03448>                       +     1.0 02:R7               .83     .048 No_date    1:50   35.77  n/a     .000
03449>                     SUM=    1.0 01:J7              1.83     .131 No_date    1:31   35.88  n/a     .000
03450> R9999:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03451>     ROUTE CHANNEL   ->    1.0 02:J7              1.83     .131 No_date    1:31   35.88  n/a     .000
03452>       [RDT= 1.00] out<-   1.0 01:R9              1.83     .131 No_date    1:32   35.88  n/a     .000
03453>         [L/S/n=   29./ .887/.035]
03454>       (Vmax=  .543:Dmax=  .089)
03455> R9999:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03456>     ADD HYD                 1.0 02:EXT9            3.57     .297 No_date    1:34   40.95  n/a     .000
03457>                       +     1.0 02:R9              1.83     .131 No_date    1:32   35.89  n/a     .000
03458>                       +     1.0 02:EXT8             .83     .083 No_date    1:29   44.44  n/a     .000
03459>                       +     1.0 02:R5              6.86     .513 No_date    1:49   46.41  n/a     .000
03460>                     SUM=    1.0 01:J8             13.10     .984 No_date    1:41   43.32  n/a     .000
03461> R9999:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03462>     ROUTE PIPE     ->    1.0 02:J8             13.10     .984 No_date    1:41   43.32  n/a     .000
03463> *   [RDT= 1.00] out<-   1.0 01:Outlet         13.10     .983 No_date    1:42   43.32  n/a     .000
03464>       [L/S/n=   8./ .010/.013]
03465>       (Vmax=  .495:Dmax= 1.394)
03466>       [Din=  .53:Dused= 1.70)
03467> ################################################################################
03468> # STORMS
03469> ################################################################################
03470> R9999:C00002------------------------------------------------------------------------------------------
03471>     FINISH
03472>     ----------
03473> ********************************************************************************************************
03474>      WARNINGS / ERRORS / NOTES
03475>      -------------------------
03476> R0002:C00035  ROUTE PIPE      ->
03477> *** WARNING: New pipe size used for routing.
03478> *** WARNING: New pipe size used for routing.
03479> *** WARNING: New pipe size used for routing.
03480> *** WARNING: New pipe size used for routing.
03481> *** WARNING: New pipe size used for routing.
03482> *** WARNING: New pipe size used for routing.
03483> *** WARNING: New pipe size used for routing.
03484> *** WARNING: New pipe size used for routing.
03485> *** WARNING: New pipe size used for routing.
03486> *** WARNING: New pipe size used for routing.
03487> *** WARNING: New pipe size used for routing.
03488> *** WARNING: New pipe size used for routing.
03489> *** WARNING: New pipe size used for routing.
03490> *** WARNING: New pipe size used for routing.
03491> *** WARNING: New pipe size used for routing.
03492> *** WARNING: New pipe size used for routing.
03493>    Simulation ended on 2025-09-10     at 20:42:50
03494> ============================================================================================================
03495>
```

Attachment B

Post-Development Hydrology



N

Legend

- Post-development Subcatchments
- Site Plan

EXT1 — Subcatchment Name
3.212 ha — Subcatchment Area (ha)

SCALE: 1:3000

0 50 100 150 m

JFSA CANADA INC
WATER RESOURCE ENGINEERING, ENVIRONMENTAL MANAGEMENT AND LAND PLANNING CONSULTANTS

egis

5923 Ottawa St – Richmond

Figure B1: Proposed Drainage Areas

PROJECT	P2710(e01)
DRAWN	MM
DATE	04-06-2025

C:\Users\JonathonBurnett\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\2710(e01)\Design\GIS\20250603-Attachments

Table B1 - Site 1 - Stage/Storage/Outflow Curves

					Quality Control 1		Overflow			
					Vertical Orifice		Broad Crested Weir			
					Dia (m)	0.075	L (m)	0.300		
					Area (m^2)	0.006				
					Invert (m)	93.84	C_w	1.580		
					C_o	0.61	Invert (m)	94.40		
					Q @ D	0.002	n contr.	2	Total	
Elevation (m)	Storage 1 (m^3)	Storage 2 (m^3)	Total Volume (m^3)	Demarcation Points	Depth (m)	Outflow (m^3/s)	Depth (m)	Outflow (m^3/s)	Outflow (m^3/s)	Storage (ha·m)
93.84		**0.0**	**0.0**	**Pond Bottom**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
93.85		0.0	0.0		0.010	0.000	0.000	0.000	0.000	0.000
93.86		0.0	0.0		0.020	0.001	0.000	0.000	0.001	0.000
93.87		0.2	0.2		0.030	0.001	0.000	0.000	0.001	0.000
93.88		0.3	0.3		0.040	0.001	0.000	0.000	0.001	0.000
93.89		0.6	0.6		0.050	0.002	0.000	0.000	0.002	0.000
93.90		0.9	0.9		0.060	0.002	0.000	0.000	0.002	0.000
93.91		1.4	1.4		0.070	0.002	0.000	0.000	0.002	0.000
93.92		1.9	1.9		0.080	0.002	0.000	0.000	0.002	0.000
93.93		2.5	2.5		0.090	0.003	0.000	0.000	0.003	0.000
93.94		3.2	3.2		0.100	0.003	0.000	0.000	0.003	0.000
93.95		4.0	4.0		0.110	0.003	0.000	0.000	0.003	0.000
93.96		4.9	4.9		0.120	0.003	0.000	0.000	0.003	0.000
93.97		5.9	5.9		0.130	0.004	0.000	0.000	0.004	0.001
93.98		6.9	6.9		0.140	0.004	0.000	0.000	0.004	0.001
93.99		8.1	8.1		0.150	0.004	0.000	0.000	0.004	0.001
94.00		9.3	9.3		0.160	0.004	0.000	0.000	0.004	0.001
94.01	0.00	10.6	10.6		0.170	0.004	0.000	0.000	0.004	0.001
94.02	0.01	12.0	12.1		0.180	0.005	0.000	0.000	0.005	0.001
94.03	0.05	13.6	13.6		0.190	0.005	0.000	0.000	0.005	0.001
94.04	0.16	15.2	15.3		0.200	0.005	0.000	0.000	0.005	0.002
94.05	0.39	16.9	17.2		0.210	0.005	0.000	0.000	0.005	0.002
94.06	0.74	18.7	19.4		0.220	0.005	0.000	0.000	0.005	0.002
94.07	1.20	20.5	21.7		0.230	0.005	0.000	0.000	0.005	0.002
94.08	1.78	22.5	24.3		0.240	0.005	0.000	0.000	0.005	0.002
94.09	2.46	24.6	27.1		0.250	0.006	0.000	0.000	0.006	0.003
94.10	3.24	26.8	30.1		0.260	0.006	0.000	0.000	0.006	0.003
94.11	4.12	29.1	33.2		0.270	0.006	0.000	0.000	0.006	0.003
94.12	4.61	31.5	36.1		0.280	0.006	0.000	0.000	0.006	0.004
94.13	5.63	34.0	39.7		0.290	0.006	0.000	0.000	0.006	0.004
94.14	6.85	36.6	43.5		0.300	0.006	0.000	0.000	0.006	0.004
94.15	8.19	39.3	47.5		0.310	0.006	0.000	0.000	0.006	0.005
94.16	9.66	42.0	51.7		0.320	0.006	0.000	0.000	0.006	0.005
94.17	11.17	44.8	56.0		0.330	0.006	0.000	0.000	0.006	0.006
94.18	12.00	47.6	59.6		0.340	0.007	0.000	0.000	0.007	0.006
94.19	13.82	50.5	64.3		0.350	0.007	0.000	0.000	0.007	0.006
94.20	15.76	53.3	69.1		0.360	0.007	0.000	0.000	0.007	0.007
94.21	17.78	56.3	74.0		0.370	0.007	0.000	0.000	0.007	0.007
94.22	19.87	59.2	79.1		0.380	0.007	0.000	0.000	0.007	0.008
94.23	22.01	62.2	84.2		0.390	0.007	0.000	0.000	0.007	0.008
94.24	24.17	65.1	89.3		0.400	0.007	0.000	0.000	0.007	0.009
94.25	26.36	68.2	94.5		0.410	0.007	0.000	0.000	0.007	0.009
94.26	28.57	71.2	99.8		0.420	0.007	0.000	0.000	0.007	0.010
94.27	30.81	74.3	105.1		0.430	0.007	0.000	0.000	0.007	0.011
94.28	33.07	77.4	110.5		0.440	0.008	0.000	0.000	0.008	0.011
94.29	35.35	80.5	115.9		0.450	0.008	0.000	0.000	0.008	0.012
94.30	37.66	83.7	121.3		0.460	0.008	0.000	0.000	0.008	0.012
94.31	39.99	86.9	126.9		0.470	0.008	0.000	0.000	0.008	0.013
94.32	42.35	90.1	132.5		0.480	0.008	0.000	0.000	0.008	0.013
94.33	44.74	93.4	138.1		0.490	0.008	0.000	0.000	0.008	0.014
94.34	47.15	96.7	143.8		0.500	0.008	0.000	0.000	0.008	0.014
94.35	49.58	100.0	149.6		0.510	0.008	0.000	0.000	0.008	0.015
94.36	52.04	103.4	155.4		0.520	0.008	0.000	0.000	0.008	0.016
94.37	54.52	106.8	161.3		0.530	0.008	0.000	0.000	0.008	0.016
94.38	57.03	110.2	167.2		0.540	0.008	0.000	0.000	0.008	0.017
94.39	59.56	113.7	173.3		0.550	0.009	0.000	0.000	0.009	0.017
94.40	**62.12**	**117.2**	**179.3**	**Max100-Yr WSE***	**0.560**	**0.009**	**0.000**	**0.000**	**0.009**	**0.018**
94.41	64.70	120.8	185.5		0.570	0.009	0.010	0.000	0.009	0.019
94.42	67.31	124.4	191.7		0.580	0.009	0.020	0.001	0.010	0.019
94.43	69.95	128.0	197.9		0.590	0.009	0.030	0.002	0.011	0.020
94.44	72.61	131.7	204.3		0.600	0.009	0.040	0.004	0.013	0.020
94.45	75.29	135.4	210.7		0.610	0.009	0.050	0.005	0.014	0.021
94.46	78.00	139.1	217.1		0.620	0.009	0.060	0.007	0.016	0.022
94.47	80.74	142.9	223.7		0.630	0.009	0.070	0.008	0.018	0.022
94.48	83.50	146.8	230.3		0.640	0.009	0.080	0.010	0.019	0.023
94.49	86.29	150.7	237.0		0.650	0.009	0.090	0.012	0.021	0.024
94.50	89.10	154.6	243.7		0.660	0.009	0.100	0.014	0.023	0.024
94.51	91.94	158.6	250.5		0.670	0.009	0.110	0.016	0.026	0.025
94.52	94.81	162.6	257.4		0.680	0.010	0.120	0.018	0.028	0.026
94.53	97.70	166.7	264.4		0.690	0.010	0.130	0.020	0.030	0.026
94.54	100.61	170.8	271.4		0.700	0.010	0.140	0.023	0.032	0.027
94.55	103.56	175.0	278.5		0.710	0.010	0.150	0.025	0.035	0.028
94.56	106.53	179.2	285.7		0.720	0.010	0.160	0.027	0.037	0.029
94.57	109.52	183.5	293.0		0.730	0.010	0.170	0.029	0.039	0.029
94.58	112.54	187.8	300.3		0.740	0.010	0.180	0.032	0.042	0.030
94.59	115.59	192.2	307.7		0.750	0.010	0.190	0.034	0.044	0.031
94.60	118.66	196.6	315.2		0.760	0.010	0.200	0.037	0.047	0.032
94.61	119.86	201.1	320.9		0.770	0.010	0.210	0.039	0.049	0.032
94.62	121.07	205.6	326.7		0.780	0.010	0.220	0.042	0.052	0.033
94.63	124.27	210.2	334.5		0.790	0.010	0.230	0.044	0.055	0.033
94.64	125.49	214.9	340.4		0.800	0.010	0.240	0.047	0.057	0.034
94.65	125.52	219.6	345.1		0.810	0.010	0.250	0.049	0.060	0.035
94.66	126.70	224.3	351.0		0.820	0.011	0.260	0.052	0.063	0.035
94.67	127.87	229.2	357.0		0.830	0.011	0.270	0.055	0.065	0.036
94.68	131.15	234.1	365.2		0.840	0.011	0.280	0.057	0.068	0.037
94.69	132.31	239.0	371.3		0.850	0.011	0.290	0.060	0.070	0.037
94.70	132.31	244.0	376.3	**Pond Spill**	0.860	0.011	0.300	0.062	0.073	0.038

*Maximum allowable 100-year water level in the pond - not the simulated 100 year water level

Table B2 - Site 2 - Stage/Storage/Outflow Curves

					Quality Control 1		Emergency Overflow			
					Vertical Orifice		Broad Crested Weir			
					Dia (m)	0.075	L (m)	0.300		
					Area (m^2)	0.006				
					Invert (m)	93.71	C_w	1.580		
					C_o	0.61	Invert (m)	94.40		
					Q @ D	0.002	n contr.	2	Total	
Elevation (m)	Storage 3 (m^3)	Storage 4 (m^3)	Total Volume (m^3)	Demarcation Points	Depth (m)	Outflow (m^3/s)	Depth (m)	Outflow (m^3/s)	Outflow (m^3/s)	Storage (ha·m)
93.71		**0.0**	**0.0**	**Pond Bottom**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
93.72		0.0	0.0		0.010	0.000	0.000	0.000	0.000	0.000
93.73		0.0	0.0		0.020	0.001	0.000	0.000	0.001	0.000
93.74		0.1	0.1		0.030	0.001	0.000	0.000	0.001	0.000
93.75		0.3	0.3		0.040	0.001	0.000	0.000	0.001	0.000
93.76		0.6	0.6		0.050	0.002	0.000	0.000	0.002	0.000
93.77		1.0	1.0		0.060	0.002	0.000	0.000	0.002	0.000
93.78		1.6	1.6		0.070	0.002	0.000	0.000	0.002	0.000
93.79		2.3	2.3		0.080	0.002	0.000	0.000	0.002	0.000
93.80		3.2	3.2		0.090	0.003	0.000	0.000	0.003	0.000
93.81		4.3	4.3		0.100	0.003	0.000	0.000	0.003	0.000
93.82		5.4	5.4		0.110	0.003	0.000	0.000	0.003	0.001
93.83		6.5	6.5		0.120	0.003	0.000	0.000	0.003	0.001
93.84		7.7	7.7		0.130	0.004	0.000	0.000	0.004	0.001
93.85		8.9	8.9		0.140	0.004	0.000	0.000	0.004	0.001
93.86		10.2	10.2		0.150	0.004	0.000	0.000	0.004	0.001
93.87		11.4	11.4		0.160	0.004	0.000	0.000	0.004	0.001
93.88		12.7	12.7		0.170	0.004	0.000	0.000	0.004	0.001
93.89		13.9	13.9		0.180	0.005	0.000	0.000	0.005	0.001
93.90		15.2	15.2		0.190	0.005	0.000	0.000	0.005	0.002
93.91		16.5	16.5		0.200	0.005	0.000	0.000	0.005	0.002
93.92		17.8	17.8		0.210	0.005	0.000	0.000	0.005	0.002
93.93		19.1	19.1		0.220	0.005	0.000	0.000	0.005	0.002
93.94		20.5	20.5		0.230	0.005	0.000	0.000	0.005	0.002
93.95		21.8	21.8		0.240	0.005	0.000	0.000	0.005	0.002
93.96		23.2	23.2		0.250	0.006	0.000	0.000	0.006	0.002
93.97		24.6	24.6		0.260	0.006	0.000	0.000	0.006	0.002
93.98		26.0	26.0		0.270	0.006	0.000	0.000	0.006	0.003
93.99		27.4	27.4		0.280	0.006	0.000	0.000	0.006	0.003
94.00		28.9	28.9		0.290	0.006	0.000	0.000	0.006	0.003
94.01		30.4	30.4		0.300	0.006	0.000	0.000	0.006	0.003
94.02		31.8	31.8		0.310	0.006	0.000	0.000	0.006	0.003
94.03		33.4	33.4		0.320	0.006	0.000	0.000	0.006	0.003
94.04	0.0	34.9	34.9		0.330	0.006	0.000	0.000	0.006	0.003
94.05	0.1	36.4	36.6		0.340	0.007	0.000	0.000	0.007	0.004
94.06	0.4	38.0	38.4		0.350	0.007	0.000	0.000	0.007	0.004
94.07	0.8	39.6	40.4		0.360	0.007	0.000	0.000	0.007	0.004
94.08	1.3	41.2	42.5		0.370	0.007	0.000	0.000	0.007	0.004
94.09	1.8	42.9	44.7		0.380	0.007	0.000	0.000	0.007	0.004
94.10	2.5	44.5	47.0		0.390	0.007	0.000	0.000	0.007	0.005
94.11	3.3	46.2	49.5		0.400	0.007	0.000	0.000	0.007	0.005
94.12	4.1	48.0	52.1		0.410	0.007	0.000	0.000	0.007	0.005
94.13	4.5	49.7	54.2		0.420	0.007	0.000	0.000	0.007	0.005
94.14	5.6	51.5	57.1		0.430	0.007	0.000	0.000	0.007	0.006
94.15	6.7	53.3	60.0		0.440	0.008	0.000	0.000	0.008	0.006
94.16	8.0	55.1	63.1		0.450	0.008	0.000	0.000	0.008	0.006
94.17	8.5	57.0	65.5		0.460	0.008	0.000	0.000	0.008	0.007
94.18	10.0	58.9	68.9		0.470	0.008	0.000	0.000	0.008	0.007
94.19	11.6	60.8	72.4		0.480	0.008	0.000	0.000	0.008	0.007
94.20	13.3	62.7	76.0		0.490	0.008	0.000	0.000	0.008	0.008
94.21	15.1	64.7	79.8		0.500	0.008	0.000	0.000	0.008	0.008
94.22	17.0	66.7	83.8		0.510	0.008	0.000	0.000	0.008	0.008
94.23	19.1	68.8	87.8		0.520	0.008	0.000	0.000	0.008	0.009
94.24	21.1	70.9	92.0		0.530	0.008	0.000	0.000	0.008	0.009
94.25	23.2	73.0	96.2		0.540	0.008	0.000	0.000	0.008	0.010
94.26	25.4	75.1	100.5		0.550	0.009	0.000	0.000	0.009	0.010
94.27	27.5	77.3	104.8		0.560	0.009	0.000	0.000	0.009	0.010
94.28	29.7	79.5	109.2		0.570	0.009	0.000	0.000	0.009	0.011
94.29	31.9	81.8	113.7		0.580	0.009	0.000	0.000	0.009	0.011
94.30	34.1	84.1	118.2		0.590	0.009	0.000	0.000	0.009	0.012
94.31	36.4	86.4	122.8		0.600	0.009	0.000	0.000	0.009	0.012
94.32	38.7	88.7	127.4		0.610	0.009	0.000	0.000	0.009	0.013
94.33	41.0	91.1	132.1		0.620	0.009	0.000	0.000	0.009	0.013
94.34	43.3	93.6	136.9		0.630	0.009	0.000	0.000	0.009	0.014
94.35	45.7	96.1	141.7		0.640	0.009	0.000	0.000	0.009	0.014
94.36	48.1	98.6	146.7		0.650	0.009	0.000	0.000	0.009	0.015
94.37	50.5	101.2	151.7		0.660	0.009	0.000	0.000	0.009	0.015
94.38	52.9	103.8	156.7		0.670	0.009	0.000	0.000	0.009	0.016
94.39	55.4	106.5	161.9		0.680	0.010	0.000	0.000	0.010	0.016
94.40	**57.9**	**109.2**	**167.1**	**Max 100-Yr WSE***	**0.690**	**0.010**	**0.000**	**0.000**	**0.010**	**0.017**
94.41	60.4	112.0	172.4		0.700	0.010	0.010	0.000	0.010	0.017
94.42	62.9	114.8	177.7		0.710	0.010	0.020	0.001	0.011	0.018
94.43	65.5	117.7	183.2		0.720	0.010	0.030	0.002	0.012	0.018
94.44	68.1	119.9	188.0		0.730	0.010	0.040	0.004	0.014	0.019
94.45	70.7	122.0	192.7		0.740	0.010	0.050	0.005	0.015	0.019
94.46	73.4	123.8	197.2		0.750	0.010	0.060	0.007	0.017	0.020
94.47	76.1	125.7	201.8		0.760	0.010	0.070	0.008	0.019	0.020
94.48	78.8	127.2	206.0		0.770	0.010	0.080	0.010	0.020	0.021
94.49	81.5	129.4	210.9		0.780	0.010	0.090	0.012	0.022	0.021
94.50	84.3	131.0	215.2		0.790	0.010	0.100	0.014	0.024	0.022
94.51	87.1	133.1	220.2		0.800	0.010	0.110	0.016	0.026	0.022
94.52	89.9	134.7	224.6		0.810	0.010	0.120	0.018	0.029	0.022
94.53	92.7	135.4	228.1		0.820	0.011	0.130	0.020	0.031	0.023
94.53	92.7	135.4	228.1		0.820	0.011	0.130	0.020	0.031	0.023
94.54	95.6	137.6	233.2		0.830	0.011	0.140	0.023	0.033	0.023
94.55	98.5	137.6	236.1		0.840	0.011	0.150	0.025	0.035	0.024
94.55	98.5	137.6	236.1		0.840	0.011	0.150	0.025	0.035	0.024
94.56	101.4	138.4	239.9		0.850	0.011	0.160	0.027	0.038	0.024
94.57	104.4	139.1	243.5		0.860	0.011	0.170	0.029	0.040	0.024
94.57	104.4	139.1	243.5		0.860	0.011	0.170	0.029	0.040	0.024
94.58	107.4	140.6	248.0		0.870	0.011	0.180	0.032	0.043	0.025
94.59	110.4	141.4	251.8		0.880	0.011	0.190	0.034	0.045	0.025
94.60	113.4	143.6	257.1		0.890	0.011	0.200	0.037	0.048	0.026
94.61	114.6	144.4	259.1		0.900	0.011	0.210	0.039	0.050	0.026
94.62	115.8	145.9	261.7		0.910	0.011	0.220	0.042	0.053	0.026
94.63	119.0	148.1	267.1		0.920	0.011	0.230	0.044	0.055	0.027
94.64	120.2	149.6	269.8		0.930	0.011	0.240	0.047	0.058	0.027
94.65	120.2	150.4	270.6		0.940	0.011	0.250	0.049	0.061	0.027
94.66	121.4	152.6	274.1		0.950	0.011	0.260	0.052	0.063	0.027
94.67	122.6	153.4	276.0		0.960	0.011	0.270	0.055	0.066	0.028
94.68	125.8	155.7	281.5		0.970	0.012	0.280	0.057	0.069	0.028
94.69	127.0	156.5	283.5		0.980	0.012	0.290	0.060	0.071	0.028
94.70	127.0	157.3	284.3	**Pond Spill**	0.990	0.012	0.300	0.062	0.074	0.028

*Maximum allowable 100-year water level in the pond

```
20    Metric units / ID numbers OFF
*#*******************************************************************************************
*#  SWMHYMO  / INPUT DATA FILE
*#*******************************************************************************************
*#  Project Name  : [5923 Ottawa St]
*#  Project Number: [P2710(e01)]
*#  Date          : [2025 April 28]
*#  Modeller      : [MM]
*#  Company       : JFSA Canada Inc.
*#  License #     : 2549237
*#*******************************************************************************************
*# Model developed to simulate runoff from subcatchments under post development
conditions
*#*******************************************************************************************
*%  25 mm Storm based on 2-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[002]
                   ["002YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
READ STORM          STORM_FILENAME=["STORM.001"]
*%-----------------|-------------------------------------------------------------|
*#*******************************************************************************************
*%-----------------|-------------------------------------------------------------|
DEFAULT VALUES      ICASEdef=[1],  read values only
                    DEFVAL_FILENAME=["Ottawa.val"]
*%-----------------|-------------------------------------------------------------|
*#*******************************************************************************************
*# EXT1
*#*******************************************************************************************
CALIB NASHYD        NHYD=["EXT1"], DT[1](min), AREA=[3.211](ha),
                    DWF=[0](cms), CN=[80],
                    IA=[4.67](mm), N=[3], TP[0.72](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************
*# EXT2
*#*******************************************************************************************
CALIB NASHYD        NHYD=["EXT2"], DT[1](min), AREA=[0.285](ha),
                    DWF=[0](cms), CN=[85],
                    IA=[4.67](mm), N=[3], TP[0.33](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************
*# EXT3
*#*******************************************************************************************
CALIB NASHYD        NHYD=["EXT3"], DT[1](min), AREA=[0.560](ha),
                    DWF=[0](cms), CN=[80],
                    IA=[4.67](mm), N=[3], TP[0.32](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************
*# EXT4
*#*******************************************************************************************
CALIB NASHYD        NHYD=["EXT4"], DT[1](min), AREA=[0.309](ha),
                    DWF=[0](cms), CN=[79],
                    IA=[4.67](mm), N=[3], TP[0.29](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************
*# EXT5
```

```
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["EXT5"], DT[1](min), AREA=[0.594](ha),
                    DWF=[0](cms), CN=[76],
                    IA=[4.67](mm), N=[3], TP[0.45](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************************
*# EXT6
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["EXT6"], DT[1](min), AREA=[0.864](ha),
                    DWF=[0](cms), CN=[85],
                    IA=[4.67](mm), N=[3], TP[0.56](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************************
*# EXT7
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["EXT7"], DT[1](min), AREA=[0.471](ha),
                    DWF=[0](cms), CN=[83],
                    IA=[4.67](mm), N=[3], TP[0.32](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************************
*# EXT8
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["EXT8"], DT[1](min), AREA=[0.834](ha),
                    DWF=[0](cms), CN=[79],
                    IA=[4.67](mm), N=[3], TP[0.42](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************************
*# EXT9
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["EXT9"], DT[1](min), AREA=[3.571](ha),
                    DWF=[0](cms), CN=[76],
                    IA=[4.67](mm), N=[3], TP[0.48](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************************
*# EXT9a
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["EXT9a"], DT[1](min), AREA=[0.011](ha),
                    DWF=[0](cms), CN=[78],
                    IA=[4.67](mm), N=[3], TP[0.04](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************************
*# EXT10
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["EXT10"], DT[1](min), AREA=[0.203](ha),
                    DWF=[0](cms), CN=[71],
                    IA=[4.67](mm), N=[3], TP[0.42](hrs),
                    RAINFALL[ , , -1]
*#*******************************************************************************************************
*# Pre2_1
*#*******************************************************************************************************
CALIB NASHYD        NHYD=["Pre2_1"], DT[1](min), AREA=[0.013](ha),
                    DWF=[0](cms), CN=[72],
                    IA=[4.67](mm), N=[3], TP[0.03](hrs),
                    RAINFALL[ , , -1]
```

```
*#*************************************************************************************************
*# Pre2_2
*#*************************************************************************************************
CALIB NASHYD        NHYD=["Pre2_2"], DT[1](min), AREA=[0.002](ha),
                    DWF=[0](cms), CN=[78],
                    IA=[4.67](mm), N=[3], TP[0.02](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# Pre9_1
*#*************************************************************************************************
CALIB NASHYD        NHYD=["Pre9_1"], DT[1](min), AREA=[0.437](ha),
                    DWF=[0](cms), CN=[71],
                    IA=[4.67](mm), N=[3], TP[0.38](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# Pre9_2
*#*************************************************************************************************
CALIB NASHYD        NHYD=["Pre9_2"], DT[1](min), AREA=[0.014](ha),
                    DWF=[0](cms), CN=[59],
                    IA=[4.67](mm), N=[3], TP[0.03](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# Pre10_1
*#*************************************************************************************************
CALIB NASHYD        NHYD=["Pre10_1"], DT[1](min), AREA=[0.799](ha),
                    DWF=[0](cms), CN=[71],
                    IA=[4.67](mm), N=[3], TP[0.29](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# Pre11_1
*#*************************************************************************************************
CALIB NASHYD        NHYD=["Pre11_1"], DT[1](min), AREA=[0.067](ha),
                    DWF=[0](cms), CN=[78],
                    IA=[4.67](mm), N=[3], TP[0.21](hrs),
                    RAINFALL[ , , -1]
*#*************************************************************************************************
*# Site 1
*#*************************************************************************************************
DESIGN STANDHYD     NHYD=["S1-B1"], DT=[1](min), AREA=[0.415](ha),
                    XIMP=[0.34], TIMP=[0.44], DWF=[0](cms),
                    LOSS=[1], SLOPE=[1.0](%), RAINFALL=[ , , -1](mm/hr)
*#*************************************************************************************************
*# Site 1 - Roof
*#*************************************************************************************************
DESIGN STANDHYD     NHYD=["S1-Roof"], DT=[1](min), AREA=[0.065](ha),
                    XIMP=[0.99], TIMP=[0.99], DWF=[0](cms),
                    LOSS=[1], SLOPE=[0.5](%), RAINFALL=[ , , -1](mm/hr)
*%-----------------|-------------------------------------------------------------------------|
* Rooftop Storage-Outflow Curve for site 1 Facility - From EGIS Report
ROUTE RESERVOIR     NHYDout=["S1-Roof-Out"], NHYDin=["S1-Roof"], RDT=[1](min),
                         TABLE of ( OUTFLOW-STORAGE ) values
                                   (cms) - (ha-m)
                                    [ 0 , 0 ]
                                    [ 0.0008 , 0.0007 ]
```

```
                                        [ 0.001 , 0.001 ]
                                        [ 0.0015 , 0.0015 ]
                                        [ 0.0018 , 0.0017 ]
                                        [ 0.0023 , 0.0022 ]
                                        [ 0.0025 , 0.0024 ]
                                        [ 0.0028 , 0.0027 ]
                                        [ 0.003 , 0.0029 ]
                                        [ 0.0033 , 0.0032 ]
                                        [ 0.0038 , 0.0037 ]
                                        [ 0.004 , 0.0039 ]
                                        [ 0.0045 , 0.0044 ]
                                        [ 0.0048 , 0.0046 ]
                                        [ 0.0051 , 0.0049 ]
                                        [ 0.0056 , 0.0054 ]
                                        [ 0.0063 , 0.0061 ]
                                        [ 0.0066 , 0.0064 ]
                                        [ 0.0076 , 0.0073 ]
                                        [ -1 , -1 ]
                                    NHYDovf=["S1-Roof-Over"],
*%-----------------|-------------------------------------------------------------------------
----|-------------------------|
ADD HYD             NHYDsum=["SITE1-IN"], NHYDs to add=["S1-B1"+"S1-Roof-Out"+
"S1-Roof-Over"]
*%-----------------|-------------------------------------------------------------------------
----|-------------------------|
* Pond for Site 1: Stage-Storage-Outflow
ROUTE RESERVOIR     NHYDout=["SITE1-Out"], NHYDin=["SITE1-IN"], RDT=[1](min),
                         TABLE of ( OUTFLOW-STORAGE ) values
                                        (cms) - (ha-m)
                                         [ 0.00000 , 0 ]
                                         [ 0.00154 , 0.00006 ]
                                         [ 0.00246 , 0.00019 ]
                                         [ 0.00321 , 0.0004 ]
                                         [ 0.00382 , 0.00069 ]
                                         [ 0.00435 , 0.00106 ]
                                         [ 0.00481 , 0.00153 ]
                                         [ 0.00524 , 0.00217 ]
                                         [ 0.00563 , 0.00301 ]
                                         [ 0.006 , 0.00397 ]
                                         [ 0.00634 , 0.00517 ]
                                         [ 0.00667 , 0.00643 ]
                                         [ 0.00699 , 0.00791 ]
                                         [ 0.00729 , 0.00945 ]
                                         [ 0.00757 , 0.01105 ]
                                         [ 0.00785 , 0.01269 ]
                                         [ 0.00812 , 0.01438 ]
                                         [ 0.00838 , 0.01613 ]
                                         [ 0.00863 , 0.01793 ]
                                         [ 0.01129 , 0.01979 ]
                                         [ 0.0158 , 0.02171 ]
                                         [ 0.02137 , 0.0237 ]
                                         [ 0.0277 , 0.02574 ]
                                         [ 0.03457 , 0.02785 ]
                                         [ 0.04186 , 0.03003 ]
                                         [ 0.04945 , 0.03209 ]
                                         [ 0.05724 , 0.03404 ]
                                         [ 0.06516 , 0.0357 ]
                                         [ 0.07313 , 0.03763 ]
                                         [ -1 , -1 ]
                                    NHYDovf=["SITE1-Over"],
*%-----------------|-------------------------------------------------------------------------
----|-------------------------|
*#*************************************************************************************
***********
*# Site 2
*#*************************************************************************************
***********
DESIGN STANDHYD     NHYD=["S2-B3"], DT=[1](min), AREA=[0.354](ha),
                    XIMP=[0.31], TIMP=[0.41], DWF=[0](cms),
```

```
                    LOSS=[1], SLOPE=[1.0](%), RAINFALL=[ , , -1](mm/hr)
*#*************************************************************************************************
*# Site 2 - Roof
*#*************************************************************************************************
DESIGN STANDHYD     NHYD=["S2-Roof"], DT=[1](min), AREA=[0.093](ha),
                    XIMP=[0.99], TIMP=[0.99], DWF=[0](cms),
                    LOSS=[1], SLOPE=[0.5](%), RAINFALL=[ , , -1](mm/hr)
*#*************************************************************************************************
* Rooftop Storage-Outflow Curve for site 2 Facility - From EGIS Report
ROUTE RESERVOIR     NHYDout=["S2-Roof-Out"], NHYDin=["S2-Roof"], RDT=[1](min),
                         TABLE of ( OUTFLOW-STORAGE ) values
                                   (cms) - (ha-m)
                                    [ 0 , 0 ]
                                    [ 0.0007 , 0 ]
                                    [ 0.0015 , 0.0001 ]
                                    [ 0.003 , 0.0002 ]
                                    [ 0.0037 , 0.0004 ]
                                    [ 0.0048 , 0.0007 ]
                                    [ 0.0053 , 0.0008 ]
                                    [ 0.0065 , 0.0014 ]
                                    [ 0.0072 , 0.0018 ]
                                    [ 0.0081 , 0.0025 ]
                                    [ 0.0084 , 0.0029 ]
                                    [ 0.0092 , 0.0042 ]
                                    [ 0.0099 , 0.006 ]
                                    [ 0.0104 , 0.0075 ]
                                    [ 0.0106 , 0.0083 ]
                                    [ 0.0112 , 0.0109 ]
                                    [ 0.0143 , 0.0128 ]
                                    [ 0.0174 , 0.0138 ]
                                    [ 0.0253 , 0.0158 ]
                                    [ 0.0276 , 0.0164 ]
                                    [ -1 , -1 ]
                                  NHYDovf=["S2-Roof-Over"],
*%-----------------|-------------------------------------------------------------|
ADD HYD             NHYDsum=["SITE2-IN"], NHYDs to add=["S2-B3"+"S2-Roof-Out"+
"S2-Roof-Over"]
*%-----------------|-------------------------------------------------------------|
* Pond for Site 2: Stage-Storage-Outflow
ROUTE RESERVOIR     NHYDout=["SITE2-Out"], NHYDin=["SITE2-IN"], RDT=[1](min),
                         TABLE of ( OUTFLOW-STORAGE
                                   (cms) - (ha-m)
                                    [ 0 , 0 ]
                                    [ 0.0022 , 0.0002 ]
                                    [ 0.003 , 0.0004 ]
                                    [ 0.0036 , 0.0008 ]
                                    [ 0.0042 , 0.0011 ]
                                    [ 0.0047 , 0.0015 ]
                                    [ 0.0051 , 0.0019 ]
                                    [ 0.0055 , 0.0023 ]
                                    [ 0.0059 , 0.0027 ]
                                    [ 0.0062 , 0.0032 ]
                                    [ 0.0066 , 0.0037 ]
                                    [ 0.0069 , 0.0042 ]
                                    [ 0.0072 , 0.0049 ]
                                    [ 0.0075 , 0.0057 ]
                                    [ 0.0078 , 0.0065 ]
                                    [ 0.008 , 0.0076 ]
                                    [ 0.0083 , 0.0088 ]
                                    [ 0.0085 , 0.01 ]
                                    [ 0.0088 , 0.0114 ]
                                    [ 0.009 , 0.0127 ]
                                    [ 0.0093 , 0.0142 ]
                                    [ 0.0095 , 0.0157 ]
                                    [ 0.0102 , 0.0172 ]
                                    [ 0.0136 , 0.0188 ]
```

```
                                    [ 0.0185 , 0.0202 ]
                                    [ 0.0243 , 0.0215 ]
                                    [ 0.0309 , 0.0228 ]
                                    [ 0.0355 , 0.0236 ]
                                    [ 0.0403 , 0.0244 ]
                                    [ 0.0452 , 0.0252 ]
                                    [ 0.0529 , 0.0262 ]
                                    [ 0.0607 , 0.0271 ]
                                    [ 0.0686 , 0.0282 ]
                                    [ 0.074 , 0.0284 ]
                                    [ 0.0766 , 0.0287 ]
                                    [ 0.0793 , 0.0287 ]
                                    [ 0.0819 , 0.0287 ]
                                    [ 0.0819 , 0.0287 ]
                                    [ 0.0846 , 0.0287 ]
                                    [ 0.0872 , 0.0287 ]
                                    [ 0.0898 , 0.0287 ]
                                    [ 0.0924 , 0.0288 ]
                                    [ 0.095 , 0.0288 ]
                                    [ 0.0976 , 0.0288 ]
                                    [ 0.1027 , 0.0288 ]
                                    [ 0.1053 , 0.0288 ]
                                    [ 0.1078 , 0.0288 ]
                                    [ 0.1102 , 0.0288 ]
                                    [ 0.1127 , 0.0288 ]
                                    [ 0.1151 , 0.0289 ]
                                    [ 0.1175 , 0.0289 ]
                                    [ 0.1199 , 0.0289 ]
                                    [ 0.1222 , 0.0289 ]
                                    [ 0.129 , 0.0289 ]
                                    [ 0.1355 , 0.0289 ]
                                    [ 0.1417 , 0.0289 ]
                                    [ 0.1474 , 0.0289 ]
                                    [ 0.151 , 0.0289 ]
                                    [ 0.156 , 0.0289 ]
                                    [ -1 , -1 ]
                                  NHYDovf=["SITE2-Over"],
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["Site1"], NHYDs to add=["SITE1-Out"+"SITE1-Over"]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["Site2"], NHYDs to add=["SITE2-Out"+"SITE2-Over"]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J1"], NHYDs to add=["EXT2"+"Pre2_1"+"Site1"+"Site2"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 849.0434 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R1"], NHYDin=["J1"], RDT=[1](min),
                    CHLGTH=[143.151](m), CHSLOPE=[0.394](%), FPSLOPE=[0.394](%),
                    SECNUM=[849.0434], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,18.95 -0.035,26.78 0.08,35.18] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0.48, 94.05]
                                                     [3.19, 93.99]
                                                     [6.85, 93.91]
                                                     [10.48, 93.87]
                                                     [17.45, 93.85]
                                                     [18.95, 93.84]
                                                     [20.36, 93.81]
                                                     [22.3, 93.76]
                                                     [22.53, 93.72]
                                                     [23.98, 93.35]
                                                     [24.35, 93.33]
                                                     [24.65, 93.37]
                                                     [25.04, 93.45]
                                                     [26.04, 93.74]
                                                     [26.44, 93.82]
                                                     [26.78, 93.87]
                                                     [29.14, 94.11]
                                                     [33.98, 94.26]
                                                     [35.18, 94.26]
```

```
*%-----------------|-------------------------------------------------------------|
ADD HYD             NHYDsum=["J2"], NHYDs to add=["R1"+"EXT3"+"EXT1"]
*%-----------------|-------------------------------------------------------------|
* NOTE: Cross-section number 737.5813 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R2"], NHYDin=["J2"], RDT=[1](min),
                    CHLGTH=[73.338](m), CHSLOPE=[0.425](%), FPSLOPE=[0.425](%),
                    SECNUM=[737.5813], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,8.4 -0.035,16.42 0.08,22.6] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0, 93.52]
                                                     [1.08, 93.5]
                                                     [4.37, 93.48]
                                                     [6.31, 93.45]
                                                     [8.4, 93.38]
                                                     [9.5, 93.31]
                                                     [10.49, 93.23]
                                                     [10.99, 93.18]
                                                     [12.4, 92.94]
                                                     [13.11, 92.84]
                                                     [13.67, 92.92]
                                                     [16.42, 93.6]
                                                     [16.91, 93.65]
                                                     [17.97, 93.65]
                                                     [19, 93.83]
                                                     [19.51, 93.89]
                                                     [21.06, 93.94]
                                                     [22.6, 93.95]
*%-----------------|-------------------------------------------------------------|
ADD HYD             NHYDsum=["J3"], NHYDs to add=["R2"+"EXT4"]
*%-----------------|-------------------------------------------------------------|
* NOTE: Cross-section number 675.4097 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R3"], NHYDin=["J3"], RDT=[1](min),
                    CHLGTH=[92.08](m), CHSLOPE=[0.274](%), FPSLOPE=[0.274](%),
                    SECNUM=[675.4097], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,31.64 -0.035,42.44 0.08,48.87] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[30.59, 93.12]
                                                     [31.64, 93.13]
                                                     [34.35, 93.08]
                                                     [35.18, 93.03]
                                                     [37.78, 92.72]
                                                     [38.25, 92.64]
                                                     [38.7, 92.61]
                                                     [39.74, 92.76]
                                                     [42.44, 93.41]
                                                     [42.89, 93.49]
                                                     [43.97, 93.57]
                                                     [44.92, 93.6]
                                                     [46.07, 93.67]
                                                     [48.87, 93.74]
*%-----------------|-------------------------------------------------------------|
ADD HYD             NHYDsum=["J4"], NHYDs to add=["R3"+"EXT5"]
*%-----------------|-------------------------------------------------------------|
* NOTE: Cross-section number 518.7506 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R4"], NHYDin=["J4"], RDT=[1](min),
                    CHLGTH=[251.495](m), CHSLOPE=[0.19](%), FPSLOPE=[0.19](%),
                    SECNUM=[518.7506], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,51.48 -0.035,59.39 0.08,66.4] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0, 92.92]
                                                     [4.26, 92.9]
                                                     [48.31, 92.76]
                                                     [51.48, 92.76]
                                                     [53.64, 92.7]
                                                     [55.33, 92.29]
                                                     [55.44, 92.29]
                                                     [56.43, 92.37]
                                                     [56.97, 92.43]
                                                     [59.39, 93.27]
```

```
                                                  [59.74, 93.37]
                                                  [60.8, 93.52]
                                                  [63.31, 93.71]
                                                  [66.4, 93.76]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J5"], NHYDs to add=["R4"+"EXT6"+"EXT7"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 275.0857 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R5"], NHYDin=["J5"], RDT=[1](min),
                    CHLGTH=[237.343](m), CHSLOPE=[0.644](%), FPSLOPE=[0.644](%),
                    SECNUM=[275.0857], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,40.82 -0.035,53.64 0.08,57.93] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[36.16, 92.63]
                                                  [40.82, 92.97]
                                                  [41.39, 92.9]
                                                  [44.69, 91.72]
                                                  [45.24, 91.58]
                                                  [46.33, 91.43]
                                                  [47.41, 91.64]
                                                  [47.87, 91.75]
                                                  [49.59, 92.2]
                                                  [50.99, 92.36]
                                                  [51.44, 92.48]
                                                  [53.18, 92.98]
                                                  [53.64, 93.15]
                                                  [55.92, 93.66]
                                                  [57.93, 93.68]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["Pre"], NHYDs to add=["Pre10_1"+"Pre9_2"+"Pre2_2"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 124 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R6"], NHYDin=["Pre"], RDT=[1](min),
                    CHLGTH=[77.414](m), CHSLOPE=[0.776](%), FPSLOPE=[0.776](%),
                    SECNUM=[124], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,8.34 -0.035,31.31 0.08,84.97] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[1.78, 93.73]
                                                  [4.51, 93.54]
                                                  [5.06, 93.31]
                                                  [7.25, 92.98]
                                                  [7.79, 92.77]
                                                  [8.34, 92.49]
                                                  [9.43, 91.93]
                                                  [9.68, 91.81]
                                                  [10.53, 91.27]
                                                  [12.64, 90.92]
                                                  [14.44, 90.9]
                                                  [16.54, 91.06]
                                                  [17.64, 91.06]
                                                  [30.22, 92.3]
                                                  [31.31, 92.45]
                                                  [33.5, 92.41]
                                                  [55.37, 93.11]
                                                  [57.01, 93.2]
                                                  [84.97, 93.43]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 74 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R7"], NHYDin=["Pre9_1"], RDT=[1](min),
                    CHLGTH=[159.151](m), CHSLOPE=[1.576](%), FPSLOPE=[1.576](%),
                    SECNUM=[74], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,4.67 -0.035,81.24 0.08,82.88] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[1.94, 93.64]
                                                  [4.67, 93.32]
                                                  [5.77, 93.15]
                                                  [7.41, 92.69]
                                                  [7.95, 92.37]
                                                  [9.36, 91.71]
```

```
                                                    [10.12, 91.22]
                                                    [10.49, 91.06]
                                                    [12.64, 90.89]
                                                    [16.16, 90.92]
                                                    [18.83, 91.66]
                                                    [19.59, 92.02]
                                                    [21.62, 92.39]
                                                    [24.87, 92.48]
                                                    [30.37, 92.55]
                                                    [34.37, 92.65]
                                                    [77.41, 92.82]
                                                    [80.6, 93.25]
                                                    [81.24, 93.48]
                                                    [82.88, 93.79]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J6"], NHYDs to add=["R6"+"EXT10"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 49 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R8"], NHYDin=["J6"], RDT=[1](min),
                    CHLGTH=[78.801](m), CHSLOPE=[0.522](%), FPSLOPE=[0.522](%),
                    SECNUM=[49], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,8.71 -0.035,20.59 0.08,116.73] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0, 93.36]
                                                    [1.93, 93.63]
                                                    [4.61, 93.26]
                                                    [6.23, 93.1]
                                                    [8.19, 92.26]
                                                    [8.71, 91.84]
                                                    [9.86, 91.47]
                                                    [10.53, 91.04]
                                                    [13.84, 91]
                                                    [14.5, 91.11]
                                                    [16.97, 91.27]
                                                    [20.59, 91.76]
                                                    [23.3, 91.64]
                                                    [30.34, 91.85]
                                                    [35.29, 91.92]
                                                    [116.73, 92.96]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J7"], NHYDs to add=["R8"+"R7"]
*%-----------------|-------------------------------------------------------|
* NOTE: Cross-section number 7 is taken from HEC-RAS Model
ROUTE CHANNEL       NHYDout=["R9"], NHYDin=["J7"], RDT=[1](min),
                    CHLGTH=[29.445](m), CHSLOPE=[0.887](%), FPSLOPE=[0.887](%),
                    SECNUM=[7], NSEG=[3],
                      ( SEGROUGH, SEGDIST (m))=[0.08,1.5 -0.035,22.44 0.08,100.08] NSEG
                      times
                      ( DISTANCE (m), ELEVATION (m))=[0, 93.4]
                                                    [1.5, 93.63]
                                                    [3.13, 93.62]
                                                    [4.76, 93.28]
                                                    [5.3, 93.25]
                                                    [6.52, 93.08]
                                                    [6.96, 92.95]
                                                    [10.57, 90.95]
                                                    [13.59, 90.67]
                                                    [15.83, 90.72]
                                                    [16.42, 90.85]
                                                    [18.66, 91.76]
                                                    [20.82, 91.86]
                                                    [22.44, 91.92]
                                                    [27.84, 91.98]
                                                    [30.15, 91.96]
                                                    [100.08, 92.61]
*%-----------------|-------------------------------------------------------|
ADD HYD             NHYDsum=["J8"], NHYDs to add=["EXT9"+"R9"+"EXT8"+"R5"]
*%-----------------|-------------------------------------------------------|
* Note: The pipe needs to be adjusted based on the Culvert-under-railway information
```

```
ROUTE PIPE          PTYPE=[1]circ, NHYDout=["Outlet"], RNUMBER=[1.0],
                    PDIAM=[525](mm), PLNGTH=[8.407](m), PROUGH=[0.013],
                    PSLOPE=[0.0001](m/m),
                    NHYDin=["J8"], RDT=[1](min)
*%-----------------|-------------------------------------------------------|
*#########################################################################
*# STORMS
*#########################################################################
*%  2-Year, 3-Hour Chicago Storm
*START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[002]
*                   ["002YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  5-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[005]
                   ["005YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  10-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[010]
                   ["010YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  25-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[025]
                   ["025YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  50-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[050]
                   ["050YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  100-Year, 3-Hour Chicago Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[099]
                   ["100YC3H.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  2-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[102]
                   ["SC24002x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  5-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[105]
                   ["SC24005x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  10-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[110]
                   ["SC24010x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  25-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[125]
                   ["SC24025x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  50-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[150]
                   ["SC24050x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  100-Year, 24-Hour SCS Storm
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[199]
                   ["SC24100x.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  July 1st, 1979 Storm - Ottawa International Airport
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1979]
                   ["19790701.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  August 4th, 1988 Storm - Ottawa International Airport
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1988]
                   ["19880804.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  August 8th, 1996 Storm - Ottawa International Airport
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1996]
                   ["19960808.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------|
*%  100-Year, 3-Hour Chicago Storm + 20%
```

```
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[9999]
                   ["100YC3H+.STM"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
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   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    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>                                                                2     0   0  11     5     # 2549237
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: 2025-09-11     TIME: 20:19:56     RUN COUNTER: 011833   *
00039>  ***************************************************************************************
00040>  * Input   file: C:\Temp\20250910-PostDev\Ott_St-Post_v11.dat                            *
00041>  * Output  file: C:\Temp\20250910-PostDev\Ott_St-Post_v11.out                            *
00042>  * Summary file: C:\Temp\20250910-PostDev\Ott_St-Post_v11.sum                            *
00043>  * User comments:                                                                       *
00044>  * 1:_____________________________________________________________________________________*
00045>  * 2:_____________________________________________________________________________________*
00046>  * 3:_____________________________________________________________________________________*
00047>  ***************************************************************************************
00048>
00049>
00050> #*************************************************************************************
00051> #  SWMHYMO  / INPUT DATA FILE
00052> #*************************************************************************************
00053> #  Project Name  : [5923 Ottawa St]
00054> #  Project Number: [P2710(e01)]
00055> #  Date          : [2025 April 28]
00056> #  Modeller      : [MM]
00057> #  Company       : JFSA Canada Inc.
00058> #  License #     : 2549237
00059> #*************************************************************************************
00060> # Model developed to simulate runoff from subcatchments under post development conditions
00061> #*************************************************************************************
00062>   ** END OF RUN :   1
00063>
00064> #*************************************************************************************
00065>
00066>
00067>
00068>
00069>
00070>  RUN#:COMMAND#
00071> R0002:c00001-------------------------------------------------------------------------------
00072>       START
00073>         [TZERO =    .00 hrs on      0]
00074>         [METOUT=  2    (1=imperial, 2=metric output)]
00075>         [NSTORM=   1 ]
00076>         [NRUN  = 0002 ]
00077> #*************************************************************************************
00078> #  SWMHYMO  / INPUT DATA FILE
00079> #*************************************************************************************
00080> #  Project Name  : [5923 Ottawa St]
00081> #  Project Number: [P2710(e01)]
00082> #  Date          : [2025 April 28]
00083> #  Modeller      : [MM]
00084> #  Company       : JFSA Canada Inc.
00085> #  License #     : 2549237
00086> #*************************************************************************************
00087> # Model developed to simulate runoff from subcatchments under post development conditions
00088> #*************************************************************************************
00089> R0002:c00002-------------------------------------------------------------------------------
00090>       READ STORM
00091>         Filename = STORM.001
00092>         Comment  = CHICAGO STORM 2 Year, 3 Hours
00093>         [SDT=10.00:SDUR=   3.00:PTOT=  31.86]
00094> #*************************************************************************************
00095> R0002:c00003-------------------------------------------------------------------------------
00096>       DEFAULT VALUES
00097>         Filename = C:\Temp\20250910-PostDev\Ottawa.val
00098>         ICASEdv  = 1 (read and print data)
00099>         FileTitle= File comment: [Parameters for City of Ottawa Projects]
00100>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
00101>         Horton's infiltration equation parameters:
00102>         [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
00103>         Parameters for PERVIOUS surfaces in STANDHYD:
00104>         [IAper=   4.67 mm] [LGP=40.00 m] [MNP=  .250]
00105>         Parameters for IMPERVIOUS surfaces in STANDHYD:
00106>         [IAimp=   1.57 mm] [DI= 1.50]   [MNI= .013]
00107>         Parameters used in NASHYD:
00108>         [Ia=    4.67 mm] [N= 3.00]
00109>         Average monthly Pan Evaporation data in     (mm)
00110>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
00111>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
00112>         Average monthly Potential Evapotranspiration in     (mm)
00113>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
00114>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
00115> #*************************************************************************************
00116> # EXT1
00117> #*************************************************************************************
00118> R0002:c00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00119>       CALIB NASHYD             1.0 01:EXT1            3.21     .037 No_date    1:58   8.15 .256     .000
00120>         [CN= 80.0: N= 3.00: Tp=  .72]
00121> #*************************************************************************************
00122> # EXT2
00123> #*************************************************************************************
00124> R0002:c00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00125>       CALIB NASHYD             1.0 01:EXT2            .28     .007 No_date    1:25   10.26 .322     .000
00126>         [CN= 85.0: N= 3.00: Tp=  .33]
00127> #*************************************************************************************
00128> # EXT3
00129> #*************************************************************************************
00130> R0002:c00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00131>       CALIB NASHYD             1.0 01:EXT3            .56     .011 No_date    1:24   8.15 .256     .000
00132>         [CN= 80.0: N= 3.00: Tp=  .32]
00133> #*************************************************************************************
00134> # EXT4
00135> #*************************************************************************************
00136> R0002:c00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00137>       CALIB NASHYD             1.0 01:EXT4            .31     .006 No_date    1:22   7.80 .245     .000
00138>         [CN= 79.0: N= 3.00: Tp=  .29]
00139> #*************************************************************************************
00140> # EXT5
00141> #*************************************************************************************
00142> R0002:c00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00143>       CALIB NASHYD             1.0 01:EXT5            .59     .008 No_date    1:36   6.88 .216     .000
00144>         [CN= 76.0: N= 3.00: Tp=  .45]
00145> #*************************************************************************************
00146> # EXT6
00147> #*************************************************************************************
00148> R0002:c00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00149>       CALIB NASHYD             1.0 01:EXT6            .86     .015 No_date    1:44   10.27 .322     .000
00150>         [CN= 85.0: N= 3.00: Tp=  .56]
00151> #*************************************************************************************
00152> # EXT7
00153> #*************************************************************************************
00154> R0002:c00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00155>       CALIB NASHYD             1.0 01:EXT7            .47     .011 No_date    1:24   9.33 .293     .000
00156>         [CN= 83.0: N= 3.00: Tp=  .32]
00157> #*************************************************************************************
00158> # EXT8
00159> #*************************************************************************************
00160> R0002:c00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00161>       CALIB NASHYD             1.0 01:EXT8            .83     .013 No_date    1:33   7.81 .245     .000
00162>         [CN= 79.0: N= 3.00: Tp=  .42]
00163> #*************************************************************************************
00164> # EXT9
00165> #*************************************************************************************
00166> R0002:c00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00167>       CALIB NASHYD             1.0 01:EXT9            3.57     .045 No_date    1:38   6.88 .216     .000
00168>         [CN= 76.0: N= 3.00: Tp=  .48]
00169> #*************************************************************************************
00170> # EXT9a
00171> #*************************************************************************************
00172> R0002:c00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00173>       CALIB NASHYD             1.0 01:EXT9a           .01     .001 No_date    1:00   7.47 .234     .000
00174>         [CN= 78.0: N= 3.00: Tp=  .04]
00175> #*************************************************************************************
00176> # EXT10
00177> #*************************************************************************************
00178> R0002:c00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00179>       CALIB NASHYD             1.0 01:EXT10           .20     .002 No_date    1:34   5.64 .177     .000
00180>         [CN= 71.0: N= 3.00: Tp=  .42]
00181> #*************************************************************************************
00182> # Pre2_1
00183> #*************************************************************************************
00184> R0002:c00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00185>  *  CALIB NASHYD             1.0 01:Pre2_1          .01     .001 No_date    1:00   5.86 .184     .000
00186>         [CN= 72.0: N= 3.00: Tp=  .03]
00187> #*************************************************************************************
00188> # Pre2_2
00189> #*************************************************************************************
00190> R0002:c00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00191>  *  CALIB NASHYD             1.0 01:Pre2_2          .00     .000 No_date    1:00   7.46 .234     .000
00192>         [CN= 78.0: N= 3.00: Tp=  .02]
00193> #*************************************************************************************
00194> # Pre9_1
00195> #*************************************************************************************
00196> R0002:c00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00197>       CALIB NASHYD             1.0 01:Pre9_1          .44     .005 No_date    1:30   5.64 .177     .000
00198>         [CN= 71.0: N= 3.00: Tp=  .38]
00199> #*************************************************************************************
00200> # Pre9_2
00201> #*************************************************************************************
00202> R0002:c00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00203>  *  CALIB NASHYD             1.0 01:Pre9_2          .01     .000 No_date    1:00   3.62 .114     .000
00204>         [CN= 59.0: N= 3.00: Tp=  .03]
00205> #*************************************************************************************
00206> # Pre10_1
00207> #*************************************************************************************
00208> R0002:c00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00209>       CALIB NASHYD             1.0 01:Pre10_1         .80     .011 No_date    1:22   5.65 .177     .000
00210>         [CN= 71.0: N= 3.00: Tp=  .29]
00211> #*************************************************************************************
00212> # Pre11_1
00213> #*************************************************************************************
00214> R0002:c00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00215>       CALIB NASHYD             1.0 01:Pre11_1         .07     .002 No_date    1:15   7.47 .235     .000
00216>         [CN= 78.0: N= 3.00: Tp=  .21]
00217> #*************************************************************************************
00218> # Site 1
00219> #*************************************************************************************
00220> R0002:c00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00221>       DESIGN STANDHYD          1.0 01:S1-B1           .42     .032 No_date    1:00   13.81 .433     .000
00222>         [XIMP=.34:TIMP=.44]
00223>         [SLP=1.00:DT= 1.00]
00224>         [LOSS= 1 : HORTONS]
00225> #*************************************************************************************
00226> # Site 1 - Roof
00227> #*************************************************************************************
00228> R0002:c00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00229>       DESIGN STANDHYD          1.0 01:S1-Roof         .06     .014 No_date    1:00   30.00 .942     .000
00230>         [XIMP=.99:TIMP=.99]
00231>         [SLP= .50:DT= 1.00]
00232>         [LOSS= 1 : HORTONS]
00233> R0002:c00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00234>       ROUTE RESERVOIR ->     1.0 02:S1-Roof         .06     .014 No_date    1:00   30.00  n/a     .000
00235>                          out <=     1.0 01:S1-Roof-Ou      .06     .001 No_date    1:31   30.00  n/a     .000
00236>                      overflow <=    1.0 03:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
00237>         (MxStoUsed=.1311E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00238> R0002:c00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00239>       ADD HYD                  1.0 02:S1-B1           .42     .032 No_date    1:00   13.81  n/a     .000
00240>                            +     1.0 02:S1-Roof-Ou      .06     .001 No_date    1:31   30.00  n/a     .000
00241>                            +     1.0 02:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
00242>                          SUM=    1.0 01:SITE1-IN        .48     .033 No_date    1:00   16.00  n/a     .000
00243> R0002:c00025-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00244>       ROUTE RESERVOIR ->     1.0 02:SITE1-IN        .48     .033 No_date    1:00   16.00  n/a     .000
00245>                          out <=     1.0 01:SITE1-Out       .48     .006 No_date    1:40   16.00  n/a     .000
00246>                      overflow <=    1.0 03:SITE1-Over      .00     .000 No_date    0:00    .00  n/a     .000
00247>         (MxStoUsed=.3413E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00248> #*************************************************************************************
00249> # Site 2
00250> #*************************************************************************************
00251> R0002:c00026-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00252>       DESIGN STANDHYD          1.0 01:S2-B3           .35     .025 No_date    1:00   13.02 .409     .000
00253>         [XIMP=.31:TIMP=.41]
00254>         [SLP=1.00:DT= 1.00]
00255>         [LOSS= 1 : HORTONS]
00256> #*************************************************************************************
00257> # Site 2 - Roof
00258> #*************************************************************************************
00259> R0002:c00027-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00260>       DESIGN STANDHYD          1.0 01:S2-Roof         .09     .020 No_date    1:00   30.02 .942     .000
00261>         [XIMP=.99:TIMP=.99]
00262>         [SLP= .50:DT= 1.00]
00263>         [LOSS= 1 : HORTONS]
00264> #*************************************************************************************
00265> R0002:c00028-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00266>       ROUTE RESERVOIR ->     1.0 02:S2-Roof         .09     .020 No_date    1:00   30.02  n/a     .000
00267>                          out <=     1.0 02:S2-Roof-Ou      .09     .006 No_date    1:10   30.03  n/a     .000
00268>                      overflow <=    1.0 03:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
00269>         (MxStoUsed=.1117E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00270> R0002:c00029-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00271>       ADD HYD                  1.0 02:S2-B3           .35     .025 No_date    1:00   13.02  n/a     .000
00272>                            +     1.0 02:S2-Roof-Ou      .09     .006 No_date    1:10   30.03  n/a     .000
00273>                            +     1.0 02:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
00274>                          SUM=    1.0 01:SITE2-IN        .45     .031 No_date    1:00   16.56  n/a     .000
00275> R0002:c00030-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00276>       ROUTE RESERVOIR ->     1.0 02:SITE2-IN        .45     .031 No_date    1:00   16.56  n/a     .000
00277>                          out <=     1.0 01:SITE2-Out       .45     .007 No_date    1:49   16.56  n/a     .000
00278>                      overflow <=    1.0 03:SITE2-Over      .00     .000 No_date    0:00    .00  n/a     .000
00279>         (MxStoUsed=.3806E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00280> R0002:c00031-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00281>       ADD HYD                  1.0 02:SITE1-Out       .48     .006 No_date    1:40   16.00  n/a     .000
00282>                            +     1.0 02:SITE1-Over      .00     .000 No_date    0:00    .00  n/a     .000
00283>                          SUM=    1.0 01:Site1           .48     .006 No_date    1:40   16.00  n/a     .000
00284> R0002:c00032-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00285>       ADD HYD                  1.0 02:SITE2-Out       .45     .007 No_date    1:49   16.56  n/a     .000
00286>                            +     1.0 02:SITE2-Over      .00     .000 No_date    0:00    .00  n/a     .000
00287>                          SUM=    1.0 01:Site2           .45     .007 No_date    1:49   16.56  n/a     .000
00288> R0002:c00033-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00289>       ADD HYD                  1.0 02:EXT2            .28     .007 No_date    1:25   10.26  n/a     .000
00290>                            +     1.0 02:Pre2_1          .01     .001 No_date    1:00    5.86  n/a     .000
00291>                            +     1.0 02:Site1           .48     .006 No_date    1:40   16.00  n/a     .000
00292>                            +     1.0 02:Site2           .45     .007 No_date    1:49   16.56  n/a     .000
00293>                          SUM=    1.0 01:J1             1.23     .019 No_date    1:27   14.76  n/a     .000
00294> R0002:c00034-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00295>       ROUTE CHANNEL    ->     1.0 02:J1             1.23     .019 No_date    1:27   14.76  n/a     .000
00296>         [RDT= 1.00] out<-     1.0 01:R1             1.23     .019 No_date    1:36   14.76  n/a     .000
00297>          [L/S/n=  143./ .394/.035]
00298>          [Vmax=   .258:Dmax=   .093]
00299> R0002:c00035-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00300>       ADD HYD                  1.0 02:R1              1.23     .019 No_date    1:36   14.76  n/a     .000
00301>                            +     1.0 02:EXT3            .56     .011 No_date    1:24    8.15  n/a     .000
00302>                            +     1.0 02:EXT1            3.21     .037 No_date    1:58    8.15  n/a     .000
00303>                          SUM=    1.0 01:J2              5.00     .062 No_date    1:46    9.77  n/a     .000
00304> R0002:c00036-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00305>       ROUTE CHANNEL    ->     1.0 02:J2              5.00     .062 No_date    1:46    9.77  n/a     .000
00306>         [RDT= 1.00] out<-     1.0 01:R2              5.00     .062 No_date    1:49    9.77  n/a     .000
00307>          [L/S/n=   73./ .425/.035]
00308>          [Vmax=   .359:Dmax=   .160]
00309> R0002:c00037-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00310>       ADD HYD                  1.0 02:R2              5.00     .062 No_date    1:49    9.77  n/a     .000
00311>                            +     1.0 02:EXT4            .31     .006 No_date    1:22    7.80  n/a     .000
00312>                          SUM=    1.0 01:J3              5.31     .066 No_date    1:46    9.66  n/a     .000
00313> R0002:c00038-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00314>       ROUTE CHANNEL    ->     1.0 02:J3              5.31     .066 No_date    1:46    9.66  n/a     .000
00315>         [RDT= 1.00] out<-     1.0 01:R3              5.31     .065 No_date    1:51    9.66  n/a     .000
00316>          [L/S/n=   92./ .274/.035]
00317>          [Vmax=   .294:Dmax=   .165]
00318> R0002:c00039-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00319>       ADD HYD                  1.0 02:R3              5.31     .065 No_date    1:51    9.66  n/a     .000
00320>                            +     1.0 02:EXT5            .59     .008 No_date    1:36    6.88  n/a     .000
00321>                          SUM=    1.0 01:J4              5.90     .072 No_date    1:49    9.38  n/a     .000
00322> R0002:c00040-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00323>       ROUTE CHANNEL    ->     1.0 02:J4              5.90     .072 No_date    1:49    9.38  n/a     .000
00324>         [RDT= 1.00] out<-     1.0 01:R4              5.90     .067 No_date    2:05    9.38  n/a     .000
00325>          [L/S/n=  251./ .190/.035]
00326>          [Vmax=   .273:Dmax=   .178]
00327> R0002:c00041-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00328>       ADD HYD                  1.0 02:R4              5.90     .067 No_date    2:05    9.38  n/a     .000
00329>                            +     1.0 02:EXT6            .86     .015 No_date    1:44   10.27  n/a     .000
00330>                            +     1.0 02:EXT7            .47     .011 No_date    1:24    9.33  n/a     .000
00331>                          SUM=    1.0 01:J5              7.23     .086 No_date    1:58    9.48  n/a     .000
00332> R0002:c00042-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00333>       ROUTE CHANNEL    ->     1.0 02:J5              7.23     .086 No_date    1:58    9.48  n/a     .000
00334>         [RDT= 1.00] out<-     1.0 01:R5              7.23     .084 No_date    2:05    9.48  n/a     .000
00335>          [L/S/n=  237./ .644/.035]
00336>          [Vmax=   .444:Dmax=   .172]
00337> R0002:c00043-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00338>       ADD HYD                  1.0 02:Pre10_1         .80     .011 No_date    1:22    5.65  n/a     .000
00339>                            +     1.0 02:Pre9_2          .01     .000 No_date    1:00    3.62  n/a     .000
00340>                            +     1.0 02:Pre2_2          .00     .000 No_date    1:00    7.46  n/a     .000
00341>                          SUM=    1.0 01:Pre             .81     .011 No_date    1:22    5.62  n/a     .000
00342> R0002:c00044-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00343>       ROUTE CHANNEL    ->     1.0 02:Pre             .81     .011 No_date    1:22    5.62  n/a     .000
00344>         [RDT= 1.00] out<-     1.0 01:R6              .81     .011 No_date    1:25    5.62  n/a     .000
00345>          [L/S/n=   77./ .776/.035]
00346>          [Vmax=   .492:Dmax=   .008]
00347> R0002:c00045-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00348>       ROUTE CHANNEL    ->     1.0 02:Pre9_1          .44     .005 No_date    1:30    5.64  n/a     .000
00349>         [RDT= 1.00] out<-     1.0 01:R7              .44     .005 No_date    1:34    5.64  n/a     .000
00350>          [L/S/n=  159./1.576/.035]
00351>          [Vmax=   .797:Dmax=   .002]
00352> R0002:c00046-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00353>       ADD HYD                  1.0 02:R6              .81     .021 No_date    4:19    5.77  n/a     .000
00354>                            +     1.0 02:EXT10           .20     .002 No_date    1:34    5.64  n/a     .000
00355>                          SUM=    1.0 01:J6              1.02     .021 No_date    4:19    5.75  n/a     .000
00356> R0002:c00047-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00357>       ROUTE CHANNEL    ->     1.0 02:J6              1.02     .021 No_date    4:19    5.75  n/a     .000
00358>         [RDT= 1.00] out<-     1.0 01:R8              1.02     .013 No_date    1:30    5.75  n/a     .000
00359>          [L/S/n=   79./ .522/.035]
00360>          [Vmax=   .423:Dmax=   .016]
```

```
00361> R0002:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00362>     ADD HYD                 1.0 02:R8          1.02     .016 No_date    4:41    5.84  n/a     .000
00363>                        +    1.0 02:R7           .44     .017 No_date    4:37    5.87  n/a     .000
00364>                    SUM=     1.0 01:J7          1.46     .018 No_date    1:31    5.85  n/a     .000
00365> R0002:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00366>     ROUTE CHANNEL   ->     1.0 02:J7          1.46     .018 No_date    1:31    5.85  n/a     .000
00367>       [RDT= 1.00] out<-    1.0 01:R9          1.46     .018 No_date    1:32    5.85  n/a     .000
00368>        [L/S/n=  29./ .887/.035]
00369>        [Vmax=  .543:Dmax=  .012]
00370> R0002:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00371>     ADD HYD                 1.0 02:EXT9        3.57     .045 No_date    1:38    6.88  n/a     .000
00372>                        +    1.0 02:R9          1.46     .018 No_date    1:32    5.91  n/a     .000
00373>                        +    1.0 02:EXT8         .83     .013 No_date    1:33    7.81  n/a     .000
00374>                        +    1.0 02:R5          7.23     .084 No_date    2:05    9.48  n/a     .000
00375>                    SUM=     1.0 01:J8         13.09     .146 No_date    1:52    8.27  n/a     .000
00376> R0002:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00377>     ROUTE PIPE      ->     1.0 02:J8         13.09     .146 No_date    1:52    8.27  n/a     .000
00378> *   [RDT= 1.00] out<-    1.0 01:Outlet      13.09     .146 No_date    1:53    8.27  n/a     .000
00379>        [L/S/n=   8./ .010/.013]
00380>        [Vmax=  .307:Dmax=  .681]
00381>        [Din=  .53:Dused=  .83)
00382> ##############################################################################
00383> # STORMS
00384> ##############################################################################
00385>   ** END OF RUN :    4
00386>
00387> ******************************************************************************
00388>
00389>
00390>
00391>
00392>
00393>  RUN#:COMMAND#
00394> R0005:C00001-------------------------------------------------------------------------------
00395>       START
00396>        [TZERO =    .00 hrs on        0]
00397>        [METOUT=  2    (1=imperial, 2=metric output)]
00398>        [NSTORM=  1 ]
00399>        [NRUN   = 0005 ]
00400> ******************************************************************************
00401> #  SWMHYMO  / INPUT DATA FILE
00402> ******************************************************************************
00403> #  Project Name  : [5923 Ottawa St]
00404> #  Project Number: [P2710(e01)]
00405> #  Date          : [2025 April 28]
00406> #  Modeller      : [MM]
00407> #  Company       : JFSA Canada Inc.
00408> #  License #     : 2549237
00409> ******************************************************************************
00410> # Model developed to simulate runoff from subcatchments under post development conditions
00411> ******************************************************************************
00412> R0005:C00002-------------------------------------------------------------------------------
00413>       READ STORM
00414>        Filename = STORM.001
00415>        Comment  = CHICAGO STORM  5 Year, 3 Hours
00416>        [SDT=10.00:SDUR=   3.00:PTOT=  42.51]
00417> ******************************************************************************
00418> R0005:C00003-------------------------------------------------------------------------------
00419>       DEFAULT VALUES
00420>        Filename = C:\Temp\20250910-PostDev\Ottawa.val
00421>        ICASEDY  = 1 (read and print data)
00422>        FileTitle= File comment: [Parameters for City of Ottawa Projects]
00423>                   THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
00424>        Horton's infiltration equation parameters:
00425>        [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
00426>        Parameters for PERVIOUS surfaces in STANDHYD:
00427>        [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
00428>        Parameters for IMPERVIOUS surfaces in STANDHYD:
00429>        [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
00430>        Parameters used in NASHYD:
00431>        [Ia=   4.67 mm] [N= 3.00]
00432>        Average monthly Pan Evaporation data in    (mm)
00433>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
00434>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
00435>        Average monthly Potential Evapotranspiration in    (mm)
00436>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
00437>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
00438> ******************************************************************************
00439> # EXT1
00440> ******************************************************************************
00441> R0005:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00442>     CALIB NASHYD            1.0 01:EXT1        3.21     .066 No_date    1:55   14.13 .332     .000
00443>       [CN= 80.0: N= 3.00: Tp=  .72]
00444> ******************************************************************************
00445> # EXT2
00446> ******************************************************************************
00447> R0005:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00448>     CALIB NASHYD            1.0 01:EXT2         .28     .012 No_date    1:23   17.32 .407     .000
00449>       [CN= 85.0: N= 3.00: Tp=  .33]
00450> ******************************************************************************
00451> # EXT3
00452> ******************************************************************************
00453> R0005:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00454>     CALIB NASHYD            1.0 01:EXT3         .56     .020 No_date    1:23   14.13 .332     .000
00455>       [CN= 80.0: N= 3.00: Tp=  .32]
00456> ******************************************************************************
00457> # EXT4
00458> ******************************************************************************
00459> R0005:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00460>     CALIB NASHYD            1.0 01:EXT4         .31     .011 No_date    1:21   13.59 .320     .000
00461>       [CN= 79.0: N= 3.00: Tp=  .29]
00462> ******************************************************************************
00463> # EXT5
00464> ******************************************************************************
00465> R0005:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00466>     CALIB NASHYD            1.0 01:EXT5         .59     .014 No_date    1:34   12.13 .285     .000
00467>       [CN= 76.0: N= 3.00: Tp=  .45]
00468> ******************************************************************************
00469> # EXT6
00470> ******************************************************************************
00471> R0005:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00472>     CALIB NASHYD            1.0 01:EXT6         .86     .026 No_date    1:42   17.32 .407     .000
00473>       [CN= 85.0: N= 3.00: Tp=  .56]
00474> ******************************************************************************
00475> # EXT7
00476> ******************************************************************************
00477> R0005:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00478>     CALIB NASHYD            1.0 01:EXT7         .47     .019 No_date    1:23   15.94 .375     .000
00479>       [CN= 83.0: N= 3.00: Tp=  .32]
00480> ******************************************************************************
00481> # EXT8
00482> ******************************************************************************
00483> R0005:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00484>     CALIB NASHYD            1.0 01:EXT8         .83     .024 No_date    1:31   13.59 .320     .000
00485>       [CN= 79.0: N= 3.00: Tp=  .42]
00486> ******************************************************************************
00487> # EXT9
00488> ******************************************************************************
00489> R0005:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00490>     CALIB NASHYD            1.0 01:EXT9        3.57     .083 No_date    1:36   12.13 .285     .000
00491>       [CN= 76.0: N= 3.00: Tp=  .48]
00492> ******************************************************************************
00493> # EXT9a
00494> ******************************************************************************
00495> R0005:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00496>     CALIB NASHYD            1.0 01:EXT9a        .01     .001 No_date    1:00   13.07 .307     .000
00497>       [CN= 78.0: N= 3.00: Tp=  .04]
00498> ******************************************************************************
00499> # EXT10
00500> ******************************************************************************
00501> R0005:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00502>     CALIB NASHYD            1.0 01:EXT10        .20     .004 No_date    1:32   10.11 .238     .000
00503>       [CN= 71.0: N= 3.00: Tp=  .42]
00504> ******************************************************************************
00505> # Pre2_1
00506> ******************************************************************************
00507> R0005:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00508> *   CALIB NASHYD            1.0 01:Pre2_1       .01     .001 No_date    1:00   10.48 .246     .000
00509>       [CN= 72.0: N= 3.00: Tp=  .03]
00510> ******************************************************************************
00511> # Pre2_2
00512> ******************************************************************************
00513> R0005:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00514> *   CALIB NASHYD            1.0 01:Pre2_2       .00     .000 No_date    1:00   13.06 .307     .000
00515>       [CN= 78.0: N= 3.00: Tp=  .02]
00516> ******************************************************************************
00517> # Pre9_1
00518> ******************************************************************************
00519> R0005:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00520>     CALIB NASHYD            1.0 01:Pre9_1       .44     .010 No_date    1:29   10.11 .238     .000
00521>       [CN= 71.0: N= 3.00: Tp=  .38]
00522> ******************************************************************************
00523> # Pre9_2
00524> ******************************************************************************
00525> R0005:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00526> *   CALIB NASHYD            1.0 01:Pre9_2       .01     .001 No_date    1:00    6.67 .157     .000
00527>       [CN= 59.0: N= 3.00: Tp=  .03]
00528> ******************************************************************************
00529> # Pre10_1
00530> ******************************************************************************
00531> R0005:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00532>     CALIB NASHYD            1.0 01:Pre10_1      .80     .021 No_date    1:21   10.11 .238     .000
00533>       [CN= 71.0: N= 3.00: Tp=  .29]
00534> ******************************************************************************
00535> # Pre11_1
00536> ******************************************************************************
00537> R0005:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00538>     CALIB NASHYD            1.0 01:Pre11_1      .07     .003 No_date    1:14   13.07 .308     .000
00539>       [CN= 78.0: N= 3.00: Tp=  .21]
00540> ******************************************************************************
00541> # Site 1
00542> ******************************************************************************
00543> R0005:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00544>     DESIGN STANDHYD         1.0 01:S1-B1        .42     .053 No_date    1:00   21.70 .510     .000
00545>       [XIMP=.34:TIMP=.44]
00546>       [SLP=1.00:DT= 1.00]
00547>       [LOSS= 1 : HORTONS]
00548> ******************************************************************************
00549> # Site 1 - Roof
00550> ******************************************************************************
00551> R0005:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00552>     DESIGN STANDHYD         1.0 01:S1-Roof      .06     .019 No_date    1:00   40.62 .955     .000
00553>       [XIMP=.99:TIMP=.99]
00554>       [SLP= .50:DT= 1.00]
00555>       [LOSS= 1 : HORTONS]
00556> R0005:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00557>     ROUTE RESERVOIR ->      1.0 02:S1-Roof      .06     .019 No_date    1:00   40.62  n/a     .000
00558>                       out <=    1.0 01:S1-Roof-Ou     .06     .002 No_date    1:30   40.61  n/a     .000
00559>                   overflow <=   1.0 03:S1-Roof-Ov     .00     .000 No_date    0:00    .00  n/a     .000
00560>       (MxStOUsed=.1771E-02  m3, TotOvrFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
00561> R0005:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00562>     ADD HYD                 1.0 02:S1-B1        .42     .053 No_date    1:00   21.70  n/a     .000
00563>                        +    1.0 02:S1-Roof-Ou     .06     .002 No_date    1:30   40.61  n/a     .000
00564>                        +    1.0 02:S1-Roof-Ov     .00     .000 No_date    0:00    .00  n/a     .000
00565>                    SUM=     1.0 01:SITE1-IN     .48     .054 No_date    1:00   24.26  n/a     .000
00566> R0005:C00025-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00567>     ROUTE RESERVOIR ->      1.0 02:SITE1-IN     .48     .054 No_date    1:00   24.26  n/a     .000
00568>                       out <=    1.0 01:SITE1-Out    .48     .007 No_date    1:42   24.26  n/a     .000
00569>                   overflow <=   1.0 03:SITE1-Over    .00     .000 No_date    0:00    .00  n/a     .000
00570>       (MxStOUsed=.6381E-02  m3, TotOvrFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
00571> ******************************************************************************
00572> # Site 2
00573> ******************************************************************************
00574> R0005:C00026-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00575>     DESIGN STANDHYD         1.0 01:S2-B3        .35     .042 No_date    1:00   20.76 .488     .000
00576>       [XIMP=.31:TIMP=.41]
00577>       [SLP=1.00:DT= 1.00]
00578>       [LOSS= 1 : HORTONS]
00579> ******************************************************************************
00580> # Site 2 - Roof
00581> ******************************************************************************
00582> R0005:C00027-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00583>     DESIGN STANDHYD         1.0 01:S2-Roof      .09     .027 No_date    1:00   40.61 .955     .000
00584>       [XIMP=.99:TIMP=.99]
00585>       [SLP= .50:DT= 1.00]
00586>       [LOSS= 1 : HORTONS]
00587> ******************************************************************************
00588> R0005:C00028-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00589>     ROUTE RESERVOIR ->      1.0 02:S2-Roof      .09     .027 No_date    1:00   40.61  n/a     .000
00590>                       out <=    1.0 01:S2-Roof-Ou     .09     .007 No_date    1:11   40.63  n/a     .000
00591>                   overflow <=   1.0 03:S2-Roof-Ov     .00     .000 No_date    0:00    .00  n/a     .000
00592>       (MxStOUsed=.1653E-02  m3, TotOvrFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
00593> R0005:C00029-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00594>     ADD HYD                 1.0 02:S2-B3        .35     .042 No_date    1:00   20.76  n/a     .000
00595>                        +    1.0 02:S2-Roof-Ou     .09     .007 No_date    1:11   40.63  n/a     .000
00596>                        +    1.0 02:S2-Roof-Ov     .00     .000 No_date    0:00    .00  n/a     .000
00597>                    SUM=     1.0 01:SITE2-IN     .45     .049 No_date    1:00   24.89  n/a     .000
00598> R0005:C00030-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00599>     ROUTE RESERVOIR ->      1.0 02:SITE2-IN     .45     .049 No_date    1:00   24.89  n/a     .000
00600>                       out <=    1.0 01:SITE2-Out    .45     .008 No_date    1:52   24.89  n/a     .000
00601>                   overflow <=   1.0 03:SITE2-Over    .00     .000 No_date    0:00    .00  n/a     .000
00602>       (MxStOUsed=.6481E-02  m3, TotOvrFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
00603> R0005:C00031-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00604>     ADD HYD                 1.0 02:SITE1-Out    .48     .007 No_date    1:42   24.26  n/a     .000
00605>                        +    1.0 02:SITE1-Over   .00     .000 No_date    0:00    .00  n/a     .000
00606>                    SUM=     1.0 01:Site1        .48     .007 No_date    1:42   24.26  n/a     .000
00607> R0005:C00032-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00608>     ADD HYD                 1.0 02:SITE2-Out    .45     .008 No_date    1:52   24.89  n/a     .000
00609>                        +    1.0 02:SITE2-Over   .00     .000 No_date    0:00    .00  n/a     .000
00610>                    SUM=     1.0 01:Site2        .45     .008 No_date    1:52   24.89  n/a     .000
00611> R0005:C00033-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00612>     ADD HYD                 1.0 02:EXT2         .28     .012 No_date    1:23   17.32  n/a     .000
00613>                        +    1.0 02:Pre2_1       .01     .001 No_date    1:00   10.48  n/a     .000
00614>                        +    1.0 02:Site1        .48     .007 No_date    1:42   24.26  n/a     .000
00615>                        +    1.0 02:Site2        .45     .008 No_date    1:52   24.89  n/a     .000
00616>                    SUM=     1.0 01:J1          1.23     .027 No_date    1:24   22.73  n/a     .000
00617> R0005:C00034-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00618>     ROUTE CHANNEL   ->      1.0 02:J1          1.23     .027 No_date    1:24   22.73  n/a     .000
00619>       [RDT= 1.00] out<-     1.0 01:R1          1.23     .026 No_date    1:31   22.73  n/a     .000
00620>        [L/S/n=  143./ .394/.035]
00621>        [Vmax=  .293:Dmax=  .110]
00622> R0005:C00035-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00623>     ADD HYD                 1.0 02:R1          1.23     .026 No_date    1:31   22.73  n/a     .000
00624>                        +    1.0 02:EXT3         .56     .020 No_date    1:23   14.13  n/a     .000
00625>                        +    1.0 02:EXT1        3.21     .066 No_date    1:55   14.13  n/a     .000
00626>                    SUM=     1.0 01:J2          5.00     .102 No_date    1:44   16.24  n/a     .000
00627> R0005:C00036-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00628>     ROUTE CHANNEL   ->      1.0 02:J2          5.00     .102 No_date    1:44   16.24  n/a     .000
00629>       [RDT= 1.00] out<-     1.0 01:R2          5.00     .102 No_date    1:46   16.24  n/a     .000
00630>        [L/S/n=   73./ .425/.035]
00631>        [Vmax=  .413:Dmax=  .196]
00632> R0005:C00037-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00633>     ADD HYD                 1.0 02:R2          5.00     .102 No_date    1:46   16.24  n/a     .000
00634>                        +    1.0 02:EXT4         .31     .011 No_date    1:21   13.59  n/a     .000
00635>                    SUM=     1.0 01:J3          5.31     .109 No_date    1:42   16.09  n/a     .000
00636> R0005:C00038-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00637>     ROUTE CHANNEL   ->      1.0 02:J3          5.31     .109 No_date    1:42   16.09  n/a     .000
00638>       [RDT= 1.00] out<-     1.0 01:R3          5.31     .108 No_date    1:47   16.09  n/a     .000
00639>        [L/S/n=   92./ .274/.035]
00640>        [Vmax=  .338:Dmax=  .203]
00641> R0005:C00039-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00642>     ADD HYD                 1.0 02:R3          5.31     .108 No_date    1:47   16.09  n/a     .000
00643>                        +    1.0 02:EXT5         .59     .014 No_date    1:34   12.13  n/a     .000
00644>                    SUM=     1.0 01:J4          5.90     .122 No_date    1:45   15.69  n/a     .000
00645> R0005:C00040-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00646>     ROUTE CHANNEL   ->      1.0 02:J4          5.90     .122 No_date    1:45   15.69  n/a     .000
00647>       [RDT= 1.00] out<-     1.0 01:R4          5.90     .114 No_date    1:58   15.69  n/a     .000
00648>        [L/S/n=  251./ .190/.035]
00649>        [Vmax=  .323:Dmax=  .222]
00650> R0005:C00041-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00651>     ADD HYD                 1.0 02:R4          5.90     .114 No_date    1:58   15.69  n/a     .000
00652>                        +    1.0 02:EXT6         .86     .026 No_date    1:42   17.32  n/a     .000
00653>                        +    1.0 02:EXT7         .47     .019 No_date    1:23   15.94  n/a     .000
00654>                    SUM=     1.0 01:J5          7.23     .149 No_date    1:52   15.90  n/a     .000
00655> R0005:C00042-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00656>     ROUTE CHANNEL   ->      1.0 02:J5          7.23     .149 No_date    1:52   15.90  n/a     .000
00657>       [RDT= 1.00] out<-     1.0 01:R5          7.23     .146 No_date    1:59   15.90  n/a     .000
00658>        [L/S/n=  237./ .644/.035]
00659>        [Vmax=  .521:Dmax=  .211]
00660> R0005:C00043-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00661>     ADD HYD                 1.0 02:Pre10_1      .80     .021 No_date    1:21   10.11  n/a     .000
00662>                        +    1.0 02:Pre9_2       .01     .001 No_date    1:00    6.67  n/a     .000
00663>                        +    1.0 02:Pre2_2       .00     .000 No_date    1:00   13.06  n/a     .000
00664>                    SUM=     1.0 01:Pre          .81     .021 No_date    1:21   10.06  n/a     .000
00665> R0005:C00044-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00666>     ROUTE CHANNEL   ->      1.0 02:Pre          .81     .021 No_date    1:21   10.06  n/a     .000
00667>       [RDT= 1.00] out<-     1.0 01:R6          .81     .021 No_date    1:24   10.06  n/a     .000
00668>        [L/S/n=   77./ .776/.035]
00669>        [Vmax=  .492:Dmax=  .016]
00670> R0005:C00045-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00671>     ROUTE CHANNEL   ->      1.0 02:Pre9_1       .44     .010 No_date    1:29   10.11  n/a     .000
00672>       [RDT= 1.00] out<-     1.0 01:R7          .44     .010 No_date    1:32   10.11  n/a     .000
00673>        [L/S/n=  159./1.576/.035]
00674>        [Vmax=  .797:Dmax=  .003]
00675> R0005:C00046-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00676>     ADD HYD                 1.0 02:R6          .81     .028 No_date    4:24   10.27  n/a     .000
00677>                        +    1.0 02:EXT10        .20     .004 No_date    1:32   10.11  n/a     .000
00678>                    SUM=     1.0 01:J6          1.02     .028 No_date    4:24   10.24  n/a     .000
00679> R0005:C00047-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00680>     ROUTE CHANNEL   ->      1.0 02:J6          1.02     .028 No_date    4:24   10.24  n/a     .000
00681>       [RDT= 1.00] out<-     1.0 01:R8          1.02     .025 No_date    1:28   10.24  n/a     .000
00682>        [L/S/n=   79./ .522/.035]
00683>        [Vmax=  .423:Dmax=  .021]
00684> R0005:C00048-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00685>     ADD HYD                 1.0 02:R8          1.02     .025 No_date    1:28   10.36  n/a     .000
00686>                        +    1.0 02:R7           .44     .022 No_date    4:43   10.41  n/a     .000
00687>                    SUM=     1.0 01:J7          1.46     .034 No_date    1:29   10.38  n/a     .000
00688> R0005:C00049-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00689>     ROUTE CHANNEL   ->      1.0 02:J7          1.46     .034 No_date    1:29   10.38  n/a     .000
00690>       [RDT= 1.00] out<-     1.0 01:R9          1.46     .034 No_date    1:30   10.38  n/a     .000
00691>        [L/S/n=   29./ .887/.035]
00692>        [Vmax=  .543:Dmax=  .023]
00693> R0005:C00050-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00694>     ADD HYD                 1.0 02:EXT9        3.57     .083 No_date    1:36   12.13  n/a     .000
00695>                        +    1.0 02:R9          1.46     .034 No_date    1:30   10.46  n/a     .000
00696>                        +    1.0 02:EXT8         .83     .024 No_date    1:31   13.59  n/a     .000
00697>                        +    1.0 02:R5          7.23     .146 No_date    1:59   15.90  n/a     .000
00698>                    SUM=     1.0 01:J8         13.09     .265 No_date    1:47   14.12  n/a     .000
00699> R0005:C00051-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00700>     ROUTE PIPE      ->      1.0 02:J8         13.09     .265 No_date    1:47   14.12  n/a     .000
00701> *   [RDT= 1.00] out<-     1.0 01:Outlet      13.09     .263 No_date    1:50   14.12  n/a     .000
00702>        [L/S/n=   8./ .010/.013]
00703>        [Vmax=  .357:Dmax=  .851]
00704>        [Din=  .53:Dused= 1.04)
00705> ##############################################################################
00706> # STORMS
00707> ##############################################################################
00708>   ** END OF RUN :    9
00709>
00710> ******************************************************************************
00711>
00712>
00713>
00714>
00715>
00716>  RUN#:COMMAND#
00717> R0010:C00001-------------------------------------------------------------------------------
00718>       START
00719>        [TZERO =    .00 hrs on        0]
00720>        [METOUT=  2    (1=imperial, 2=metric output)]
```

```
00721>       [NSTORM=   1 ]
00722>       [NRUN  = 0010 ]
00723> #*******************************************************************************
00724> #  SWMHYMO  / INPUT DATA FILE
00725> #*******************************************************************************
00726> #  Project Name  : [5923 Ottawa St]
00727> #  Project Number: [P2710(e01)]
00728> #  Date          : [2025 April 28]
00729> #  Modeller      : [MM]
00730> #  Company       : JFSA Canada Inc.
00731> #  License #     : 2549237
00732> #*******************************************************************************
00733> # Model developed to simulate runoff from subcatchments under post development conditions
00734> #*******************************************************************************
00735> R0010:C00002-----------------------------------------------------------------------
00736>       READ STORM
00737>         Filename = STORM.001
00738>         Comment  = CHICAGO STORM 10 Year, 3 Hours
00739>         [SDT=10.00:SDUR=   3.00:PTOT=  49.50]
00740> #*******************************************************************************
00741> R0010:C00003-----------------------------------------------------------------------
00742>       DEFAULT VALUES
00743>         Filename = C:\Temp\20250910-PostDev\Ottawa.val
00744>         ICASEdv  = 1 (read and print data)
00745>         FileTitle= File comment: [Parameters for City of Ottawa Projects]
00746>                    THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
00747>         Horton's infiltration equation parameters:
00748>         [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
00749>         Parameters for PERVIOUS surfaces in STANDHYD:
00750>         [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
00751>         Parameters for IMPERVIOUS surfaces in STANDHYD:
00752>         [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
00753>         Parameters used in NASHYD:
00754>         [Ia=   4.67 mm] [N= 3.00]
00755>         Average monthly Pan Evaporation data in     (mm)
00756>       JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
00757>      .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
00758>         Average monthly Potential Evapotranspiration in     (mm)
00759>       JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
00760>      .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
00761> #*******************************************************************************
00762> # EXT1
00763> #*******************************************************************************
00764> R0010:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00765>       CALIB NASHYD           1.0 01:EXT1          3.21     .088 No_date    1:54   18.55 .375     .000
00766>         [CN= 80.0: N= 3.00: Tp=  .72]
00767> #*******************************************************************************
00768> # EXT2
00769> #*******************************************************************************
00770> R0010:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00771>       CALIB NASHYD           1.0 01:EXT2          .28     .016 No_date    1:23   22.42 .453     .000
00772>         [CN= 85.0: N= 3.00: Tp=  .33]
00773> #*******************************************************************************
00774> # EXT3
00775> #*******************************************************************************
00776> R0010:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00777>       CALIB NASHYD           1.0 01:EXT3          .56     .027 No_date    1:23   18.55 .375     .000
00778>         [CN= 80.0: N= 3.00: Tp=  .32]
00779> #*******************************************************************************
00780> # EXT4
00781> #*******************************************************************************
00782> R0010:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00783>       CALIB NASHYD           1.0 01:EXT4          .31     .015 No_date    1:20   17.89 .361     .000
00784>         [CN= 79.0: N= 3.00: Tp=  .29]
00785> #*******************************************************************************
00786> # EXT5
00787> #*******************************************************************************
00788> R0010:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00789>       CALIB NASHYD           1.0 01:EXT5          .59     .019 No_date    1:33   16.07 .325     .000
00790>         [CN= 76.0: N= 3.00: Tp=  .45]
00791> #*******************************************************************************
00792> # EXT6
00793> #*******************************************************************************
00794> R0010:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00795>       CALIB NASHYD           1.0 01:EXT6          .86     .035 No_date    1:41   22.42 .453     .000
00796>         [CN= 85.0: N= 3.00: Tp=  .56]
00797> #*******************************************************************************
00798> # EXT7
00799> #*******************************************************************************
00800> R0010:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00801>       CALIB NASHYD           1.0 01:EXT7          .47     .025 No_date    1:22   20.75 .419     .000
00802>         [CN= 83.0: N= 3.00: Tp=  .32]
00803> #*******************************************************************************
00804> # EXT8
00805> #*******************************************************************************
00806> R0010:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00807>       CALIB NASHYD           1.0 01:EXT8          .83     .032 No_date    1:31   17.89 .361     .000
00808>         [CN= 79.0: N= 3.00: Tp=  .42]
00809> #*******************************************************************************
00810> # EXT9
00811> #*******************************************************************************
00812> R0010:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00813>       CALIB NASHYD           1.0 01:EXT9         3.57     .111 No_date    1:36   16.08 .325     .000
00814>         [CN= 76.0: N= 3.00: Tp=  .48]
00815> #*******************************************************************************
00816> # EXT9a
00817> #*******************************************************************************
00818> R0010:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00819>       CALIB NASHYD           1.0 01:EXT9a         .01     .001 No_date    1:00   17.25 .348     .000
00820>         [CN= 78.0: N= 3.00: Tp=  .04]
00821> #*******************************************************************************
00822> # EXT10
00823> #*******************************************************************************
00824> R0010:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00825>       CALIB NASHYD           1.0 01:EXT10         .20     .006 No_date    1:31   13.53 .273     .000
00826>         [CN= 71.0: N= 3.00: Tp=  .42]
00827> #*******************************************************************************
00828> # Pre2_1
00829> #*******************************************************************************
00830> R0010:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00831> *     CALIB NASHYD           1.0 01:Pre2_1        .01     .001 No_date    1:00   13.99 .283     .000
00832>         [CN= 72.0: N= 3.00: Tp=  .03]
00833> #*******************************************************************************
00834> # Pre2_2
00835> #*******************************************************************************
00836> R0010:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00837> *     CALIB NASHYD           1.0 01:Pre2_2        .00     .000 No_date    1:00   17.23 .348     .000
00838>         [CN= 78.0: N= 3.00: Tp=  .02]
00839> #*******************************************************************************
00840> # Pre9_1
00841> #*******************************************************************************
00842> R0010:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00843>       CALIB NASHYD           1.0 01:Pre9_1        .44     .013 No_date    1:28   13.53 .273     .000
00844>         [CN= 71.0: N= 3.00: Tp=  .38]
00845> #*******************************************************************************
00846> # Pre9_2
00847> #*******************************************************************************
00848> R0010:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00849> *     CALIB NASHYD           1.0 01:Pre9_2        .01     .001 No_date    1:00    9.08 .183     .000
00850>         [CN= 59.0: N= 3.00: Tp=  .03]
00851> #*******************************************************************************
00852> # Pre10_1
00853> #*******************************************************************************
00854> R0010:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00855>       CALIB NASHYD           1.0 01:Pre10_1       .80     .029 No_date    1:21   13.53 .273     .000
00856>         [CN= 71.0: N= 3.00: Tp=  .29]
00857> #*******************************************************************************
00858> # Pre11_1
00859> #*******************************************************************************
00860> R0010:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00861>       CALIB NASHYD           1.0 01:Pre11_1       .07     .004 No_date    1:14   17.25 .348     .000
00862>         [CN= 78.0: N= 3.00: Tp=  .21]
00863> #*******************************************************************************
00864> # Site 1
00865> #*******************************************************************************
00866> R0010:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00867>       DESIGN STANDHYD        1.0 01:S1-B1         .42     .070 No_date    1:00   27.23 .550     .000
00868>         [XIMP=.34:TIMP=.44]
00869>         [SLP=1.00:DT= 1.00]
00870>         [LOSS= 1 : HORTONS]
00871> #*******************************************************************************
00872> # Site 1 - Roof
00873> #*******************************************************************************
00874> R0010:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00875>       DESIGN STANDHYD        1.0 01:S1-Roof       .06     .022 No_date    1:00   47.58 .961     .000
00876>         [XIMP=.99:TIMP=.99]
00877>         [SLP=  .50:DT= 1.00]
00878>         [LOSS= 1 : HORTONS]
00879> R0010:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00880>       ROUTE RESERVOIR ->     1.0 02:S1-Roof         .06     .022 No_date    1:00   47.58  n/a     .000
00881>                      out <=    1.0 01:S1-Roof-Ou     .06     .002 No_date    1:30   47.58  n/a     .000
00882>                  overflow <=   1.0 03:S1-Roof-Ov     .00     .000 No_date    0:00    .00  n/a     .000
00883>       (MxStoUsed=.2078E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00884> R0010:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00885>       ADD HYD                1.0 02:S1-B1         .42     .070 No_date    1:00   27.23  n/a     .000
00886>                          +     1.0 02:S1-Roof-Ou    .06     .002 No_date    1:30   47.58  n/a     .000
00887>                          +     1.0 02:S1-Roof-Ov    .00     .000 No_date    0:00    .00  n/a     .000
00888>                      SUM=      1.0 01:SITE1-IN      .48     .072 No_date    1:00   29.99  n/a     .000
00889> R0010:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00890>       ROUTE RESERVOIR ->     1.0 02:SITE1-IN      .48     .072 No_date    1:00   29.99  n/a     .000
00891>                      out <=    1.0 01:SITE1-Out     .48     .007 No_date    1:43   29.99  n/a     .000
00892>                  overflow <=   1.0 03:SITE1-Over    .00     .000 No_date    0:00    .00  n/a     .000
00893>       (MxStoUsed=.8491E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00894> #*******************************************************************************
00895> # Site 2
00896> #*******************************************************************************
00897> R0010:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00898>       DESIGN STANDHYD        1.0 01:S2-B3         .35     .057 No_date    1:00   26.22 .530     .000
00899>         [XIMP=.31:TIMP=.41]
00900>         [SLP=1.00:DT= 1.00]
00901>         [LOSS= 1 : HORTONS]
00902> #*******************************************************************************
00903> # Site 2 - Roof
00904> #*******************************************************************************
00905> R0010:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00906>       DESIGN STANDHYD        1.0 01:S2-Roof       .09     .031 No_date    1:00   47.58 .961     .000
00907>         [XIMP=.99:TIMP=.99]
00908>         [SLP=  .50:DT= 1.00]
00909>         [LOSS= 1 : HORTONS]
00910> #*******************************************************************************
00911> R0010:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00912>       ROUTE RESERVOIR ->     1.0 02:S2-Roof         .09     .031 No_date    1:00   47.58  n/a     .000
00913>                      out <=    1.0 01:S2-Roof-Ou     .09     .007 No_date    1:11   47.60  n/a     .000
00914>                  overflow <=   1.0 03:S2-Roof-Ov     .00     .000 No_date    0:00    .00  n/a     .000
00915>       (MxStoUsed=.2022E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00916> R0010:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00917>       ADD HYD                1.0 02:S2-B3         .35     .057 No_date    1:00   26.22  n/a     .000
00918>                          +     1.0 02:S2-Roof-Ou    .09     .007 No_date    1:11   47.60  n/a     .000
00919>                          +     1.0 02:S2-Roof-Ov    .00     .000 No_date    0:00    .00  n/a     .000
00920>                      SUM=      1.0 01:SITE2-IN      .45     .064 No_date    1:00   30.67  n/a     .000
00921> R0010:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00922>       ROUTE RESERVOIR ->     1.0 02:SITE2-IN      .45     .064 No_date    1:00   30.67  n/a     .000
00923>                      out <=    1.0 01:SITE2-Out     .45     .008 No_date    1:55   30.67  n/a     .000
00924>                  overflow <=   1.0 03:SITE2-Over    .00     .000 No_date    0:00    .00  n/a     .000
00925>       (MxStoUsed=.8397E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00926> R0010:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00927>       ADD HYD                1.0 02:SITE1-Out     .48     .007 No_date    1:43   29.99  n/a     .000
00928>                          +     1.0 02:SITE1-Over    .00     .000 No_date    0:00    .00  n/a     .000
00929>                      SUM=      1.0 01:Site1         .48     .007 No_date    1:43   29.99  n/a     .000
00930> R0010:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00931>       ADD HYD                1.0 02:SITE2-Out     .45     .008 No_date    1:55   30.67  n/a     .000
00932>                          +     1.0 02:SITE2-Over    .00     .000 No_date    0:00    .00  n/a     .000
00933>                      SUM=      1.0 01:Site2         .45     .008 No_date    1:55   30.67  n/a     .000
00934> R0010:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00935>       ADD HYD                1.0 02:EXT2          .28     .016 No_date    1:23   22.42  n/a     .000
00936>                          +     1.0 02:Pre2_1        .01     .001 No_date    1:00   13.99  n/a     .000
00937>                          +     1.0 02:Site1         .48     .007 No_date    1:43   29.99  n/a     .000
00938>                          +     1.0 02:Site2         .45     .008 No_date    1:55   30.67  n/a     .000
00939>                      SUM=      1.0 01:J1            .23     .032 No_date    1:23   28.30  n/a     .000
00940> R0010:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00941>       ROUTE CHANNEL          ->     1.0 02:J1            1.23     .032 No_date    1:23   28.30  n/a     .000
00942>         [RDT= 1.00] out<-          1.0 01:R1            1.23     .031 No_date    1:31   28.30  n/a     .000
00943>          [L/S/n=  143./ .394/.035]
00944>          (Vmax=  .303:Dmax=  .117)
00945> R0010:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00946>       ADD HYD                1.0 02:R1            1.23     .031 No_date    1:31   28.30  n/a     .000
00947>                          +     1.0 02:EXT3          .56     .027 No_date    1:23   18.55  n/a     .000
00948>                          +     1.0 02:EXT1         3.21     .088 No_date    1:54   18.55  n/a     .000
00949>                      SUM=      1.0 01:J2            5.00     .132 No_date    1:43   20.95  n/a     .000
00950> R0010:C00036-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00951>       ROUTE CHANNEL          ->     1.0 02:J2            5.00     .132 No_date    1:43   20.95  n/a     .000
00952>         [RDT= 1.00] out<-          1.0 01:R2            5.00     .132 No_date    1:45   20.95  n/a     .000
00953>          [L/S/n=   73./ .425/.035]
00954>          (Vmax=  .441:Dmax=  .217)
00955> R0010:C00037-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00956>       ADD HYD                1.0 02:R2            5.00     .132 No_date    1:45   20.95  n/a     .000
00957>                          +     1.0 02:EXT4          .31     .015 No_date    1:20   17.89  n/a     .000
00958>                      SUM=      1.0 01:J3            5.31     .141 No_date    1:42   20.77  n/a     .000
00959> R0010:C00038-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00960>       ROUTE CHANNEL          ->     1.0 02:J3            5.31     .141 No_date    1:42   20.77  n/a     .000
00961>         [RDT= 1.00] out<-          1.0 01:R3            5.31     .141 No_date    1:45   20.77  n/a     .000
00962>          [L/S/n=   92./ .274/.035]
00963>          (Vmax=  .361:Dmax=  .224)
00964> R0010:C00039-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00965>       ADD HYD                1.0 02:R3            5.31     .141 No_date    1:45   20.77  n/a     .000
00966>                          +     1.0 02:EXT5          .59     .019 No_date    1:33   16.07  n/a     .000
00967>                      SUM=      1.0 01:J4            5.90     .159 No_date    1:43   20.29  n/a     .000
00968> R0010:C00040-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00969>       ROUTE CHANNEL          ->     1.0 02:J4            5.90     .159 No_date    1:43   20.29  n/a     .000
00970>         [RDT= 1.00] out<-          1.0 01:R4            5.90     .149 No_date    1:56   20.29  n/a     .000
00971>          [L/S/n=  251./ .190/.035]
00972>          (Vmax=  .350:Dmax=  .248)
00973> R0010:C00041-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00974>       ADD HYD                1.0 02:R4            5.90     .149 No_date    1:56   20.29  n/a     .000
00975>                          +     1.0 02:EXT6          .86     .035 No_date    1:41   22.42  n/a     .000
00976>                          +     1.0 02:EXT7          .47     .025 No_date    1:22   20.75  n/a     .000
00977>                      SUM=      1.0 01:J5            7.23     .196 No_date    1:50   20.58  n/a     .000
00978> R0010:C00042-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00979>       ROUTE CHANNEL          ->     1.0 02:J5            7.23     .196 No_date    1:50   20.58  n/a     .000
00980>         [RDT= 1.00] out<-          1.0 01:R5            7.23     .193 No_date    1:55   20.58  n/a     .000
00981>          [L/S/n=  237./ .644/.035]
00982>          (Vmax=  .571:Dmax=  .237)
00983> R0010:C00043-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00984>       ADD HYD                1.0 02:Pre10_1       .80     .029 No_date    1:21   13.53  n/a     .000
00985>                          +     1.0 02:Pre9_2        .01     .001 No_date    1:00    9.08  n/a     .000
00986>                          +     1.0 02:Pre2_2        .00     .000 No_date    1:00   17.23  n/a     .000
00987>                      SUM=      1.0 01:Pre           .81     .029 No_date    1:20   13.46  n/a     .000
00988> R0010:C00044-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00989>       ROUTE CHANNEL          ->     1.0 02:Pre           .81     .029 No_date    1:20   13.46  n/a     .000
00990>         [RDT= 1.00] out<-          1.0 01:R6            .81     .029 No_date    1:23   13.46  n/a     .000
00991>          [L/S/n=   77./ .776/.035]
00992>          (Vmax=  .492:Dmax=  .021)
00993> R0010:C00045-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00994>       ROUTE CHANNEL          ->     1.0 02:Pre9_1        .44     .013 No_date    1:28   13.53  n/a     .000
00995>         [RDT= 1.00] out<-          1.0 01:R7            .44     .013 No_date    1:32   13.53  n/a     .000
00996>          [L/S/n=  159./1.576/.035]
00997>          (Vmax=  .797:Dmax=  .004)
00998> R0010:C00046-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
00999>       ADD HYD                1.0 02:R6            .81     .033 No_date    4:26   13.71  n/a     .000
01000>                          +     1.0 02:EXT10         .20     .006 No_date    1:31   13.53  n/a     .000
01001>                      SUM=      1.0 01:J6            1.02     .034 No_date    1:24   13.67  n/a     .000
01002> R0010:C00047-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01003>       ROUTE CHANNEL          ->     1.0 02:J6            1.02     .034 No_date    1:24   13.67  n/a     .000
01004>         [RDT= 1.00] out<-          1.0 01:R8            1.02     .034 No_date    1:28   13.67  n/a     .000
01005>          [L/S/n=   79./ .522/.035]
01006>          (Vmax=  .423:Dmax=  .025)
01007> R0010:C00048-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01008>       ADD HYD                1.0 02:R8            1.02     .034 No_date    1:28   13.81  n/a     .000
01009>                          +     1.0 02:R7            .44     .025 No_date    4:45   13.87  n/a     .000
01010>                      SUM=      1.0 01:J7            1.46     .047 No_date    1:29   13.83  n/a     .000
01011> R0010:C00049-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01012>       ROUTE CHANNEL          ->     1.0 02:J7            1.46     .047 No_date    1:29   13.83  n/a     .000
01013>         [RDT= 1.00] out<-          1.0 01:R9            1.46     .047 No_date    1:30   13.83  n/a     .000
01014>          [L/S/n=   29./ .887/.035]
01015>          (Vmax=  .543:Dmax=  .032)
01016> R0010:C00050-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01017>       ADD HYD                1.0 02:EXT9         3.57     .111 No_date    1:36   16.08  n/a     .000
01018>                          +     1.0 02:R9            1.46     .047 No_date    1:30   13.92  n/a     .000
01019>                          +     1.0 02:EXT8          .83     .032 No_date    1:31   17.89  n/a     .000
01020>                          +     1.0 02:R5            7.23     .193 No_date    1:55   20.58  n/a     .000
01021>                      SUM=      1.0 01:J8           13.09     .357 No_date    1:45   18.44  n/a     .000
01022> R0010:C00051-----------DTmin-ID:NHYD---------AREAha-QPEAKCms-TpeakDate_hh:mm----RVmm-R.C.---DWFCms
01023>       ROUTE PIPE             ->     1.0 02:J8           13.09     .357 No_date    1:45   18.44  n/a     .000
01024> *     [RDT= 1.00] out<-          1.0 01:Outlet        13.09     .357 No_date    1:46   18.44  n/a     .000
01025>          [L/S/n=    8./ .010/.013]
01026>          (Vmax=  .384:Dmax=  .953)
01027>          [Din=  .53:Dused= 1.16)
01028> ###############################################################################
01029> # STORMS
01030> ###############################################################################
01031>   ** END OF RUN :  24
01032>
01033> ********************************************************************************
01034>
01035>
01036>
01037>
01038>
01039>  RUN#:COMMAND#
01040> R0025:C00001-----------------------------------------------------------------------
01041>       START                  [TZERO =    .00 hrs on        0]
01042>         [METOUT=  2   (1=imperial, 2=metric output)]
01043>         [NSTORM=  1 ]
01044>         [NRUN  = 0025 ]
01045> #*******************************************************************************
01046> #  SWMHYMO  / INPUT DATA FILE
01047> #*******************************************************************************
01048> #  Project Name  : [5923 Ottawa St]
01049> #  Project Number: [P2710(e01)]
01050> #  Date          : [2025 April 28]
01051> #  Modeller      : [MM]
01052> #  Company       : JFSA Canada Inc.
01053> #  License #     : 2549237
01054> #*******************************************************************************
01055> # Model developed to simulate runoff from subcatchments under post development conditions
01056> #*******************************************************************************
01057> R0025:C00002-----------------------------------------------------------------------
01058>       READ STORM
01059>         Filename = STORM.001
01060>         Comment  = CHICAGO STORM   25 Year, 3 Hours
01061>         [SDT=10.00:SDUR=   3.00:PTOT=  58.23]
01062> #*******************************************************************************
01063> R0025:C00003-----------------------------------------------------------------------
01064>       DEFAULT VALUES
01065>         Filename = C:\Temp\20250910-PostDev\Ottawa.val
01066>         ICASEdv  = 1 (read and print data)
01067>         FileTitle= File comment: [Parameters for City of Ottawa Projects]
01068>                    THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
01069>         Horton's infiltration equation parameters:
01070>         [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
01071>         Parameters for PERVIOUS surfaces in STANDHYD:
01072>         [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
01073>         Parameters for IMPERVIOUS surfaces in STANDHYD:
01074>         [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
01075>         Parameters used in NASHYD:
01076>         [Ia=   4.67 mm] [N= 3.00]
01077>         Average monthly Pan Evaporation data in     (mm)
01078>       JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01079>      .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01080>
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01081>       Average monthly Potential Evapotranspiration in    (mm)
01082>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01083>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01084> *****************************************************************************************
01085> # EXT1
01086> *****************************************************************************************
01087> R0025:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01088>      CALIB NASHYD            1.0 01:EXT1          3.21     .118 No_date    1:53   24.50 .421     .000
01089>        [CN= 80.0: N= 3.00: Tp=  .72]
01090> *****************************************************************************************
01091> # EXT2
01092> *****************************************************************************************
01093> R0025:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01094>      CALIB NASHYD            1.0 01:EXT2          .28     .022 No_date    1:22   29.15 .501     .000
01095>        [CN= 85.0: N= 3.00: Tp=  .33]
01096> *****************************************************************************************
01097> # EXT3
01098> *****************************************************************************************
01099> R0025:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01100>      CALIB NASHYD            1.0 01:EXT3          .56     .036 No_date    1:22   24.50 .421     .000
01101>        [CN= 80.0: N= 3.00: Tp=  .32]
01102> *****************************************************************************************
01103> # EXT4
01104> *****************************************************************************************
01105> R0025:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01106>      CALIB NASHYD            1.0 01:EXT4          .31     .020 No_date    1:20   23.69 .407     .000
01107>        [CN= 79.0: N= 3.00: Tp=  .29]
01108> *****************************************************************************************
01109> # EXT5
01110> *****************************************************************************************
01111> R0025:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01112>      CALIB NASHYD            1.0 01:EXT5          .59     .026 No_date    1:33   21.44 .368     .000
01113>        [CN= 76.0: N= 3.00: Tp=  .45]
01114> *****************************************************************************************
01115> # EXT6
01116> *****************************************************************************************
01117> R0025:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01118>      CALIB NASHYD            1.0 01:EXT6          .86     .046 No_date    1:40   29.15 .501     .000
01119>        [CN= 85.0: N= 3.00: Tp=  .56]
01120> *****************************************************************************************
01121> # EXT7
01122> *****************************************************************************************
01123> R0025:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01124>      CALIB NASHYD            1.0 01:EXT7          .47     .034 No_date    1:22   27.17 .467     .000
01125>        [CN= 83.0: N= 3.00: Tp=  .32]
01126> *****************************************************************************************
01127> # EXT8
01128> *****************************************************************************************
01129> R0025:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01130>      CALIB NASHYD            1.0 01:EXT8          .83     .043 No_date    1:30   23.69 .407     .000
01131>        [CN= 79.0: N= 3.00: Tp=  .42]
01132> *****************************************************************************************
01133> # EXT9
01134> *****************************************************************************************
01135> R0025:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01136>      CALIB NASHYD            1.0 01:EXT9         3.57     .151 No_date    1:35   21.44 .368     .000
01137>        [CN= 76.0: N= 3.00: Tp=  .48]
01138> *****************************************************************************************
01139> # EXT9a
01140> *****************************************************************************************
01141> R0025:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01142>      CALIB NASHYD            1.0 01:EXT9a         .01     .002 No_date    1:00   22.90 .393     .000
01143>        [CN= 78.0: N= 3.00: Tp=  .04]
01144> *****************************************************************************************
01145> # EXT10
01146> *****************************************************************************************
01147> R0025:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01148>      CALIB NASHYD            1.0 01:EXT10         .20     .008 No_date    1:31   18.23 .313     .000
01149>        [CN= 71.0: N= 3.00: Tp=  .42]
01150> *****************************************************************************************
01151> # Pre2_1
01152> *****************************************************************************************
01153> R0025:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01154> *    CALIB NASHYD            1.0 01:Pre2_1        .01     .002 No_date    1:00   18.82 .323     .000
01155>        [CN= 72.0: N= 3.00: Tp=  .03]
01156> *****************************************************************************************
01157> # Pre2_2
01158> *****************************************************************************************
01159> R0025:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01160> *    CALIB NASHYD            1.0 01:Pre2_2        .00     .000 No_date    1:00   22.87 .393     .000
01161>        [CN= 78.0: N= 3.00: Tp=  .02]
01162> *****************************************************************************************
01163> # Pre9_1
01164> *****************************************************************************************
01165> R0025:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01166>      CALIB NASHYD            1.0 01:Pre9_1        .44     .018 No_date    1:27   18.23 .313     .000
01167>        [CN= 71.0: N= 3.00: Tp=  .38]
01168> *****************************************************************************************
01169> # Pre9_2
01170> *****************************************************************************************
01171> R0025:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01172> *    CALIB NASHYD            1.0 01:Pre9_2        .01     .001 No_date    1:00   12.46 .214     .000
01173>        [CN= 59.0: N= 3.00: Tp=  .03]
01174> *****************************************************************************************
01175> # Pre10_1
01176> *****************************************************************************************
01177> R0025:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01178>      CALIB NASHYD            1.0 01:Pre10_1       .80     .040 No_date    1:20   18.23 .313     .000
01179>        [CN= 71.0: N= 3.00: Tp=  .29]
01180> *****************************************************************************************
01181> # Pre11_1
01182> *****************************************************************************************
01183> R0025:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01184>      CALIB NASHYD            1.0 01:Pre11_1       .07     .005 No_date    1:13   22.90 .393     .000
01185>        [CN= 78.0: N= 3.00: Tp=  .21]
01186> *****************************************************************************************
01187> # Site 1
01188> *****************************************************************************************
01189> R0025:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01190>      DESIGN STANDHYD         1.0 01:S1-B1         .42     .092 No_date    1:00   34.53 .593     .000
01191>        [XIMP=.34:TIMP=.44]
01192>        [SLP=1.00:DT= 1.00]
01193>        [LOSS= 1 : HORTONS]
01194> *****************************************************************************************
01195> # Site 1 - Roof
01196> *****************************************************************************************
01197> R0025:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01198>      DESIGN STANDHYD         1.0 01:S1-Roof       .06     .026 No_date    1:00   56.27 .966     .000
01199>        [XIMP=.99:TIMP=.99]
01200>        [SLP= .50:DT= 1.00]
01201>        [LOSS= 1 : HORTONS]
01202> R0025:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01203>      ROUTE RESERVOIR ->      1.0 02:S1-Roof       .06     .026 No_date    1:00   56.27  n/a     .000
01204>                  out <=      1.0 01:S1-Roof-Ou    .06     .003 No_date    1:30   56.27  n/a     .000
01205>              overflow <=     1.0 01:S1-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
01206>       (MxStoUsed=.2466E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01207> R0025:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01208>      ADD HYD                 1.0 02:S1-B1         .42     .092 No_date    1:00   34.53  n/a     .000
01209>                        +     1.0 02:S1-Roof-Ou    .06     .003 No_date    1:30   56.27  n/a     .000
01210>                        +     1.0 02:S1-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
01211>                      SUM=    1.0 01:S1-IN         .48     .094 No_date    1:00   37.47  n/a     .000
01212> R0025:C00025-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01213>      ROUTE RESERVOIR ->      1.0 02:S1IE1-IN      .48     .094 No_date    1:00   37.47  n/a     .000
01214>                  out <=      1.0 01:S1IE1-Out     .48     .008 No_date    1:46   37.47  n/a     .000
01215>              overflow <=     1.0 03:S1IE1-Over    .00     .000 No_date    0:00     .00  n/a     .000
01216>       (MxStoUsed=.1128E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01217> *****************************************************************************************
01218> # Site 2
01219> *****************************************************************************************
01220> R0025:C00026-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01221>      DESIGN STANDHYD         1.0 01:S2-B3         .35     .076 No_date    1:00   33.45 .574     .000
01222>        [XIMP=.31:TIMP=.41]
01223>        [SLP=1.00:DT= 1.00]
01224>        [LOSS= 1 : HORTONS]
01225> *****************************************************************************************
01226> # Site 2 - Roof
01227> *****************************************************************************************
01228> R0025:C00027-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01229>      DESIGN STANDHYD         1.0 01:S2-Roof       .09     .037 No_date    1:00   56.28 .967     .000
01230>        [XIMP=.99:TIMP=.99]
01231>        [SLP= .50:DT= 1.00]
01232>        [LOSS= 1 : HORTONS]
01233> *****************************************************************************************
01234> R0025:C00028-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01235>      ROUTE RESERVOIR ->      1.0 02:S2-Roof       .09     .037 No_date    1:00   56.28  n/a     .000
01236>                  out <=      1.0 01:S2-Roof-Ou    .09     .008 No_date    1:11   56.29  n/a     .000
01237>              overflow <=     1.0 01:S2-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
01238>       (MxStoUsed=.2497E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01239> R0025:C00029-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01240>      ADD HYD                 1.0 02:S2-B3         .35     .076 No_date    1:00   33.45  n/a     .000
01241>                        +     1.0 02:S2-Roof-Ou    .09     .008 No_date    1:11   56.29  n/a     .000
01242>                        +     1.0 02:S2-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
01243>                      SUM=    1.0 01:S2IE2-IN      .45     .083 No_date    1:00   38.20  n/a     .000
01244> R0025:C00030-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01245>      ROUTE RESERVOIR ->      1.0 02:S1IE2-IN      .45     .083 No_date    1:00   38.20  n/a     .000
01246>                  out <=      1.0 01:S1IE2-Out     .45     .009 No_date    2:01   38.20  n/a     .000
01247>              overflow <=     1.0 03:S1IE2-Over    .00     .000 No_date    0:00     .00  n/a     .000
01248>       (MxStoUsed=.1094E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01249> R0025:C00031-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01250>      ADD HYD                 1.0 02:S1IE1-Out     .48     .008 No_date    1:46   37.47  n/a     .000
01251>                        +     1.0 02:S1IE1-Over    .00     .000 No_date    0:00     .00  n/a     .000
01252>                      SUM=    1.0 01:S1ie1         .48     .008 No_date    1:46   37.47  n/a     .000
01253> R0025:C00032-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01254>      ADD HYD                 1.0 02:S1IE2-Out     .45     .009 No_date    2:01   38.20  n/a     .000
01255>                        +     1.0 02:S1IE2-Over    .00     .000 No_date    0:00     .00  n/a     .000
01256>                      SUM=    1.0 01:S1ie2         .45     .009 No_date    2:01   38.20  n/a     .000
01257> R0025:C00033-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01258>      ADD HYD                 1.0 02:EXT2          .28     .022 No_date    1:22   29.15  n/a     .000
01259>                        +     1.0 02:Pre2_1        .01     .002 No_date    1:00   18.82  n/a     .000
01260>                        +     1.0 02:Site1         .48     .008 No_date    1:46   37.47  n/a     .000
01261>                        +     1.0 02:Site2         .45     .009 No_date    2:01   38.20  n/a     .000
01262>                      SUM=    1.0 01:J1           1.23     .038 No_date    1:22   35.61  n/a     .000
01263> R0025:C00034-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01264>      ROUTE CHANNEL   ->      1.0 02:J1           1.23     .038 No_date    1:22   35.61  n/a     .000
01265>        [RDT= 1.00] out<-     1.0 01:R1           1.23     .037 No_date    1:30   35.61  n/a     .000
01266>         [L/S/n=  143./ .394/.035]
01267>         [Vmax=  .318:Dmax=  .126]
01268> R0025:C00035-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01269>      ADD HYD                 1.0 02:R1           1.23     .037 No_date    1:30   35.61  n/a     .000
01270>                        +     1.0 02:EXT3          .56     .036 No_date    1:22   24.50  n/a     .000
01271>                        +     1.0 02:EXT1         3.21     .118 No_date    1:53   24.50  n/a     .000
01272>                      SUM=    1.0 01:J2           5.00     .172 No_date    1:42   27.23  n/a     .000
01273> R0025:C00036-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01274>      ROUTE CHANNEL   ->      1.0 02:J2           5.00     .172 No_date    1:42   27.23  n/a     .000
01275>        [RDT= 1.00] out<-     1.0 01:R2           5.00     .172 No_date    1:44   27.23  n/a     .000
01276>         [L/S/n=  73./ .425/.035]
01277>         [Vmax=  .475:Dmax=  .242]
01278> R0025:C00037-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01279>      ADD HYD                 1.0 02:R2           5.00     .172 No_date    1:44   27.23  n/a     .000
01280>                        +     1.0 02:EXT4          .31     .020 No_date    1:20   23.69  n/a     .000
01281>                      SUM=    1.0 01:J3           5.31     .185 No_date    1:41   27.02  n/a     .000
01282> R0025:C00038-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01283>      ROUTE CHANNEL   ->      1.0 02:J3           5.31     .185 No_date    1:41   27.02  n/a     .000
01284>        [RDT= 1.00] out<-     1.0 01:R3           5.31     .184 No_date    1:44   27.02  n/a     .000
01285>         [L/S/n=  92./ .274/.035]
01286>         [Vmax=  .388:Dmax=  .250]
01287> R0025:C00039-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01288>      ADD HYD                 1.0 02:R3           5.31     .184 No_date    1:44   27.02  n/a     .000
01289>                        +     1.0 02:EXT5          .59     .026 No_date    1:33   21.44  n/a     .000
01290>                      SUM=    1.0 01:J4           5.90     .209 No_date    1:42   26.46  n/a     .000
01291> R0025:C00040-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01292>      ROUTE CHANNEL   ->      1.0 02:J4           5.90     .209 No_date    1:42   26.46  n/a     .000
01293>        [RDT= 1.00] out<-     1.0 01:R4           5.90     .197 No_date    1:53   26.46  n/a     .000
01294>         [L/S/n=  251./ .190/.035]
01295>         [Vmax=  .380:Dmax=  .280]
01296> R0025:C00041-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01297>      ADD HYD                 1.0 02:R4           5.90     .197 No_date    1:53   26.46  n/a     .000
01298>                        +     1.0 02:EXT6          .86     .046 No_date    1:40   29.15  n/a     .000
01299>                        +     1.0 02:EXT7          .47     .034 No_date    1:22   27.17  n/a     .000
01300>                      SUM=    1.0 01:J5           7.23     .260 No_date    1:48   26.83  n/a     .000
01301> R0025:C00042-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01302>      ROUTE CHANNEL   ->      1.0 02:J5           7.23     .260 No_date    1:48   26.83  n/a     .000
01303>        [RDT= 1.00] out<-     1.0 01:R5           7.23     .257 No_date    1:53   26.83  n/a     .000
01304>         [L/S/n=  237./ .644/.035]
01305>         [Vmax=  .618:Dmax=  .264]
01306> R0025:C00043-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01307>      ADD HYD                 1.0 02:Pre10_1       .80     .040 No_date    1:20   18.23  n/a     .000
01308>                        +     1.0 02:Pre9_2        .01     .001 No_date    1:00   12.46  n/a     .000
01309>                        +     1.0 02:Pre2_2        .00     .000 No_date    1:00   22.87  n/a     .000
01310>                      SUM=    1.0 01:Pre           .81     .040 No_date    1:20   18.15  n/a     .000
01311> R0025:C00044-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01312>      ROUTE CHANNEL   ->      1.0 02:Pre          .81     .040 No_date    1:20   18.15  n/a     .000
01313>        [RDT= 1.00] out<-     1.0 01:R6           .81     .039 No_date    1:23   18.15  n/a     .000
01314>         [L/S/n=  77./ .776/.035]
01315>         [Vmax=  .492:Dmax=  .029]
01316> R0025:C00045-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01317>      ROUTE CHANNEL   ->      1.0 02:Pre9_1        .44     .018 No_date    1:27   18.23  n/a     .000
01318>        [RDT= 1.00] out<-     1.0 01:R7           .44     .018 No_date    1:31   18.23  n/a     .000
01319>         [L/S/n=  159./1.576/.035]
01320>         [Vmax=  .797:Dmax=  .005]
01321> R0025:C00046-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01322>      ADD HYD                 1.0 02:R6           .81     .039 No_date    1:23   18.43  n/a     .000
01323>                        +     1.0 02:EXT10         .20     .008 No_date    1:31   18.23  n/a     .000
01324>                      SUM=    1.0 01:J6           1.02     .047 No_date    1:24   18.39  n/a     .000
01325> R0025:C00047-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01326>      ROUTE CHANNEL   ->      1.0 02:J6           1.02     .047 No_date    1:24   18.39  n/a     .000
01327>        [RDT= 1.00] out<-     1.0 01:R8           1.02     .046 No_date    1:27   18.39  n/a     .000
01328>         [L/S/n=  79./ .522/.035]
01329>         [Vmax=  .423:Dmax=  .034]
01330> R0025:C00048-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01331>      ADD HYD                 1.0 02:R8           1.02     .046 No_date    1:27   18.55  n/a     .000
01332>                        +     1.0 02:R7           .44     .028 No_date    4:48   18.61  n/a     .000
01333>                      SUM=    1.0 01:J7           1.46     .064 No_date    1:28   18.57  n/a     .000
01334> R0025:C00049-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01335>      ROUTE CHANNEL   ->      1.0 02:J7           1.46     .064 No_date    1:28   18.57  n/a     .000
01336>        [RDT= 1.00] out<-     1.0 01:R9           1.46     .064 No_date    1:29   18.57  n/a     .000
01337>         [L/S/n=  29./ .887/.035]
01338>         [Vmax=  .543:Dmax=  .043]
01339> R0025:C00050-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01340>      ADD HYD                 1.0 02:EXT9         3.57     .151 No_date    1:35   21.44  n/a     .000
01341>                        +     1.0 02:R9           1.46     .064 No_date    1:29   18.67  n/a     .000
01342>                        +     1.0 02:EXT8          .83     .043 No_date    1:30   23.69  n/a     .000
01343>                        +     1.0 02:R5           7.23     .257 No_date    1:53   26.83  n/a     .000
01344>                      SUM=    1.0 01:J8          13.09     .483 No_date    1:43   24.25  n/a     .000
01345> R0025:C00051-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01346>      ROUTE PIPE      ->      1.0 02:J8          13.09     .483 No_date    1:43   24.25  n/a     .000
01347> *    [RDT= 1.00] out<-     1.0 01:Outlet        13.09     .483 No_date    1:43   24.25  n/a     .000
01348>         [L/S/n=  8./ .010/.013]
01349>         [Vmax=  .414:Dmax= 1.067]
01350>         [Din=  .53:Dused= 1.30]
01351> ###############################################################################
01352> # STORMS
01353> ###############################################################################
01354>  ** END OF RUN :  49
01355>
01356> *****************************************************************************************
01357>
01358>
01359>
01360>
01361>
01362>  RUN#:COMMAND#
01363> R0050:C00001-------------------------------------------------------------------------------
01364>       START
01365>         [TZERO =    .00 hrs on         0]
01366>         [METOUT=   2   (1=imperial, 2=metric output)]
01367>         [NSTORM=   1 ]
01368>         [NRUN  = 0050 ]
01369> *****************************************************************************************
01370> #  SWMHYMO  / INPUT DATA FILE
01371> *****************************************************************************************
01372> #  Project Name  : [5923 Ottawa St]
01373> #  Project Number: [P2710(e01)]
01374> #  Date          : [2025 April 28]
01375> #  Modeller      : [MM]
01376> #  Company       : JFSA Canada Inc.
01377> #  License #     : 2549237
01378> *****************************************************************************************
01379> # Model developed to simulate runoff from subcatchments under post development conditions
01380> *****************************************************************************************
01381> R0050:C00002-------------------------------------------------------------------------------
01382>       READ STORM
01383>       Filename = STORM.001
01384>       Comment  = CHICAGO STORM  50 Year, 3 Hours
01385>       [SDT=10.00:SDUR=   3.00:PTOT=  64.81]
01386> *****************************************************************************************
01387> R0050:C00003-------------------------------------------------------------------------------
01388>       DEFAULT VALUES
01389>       Filename = C:\Temp\20250910-PostDev\Ottawa.val
01390>       ICASEdv  = 1 (read and print data)
01391>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
01392>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
01393>       Horton's infiltration equation parameters:
01394>       [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
01395>       Parameters for PERVIOUS surfaces in STANDHYD:
01396>       [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
01397>       Parameters for IMPERVIOUS surfaces in STANDHYD:
01398>       [IAimp=   1.57 mm] [CLI= 1.50]    [MNI= .013]
01399>       Parameters used in NASHYD:
01400>       [Ia=   4.67 mm] [N= 3.00]
01401>       Average monthly Pan Evaporation data in    (mm)
01402>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01403>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01404>       Average monthly Potential Evapotranspiration in    (mm)
01405>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01406>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01407> *****************************************************************************************
01408> # EXT1
01409> *****************************************************************************************
01410> R0050:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01411>      CALIB NASHYD            1.0 01:EXT1          3.21     .142 No_date    1:53   29.25 .451     .000
01412>        [CN= 80.0: N= 3.00: Tp=  .72]
01413> *****************************************************************************************
01414> # EXT2
01415> *****************************************************************************************
01416> R0050:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01417>      CALIB NASHYD            1.0 01:EXT2          .28     .026 No_date    1:22   34.45 .532     .000
01418>        [CN= 85.0: N= 3.00: Tp=  .33]
01419> *****************************************************************************************
01420> # EXT3
01421> *****************************************************************************************
01422> R0050:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01423>      CALIB NASHYD            1.0 01:EXT3          .56     .044 No_date    1:22   29.25 .451     .000
01424>        [CN= 80.0: N= 3.00: Tp=  .32]
01425> *****************************************************************************************
01426> # EXT4
01427> *****************************************************************************************
01428> R0050:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01429>      CALIB NASHYD            1.0 01:EXT4          .31     .025 No_date    1:19   28.33 .437     .000
01430>        [CN= 79.0: N= 3.00: Tp=  .29]
01431> *****************************************************************************************
01432> # EXT5
01433> *****************************************************************************************
01434> R0050:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01435>      CALIB NASHYD            1.0 01:EXT5          .59     .032 No_date    1:32   25.77 .398     .000
01436>        [CN= 76.0: N= 3.00: Tp=  .45]
01437> *****************************************************************************************
01438> # EXT6
01439> *****************************************************************************************
01440> R0050:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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01441>     CALIB NASHYD          1.0 01:EXT6          .86     .055 No_date    1:40   34.45 .532     .000
01442>       [CN= 85.0: N= 3.00: Tp=  .56]
01443> #*******************************************************************************
01444> # EXT7
01445> #*******************************************************************************
01446> R0050:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01447>     CALIB NASHYD          1.0 01:EXT7          .47     .041 No_date    1:21   32.24 .498     .000
01448>       [CN= 83.0: N= 3.00: Tp=  .32]
01449> #*******************************************************************************
01450> # EXT8
01451> #*******************************************************************************
01452> R0050:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01453>     CALIB NASHYD          1.0 01:EXT8          .83     .052 No_date    1:30   28.33 .437     .000
01454>       [CN= 79.0: N= 3.00: Tp=  .42]
01455> #*******************************************************************************
01456> # EXT9
01457> #*******************************************************************************
01458> R0050:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01459>     CALIB NASHYD          1.0 01:EXT9         3.57     .183 No_date    1:35   25.77 .398     .000
01460>       [CN= 76.0: N= 3.00: Tp=  .48]
01461> #*******************************************************************************
01462> # EXT9a
01463> #*******************************************************************************
01464> R0050:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01465>     CALIB NASHYD          1.0 01:EXT9a         .01     .002 No_date    1:00   27.43 .423     .000
01466>       [CN= 78.0: N= 3.00: Tp=  .04]
01467> #*******************************************************************************
01468> # EXT10
01469> #*******************************************************************************
01470> R0050:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01471>     CALIB NASHYD          1.0 01:EXT10         .20     .010 No_date    1:30   22.06 .340     .000
01472>       [CN= 71.0: N= 3.00: Tp=  .42]
01473> #*******************************************************************************
01474> # Pre2_1
01475> #*******************************************************************************
01476> R0050:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01477> *   CALIB NASHYD          1.0 01:Pre2_1        .01     .002 No_date    1:00   22.75 .351     .000
01478>       [CN= 72.0: N= 3.00: Tp=  .03]
01479> #*******************************************************************************
01480> # Pre2_2
01481> #*******************************************************************************
01482> R0050:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01483> *   CALIB NASHYD          1.0 01:Pre2_2        .00     .000 No_date    1:00   27.40 .423     .000
01484>       [CN= 78.0: N= 3.00: Tp=  .02]
01485> #*******************************************************************************
01486> # Pre9_1
01487> #*******************************************************************************
01488> R0050:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01489>     CALIB NASHYD          1.0 01:Pre9_1        .44     .022 No_date    1:27   22.07 .340     .000
01490>       [CN= 71.0: N= 3.00: Tp=  .38]
01491> #*******************************************************************************
01492> # Pre9_2
01493> #*******************************************************************************
01494> R0050:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01495> *   CALIB NASHYD          1.0 01:Pre9_2        .01     .002 No_date    1:00   15.27 .236     .000
01496>       [CN= 59.0: N= 3.00: Tp=  .03]
01497> #*******************************************************************************
01498> # Pre10_1
01499> #*******************************************************************************
01500> R0050:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01501>     CALIB NASHYD          1.0 01:Pre10_1       .80     .048 No_date    1:20   22.07 .340     .000
01502>       [CN= 71.0: N= 3.00: Tp=  .29]
01503> #*******************************************************************************
01504> # Pre11_1
01505> #*******************************************************************************
01506> R0050:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01507>     CALIB NASHYD          1.0 01:Pre11_1       .07     .006 No_date    1:13   27.44 .423     .000
01508>       [CN= 78.0: N= 3.00: Tp=  .21]
01509> #*******************************************************************************
01510> # Site 1
01511> #*******************************************************************************
01512> R0050:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01513>     DESIGN STANDHYD       1.0 01:S1-B1         .42     .107 No_date    1:00   40.11 .619     .000
01514>       [XIMP=.34:TIMP=.44]
01515>       [SLP=1.00:DT= 1.00]
01516>       [LOSS= 1 : HORTONS]
01517> #*******************************************************************************
01518> # Site 1 - Roof
01519> #*******************************************************************************
01520> R0050:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01521>     DESIGN STANDHYD       1.0 01:S1-Roof       .06     .029 No_date    1:00   62.84 .970     .000
01522>       [XIMP=.99:TIMP=.99]
01523>       [SLP= .50:DT= 1.00]
01524>       [LOSS= 1 : HORTONS]
01525> R0050:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01526>     ROUTE RESERVOIR ->    1.0 02:S1-Roof       .06     .029 No_date    1:00   62.84  n/a     .000
01527>                     out <=    1.0 01:S1-Roof-Ou    .06     .003 No_date    1:30   62.84  n/a     .000
01528>                overflow <=    1.0 03:S1-Roof-Ov    .00     .000 No_date    0:00    .00  n/a     .000
01529>       (MxStoUsed=.2757E-02  m3, TotOvFVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
01530> R0050:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01531>     ADD HYD               1.0 02:S1-B1         .42     .107 No_date    1:00   40.11  n/a     .000
01532>                       +    1.0 02:S1-Roof-Ou    .06     .003 No_date    1:30   62.84  n/a     .000
01533>                       +    1.0 02:S1-Roof-Ov    .00     .000 No_date    0:00    .00  n/a     .000
01534>                     SUM=   1.0 01:SITE1-IN      .48     .109 No_date    1:00   43.19  n/a     .000
01535> R0050:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01536>     ROUTE RESERVOIR ->    1.0 02:SITE1-IN      .48     .109 No_date    1:00   43.19  n/a     .000
01537>                     out <=    1.0 01:SITE1-Out     .48     .008 No_date    1:50   43.19  n/a     .000
01538>                overflow <=    1.0 03:SITE1-Over    .00     .000 No_date    0:00    .00  n/a     .000
01539>       (MxStoUsed=.1343E-01  m3, TotOvFVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
01540> #*******************************************************************************
01541> # Site 2
01542> #*******************************************************************************
01543> R0050:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01544>     DESIGN STANDHYD       1.0 01:S2-B3         .35     .088 No_date    1:00   38.93 .601     .000
01545>       [XIMP=.31:TIMP=.41]
01546>       [SLP=1.00:DT= 1.00]
01547>       [LOSS= 1 : HORTONS]
01548> #*******************************************************************************
01549> # Site 2 - Roof
01550> #*******************************************************************************
01551> R0050:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01552>     DESIGN STANDHYD       1.0 01:S2-Roof       .09     .041 No_date    1:00   62.84 .970     .000
01553>       [XIMP=.99:TIMP=.99]
01554>       [SLP= .50:DT= 1.00]
01555>       [LOSS= 1 : HORTONS]
01556> #*******************************************************************************
01557> R0050:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01558>     ROUTE RESERVOIR ->    1.0 02:S2-Roof       .09     .041 No_date    1:00   62.84  n/a     .000
01559>                     out <=    1.0 01:S2-Roof-Ou    .09     .008 No_date    1:11   62.85  n/a     .000
01560>                overflow <=    1.0 03:S2-Roof-Ov    .00     .000 No_date    0:00    .00  n/a     .000
01561>       (MxStoUsed=.2863E-02  m3, TotOvFVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
01562> R0050:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01563>     ADD HYD               1.0 02:S2-B3         .35     .088 No_date    1:00   38.93  n/a     .000
01564>                       +    1.0 02:S2-Roof-Ou    .09     .008 No_date    1:11   62.85  n/a     .000
01565>                       +    1.0 02:S2-Roof-Ov    .00     .000 No_date    0:00    .00  n/a     .000
01566>                     SUM=   1.0 01:SITE2-IN      .45     .096 No_date    1:00   43.90  n/a     .000
01567> R0050:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01568>     ROUTE RESERVOIR ->    1.0 02:SITE2-IN      .45     .096 No_date    1:00   43.90  n/a     .000
01569>                     out <=    1.0 01:SITE2-Out     .45     .009 No_date    2:05   43.90  n/a     .000
01570>                overflow <=    1.0 03:SITE2-Over    .00     .000 No_date    0:00    .00  n/a     .000
01571>       (MxStoUsed=.1288E-01  m3, TotOvFVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
01572> R0050:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01573>     ADD HYD               1.0 02:SITE1-Out     .48     .008 No_date    1:50   43.19  n/a     .000
01574>                       +    1.0 02:SITE1-Over    .00     .000 No_date    0:00    .00  n/a     .000
01575>                     SUM=   1.0 01:Site1         .48     .008 No_date    1:50   43.19  n/a     .000
01576> R0050:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01577>     ADD HYD               1.0 02:SITE2-Out     .45     .009 No_date    2:05   43.90  n/a     .000
01578>                       +    1.0 02:SITE2-Over    .00     .000 No_date    0:00    .00  n/a     .000
01579>                     SUM=   1.0 01:Site2         .45     .009 No_date    2:05   43.90  n/a     .000
01580> R0050:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01581>     ADD HYD               1.0 02:EXT2          .28     .026 No_date    1:22   34.45  n/a     .000
01582>                       +    1.0 02:Pre2_1        .01     .002 No_date    1:00   22.75  n/a     .000
01583>                       +    1.0 02:Site1         .48     .008 No_date    1:50   43.19  n/a     .000
01584>                       +    1.0 02:Site2         .45     .009 No_date    2:05   43.90  n/a     .000
01585>                     SUM=   1.0 01:J1           1.23     .043 No_date    1:22   41.20  n/a     .000
01586> R0050:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01587>     ROUTE CHANNEL     ->    1.0 02:J1           1.23     .043 No_date    1:22   41.20  n/a     .000
01588>       [RDT= 1.00] out<-    1.0 01:R1           1.23     .041 No_date    1:29   41.20  n/a     .000
01589>        [L/S/n=  143./ .394/.035]
01590>        (Vmax=   .330:Dmax=  .134)
01591> R0050:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01592>     ADD HYD               1.0 02:R1           1.23     .041 No_date    1:29   41.20  n/a     .000
01593>                       +    1.0 02:EXT3          .56     .044 No_date    1:22   29.25  n/a     .000
01594>                       +    1.0 02:EXT1         3.21     .142 No_date    1:53   29.25  n/a     .000
01595>                     SUM=   1.0 01:J2           5.00     .205 No_date    1:41   32.18  n/a     .000
01596> R0050:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01597>     ROUTE CHANNEL     ->    1.0 02:J2           5.00     .205 No_date    1:41   32.18  n/a     .000
01598>       [RDT= 1.00] out<-    1.0 01:R2           5.00     .204 No_date    1:43   32.18  n/a     .000
01599>        [L/S/n=  73./ .425/.035]
01600>        (Vmax=   .495:Dmax=  .259)
01601> R0050:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01602>     ADD HYD               1.0 02:R2           5.00     .204 No_date    1:43   32.18  n/a     .000
01603>                       +    1.0 02:EXT4          .31     .025 No_date    1:19   28.33  n/a     .000
01604>                     SUM=   1.0 01:J3           5.31     .220 No_date    1:39   31.96  n/a     .000
01605> R0050:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01606>     ROUTE CHANNEL     ->    1.0 02:J3           5.31     .220 No_date    1:39   31.96  n/a     .000
01607>       [RDT= 1.00] out<-    1.0 01:R3           5.31     .219 No_date    1:43   31.96  n/a     .000
01608>        [L/S/n=  92./ .274/.035]
01609>        (Vmax=   .406:Dmax=  .268)
01610> R0050:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01611>     ADD HYD               1.0 02:R3           5.31     .219 No_date    1:43   31.96  n/a     .000
01612>                       +    1.0 02:EXT5          .59     .032 No_date    1:32   25.77  n/a     .000
01613>                     SUM=   1.0 01:J4           5.90     .249 No_date    1:41   31.33  n/a     .000
01614> R0050:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01615>     ROUTE CHANNEL     ->    1.0 02:J4           5.90     .249 No_date    1:41   31.33  n/a     .000
01616>       [RDT= 1.00] out<-    1.0 01:R4           5.90     .236 No_date    1:52   31.33  n/a     .000
01617>        [L/S/n=  251./ .190/.035]
01618>        (Vmax=   .399:Dmax=  .302)
01619> R0050:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01620>     ADD HYD               1.0 02:R4           5.90     .236 No_date    1:52   31.33  n/a     .000
01621>                       +    1.0 02:EXT6          .86     .055 No_date    1:40   34.45  n/a     .000
01622>                       +    1.0 02:EXT7          .47     .041 No_date    1:21   32.24  n/a     .000
01623>                     SUM=   1.0 01:J5           7.23     .312 No_date    1:46   31.76  n/a     .000
01624> R0050:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01625>     ROUTE CHANNEL     ->    1.0 02:J5           7.23     .312 No_date    1:46   31.76  n/a     .000
01626>       [RDT= 1.00] out<-    1.0 01:R5           7.23     .308 No_date    1:53   31.76  n/a     .000
01627>        [L/S/n=  237./ .644/.035]
01628>        (Vmax=   .650:Dmax=  .283)
01629> R0050:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01630>     ADD HYD               1.0 02:Pre10_1       .80     .048 No_date    1:20   22.07  n/a     .000
01631>                       +    1.0 02:Pre9_2        .01     .002 No_date    1:00   15.27  n/a     .000
01632>                       +    1.0 02:Pre2_2        .00     .000 No_date    1:00   27.40  n/a     .000
01633>                     SUM=   1.0 01:Pre           .81     .049 No_date    1:20   21.96  n/a     .000
01634> R0050:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01635>     ROUTE CHANNEL     ->    1.0 02:Pre          .81     .049 No_date    1:20   21.96  n/a     .000
01636>       [RDT= 1.00] out<-    1.0 01:R6           .81     .048 No_date    1:23   21.96  n/a     .000
01637>        [L/S/n=   77./ .776/.035]
01638>        (Vmax=  .492:Dmax=  .036)
01639> R0050:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01640>     ROUTE CHANNEL     ->    1.0 02:Pre9_1        .44     .022 No_date    1:27   22.07  n/a     .000
01641>       [RDT= 1.00] out<-    1.0 01:R7           .44     .022 No_date    1:31   22.07  n/a     .000
01642>        [L/S/n=  159./1.576/.035]
01643>        (Vmax=   .797:Dmax=  .007)
01644> R0050:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01645>     ADD HYD               1.0 02:R6           .81     .048 No_date    1:23   22.27  n/a     .000
01646>                       +    1.0 02:EXT10         .20     .010 No_date    1:30   22.06  n/a     .000
01647>                     SUM=   1.0 01:J6           1.02     .057 No_date    1:24   22.23  n/a     .000
01648> R0050:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01649>     ROUTE CHANNEL     ->    1.0 02:J6           1.02     .057 No_date    1:24   22.23  n/a     .000
01650>       [RDT= 1.00] out<-    1.0 01:R8           1.02     .057 No_date    1:27   22.23  n/a     .000
01651>        [L/S/n=   79./ .522/.035]
01652>        (Vmax=   .423:Dmax=  .042)
01653> R0050:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01654>     ADD HYD               1.0 02:R8           1.02     .057 No_date    1:27   22.39  n/a     .000
01655>                       +    1.0 02:R7           .44     .030 No_date    4:50   22.47  n/a     .000
01656>                     SUM=   1.0 01:J7           1.46     .078 No_date    1:28   22.42  n/a     .000
01657> R0050:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01658>     ROUTE CHANNEL     ->    1.0 02:J7           1.46     .078 No_date    1:28   22.42  n/a     .000
01659>       [RDT= 1.00] out<-    1.0 01:R9           1.46     .078 No_date    1:29   22.42  n/a     .000
01660>        [L/S/n=   29./ .887/.035]
01661>        (Vmax=   .543:Dmax=  .053)
01662> R0050:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01663>     ADD HYD               1.0 02:EXT9         3.57     .183 No_date    1:35   25.77  n/a     .000
01664>                       +    1.0 02:R9           1.46     .078 No_date    1:29   22.52  n/a     .000
01665>                       +    1.0 02:EXT8          .83     .052 No_date    1:30   28.33  n/a     .000
01666>                       +    1.0 02:R5           7.23     .308 No_date    1:53   31.76  n/a     .000
01667>                     SUM=   1.0 01:J8          13.09     .586 No_date    1:42   28.88  n/a     .000
01668> R0050:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01669>     ROUTE PIPE        ->    1.0 02:J8          13.09     .586 No_date    1:42   28.88  n/a     .000
01670> *   [RDT= 1.00] out<-    1.0 01:Outlet       13.09     .585 No_date    1:43   28.88  n/a     .000
01671>        [L/S/n=    8./ .010/.013]
01672>        [Vmax=  .435:Dmax=  1.147]
01673>        [Din=  .53:Dused= 1.40)
01674> ###############################################################################
01675> # STORMS
01676> ###############################################################################
01677>   ** END OF RUN :  98
01678>
01679> *******************************************************************************
01680>
01681>
01682>
01683>
01684>
01685> RUN#:COMMAND#
01686> R0099:C00001------------------------------------------------------------------------------
01687>      START
01688>       [TZERO =    .00 hrs on        0]
01689>       [METOUT=   2   (1=imperial, 2=metric output)]
01690>       [NSTORM=   1 ]
01691>       [NRUN  = 0099 ]
01692> #*******************************************************************************
01693> #  SWMHYMO  / INPUT DATA FILE
01694> #*******************************************************************************
01695> #  Project Name  : [5923 Ottawa St]
01696> #  Project Number: [P2710(e01)]
01697> #  Date          : [2025 April 28]
01698> #  Modeller      : [MM]
01699> #  Company       : JFSA Canada Inc.
01700> #  License #     : 2549237
01701> #*******************************************************************************
01702> # Model developed to simulate runoff from subcatchments under post development conditions
01703> #*******************************************************************************
01704> R0099:C00002------------------------------------------------------------------------------
01705>      READ STORM
01706>       Filename = STORM.001
01707>       Comment  = CHICAGO STORM   100 Year, 3 Hours
01708>       [SDT=10.00:SDUR=   3.00:PTOT=  71.66]
01709> #*******************************************************************************
01710> R0099:C00003------------------------------------------------------------------------------
01711>      DEFAULT VALUES
01712>       Filename = C:\Temp\20250910-PostDev\Ottawa.val
01713>       ICASEdv  = 1 (read and print data)
01714>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
01715>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
01716>       Horton's infiltration equation parameters:
01717>       [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
01718>       Parameters for PERVIOUS surfaces in STANDHYD:
01719>       [IApe=   4.67 mm] [LGP=40.00 m] [MNP= .250]
01720>       Parameters for IMPERVIOUS surfaces in STANDHYD:
01721>       [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
01722>       Parameters used in NASHYD:
01723>       [Ia=   4.67 mm] [N= 3.00]
01724>       Average monthly Pan Evaporation data in    (mm)
01725>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01726>     .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01727>       Average monthly Potential Evapotranspiration in    (mm)
01728>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01729>     .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01730> #*******************************************************************************
01731> # EXT1
01732> #*******************************************************************************
01733> R0099:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01734>     CALIB NASHYD          1.0 01:EXT1         3.21     .167 No_date    1:52   34.39 .480     .000
01735>       [CN= 80.0: N= 3.00: Tp=  .72]
01736> #*******************************************************************************
01737> # EXT2
01738> #*******************************************************************************
01739> R0099:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01740>     CALIB NASHYD          1.0 01:EXT2          .28     .031 No_date    1:22   40.14 .560     .000
01741>       [CN= 85.0: N= 3.00: Tp=  .33]
01742> #*******************************************************************************
01743> # EXT3
01744> #*******************************************************************************
01745> R0099:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01746>     CALIB NASHYD          1.0 01:EXT3          .56     .052 No_date    1:21   34.39 .480     .000
01747>       [CN= 80.0: N= 3.00: Tp=  .32]
01748> #*******************************************************************************
01749> # EXT4
01750> #*******************************************************************************
01751> R0099:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01752>     CALIB NASHYD          1.0 01:EXT4          .31     .029 No_date    1:19   33.37 .466     .000
01753>       [CN= 79.0: N= 3.00: Tp=  .29]
01754> #*******************************************************************************
01755> # EXT5
01756> #*******************************************************************************
01757> R0099:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01758>     CALIB NASHYD          1.0 01:EXT5          .59     .038 No_date    1:32   30.49 .425     .000
01759>       [CN= 76.0: N= 3.00: Tp=  .45]
01760> #*******************************************************************************
01761> # EXT6
01762> #*******************************************************************************
01763> R0099:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01764>     CALIB NASHYD          1.0 01:EXT6          .86     .064 No_date    1:39   40.14 .560     .000
01765>       [CN= 85.0: N= 3.00: Tp=  .56]
01766> #*******************************************************************************
01767> # EXT7
01768> #*******************************************************************************
01769> R0099:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01770>     CALIB NASHYD          1.0 01:EXT7          .47     .048 No_date    1:21   37.71 .526     .000
01771>       [CN= 83.0: N= 3.00: Tp=  .32]
01772> #*******************************************************************************
01773> # EXT8
01774> #*******************************************************************************
01775> R0099:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01776>     CALIB NASHYD          1.0 01:EXT8          .83     .062 No_date    1:29   33.37 .466     .000
01777>       [CN= 79.0: N= 3.00: Tp=  .42]
01778> #*******************************************************************************
01779> # EXT9
01780> #*******************************************************************************
01781> R0099:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01782>     CALIB NASHYD          1.0 01:EXT9         3.57     .218 No_date    1:34   30.49 .425     .000
01783>       [CN= 76.0: N= 3.00: Tp=  .48]
01784> #*******************************************************************************
01785> # EXT9a
01786> #*******************************************************************************
01787> R0099:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01788>     CALIB NASHYD          1.0 01:EXT9a         .01     .003 No_date    1:00   32.37 .452     .000
01789>       [CN= 78.0: N= 3.00: Tp=  .04]
01790> #*******************************************************************************
01791> # EXT10
01792> #*******************************************************************************
01793> R0099:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01794>     CALIB NASHYD          1.0 01:EXT10         .20     .012 No_date    1:30   26.28 .367     .000
01795>       [CN= 71.0: N= 3.00: Tp=  .42]
01796> #*******************************************************************************
01797> # Pre2_1
01798> #*******************************************************************************
01799> R0099:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
01800> *   CALIB NASHYD          1.0 01:Pre2_1        .01     .003 No_date    1:00   27.07 .378     .000
```

```
      [CN= 72.0: N= 3.00: Tp=  .03]
********************************************************************************
# Pre2_2
********************************************************************************
R0099:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD            1.0 01:Pre2_2          .00     .001 No_date    1:00   32.36 .451    .000
      [CN= 78.0: N= 3.00: Tp=  .02]
********************************************************************************
# Pre9_1
********************************************************************************
R0099:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:Pre9_1          .44     .027 No_date    1:27   26.29 .367    .000
      [CN= 71.0: N= 3.00: Tp=  .38]
********************************************************************************
# Pre9_2
********************************************************************************
R0099:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD            1.0 01:Pre9_2          .01     .002 No_date    1:00   18.43 .257    .000
      [CN= 59.0: N= 3.00: Tp=  .03]
********************************************************************************
# Pre10_1
********************************************************************************
R0099:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:Pre10_1         .80     .058 No_date    1:20   26.29 .367    .000
      [CN= 71.0: N= 3.00: Tp=  .29]
********************************************************************************
# Pre11_1
********************************************************************************
R0099:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:Pre11_1         .07     .008 No_date    1:13   32.37 .452    .000
      [CN= 78.0: N= 3.00: Tp=  .21]
********************************************************************************
# Site 1
********************************************************************************
R0099:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      DESIGN STANDHYD         1.0 01:S1-B1           .42     .127 No_date    1:00   46.20 .645    .000
        [XIMP=.34:TIMP=.44]
        [SLP=1.00:DT= 1.00]
        [LOSS= 1 : HORTONS]
********************************************************************************
# Site 1 - Roof
********************************************************************************
R0099:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      DESIGN STANDHYD         1.0 01:S1-Roof         .06     .032 No_date    1:00   69.68 .972    .000
        [XIMP=.99:TIMP=.99]
        [SLP= .50:DT= 1.00]
        [LOSS= 1 : HORTONS]
********************************************************************************
R0099:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE RESERVOIR ->      1.0 02:S1-Roof         .06     .032 No_date    1:00   69.68  n/a    .000
                  out <=      1.0 01:S1-Roof-Ou      .06     .003 No_date    1:12   69.70  n/a    .000
              overflow <=     1.0 03:S1-Roof-Ov      .00     .000 No_date    0:00     .00  n/a    .000
     {MxStoUsed=.3059E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0099:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:S1-B1           .42     .127 No_date    1:00   46.20  n/a    .000
                        +     1.0 02:S1-Roof-Ou      .06     .003 No_date    1:30   69.68  n/a    .000
                        +     1.0 02:S1-Roof-Ov      .00     .000 No_date    0:00     .00  n/a    .000
                      SUM=    1.0 01:S1TE1-IN        .48     .130 No_date    1:00   49.38  n/a    .000
R0099:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE RESERVOIR ->      1.0 02:S1TE1-IN        .48     .130 No_date    1:00   49.38  n/a    .000
                  out <=      1.0 01:S1TE1-Out       .48     .008 No_date    1:51   49.38  n/a    .000
              overflow <=     1.0 03:S1TE1-Over      .00     .000 No_date    0:00     .00  n/a    .000
     {MxStoUsed=.1579E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
********************************************************************************
# Site 2
********************************************************************************
R0099:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      DESIGN STANDHYD         1.0 01:S2-B3           .35     .105 No_date    1:00   44.99 .628    .000
        [XIMP=.31:TIMP=.41]
        [SLP=1.00:DT= 1.00]
        [LOSS= 1 : HORTONS]
********************************************************************************
# Site 2 - Roof
********************************************************************************
R0099:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      DESIGN STANDHYD         1.0 01:S2-Roof         .09     .046 No_date    1:00   69.68 .972    .000
        [XIMP=.99:TIMP=.99]
        [SLP= .50:DT= 1.00]
        [LOSS= 1 : HORTONS]
********************************************************************************
R0099:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE RESERVOIR ->      1.0 02:S2-Roof         .09     .046 No_date    1:00   69.68  n/a    .000
                  out <=      1.0 01:S2-Roof-Ou      .09     .009 No_date    1:12   69.70  n/a    .000
              overflow <=     1.0 03:S2-Roof-Ov      .00     .000 No_date    0:00     .00  n/a    .000
     {MxStoUsed=.3248E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0099:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:S2-B3           .35     .105 No_date    1:00   44.99  n/a    .000
                        +     1.0 02:S2-Roof-Ou      .09     .009 No_date    1:12   69.70  n/a    .000
                        +     1.0 02:S2-Roof-Ov      .00     .000 No_date    0:00     .00  n/a    .000
                      SUM=    1.0 01:S1TE2-IN        .45     .114 No_date    1:00   50.13  n/a    .000
R0099:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE RESERVOIR ->      1.0 02:S1TE2-IN        .45     .114 No_date    1:00   50.13  n/a    .000
                  out <=      1.0 01:S1TE2-Out       .45     .009 No_date    2:11   50.13  n/a    .000
              overflow <=     1.0 03:S1TE2-Over      .00     .000 No_date    0:00     .00  n/a    .000
     {MxStoUsed=.1499E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0099:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:S1TE1-Out       .48     .008 No_date    1:51   49.38  n/a    .000
                        +     1.0 02:S1TE1-Over      .00     .000 No_date    0:00     .00  n/a    .000
                      SUM=    1.0 01:Site1           .48     .008 No_date    1:51   49.38  n/a    .000
R0099:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:S1TE2-Out       .45     .009 No_date    2:11   50.13  n/a    .000
                        +     1.0 02:S1TE2-Over      .00     .000 No_date    0:00     .00  n/a    .000
                      SUM=    1.0 01:Site2           .45     .009 No_date    2:11   50.13  n/a    .000
R0099:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:EXT2            .28     .031 No_date    1:22   40.14  n/a    .000
                        +     1.0 02:Pre2_1          .01     .003 No_date    1:00   27.07  n/a    .000
                        +     1.0 02:Site1           .48     .008 No_date    1:51   49.38  n/a    .000
                        +     1.0 02:Site2           .45     .009 No_date    2:11   50.13  n/a    .000
                      SUM=    1.0 01:J1              1.23    .048 No_date    1:22   47.27  n/a    .000
R0099:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:J1              1.23    .048 No_date    1:22   47.27  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R1              1.23    .047 No_date    1:28   47.27  n/a    .000
        [L/S/n=  143./ .394/.035]
        [Vmax=  .344:Dmax=  .141]
R0099:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:R1              1.23    .047 No_date    1:28   47.27  n/a    .000
                        +     1.0 02:EXT3            .56     .052 No_date    1:21   34.39  n/a    .000
                        +     1.0 02:EXT1            3.21    .167 No_date    1:52   34.39  n/a    .000
                      SUM=    1.0 01:J2              5.00    .239 No_date    1:41   37.55  n/a    .000
R0099:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:J2              5.00    .239 No_date    1:41   37.55  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R2              5.00    .239 No_date    1:42   37.55  n/a    .000
        [L/S/n=   73./ .425/.035]
        [Vmax=  .517:Dmax=  .276]
R0099:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:R2              5.00    .239 No_date    1:42   37.55  n/a    .000
                        +     1.0 02:EXT4            .31     .029 No_date    1:19   33.37  n/a    .000
                      SUM=    1.0 01:J3              5.31    .258 No_date    1:39   37.31  n/a    .000
R0099:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:J3              5.31    .258 No_date    1:39   37.31  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R3              5.31    .256 No_date    1:42   37.31  n/a    .000
        [L/S/n=   92./ .274/.035]
        [Vmax=  .423:Dmax=  .285]
R0099:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:R3              5.31    .256 No_date    1:42   37.31  n/a    .000
                        +     1.0 02:EXT5            .59     .038 No_date    1:32   30.49  n/a    .000
                      SUM=    1.0 01:J4              5.90    .292 No_date    1:40   36.62  n/a    .000
R0099:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:J4              5.90    .292 No_date    1:40   36.62  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R4              5.90    .278 No_date    1:51   36.62  n/a    .000
        [L/S/n=  251./ .190/.035]
        [Vmax=  .418:Dmax=  .324]
R0099:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:R4              5.90    .278 No_date    1:51   36.62  n/a    .000
                        +     1.0 02:EXT6            .86     .064 No_date    1:39   40.14  n/a    .000
                        +     1.0 02:EXT7            .47     .048 No_date    1:21   37.71  n/a    .000
                      SUM=    1.0 01:J5              7.23    .368 No_date    1:45   37.11  n/a    .000
R0099:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:J5              7.23    .368 No_date    1:45   37.11  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R5              7.23    .364 No_date    1:50   37.11  n/a    .000
        [L/S/n=  237./ .644/.035]
        [Vmax=  .689:Dmax=  .305]
R0099:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:Pre10_1         .80     .058 No_date    1:20   26.29  n/a    .000
                        +     1.0 02:Pre9_2          .01     .002 No_date    1:00   18.43  n/a    .000
                        +     1.0 02:Pre2_2          .00     .001 No_date    1:00   32.36  n/a    .000
                      SUM=    1.0 01:Pre             .81     .059 No_date    1:20   26.17  n/a    .000
R0099:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:Pre             .81     .059 No_date    1:20   26.17  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R6              .81     .058 No_date    1:22   26.17  n/a    .000
        [L/S/n=   77./ .776/.035]
        [Vmax=  .492:Dmax=  .043]
R0099:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:Pre9_1          .44     .027 No_date    1:27   26.29  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R7              .44     .026 No_date    1:30   26.29  n/a    .000
        [L/S/n=  159./1.576/.035]
        [Vmax=  .797:Dmax=  .008]
R0099:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:R6              .81     .058 No_date    1:22   26.50  n/a    .000
                        +     1.0 02:EXT10           .20     .012 No_date    1:30   26.28  n/a    .000
                      SUM=    1.0 01:J6              1.02    .069 No_date    1:23   26.46  n/a    .000
R0099:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:J6              1.02    .069 No_date    1:23   26.46  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R8              1.02    .068 No_date    1:27   26.46  n/a    .000
        [L/S/n=   79./ .522/.035]
        [Vmax=  .423:Dmax=  .051]
R0099:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:R8              1.02    .068 No_date    1:27   26.63  n/a    .000
                        +     1.0 02:R7              .44     .032 No_date    4:51   26.73  n/a    .000
                      SUM=    1.0 01:J7              1.46    .094 No_date    1:28   26.66  n/a    .000
R0099:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE CHANNEL   ->      1.0 02:J7              1.46    .094 No_date    1:28   26.66  n/a    .000
        [RDT= 1.00] out<-     1.0 01:R9              1.46    .094 No_date    1:29   26.66  n/a    .000
        [L/S/n=   29./ .887/.035]
        [Vmax=  .543:Dmax=  .064]
R0099:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ADD HYD                 1.0 02:EXT9            3.57    .218 No_date    1:34   30.49  n/a    .000
                        +     1.0 02:R9              1.46    .094 No_date    1:29   26.77  n/a    .000
                        +     1.0 02:EXT8             .83    .062 No_date    1:29   33.37  n/a    .000
                        +     1.0 02:R5              7.23    .364 No_date    1:50   37.11  n/a    .000
                      SUM=    1.0 01:J8              13.09   .700 No_date    1:41   33.92  n/a    .000
R0099:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      ROUTE PIPE      ->      1.0 02:J8              13.09   .700 No_date    1:41   33.92  n/a    .000
 *  [RDT= 1.00] out<-     1.0 01:Outlet          13.09   .700 No_date    1:41   33.92  n/a    .000
        [L/S/n=   8./ .010/.013]
        [Vmax=  .455:Dmax= 1.227)
        [Din=  .53:Dused= 1.49)
########################################################################
# STORMS
########################################################################
   ** END OF RUN :  101


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

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

RUN#:COMMAND#
R0102:C00001------------------------------------------------------------------------
      START
        [TZERO =    .00 hrs on        0]
        [METOUT=   2   (1=imperial, 2=metric output)]
        [NSTORM=   1 ]
        [NRUN  = 0102 ]
********************************************************************************
#  SWMHYMO  / INPUT DATA FILE
********************************************************************************
#  Project Name  : [5923 Ottawa St]
#  Project Number: [P2710(e01)]
#  Date          : [2025 April 28]
#  Modeller      : [MM]
#  Company       : JFSA Canada Inc.
#  License #     : 2549237
********************************************************************************
# Model developed to simulate runoff from subcatchments under post development conditions
********************************************************************************
R0102:C00002------------------------------------------------------------------------
      READ STORM
        Filename = STORM.001
        Comment  = 2 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
        [SDT=10.00:SDUR=  24.00:PTOT=  48.46]
********************************************************************************
R0102:C00003------------------------------------------------------------------------
      DEFAULT VALUES
        Filename = C:\Temp\20250910-PostDev\Ottawa.val
        ICASEdv  = 1 (read and print data)
        FileTitle= File comment: [Parameters for City of Ottawa Projects]
        THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
        Horton's infiltration equation parameters:
        [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
        Parameters for PERVIOUS surfaces in STANDHYD:
        [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
        Parameters for IMPERVIOUS surfaces in STANDHYD:
        [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
        Parameters used in NASHYD:
        [Ia=   4.67 mm] [N= 3.00]
        Average monthly Pan Evaporation data in    (mm)
   JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
  .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
        Average monthly Potential Evapotranspiration in    (mm)
   JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
  .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
********************************************************************************
# EXT1
********************************************************************************
R0102:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT1            3.21    .058 No_date    12:42  17.87 .369    .000
      [CN= 80.0: N= 3.00: Tp=  .72]
********************************************************************************
# EXT2
********************************************************************************
R0102:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT2            .28     .011 No_date    12:14  21.63 .446    .000
      [CN= 85.0: N= 3.00: Tp=  .33]
********************************************************************************
# EXT3
********************************************************************************
R0102:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT3            .56     .018 No_date    12:13  17.87 .369    .000
      [CN= 80.0: N= 3.00: Tp=  .32]
********************************************************************************
# EXT4
********************************************************************************
R0102:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT4            .31     .010 No_date    12:12  17.22 .355    .000
      [CN= 79.0: N= 3.00: Tp=  .29]
********************************************************************************
# EXT5
********************************************************************************
R0102:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT5            .59     .013 No_date    12:22  15.46 .319    .000
      [CN= 76.0: N= 3.00: Tp=  .45]
********************************************************************************
# EXT6
********************************************************************************
R0102:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT6            .86     .023 No_date    12:30  21.64 .446    .000
      [CN= 85.0: N= 3.00: Tp=  .56]
********************************************************************************
# EXT7
********************************************************************************
R0102:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT7            .47     .017 No_date    12:13  20.01 .413    .000
      [CN= 83.0: N= 3.00: Tp=  .32]
********************************************************************************
# EXT8
********************************************************************************
R0102:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT8            .83     .021 No_date    12:20  17.22 .355    .000
      [CN= 79.0: N= 3.00: Tp=  .42]
********************************************************************************
# EXT9
********************************************************************************
R0102:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT9            3.57    .074 No_date    12:25  15.46 .319    .000
      [CN= 76.0: N= 3.00: Tp=  .48]
********************************************************************************
# EXT9a
********************************************************************************
R0102:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT9a           .01     .001 No_date    12:00  16.59 .342    .000
      [CN= 78.0: N= 3.00: Tp=  .04]
********************************************************************************
# EXT10
********************************************************************************
R0102:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:EXT10           .20     .004 No_date    12:20  12.99 .268    .000
      [CN= 71.0: N= 3.00: Tp=  .42]
********************************************************************************
# Pre2_1
********************************************************************************
R0102:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD            1.0 01:Pre2_1          .01     .001 No_date    12:00  13.44 .277    .000
      [CN= 72.0: N= 3.00: Tp=  .03]
********************************************************************************
# Pre2_2
********************************************************************************
R0102:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD            1.0 01:Pre2_2          .00     .000 No_date    12:00  16.60 .343    .000
      [CN= 78.0: N= 3.00: Tp=  .02]
********************************************************************************
# Pre9_1
********************************************************************************
R0102:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:Pre9_1          .44     .009 No_date    12:18  12.99 .268    .000
      [CN= 71.0: N= 3.00: Tp=  .38]
********************************************************************************
# Pre9_2
********************************************************************************
R0102:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD            1.0 01:Pre9_2          .01     .001 No_date    12:00   8.70 .179    .000
      [CN= 59.0: N= 3.00: Tp=  .03]
********************************************************************************
# Pre10_1
********************************************************************************
R0102:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:Pre10_1         .80     .020 No_date    12:12  12.99 .268    .000
      [CN= 71.0: N= 3.00: Tp=  .29]
********************************************************************************
# Pre11_1
********************************************************************************
R0102:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      CALIB NASHYD            1.0 01:Pre11_1         .07     .003 No_date    12:07  16.60 .343    .000
      [CN= 78.0: N= 3.00: Tp=  .21]
********************************************************************************
# Site 1
********************************************************************************
R0102:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
      DESIGN STANDHYD         1.0 01:S1-B1           .42     .034 No_date    12:00  22.59 .466    .000
        [XIMP=.34:TIMP=.44]
```

```
02161>       [SLP=1.00:DT= 1.00]
02162>       [LOSS= 1 : HORTONS]
02163> *******************************************************************************
02164> # Site 1 - Roof
02165> *******************************************************************************
02166> R0102:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02167>      DESIGN STANDHYD       1.0 01:S1-Roof          .06     .011 No_date   12:00   46.49 .959     .000
02168>        [XIMP=.99:TIMF=.99]
02169>        [SLP=  .50:DT= 1.00]
02170>        [LOSS= 1 : HORTONS]
02171> R0102:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02172>      ROUTE RESERVOIR ->    1.0 02:S1-Roof          .06     .011 No_date   12:00   46.49  n/a     .000
02173>                      out <=    1.0 01:S1-Roof-Ou     .06     .001 No_date   12:07   46.49  n/a     .000
02174>                overflow <=    1.0 03:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
02175>      {MxStoUsed=.1393E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
02176> R0102:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02177>      ADD HYD               1.0 02:S1-B1            .42     .034 No_date   12:00   22.59  n/a     .000
02178>                        +     1.0 02:S1-Roof-Ou     .06     .001 No_date   12:07   46.49  n/a     .000
02179>                        +     1.0 02:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
02180>                      SUM=    1.0 01:SITE1-IN       .48     .036 No_date   12:00   25.82  n/a     .000
02181> R0102:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02182>      ROUTE RESERVOIR ->    1.0 02:SITE1-IN       .48     .036 No_date   12:00   25.82  n/a     .000
02183>                      out <=    1.0 01:SITE1-Out      .48     .006 No_date   12:35   25.82  n/a     .000
02184>                overflow <=    1.0 03:SITE1-Over     .00     .000 No_date    0:00     .00  n/a     .000
02185>      {MxStoUsed=.4323E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
02186> *******************************************************************************
02187> # Site 2
02188> *******************************************************************************
02189> R0102:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02190>      DESIGN STANDHYD       1.0 01:S2-B3            .35     .028 No_date   12:00   21.44 .442     .000
02191>        [XIMP=.31:TIMF=.41]
02192>        [SLP=1.00:DT= 1.00]
02193>        [LOSS= 1 : HORTONS]
02194> *******************************************************************************
02195> # Site 2 - Roof
02196> *******************************************************************************
02197> R0102:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02198>      DESIGN STANDHYD       1.0 01:S2-Roof          .09     .015 No_date   12:00   46.49 .959     .000
02199>        [XIMP=.99:TIMF=.99]
02200>        [SLP=  .50:DT= 1.00]
02201>        [LOSS= 1 : HORTONS]
02202> *******************************************************************************
02203> R0102:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02204>      ROUTE RESERVOIR ->    1.0 02:S2-Roof          .09     .015 No_date   12:00   46.49  n/a     .000
02205>                      out <=    1.0 01:S2-Roof-Ou     .09     .006 No_date   12:03   46.49  n/a     .000
02206>                overflow <=    1.0 03:S2-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
02207>      {MxStoUsed=.1067E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
02208> R0102:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02209>      ADD HYD               1.0 02:S2-B3            .35     .028 No_date   12:00   21.44  n/a     .000
02210>                        +     1.0 02:S2-Roof-Ou     .09     .006 No_date   12:03   46.49  n/a     .000
02211>                        +     1.0 02:S2-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
02212>                      SUM=    1.0 01:SITE2-IN       .45     .034 No_date   12:00   26.65  n/a     .000
02213> R0102:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02214>      ROUTE RESERVOIR ->    1.0 02:SITE2-IN       .45     .034 No_date   12:00   26.65  n/a     .000
02215>                      out <=    1.0 01:SITE2-Out      .45     .007 No_date   12:38   26.65  n/a     .000
02216>                overflow <=    1.0 03:SITE2-Over     .00     .000 No_date    0:00     .00  n/a     .000
02217>      {MxStoUsed=.4496E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
02218> R0102:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02219>      ADD HYD               1.0 02:SITE1-Out        .48     .006 No_date   12:35   25.82  n/a     .000
02220>                        +     1.0 02:SITE1-Over     .00     .000 No_date    0:00     .00  n/a     .000
02221>                      SUM=    1.0 01:Site1          .48     .006 No_date   12:35   25.82  n/a     .000
02222> R0102:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02223>      ADD HYD               1.0 02:SITE2-Out        .45     .007 No_date   12:38   26.65  n/a     .000
02224>                        +     1.0 02:SITE2-Over     .00     .000 No_date    0:00     .00  n/a     .000
02225>                      SUM=    1.0 01:Site2          .45     .007 No_date   12:38   26.65  n/a     .000
02226> R0102:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02227>      ADD HYD               1.0 02:EXT2             .28     .011 No_date   12:14   21.63  n/a     .000
02228>                        +     1.0 02:Pre2_1         .01     .001 No_date   12:00   13.44  n/a     .000
02229>                        +     1.0 02:Site1          .48     .006 No_date   12:35   25.82  n/a     .000
02230>                        +     1.0 02:Site2          .45     .007 No_date   12:38   26.65  n/a     .000
02231>                      SUM=    1.0 01:J1             1.23     .024 No_date   12:16   25.02  n/a     .000
02232> R0102:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02233>      ROUTE CHANNEL   ->    1.0 02:J1             1.23     .024 No_date   12:16   25.02  n/a     .000
02234>        [RD= 1.00] out<-    1.0 01:R1             1.23     .023 No_date   12:23   25.02  n/a     .000
02235>        [L/S/n=  143./ .394/.035]
02236>        {Vmax=  .279:Dmax=  .103}
02237> R0102:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02238>      ADD HYD               1.0 02:R1             1.23     .023 No_date   12:23   25.02  n/a     .000
02239>                        +     1.0 02:EXT3           .56     .018 No_date   12:13   17.87  n/a     .000
02240>                        +     1.0 02:EXT1          3.21     .058 No_date   12:42   17.87  n/a     .000
02241>                      SUM=    1.0 01:J2             5.00     .091 No_date   12:31   19.62  n/a     .000
02242> R0102:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02243>      ROUTE CHANNEL   ->    1.0 02:J2             5.00     .091 No_date   12:31   19.62  n/a     .000
02244>        [RD= 1.00] out<-    1.0 01:R2             5.00     .091 No_date   12:33   19.62  n/a     .000
02245>        [L/S/n=   73./ .425/.035]
02246>        {Vmax=  .399:Dmax=  .186}
02247> R0102:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02248>      ADD HYD               1.0 02:R2             5.00     .091 No_date   12:33   19.62  n/a     .000
02249>                        +     1.0 02:EXT4           .31     .010 No_date   12:12   17.22  n/a     .000
02250>                      SUM=    1.0 01:J3             5.31     .097 No_date   12:30   19.48  n/a     .000
02251> R0102:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02252>      ROUTE CHANNEL   ->    1.0 02:J3             5.31     .097 No_date   12:30   19.48  n/a     .000
02253>        [RD= 1.00] out<-    1.0 01:R3             5.31     .096 No_date   12:34   19.48  n/a     .000
02254>        [L/S/n=   92./ .274/.035]
02255>        {Vmax=  .327:Dmax=  .193}
02256> R0102:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02257>      ADD HYD               1.0 02:R3             5.31     .096 No_date   12:34   19.48  n/a     .000
02258>                        +     1.0 02:EXT5           .59     .013 No_date   12:22   15.46  n/a     .000
02259>                      SUM=    1.0 01:J4             5.90     .108 No_date   12:32   19.08  n/a     .000
02260> R0102:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02261>      ROUTE CHANNEL   ->    1.0 02:J4             5.90     .108 No_date   12:32   19.08  n/a     .000
02262>        [RD= 1.00] out<-    1.0 01:R4             5.90     .100 No_date   12:45   19.08  n/a     .000
02263>        [L/S/n=  251./ .190/.035]
02264>        {Vmax=  .310:Dmax=  .210}
02265> R0102:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02266>      ADD HYD               1.0 02:R4             5.90     .100 No_date   12:45   19.08  n/a     .000
02267>                        +     1.0 02:EXT6           .86     .023 No_date   12:30   21.64  n/a     .000
02268>                        +     1.0 02:EXT7           .47     .017 No_date   12:13   20.01  n/a     .000
02269>                      SUM=    1.0 01:J5             7.23     .130 No_date   12:39   19.44  n/a     .000
02270> R0102:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02271>      ROUTE CHANNEL   ->    1.0 02:J5             7.23     .130 No_date   12:39   19.44  n/a     .000
02272>        [RD= 1.00] out<-    1.0 01:R5             7.23     .128 No_date   12:46   19.44  n/a     .000
02273>        [L/S/n=  237./ .644/.035]
02274>        {Vmax=  .503:Dmax=  .201}
02275> R0102:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02276>      ADD HYD               1.0 02:Pre10_1          .80     .020 No_date   12:12   12.99  n/a     .000
02277>                        +     1.0 02:Pre9_2         .01     .001 No_date   12:00    8.70  n/a     .000
02278>                        +     1.0 02:Pre2_2         .00     .000 No_date   12:00   16.60  n/a     .000
02279>                      SUM=    1.0 01:Pre            .81     .020 No_date   12:12   12.93  n/a     .000
02280> R0102:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02281>      ROUTE CHANNEL   ->    1.0 02:Pre            .81     .020 No_date   12:12   12.93  n/a     .000
02282>        [RD= 1.00] out<-    1.0 01:R6             .81     .019 No_date   12:15   12.93  n/a     .000
02283>        [L/S/n=   77./ .776/.035]
02284>        {Vmax=  .492:Dmax=  .014}
02285> R0102:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02286>      ROUTE CHANNEL   ->    1.0 02:Pre9_1         .44     .009 No_date   12:18   12.99  n/a     .000
02287>        [RD= 1.00] out<-    1.0 01:R7             .44     .009 No_date   12:21   12.99  n/a     .000
02288>        [L/S/n=  159./1.576/.035]
02289>        {Vmax=  .797:Dmax=  .003}
02290> R0102:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02291>      ADD HYD               1.0 02:R6             .81     .019 No_date   12:15   12.96  n/a     .000
02292>                        +     1.0 02:EXT10          .20     .004 No_date   12:20   12.99  n/a     .000
02293>                      SUM=    1.0 01:J6             1.02     .023 No_date   12:15   12.97  n/a     .000
02294> R0102:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02295>      ROUTE CHANNEL   ->    1.0 02:J6             1.02     .023 No_date   12:15   12.97  n/a     .000
02296>        [RD= 1.00] out<-    1.0 01:R8             1.02     .023 No_date   12:19   12.97  n/a     .000
02297>        [L/S/n=   79./ .522/.035]
02298>        {Vmax=  .423:Dmax=  .017}
02299> R0102:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02300>      ADD HYD               1.0 02:R8             1.02     .023 No_date   12:19   12.99  n/a     .000
02301>                        +     1.0 02:R7             .44     .009 No_date   12:21   13.02  n/a     .000
02302>                      SUM=    1.0 01:J7             1.46     .031 No_date   12:19   13.01  n/a     .000
02303> R0102:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02304>      ROUTE CHANNEL   ->    1.0 02:J7             1.46     .031 No_date   12:19   13.01  n/a     .000
02305>        [RD= 1.00] out<-    1.0 01:R9             1.46     .031 No_date   12:20   13.01  n/a     .000
02306>        [L/S/n=   29./ .887/.035]
02307>        {Vmax=  .543:Dmax=  .021}
02308> R0102:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02309>      ADD HYD               1.0 02:EXT9           3.57     .074 No_date   12:25   15.46  n/a     .000
02310>                        +     1.0 02:R9             1.46     .031 No_date   12:20   13.02  n/a     .000
02311>                        +     1.0 02:EXT8           .83     .021 No_date   12:20   17.22  n/a     .000
02312>                        +     1.0 02:R5             7.23     .128 No_date   12:46   19.44  n/a     .000
02313>                      SUM=    1.0 01:J8            13.09     .234 No_date   12:33   17.50  n/a     .000
02314> R0102:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02315>      ROUTE PIPE      ->    1.0 02:J8            13.09     .234 No_date   12:33   17.50  n/a     .000
02316> *    [RD= 1.00] out<-    1.0 01:Outlet         13.09     .232 No_date   12:37   17.50  n/a     .000
02317>        [L/S/n=    8./ .010/.013]
02318>        {Vmax=  .346:Dmax=  .813}
02319>        {Din=  .53:Dused=  .99}
02320> ###############################################################################
02321> # STORMS
02322> ###############################################################################
02323>  ** END OF RUN :  104
02324>
02325> *******************************************************************************
02326>
02327>
02328>
02329>
02330>
02331>  RUN#:COMMAND#
02332> R0105:C00001------------
02333>       START
02334>         [TZERO =     .00 hrs on        0]
02335>         [METOUT=   2     (1=imperial, 2=metric output)]
02336>         [NSTORM=   1 ]
02337>         [NRUN  = 0105 ]
02338> *******************************************************************************
02339> #  SWMHYMO / INPUT DATA FILE
02340> *******************************************************************************
02341> #  Project Name  : [5923 Ottawa St]
02342> #  Project Number: [P2710(e01)]
02343> #  Date          : [2025 April 28]
02344> #  Modeller      : [MM]
02345> #  Company       : JFSA Canada Inc.
02346> #  License #     : 2549237
02347> *******************************************************************************
02348> # Model developed to simulate runoff from subcatchments under post development conditions
02349> *******************************************************************************
02350> R0105:C00002------------------------------------------------------------------------------
02351>       READ STORM
02352>         Filename = STORM.001
02353>         Comment  = 5 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
02354>         [SDT=10.00:SDUR=  24.00:PTOT=  64.11]
02355> *******************************************************************************
02356> R0105:C00003------------------------------------------------------------------------------
02357>       DEFAULT VALUES
02358>         Filename = C:\Temp\20250910-PostDev\Ottawa.val
02359>         ICASEdv  = 1 (read and print data)
02360>         FileTitle= File comment: [Parameters for City of Ottawa Projects]
02361>                    THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
02362>         Horton's infiltration equation parameters:
02363>         [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
02364>         Parameters for PERVIOUS surfaces in STANDHYD:
02365>         [IAper=   4.67 mm] [LGP=40.00 m] [MMP= .250]
02366>         Parameters for IMPERVIOUS surfaces in STANDHYD:
02367>         [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
02368>         Parameters used in NASHYD:
02369>         [Ia=   4.67 mm] [N= 3.00]
02370>         Average monthly Pan Evaporation data in    (mm)
02371>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
02372>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
02373>         Average monthly Potential Evapotranspiration in    (mm)
02374>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
02375>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
02376> *******************************************************************************
02377> # EXT1
02378> *******************************************************************************
02379> R0105:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02380>      CALIB NASHYD          1.0 01:EXT1           3.21     .095 No_date   12:41   28.73 .448     .000
02381>        [CN= 80.0: N= 3.00: Tp=  .72]
02382> *******************************************************************************
02383> # EXT2
02384> *******************************************************************************
02385> R0105:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02386>      CALIB NASHYD          1.0 01:EXT2           .28     .018 No_date   12:13   33.88 .529     .000
02387>        [CN= 85.0: N= 3.00: Tp=  .33]
02388> *******************************************************************************
02389> # EXT3
02390> *******************************************************************************
02391> R0105:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02392>      CALIB NASHYD          1.0 01:EXT3           .56     .030 No_date   12:13   28.73 .448     .000
02393>        [CN= 80.0: N= 3.00: Tp=  .32]
02394> *******************************************************************************
02395> # EXT4
02396> *******************************************************************************
02397> R0105:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02398>      CALIB NASHYD          1.0 01:EXT4           .31     .017 No_date   12:11   27.82 .434     .000
02399>        [CN= 79.0: N= 3.00: Tp=  .29]
02400> *******************************************************************************
02401> # EXT5
02402> *******************************************************************************
02403> R0105:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02404>      CALIB NASHYD          1.0 01:EXT5           .59     .021 No_date   12:22   25.29 .395     .000
02405>        [CN= 76.0: N= 3.00: Tp=  .45]
02406> *******************************************************************************
02407> # EXT6
02408> *******************************************************************************
02409> R0105:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02410>      CALIB NASHYD          1.0 01:EXT6           .86     .037 No_date   12:29   33.88 .529     .000
02411>        [CN= 85.0: N= 3.00: Tp=  .56]
02412> *******************************************************************************
02413> # EXT7
02414> *******************************************************************************
02415> R0105:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02416>      CALIB NASHYD          1.0 01:EXT7           .47     .028 No_date   12:13   31.69 .494     .000
02417>        [CN= 83.0: N= 3.00: Tp=  .32]
02418> *******************************************************************************
02419> # EXT8
02420> *******************************************************************************
02421> R0105:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02422>      CALIB NASHYD          1.0 01:EXT8           .83     .035 No_date   12:20   27.82 .434     .000
02423>        [CN= 79.0: N= 3.00: Tp=  .42]
02424> *******************************************************************************
02425> # EXT9
02426> *******************************************************************************
02427> R0105:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02428>      CALIB NASHYD          1.0 01:EXT9          3.57     .123 No_date   12:24   25.30 .395     .000
02429>        [CN= 76.0: N= 3.00: Tp=  .48]
02430> *******************************************************************************
02431> # EXT9a
02432> *******************************************************************************
02433> R0105:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02434>      CALIB NASHYD          1.0 01:EXT9a          .01     .001 No_date   12:00   26.94 .420     .000
02435>        [CN= 78.0: N= 3.00: Tp=  .04]
02436> *******************************************************************************
02437> # EXT10
02438> *******************************************************************************
02439> R0105:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02440>      CALIB NASHYD          1.0 01:EXT10          .20     .006 No_date   12:20   21.64 .338     .000
02441>        [CN= 71.0: N= 3.00: Tp=  .42]
02442> *******************************************************************************
02443> # Pre2_1
02444> *******************************************************************************
02445> R0105:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02446> *    CALIB NASHYD          1.0 01:Pre2_1         .01     .001 No_date   12:00   22.32 .348     .000
02447>        [CN= 72.0: N= 3.00: Tp=  .03]
02448> *******************************************************************************
02449> # Pre2_2
02450> *******************************************************************************
02451> R0105:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02452> *    CALIB NASHYD          1.0 01:Pre2_2         .00     .000 No_date   12:00   26.94 .420     .000
02453>        [CN= 78.0: N= 3.00: Tp=  .02]
02454> *******************************************************************************
02455> # Pre9_1
02456> *******************************************************************************
02457> R0105:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02458>      CALIB NASHYD          1.0 01:Pre9_1         .44     .015 No_date   12:17   21.65 .338     .000
02459>        [CN= 71.0: N= 3.00: Tp=  .38]
02460> *******************************************************************************
02461> # Pre9_2
02462> *******************************************************************************
02463> R0105:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02464> *    CALIB NASHYD          1.0 01:Pre9_2         .01     .001 No_date   12:00   14.97 .233     .000
02465>        [CN= 59.0: N= 3.00: Tp=  .03]
02466> *******************************************************************************
02467> # Pre10_1
02468> *******************************************************************************
02469> R0105:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02470>      CALIB NASHYD          1.0 01:Pre10_1        .80     .033 No_date   12:11   21.65 .338     .000
02471>        [CN= 71.0: N= 3.00: Tp=  .29]
02472> *******************************************************************************
02473> # Pre11_1
02474> *******************************************************************************
02475> R0105:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02476>      CALIB NASHYD          1.0 01:Pre11_1        .07     .004 No_date   12:07   26.94 .420     .000
02477>        [CN= 78.0: N= 3.00: Tp=  .21]
02478> *******************************************************************************
02479> # Site 1
02480> *******************************************************************************
02481> R0105:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02482>      DESIGN STANDHYD       1.0 01:S1-B1            .42     .054 No_date   12:00   32.23 .503     .000
02483>        [XIMP=.34:TIMF=.44]
02484>        [SLP=1.00:DT= 1.00]
02485>        [LOSS= 1 : HORTONS]
02486> *******************************************************************************
02487> # Site 1 - Roof
02488> *******************************************************************************
02489> R0105:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02490>      DESIGN STANDHYD       1.0 01:S1-Roof          .06     .014 No_date   12:00   62.02 .967     .000
02491>        [XIMP=.99:TIMF=.99]
02492>        [SLP=  .50:DT= 1.00]
02493>        [LOSS= 1 : HORTONS]
02494> R0105:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02495>      ROUTE RESERVOIR ->    1.0 02:S1-Roof          .06     .014 No_date   12:00   62.02  n/a     .000
02496>                      out <=    1.0 01:S1-Roof-Ou     .06     .002 No_date   12:06   62.02  n/a     .000
02497>                overflow <=    1.0 03:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
02498>      {MxStoUsed=.1846E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
02499> R0105:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02500>      ADD HYD               1.0 02:S1-B1            .42     .054 No_date   12:00   32.23  n/a     .000
02501>                        +     1.0 02:S1-Roof-Ou     .06     .002 No_date   12:06   62.02  n/a     .000
02502>                        +     1.0 02:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
02503>                      SUM=    1.0 01:SITE1-IN       .48     .056 No_date   12:00   36.26  n/a     .000
02504> R0105:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02505>      ROUTE RESERVOIR ->    1.0 02:SITE1-IN       .48     .056 No_date   12:00   36.26  n/a     .000
02506>                      out <=    1.0 01:SITE1-Out      .48     .007 No_date   12:36   36.26  n/a     .000
02507>                overflow <=    1.0 03:SITE1-Over     .00     .000 No_date    0:00     .00  n/a     .000
02508>      {MxStoUsed=.7158E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
02509> *******************************************************************************
02510> # Site 2
02511> *******************************************************************************
02512> R0105:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02513>      DESIGN STANDHYD       1.0 01:S2-B3            .35     .045 No_date   12:00   30.79 .480     .000
02514>        [XIMP=.31:TIMF=.41]
02515>        [SLP=1.00:DT= 1.00]
02516>        [LOSS= 1 : HORTONS]
02517> *******************************************************************************
02518> # Site 2 - Roof
02519> *******************************************************************************
02520> R0105:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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02521>     DESIGN STANDHYD       1.0 01:S2-Roof         .09     .020 No_date   12:00   62.06 .968     .000
02522>       [XIMP=.99:TIMP=.99]
02523>       [SLP= .50:DT= 1.00]
02524>       [LOSS= 1 : HORTONS]
02525> *******************************************************************************
02526> R0105:C00028------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02527>     ROUTE RESERVOIR ->     1.0 02:S2-Roof         .09     .020 No_date   12:00     .00 n/a       .000
02528>                  out <=    1.0 01:S2-Roof-Ou      .09     .007 No_date   12:03   62.06 n/a       .000
02529>              overflow <=   1.0 03:S2-Roof-Ov      .00     .000 No_date   0:00     .00 n/a       .000
02530>       (MxStoUsed=.1528E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=     0.hrs)
02531> R0105:C00029------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02532>     ADD HYD               1.0 02:S2-B3           .35     .045 No_date   12:00   30.79 n/a       .000
02533>                     +     1.0 02:S2-Roof-Ou      .09     .007 No_date   12:03   62.06 n/a       .000
02534>                     +     1.0 02:S2-Roof-Ov      .00     .000 No_date   0:00     .00 n/a       .000
02535>                   SUM=    1.0 01:SITE2-IN        .45     .051 No_date   12:00   37.29 n/a       .000
02536> R0105:C00030------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02537>     ROUTE RESERVOIR ->     1.0 02:SITE2-IN        .45     .051 No_date   12:00   37.29 n/a       .000
02538>                  out <=    1.0 01:SITE2-Out       .45     .008 No_date   12:41   37.29 n/a       .000
02539>              overflow <=   1.0 03:SITE2-Over      .00     .000 No_date   0:00     .00 n/a       .000
02540>       (MxStoUsed=.8066E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=     0.hrs)
02541> R0105:C00031------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02542>     ADD HYD               1.0 02:SITE1-Out       .48     .007 No_date   12:36   36.26 n/a       .000
02543>                     +     1.0 02:SITE1-Over      .00     .000 No_date   0:00     .00 n/a       .000
02544>                   SUM=    1.0 01:Site1           .48     .007 No_date   12:36   36.26 n/a       .000
02545> R0105:C00032------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02546>     ADD HYD               1.0 02:SITE2-Out       .45     .008 No_date   12:41   37.29 n/a       .000
02547>                     +     1.0 02:SITE2-Over      .00     .000 No_date   0:00     .00 n/a       .000
02548>                   SUM=    1.0 01:Site2           .45     .008 No_date   12:41   37.29 n/a       .000
02549> R0105:C00033------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02550>     ADD HYD               1.0 02:EXT2            .28     .018 No_date   12:13   33.88 n/a       .000
02551>                     +     1.0 02:Pre2_1          .01     .001 No_date   12:00   22.32 n/a       .000
02552>                     +     1.0 02:Site1           .48     .007 No_date   12:36   36.26 n/a       .000
02553>                     +     1.0 02:Site2           .45     .008 No_date   12:41   37.29 n/a       .000
02554>                   SUM=    1.0 01:J1             1.23     .032 No_date   12:15   35.94 n/a       .000
02555> R0105:C00034------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02556>     ROUTE CHANNEL    ->    1.0 02:J1             1.23     .032 No_date   12:15   35.94 n/a       .000
02557>       [RDT= 1.00] out<-    1.0 01:R1             1.23     .031 No_date   12:21   35.94 n/a       .000
02558>       [L/S/n=  143./ .394/.035]
02559>       {Vmax=   .304:Dmax=   .117}
02560> R0105:C00035------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02561>     ADD HYD               1.0 02:R1             1.23     .031 No_date   12:21   35.94 n/a       .000
02562>                     +     1.0 02:EXT3            .56     .030 No_date   12:13   28.73 n/a       .000
02563>                     +     1.0 02:EXT1           3.21     .095 No_date   12:41   28.73 n/a       .000
02564>                   SUM=    1.0 01:J2             5.00     .142 No_date   12:30   30.50 n/a       .000
02565> R0105:C00036------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02566>     ROUTE CHANNEL    ->    1.0 02:J2             5.00     .142 No_date   12:30   30.50 n/a       .000
02567>       [RDT= 1.00] out<-    1.0 01:R2             5.00     .142 No_date   12:32   30.50 n/a       .000
02568>       [L/S/n=  73./ .425/.035]
02569>       {Vmax=   .450:Dmax=   .223}
02570> R0105:C00037------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02571>     ADD HYD               1.0 02:R2             5.00     .142 No_date   12:32   30.50 n/a       .000
02572>                     +     1.0 02:EXT4            .31     .017 No_date   12:11   27.82 n/a       .000
02573>                   SUM=    1.0 01:J3             5.31     .152 No_date   12:28   30.34 n/a       .000
02574> R0105:C00038------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02575>     ROUTE CHANNEL    ->    1.0 02:J3             5.31     .152 No_date   12:28   30.34 n/a       .000
02576>       [RDT= 1.00] out<-    1.0 01:R3             5.31     .151 No_date   12:32   30.34 n/a       .000
02577>       [L/S/n=  92./ .274/.035]
02578>       {Vmax=   .369:Dmax=   .231}
02579> R0105:C00039------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02580>     ADD HYD               1.0 02:R3             5.31     .151 No_date   12:32   30.34 n/a       .000
02581>                     +     1.0 02:EXT5            .59     .021 No_date   12:22   25.29 n/a       .000
02582>                   SUM=    1.0 01:J4             5.90     .171 No_date   12:30   29.84 n/a       .000
02583> R0105:C00040------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02584>     ROUTE CHANNEL    ->    1.0 02:J4             5.90     .171 No_date   12:30   29.84 n/a       .000
02585>       [RDT= 1.00] out<-    1.0 01:R4             5.90     .161 No_date   12:42   29.84 n/a       .000
02586>       [L/S/n=  251./ .190/.035]
02587>       {Vmax=   .358:Dmax=   .256}
02588> R0105:C00041------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02589>     ADD HYD               1.0 02:R4             5.90     .161 No_date   12:42   29.84 n/a       .000
02590>                     +     1.0 02:EXT6            .86     .037 No_date   12:29   33.88 n/a       .000
02591>                     +     1.0 02:EXT7            .47     .028 No_date   12:13   31.69 n/a       .000
02592>                   SUM=    1.0 01:J5             7.23     .211 No_date   12:37   30.44 n/a       .000
02593> R0105:C00042------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02594>     ROUTE CHANNEL    ->    1.0 02:J5             7.23     .211 No_date   12:37   30.44 n/a       .000
02595>       [RDT= 1.00] out<-    1.0 01:R5             7.23     .208 No_date   12:41   30.44 n/a       .000
02596>       [L/S/n=  237./ .644/.035]
02597>       {Vmax=   .589:Dmax=   .245}
02598> R0105:C00043------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02599>     ADD HYD               1.0 02:Pre10_1         .80     .033 No_date   12:11   21.65 n/a       .000
02600>                     +     1.0 02:Pre9_2          .01     .001 No_date   12:00   26.94 n/a       .000
02601>                     +     1.0 02:Pre2_2          .00     .000 No_date   12:00   26.94 n/a       .000
02602>                   SUM=    1.0 01:Pre             .81     .033 No_date   12:11   21.55 n/a       .000
02603> R0105:C00044------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02604>     ROUTE CHANNEL    ->    1.0 02:Pre            .81     .033 No_date   12:11   21.55 n/a       .000
02605>       [RDT= 1.00] out<-    1.0 01:R6             .81     .033 No_date   12:14   21.55 n/a       .000
02606>       [L/S/n=  77./ .776/.035]
02607>       {Vmax=   .492:Dmax=   .024}
02608> R0105:C00045------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02609>     ROUTE CHANNEL    ->    1.0 02:Pre9_1          .44     .015 No_date   12:17   21.65 n/a       .000
02610>       [RDT= 1.00] out<-    1.0 01:R7             .44     .015 No_date   12:21   21.65 n/a       .000
02611>       [L/S/n=  159./1.576/.035]
02612>       {Vmax=   .797:Dmax=   .004}
02613> R0105:C00046------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02614>     ADD HYD               1.0 02:R6             .81     .033 No_date   12:14   21.59 n/a       .000
02615>                     +     1.0 02:EXT10           .20     .006 No_date   12:20   21.64 n/a       .000
02616>                   SUM=    1.0 01:J6             1.02     .039 No_date   12:15   21.60 n/a       .000
02617> R0105:C00047------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02618>     ROUTE CHANNEL    ->    1.0 02:J6             1.02     .039 No_date   12:15   21.60 n/a       .000
02619>       [RDT= 1.00] out<-    1.0 01:R8             1.02     .038 No_date   12:18   21.60 n/a       .000
02620>       [L/S/n=  79./ .522/.035]
02621>       {Vmax=   .423:Dmax=   .029}
02622> R0105:C00048------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02623>     ADD HYD               1.0 02:R8             1.02     .038 No_date   12:18   21.63 n/a       .000
02624>                     +     1.0 02:R7              .44     .015 No_date   12:21   21.72 n/a       .000
02625>                   SUM=    1.0 01:J7             1.46     .053 No_date   12:19   21.66 n/a       .000
02626> R0105:C00049------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02627>     ROUTE CHANNEL    ->    1.0 02:J7             1.46     .053 No_date   12:19   21.66 n/a       .000
02628>       [RDT= 1.00] out<-    1.0 01:R9             1.46     .053 No_date   12:20   21.66 n/a       .000
02629>       [L/S/n=  29./ .887/.035]
02630>       {Vmax=   .543:Dmax=   .036}
02631> R0105:C00050------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02632>     ADD HYD               1.0 02:EXT9           3.57     .123 No_date   12:24   25.30 n/a       .000
02633>                     +     1.0 02:R9             1.46     .053 No_date   12:20   21.67 n/a       .000
02634>                     +     1.0 02:EXT8            .83     .035 No_date   12:20   27.82 n/a       .000
02635>                     +     1.0 02:R5             7.23     .208 No_date   12:41   30.44 n/a       .000
02636>                   SUM=    1.0 01:J8            13.09     .393 No_date   12:31   27.90 n/a       .000
02637> R0105:C00051------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02638>     ROUTE PIPE       ->    1.0 02:J8            13.09     .393 No_date   12:31   27.90 n/a       .000
02639> *   [RDT= 1.00] out<-    1.0 01:Outlet         13.09     .392 No_date   12:33   27.90 n/a       .000
02640>       [L/S/n=   8./ .010/.013]
02641>       {Vmax=   .394:Dmax=   .988}
02642>       [Din=   .53:Dused=  1.20]
02643> ###############################################################################
02644> # STORMS
02645> ###############################################################################
02646>   ** END OF RUN :  109
02647>
02648>  ************************************************************************************
02649>
02650>
02651>
02652>
02653>
02654>  RUN#:COMMAND#
02655> R0110:C00001------------------------------------------------------------------------------
02656>       START
02657>       [TZERO =     .00 hrs on        0]
02658>       [METOUT=   2    (1=imperial, 2=metric output)]
02659>       [NSTORM=   1 ]
02660>       [NRUN   = 0110 ]
02661> ********************************************************************************
02662> #  SWMHYMO  / INPUT DATA FILE
02663> ********************************************************************************
02664> #  Project Name  : [5923 Ottawa St]
02665> #  Project Number: [P2710(e01)]
02666> #  Date          : [2025 April 28]
02667> #  Modeller      : [MM]
02668> #  Company       : JFSA Canada Inc.
02669> #  License #     : 2549237
02670> ********************************************************************************
02671> # Model developed to simulate runoff from subcatchments under post development conditions
02672> ********************************************************************************
02673> R0110:C00002------------------------------------------------------------------------------
02674>       READ STORM
02675>       Filename = STORM.001
02676>       Comment  = 10 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
02677>       [SDT=10.00:SDUR=  24.11:PTOT=  74.35]
02678> ********************************************************************************
02679> R0110:C00003------------------------------------------------------------------------------
02680>       DEFAULT VALUES
02681>       Filename = C:\Temp\20250910-PostDev\Ottawa.val
02682>       ICASEdv  = 1 (read and print data)
02683>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
02684>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
02685>       Horton's infiltration equation parameters:
02686>       [F= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
02687>       Parameters for PERVIOUS surfaces in STANDHYD:
02688>       [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
02689>       Parameters for IMPERVIOUS surfaces in STANDHYD:
02690>       [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
02691>       Parameters used in NASHYD:
02692>       [Ia=   4.67 mm] [N= 3.00]
02693>       Average monthly Fan Evaporation data in     (mm)
02694>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
02695>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
02696>       Average monthly Potential Evapotranspiration in     (mm)
02697>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
02698>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
02699> ********************************************************************************
02700> # EXT1

02701> ********************************************************************************
02702> R0110:C00004------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02703>     CALIB NASHYD          1.0 01:EXT1           3.21     .121 No_date   12:40   36.46 .490     .000
02704>       [CN= 80.0: N= 3.00: Tp=  .72]
02705> ********************************************************************************
02706> # EXT2
02707> ********************************************************************************
02708> R0110:C00005------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02709>     CALIB NASHYD          1.0 01:EXT2            .28     .022 No_date   12:13   42.40 .570     .000
02710>       [CN= 85.0: N= 3.00: Tp=  .33]
02711> ********************************************************************************
02712> # EXT3
02713> ********************************************************************************
02714> R0110:C00006------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02715>     CALIB NASHYD          1.0 01:EXT3            .56     .038 No_date   12:13   36.46 .490     .000
02716>       [CN= 80.0: N= 3.00: Tp=  .32]
02717> ********************************************************************************
02718> # EXT4
02719> ********************************************************************************
02720> R0110:C00007------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02721>     CALIB NASHYD          1.0 01:EXT4            .31     .022 No_date   12:11   35.39 .476     .000
02722>       [CN= 79.0: N= 3.00: Tp=  .29]
02723> ********************************************************************************
02724> # EXT5
02725> ********************************************************************************
02726> R0110:C00008------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02727>     CALIB NASHYD          1.0 01:EXT5            .59     .028 No_date   12:22   32.39 .436     .000
02728>       [CN= 76.0: N= 3.00: Tp=  .45]
02729> ********************************************************************************
02730> # EXT6
02731> ********************************************************************************
02732> R0110:C00009------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02733>     CALIB NASHYD          1.0 01:EXT6            .86     .046 No_date   12:29   42.40 .570     .000
02734>       [CN= 85.0: N= 3.00: Tp=  .56]
02735> ********************************************************************************
02736> # EXT7
02737> ********************************************************************************
02738> R0110:C00010------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02739>     CALIB NASHYD          1.0 01:EXT7            .47     .035 No_date   12:13   39.90 .537     .000
02740>       [CN= 83.0: N= 3.00: Tp=  .32]
02741> ********************************************************************************
02742> # EXT8
02743> ********************************************************************************
02744> R0110:C00011------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02745>     CALIB NASHYD          1.0 01:EXT8            .83     .045 No_date   12:19   35.39 .476     .000
02746>       [CN= 79.0: N= 3.00: Tp=  .42]
02747> ********************************************************************************
02748> # EXT9
02749> ********************************************************************************
02750> R0110:C00012------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02751>     CALIB NASHYD          1.0 01:EXT9           3.57     .158 No_date   12:24   32.39 .436     .000
02752>       [CN= 76.0: N= 3.00: Tp=  .48]
02753> ********************************************************************************
02754> # EXT9a
02755> ********************************************************************************
02756> R0110:C00013------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02757>     CALIB NASHYD          1.0 01:EXT9a           .01     .002 No_date   12:00   34.35 .462     .000
02758>       [CN= 78.0: N= 3.00: Tp=  .04]
02759> ********************************************************************************
02760> # EXT10
02761> ********************************************************************************
02762> R0110:C00014------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02763>     CALIB NASHYD          1.0 01:EXT10           .20     .008 No_date   12:20   27.99 .377     .000
02764>       [CN= 71.0: N= 3.00: Tp=  .52]
02765> ********************************************************************************
02766> # Pre2_1
02767> ********************************************************************************
02768> R0110:C00015------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02769>   *  CALIB NASHYD          1.0 01:Pre2_1          .01     .002 No_date   12:00   28.81 .388     .000
02770>       [CN= 72.0: N= 3.00: Tp=  .03]
02771> ********************************************************************************
02772> # Pre2_2
02773> ********************************************************************************
02774> R0110:C00016------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02775>   *  CALIB NASHYD          1.0 01:Pre2_2          .00     .000 No_date   12:00   34.35 .462     .000
02776>       [CN= 78.0: N= 3.00: Tp=  .02]
02777> ********************************************************************************
02778> # Pre9_1
02779> ********************************************************************************
02780> R0110:C00017------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02781>     CALIB NASHYD          1.0 01:Pre9_1          .44     .020 No_date   12:17   28.00 .377     .000
02782>       [CN= 71.0: N= 3.00: Tp=  .38]
02783> ********************************************************************************
02784> # Pre9_2
02785> ********************************************************************************
02786> R0110:C00018------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02787>   *  CALIB NASHYD          1.0 01:Pre9_2          .01     .001 No_date   12:00   19.72 .265     .000
02788>       [CN= 59.0: N= 3.00: Tp=  .03]
02789> ********************************************************************************
02790> # Pre10_1
02791> ********************************************************************************
02792> R0110:C00019------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02793>     CALIB NASHYD          1.0 01:Pre10_1         .80     .043 No_date   12:11   28.00 .377     .000
02794>       [CN= 71.0: N= 3.00: Tp=  .29]
02795> ********************************************************************************
02796> # Pre11_1
02797> ********************************************************************************
02798> R0110:C00020------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02799>     CALIB NASHYD          1.0 01:Pre11_1         .07     .006 No_date   12:07   34.35 .462     .000
02800>       [CN= 78.0: N= 3.00: Tp=  .21]
02801> ********************************************************************************
02802> # Site 1
02803> ********************************************************************************
02804> R0110:C00021------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02805>     DESIGN STANDHYD       1.0 01:S1-B1           .42     .068 No_date   12:00   38.77 .521     .000
02806>       [XIMP=.34:TIMP=.44]
02807>       [SLP=1.00:DT= 1.00]
02808>       [LOSS= 1 : HORTONS]
02809> ********************************************************************************
02810> # Site 1 - Roof
02811> ********************************************************************************
02812> R0110:C00022------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02813>     DESIGN STANDHYD       1.0 01:S1-Roof         .06     .016 No_date   12:00   72.22 .971     .000
02814>       [XIMP=.99:TIMP=.99]
02815>       [SLP= .50:DT= 1.00]
02816>       [LOSS= 1 : HORTONS]
02817> R0110:C00023------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02818>     ROUTE RESERVOIR ->     1.0 01:S1-Roof         .06     .016 No_date   12:00   72.22 n/a       .000
02819>                  out <=    1.0 01:S1-Roof-Ou      .06     .002 No_date   12:05   72.22 n/a       .000
02820>              overflow <=   1.0 03:S1-Roof-Ov      .00     .000 No_date   0:00     .00 n/a       .000
02821>       (MxStoUsed=.2143E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=     0.hrs)
02822> R0110:C00024------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02823>     ADD HYD               1.0 02:S1-B1           .42     .068 No_date   12:00   38.77 n/a       .000
02824>                     +     1.0 02:S1-Roof-Ou      .06     .002 No_date   12:05   72.22 n/a       .000
02825>                     +     1.0 02:S1-Roof-Ov      .00     .000 No_date   0:00     .00 n/a       .000
02826>                   SUM=    1.0 01:SITE1-IN        .48     .070 No_date   12:00   43.30 n/a       .000
02827> R0110:C00025------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02828>     ROUTE RESERVOIR ->     1.0 02:SITE1-IN        .48     .070 No_date   12:00   43.30 n/a       .000
02829>                  out <=    1.0 01:SITE1-Out       .48     .007 No_date   12:36   43.30 n/a       .000
02830>              overflow <=   1.0 03:SITE1-Over      .00     .000 No_date   0:00     .00 n/a       .000
02831>       (MxStoUsed=.9127E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=     0.hrs)
02832> ********************************************************************************
02833> # Site 2
02834> ********************************************************************************
02835> R0110:C00026------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02836>     DESIGN STANDHYD       1.0 01:S2-B3           .35     .057 No_date   12:00   37.18 .500     .000
02837>       [XIMP=.31:TIMP=.41]
02838>       [SLP=1.00:DT= 1.00]
02839>       [LOSS= 1 : HORTONS]
02840> ********************************************************************************
02841> # Site 2 - Roof
02842> ********************************************************************************
02843> R0110:C00027------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02844>     DESIGN STANDHYD       1.0 01:S2-Roof         .09     .023 No_date   12:00   72.23 .971     .000
02845>       [XIMP=.99:TIMP=.99]
02846>       [SLP= .50:DT= 1.00]
02847>       [LOSS= 1 : HORTONS]
02848> ********************************************************************************
02849> R0110:C00028------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02850>     ROUTE RESERVOIR ->     1.0 02:S2-Roof         .09     .023 No_date   12:00   72.23 n/a       .000
02851>                  out <=    1.0 01:S2-Roof-Ou      .09     .007 No_date   12:02   72.23 n/a       .000
02852>              overflow <=   1.0 03:S2-Roof-Ov      .00     .000 No_date   0:00     .00 n/a       .000
02853>       (MxStoUsed=.1842E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=     0.hrs)
02854> R0110:C00029------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02855>     ADD HYD               1.0 02:S2-B3           .35     .057 No_date   12:00   37.18 n/a       .000
02856>                     +     1.0 02:S2-Roof-Ou      .09     .007 No_date   12:02   72.23 n/a       .000
02857>                     +     1.0 02:S2-Roof-Ov      .00     .000 No_date   0:00     .00 n/a       .000
02858>                   SUM=    1.0 01:SITE2-IN        .45     .064 No_date   12:00   44.47 n/a       .000
02859> R0110:C00030------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02860>     ROUTE RESERVOIR ->     1.0 02:SITE2-IN        .45     .064 No_date   12:00   44.47 n/a       .000
02861>                  out <=    1.0 01:SITE2-Out       .45     .008 No_date   12:44   44.47 n/a       .000
02862>              overflow <=   1.0 03:SITE2-Over      .00     .000 No_date   0:00     .00 n/a       .000
02863>       (MxStoUsed=.8872E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=     0.hrs)
02864> R0110:C00031------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02865>     ADD HYD               1.0 02:SITE1-Out       .48     .007 No_date   12:36   43.30 n/a       .000
02866>                     +     1.0 02:SITE1-Over      .00     .000 No_date   0:00     .00 n/a       .000
02867>                   SUM=    1.0 01:Site1           .48     .007 No_date   12:36   43.30 n/a       .000
02868> R0110:C00032------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02869>     ADD HYD               1.0 02:SITE2-Out       .45     .008 No_date   12:44   44.47 n/a       .000
02870>                     +     1.0 02:SITE2-Over      .00     .000 No_date   0:00     .00 n/a       .000
02871>                   SUM=    1.0 01:Site2           .45     .008 No_date   12:44   44.47 n/a       .000
02872> R0110:C00033------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02873>     ADD HYD               1.0 02:EXT2            .28     .022 No_date   12:13   42.40 n/a       .000
02874>                     +     1.0 02:Pre2_1          .01     .002 No_date   12:00   28.81 n/a       .000
02875>                     +     1.0 02:Site1           .48     .007 No_date   12:36   43.30 n/a       .000
02876>                     +     1.0 02:Site2           .45     .008 No_date   12:44   44.47 n/a       .000
02877>                   SUM=    1.0 01:J1             1.23     .037 No_date   12:14   43.37 n/a       .000
02878> R0110:C00034------------DTmin-ID:NHYD----------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
02879>     ROUTE CHANNEL    ->    1.0 02:J1             1.23     .037 No_date   12:14   43.37 n/a       .000
02880>       [RDT= 1.00] out<-    1.0 01:R1             1.23     .036 No_date   12:21   43.37 n/a       .000
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02881>       [L/S/n=  143./ .394/.035]
02882>       (Vmax=  .316:Dmax=  .125)
02883> R0110:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02884>     ADD HYD                1.0 02:R1            1.23      .036 No_date   12:21  43.37  n/a     .000
02885>                      +     1.0 02:EXT3           .56      .038 No_date   12:13  36.46  n/a     .000
02886>                      +     1.0 02:EXT1          3.21      .121 No_date   12:40  36.46  n/a     .000
02887>                    SUM=    1.0 01:J2            5.00      .178 No_date   12:29  38.15  n/a     .000
02888> R0110:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02889>     ROUTE CHANNEL   ->     1.0 02:J2            5.00      .178 No_date   12:29  38.15  n/a     .000
02890>       [RD*= 1.00] out<-    1.0 01:R2            5.00      .177 No_date   12:31  38.15  n/a     .000
02891>       [L/S/n=  73./ .425/.035]
02892>       (Vmax=  .478:Dmax=  .244)
02893> R0110:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02894>     ADD HYD                1.0 02:R2            5.00      .177 No_date   12:31  38.15  n/a     .000
02895>                      +     1.0 02:EXT4           .31      .022 No_date   12:11  35.39  n/a     .000
02896>                    SUM=    1.0 01:J3            5.31      .191 No_date   12:28  37.99  n/a     .000
02897> R0110:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02898>     ROUTE CHANNEL   ->     1.0 02:J3            5.31      .191 No_date   12:28  37.99  n/a     .000
02899>       [RD*= 1.00] out<-    1.0 01:R3            5.31      .190 No_date   12:31  37.99  n/a     .000
02900>       [L/S/n=  92./ .274/.035]
02901>       (Vmax=  .391:Dmax=  .253)
02902> R0110:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02903>     ADD HYD                1.0 02:R3            5.31      .190 No_date   12:31  37.99  n/a     .000
02904>                      +     1.0 02:EXT5           .59      .028 No_date   12:22  32.39  n/a     .000
02905>                    SUM=    1.0 01:J4            5.90      .216 No_date   12:30  37.43  n/a     .000
02906> R0110:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02907>     ROUTE CHANNEL   ->     1.0 02:J4            5.90      .216 No_date   12:30  37.43  n/a     .000
02908>       [RD*= 1.00] out<-    1.0 01:R4            5.90      .204 No_date   12:40  37.43  n/a     .000
02909>       [L/S/n=  251./ .190/.035]
02910>       (Vmax=  .384:Dmax=  .284)
02911> R0110:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02912>     ADD HYD                1.0 02:R4            5.90      .204 No_date   12:40  37.43  n/a     .000
02913>                      +     1.0 02:EXT6           .86      .046 No_date   12:29  42.40  n/a     .000
02914>                      +     1.0 02:EXT7           .47      .035 No_date   12:13  39.90  n/a     .000
02915>                    SUM=    1.0 01:J5            7.23      .268 No_date   12:35  38.18  n/a     .000
02916> R0110:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02917>     ROUTE CHANNEL   ->     1.0 02:J5            7.23      .268 No_date   12:35  38.18  n/a     .000
02918>       [RD*= 1.00] out<-    1.0 01:R5            7.23      .264 No_date   12:41  38.18  n/a     .000
02919>       [L/S/n=  237./ .644/.035]
02920>       (Vmax=  .623:Dmax=  .267)
02921> R0110:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02922>     ADD HYD                1.0 02:Pre10_1        .80      .043 No_date   12:11  28.00  n/a     .000
02923>                      +     1.0 02:Pre9_2         .01      .001 No_date   12:00  19.72  n/a     .000
02924>                      +     1.0 02:Pre2_2         .00      .000 No_date   12:00  34.35  n/a     .000
02925>                    SUM=    1.0 01:Pre           .81      .043 No_date   12:11  27.87  n/a     .000
02926> R0110:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02927>     ROUTE CHANNEL   ->     1.0 02:Pre           .81      .043 No_date   12:11  27.87  n/a     .000
02928>       [RD*= 1.00] out<-    1.0 01:R6            .81      .043 No_date   12:14  27.87  n/a     .000
02929>       [L/S/n=  77./ .776/.035]
02930>       (Vmax=  .492:Dmax=  .032)
02931> R0110:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02932>     ROUTE CHANNEL   ->     1.0 02:Pre9_1         .44      .020 No_date   12:17  28.00  n/a     .000
02933>       [RD*= 1.00] out<-    1.0 01:R7            .44      .019 No_date   12:21  28.00  n/a     .000
02934>       [L/S/n=  159./1.576/.035]
02935>       (Vmax=  .797:Dmax=  .006)
02936> R0110:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02937>     ADD HYD                1.0 02:R6            .81      .043 No_date   12:14  27.92  n/a     .000
02938>                      +     1.0 02:EXT10          .20      .008 No_date   12:20  27.99  n/a     .000
02939>                    SUM=    1.0 01:J6            1.02      .051 No_date   12:15  27.94  n/a     .000
02940> R0110:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02941>     ROUTE CHANNEL   ->     1.0 02:J6            1.02      .051 No_date   12:15  27.94  n/a     .000
02942>       [RD*= 1.00] out<-    1.0 01:R8            1.02      .050 No_date   12:18  27.94  n/a     .000
02943>       [L/S/n=  79./ .522/.035]
02944>       (Vmax=  .423:Dmax=  .037)
02945> R0110:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02946>     ADD HYD                1.0 02:R8            1.02      .050 No_date   12:18  27.97  n/a     .000
02947>                      +     1.0 02:R7            .44      .019 No_date   12:21  28.07  n/a     .000
02948>                    SUM=    1.0 01:J7            1.46      .069 No_date   12:19  28.00  n/a     .000
02949> R0110:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02950>     ROUTE CHANNEL   ->     1.0 02:J7            1.46      .069 No_date   12:19  28.00  n/a     .000
02951>       [RD*= 1.00] out<-    1.0 01:R9            1.46      .069 No_date   12:20  28.00  n/a     .000
02952>       [L/S/n=  29./ .887/.035]
02953>       (Vmax=  .543:Dmax=  .047)
02954> R0110:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02955>     ADD HYD                1.0 02:EXT9          3.57      .158 No_date   12:24  32.39  n/a     .000
02956>                      +     1.0 02:R9            1.46      .069 No_date   12:20  28.02  n/a     .000
02957>                      +     1.0 02:EXT8           .83      .045 No_date   12:19  45.14  n/a     .000
02958>                      +     1.0 02:R5            7.23      .264 No_date   12:41  38.18  n/a     .000
02959>                    SUM=    1.0 01:J8           13.09      .505 No_date   12:30  35.30  n/a     .000
02960> R0110:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02961>     ROUTE PIPE      ->     1.0 02:J8           13.09      .505 No_date   12:30  35.30  n/a     .000
02962> *   [RD*= 1.00] out<-    1.0 01:Outlet        13.09      .505 No_date   12:32  35.30  n/a     .000
02963>       [L/S/n=    8./ .010/.013]
02964>       (Vmax=  .419:Dmax= 1.085)
02965>       [Din=  .53:Dused= 1.32)
02966> ################################################################################
02967> # STORMS                                                                        #
02968> ################################################################################
02969>   ** END OF RUN :  124
02970>
02971> ********************************************************************************
02972>
02973>
02974>
02975>
02976>
02977>  RUN#:COMMAND#
02978> R0125:C00001------------------------------------------------------------------------
02979>       START
02980>       [TZERO =    .00 hrs on       0]
02981>       [METOUT=  2   (1=imperial, 2=metric output)]
02982>       [NSTORM=  1 ]
02983>       [NRUN   = 0125 ]
02984> #*******************************************************************************
02985> #  SWMHYMO  / INPUT DATA FILE                                                   #
02986> #*******************************************************************************
02987> #  Project Name  : [5923 Ottawa St]
02988> #  Project Number: [P2710(e01)]
02989> #  Date          : [2025 April 28]
02990> #  Modeller      : [MM]
02991> #  Company       : JFSA Canada Inc.
02992> #  License #     : 2549237
02993> #*******************************************************************************
02994> # Model developed to simulate runoff from subcatchments under post development conditions
02995> #*******************************************************************************
02996> R0125:C00002------------------------------------------------------------------------
02997>       READ STORM
02998>         Filename = STORM.001
02999>         Comment  = 25 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
03000>         [SDT=10.00:SDUR=  24.00:PTOT=  86.89]
03001> ********************************************************************************
03002> R0125:C00003------------------------------------------------------------------------
03003>       DEFAULT VALUES
03004>         Filename = C:\Temp\20250910-PostDev\Ottawa.val
03005>         ICASEdv  = 1 (read and print data)
03006>         FileTitle= File comment: [Parameters for City of Ottawa Projects]
03007>                    THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
03008>         Horton's infiltration equation parameters:
03009>         [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
03010>         Parameters for PERVIOUS surfaces in STANDHYD:
03011>         [IAperv=   4.67 mm] [LGP=40.00 m] [MNP=.250]
03012>         Parameters for IMPERVIOUS surfaces in STANDHYD:
03013>         [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
03014>         Parameters used in NASHYD:
03015>         [Ia=   4.67 mm] [N= 3.00]
03016>         Average monthly Pan Evaporation data in    (mm)
03017>       JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03018>      .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03019>         Average monthly Potential Evapotranspiration in    (mm)
03020>       JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03021>      .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03022> #*******************************************************************************
03023> # EXT1
03024> #*******************************************************************************
03025> R0125:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03026>     CALIB NASHYD           1.0 01:EXT1          3.21      .155 No_date   12:40  46.39 .534     .000
03027>       [CN= 80.0: N= 3.00: Tp=  .72]
03028> #*******************************************************************************
03029> # EXT2
03030> #*******************************************************************************
03031> R0125:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03032>     CALIB NASHYD           1.0 01:EXT2           .28      .028 No_date   12:13  53.21 .612     .000
03033>       [CN= 85.0: N= 3.00: Tp=  .33]
03034> #*******************************************************************************
03035> # EXT3
03036> #*******************************************************************************
03037> R0125:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03038>     CALIB NASHYD           1.0 01:EXT3           .56      .048 No_date   12:13  46.39 .534     .000
03039>       [CN= 80.0: N= 3.00: Tp=  .32]
03040> #*******************************************************************************
03041> # EXT4
03042> #*******************************************************************************
03043> R0125:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03044>     CALIB NASHYD           1.0 01:EXT4           .31      .028 No_date   12:11  45.14 .520     .000
03045>       [CN= 79.0: N= 3.00: Tp=  .29]
03046> #*******************************************************************************
03047> # EXT5
03048> #*******************************************************************************
03049> R0125:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03050>     CALIB NASHYD           1.0 01:EXT5           .59      .036 No_date   12:21  41.61 .479     .000
03051>       [CN= 76.0: N= 3.00: Tp=  .45]
03052> #*******************************************************************************
03053> # EXT6
03054> #*******************************************************************************
03055> R0125:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03056>     CALIB NASHYD           1.0 01:EXT6           .86      .058 No_date   12:28  53.21 .612     .000
03057>       [CN= 85.0: N= 3.00: Tp=  .56]
03058> #*******************************************************************************
03059> # EXT7
03060> #*******************************************************************************
03061> R0125:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03062>     CALIB NASHYD           1.0 01:EXT7           .47      .045 No_date   12:13  50.35 .580     .000
03063>       [CN= 83.0: N= 3.00: Tp=  .32]
03064> #*******************************************************************************
03065> # EXT8
03066> #*******************************************************************************
03067> R0125:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03068>     CALIB NASHYD           1.0 01:EXT8           .83      .058 No_date   12:19  45.14 .520     .000
03069>       [CN= 79.0: N= 3.00: Tp=  .42]
03070> #*******************************************************************************
03071> # EXT9
03072> #*******************************************************************************
03073> R0125:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03074>     CALIB NASHYD           1.0 01:EXT9          3.57      .205 No_date   12:23  41.62 .479     .000
03075>       [CN= 76.0: N= 3.00: Tp=  .48]
03076> #*******************************************************************************
03077> # EXT9a
03078> #*******************************************************************************
03079> R0125:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03080>     CALIB NASHYD           1.0 01:EXT9a          .01      .002 No_date   12:00  43.92 .506     .000
03081>       [CN= 78.0: N= 3.00: Tp=  .04]
03082> #*******************************************************************************
03083> # EXT10
03084> #*******************************************************************************
03085> R0125:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03086>     CALIB NASHYD           1.0 01:EXT10          .20      .011 No_date   12:20  36.34 .418     .000
03087>       [CN= 71.0: N= 3.00: Tp=  .42]
03088> #*******************************************************************************
03089> # Pre2_1
03090> #*******************************************************************************
03091> R0125:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03092> *   CALIB NASHYD           1.0 01:Pre2_1         .01      .002 No_date   12:00  37.34 .430     .000
03093>       [CN= 72.0: N= 3.00: Tp=  .03]
03094> #*******************************************************************************
03095> # Pre2_2
03096> #*******************************************************************************
03097> R0125:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03098> *   CALIB NASHYD           1.0 01:Pre2_2         .00      .000 No_date   12:00  43.92 .506     .000
03099>       [CN= 78.0: N= 3.00: Tp=  .02]
03100> #*******************************************************************************
03101> # Pre9_1
03102> #*******************************************************************************
03103> R0125:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03104>     CALIB NASHYD           1.0 01:Pre9_1         .44      .026 No_date   12:17  36.35 .418     .000
03105>       [CN= 71.0: N= 3.00: Tp=  .28]
03106> #*******************************************************************************
03107> # Pre9_2
03108> #*******************************************************************************
03109> R0125:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03110> *   CALIB NASHYD           1.0 01:Pre9_2         .01      .002 No_date   12:00  26.12 .301     .000
03111>       [CN= 59.0: N= 3.00: Tp=  .03]
03112> #*******************************************************************************
03113> # Pre10_1
03114> #*******************************************************************************
03115> R0125:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03116>     CALIB NASHYD           1.0 01:Pre10_1        .80      .057 No_date   12:11  36.35 .418     .000
03117>       [CN= 71.0: N= 3.00: Tp=  .29]
03118> #*******************************************************************************
03119> # Pre11_1
03120> #*******************************************************************************
03121> R0125:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03122>     CALIB NASHYD           1.0 01:Pre11_1        .07      .007 No_date   12:06  43.93 .506     .000
03123>       [CN= 78.0: N= 3.00: Tp=  .21]
03124> #*******************************************************************************
03125> # Site 1
03126> #*******************************************************************************
03127> R0125:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03128>     DESIGN STANDHYD        1.0 01:S1-B1          .42      .086 No_date   12:00  47.13 .542     .000
03129>       [XIMP=.34:TIMP=.44]
03130>       [SLP=1.00:DT= 1.00]
03131>       [LOSS= 1 : HORTONS]
03132> #*******************************************************************************
03133> # Site 1 - Roof
03134> #*******************************************************************************
03135> R0125:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03136>     DESIGN STANDHYD        1.0 01:S1-Roof        .06      .019 No_date   12:00  84.69 .975     .000
03137>       [XIMP=.99:TIMP=.99]
03138>       [SLP=  .50:DT= 1.00]
03139>       [LOSS= 1 : HORTONS]
03140> R0125:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03141>     ROUTE RESERVOIR ->     1.0 02:S1-Roof        .06      .019 No_date   12:00  84.69  n/a     .000
03142>                      out <=    1.0 01:S1-Roof-Ou    .06      .003 No_date   12:05  84.69  n/a     .000
03143>                  overflow <=   1.0 03:S1-Roof-Ov    .00      .000 No_date   0:00    .00  n/a     .000
03144>       (MxStoUsed=.2510E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
03145> R0125:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03146>     ADD HYD                1.0 02:S1-B1          .42      .086 No_date   12:00  47.14  n/a     .000
03147>                      +     1.0 02:S1-Roof-Ou     .06      .003 No_date   12:05  84.69  n/a     .000
03148>                      +     1.0 02:S1-Roof-Ov     .00      .000 No_date   0:00    .00  n/a     .000
03149>                    SUM=    1.0 01:SITE1-IN       .48      .088 No_date   12:00  52.22  n/a     .000
03150> R0125:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03151>     ROUTE RESERVOIR ->     1.0 02:SITE1-IN       .48      .088 No_date   12:00  52.22  n/a     .000
03152>                      out <=    1.0 01:SITE1-Out     .48      .008 No_date   12:39  52.22  n/a     .000
03153>                  overflow <=   1.0 03:SITE1-Over    .00      .000 No_date   0:00    .00  n/a     .000
03154>       (MxStoUsed=.1168E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
03155> #*******************************************************************************
03156> # Site 2
03157> #*******************************************************************************
03158> R0125:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03159>     DESIGN STANDHYD        1.0 01:S2-B3          .35      .072 No_date   12:00  45.30 .521     .000
03160>       [XIMP=.31:TIMP=.41]
03161>       [SLP=1.00:DT= 1.00]
03162>       [LOSS= 1 : HORTONS]
03163> #*******************************************************************************
03164> # Site 2 - Roof
03165> #*******************************************************************************
03166> R0125:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03167>     DESIGN STANDHYD        1.0 01:S2-Roof        .09      .027 No_date   12:00  84.69 .975     .000
03168>       [XIMP=.99:TIMP=.99]
03169>       [SLP=  .50:DT= 1.00]
03170>       [LOSS= 1 : HORTONS]
03171> #*******************************************************************************
03172> R0125:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03173>     ROUTE RESERVOIR ->     1.0 02:S2-Roof        .09      .027 No_date   12:00  84.69  n/a     .000
03174>                      out <=    1.0 01:S2-Roof-Ou    .09      .008 No_date   12:02  84.69  n/a     .000
03175>                  overflow <=   1.0 03:S2-Roof-Ov    .00      .000 No_date   0:00    .00  n/a     .000
03176>       (MxStoUsed=.2237E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
03177> R0125:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03178>     ADD HYD                1.0 02:S2-B3          .35      .072 No_date   12:00  45.30  n/a     .000
03179>                      +     1.0 02:S2-Roof-Ou     .09      .008 No_date   12:02  84.69  n/a     .000
03180>                      +     1.0 02:S2-Roof-Ov     .00      .000 No_date   0:00    .00  n/a     .000
03181>                    SUM=    1.0 01:SITE2-IN       .45      .080 No_date   12:00  53.50  n/a     .000
03182> R0125:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03183>     ROUTE RESERVOIR ->     1.0 02:SITE2-IN       .45      .080 No_date   12:00  53.50  n/a     .000
03184>                      out <=    1.0 01:SITE2-Out     .45      .009 No_date   12:48  53.50  n/a     .000
03185>                  overflow <=   1.0 03:SITE2-Over    .00      .000 No_date   0:00    .00  n/a     .000
03186>       (MxStoUsed=.1119E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
03187> R0125:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03188>     ADD HYD                1.0 02:SITE1-Out      .48      .008 No_date   12:39  52.22  n/a     .000
03189>                      +     1.0 02:SITE1-Over     .00      .000 No_date   0:00    .00  n/a     .000
03190>                    SUM=    1.0 01:Site1          .48      .008 No_date   12:39  52.22  n/a     .000
03191> R0125:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03192>     ADD HYD                1.0 02:SITE2-Out      .45      .009 No_date   12:48  53.50  n/a     .000
03193>                      +     1.0 02:SITE2-Over     .00      .000 No_date   0:00    .00  n/a     .000
03194>                    SUM=    1.0 01:Site2          .45      .009 No_date   12:48  53.50  n/a     .000
03195> R0125:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03196>     ADD HYD                1.0 02:EXT2           .28      .028 No_date   12:13  53.21  n/a     .000
03197>                      +     1.0 02:Pre2_1         .01      .002 No_date   12:00  37.34  n/a     .000
03198>                      +     1.0 02:Site1          .48      .008 No_date   12:39  52.22  n/a     .000
03199>                      +     1.0 02:Site2          .45      .009 No_date   12:48  53.50  n/a     .000
03200>                    SUM=    1.0 01:J1            1.23      .044 No_date   12:14  52.76  n/a     .000
03201> R0125:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03202>     ROUTE CHANNEL   ->     1.0 02:J1            1.23      .044 No_date   12:14  52.76  n/a     .000
03203>       [RD*= 1.00] out<-    1.0 01:R1            1.23      .042 No_date   12:19  52.76  n/a     .000
03204>       [L/S/n=  143./ .394/.035]
03205>       (Vmax=  .333:Dmax=  .135)
03206> R0125:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03207>     ADD HYD                1.0 02:R1            1.23      .042 No_date   12:19  52.76  n/a     .000
03208>                      +     1.0 02:EXT3           .56      .048 No_date   12:13  46.39  n/a     .000
03209>                      +     1.0 02:EXT1          3.21      .155 No_date   12:40  46.39  n/a     .000
03210>                    SUM=    1.0 01:J2            5.00      .224 No_date   12:29  47.95  n/a     .000
03211> R0125:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03212>     ROUTE CHANNEL   ->     1.0 02:J2            5.00      .224 No_date   12:29  47.95  n/a     .000
03213>       [RD*= 1.00] out<-    1.0 01:R2            5.00      .223 No_date   12:31  47.95  n/a     .000
03214>       [L/S/n=  73./ .425/.035]
03215>       (Vmax=  .509:Dmax=  .269)
03216> R0125:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03217>     ADD HYD                1.0 02:R2            5.00      .223 No_date   12:31  47.95  n/a     .000
03218>                      +     1.0 02:EXT4           .31      .028 No_date   12:11  45.14  n/a     .000
03219>                    SUM=    1.0 01:J3            5.31      .242 No_date   12:27  47.79  n/a     .000
03220> R0125:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03221>     ROUTE CHANNEL   ->     1.0 02:J3            5.31      .242 No_date   12:27  47.79  n/a     .000
03222>       [RD*= 1.00] out<-    1.0 01:R3            5.31      .240 No_date   12:30  47.79  n/a     .000
03223>       [L/S/n=  92./ .274/.035]
03224>       (Vmax=  .416:Dmax=  .278)
03225> R0125:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03226>     ADD HYD                1.0 02:R3            5.31      .240 No_date   12:30  47.79  n/a     .000
03227>                      +     1.0 02:EXT5           .59      .036 No_date   12:21  41.61  n/a     .000
03228>                    SUM=    1.0 01:J4            5.90      .274 No_date   12:29  47.16  n/a     .000
03229> R0125:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03230>     ROUTE CHANNEL   ->     1.0 02:J4            5.90      .274 No_date   12:29  47.16  n/a     .000
03231>       [RD*= 1.00] out<-    1.0 01:R4            5.90      .259 No_date   12:39  47.16  n/a     .000
03232>       [L/S/n=  251./ .190/.035]
03233>       (Vmax=  .411:Dmax=  .315)
03234> R0125:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03235>     ADD HYD                1.0 02:R4            5.90      .259 No_date   12:39  47.16  n/a     .000
03236>                      +     1.0 02:EXT6           .86      .058 No_date   12:28  53.21  n/a     .000
03237>                      +     1.0 02:EXT7           .47      .045 No_date   12:13  50.35  n/a     .000
03238>                    SUM=    1.0 01:J5            7.23      .342 No_date   12:34  48.09  n/a     .000
03239> R0125:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03240>     ROUTE CHANNEL   ->     1.0 02:J5            7.23      .342 No_date   12:34  48.09  n/a     .000
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03241>       [RDT= 1.00] out<-    1.0 01:R5            7.23     .338 No_date   12:39   48.09  n/a     .000
03242>        [L/S/n=  237./ .644/.035]
03243>        {Vmax=  .671:Dmax=  .295}
03244> R0125:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03245>      ADD HYD              1.0 02:Pre10_1        .80     .057 No_date   12:11   36.35  n/a     .000
03246>                   +       1.0 02:Pre9_2         .01     .002 No_date   12:00   26.12  n/a     .000
03247>                   +       1.0 02:Pre2_2         .00     .000 No_date   12:00   43.92  n/a     .000
03248>                 SUM=      1.0 01:Pre            .81     .057 No_date   12:11   36.19  n/a     .000
03249> R0125:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03250>      ROUTE CHANNEL    ->    1.0 02:Pre            .81     .057 No_date   12:11   36.19  n/a     .000
03251>       [RDT= 1.00] out<-    1.0 01:R6             .81     .056 No_date   12:14   36.19  n/a     .000
03252>        [L/S/n=   77./ .776/.035]
03253>        {Vmax=  .492:Dmax=  .041}
03254> R0125:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03255>      ROUTE CHANNEL    ->    1.0 02:Pre9_1         .44     .026 No_date   12:17   36.35  n/a     .000
03256>       [RDT= 1.00] out<-    1.0 01:R7             .44     .025 No_date   12:21   36.35  n/a     .000
03257>        [L/S/n=  159./1.576/.035]
03258>        {Vmax=  .797:Dmax=  .008}
03259> R0125:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03260>      ADD HYD              1.0 02:R6             .81     .056 No_date   12:14   36.25  n/a     .000
03261>                   +       1.0 02:EXT10          .20     .011 No_date   12:20   36.34  n/a     .000
03262>                 SUM=      1.0 01:J6            1.02     .066 No_date   12:15   36.27  n/a     .000
03263> R0125:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03264>      ROUTE CHANNEL    ->    1.0 02:J6            1.02     .066 No_date   12:15   36.27  n/a     .000
03265>       [RDT= 1.00] out<-    1.0 01:R8            1.02     .065 No_date   12:18   36.27  n/a     .000
03266>        [L/S/n=   79./ .522/.035]
03267>        {Vmax=  .423:Dmax=  .049}
03268> R0125:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03269>      ADD HYD              1.0 02:R8            1.02     .065 No_date   12:18   36.31  n/a     .000
03270>                   +       1.0 02:R7             .44     .025 No_date   12:21   36.43  n/a     .000
03271>                 SUM=      1.0 01:J7            1.46     .090 No_date   12:19   36.34  n/a     .000
03272> R0125:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03273>      ROUTE CHANNEL    ->    1.0 02:J7            1.46     .090 No_date   12:19   36.34  n/a     .000
03274>       [RDT= 1.00] out<-    1.0 01:R9            1.46     .090 No_date   12:19   36.34  n/a     .000
03275>        [L/S/n=   29./ .887/.035]
03276>        {Vmax=  .543:Dmax=  .061}
03277> R0125:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03278>      ADD HYD              1.0 02:EXT9          3.57     .205 No_date   12:23   41.62  n/a     .000
03279>                   +       1.0 02:R9            1.46     .090 No_date   12:19   36.37  n/a     .000
03280>                   +       1.0 02:EXT8           .83     .058 No_date   12:19   45.14  n/a     .000
03281>                   +       1.0 02:R5            7.23     .338 No_date   12:39   48.09  n/a     .000
03282>                 SUM=      1.0 01:J8           13.09     .656 No_date   12:29   44.84  n/a     .000
03283> R0125:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03284>      ROUTE PIPE       ->    1.0 02:J8           13.09     .656 No_date   12:29   44.84  n/a     .000
03285> *    [RDT= 1.00] out<-    1.0 01:Outlet        13.09     .654 No_date   12:31   44.84  n/a     .000
03286>        [L/S/n=    8./ .010/.013]
03287>        {Vmax=  .447:Dmax= 1.197}
03288>        {Din=  .53:Dused=  1.46}
03289> ##############################################################################
03290> # STORMS
03291> ##############################################################################
03292>    ** END OF RUN :  149
03293>
03294> ************************************************************************************
03295>
03296>
03297>
03298>
03299>
03300>  RUN#:COMMAND#
03301> R0150:C00001------------------------------------------------------------------------
03302>      START
03303>       [TZERO =      .00 hrs on      0]
03304>       [METOUT=   2     (1=imperial, 2=metric output)]
03305>       [NSTORM=   1 ]
03306>       [NRUN  = 0150 ]
03307> ************************************************************************************
03308> #  SWMHYMO  / INPUT DATA FILE
03309> ************************************************************************************
03310> #  Project Name  : [5923 Ottawa St]
03311> #  Project Number: [P2710(a01)]
03312> #  Date          : [2025 April 28]
03313> #  Modeller      : [MM]
03314> #  Company       : JFSA Canada Inc.
03315> #  License #     : 2549237
03316> ************************************************************************************
03317> # Model developed to simulate runoff from subcatchments under post development conditions
03318> ************************************************************************************
03319> R0150:C00002------------------------------------------------------------------------
03320>      READ STORM
03321>       Filename = STORM.001
03322>       Comment  = 50 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
03323>       [SDT=10.00:SDUR=  24.00:PTOT=  96.53]
03324> ************************************************************************************
03325> R0150:C00003------------------------------------------------------------------------
03326>      DEFAULT VALUES
03327>       Filename = C:\Temp\20250910-PostDev\Ottawa.val
03328>       ICASEdv  = 1 (read and print data)
03329>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
03330>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
03331>       Horton's infiltration equation parameters:
03332>       [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
03333>       Parameters for PERVIOUS surfaces in STANDHYD:
03334>       [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
03335>       Parameters for IMPERVIOUS surfaces in STANDHYD:
03336>       [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
03337>       Parameters used in NASHYD:
03338>       [Ia=     4.67 mm] [N= 3.00]
03339>       Average monthly Pan Evaporation data in    (mm)
03340>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03341>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03342>       Average monthly Potential Evapotranspiration in    (mm)
03343>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03344>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03345> ************************************************************************************
03346> # EXT1
03347> ************************************************************************************
03348> R0150:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03349>      CALIB NASHYD         1.0 01:EXT1          3.21     .182 No_date   12:40   54.31 .563     .000
03350>        [CN= 80.0: N= 3.00: Tp=  .72]
03351> ************************************************************************************
03352> # EXT2
03353> ************************************************************************************
03354> R0150:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03355>      CALIB NASHYD         1.0 01:EXT2           .28     .033 No_date   12:13   61.73 .640     .000
03356>        [CN= 85.0: N= 3.00: Tp=  .33]
03357> ************************************************************************************
03358> # EXT3
03359> ************************************************************************************
03360> R0150:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03361>      CALIB NASHYD         1.0 01:EXT3           .56     .057 No_date   12:13   54.31 .563     .000
03362>        [CN= 80.0: N= 3.00: Tp=  .32]
03363> ************************************************************************************
03364> # EXT4
03365> ************************************************************************************
03366> R0150:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03367>      CALIB NASHYD         1.0 01:EXT4           .31     .033 No_date   12:11   52.94 .548     .000
03368>        [CN= 79.0: N= 3.00: Tp=  .29]
03369> ************************************************************************************
03370> # EXT5
03371> ************************************************************************************
03372> R0150:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03373>      CALIB NASHYD         1.0 01:EXT5           .59     .042 No_date   12:21   49.04 .508     .000
03374>        [CN= 76.0: N= 3.00: Tp=  .45]
03375> ************************************************************************************
03376> # EXT6
03377> ************************************************************************************
03378> R0150:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03379>      CALIB NASHYD         1.0 01:EXT6           .86     .068 No_date   12:28   61.73 .640     .000
03380>        [CN= 85.0: N= 3.00: Tp=  .56]
03381> ************************************************************************************
03382> # EXT7
03383> ************************************************************************************
03384> R0150:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03385>      CALIB NASHYD         1.0 01:EXT7           .47     .052 No_date   12:12   58.64 .608     .000
03386>        [CN= 83.0: N= 3.00: Tp=  .32]
03387> ************************************************************************************
03388> # EXT8
03389> ************************************************************************************
03390> R0150:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03391>      CALIB NASHYD         1.0 01:EXT8           .83     .068 No_date   12:19   52.94 .548     .000
03392>        [CN= 79.0: N= 3.00: Tp=  .42]
03393> ************************************************************************************
03394> # EXT9
03395> ************************************************************************************
03396> R0150:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03397>      CALIB NASHYD         1.0 01:EXT9          3.57     .242 No_date   12:23   49.04 .508     .000
03398>        [CN= 76.0: N= 3.00: Tp=  .48]
03399> ************************************************************************************
03400> # EXT9a
03401> ************************************************************************************
03402> R0150:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03403>      CALIB NASHYD         1.0 01:EXT9a          .01     .002 No_date   12:00   51.60 .535     .000
03404>        [CN= 78.0: N= 3.00: Tp=  .04]
03405> ************************************************************************************
03406> # EXT10
03407> ************************************************************************************
03408> R0150:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03409>      CALIB NASHYD         1.0 01:EXT10          .20     .013 No_date   12:19   43.13 .447     .000
03410>        [CN= 71.0: N= 3.00: Tp=  .42]
03411> ************************************************************************************
03412> # Pre2_1
03413> ************************************************************************************
03414> R0150:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03415> *    CALIB NASHYD         1.0 01:Pre2_1         .01     .003 No_date   12:00   44.25 .458     .000
03416>        [CN= 72.0: N= 3.00: Tp=  .03]
03417> ************************************************************************************
03418> # Pre2_2
03419> ************************************************************************************
03420> R0150:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03421> *    CALIB NASHYD         1.0 01:Pre2_2         .00     .000 No_date   12:00   51.59 .535     .000
03422>        [CN= 78.0: N= 3.00: Tp=  .02]
03423> ************************************************************************************
03424> # Pre9_1
03425> ************************************************************************************
03426> R0150:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03427>      CALIB NASHYD         1.0 01:Pre9_1         .44     .030 No_date   12:17   43.13 .447     .000
03428>        [CN= 71.0: N= 3.00: Tp=  .38]
03429> ************************************************************************************
03430> # Pre9_2
03431> ************************************************************************************
03432> R0150:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03433> *    CALIB NASHYD         1.0 01:Pre9_2         .01     .002 No_date   12:00   31.44 .326     .000
03434>        [CN= 59.0: N= 3.00: Tp=  .03]
03435> ************************************************************************************
03436> # Pre10_1
03437> ************************************************************************************
03438> R0150:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03439>      CALIB NASHYD         1.0 01:Pre10_1        .80     .067 No_date   12:11   43.14 .447     .000
03440>        [CN= 71.0: N= 3.00: Tp=  .29]
03441> ************************************************************************************
03442> # Pre11_1
03443> ************************************************************************************
03444> R0150:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03445>      CALIB NASHYD         1.0 01:Pre11_1        .07     .008 No_date   12:06   51.60 .535     .000
03446>        [CN= 78.0: N= 3.00: Tp=  .11]
03447> ************************************************************************************
03448> # Site 1
03449> ************************************************************************************
03450> R0150:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03451>      DESIGN STANDHYD      1.0 01:S1-B1          .42     .098 No_date   12:00   53.53 .555     .000
03452>        [XIMP=.34:TIMP=.44]
03453>        [SLP=1.00:DT= 1.00]
03454>        [LOSS= 1 : HORTONS]
03455> ************************************************************************************
03456> # Site 1 - Roof
03457> ************************************************************************************
03458> R0150:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03459>      DESIGN STANDHYD      1.0 01:S1-Roof        .06     .021 No_date   12:00   94.29 .977     .000
03460>        [XIMP=.99:TIMP=.99]
03461>        [SLP=  .50:DT= 1.00]
03462>        [LOSS= 1 : HORTONS]
03463> R0150:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03464>      ROUTE RESERVOIR ->    1.0 02:S1-Roof        .06     .021 No_date   12:00   94.29 n/a      .000
03465>                      out <=    1.0 01:S1-Roof-Ou     .06     .003 No_date   12:05   94.28 n/a      .000
03466>                overflow <=    1.0 03:S1-Roof-Ov     .00     .000 No_date   0:00    .00  n/a      .000
03467>       (MxStoUsed=.2792E-02  m3, TotOvfVol=.0000E+00  m3, No-Ovf=    0, TotDurOvf=    0.hrs)
03468> R0150:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03469>      ADD HYD              1.0 02:S1-B1          .42     .098 No_date   12:00   53.53 n/a      .000
03470>                   +       1.0 02:S1-Roof-Ou     .06     .003 No_date   12:05   94.28 n/a      .000
03471>                   +       1.0 02:S1-Roof-Ov     .00     .000 No_date   0:00    .00  n/a      .000
03472>                 SUM=      1.0 01:S1TE1-IN       .48     .101 No_date   12:00   59.05 n/a      .000
03473> R0150:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03474>      ROUTE RESERVOIR ->    1.0 02:S1TE1-IN       .48     .101 No_date   12:00   59.05 n/a      .000
03475>                      out <=    1.0 01:S1TE1-Out      .48     .008 No_date   12:42   59.05 n/a      .000
03476>                overflow <=    1.0 03:S1TE1-Over     .00     .000 No_date   0:00    .00  n/a      .000
03477>       (MxStoUsed=.1364E-01  m3, TotOvfVol=.0000E+00  m3, No-Ovf=    0, TotDurOvf=    0.hrs)
03478> ************************************************************************************
03479> # Site 2
03480> ************************************************************************************
03481> R0150:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03482>      DESIGN STANDHYD      1.0 01:S2-B3          .35     .082 No_date   12:00   51.56 .534     .000
03483>        [XIMP=.31:TIMP=.41]
03484>        [SLP=1.00:DT= 1.00]
03485>        [LOSS= 1 : HORTONS]
03486> ************************************************************************************
03487> # Site 2 - Roof
03488> ************************************************************************************
03489> R0150:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03490>      DESIGN STANDHYD      1.0 01:S2-Roof        .09     .030 No_date   12:00   94.28 .977     .000
03491>        [XIMP=.99:TIMP=.99]
03492>        [SLP=  .50:DT= 1.00]
03493>        [LOSS= 1 : HORTONS]
03494> ************************************************************************************
03495> R0150:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03496>      ROUTE RESERVOIR ->    1.0 02:S2-Roof        .09     .030 No_date   12:00   94.28 n/a      .000
03497>                      out <=    1.0 01:S2-Roof-Ou     .09     .008 No_date   12:02   94.29 n/a      .000
03498>                overflow <=    1.0 03:S2-Roof-Ov     .00     .000 No_date   0:00    .00  n/a      .000
03499>       (MxStoUsed=.2543E-02  m3, TotOvfVol=.0000E+00  m3, No-Ovf=    0, TotDurOvf=    0.hrs)
03500> R0150:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03501>      ADD HYD              1.0 02:S2-B3          .35     .082 No_date   12:00   51.56 n/a      .000
03502>                   +       1.0 02:S2-Roof-Ou     .09     .008 No_date   12:02   94.29 n/a      .000
03503>                   +       1.0 02:S2-Roof-Ov     .00     .000 No_date   0:00    .00  n/a      .000
03504>                 SUM=      1.0 01:S1TE2-IN       .45     .090 No_date   12:00   60.45 n/a      .000
03505> R0150:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03506>      ROUTE RESERVOIR ->    1.0 02:S1TE2-IN       .45     .090 No_date   12:00   60.45 n/a      .000
03507>                      out <=    1.0 01:S1TE2-Out      .45     .009 No_date   12:52   60.45 n/a      .000
03508>                overflow <=    1.0 03:S1TE2-Over     .00     .000 No_date   0:00    .00  n/a      .000
03509>       (MxStoUsed=.1300E-01  m3, TotOvfVol=.0000E+00  m3, No-Ovf=    0, TotDurOvf=    0.hrs)
03510> R0150:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03511>      ADD HYD              1.0 02:S1TE1-Out      .48     .008 No_date   12:42   59.05 n/a      .000
03512>                   +       1.0 02:S1TE1-Over     .00     .000 No_date   0:00    .00  n/a      .000
03513>                 SUM=      1.0 01:Site1          .48     .008 No_date   12:42   59.05 n/a      .000
03514> R0150:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03515>      ADD HYD              1.0 02:S1TE2-Out      .45     .009 No_date   12:52   60.45 n/a      .000
03516>                   +       1.0 02:S1TE2-Over     .00     .000 No_date   0:00    .00  n/a      .000
03517>                 SUM=      1.0 01:Site2          .45     .009 No_date   12:52   60.45 n/a      .000
03518> R0150:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03519>      ADD HYD              1.0 02:Pre2_2         .28     .033 No_date   12:13   61.73 n/a      .000
03520>                   +       1.0 02:Pre2_1         .01     .003 No_date   12:00   44.25 n/a      .000
03521>                   +       1.0 02:Site1          .48     .008 No_date   12:42   59.05 n/a      .000
03522>                   +       1.0 02:Site2          .45     .009 No_date   12:52   60.45 n/a      .000
03523>                 SUM=      1.0 01:J1            1.23     .049 No_date   12:14   60.03 n/a      .000
03524> R0150:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03525>      ROUTE CHANNEL    ->    1.0 02:J1            1.23     .049 No_date   12:14   60.03 n/a      .000
03526>       [RDT= 1.00] out<-    1.0 01:R1            1.23     .047 No_date   12:19   60.03 n/a      .000
03527>        [L/S/n=  143./ .394/.035]
03528>        {Vmax=  .347:Dmax=  .143}
03529> R0150:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03530>      ADD HYD              1.0 02:R1            1.23     .047 No_date   12:19   60.03 n/a      .000
03531>                   +       1.0 02:EXT3           .56     .057 No_date   12:13   54.31 n/a      .000
03532>                   +       1.0 02:EXT1          3.21     .182 No_date   12:40   54.31 n/a      .000
03533>                 SUM=      1.0 01:J2            5.00     .260 No_date   12:28   55.71 n/a      .000
03534> R0150:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03535>      ROUTE CHANNEL    ->    1.0 02:J2            5.00     .260 No_date   12:28   55.71 n/a      .000
03536>       [RDT= 1.00] out<-    1.0 01:R2            5.00     .259 No_date   12:30   55.71 n/a      .000
03537>        [L/S/n=   73./ .425/.035]
03538>        {Vmax=  .527:Dmax=  .285}
03539> R0150:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03540>      ADD HYD              1.0 02:R2            5.00     .259 No_date   12:30   55.71 n/a      .000
03541>                   +       1.0 02:EXT4           .31     .033 No_date   12:11   52.94 n/a      .000
03542>                 SUM=      1.0 01:J3            5.31     .281 No_date   12:27   55.55 n/a      .000
03543> R0150:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03544>      ROUTE CHANNEL    ->    1.0 02:J3            5.31     .281 No_date   12:27   55.55 n/a      .000
03545>       [RDT= 1.00] out<-    1.0 01:R3            5.31     .279 No_date   12:30   55.55 n/a      .000
03546>        [L/S/n=   92./ .274/.035]
03547>        {Vmax=  .432:Dmax=  .295}
03548> R0150:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03549>      ADD HYD              1.0 02:R3            5.31     .279 No_date   12:30   55.55 n/a      .000
03550>                   +       1.0 02:EXT5           .59     .042 No_date   12:21   49.04 n/a      .000
03551>                 SUM=      1.0 01:J4            5.90     .320 No_date   12:28   54.89 n/a      .000
03552> R0150:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03553>      ROUTE CHANNEL    ->    1.0 02:J4            5.90     .320 No_date   12:28   54.89 n/a      .000
03554>       [RDT= 1.00] out<-    1.0 01:R4            5.90     .303 No_date   12:38   54.89 n/a      .000
03555>        [L/S/n=  251./ .190/.035]
03556>        {Vmax=  .429:Dmax=  .337}
03557> R0150:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03558>      ADD HYD              1.0 02:R4            5.90     .303 No_date   12:38   54.89 n/a      .000
03559>                   +       1.0 02:EXT6           .86     .068 No_date   12:28   61.73 n/a      .000
03560>                   +       1.0 02:EXT7           .47     .052 No_date   12:12   58.64 n/a      .000
03561>                 SUM=      1.0 01:J5            7.23     .400 No_date   12:33   55.95 n/a      .000
03562> R0150:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03563>      ROUTE CHANNEL    ->    1.0 02:J5            7.23     .400 No_date   12:33   55.95 n/a      .000
03564>       [RDT= 1.00] out<-    1.0 01:R5            7.23     .396 No_date   12:38   55.95 n/a      .000
03565>        [L/S/n=  237./ .644/.035]
03566>        {Vmax=  .705:Dmax=  .314}
03567> R0150:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03568>      ADD HYD              1.0 02:Pre10_1        .80     .067 No_date   12:11   43.14 n/a      .000
03569>                   +       1.0 02:Pre9_2         .01     .002 No_date   12:00   31.44 n/a      .000
03570>                   +       1.0 02:Pre2_2         .00     .000 No_date   12:00   51.59 n/a      .000
03571>                 SUM=      1.0 01:Pre            .81     .068 No_date   12:11   42.96 n/a      .000
03572> R0150:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03573>      ROUTE CHANNEL    ->    1.0 02:Pre           .81     .068 No_date   12:11   42.96 n/a      .000
03574>       [RDT= 1.00] out<-    1.0 01:R6            .81     .066 No_date   12:14   42.95 n/a      .000
03575>        [L/S/n=   77./ .776/.035]
03576>        {Vmax=  .492:Dmax=  .049}
03577> R0150:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03578>      ROUTE CHANNEL    ->    1.0 02:Pre9_1         .44     .030 No_date   12:17   43.13 n/a      .000
03579>       [RDT= 1.00] out<-    1.0 01:R7            .44     .030 No_date   12:20   43.13 n/a      .000
03580>        [L/S/n=  159./1.576/.035]
03581>        {Vmax=  .797:Dmax=  .009}
03582> R0150:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03583>      ADD HYD              1.0 02:R6             .81     .066 No_date   12:14   43.02 n/a      .000
03584>                   +       1.0 02:EXT10          .20     .013 No_date   12:19   43.13 n/a      .000
03585>                 SUM=      1.0 01:J6            1.02     .079 No_date   12:14   43.04 n/a      .000
03586> R0150:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03587>      ROUTE CHANNEL    ->    1.0 02:J6            1.02     .079 No_date   12:14   43.04 n/a      .000
03588>       [RDT= 1.00] out<-    1.0 01:R8            1.02     .078 No_date   12:18   43.04 n/a      .000
03589>        [L/S/n=   79./ .522/.035]
03590>        {Vmax=  .423:Dmax=  .058}
03591> R0150:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03592>      ADD HYD              1.0 02:R8            1.02     .078 No_date   12:18   43.08 n/a      .000
03593>                   +       1.0 02:R7             .44     .030 No_date   12:20   43.23 n/a      .000
03594>                 SUM=      1.0 01:J7            1.46     .107 No_date   12:18   43.13 n/a      .000
03595> R0150:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03596>      ROUTE CHANNEL    ->    1.0 02:J7            1.46     .107 No_date   12:18   43.13 n/a      .000
03597>       [RDT= 1.00] out<-    1.0 01:R9            1.46     .107 No_date   12:19   43.13 n/a      .000
03598>        [L/S/n=   29./ .887/.035]
03599>        {Vmax=  .543:Dmax=  .073}
03600> R0150:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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03601>     ADD HYD                1.0 02:EXT9          3.57     .242 No_date   12:23   49.04  n/a     .000
03602>                      +     1.0 02:R9            1.46     .107 No_date   12:19   43.15  n/a     .000
03603>                      +     1.0 02:EXT8           .83     .068 No_date   12:19   52.94  n/a     .000
03604>                      +     1.0 02:R5            7.23     .396 No_date   12:38   55.95  n/a     .000
03605>                    SUM=    1.0 01:J8           13.09     .776 No_date   12:28   52.45  n/a     .000
03606> R0150:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03607>      ROUTE PIPE      ->    1.0 02:J8           13.09     .776 No_date   12:28   52.45  n/a     .000
03608> *   [RDT= 1.00] out<-     1.0 01:Outlet        13.09     .775 No_date   12:30   52.45  n/a     .000
03609>       [L/S/n=   8./ .010/.013]
03610>       (Vmax=  .467:Dmax= 1.275)
03611>       [Din=  .53:Duse= 1.55)
03612> ################################################################################
03613> # STORMS
03614> ################################################################################
03615>   ** END OF RUN :  198
03616>
03617> ********************************************************************************
03618>
03619>
03620>
03621>
03622>
03623>  RUN#:COMMAND#
03624> R0199:C00001------------------------------------------------------------------------------
03625>       START
03626>         [TZERO =    .00 hrs on        0]
03627>         [METOUT=   2    (1=imperial, 2=metric output)]
03628>         [NSTORM=   1 ]
03629>         [NRUN  = 0199 ]
03630> ********************************************************************************
03631> #  SWMHYMO  / INPUT DATA FILE
03632> ********************************************************************************
03633> #  Project Name  : [5923 Ottawa St]
03634> #  Project Number: [P2710(e01)]
03635> #  Date          : [2025 April 28]
03636> #  Modeller      : [MM]
03637> #  Company       : JFSA Canada Inc.
03638> #  License #     : 2549237
03639> ********************************************************************************
03640> # Model developed to simulate runoff from subcatchments under post development conditions
03641> ********************************************************************************
03642> R0199:C00002------------------------------------------------------------------------------
03643>       READ STORM
03644>         Filename = STORM.001
03645>         Comment  = 100 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
03646>         [SDT=10.00:SDUR=  24.00:PTOT= 106.73]
03647> ********************************************************************************
03648> R0199:C00003------------------------------------------------------------------------------
03649>       DEFAULT VALUES
03650>         Filename = C:\Temp\20250910-PostDev\Ottawa.val
03651>         ICASEdv  = 1 (read and print data)
03652>         FileTitle= File comment: [Parameters for City of Ottawa Projects]
03653>                    THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
03654>         Horton's infiltration equation parameters:
03655>         [F0= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
03656>         Parameters for IMPERVIOUS surfaces in STANDHYD:
03657>         [IAperc=   4.67 mm] [LGF=40.00 m] [MNP=  .250]
03658>         Parameters for PERVIOUS surfaces in STANDHYD:
03659>         [IAimp=   1.57 mm] [CLI=  1.50]   [MNI=  .013]
03660>         Parameters used in NASHYD:
03661>         [Ia=   4.67 mm] [N= 3.00]
03662>         Average monthly Pan Evaporation data in    (mm)
03663>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03664>     .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03665>         Average monthly Potential Evapotranspiration in    (mm)
03666>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03667>     .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03668> ********************************************************************************
03669> # EXT1
03670> ********************************************************************************
03671> R0199:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03672>      CALIB NASHYD           1.0 01:EXT1          3.21     .212 No_date   12:39   62.92 .589     .000
03673>        [CN= 80.0: N= 3.00: Tp=  .72]
03674> ********************************************************************************
03675> # EXT2
03676> ********************************************************************************
03677> R0199:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03678>      CALIB NASHYD           1.0 01:EXT2           .28     .037 No_date   12:13   70.91 .664     .000
03679>        [CN= 85.0: N= 3.00: Tp=  .33]
03680> ********************************************************************************
03681> # EXT3
03682> ********************************************************************************
03683> R0199:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03684>      CALIB NASHYD           1.0 01:EXT3           .56     .066 No_date   12:13   62.92 .589     .000
03685>        [CN= 80.0: N= 3.00: Tp=  .32]
03686> ********************************************************************************
03687> # EXT4
03688> ********************************************************************************
03689> R0199:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03690>      CALIB NASHYD           1.0 01:EXT4           .31     .038 No_date   12:11   61.42 .576     .000
03691>        [CN= 79.0: N= 3.00: Tp=  .29]
03692> ********************************************************************************
03693> # EXT5
03694> ********************************************************************************
03695> R0199:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03696>      CALIB NASHYD           1.0 01:EXT5           .59     .049 No_date   12:21   57.15 .535     .000
03697>        [CN= 76.0: N= 3.00: Tp=  .45]
03698> ********************************************************************************
03699> # EXT6
03700> ********************************************************************************
03701> R0199:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03702>      CALIB NASHYD           1.0 01:EXT6           .86     .078 No_date   12:28   70.92 .664     .000
03703>        [CN= 85.0: N= 3.00: Tp=  .56]
03704> ********************************************************************************
03705> # EXT7
03706> ********************************************************************************
03707> R0199:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03708>      CALIB NASHYD           1.0 01:EXT7           .47     .060 No_date   12:12   67.60 .633     .000
03709>        [CN= 83.0: N= 3.00: Tp=  .32]
03710> ********************************************************************************
03711> # EXT8
03712> ********************************************************************************
03713> R0199:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03714>      CALIB NASHYD           1.0 01:EXT8           .83     .079 No_date   12:19   61.42 .576     .000
03715>        [CN= 79.0: N= 3.00: Tp=  .42]
03716> ********************************************************************************
03717> # EXT9
03718> ********************************************************************************
03719> R0199:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03720>      CALIB NASHYD           1.0 01:EXT9          3.57     .284 No_date   12:23   57.15 .535     .000
03721>        [CN= 76.0: N= 3.00: Tp=  .48]
03722> ********************************************************************************
03723> # EXT9a
03724> ********************************************************************************
03725> R0199:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03726>      CALIB NASHYD           1.0 01:EXT9a          .01     .003 No_date   12:00   59.96 .562     .000
03727>        [CN= 78.0: N= 3.00: Tp=  .04]
03728> ********************************************************************************
03729> # EXT10
03730> ********************************************************************************
03731> R0199:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03732>      CALIB NASHYD           1.0 01:EXT10          .20     .016 No_date   12:19   50.61 .474     .000
03733>        [CN= 71.0: N= 3.00: Tp=  .42]
03734> ********************************************************************************
03735> # Pre2_1
03736> ********************************************************************************
03737> R0199:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03738> *    CALIB NASHYD           1.0 01:Pre2_1         .01     .003 No_date   12:00   51.86 .486     .000
03739>        [CN= 72.0: N= 3.00: Tp=  .03]
03740> ********************************************************************************
03741> # Pre2_2
03742> ********************************************************************************
03743> R0199:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03744> *    CALIB NASHYD           1.0 01:Pre2_2         .00     .001 No_date   12:00   59.95 .562     .000
03745>        [CN= 78.0: N= 3.00: Tp=  .02]
03746> ********************************************************************************
03747> # Pre9_1
03748> ********************************************************************************
03749> R0199:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03750>      CALIB NASHYD           1.0 01:Pre9_1         .44     .036 No_date   12:17   50.61 .474     .000
03751>        [CN= 71.0: N= 3.00: Tp=  .38]
03752> ********************************************************************************
03753> # Pre9_2
03754> ********************************************************************************
03755> R0199:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03756> *    CALIB NASHYD           1.0 01:Pre9_2         .01     .002 No_date   12:00   37.39 .350     .000
03757>        [CN= 59.0: N= 3.00: Tp=  .03]
03758> ********************************************************************************
03759> # Pre10_1
03760> ********************************************************************************
03761> R0199:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03762>      CALIB NASHYD           1.0 01:Pre10_1        .80     .079 No_date   12:11   50.61 .474     .000
03763>        [CN= 71.0: N= 3.00: Tp=  .29]
03764> ********************************************************************************
03765> # Pre11_1
03766> ********************************************************************************
03767> R0199:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03768>      CALIB NASHYD           1.0 01:Pre11_1        .07     .010 No_date   12:06   59.96 .562     .000
03769>        [CN= 78.0: N= 3.00: Tp=  .21]
03770> ********************************************************************************
03771> # Site 1
03772> ********************************************************************************
03773> R0199:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03774>      DESIGN STANDHYD        1.0 01:S1-B1          .42     .112 No_date   12:00   60.12 .563     .000
03775>        [XIMP=.34:TIMP=.44]
03776>        [SLP=1.00:DT= 1.00]
03777>        [LOSS= 1 : HORTONS]
03778> ********************************************************************************
03779> # Site 1 - Roof
03780> ********************************************************************************
03781> R0199:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03782>      DESIGN STANDHYD        1.0 01:S1-Roof        .06     .024 No_date   12:00  104.42 .978     .000
03783>        [XIMP=.99:TIMP=.99]
03784>        [SLP=  .50:DT= 1.00]
03785>        [LOSS= 1 : HORTONS]
03786> R0199:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03787>      ROUTE RESERVOIR ->     1.0 02:S1-Roof        .06     .024 No_date   12:00  104.42  n/a     .000
03788>                        out <=    1.0 01:S1-Roof-Ou     .06     .003 No_date   12:05  104.42  n/a     .000
03789>                     overflow <=    1.0 03:S1-Roof-Ov     .00     .000 No_date   0:00    .00  n/a     .000
03790>        (MxStoUsed=.3091E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
03791> R0199:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03792>      ADD HYD                1.0 02:S1-B1          .42     .112 No_date   12:00   60.12  n/a     .000
03793>                      +     1.0 02:S1-Roof-Ou     .06     .003 No_date   12:05  104.42  n/a     .000
03794>                      +     1.0 02:S1-Roof-Ov     .00     .000 No_date   0:00    .00  n/a     .000
03795>                    SUM=    1.0 01:SITE1-IN       .48     .115 No_date   12:00   66.12  n/a     .000
03796> R0199:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03797>      ROUTE RESERVOIR ->     1.0 02:SITE1-IN       .48     .115 No_date   12:00   66.12  n/a     .000
03798>                        out <=    1.0 01:SITE1-Out      .48     .008 No_date   12:44   66.12  n/a     .000
03799>                     overflow <=    1.0 03:SITE1-Over     .00     .000 No_date   0:00    .00  n/a     .000
03800>        (MxStoUsed=.1568E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
03801> ********************************************************************************
03802> # Site 2
03803> ********************************************************************************
03804> R0199:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03805>      DESIGN STANDHYD        1.0 01:S2-B3          .35     .094 No_date   12:00   58.00 .543     .000
03806>        [XIMP=.31:TIMP=.41]
03807>        [SLP=1.00:DT= 1.00]
03808>        [LOSS= 1 : HORTONS]
03809> ********************************************************************************
03810> # Site 2 - Roof
03811> ********************************************************************************
03812> R0199:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03813>      DESIGN STANDHYD        1.0 01:S2-Roof        .09     .034 No_date   12:00  104.44 .979     .000
03814>        [XIMP=.99:TIMP=.99]
03815>        [SLP=  .50:DT= 1.00]
03816>        [LOSS= 1 : HORTONS]
03817> ********************************************************************************
03818> R0199:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03819>      ROUTE RESERVOIR ->     1.0 02:S2-Roof        .09     .034 No_date   12:00  104.44  n/a     .000
03820>                        out <=    1.0 01:S2-Roof-Ou     .09     .008 No_date   12:02  104.45  n/a     .000
03821>                     overflow <=    1.0 03:S2-Roof-Ov     .00     .000 No_date   0:00    .00  n/a     .000
03822>        (MxStoUsed=.2875E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
03823> R0199:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03824>      ADD HYD                1.0 02:S2-B3          .35     .094 No_date   12:00   58.00  n/a     .000
03825>                      +     1.0 02:S2-Roof-Ou     .09     .008 No_date   12:02  104.45  n/a     .000
03826>                      +     1.0 02:S2-Roof-Ov     .00     .000 No_date   0:00    .00  n/a     .000
03827>                    SUM=    1.0 01:SITE2-IN       .45     .103 No_date   12:00   67.66  n/a     .000
03828> R0199:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03829>      ROUTE RESERVOIR ->     1.0 02:SITE2-IN       .45     .103 No_date   12:00   67.66  n/a     .000
03830>                        out <=    1.0 01:SITE2-Out      .45     .009 No_date   12:56   67.66  n/a     .000
03831>                     overflow <=    1.0 03:SITE2-Over     .00     .000 No_date   0:00    .00  n/a     .000
03832>        (MxStoUsed=.1485E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
03833> R0199:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03834>      ADD HYD                1.0 02:SITE1-Out      .48     .008 No_date   12:44   66.12  n/a     .000
03835>                      +     1.0 02:SITE2-Over     .00     .000 No_date   0:00    .00  n/a     .000
03836>                    SUM=    1.0 01:Site1          .48     .008 No_date   12:44   66.12  n/a     .000
03837> R0199:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03838>      ADD HYD                1.0 02:SITE2-Out      .45     .009 No_date   12:56   67.66  n/a     .000
03839>                      +     1.0 02:SITE2-Over     .00     .000 No_date   0:00    .00  n/a     .000
03840>                    SUM=    1.0 01:Site2          .45     .009 No_date   12:56   67.66  n/a     .000
03841> R0199:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03842>      ADD HYD                1.0 02:EXT2           .28     .037 No_date   12:13   70.91  n/a     .000
03843>                      +     1.0 02:Pre2_1         .01     .003 No_date   12:00   51.86  n/a     .000
03844>                      +     1.0 02:Site1          .48     .008 No_date   12:44   66.12  n/a     .000
03845>                      +     1.0 02:Site2          .45     .009 No_date   12:56   67.66  n/a     .000
03846>                    SUM=    1.0 01:J1            1.23     .055 No_date   12:13   67.65  n/a     .000
03847> R0199:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03848>      ROUTE CHANNEL   ->     1.0 02:J1            1.23     .055 No_date   12:13   67.65  n/a     .000
03849>        [RDT= 1.00] out<-     1.0 01:R1            1.23     .053 No_date   12:19   67.65  n/a     .000
03850>         [L/S/n=  143./ .394/.035]
03851>         (Vmax=  .357:Dmax=  .149)
03852> R0199:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03853>      ADD HYD                1.0 02:R1            1.23     .053 No_date   12:19   67.65  n/a     .000
03854>                      +     1.0 02:EXT3           .56     .066 No_date   12:13   62.92  n/a     .000
03855>                      +     1.0 02:EXT1          3.21     .212 No_date   12:39   62.92  n/a     .000
03856>                    SUM=    1.0 01:J2            5.00     .300 No_date   12:28   64.08  n/a     .000
03857> R0199:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03858>      ROUTE CHANNEL   ->     1.0 02:J2            5.00     .300 No_date   12:28   64.08  n/a     .000
03859>        [RDT= 1.00] out<-     1.0 01:R2            5.00     .299 No_date   12:30   64.08  n/a     .000
03860>         [L/S/n=   73./ .425/.035]
03861>         (Vmax=  .548:Dmax=  .302)
03862> R0199:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03863>      ADD HYD                1.0 02:R2            5.00     .299 No_date   12:30   64.08  n/a     .000
03864>                      +     1.0 02:EXT4           .31     .038 No_date   12:11   61.42  n/a     .000
03865>                    SUM=    1.0 01:J3            5.31     .325 No_date   12:26   63.92  n/a     .000
03866> R0199:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03867>      ROUTE CHANNEL   ->     1.0 02:J3            5.31     .325 No_date   12:26   63.92  n/a     .000
03868>        [RDT= 1.00] out<-     1.0 01:R3            5.31     .323 No_date   12:29   63.92  n/a     .000
03869>         [L/S/n=   92./ .274/.035]
03870>         (Vmax=  .449:Dmax=  .313)
03871> R0199:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03872>      ADD HYD                1.0 02:R3            5.31     .323 No_date   12:29   63.92  n/a     .000
03873>                      +     1.0 02:EXT5           .59     .049 No_date   12:21   57.15  n/a     .000
03874>                    SUM=    1.0 01:J4            5.90     .370 No_date   12:28   63.24  n/a     .000
03875> R0199:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03876>      ROUTE CHANNEL   ->     1.0 02:J4            5.90     .370 No_date   12:28   63.24  n/a     .000
03877>        [RDT= 1.00] out<-     1.0 01:R4            5.90     .352 No_date   12:37   63.24  n/a     .000
03878>         [L/S/n=  251./ .190/.035]
03879>         (Vmax=  .447:Dmax=  .359)
03880> R0199:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03881>      ADD HYD                1.0 02:R4            5.90     .352 No_date   12:37   63.24  n/a     .000
03882>                      +     1.0 02:EXT6           .86     .078 No_date   12:28   70.92  n/a     .000
03883>                      +     1.0 02:EXT7           .47     .060 No_date   12:12   67.60  n/a     .000
03884>                    SUM=    1.0 01:J5            7.23     .465 No_date   12:32   64.44  n/a     .000
03885> R0199:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03886>      ROUTE CHANNEL   ->     1.0 02:J5            7.23     .465 No_date   12:32   64.44  n/a     .000
03887>        [RDT= 1.00] out<-     1.0 01:R5            7.23     .459 No_date   12:37   64.44  n/a     .000
03888>         [L/S/n=  237./ .644/.035]
03889>         (Vmax=  .732:Dmax=  .333)
03890> R0199:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03891>      ADD HYD                1.0 02:Pre10_1        .80     .079 No_date   12:11   50.61  n/a     .000
03892>                      +     1.0 02:Pre9_2         .01     .002 No_date   12:00   37.39  n/a     .000
03893>                      +     1.0 02:Pre2_2         .00     .001 No_date   12:00   59.95  n/a     .000
03894>                    SUM=    1.0 01:Pre           .81     .080 No_date   12:11   50.41  n/a     .000
03895> R0199:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03896>      ROUTE CHANNEL   ->     1.0 02:Pre           .81     .080 No_date   12:11   50.41  n/a     .000
03897>        [RDT= 1.00] out<-     1.0 01:R6            .81     .078 No_date   12:14   50.41  n/a     .000
03898>         [L/S/n=   77./ .776/.035]
03899>         (Vmax=  .492:Dmax=  .058)
03900> R0199:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03901>      ROUTE CHANNEL   ->     1.0 02:Pre9_1         .44     .036 No_date   12:17   50.61  n/a     .000
03902>        [RDT= 1.00] out<-     1.0 01:R7            .44     .035 No_date   12:20   50.61  n/a     .000
03903>         [L/S/n=  159./1.576/.035]
03904>         (Vmax=  .797:Dmax=  .011)
03905> R0199:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03906>      ADD HYD                1.0 02:R6            .81     .078 No_date   12:14   50.48  n/a     .000
03907>                      +     1.0 02:EXT10          .20     .016 No_date   12:19   50.61  n/a     .000
03908>                    SUM=    1.0 01:J6            1.02     .093 No_date   12:14   50.51  n/a     .000
03909> R0199:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03910>      ROUTE CHANNEL   ->     1.0 02:J6            1.02     .093 No_date   12:14   50.51  n/a     .000
03911>        [RDT= 1.00] out<-     1.0 01:R8            1.02     .091 No_date   12:18   50.51  n/a     .000
03912>         [L/S/n=   79./ .522/.035]
03913>         (Vmax=  .423:Dmax=  .068)
03914> R0199:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03915>      ADD HYD                1.0 02:R8            1.02     .091 No_date   12:18   50.55  n/a     .000
03916>                      +     1.0 02:R7            .44     .035 No_date   12:20   50.71  n/a     .000
03917>                    SUM=    1.0 01:J7            1.46     .126 No_date   12:18   50.60  n/a     .000
03918> R0199:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03919>      ROUTE CHANNEL   ->     1.0 02:J7            1.46     .126 No_date   12:18   50.60  n/a     .000
03920>        [RDT= 1.00] out<-     1.0 01:R9            1.46     .126 No_date   12:19   50.60  n/a     .000
03921>         [L/S/n=   29./ .887/.035]
03922>         (Vmax=  .543:Dmax=  .086)
03923> R0199:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03924>      ADD HYD                1.0 02:EXT9          3.57     .284 No_date   12:23   57.15  n/a     .000
03925>                      +     1.0 02:R9            1.46     .126 No_date   12:19   50.62  n/a     .000
03926>                      +     1.0 02:EXT8           .83     .079 No_date   12:19   61.43  n/a     .000
03927>                      +     1.0 02:R5            7.23     .459 No_date   12:37   64.44  n/a     .000
03928>                    SUM=    1.0 01:J8           13.09     .906 No_date   12:28   60.72  n/a     .000
03929> R0199:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
03930>      ROUTE PIPE      ->    1.0 02:J8           13.09     .906 No_date   12:28   60.72  n/a     .000
03931> *   [RDT= 1.00] out<-     1.0 01:Outlet        13.09     .903 No_date   12:30   60.72  n/a     .000
03932>       [L/S/n=   8./ .010/.013]
03933>       (Vmax=  .485:Dmax= 1.351)
03934>       [Din=  .53:Duse= 1.65)
03935> ################################################################################
03936> # STORMS
03937> ################################################################################
03938>   ** END OF RUN : 1978
03939>
03940> ********************************************************************************
03941>
03942>
03943>
03944>
03945>
03946>  RUN#:COMMAND#
03947> R1979:C00001------------------------------------------------------------------------------
03948>       START
03949>         [TZERO =    .00 hrs on        0]
03950>         [METOUT=   2    (1=imperial, 2=metric output)]
03951>         [NSTORM=   1 ]
03952>         [NRUN  = 1979 ]
03953> ********************************************************************************
03954> #  SWMHYMO  / INPUT DATA FILE
03955> ********************************************************************************
03956> #  Project Name  : [5923 Ottawa St]
03957> #  Project Number: [P2710(e01)]
03958> #  Date          : [2025 April 28]
03959> #  Modeller      : [MM]
03960> #  Company       : JFSA Canada Inc.
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03961> #  License #     : 2549237
03962> #*****************************************************************************************
03963> # Model developed to simulate runoff from subcatchments under post development conditions
03964> #*****************************************************************************************
03965> R1979:C00002-------------------------------------------------------------------------------
03966>       READ STORM
03967>        Filename = STORM.001
03968>        Comment  = July 1st, 1979 Storm (3H) - Ottawa International Airport step 5 min
03969>        [SDT= 5.00:SDUR=   3.00:PTOT=  83.99]
03970> #*****************************************************************************************
03971> R1979:C00003-------------------------------------------------------------------------------
03972>       DEFAULT VALUES
03973>        Filename = C:\Temp\20250910-PostDev\Ottawa.val
03974>        ICASEdv  = 1 (read and print data)
03975>        FileTitle= File comment: [Parameters for City of Ottawa Projects]
03976>                   THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
03977>        Horton's infiltration equation parameters:
03978>        [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
03979>        Parameters for PERVIOUS surfaces in STANDHYD:
03980>        [IAperv=   4.67 mm] [LGP=40.00 m] [MNP= .250]
03981>        Parameters for IMPERVIOUS surfaces in STANDHYD:
03982>        [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
03983>        Parameters used in NASHYD:
03984>        [Ia=   4.67 mm] [N= 3.00]
03985>        Average monthly Pan Evaporation data in    (mm)
03986>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03987>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03988>        Average monthly Potential Evapotranspiration in    (mm)
03989>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03990>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03991> #*****************************************************************************************
03992> # EXT1
03993> #*****************************************************************************************
03994> R1979:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03995>      CALIB NASHYD            1.0 01:EXT1           3.21     .240 No_date    2:16   44.05 .524     .000
03996>        [CN= 80.0: N= 3.00: Tp=  .72]
03997> #*****************************************************************************************
03998> # EXT2
03999> #*****************************************************************************************
04000> R1979:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04001>      CALIB NASHYD            1.0 01:EXT2           .28     .039 No_date    1:50   50.68 .603     .000
04002>        [CN= 85.0: N= 3.00: Tp=  .33]
04003> #*****************************************************************************************
04004> # EXT3
04005> #*****************************************************************************************
04006> R1979:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04007>      CALIB NASHYD            1.0 01:EXT3           .56     .067 No_date    1:50   44.05 .524     .000
04008>        [CN= 80.0: N= 3.00: Tp=  .32]
04009> #*****************************************************************************************
04010> # EXT4
04011> #*****************************************************************************************
04012> R1979:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04013>      CALIB NASHYD            1.0 01:EXT4           .31     .038 No_date    1:48   42.84 .510     .000
04014>        [CN= 79.0: N= 3.00: Tp=  .29]
04015> #*****************************************************************************************
04016> # EXT5
04017> #*****************************************************************************************
04018> R1979:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04019>      CALIB NASHYD            1.0 01:EXT5           .59     .054 No_date    2:01   39.44 .470     .000
04020>        [CN= 76.0: N= 3.00: Tp=  .45]
04021> #*****************************************************************************************
04022> # EXT6
04023> #*****************************************************************************************
04024> R1979:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04025>      CALIB NASHYD            1.0 01:EXT6           .86     .088 No_date    2:06   50.68 .603     .000
04026>        [CN= 85.0: N= 3.00: Tp=  .56]
04027> #*****************************************************************************************
04028> # EXT7
04029> #*****************************************************************************************
04030> R1979:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04031>      CALIB NASHYD            1.0 01:EXT7           .47     .061 No_date    1:49   47.90 .570     .000
04032>        [CN= 83.0: N= 3.00: Tp=  .32]
04033> #*****************************************************************************************
04034> # EXT8
04035> #*****************************************************************************************
04036> R1979:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04037>      CALIB NASHYD            1.0 01:EXT8           .83     .085 No_date    1:58   42.85 .510     .000
04038>        [CN= 79.0: N= 3.00: Tp=  .42]
04039> #*****************************************************************************************
04040> # EXT9
04041> #*****************************************************************************************
04042> R1979:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04043>      CALIB NASHYD            1.0 01:EXT9          3.57     .311 No_date    2:03   39.44 .470     .000
04044>        [CN= 76.0: N= 3.00: Tp=  .48]
04045> #*****************************************************************************************
04046> # EXT9a
04047> #*****************************************************************************************
04048> R1979:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04049>      CALIB NASHYD            1.0 01:EXT9a          .01     .002 No_date    1:30   41.67 .496     .000
04050>        [CN= 78.0: N= 3.00: Tp=  .04]
04051> #*****************************************************************************************
04052> # EXT10
04053> #*****************************************************************************************
04054> R1979:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04055>      CALIB NASHYD            1.0 01:EXT10          .20     .017 No_date    1:59   34.36 .409     .000
04056>        [CN= 71.0: N= 3.00: Tp=  .42]
04057> #*****************************************************************************************
04058> # Pre2_1
04059> #*****************************************************************************************
04060> R1979:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04061> *    CALIB NASHYD            1.0 01:Pre2_1         .01     .002 No_date    1:30   35.32 .421     .000
04062>        [CN= 72.0: N= 3.00: Tp=  .03]
04063> #*****************************************************************************************
04064> # Pre2_2
04065> #*****************************************************************************************
04066> R1979:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04067> *    CALIB NASHYD            1.0 01:Pre2_2         .00     .000 No_date    1:30   41.63 .496     .000
04068>        [CN= 78.0: N= 3.00: Tp=  .02]
04069> #*****************************************************************************************
04070> # Pre9_1
04071> #*****************************************************************************************
04072> R1979:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04073>      CALIB NASHYD            1.0 01:Pre9_1         .44     .038 No_date    1:55   34.37 .409     .000
04074>        [CN= 71.0: N= 3.00: Tp=  .38]
04075> #*****************************************************************************************
04076> # Pre9_2
04077> #*****************************************************************************************
04078> R1979:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04079> *    CALIB NASHYD            1.0 01:Pre9_2         .01     .002 No_date    1:30   24.59 .293     .000
04080>        [CN= 59.0: N= 3.00: Tp=  .03]
04081> #*****************************************************************************************
04082> # Pre10_1
04083> #*****************************************************************************************
04084> R1979:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04085>      CALIB NASHYD            1.0 01:Pre10_1        .80     .078 No_date    1:48   34.37 .409     .000
04086>        [CN= 71.0: N= 3.00: Tp=  .29]
04087> #*****************************************************************************************
04088> # Prel1_1
04089> #*****************************************************************************************
04090> R1979:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04091>      CALIB NASHYD            1.0 01:Prel1_1        .07     .009 No_date    1:43   41.67 .496     .000
04092>        [CN= 78.0: N= 3.00: Tp=  .21]
04093> #*****************************************************************************************
04094> # Site 1
04095> #*****************************************************************************************
04096> R1979:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04097>      DESIGN STANDHYD         1.0 01:S1-B1          .42     .088 No_date    1:30   59.24 .705     .000
04098>        [XIMP=.34:TIMP=.44]
04099>        [SLP=1.00:DT= 1.00]
04100>        [LOSS= 1 : HORTONS]
04101> #*****************************************************************************************
04102> # Site 1 - Roof
04103> #*****************************************************************************************
04104> R1979:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04105>      DESIGN STANDHYD         1.0 01:S1-Roof        .06     .019 No_date    1:30   82.00 .976     .000
04106>        [XIMP=.99:TIMP=.99]
04107>        [SLP= .50:DT= 1.00]
04108>        [LOSS= 1 : HORTONS]
04109> R1979:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04110>      ROUTE RESERVOIR ->      1.0 01:S1-Roof        .06     .019 No_date    1:30   82.00 n/a      .000
04111>                  out <=      1.0 01:S1-Roof-Ou     .06     .004 No_date    2:01   82.00 n/a      .000
04112>              overflow <=     1.0 03:S1-Roof-Ov     .00     .000 No_date    0:00    .00 n/a      .000
04113>        (MxStoUsed=.3896E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04114> R1979:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04115>      ADD HYD                 1.0 02:S1-B1          .42     .088 No_date    1:30   59.24 n/a      .000
04116>                        +     1.0 02:S1-Roof-Ou     .06     .004 No_date    2:01   82.00 n/a      .000
04117>                        +     1.0 02:S1-Roof-Ov     .00     .000 No_date    0:00    .00 n/a      .000
04118>                    SUM=      1.0 01:SITE1-IN       .48     .091 No_date    1:30   62.32 n/a      .000
04119> R1979:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04120>      ROUTE RESERVOIR ->      1.0 02:SITE1-IN       .48     .091 No_date    1:30   62.32 n/a      .000
04121>                  out <=      1.0 01:SITE1-Out      .48     .013 No_date    2:14   62.32 n/a      .000
04122>              overflow <=     1.0 03:SITE1-Over     .00     .000 No_date    0:00    .00 n/a      .000
04123>        (MxStoUsed=.2061E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04124> #*****************************************************************************************
04125> # Site 2
04126> #*****************************************************************************************
04127> R1979:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04128>      DESIGN STANDHYD         1.0 01:S2-B3          .35     .073 No_date    1:30   58.02 .691     .000
04129>        [XIMP=.31:TIMP=.41]
04130>        [SLP=1.00:DT= 1.00]
04131>        [LOSS= 1 : HORTONS]
04132> #*****************************************************************************************
04133> # Site 2 - Roof
04134> #*****************************************************************************************
04135> R1979:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04136>      DESIGN STANDHYD         1.0 01:S2-Roof        .09     .027 No_date    1:30   82.00 .976     .000
04137>        [XIMP=.99:TIMP=.99]
04138>        [SLP= .50:DT= 1.00]
04139>        [LOSS= 1 : HORTONS]
04140> #*****************************************************************************************
04141> R1979:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04142>      ROUTE RESERVOIR ->      1.0 02:S2-Roof        .09     .027 No_date    1:30   82.00 n/a      .000
04143>                  out <=      1.0 01:S2-Roof-Ou     .09     .009 No_date    1:43   82.00 n/a      .000
04144>              overflow <=     1.0 03:S2-Roof-Ov     .00     .000 No_date    0:00    .00 n/a      .000
04145>        (MxStoUsed=.3654E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04146> R1979:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04147>      ADD HYD                 1.0 02:S2-B3          .35     .073 No_date    1:30   58.02 n/a      .000
04148>                        +     1.0 02:S2-Roof-Ou     .09     .009 No_date    1:43   82.00 n/a      .000
04149>                        +     1.0 02:S2-Roof-Ov     .00     .000 No_date    0:00    .00 n/a      .000
04150>                    SUM=      1.0 01:SITE2-Out      .45     .082 No_date    1:31   63.01 n/a      .000
04151> R1979:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04152>      ROUTE RESERVOIR ->      1.0 02:SITE2-IN       .45     .082 No_date    1:31   63.01 n/a      .000
04153>                  out <=      1.0 01:SITE2-Out      .45     .015 No_date    2:17   63.01 n/a      .000
04154>              overflow <=     1.0 03:SITE2-Over     .00     .000 No_date    0:00    .00 n/a      .000
04155>        (MxStoUsed=.1922E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04156> R1979:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04157>      ADD HYD                 1.0 02:SITE1-Out      .48     .013 No_date    2:14   62.32 n/a      .000
04158>                        +     1.0 02:SITE1-Over     .00     .000 No_date    0:00    .00 n/a      .000
04159>                    SUM=      1.0 01:Site1          .48     .013 No_date    2:14   62.32 n/a      .000
04160> R1979:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04161>      ADD HYD                 1.0 02:SITE2-Out      .45     .015 No_date    2:17   63.01 n/a      .000
04162>                        +     1.0 02:SITE2-Over     .00     .000 No_date    0:00    .00 n/a      .000
04163>                    SUM=      1.0 01:Site2          .45     .015 No_date    2:17   63.01 n/a      .000
04164> R1979:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04165>      ADD HYD                 1.0 02:EXT2           .28     .039 No_date    1:50   50.68 n/a      .000
04166>                        +     1.0 02:Pre2_1         .01     .002 No_date    1:30   35.32 n/a      .000
04167>                        +     1.0 02:Site1          .48     .013 No_date    2:14   62.32 n/a      .000
04168>                        +     1.0 02:Site2          .45     .015 No_date    2:17   63.01 n/a      .000
04169>                    SUM=      1.0 01:J1            1.23     .060 No_date    2:00   59.58 n/a      .000
04170> R1979:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04171>      ROUTE CHANNEL           ->      1.0 02:J1            1.23     .060 No_date    2:00   59.58 n/a      .000
04172>        [RDT= 1.00] out<-             1.0 01:R1            1.23     .059 No_date    2:04   59.58 n/a      .000
04173>         [L/S/n=  143./ .394/.035]
04174>         {Vmax=  .365:Dmax=  .155}
04175> R1979:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04176>      ADD HYD                 1.0 02:R1            1.23     .059 No_date    2:04   59.58 n/a      .000
04177>                        +     1.0 02:EXT3           .56     .067 No_date    1:50   44.05 n/a      .000
04178>                        +     1.0 02:EXT1          3.21     .240 No_date    2:16   44.05 n/a      .000
04179>                    SUM=      1.0 01:J2            5.00     .345 No_date    2:08   47.86 n/a      .000
04180> R1979:C00036-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04181>      ROUTE CHANNEL           ->      1.0 02:J2            5.00     .345 No_date    2:08   47.86 n/a      .000
04182>        [RDT= 1.00] out<-             1.0 01:R2            5.00     .344 No_date    2:10   47.86 n/a      .000
04183>         [L/S/n=   73./ .425/.035]
04184>         {Vmax=  .567:Dmax=  .319}
04185> R1979:C00037-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04186>      ADD HYD                 1.0 02:R2            5.00     .344 No_date    2:10   47.86 n/a      .000
04187>                        +     1.0 02:EXT4           .31     .038 No_date    1:48   42.84 n/a      .000
04188>                    SUM=      1.0 01:J3            5.31     .371 No_date    2:07   47.57 n/a      .000
04189> R1979:C00038-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04190>      ROUTE CHANNEL           ->      1.0 02:J3            5.31     .371 No_date    2:07   47.57 n/a      .000
04191>        [RDT= 1.00] out<-             1.0 01:R3            5.31     .369 No_date    2:10   47.57 n/a      .000
04192>         [L/S/n=   92./ .274/.035]
04193>         {Vmax=  .464:Dmax=  .329}
04194> R1979:C00039-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04195>      ADD HYD                 1.0 02:R3            5.31     .369 No_date    2:10   47.57 n/a      .000
04196>                        +     1.0 02:EXT5           .59     .054 No_date    2:01   39.44 n/a      .000
04197>                    SUM=      1.0 01:J4            5.90     .420 No_date    2:09   46.75 n/a      .000
04198> R1979:C00040-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04199>      ROUTE CHANNEL           ->      1.0 02:J4            5.90     .420 No_date    2:09   46.75 n/a      .000
04200>        [RDT= 1.00] out<-             1.0 01:R4            5.90     .404 No_date    2:15   46.75 n/a      .000
04201>         [L/S/n=  251./ .190/.035]
04202>         {Vmax=  .463:Dmax=  .380}
04203> R1979:C00041-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04204>      ADD HYD                 1.0 02:R4            5.90     .404 No_date    2:15   46.75 n/a      .000
04205>                        +     1.0 02:EXT6           .86     .088 No_date    2:06   50.68 n/a      .000
04206>                        +     1.0 02:EXT7           .47     .061 No_date    1:49   47.90 n/a      .000
04207>                    SUM=      1.0 01:J5            7.23     .530 No_date    2:11   47.29 n/a      .000
04208> R1979:C00042-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04209>      ROUTE CHANNEL           ->      1.0 02:J5            7.23     .530 No_date    2:11   47.29 n/a      .000
04210>        [RDT= 1.00] out<-             1.0 01:R5            7.23     .525 No_date    2:15   47.29 n/a      .000
04211>         [L/S/n=  237./ .644/.035]
04212>         {Vmax=  .762:Dmax=  .351}
04213> R1979:C00043-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04214>      ADD HYD                 1.0 02:Prel0_1        .80     .078 No_date    1:48   34.37 n/a      .000
04215>                        +     1.0 02:Pre9_2         .01     .002 No_date    1:30   24.59 n/a      .000
04216>                        +     1.0 02:Pre2_2         .00     .000 No_date    1:30   41.63 n/a      .000
04217>                    SUM=      1.0 01:Pre            .81     .079 No_date    1:48   34.22 n/a      .000
04218> R1979:C00044-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04219>      ROUTE CHANNEL           ->      1.0 02:Pre            .81     .079 No_date    1:48   34.22 n/a      .000
04220>        [RDT= 1.00] out<-             1.0 01:R6            .81     .078 No_date    1:51   34.22 n/a      .000
04221>         [L/S/n=   77./ .776/.035]
04222>         {Vmax=  .492:Dmax=  .058}
04223> R1979:C00045-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04224>      ROUTE CHANNEL           ->      1.0 02:Pre9_1         .44     .038 No_date    1:55   34.37 n/a      .000
04225>        [RDT= 1.00] out<-             1.0 01:R7            .44     .037 No_date    1:59   34.37 n/a      .000
04226>         [L/S/n=  159./1.576/.035]
04227>         {Vmax=  .797:Dmax=  .011}
04228> R1979:C00046-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04229>      ADD HYD                 1.0 02:R6             .81     .078 No_date    1:51   34.62 n/a      .000
04230>                        +     1.0 02:EXT10          .20     .017 No_date    1:59   34.36 n/a      .000
04231>                    SUM=      1.0 01:J6            1.02     .094 No_date    1:52   34.57 n/a      .000
04232> R1979:C00047-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04233>      ROUTE CHANNEL           ->      1.0 02:J6            1.02     .094 No_date    1:52   34.57 n/a      .000
04234>        [RDT= 1.00] out<-             1.0 01:R8            1.02     .093 No_date    1:55   34.57 n/a      .000
04235>         [L/S/n=   79./ .522/.035]
04236>         {Vmax=  .423:Dmax=  .069}
04237> R1979:C00048-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04238>      ADD HYD                 1.0 02:R8            1.02     .093 No_date    1:55   34.79 n/a      .000
04239>                        +     1.0 02:R7             .44     .040 No_date    4:49   34.91 n/a      .000
04240>                    SUM=      1.0 01:J7            1.46     .130 No_date    1:56   34.82 n/a      .000
04241> R1979:C00049-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04242>      ROUTE CHANNEL           ->      1.0 02:J7            1.46     .130 No_date    1:56   34.82 n/a      .000
04243>        [RDT= 1.00] out<-             1.0 01:R9            1.46     .130 No_date    1:57   34.82 n/a      .000
04244>         [L/S/n=   29./ .887/.035]
04245>         {Vmax=  .543:Dmax=  .088}
04246> R1979:C00050-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04247>      ADD HYD                 1.0 02:EXT9          3.57     .311 No_date    2:03   39.44 n/a      .000
04248>                        +     1.0 02:R9            1.46     .130 No_date    1:57   34.96 n/a      .000
04249>                        +     1.0 02:EXT8           .83     .085 No_date    1:58   42.85 n/a      .000
04250>                        +     1.0 02:R5            7.23     .525 No_date    2:15   47.29 n/a      .000
04251>                    SUM=      1.0 01:J8           13.09    1.018 No_date    2:07   43.50 n/a      .000
04252> R1979:C00051-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04253>      ROUTE PIPE      ->      1.0 02:J8           13.09    1.018 No_date    2:07   43.50 n/a      .000
04254> *    [RDT= 1.00] out<-             1.0 01:Outlet       13.09    1.017 No_date    2:07   43.50 n/a      .000
04255>         [L/S/n=    8./ .010/.013]
04256>         {Vmax=  .499:Dmax= 1.411}
04257>         [Din=  .53:Dused= 1.72]
04258> ###############################################################################
04259> # STORMS
04260> ###############################################################################
04261>   ** END OF RUN : 1987
04262>
04263> *****************************************************************************************
04264>
04265>
04266>
04267>
04268>
04269>  RUN#:COMMAND#
04270> R1988:C00001-------------------------------------------------------------------------------
04271>       START
04272>        [TZERO =    .00 hrs on        0]
04273>        [METOUT=   2    (1=imperial, 2=metric output)]
04274>        [NSTORM=   1 ]
04275>        [NRUN  = 1988 ]
04276> #*****************************************************************************************
04277> #  SWMHYMO  / INPUT DATA FILE
04278> #*****************************************************************************************
04279> #  Project Name  : [5923 Ottawa St]
04280> #  Project Number: [P2710(e01)]
04281> #  Date          : [2025 April 28]
04282> #  Modeller      : [MM]
04283> #  Company       : JFSA Canada Inc.
04284> #  License #     : 2549237
04285> #*****************************************************************************************
04286> # Model developed to simulate runoff from subcatchments under post development conditions
04287> #*****************************************************************************************
04288> R1988:C00002-------------------------------------------------------------------------------
04289>       READ STORM
04290>        Filename = STORM.001
04291>        Comment  = August 4th, 1988 Storm (5H+) - Ottawa International Airport step 5
04292>        [SDT= 5.00:SDUR=   5.58:PTOT=  80.59]
04293> #*****************************************************************************************
04294> R1988:C00003-------------------------------------------------------------------------------
04295>       DEFAULT VALUES
04296>        Filename = C:\Temp\20250910-PostDev\Ottawa.val
04297>        ICASEdv  = 1 (read and print data)
04298>        FileTitle= File comment: [Parameters for City of Ottawa Projects]
04299>                   THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
04300>        Horton's infiltration equation parameters:
04301>        [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
04302>        Parameters for PERVIOUS surfaces in STANDHYD:
04303>        [IAperv=   4.67 mm] [LGP=40.00 m] [MNP= .250]
04304>        Parameters for IMPERVIOUS surfaces in STANDHYD:
04305>        [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
04306>        Parameters used in NASHYD:
04307>        [Ia=   4.67 mm] [N= 3.00]
04308>        Average monthly Pan Evaporation data in    (mm)
04309>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
04310>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
04311>        Average monthly Potential Evapotranspiration in    (mm)
04312>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
04313>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
04314> #*****************************************************************************************
04315> # EXT1
04316> #*****************************************************************************************
04317> R1988:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04318>      CALIB NASHYD            1.0 01:EXT1           3.21     .197 No_date    2:30   41.34 .513     .000
04319>        [CN= 80.0: N= 3.00: Tp=  .72]
04320> #*****************************************************************************************
```

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04321> # EXT2
04322> #*************************************************************************************
04323> R1988:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04324>      CALIB NASHYD            1.0 01:EXT2          .28     .035 No_date    2:11   47.74 .592     .000
04325>        [CN= 85.0: N= 3.00: Tp=  .33]
04326> #*************************************************************************************
04327> # EXT3
04328> #*************************************************************************************
04329> R1988:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04330>      CALIB NASHYD            1.0 01:EXT3          .56     .061 No_date    2:11   41.34 .513     .000
04331>        [CN= 80.0: N= 3.00: Tp=  .32]
04332> #*************************************************************************************
04333> # EXT4
04334> #*************************************************************************************
04335> R1988:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04336>      CALIB NASHYD            1.0 01:EXT4          .31     .035 No_date    2:10   40.18 .499     .000
04337>        [CN= 79.0: N= 3.00: Tp=  .29]
04338> #*************************************************************************************
04339> # EXT5
04340> #*************************************************************************************
04341> R1988:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04342>      CALIB NASHYD            1.0 01:EXT5          .59     .046 No_date    2:17   36.92 .458     .000
04343>        [CN= 76.0: N= 3.00: Tp=  .45]
04344> #*************************************************************************************
04345> # EXT6
04346> #*************************************************************************************
04347> R1988:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04348>      CALIB NASHYD            1.0 01:EXT6          .86     .074 No_date    2:21   47.74 .592     .000
04349>        [CN= 85.0: N= 3.00: Tp=  .56]
04350> #*************************************************************************************
04351> # EXT7
04352> #*************************************************************************************
04353> R1988:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04354>      CALIB NASHYD            1.0 01:EXT7          .47     .055 No_date    2:11   45.05 .559     .000
04355>        [CN= 83.0: N= 3.00: Tp=  .32]
04356> #*************************************************************************************
04357> # EXT8
04358> #*************************************************************************************
04359> R1988:C00011-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04360>      CALIB NASHYD            1.0 01:EXT8          .83     .074 No_date    2:15   40.18 .499     .000
04361>        [CN= 79.0: N= 3.00: Tp=  .42]
04362> #*************************************************************************************
04363> # EXT9
04364> #*************************************************************************************
04365> R1988:C00012-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04366>      CALIB NASHYD            1.0 01:EXT9          3.57     .266 No_date    2:18   36.92 .458     .000
04367>        [CN= 76.0: N= 3.00: Tp=  .48]
04368> #*************************************************************************************
04369> # EXT9a
04370> #*************************************************************************************
04371> R1988:C00013-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04372>      CALIB NASHYD            1.0 01:EXT9a          .01     .003 No_date    2:00   39.05 .485     .000
04373>        [CN= 78.0: N= 3.00: Tp=  .04]
04374> #*************************************************************************************
04375> # EXT10
04376> #*************************************************************************************
04377> R1988:C00014-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04378>      CALIB NASHYD            1.0 01:EXT10          .20     .014 No_date    2:16   32.08 .398     .000
04379>        [CN= 71.0: N= 3.00: Tp=  .42]
04380> #*************************************************************************************
04381> # Pre2_1
04382> #*************************************************************************************
04383> R1988:C00015-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04384> *    CALIB NASHYD            1.0 01:Pre2_1          .01     .003 No_date    2:00   32.99 .409     .000
04385>        [CN= 72.0: N= 3.00: Tp=  .03]
04386> #*************************************************************************************
04387> # Pre2_2
04388> #*************************************************************************************
04389> R1988:C00016-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04390> *    CALIB NASHYD            1.0 01:Pre2_2          .00     .001 No_date    2:00   39.04 .484     .000
04391>        [CN= 78.0: N= 3.00: Tp=  .02]
04392> #*************************************************************************************
04393> # Pre9_1
04394> #*************************************************************************************
04395> R1988:C00017-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04396>      CALIB NASHYD            1.0 01:Pre9_1          .44     .033 No_date    2:14   32.08 .398     .000
04397>        [CN= 71.0: N= 3.00: Tp=  .38]
04398> #*************************************************************************************
04399> # Pre9_2
04400> #*************************************************************************************
04401> R1988:C00018-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04402> *    CALIB NASHYD            1.0 01:Pre9_2          .01     .003 No_date    2:00   22.83 .283     .000
04403>        [CN= 59.0: N= 3.00: Tp=  .03]
04404> #*************************************************************************************
04405> # Pre10_1
04406> #*************************************************************************************
04407> R1988:C00019-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04408>      CALIB NASHYD            1.0 01:Pre10_1          .80     .072 No_date    2:10   32.08 .398     .000
04409>        [CN= 71.0: N= 3.00: Tp=  .29]
04410> #*************************************************************************************
04411> # Pre11_1
04412> #*************************************************************************************
04413> R1988:C00020-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04414>      CALIB NASHYD            1.0 01:Pre11_1          .07     .009 No_date    2:06   39.06 .485     .000
04415>        [CN= 78.0: N= 3.00: Tp=  .21]
04416> #*************************************************************************************
04417> # Site 1
04418> #*************************************************************************************
04419> R1988:C00021-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04420>      DESIGN STANDHYD         1.0 01:S1-B1          .42     .104 No_date    2:00   54.85 .681     .000
04421>        [XIMP=.34:TIMP=.44]
04422>        [SLP=1.00:DT= 1.00]
04423>        [LOSS= 1 : HORTONS]
04424> #*************************************************************************************
04425> # Site 1 - Roof
04426> #*************************************************************************************
04427> R1988:C00022-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04428>      DESIGN STANDHYD         1.0 01:S1-Roof          .06     .028 No_date    2:00   78.59 .975     .000
04429>        [XIMP=.99:TIMP=.99]
04430>        [SLP= .50:DT= 1.00]
04431>        [LOSS= 1 : HORTONS]
04432> R1988:C00023-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04433>      ROUTE RESERVOIR ->     1.0 02:S1-Roof          .06     .028 No_date    2:00   78.59  n/a     .000
04434>                       out <=    1.0 01:S1-Roof-Ou      .06     .004 No_date    2:03   78.59  n/a     .000
04435>                  overflow <=    1.0 01:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
04436>       (MxStoUsed=.3573E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04437> R1988:C00024-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04438>      ADD HYD                 1.0 02:S1-B1          .42     .104 No_date    2:00   54.85  n/a     .000
04439>                       +    1.0 02:S1-Roof-Ou      .06     .004 No_date    2:03   78.59  n/a     .000
04440>                       +    1.0 02:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
04441>                     SUM=   1.0 01:SITE1-IN        .48     .108 No_date    2:00   58.06  n/a     .000
04442> R1988:C00025-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04443>      ROUTE RESERVOIR ->     1.0 02:SITE1-IN         .48     .108 No_date    2:00   58.06  n/a     .000
04444>                       out <=    1.0 01:SITE1-Out       .48     .009 No_date    2:30   58.06  n/a     .000
04445>                  overflow <=    1.0 01:SITE1-Over      .00     .000 No_date    0:00    .00  n/a     .000
04446>      (MxStoUsed=.1725E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04447> #*************************************************************************************
04448> # Site 2
04449> #*************************************************************************************
04450> R1988:C00026-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04451>      DESIGN STANDHYD         1.0 01:S2-B3          .35     .088 No_date    2:00   53.63 .665     .000
04452>        [XIMP=.31:TIMP=.41]
04453>        [SLP=1.00:DT= 1.00]
04454>        [LOSS= 1 : HORTONS]
04455> #*************************************************************************************
04456> # Site 2 - Roof
04457> #*************************************************************************************
04458> R1988:C00027-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04459>      DESIGN STANDHYD         1.0 01:S2-Roof          .09     .040 No_date    2:00   78.59 .975     .000
04460>        [XIMP=.99:TIMP=.99]
04461>        [SLP= .50:DT= 1.00]
04462>        [LOSS= 1 : HORTONS]
04463> #*************************************************************************************
04464> R1988:C00028-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04465>      ROUTE RESERVOIR ->     1.0 02:S2-Roof          .09     .040 No_date    2:00   78.59  n/a     .000
04466>                       out <=    1.0 01:S2-Roof-Ou      .09     .009 No_date    2:02   78.61  n/a     .000
04467>                  overflow <=    1.0 01:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
04468>       (MxStoUsed=.3220E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04469> R1988:C00029-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04470>      ADD HYD                 1.0 02:S2-B3          .35     .088 No_date    2:00   53.63  n/a     .000
04471>                       +    1.0 02:S2-Roof-Ou      .09     .009 No_date    2:02   78.61  n/a     .000
04472>                       +    1.0 02:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
04473>                     SUM=   1.0 01:SITE2-IN        .45     .096 No_date    2:00   58.83  n/a     .000
04474> R1988:C00030-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04475>      ROUTE RESERVOIR ->     1.0 02:SITE2-IN         .45     .096 No_date    2:00   58.83  n/a     .000
04476>                       out <=    1.0 01:SITE2-Out       .45     .010 No_date    2:34   58.83  n/a     .000
04477>                  overflow <=    1.0 01:SITE2-Over      .00     .000 No_date    0:00    .00  n/a     .000
04478>      (MxStoUsed=.1650E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
04479> R1988:C00031-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04480>      ADD HYD                 1.0 02:SITE1-Out        .48     .009 No_date    2:30   58.06  n/a     .000
04481>                       +    1.0 02:SITE1-Over      .00     .000 No_date    0:00    .00  n/a     .000
04482>                     SUM=   1.0 01:Site1           .48     .009 No_date    2:30   58.06  n/a     .000
04483> R1988:C00032-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04484>      ADD HYD                 1.0 02:SITE2-Out        .45     .010 No_date    2:34   58.83  n/a     .000
04485>                       +    1.0 02:SITE2-Over      .00     .000 No_date    0:00    .00  n/a     .000
04486>                     SUM=   1.0 01:Site2           .45     .010 No_date    2:34   58.83  n/a     .000
04487> R1988:C00033-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04488>      ADD HYD                 1.0 02:EXT2           .28     .035 No_date    2:11   47.74  n/a     .000
04489>                       +    1.0 02:Pre2_1          .01     .003 No_date    2:00   32.99  n/a     .000
04490>                       +    1.0 02:Site1           .48     .009 No_date    2:30   58.06  n/a     .000
04491>                       +    1.0 02:Site2           .45     .010 No_date    2:34   58.83  n/a     .000
04492>                     SUM=   1.0 01:J1            1.23     .053 No_date    2:11   55.67  n/a     .000
04493> R1988:C00034-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04494>      ROUTE CHANNEL   ->     1.0 02:J1            1.23     .053 No_date    2:11   55.67  n/a     .000
04495>        [RD= 1.00] out<-     1.0 01:R1            1.23     .051 No_date    2:15   55.67  n/a     .000
04496>        [L/S/n=  143./ .394/.035]
04497>        {Vmax=  .354:Dmax=  .147}
04498> R1988:C00035-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04499>      ADD HYD                 1.0 02:R1            1.23     .051 No_date    2:15   55.67  n/a     .000
04500>                       +    1.0 02:EXT3           .56     .061 No_date    2:11   41.34  n/a     .000
04501>                       +    1.0 02:EXT1          3.21     .197 No_date    2:30   41.34  n/a     .000
04502>                     SUM=   1.0 01:J2            5.00     .287 No_date    2:20   44.86  n/a     .000
04503> R1988:C00036-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04504>      ROUTE CHANNEL   ->     1.0 02:J2            5.00     .287 No_date    2:20   44.86  n/a     .000
04505>        [RD= 1.00] out<-     1.0 01:R2            5.00     .286 No_date    2:22   44.86  n/a     .000
04506>        [L/S/n=   73./ .425/.035]
04507>        {Vmax=  .542:Dmax=  .297}
04508> R1988:C00037-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04509>      ADD HYD                 1.0 02:R2            5.00     .286 No_date    2:22   44.86  n/a     .000
04510>                       +    1.0 02:EXT4           .31     .035 No_date    2:10   40.18  n/a     .000
04511>                     SUM=   1.0 01:J3            5.31     .313 No_date    2:20   44.58  n/a     .000
04512> R1988:C00038-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04513>      ROUTE CHANNEL   ->     1.0 02:J3            5.31     .313 No_date    2:20   44.58  n/a     .000
04514>        [RD= 1.00] out<-     1.0 01:R3            5.31     .309 No_date    2:22   44.58  n/a     .000
04515>        [L/S/n=   92./ .274/.035]
04516>        {Vmax=  .445:Dmax=  .308}
04517> R1988:C00039-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04518>      ADD HYD                 1.0 02:R3            5.31     .309 No_date    2:22   44.58  n/a     .000
04519>                       +    1.0 02:EXT5           .59     .046 No_date    2:17   36.92  n/a     .000
04520>                     SUM=   1.0 01:J4            5.90     .354 No_date    2:21   43.81  n/a     .000
04521> R1988:C00040-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04522>      ROUTE CHANNEL   ->     1.0 02:J4            5.90     .354 No_date    2:21   43.81  n/a     .000
04523>        [RD= 1.00] out<-     1.0 01:R4            5.90     .332 No_date    2:29   43.81  n/a     .000
04524>        [L/S/n=  251./ .190/.035]
04525>        {Vmax=  .441:Dmax=  .352}
04526> R1988:C00041-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04527>      ADD HYD                 1.0 02:R4            5.90     .332 No_date    2:29   43.81  n/a     .000
04528>                       +    1.0 02:EXT6           .86     .074 No_date    2:21   47.74  n/a     .000
04529>                       +    1.0 02:EXT7           .47     .055 No_date    2:11   45.05  n/a     .000
04530>                     SUM=   1.0 01:J5            7.23     .440 No_date    2:25   44.36  n/a     .000
04531> R1988:C00042-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04532>      ROUTE CHANNEL   ->     1.0 02:J5            7.23     .440 No_date    2:25   44.36  n/a     .000
04533>        [RD= 1.00] out<-     1.0 01:R5            7.23     .433 No_date    2:30   44.36  n/a     .000
04534>        [L/S/n=  237./ .644/.035]
04535>        {Vmax=  .722:Dmax=  .326}
04536> R1988:C00043-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04537>      ADD HYD                 1.0 02:Pre10_1          .80     .072 No_date    2:10   32.08  n/a     .000
04538>                       +    1.0 02:Pre9_2           .01     .003 No_date    2:00   22.83  n/a     .000
04539>                       +    1.0 02:Pre2_2           .00     .001 No_date    2:00   39.04  n/a     .000
04540>                     SUM=   1.0 01:Pre            .81     .072 No_date    2:10   31.94  n/a     .000
04541> R1988:C00044-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04542>      ROUTE CHANNEL   ->     1.0 02:Pre           .81     .072 No_date    2:10   31.94  n/a     .000
04543>        [RD= 1.00] out<-     1.0 01:R6            .81     .071 No_date    2:12   31.94  n/a     .000
04544>        [L/S/n=   77./ .776/.035]
04545>        {Vmax=  .492:Dmax=  .052}
04546> R1988:C00045-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04547>      ROUTE CHANNEL   ->     1.0 02:Pre9_1          .44     .033 No_date    2:14   32.08  n/a     .000
04548>        [RD= 1.00] out<-     1.0 01:R7            .44     .033 No_date    2:17   32.08  n/a     .000
04549>        [L/S/n=  159./1.576/.035]
04550>        {Vmax=  .797:Dmax=  .010}
04551> R1988:C00046-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04552>      ADD HYD                 1.0 02:R6            .81     .071 No_date    2:12   32.17  n/a     .000
04553>                       +    1.0 02:EXT10          .20     .014 No_date    2:16   32.08  n/a     .000
04554>                     SUM=   1.0 01:J6            1.02     .085 No_date    2:13   32.15  n/a     .000
04555> R1988:C00047-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04556>      ROUTE CHANNEL   ->     1.0 02:J6            1.02     .085 No_date    2:13   32.15  n/a     .000
04557>        [RD= 1.00] out<-     1.0 01:R8            1.02     .083 No_date    2:16   32.15  n/a     .000
04558>        [L/S/n=   79./ .522/.035]
04559>        {Vmax=  .423:Dmax=  .062}
04560> R1988:C00048-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04561>      ADD HYD                 1.0 02:R8            1.02     .083 No_date    2:16   32.29  n/a     .000
04562>                       +    1.0 02:R7            .44     .033 No_date    2:17   32.42  n/a     .000
04563>                     SUM=   1.0 01:J7            1.46     .115 No_date    2:16   32.33  n/a     .000
04564> R1988:C00049-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04565>      ROUTE CHANNEL   ->     1.0 02:J7            1.46     .115 No_date    2:16   32.33  n/a     .000
04566>        [RD= 1.00] out<-     1.0 01:R9            1.46     .115 No_date    2:17   32.33  n/a     .000
04567>        [L/S/n=   29./ .887/.035]
04568>        {Vmax=  .543:Dmax=  .078}
04569> R1988:C00050-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04570>      ADD HYD                 1.0 02:EXT9          3.57     .266 No_date    2:18   36.92  n/a     .000
04571>                       +    1.0 02:R9            1.46     .115 No_date    2:17   32.43  n/a     .000
04572>                       +    1.0 02:EXT8           .83     .074 No_date    2:15   40.18  n/a     .000
04573>                       +    1.0 02:R5            7.23     .433 No_date    2:30   44.36  n/a     .000
04574>                     SUM=   1.0 01:J8           13.09     .857 No_date    2:22   40.74  n/a     .000
04575> R1988:C00051-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04576>      ROUTE PIPE      ->     1.0 02:J8           13.09     .857 No_date    2:22   40.74  n/a     .000
04577> *    [RD= 1.00] out<-     1.0 01:Outlet        13.09     .856 No_date    2:23   40.74  n/a     .000
04578>        [L/S/n=    8./ .010/.013]
04579>        {Vmax=  .478:Dmax= 1.323}
04580>        [Din=  .53:Dus=0- 1.61]
04581> ##############################################################################
04582> # STORMS
04583> ##############################################################################
04584>  ** END OF RUN : 1995
04585>
04586> ************************************************************************************
04587>
04588>
04589>
04590>
04591>
04592>  RUN#:COMMAND#
04593> R1996:C00001-----------------------------------------------------------------------
04594>    START
04595>      [TZERO =    .00 hrs on      0]
04596>      [METOUT=   2   (1=imperial, 2=metric output)]
04597>      [NSTORM=   1 ]
04598>      [NRUN  = 1996 ]
04599> #************************************************************************************
04600> #  SWMHYMO  / INPUT DATA FILE
04601> #************************************************************************************
04602> #  Project Name  : [5923 Ottawa St]
04603> #  Project Number: [P2710(e01)]
04604> #  Date          : [2025 April 28]
04605> #  Modeller      : [MM]
04606> #  Company       : JFSA Canada Inc.
04607> #  License #     : 2549237
04608> #************************************************************************************
04609> # Model developed to simulate runoff from subcatchments under post development conditions
04610> #************************************************************************************
04611> R1996:C00002-----------------------------------------------------------------------
04612>    READ STORM
04613>      Filename = STORM.001
04614>      Comment  = August 8th, 1996 Storm (5H) - Ottawa International Airport step 5
04615>      [Ptot= 5.00:SDUR=   5.75:PTOT=  73.90]
04616> #************************************************************************************
04617> R1996:C00003-----------------------------------------------------------------------
04618>    DEFAULT VALUES
04619>      Filename = C:\Temp\20250910-PostDev\Ottawa.val
04620>      ICASEdv  = 1 (read and print data)
04621>      FileTitle= File comment: [Parameters for City of Ottawa Projects]
04622>                 THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
04623>      Horton's infiltration equation parameters:
04624>      [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
04625>      Parameters for PERVIOUS surfaces in STANDHYD:
04626>      [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
04627>      Parameters for IMPERVIOUS surfaces in STANDHYD:
04628>      [IAImp=   1.57 mm] [CLI= 1.50]   [MMI= .013]
04629>      Parameters used in NASHYD:
04630>      [Ia=   4.67 mm] [N= 3.00]
04631>      Average monthly Pan Evaporation data in     (mm)
04632>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
04633>  .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
04634>      Average monthly Potential Evapotranspiration in     (mm)
04635>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
04636>  .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
04637> #************************************************************************************
04638> # EXT1
04639> #************************************************************************************
04640> R1996:C00004-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04641>      CALIB NASHYD            1.0 01:EXT1          3.21     .134 No_date    3:49   36.11 .489     .000
04642>        [CN= 80.0: N= 3.00: Tp=  .72]
04643> #************************************************************************************
04644> # EXT2
04645> #************************************************************************************
04646> R1996:C00005-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04647>      CALIB NASHYD            1.0 01:EXT2          .28     .023 No_date    3:26   42.02 .569     .000
04648>        [CN= 85.0: N= 3.00: Tp=  .33]
04649> #************************************************************************************
04650> # EXT3
04651> #************************************************************************************
04652> R1996:C00006-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04653>      CALIB NASHYD            1.0 01:EXT3          .56     .041 No_date    3:26   36.11 .489     .000
04654>        [CN= 80.0: N= 3.00: Tp=  .32]
04655> #************************************************************************************
04656> # EXT4
04657> #************************************************************************************
04658> R1996:C00007-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04659>      CALIB NASHYD            1.0 01:EXT4          .31     .023 No_date    3:24   35.05 .474     .000
04660>        [CN= 79.0: N= 3.00: Tp=  .29]
04661> #************************************************************************************
04662> # EXT5
04663> #************************************************************************************
04664> R1996:C00008-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04665>      CALIB NASHYD            1.0 01:EXT5          .59     .031 No_date    3:34   32.07 .434     .000
04666>        [CN= 76.0: N= 3.00: Tp=  .45]
04667> #************************************************************************************
04668> # EXT6
04669> #************************************************************************************
04670> R1996:C00009-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04671>      CALIB NASHYD            1.0 01:EXT6          .86     .048 No_date    3:40   42.02 .569     .000
04672>        [CN= 85.0: N= 3.00: Tp=  .56]
04673> #************************************************************************************
04674> # EXT7
04675> #************************************************************************************
04676> R1996:C00010-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm-----RVmm-R.C.---DWFcms
04677>      CALIB NASHYD            1.0 01:EXT7          .47     .037 No_date    3:26   39.53 .535     .000
04678>        [CN= 83.0: N= 3.00: Tp=  .32]
04679> #************************************************************************************
04680> # EXT8
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04681> #*************************************************************************************************
04682> R1996:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04683>      CALIB NASHYD            1.0 01:EXT8           .83     .049 No_date    3:32   35.05 .474    .000
04684>        [CN= 79.0: N= 3.00: Tp=  .42]
04685> #*************************************************************************************************
04686> # EXT9
04687> #*************************************************************************************************
04688> R1996:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04689>      CALIB NASHYD            1.0 01:EXT9          3.57     .177 No_date    3:36   32.07 .434    .000
04690>        [CN= 76.0: N= 3.00: Tp=  .48]
04691> #*************************************************************************************************
04692> # EXT9a
04693> #*************************************************************************************************
04694> R1996:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04695>      CALIB NASHYD            1.0 01:EXT9a          .01     .001 No_date    1:26   34.01 .460    .000
04696>        [CN= 78.0: N= 3.00: Tp=  .04]
04697> #*************************************************************************************************
04698> # EXT10
04699> #*************************************************************************************************
04700> R1996:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04701>      CALIB NASHYD            1.0 01:EXT10          .20     .010 No_date    3:32   27.70 .375    .000
04702>        [CN= 71.0: N= 3.00: Tp=  .42]
04703> #*************************************************************************************************
04704> # Pre2_1
04705> #*************************************************************************************************
04706> R1996:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04707> *  CALIB NASHYD            1.0 01:Pre2_1         .01     .001 No_date    1:26   28.52 .386    .000
04708>        [CN= 72.0: N= 3.00: Tp=  .03]
04709> #*************************************************************************************************
04710> # Pre2_2
04711> #*************************************************************************************************
04712> R1996:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04713> *  CALIB NASHYD            1.0 01:Pre2_2         .00     .000 No_date    1:25   34.01 .460    .000
04714>        [CN= 78.0: N= 3.00: Tp=  .02]
04715> #*************************************************************************************************
04716> # Pre9_1
04717> #*************************************************************************************************
04718> R1996:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04719>      CALIB NASHYD            1.0 01:Pre9_1         .44     .022 No_date    3:30   27.71 .375    .000
04720>        [CN= 71.0: N= 3.00: Tp=  .38]
04721> #*************************************************************************************************
04722> # Pre9_2
04723> #*************************************************************************************************
04724> R1996:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04725> *  CALIB NASHYD            1.0 01:Pre9_2         .01     .001 No_date    1:26   19.50 .264    .000
04726>        [CN= 59.0: N= 3.00: Tp=  .03]
04727> #*************************************************************************************************
04728> # Pre10_1
04729> #*************************************************************************************************
04730> R1996:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04731>      CALIB NASHYD            1.0 01:Pre10_1        .80     .049 No_date    3:24   27.71 .375    .000
04732>        [CN= 71.0: N= 3.00: Tp=  .29]
04733> #*************************************************************************************************
04734> # Pre11_1
04735> #*************************************************************************************************
04736> R1996:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04737>      CALIB NASHYD            1.0 01:Pre11_1        .07     .006 No_date    3:19   34.01 .460    .000
04738>        [CN= 78.0: N= 3.00: Tp=  .21]
04739> #*************************************************************************************************
04740> # Site 1
04741> #*************************************************************************************************
04742> R1996:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04743>      DESIGN STANDHYD         1.0 01:S1-B1          .42     .069 No_date    1:30   49.80 .674    .000
04744>        [XIMP=.34:TIMP=.44]
04745>        [SLP=1.00:DT= 1.00]
04746>        [LOSS= 1 : HORTONS]
04747> #*************************************************************************************************
04748> # Site 1 - Roof
04749> #*************************************************************************************************
04750> R1996:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04751>      DESIGN STANDHYD         1.0 01:S1-Roof        .06     .022 No_date    1:25   71.93 .973    .000
04752>        [XIMP=.99:TIMP=.99]
04753>        [SLP= .50:DT= 1.00]
04754>        [LOSS= 1 : HORTONS]
04755> R1996:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04756>      ROUTE RESERVOIR ->    1.0 02:S1-Roof        .06     .022 No_date    1:25   71.93  n/a     .000
04757>                        out <=   1.0 01:S1-Roof-Ou    .06     .003 No_date    3:21   71.93  n/a     .000
04758>                overflow <=   1.0 03:S1-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
04759>        (MxStoUsed=.2686E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
04760> R1996:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04761>      ADD HYD                 1.0 02:S1-B1          .42     .069 No_date    1:30   49.80  n/a     .000
04762>                          +   1.0 02:S1-Roof-Ou    .06     .003 No_date    3:21   71.93  n/a     .000
04763>                          +   1.0 02:S1-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
04764>                      SUM=    1.0 01:S1TE1-IN       .48     .071 No_date    1:30   52.80  n/a     .000
04765> R1996:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04766>      ROUTE RESERVOIR ->    1.0 02:S1TE1-IN       .48     .071 No_date    1:30   52.80  n/a     .000
04767>                        out <=   1.0 01:S1TE1-Out     .48     .008 No_date    3:42   52.80  n/a     .000
04768>                overflow <=   1.0 03:S1TE1-Over    .00     .000 No_date    0:00     .00  n/a     .000
04769>        (MxStoUsed=.1461E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
04770> #*************************************************************************************************
04771> # Site 2
04772> #*************************************************************************************************
04773> R1996:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04774>      DESIGN STANDHYD         1.0 01:S2-B3          .35     .057 No_date    1:30   48.67 .659    .000
04775>        [XIMP=.31:TIMP=.41]
04776>        [SLP=1.00:DT= 1.00]
04777>        [LOSS= 1 : HORTONS]
04778> #*************************************************************************************************
04779> # Site 2 - Roof
04780> #*************************************************************************************************
04781> R1996:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04782>      DESIGN STANDHYD         1.0 01:S2-Roof        .09     .031 No_date    1:25   71.93 .973    .000
04783>        [XIMP=.99:TIMP=.99]
04784>        [SLP= .50:DT= 1.00]
04785>        [LOSS= 1 : HORTONS]
04786> #*************************************************************************************************
04787> R1996:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04788>      ROUTE RESERVOIR ->    1.0 02:S2-Roof        .09     .031 No_date    1:25   71.93  n/a     .000
04789>                        out <=   1.0 01:S2-Roof-Ou    .09     .007 No_date    1:32   71.95  n/a     .000
04790>                overflow <=   1.0 03:S2-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
04791>        (MxStoUsed=.2026E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
04792> R1996:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04793>      ADD HYD                 1.0 02:S2-B3          .35     .057 No_date    1:30   48.67  n/a     .000
04794>                          +   1.0 02:S2-Roof-Ou    .09     .007 No_date    1:32   71.95  n/a     .000
04795>                          +   1.0 02:S2-Roof-Ov    .00     .000 No_date    0:00     .00  n/a     .000
04796>                      SUM=    1.0 01:S1TE2-IN       .45     .065 No_date    1:30   53.51  n/a     .000
04797> R1996:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04798>      ROUTE RESERVOIR ->    1.0 02:S1TE2-IN       .45     .065 No_date    1:30   53.51  n/a     .000
04799>                        out <=   1.0 01:S1TE2-Out     .45     .009 No_date    3:45   53.51  n/a     .000
04800>                overflow <=   1.0 03:S1TE2-Over    .00     .000 No_date    0:00     .00  n/a     .000
04801>        (MxStoUsed=.1389E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=     0, TotDurOvf=    0.hrs)
04802> R1996:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04803>      ADD HYD                 1.0 02:S1TE1-Out      .48     .008 No_date    3:42   52.80  n/a     .000
04804>                          +   1.0 02:S1TE1-Over    .00     .000 No_date    0:00     .00  n/a     .000
04805>                      SUM=    1.0 01:Site1          .48     .008 No_date    3:42   52.80  n/a     .000
04806> R1996:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04807>      ADD HYD                 1.0 02:S1TE2-Out      .45     .009 No_date    3:45   53.51  n/a     .000
04808>                          +   1.0 02:S1TE2-Over    .00     .000 No_date    0:00     .00  n/a     .000
04809>                      SUM=    1.0 01:Site2          .45     .009 No_date    3:45   53.51  n/a     .000
04810> R1996:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04811>      ADD HYD                 1.0 02:EXT2           .28     .023 No_date    3:26   42.02  n/a     .000
04812>                          +   1.0 02:Pre2_1        .01     .001 No_date    1:26   28.52  n/a     .000
04813>                          +   1.0 02:Site1          .48     .008 No_date    3:42   52.80  n/a     .000
04814>                          +   1.0 02:Site2          .45     .009 No_date    3:45   53.51  n/a     .000
04815>                      SUM=    1.0 01:J1             1.23     .040 No_date    3:26   50.29  n/a     .000
04816> R1996:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04817>      ROUTE CHANNEL   ->    1.0 02:J1             1.23     .040 No_date    3:26   50.29  n/a     .000
04818>        [RD= 1.00] out<-    1.0 01:R1             1.23     .039 No_date    3:32   50.29  n/a     .000
04819>        [L/S/n=  143./ .394/.035]
04820>        {Vmax=  .323:Dmax=  .129}
04821> R1996:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04822>      ADD HYD                 1.0 02:R1             1.23     .039 No_date    3:32   50.29  n/a     .000
04823>                          +   1.0 02:EXT3           .56     .041 No_date    3:26   36.11  n/a     .000
04824>                          +   1.0 02:EXT1          3.21     .134 No_date    3:49   36.11  n/a     .000
04825>                      SUM=    1.0 01:J2             5.00     .199 No_date    3:39   39.59  n/a     .000
04826> R1996:C00036-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04827>      ROUTE CHANNEL   ->    1.0 02:J2             5.00     .199 No_date    3:39   39.59  n/a     .000
04828>        [RD= 1.00] out<-    1.0 01:R2             5.00     .198 No_date    3:40   39.59  n/a     .000
04829>        [L/S/n=   73./ .425/.035]
04830>        {Vmax=  .491:Dmax=  .256}
04831> R1996:C00037-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04832>      ADD HYD                 1.0 02:R2             5.00     .198 No_date    3:40   39.59  n/a     .000
04833>                          +   1.0 02:EXT4           .31     .023 No_date    3:24   35.05  n/a     .000
04834>                      SUM=    1.0 01:J3             5.31     .215 No_date    3:38   39.32  n/a     .000
04835> R1996:C00038-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04836>      ROUTE CHANNEL   ->    1.0 02:J3             5.31     .215 No_date    3:38   39.32  n/a     .000
04837>        [RD= 1.00] out<-    1.0 01:R3             5.31     .213 No_date    3:41   39.32  n/a     .000
04838>        [L/S/n=   92./ .274/.035]
04839>        {Vmax=  .404:Dmax=  .265}
04840> R1996:C00039-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04841>      ADD HYD                 1.0 02:R3             5.31     .213 No_date    3:41   39.32  n/a     .000
04842>                          +   1.0 02:EXT5           .59     .031 No_date    3:34   32.07  n/a     .000
04843>                      SUM=    1.0 01:J4             5.90     .243 No_date    3:40   38.59  n/a     .000
04844> R1996:C00040-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04845>      ROUTE CHANNEL   ->    1.0 02:J4             5.90     .243 No_date    3:40   38.59  n/a     .000
04846>        [RD= 1.00] out<-    1.0 01:R4             5.90     .229 No_date    3:48   38.59  n/a     .000
04847>        [L/S/n=  251./ .190/.035]
04848>        {Vmax=  .396:Dmax=  .298}
04849> R1996:C00041-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04850>      ADD HYD                 1.0 02:R4             5.90     .229 No_date    3:48   38.59  n/a     .000
04851>                          +   1.0 02:EXT6           .86     .048 No_date    3:40   42.02  n/a     .000
04852>                          +   1.0 02:EXT7           .47     .037 No_date    3:26   39.53  n/a     .000
04853>                      SUM=    1.0 01:J5             7.23     .300 No_date    3:44   39.06  n/a     .000
04854> R1996:C00042-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04855>      ROUTE CHANNEL   ->    1.0 02:J5             7.23     .300 No_date    3:44   39.06  n/a     .000
04856>        [RD= 1.00] out<-    1.0 01:R5             7.23     .295 No_date    3:49   39.06  n/a     .000
04857>        [L/S/n=  237./ .644/.035]
04858>        {Vmax=  .642:Dmax=  .279}
04859> R1996:C00043-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04860>      ADD HYD                 1.0 02:Pre10_1        .80     .049 No_date    3:24   27.71  n/a     .000
04861>                          +   1.0 02:Pre9_2         .01     .001 No_date    1:26   19.50  n/a     .000
04862>                          +   1.0 02:Pre2_2         .00     .000 No_date    1:25   34.01  n/a     .000
04863>                      SUM=    1.0 01:Pre            .81     .049 No_date    3:24   27.58  n/a     .000
04864> R1996:C00044-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04865>      ROUTE CHANNEL   ->    1.0 02:Pre            .81     .049 No_date    3:24   27.58  n/a     .000
04866>        [RD= 1.00] out<-    1.0 01:R6             .81     .049 No_date    3:27   27.58  n/a     .000
04867>        [L/S/n=   77./ .776/.035]
04868>        {Vmax=  .492:Dmax=  .036}
04869> R1996:C00045-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04870>      ROUTE CHANNEL   ->    1.0 02:Pre9_1         .44     .022 No_date    3:30   27.71  n/a     .000
04871>        [RD= 1.00] out<-    1.0 01:R7             .44     .022 No_date    3:33   27.71  n/a     .000
04872>        [L/S/n=  159./1.576/.035]
04873>        {Vmax=  .797:Dmax=  .007}
04874> R1996:C00046-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04875>      ADD HYD                 1.0 02:R6             .81     .049 No_date    3:27   27.75  n/a     .000
04876>                          +   1.0 02:EXT10          .20     .010 No_date    3:32   27.70  n/a     .000
04877>                      SUM=    1.0 01:J6             1.02     .058 No_date    3:27   27.74  n/a     .000
04878> R1996:C00047-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04879>      ROUTE CHANNEL   ->    1.0 02:J6             1.02     .058 No_date    3:27   27.74  n/a     .000
04880>        [RD= 1.00] out<-    1.0 01:R8             1.02     .057 No_date    3:30   27.74  n/a     .000
04881>        [L/S/n=   79./ .522/.035]
04882>        {Vmax=  .423:Dmax=  .043}
04883> R1996:C00048-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04884>      ADD HYD                 1.0 02:R8             1.02     .057 No_date    3:30   27.86  n/a     .000
04885>                          +   1.0 02:R7             .44     .022 No_date    3:33   27.99  n/a     .000
04886>                      SUM=    1.0 01:J7             1.46     .079 No_date    3:31   27.90  n/a     .000
04887> R1996:C00049-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04888>      ROUTE CHANNEL   ->    1.0 02:J7             1.46     .079 No_date    3:31   27.90  n/a     .000
04889>        [RD= 1.00] out<-    1.0 01:R9             1.46     .079 No_date    3:32   27.90  n/a     .000
04890>        [L/S/n=   29./ .887/.035]
04891>        {Vmax=  .543:Dmax=  .054}
04892> R1996:C00050-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04893>      ADD HYD                 1.0 02:EXT9           3.57     .177 No_date    3:36   32.07  n/a     .000
04894>                          +   1.0 02:R9            1.46     .079 No_date    3:32   27.97  n/a     .000
04895>                          +   1.0 02:EXT8           .83     .049 No_date    3:32   35.05  n/a     .000
04896>                          +   1.0 02:R5             7.23     .295 No_date    3:49   39.06  n/a     .000
04897>                      SUM=    1.0 01:J8            13.09     .576 No_date    3:40   35.67  n/a     .000
04898> R1996:C00051-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04899>      ROUTE TPE       ->    1.0 02:J8            13.09     .576 No_date    3:40   35.67  n/a     .000
04900> *  [RD= 1.00] out<-    1.0 01:Outlet         13.09     .575 No_date    3:41   35.67  n/a     .000
04901>        [L/S/n=   8./ .010/.013]
04902>        {Vmax=  .433:Dmax=  1.140}
04903>        [Din=  .53:Dused= 1.39)
04904> ###############################################################################
04905> # STORMS
04906> ###############################################################################
04907>  ** END OF RUN : 9998
04908>
04909>  ************************************************************************************************
04910>
04911>
04912>
04913>
04914>
04915>  RUN#:COMMAND#
04916> R9999:C00001-----------------------------------------------------------------------------------
04917>      START
04918>        [TZERO =    .00 hrs on        0]
04919>        [METOUT=   2   (1=imperial, 2=metric output)]
04920>        [NSTORM=   1 ]
04921>        [NRUN  = 9999 ]
04922> #*************************************************************************************************
04923> #  SWMHYMO  / INPUT DATA FILE
04924> #*************************************************************************************************
04925> #  Project Name  : [5923 Ottawa St]
04926> #  Project Number: [P2710(e01)]
04927> #  Date          : [2025 April 28]
04928> #  Modeller      : [MM]
04929> #  Company       : JFSA Canada Inc.
04930> #  License #     : 2549237
04931> #*************************************************************************************************
04932> # Model developed to simulate runoff from subcatchments under post development conditions
04933> #*************************************************************************************************
04934> R9999:C00002-----------------------------------------------------------------------------------
04935>      READ STORM
04936>        Filename = STORM.001
04937>        Comment  = CHICAGO STORM   100 Year, 3 Hours  +20% Stress Test
04938>        [SDT=10.00:SDUR=   3.00:PTOT=  86.00]
04939> #*************************************************************************************************
04940> R9999:C00003-----------------------------------------------------------------------------------
04941>      DEFAULT VALUES
04942>        Filename = C:\Temp\20250910-PostDev\Ottawa.val
04943>        ICASEdv  = 1 (read and print data)
04944>        FileTitle= File comment: [Parameters for City of Ottawa Projects]
04945>                   THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
04946>        Horton's infiltration equation parameters:
04947>        [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
04948>        Parameters for PERVIOUS surfaces in STANDHYD:
04949>        [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
04950>        Parameters for IMPERVIOUS surfaces in STANDHYD:
04951>        [IAimp=   1.57 mm] [CLI= 1.50]  [MNI= .013]
04952>        Parameters used in NASHYD:
04953>        [Ia=   4.67 mm] [N= 3.00]
04954>        Average monthly Pan Evaporation data in    (mm)
04955>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
04956>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
04957>        Average monthly Potential Evapotranspiration in    (mm)
04958>     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
04959>    .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
04960> #*************************************************************************************************
04961> # EXT1
04962> #*************************************************************************************************
04963> R9999:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04964>      CALIB NASHYD            1.0 01:EXT1           3.21     .224 No_date    1:51   45.67 .531    .000
04965>        [CN= 80.0: N= 3.00: Tp=  .72]
04966> #*************************************************************************************************
04967> # EXT2
04968> #*************************************************************************************************
04969> R9999:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04970>      CALIB NASHYD            1.0 01:EXT2           .28     .041 No_date    1:21   52.43 .610    .000
04971>        [CN= 85.0: N= 3.00: Tp=  .33]
04972> #*************************************************************************************************
04973> # EXT3
04974> #*************************************************************************************************
04975> R9999:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04976>      CALIB NASHYD            1.0 01:EXT3           .56     .070 No_date    1:21   45.67 .531    .000
04977>        [CN= 80.0: N= 3.00: Tp=  .32]
04978> #*************************************************************************************************
04979> # EXT4
04980> #*************************************************************************************************
04981> R9999:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04982>      CALIB NASHYD            1.0 01:EXT4           .31     .040 No_date    1:19   44.44 .517    .000
04983>        [CN= 79.0: N= 3.00: Tp=  .29]
04984> #*************************************************************************************************
04985> # EXT5
04986> #*************************************************************************************************
04987> R9999:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04988>      CALIB NASHYD            1.0 01:EXT5           .59     .052 No_date    1:31   40.94 .476    .000
04989>        [CN= 76.0: N= 3.00: Tp=  .45]
04990> #*************************************************************************************************
04991> # EXT6
04992> #*************************************************************************************************
04993> R9999:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
04994>      CALIB NASHYD            1.0 01:EXT6           .86     .085 No_date    1:38   52.43 .610    .000
04995>        [CN= 85.0: N= 3.00: Tp=  .56]
04996> #*************************************************************************************************
04997> # EXT7
04998> #*************************************************************************************************
04999> R9999:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05000>      CALIB NASHYD            1.0 01:EXT7           .47     .064 No_date    1:21   49.60 .577    .000
05001>        [CN= 83.0: N= 3.00: Tp=  .32]
05002> #*************************************************************************************************
05003> # EXT8
05004> #*************************************************************************************************
05005> R9999:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05006>      CALIB NASHYD            1.0 01:EXT8           .83     .083 No_date    1:29   44.44 .517    .000
05007>        [CN= 79.0: N= 3.00: Tp=  .42]
05008> #*************************************************************************************************
05009> # EXT9
05010> #*************************************************************************************************
05011> R9999:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05012>      CALIB NASHYD            1.0 01:EXT9           3.57     .297 No_date    1:34   40.95 .476    .000
05013>        [CN= 76.0: N= 3.00: Tp=  .48]
05014> #*************************************************************************************************
05015> # EXT9a
05016> #*************************************************************************************************
05017> R9999:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05018>      CALIB NASHYD            1.0 01:EXT9a          .01     .004 No_date    1:00   43.23 .503    .000
05019>        [CN= 78.0: N= 3.00: Tp=  .04]
05020> #*************************************************************************************************
05021> # EXT10
05022> #*************************************************************************************************
05023> R9999:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05024>      CALIB NASHYD            1.0 01:EXT10          .20     .016 No_date    1:29   35.74 .416    .000
05025>        [CN= 71.0: N= 3.00: Tp=  .42]
05026> #*************************************************************************************************
05027> # Pre2_1
05028> #*************************************************************************************************
05029> R9999:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05030> *  CALIB NASHYD            1.0 01:Pre2_1         .01     .004 No_date    1:00   36.72 .427    .000
05031>        [CN= 72.0: N= 3.00: Tp=  .03]
05032> #*************************************************************************************************
05033> # Pre2_2
05034> #*************************************************************************************************
05035> R9999:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05036> *  CALIB NASHYD            1.0 01:Pre2_2         .00     .001 No_date    1:00   43.22 .503    .000
05037>        [CN= 78.0: N= 3.00: Tp=  .02]
05038> #*************************************************************************************************
05039> # Pre9_1
05040> #*************************************************************************************************
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05041> R9999:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05042>      CALIB NASHYD           1.0 01:Pre9_1          .44     .037 No_date    1:26   35.74 .416     .000
05043>        [CN= 71.0: N= 3.00: Tp=  .38]
05044> ********************************************************************************
05045> # Pre9_2
05046> ********************************************************************************
05047> R9999:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05048>  *  CALIB NASHYD           1.0 01:Pre9_2          .01     .003 No_date    1:00   25.65 .298     .000
05049>        [CN= 59.0: N= 3.00: Tp=  .03]
05050> ********************************************************************************
05051> # Pre10_1
05052> ********************************************************************************
05053> R9999:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05054>      CALIB NASHYD           1.0 01:Pre10_1         .80     .080 No_date    1:19   35.74 .416     .000
05055>        [CN= 71.0: N= 3.00: Tp=  .29]
05056> ********************************************************************************
05057> # Pre11_1
05058> ********************************************************************************
05059> R9999:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05060>      CALIB NASHYD           1.0 01:Pre11_1         .07     .010 No_date    1:13   43.23 .503     .000
05061>        [CN= 78.0: N= 3.00: Tp=  .21]
05062> ********************************************************************************
05063> # Site 1
05064> ********************************************************************************
05065> R9999:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05066>      DESIGN STANDHYD        1.0 01:S1-B1           .42     .162 No_date    1:00   59.13 .688     .000
05067>        [XIMP=.34:TIMP=.44]
05068>        [SLP=1.00:DT= 1.00]
05069>        [LOSS= 1 : HORTONS]
05070> ********************************************************************************
05071> # Site 1 - Roof
05072> ********************************************************************************
05073> R9999:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05074>      DESIGN STANDHYD        1.0 01:S1-Roof         .06     .038 No_date    1:00   83.99 .977     .000
05075>        [XIMP=.99:TIMP=.99]
05076>        [SLP=  .50:DT= 1.00]
05077>        [LOSS= 1 : HORTONS]
05078> R9999:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05079>      ROUTE RESERVOIR ->     1.0 02:S1-Roof         .06     .038 No_date    1:00   83.99  n/a     .000
05080>                   out <=    1.0 01:S1-Roof-Ou      .06     .004 No_date    1:30   83.99  n/a     .000
05081>                overflow <=  1.0 03:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
05082>       (MxStoUsed=.828E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
05083> R9999:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05084>      ADD HYD                1.0 02:S1-B1           .42     .162 No_date    1:00   59.13  n/a     .000
05085>                       +     1.0 02:S1-Roof-Ou      .06     .004 No_date    1:30   83.99  n/a     .000
05086>                       +     1.0 02:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
05087>                     SUM=    1.0 01:SITE1-IN        .48     .165 No_date    1:00   62.50  n/a     .000
05088> R9999:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05089>      ROUTE RESERVOIR ->     1.0 02:SITE1-IN        .48     .165 No_date    1:00   62.50  n/a     .000
05090>                   out <=    1.0 01:SITE1-Out       .48     .013 No_date    1:49   62.50  n/a     .000
05091>                overflow <=  1.0 03:SITE1-Over      .00     .000 No_date    0:00    .00  n/a     .000
05092>       (MxStoUsed=.2031E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
05093> ********************************************************************************
05094> # Site 2
05095> ********************************************************************************
05096> R9999:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05097>      DESIGN STANDHYD        1.0 01:S2-B3           .35     .135 No_date    1:00   57.84 .673     .000
05098>        [XIMP=.31:TIMP=.41]
05099>        [SLP=1.00:DT= 1.00]
05100>        [LOSS= 1 : HORTONS]
05101> ********************************************************************************
05102> # Site 2 - Roof
05103> ********************************************************************************
05104> R9999:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05105>      DESIGN STANDHYD        1.0 01:S2-Roof         .09     .055 No_date    1:00   83.99 .977     .000
05106>        [XIMP=.99:TIMP=.99]
05107>        [SLP=  .50:DT= 1.00]
05108>        [LOSS= 1 : HORTONS]
05109> ********************************************************************************
05110> R9999:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05111>      ROUTE RESERVOIR ->     1.0 02:S2-Roof         .09     .055 No_date    1:00   83.99  n/a     .000
05112>                   out <=    1.0 01:S2-Roof-Ou      .09     .009 No_date    1:13   84.01  n/a     .000
05113>                overflow <=  1.0 03:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
05114>       (MxStoUsed=.4074E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
05115> R9999:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05116>      ADD HYD                1.0 02:S2-B3           .35     .135 No_date    1:00   57.84  n/a     .000
05117>                       +     1.0 02:S2-Roof-Ou      .09     .009 No_date    1:13   84.01  n/a     .000
05118>                       +     1.0 02:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a     .000
05119>                     SUM=    1.0 01:SITE2-IN        .45     .144 No_date    1:00   63.28  n/a     .000
05120> R9999:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05121>      ROUTE RESERVOIR ->     1.0 02:SITE2-IN        .45     .144 No_date    1:00   63.28  n/a     .000
05122>                   out <=    1.0 01:SITE2-Out       .45     .014 No_date    1:56   63.28  n/a     .000
05123>                overflow <=  1.0 03:SITE2-Over      .00     .000 No_date    0:00    .00  n/a     .000
05124>       (MxStoUsed=.1876E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
05125> R9999:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05126>      ADD HYD                1.0 02:SITE1-Out       .48     .013 No_date    1:49   62.50  n/a     .000
05127>                       +     1.0 02:SITE1-Over      .00     .000 No_date    0:00    .00  n/a     .000
05128>                     SUM=    1.0 01:Site1           .48     .013 No_date    1:49   62.50  n/a     .000
05129> R9999:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05130>      ADD HYD                1.0 02:SITE2-Out       .45     .014 No_date    1:56   63.28  n/a     .000
05131>                       +     1.0 02:SITE2-Over      .00     .000 No_date    0:00    .00  n/a     .000
05132>                     SUM=    1.0 01:Site2           .45     .014 No_date    1:56   63.28  n/a     .000
05133> R9999:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05134>      ADD HYD                1.0 02:EXT2            .28     .041 No_date    1:21   52.43  n/a     .000
05135>                       +     1.0 02:Pre2_1          .01     .004 No_date    1:00   36.72  n/a     .000
05136>                       +     1.0 02:Site1           .48     .013 No_date    1:49   62.50  n/a     .000
05137>                       +     1.0 02:Site2           .45     .014 No_date    1:56   63.28  n/a     .000
05138>                     SUM=    1.0 01:J1             1.23     .061 No_date    1:27   60.17  n/a     .000
05139> R9999:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05140>      ROUTE CHANNEL   ->     1.0 02:J1             1.23     .061 No_date    1:27   60.17  n/a     .000
05141>        [RDT= 1.00] out<-    1.0 01:R1             1.23     .059 No_date    1:31   60.17  n/a     .000
05142>        [L/S/n=  143./ .394/.035]
05143>        {Vmax=  .366:Dmax=  .156}
05144> R9999:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05145>      ADD HYD                1.0 02:R1             1.23     .059 No_date    1:31   60.17  n/a     .000
05146>                       +     1.0 02:EXT3            .56     .070 No_date    1:21   45.67  n/a     .000
05147>                       +     1.0 02:EXT1           3.21     .224 No_date    1:51   45.67  n/a     .000
05148>                     SUM=    1.0 01:J2             5.00     .321 No_date    1:41   49.22  n/a     .000
05149> R9999:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05150>      ROUTE CHANNEL   ->     1.0 02:J2             5.00     .321 No_date    1:41   49.22  n/a     .000
05151>        [RDT= 1.00] out<-    1.0 01:R2             5.00     .320 No_date    1:43   49.22  n/a     .000
05152>        [L/S/n=  73./ .425/.035]
05153>        {Vmax=  .558:Dmax=  .310}
05154> R9999:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05155>      ADD HYD                1.0 02:R2             5.00     .320 No_date    1:43   49.22  n/a     .000
05156>                       +     1.0 02:EXT4            .31     .040 No_date    1:19   44.44  n/a     .000
05157>                     SUM=    1.0 01:J3             5.31     .345 No_date    1:39   48.94  n/a     .000
05158> R9999:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05159>      ROUTE CHANNEL   ->     1.0 02:J3             5.31     .345 No_date    1:39   48.94  n/a     .000
05160>        [RDT= 1.00] out<-    1.0 01:R3             5.31     .344 No_date    1:42   48.94  n/a     .000
05161>        [L/S/n=  92./ .274/.035]
05162>        {Vmax=  .456:Dmax=  .320}
05163> R9999:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05164>      ADD HYD                1.0 02:R3             5.31     .344 No_date    1:42   48.94  n/a     .000
05165>                       +     1.0 02:EXT5            .59     .052 No_date    1:31   40.94  n/a     .000
05166>                     SUM=    1.0 01:J4             5.90     .392 No_date    1:40   48.14  n/a     .000
05167> R9999:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05168>      ROUTE CHANNEL   ->     1.0 02:J4             5.90     .392 No_date    1:40   48.14  n/a     .000
05169>        [RDT= 1.00] out<-    1.0 01:R4             5.90     .375 No_date    1:49   48.14  n/a     .000
05170>        [L/S/n=  251./ .190/.035]
05171>        {Vmax=  .454:Dmax=  .369}
05172> R9999:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05173>      ADD HYD                1.0 02:R4             5.90     .375 No_date    1:49   48.14  n/a     .000
05174>                       +     1.0 02:EXT6            .86     .085 No_date    1:38   52.43  n/a     .000
05175>                       +     1.0 02:EXT7           .47     .064 No_date    1:21   49.60  n/a     .000
05176>                     SUM=    1.0 01:J5             7.23     .495 No_date    1:44   48.75  n/a     .000
05177> R9999:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05178>      ROUTE CHANNEL   ->     1.0 02:J5             7.23     .495 No_date    1:44   48.75  n/a     .000
05179>        [RDT= 1.00] out<-    1.0 01:R5             7.23     .490 No_date    1:49   48.75  n/a     .000
05180>        [L/S/n=  237./ .644/.035]
05181>        {Vmax=  .746:Dmax=  .341}
05182> R9999:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05183>      ADD HYD                1.0 02:Pre10_1         .80     .080 No_date    1:19   35.74  n/a     .000
05184>                       +     1.0 02:Pre9_2          .01     .003 No_date    1:00   25.65  n/a     .000
05185>                       +     1.0 02:Pre2_2          .00     .001 No_date    1:00   43.22  n/a     .000
05186>                     SUM=    1.0 01:Pre             .81     .081 No_date    1:19   35.58  n/a     .000
05187> R9999:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05188>      ROUTE CHANNEL   ->     1.0 02:Pre             .81     .081 No_date    1:19   35.58  n/a     .000
05189>        [RDT= 1.00] out<-    1.0 01:R6              .81     .080 No_date    1:22   35.58  n/a     .000
05190>        [L/S/n=  77./ .776/.035]
05191>        {Vmax=  .492:Dmax=  .059}
05192> R9999:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05193>      ROUTE CHANNEL   ->     1.0 02:Pre9_1          .44     .037 No_date    1:26   35.74  n/a     .000
05194>        [RDT= 1.00] out<-    1.0 01:R7              .44     .036 No_date    1:30   35.74  n/a     .000
05195>        [L/S/n=  159./1.576/.035]
05196>        {Vmax=  .797:Dmax=  .011}
05197> R9999:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05198>      ADD HYD                1.0 02:R6              .81     .080 No_date    1:22   35.96  n/a     .000
05199>                       +     1.0 02:EXT10           .20     .016 No_date    1:29   35.74  n/a     .000
05200>                     SUM=    1.0 01:J6             1.02     .095 No_date    1:23   35.91  n/a     .000
05201> R9999:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05202>      ROUTE CHANNEL   ->     1.0 02:J6             1.02     .095 No_date    1:23   35.91  n/a     .000
05203>        [RDT= 1.00] out<-    1.0 01:R8             1.02     .093 No_date    1:26   35.91  n/a     .000
05204>        [L/S/n=  79./ .522/.035]
05205>        {Vmax=  .423:Dmax=  .070}
05206> R9999:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05207>      ADD HYD                1.0 02:R8             1.02     .093 No_date    1:26   36.11  n/a     .000
05208>                       +     1.0 02:R7              .44     .036 No_date    1:30   36.23  n/a     .000
05209>                     SUM=    1.0 01:J7             1.46     .129 No_date    1:27   36.15  n/a     .000
05210> R9999:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05211>      ROUTE CHANNEL   ->     1.0 02:J7             1.46     .129 No_date    1:27   36.15  n/a     .000
05212>        [RDT= 1.00] out<-    1.0 01:R9             1.46     .129 No_date    1:28   36.15  n/a     .000
05213>        [L/S/n=  29./ .887/.035]
05214>        {Vmax=  .543:Dmax=  .088}
05215> R9999:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05216>      ADD HYD                1.0 02:EXT9           3.57     .297 No_date    1:34   40.95  n/a     .000
05217>                       +     1.0 02:R9             1.46     .129 No_date    1:28   36.27  n/a     .000
05218>                       +     1.0 02:EXT8            .83     .083 No_date    1:29   44.44  n/a     .000
05219>                       +     1.0 02:R5             7.23     .490 No_date    1:49   48.75  n/a     .000
05220>                     SUM=    1.0 01:J8            13.09     .951 No_date    1:39   44.96  n/a     .000
05221> R9999:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
05222>      ROUTE PIPE      ->     1.0 02:J8             13.09     .951 No_date    1:39   44.96  n/a     .000
05223>  *   [RDT= 1.00] out<-    1.0 01:Outlet         13.09     .951 No_date    1:40   44.96  n/a     .000
05224>        [L/S/n=    8./ .010/.013]
05225>        {Vmax=  .491:Dmax= 1.376}
05226>        [Din=  .53:Dused= 1.68]
05227> ##############################################################################
05228> # STORMS
05229> ##############################################################################
05230> R9999:C00002-------------------------------------------------------------------------------
05231>      FINISH
05232> -------------------------------------------------------------------------------
05233> ================================================================================
05234>      WARNINGS / ERRORS / NOTES
05235>      -------------------------
05236> R0002:c00015  CALIB NASHYD
05237> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05238> R0002:c00016  CALIB NASHYD
05239> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05240> R0002:c00018  CALIB NASHYD
05241> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05242> R0002:c00051  ROUTE PIPE     ->
05243> *** WARNING: New pipe size used for routing.
05244> R0005:c00015  CALIB NASHYD
05245> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05246> R0005:c00016  CALIB NASHYD
05247> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05248> R0005:c00018  CALIB NASHYD
05249> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05250> R0005:c00051  ROUTE PIPE     ->
05251> *** WARNING: New pipe size used for routing.
05252> R0010:c00015  CALIB NASHYD
05253> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05254> R0010:c00016  CALIB NASHYD
05255> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05256> R0010:c00018  CALIB NASHYD
05257> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05258> R0010:c00051  ROUTE PIPE     ->
05259> *** WARNING: New pipe size used for routing.
05260> R0025:c00015  CALIB NASHYD
05261> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05262> R0025:c00016  CALIB NASHYD
05263> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05264> R0025:c00018  CALIB NASHYD
05265> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05266> R0025:c00051  ROUTE PIPE     ->
05267> *** WARNING: New pipe size used for routing.
05268> R0050:c00015  CALIB NASHYD
05269> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05270> R0050:c00016  CALIB NASHYD
05271> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05272> R0050:c00018  CALIB NASHYD
05273> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05274> R0050:c00051  ROUTE PIPE     ->
05275> *** WARNING: New pipe size used for routing.
05276> R0099:c00015  CALIB NASHYD
05277> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05278> R0099:c00016  CALIB NASHYD
05279> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05280> R0099:c00018  CALIB NASHYD
05281> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05282> R0099:c00051  ROUTE PIPE     ->
05283> *** WARNING: New pipe size used for routing.
05284> R0102:c00015  CALIB NASHYD
05285> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05286> R0102:c00016  CALIB NASHYD
05287> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05288> R0102:c00018  CALIB NASHYD
05289> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05290> R0102:c00051  ROUTE PIPE     ->
05291> *** WARNING: New pipe size used for routing.
05292> R0105:c00015  CALIB NASHYD
05293> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05294> R0105:c00016  CALIB NASHYD
05295> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05296> R0105:c00018  CALIB NASHYD
05297> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05298> R0105:c00051  ROUTE PIPE     ->
05299> *** WARNING: New pipe size used for routing.
05300> R0110:c00015  CALIB NASHYD
05301> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05302> R0110:c00016  CALIB NASHYD
05303> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05304> R0110:c00018  CALIB NASHYD
05305> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05306> R0110:c00051  ROUTE PIPE     ->
05307> *** WARNING: New pipe size used for routing.
05308> R0125:c00015  CALIB NASHYD
05309> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05310> R0125:c00016  CALIB NASHYD
05311> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05312> R0125:c00018  CALIB NASHYD
05313> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05314> R0125:c00051  ROUTE PIPE     ->
05315> *** WARNING: New pipe size used for routing.
05316> R0150:c00015  CALIB NASHYD
05317> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05318> R0150:c00016  CALIB NASHYD
05319> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05320> R0150:c00018  CALIB NASHYD
05321> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05322> R0150:c00051  ROUTE PIPE     ->
05323> *** WARNING: New pipe size used for routing.
05324> R0199:c00015  CALIB NASHYD
05325> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05326> R0199:c00016  CALIB NASHYD
05327> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05328> R0199:c00018  CALIB NASHYD
05329> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05330> R0199:c00051  ROUTE PIPE     ->
05331> *** WARNING: New pipe size used for routing.
05332> R1979:c00015  CALIB NASHYD
05333> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05334> R1979:c00016  CALIB NASHYD
05335> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05336> R1979:c00018  CALIB NASHYD
05337> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05338> R1979:c00051  ROUTE PIPE     ->
05339> *** WARNING: New pipe size used for routing.
05340> R1988:c00015  CALIB NASHYD
05341> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05342> R1988:c00016  CALIB NASHYD
05343> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05344> R1988:c00018  CALIB NASHYD
05345> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05346> R1988:c00051  ROUTE PIPE     ->
05347> *** WARNING: New pipe size used for routing.
05348> R1996:c00015  CALIB NASHYD
05349> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05350> R1996:c00016  CALIB NASHYD
05351> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05352> R1996:c00018  CALIB NASHYD
05353> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05354> R1996:c00051  ROUTE PIPE     ->
05355> *** WARNING: New pipe size used for routing.
05356> R9999:c00015  CALIB NASHYD
05357> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05358> R9999:c00016  CALIB NASHYD
05359> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05360> R9999:c00018  CALIB NASHYD
05361> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
05362> R9999:c00051  ROUTE PIPE     ->
05363> *** WARNING: New pipe size used for routing.
05364>      Simulation ended on 2025-09-11     at 20:20:05
05365> ================================================================================
05366>
```

Attachment C

Hydraulic Analysis

N

Legend

- Site Boundary
- Jock River Tributary
- Centerline
- HEC-RAS XS

SCALE: 1:3000

0 50 100 150 m

JFSA CANADA INC
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egis

5923 Ottawa St – Richmond

Figure C1: HEC-RAS Cross Sections

PROJECT	P2710(e01)
DRAWN	MM
DATE	10 Sept 2025

C:\Users\JonathonBurnett\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\2710(e01)\Design\GIS\20250603-Attachments

N

Legend

- Site Boundary

Pre-Development Flood Extents

- 2YrSCS24Hr
- 5YrSCS24Hr
- 10YrSCS24Hr
- 25YrSCS24Hr
- 50YrSCS24Hr
- 100YrSCS24Hr
- Spill Line

SCALE: 1:2500

0 50 100 m

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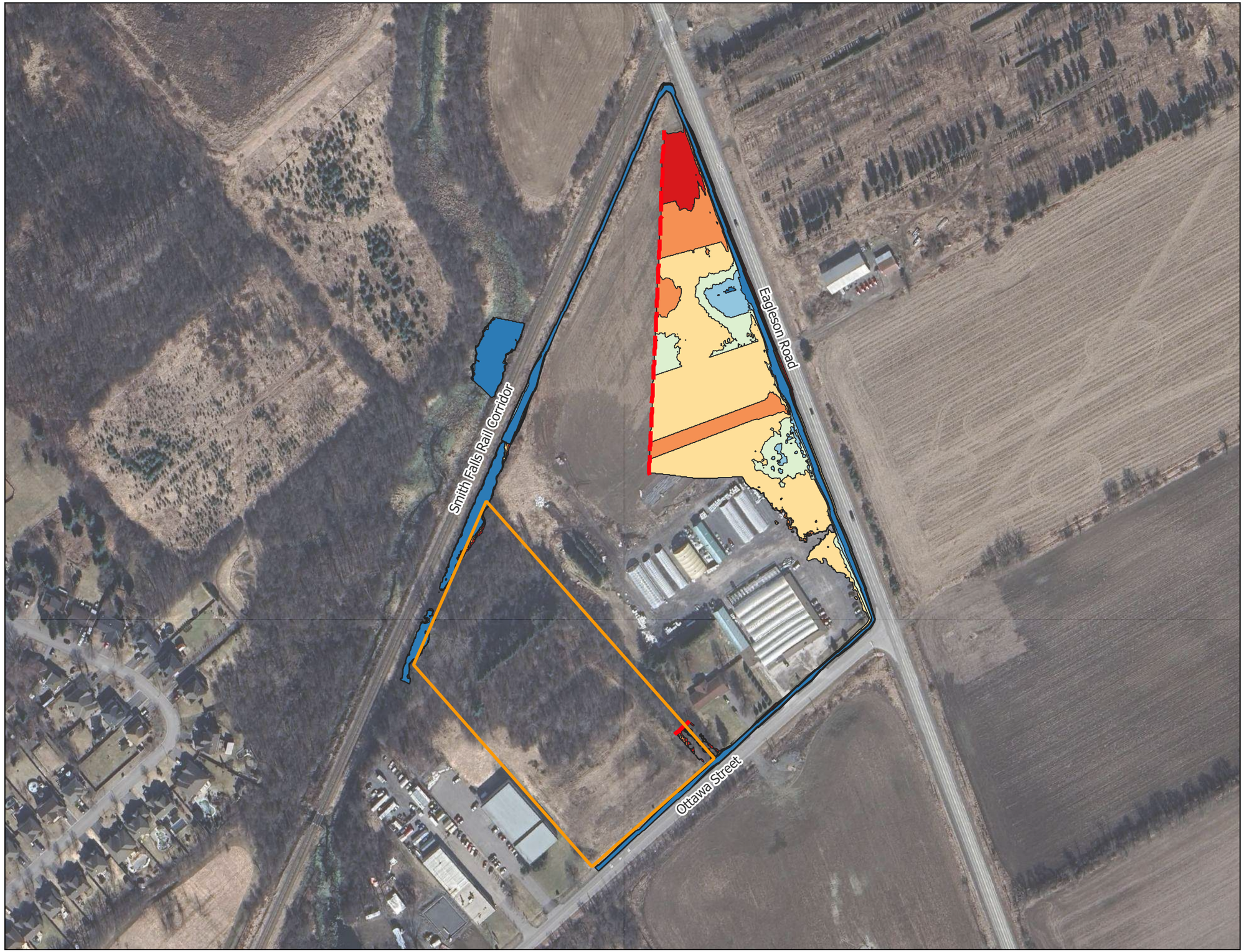
egis

5923 Ottawa St - Richmond

Figure C2: Pre-Development Flood Extents

PROJECT	P2719(e01)
DRAWN	BT
DATE	5 June 2025

C:\Users\BrennanThomas\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\2710(e01)\Design\GIS\20250605-Flood Extent Figures



N

Legend

- Site Boundary
- Post-Development Flood Extents
  - 2YrSCS24Hr
  - 5YrSCS24Hr
  - 10YrSCS24Hr
  - 25YrSCS24Hr
  - 50YrSCS24Hr
  - 100YrSCS24Hr
- Spill Line

SCALE: 1:2500

0 50 100 m

JFSA CANADA INC.
WATER RESOURCE ENGINEERING, ENVIRONMENTAL MANAGEMENT AND LAND PLANNING CONSULTANTS

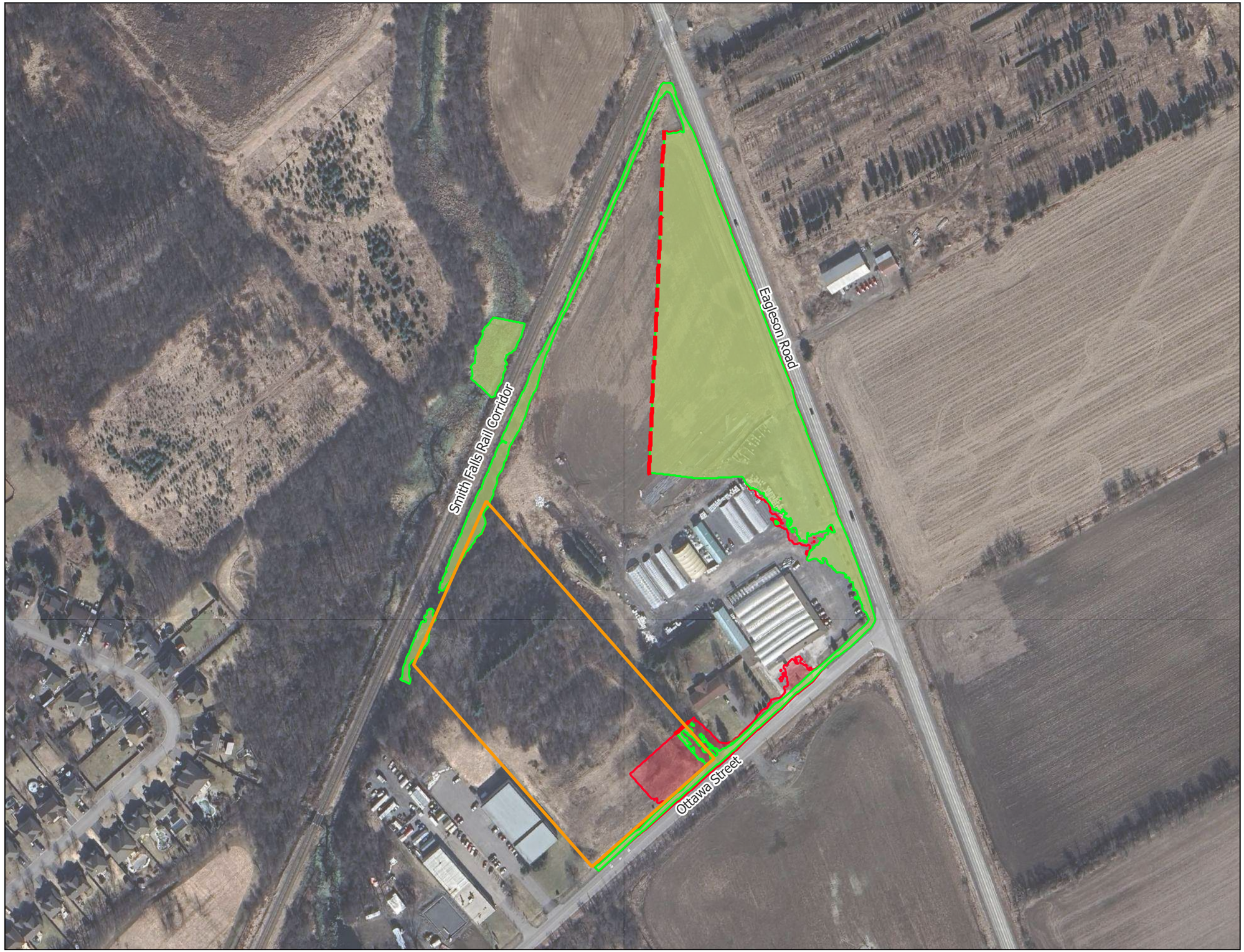
egis

5923 Ottawa St - Richmond

Figure C3: Post-Development Flood Extents

PROJECT	P2719(e01)
DRAWN	BT
DATE	10 Sept 2025

C:\Users\JonathonBurnett\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\2710(e01)\Design\GIS\20250605-Flood Extent Figures



N

Legend

- Site Boundary
- Spill Line
- Pre-Development 100yr
- Post-Dev 100yr

SCALE: 1:2500

0 50 100 m

JFSA CANADA INC.
WATER RESOURCE ENGINEERING, ENVIRONMENTAL MANAGEMENT AND LAND PLANNING CONSULTANTS

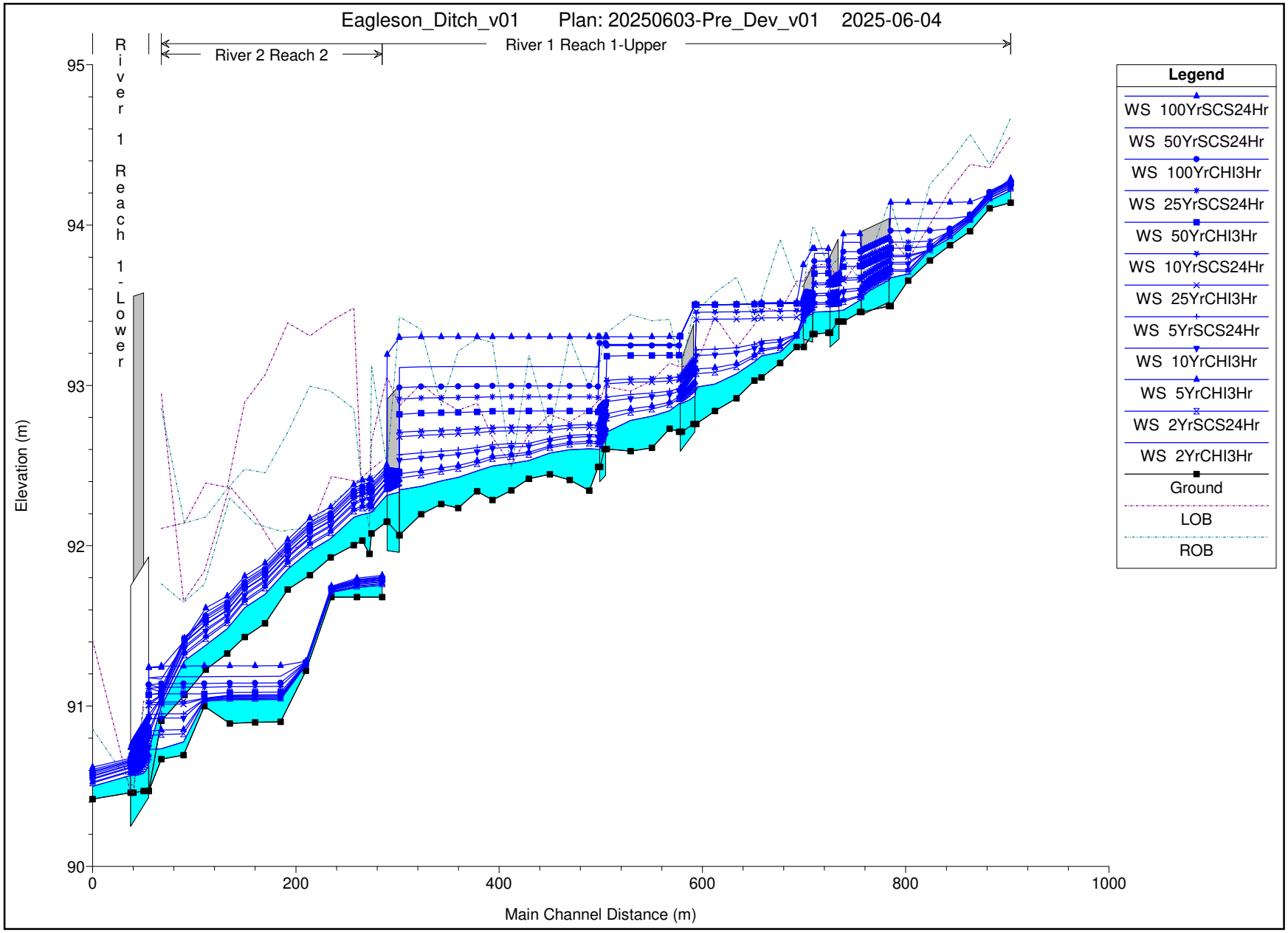
egis

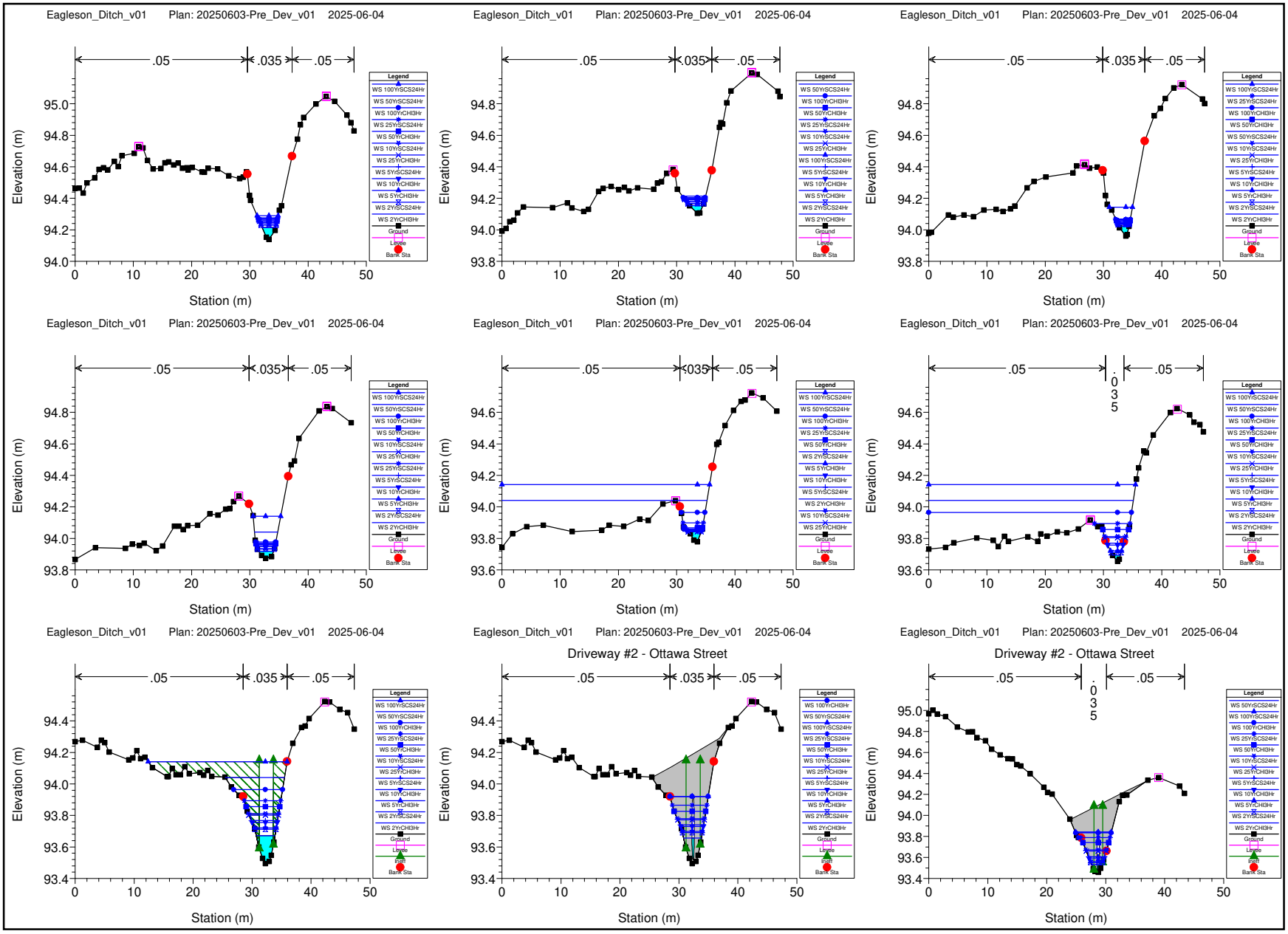
5923 Ottawa St - Richmond

Figure C4: 100-yr Floodplain Extents Comparison

PROJECT	P2719(e01)
DRAWN	BT
DATE	10 Sept 2025

C:\Users\JonathonBurnett\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\2710(e01)\Design\GIS\20250605-Flood Extent Figures


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
River 2 Reach 2
River 1 Reach 1-Upper
River 1 Reach 1-Lower
Elevation (m)
Main Channel Distance (m)
95
94
93
92
91
90
0
200
400
600
800
1000
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
LOB
ROB



Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

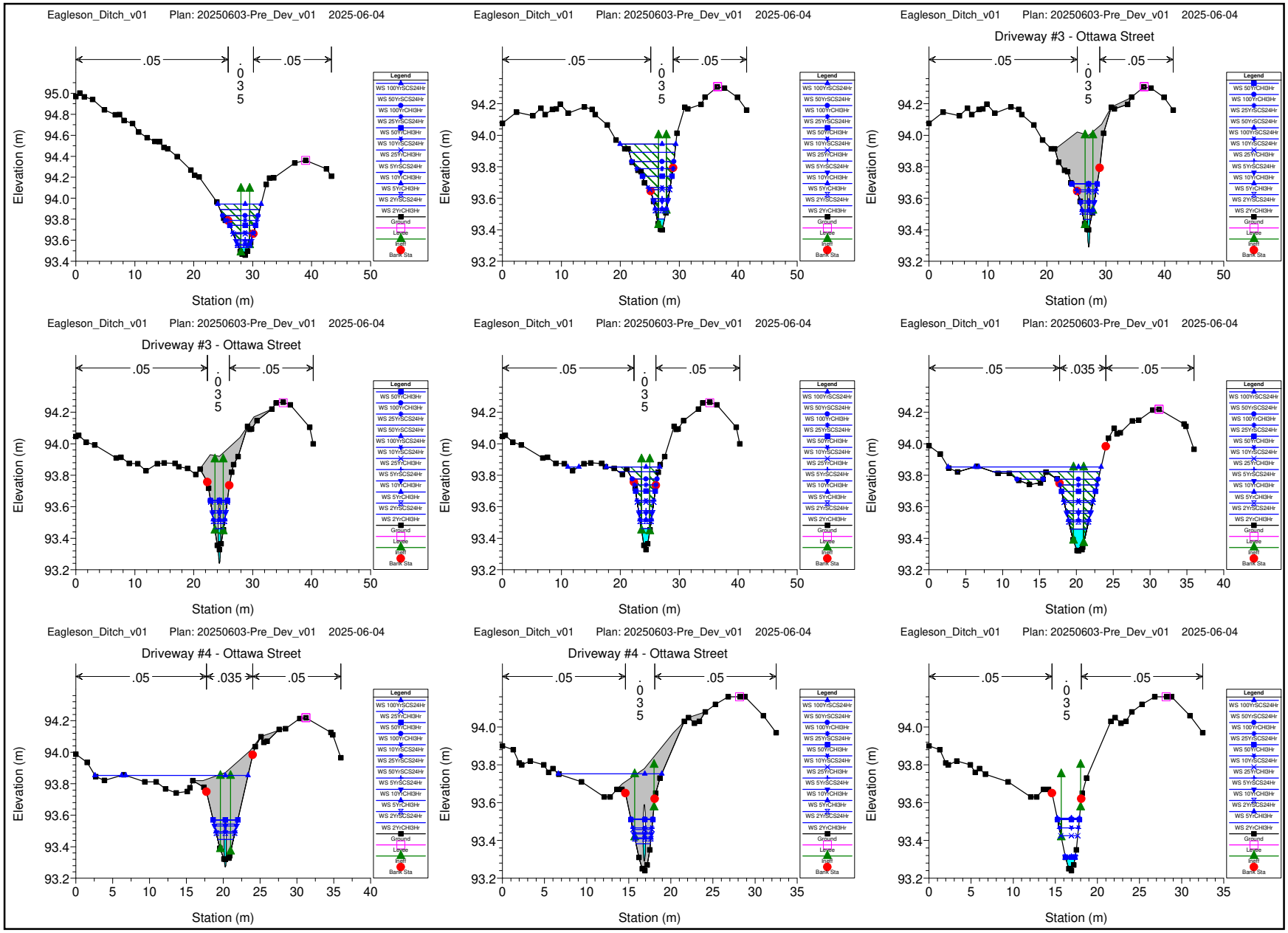
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

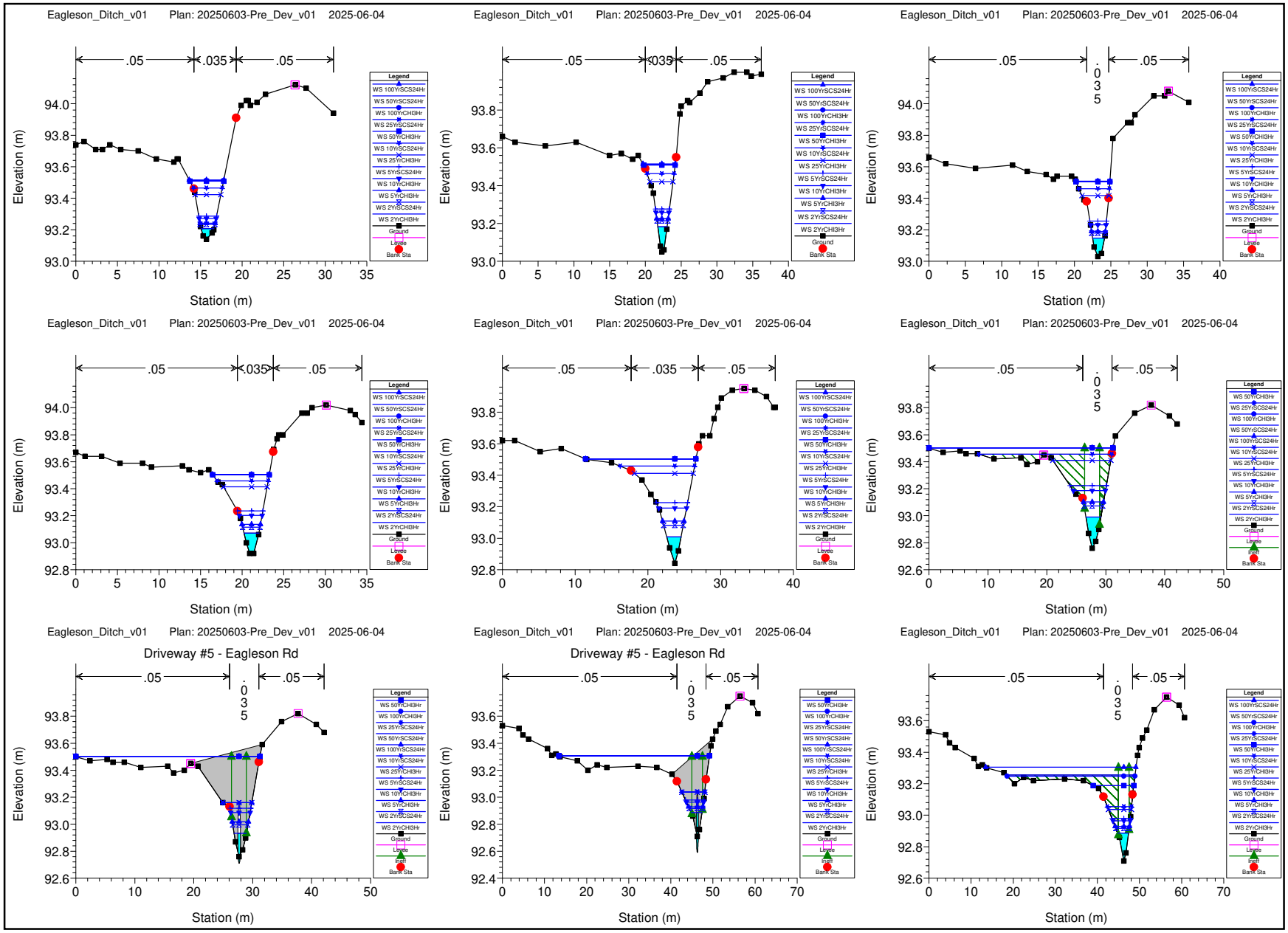
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

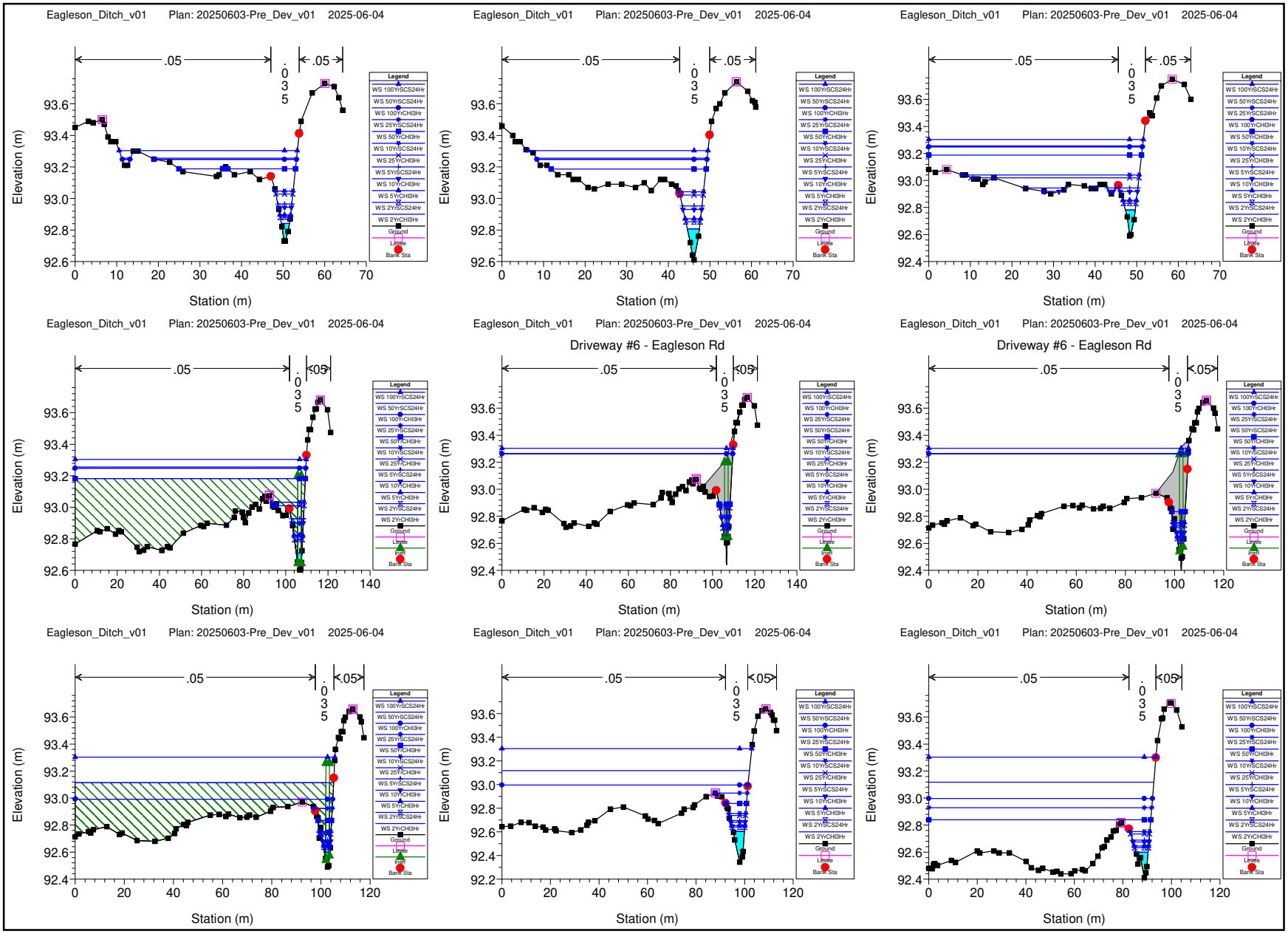
Driveway #2 - Ottawa Street

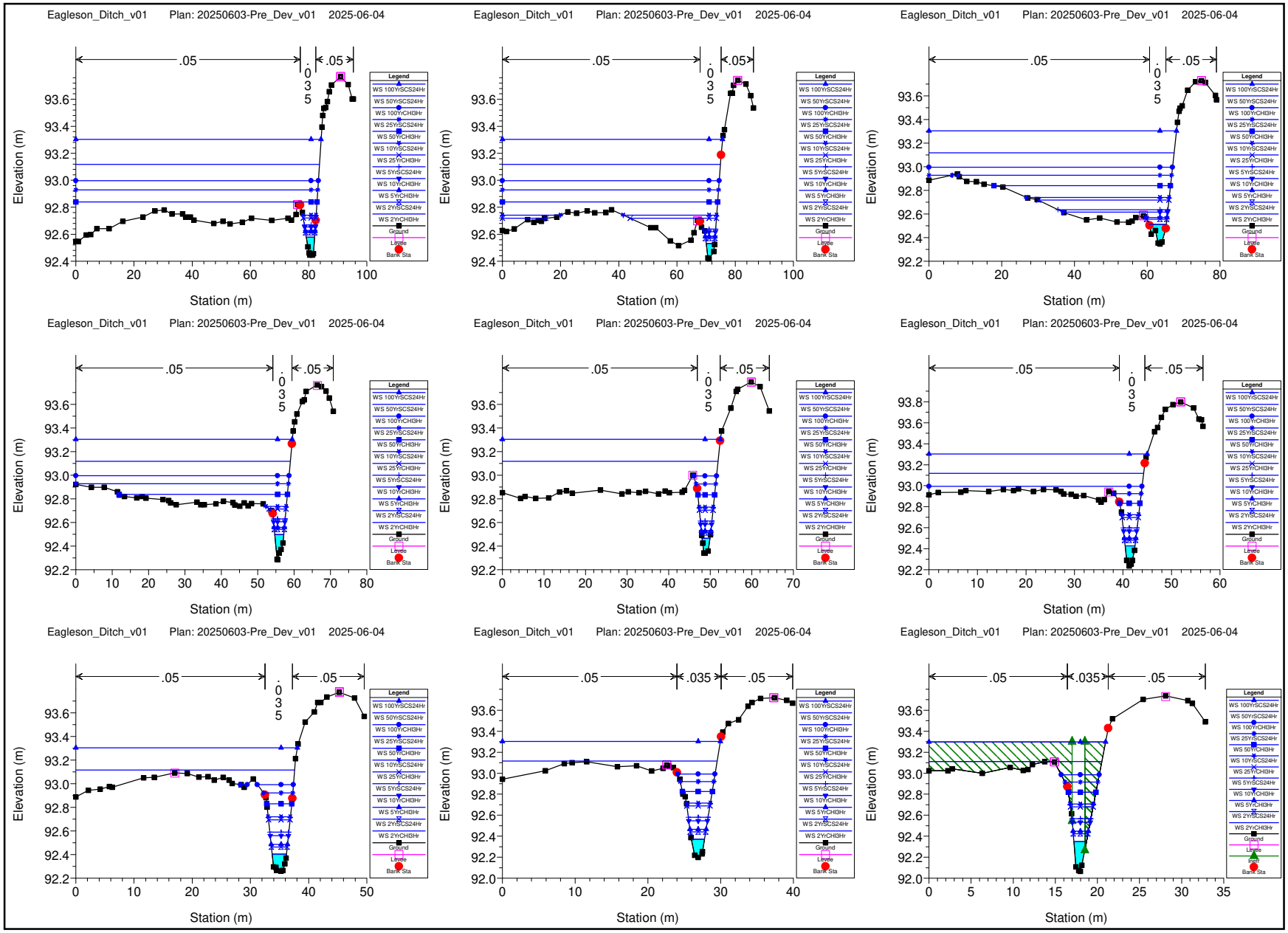
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

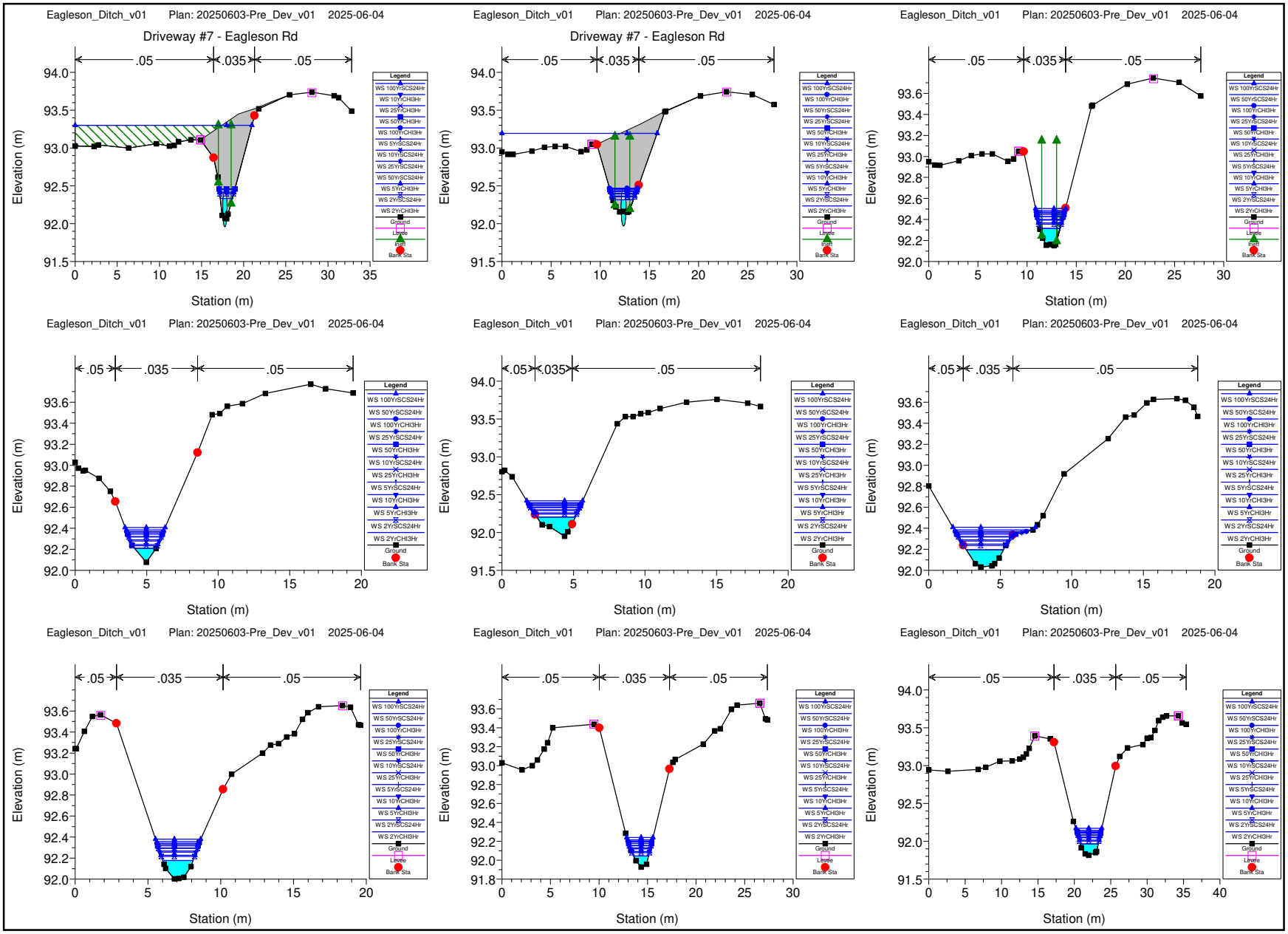
Driveway #2 - Ottawa Street

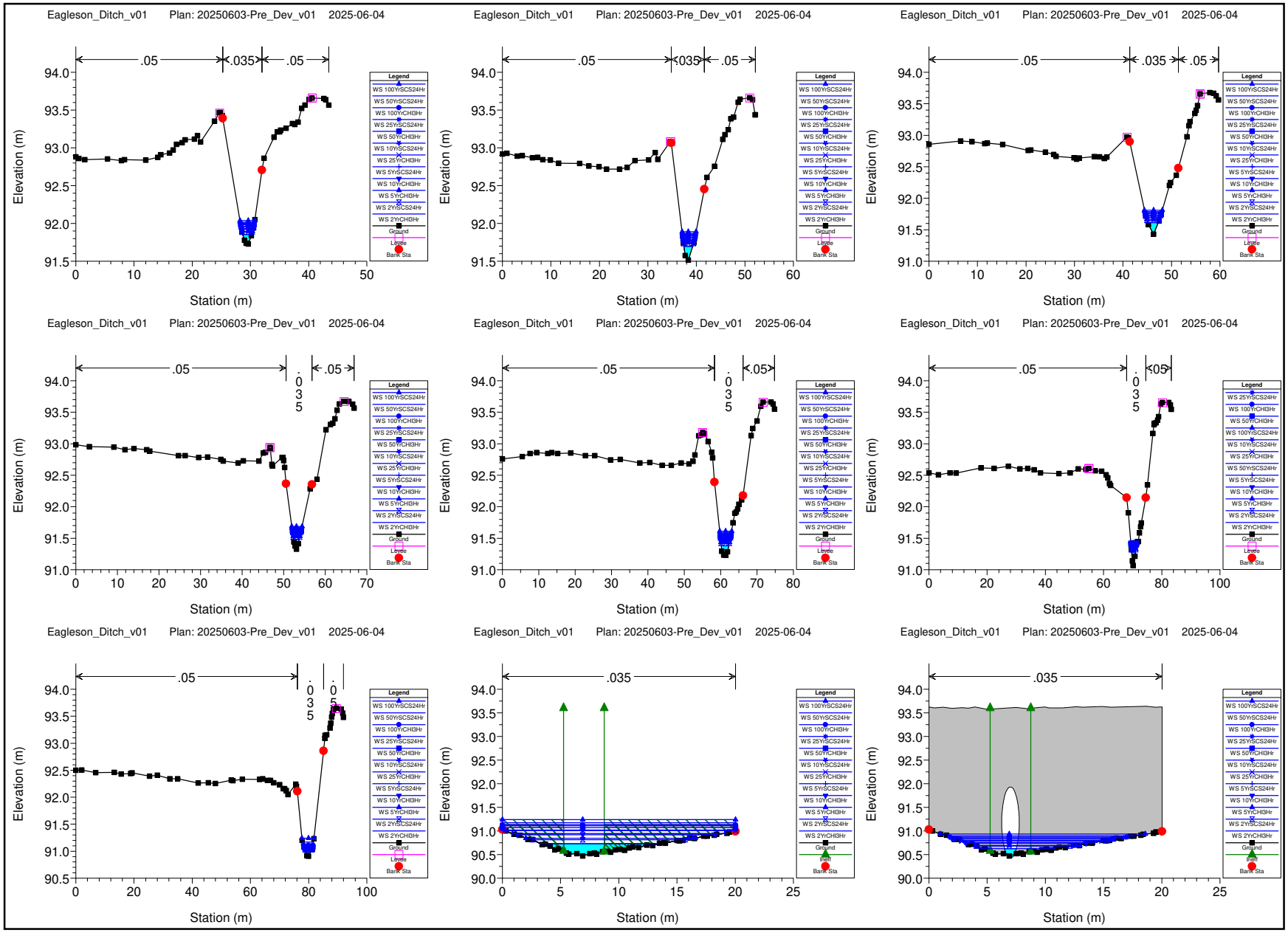

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Driveway #3 - Ottawa Street
Driveway #4 - Ottawa Street


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Driveway #5 - Eagleson Rd


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Driveway #6 - Eagleson Rd
Elevation (m)
Station (m)
.05
.035
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Elevation (m)
Station (m)
.05
.035
Legend
Ground
Levee
Bank Sta


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Driveway #7 - Eagleson Rd
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrCHI3Hr
WS 50YrCHI3Hr
WS 100YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrSCS24Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta



Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04

Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04

Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04

Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04

Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04

Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04

Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04

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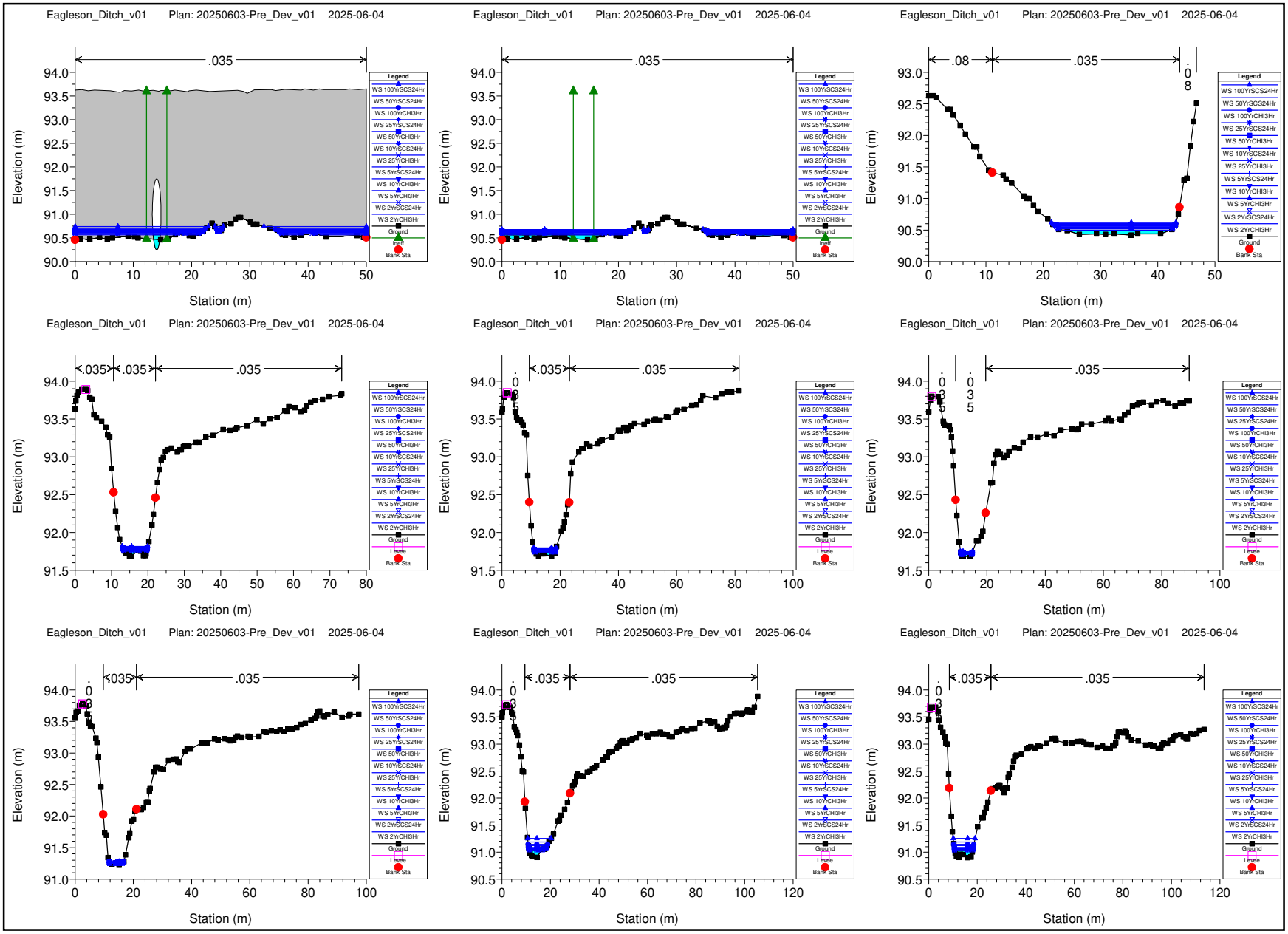
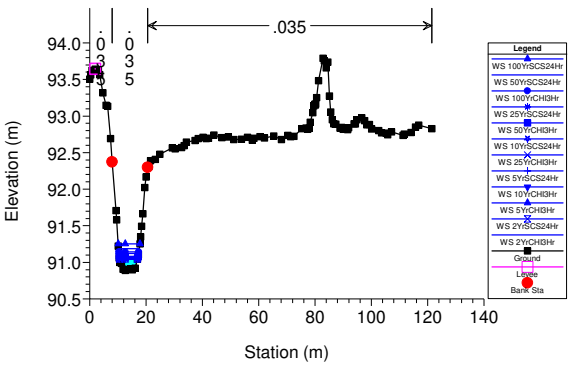
Eagleson_Ditch_v01   Plan: 20250603-Pre_Dev_v01   2025-06-04


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
.035
.08
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta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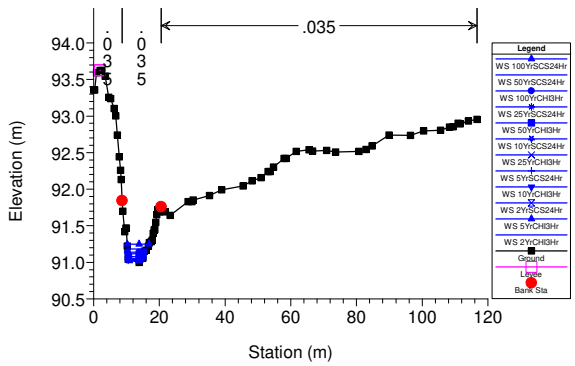
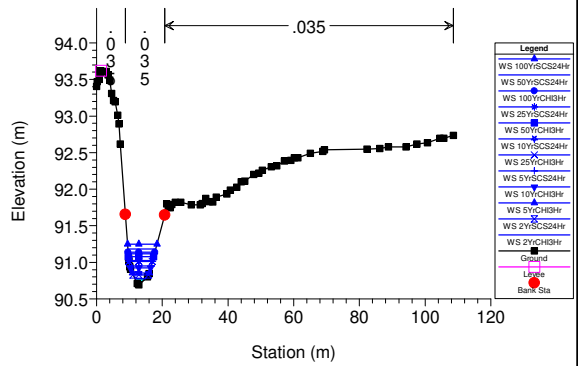

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04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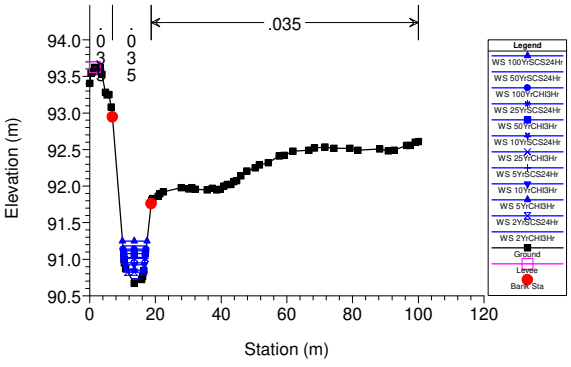
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

HEC-RAS Plan: 20250603-Pre_Dev_v01

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 2	Reach 2	224	2YrCHl3Hr	0.02	91.68	91.75	91.71	91.75	0.000626	0.08	0.20	5.09	0.13
River 2	Reach 2	224	5YrCHl3Hr	0.03	91.68	91.76	91.72	91.76	0.000730	0.10	0.26	5.99	0.15
River 2	Reach 2	224	10YrCHl3Hr	0.03	91.68	91.77	91.72	91.77	0.000742	0.11	0.32	6.48	0.15
River 2	Reach 2	224	25YrCHl3Hr	0.05	91.68	91.78	91.73	91.79	0.000756	0.12	0.39	6.61	0.16
River 2	Reach 2	224	50YrCHl3Hr	0.06	91.68	91.79	91.73	91.79	0.000763	0.13	0.44	6.71	0.16
River 2	Reach 2	224	100YrCHl3Hr	0.07	91.68	91.80	91.74	91.80	0.000773	0.14	0.50	6.81	0.16
River 2	Reach 2	224	2YrSCS24Hr	0.02	91.68	91.76	91.72	91.76	0.000717	0.09	0.25	5.79	0.14
River 2	Reach 2	224	5YrSCS24Hr	0.04	91.68	91.78	91.73	91.78	0.000753	0.11	0.35	6.53	0.15
River 2	Reach 2	224	10YrSCS24Hr	0.05	91.68	91.79	91.73	91.79	0.000757	0.12	0.41	6.65	0.16
River 2	Reach 2	224	25YrSCS24Hr	0.07	91.68	91.80	91.74	91.80	0.000769	0.14	0.48	6.78	0.16
River 2	Reach 2	224	50YrSCS24Hr	0.08	91.68	91.81	91.74	91.81	0.000794	0.15	0.54	6.88	0.17
River 2	Reach 2	224	100YrSCS24Hr	0.09	91.68	91.81	91.75	91.82	0.000800	0.16	0.60	6.99	0.17
River 2	Reach 2	199	2YrCHl3Hr	0.02	91.68	91.74	91.71	91.74	0.000450	0.07	0.24	6.76	0.11
River 2	Reach 2	199	5YrCHl3Hr	0.03	91.68	91.75	91.71	91.75	0.000479	0.08	0.31	6.96	0.12
River 2	Reach 2	199	10YrCHl3Hr	0.03	91.68	91.76	91.71	91.76	0.000481	0.09	0.38	7.14	0.12
River 2	Reach 2	199	25YrCHl3Hr	0.05	91.68	91.77	91.72	91.77	0.000549	0.10	0.45	7.32	0.13
River 2	Reach 2	199	50YrCHl3Hr	0.06	91.68	91.78	91.72	91.78	0.000569	0.11	0.50	7.42	0.14
River 2	Reach 2	199	100YrCHl3Hr	0.07	91.68	91.78	91.73	91.78	0.000591	0.12	0.56	7.51	0.14
River 2	Reach 2	199	2YrSCS24Hr	0.02	91.68	91.75	91.71	91.75	0.000474	0.08	0.30	6.91	0.12
River 2	Reach 2	199	5YrSCS24Hr	0.04	91.68	91.76	91.72	91.76	0.000522	0.10	0.41	7.20	0.13
River 2	Reach 2	199	10YrSCS24Hr	0.05	91.68	91.77	91.72	91.77	0.000558	0.11	0.47	7.37	0.14
River 2	Reach 2	199	25YrSCS24Hr	0.07	91.68	91.78	91.72	91.78	0.000582	0.12	0.55	7.49	0.14
River 2	Reach 2	199	50YrSCS24Hr	0.08	91.68	91.79	91.73	91.79	0.000628	0.13	0.60	7.57	0.15
River 2	Reach 2	199	100YrSCS24Hr	0.09	91.68	91.80	91.73	91.80	0.000634	0.14	0.66	7.67	0.15
River 2	Reach 2	174	2YrCHl3Hr	0.02	91.68	91.71	91.70	91.71	0.009341	0.22	0.07	3.33	0.47
River 2	Reach 2	174	5YrCHl3Hr	0.03	91.68	91.71	91.70	91.72	0.010728	0.27	0.09	3.51	0.52
River 2	Reach 2	174	10YrCHl3Hr	0.03	91.68	91.72	91.71	91.73	0.009147	0.28	0.12	3.68	0.49
River 2	Reach 2	174	25YrCHl3Hr	0.05	91.68	91.73	91.72	91.73	0.010482	0.33	0.14	3.80	0.54
River 2	Reach 2	174	50YrCHl3Hr	0.06	91.68	91.73	91.72	91.74	0.010789	0.35	0.16	3.90	0.56
River 2	Reach 2	174	100YrCHl3Hr	0.07	91.68	91.74	91.72	91.75	0.011338	0.38	0.18	3.99	0.58
River 2	Reach 2	174	2YrSCS24Hr	0.02	91.68	91.71	91.70	91.72	0.009099	0.24	0.09	3.51	0.48
River 2	Reach 2	174	5YrSCS24Hr	0.04	91.68	91.73	91.71	91.73	0.009102	0.29	0.13	3.75	0.50
River 2	Reach 2	174	10YrSCS24Hr	0.05	91.68	91.73	91.72	91.74	0.010830	0.34	0.15	3.84	0.55
River 2	Reach 2	174	25YrSCS24Hr	0.07	91.68	91.74	91.72	91.74	0.010024	0.36	0.18	4.01	0.55
River 2	Reach 2	174	50YrSCS24Hr	0.08	91.68	91.74	91.73	91.75	0.010794	0.40	0.20	4.08	0.57
River 2	Reach 2	174	100YrSCS24Hr	0.09	91.68	91.75	91.73	91.76	0.010716	0.42	0.22	4.15	0.58
River 2	Reach 2	149	2YrCHl3Hr	0.02	91.22	91.25	91.25	91.26	0.049600	0.35	0.05	3.45	0.99
River 2	Reach 2	149	5YrCHl3Hr	0.03	91.22	91.26	91.26	91.27	0.037267	0.35	0.07	4.39	0.89
River 2	Reach 2	149	10YrCHl3Hr	0.03	91.22	91.26	91.26	91.27	0.052915	0.44	0.08	4.47	1.07
River 2	Reach 2	149	25YrCHl3Hr	0.05	91.22	91.27	91.27	91.28	0.039832	0.45	0.10	4.68	0.97
River 2	Reach 2	149	50YrCHl3Hr	0.06	91.22	91.27	91.27	91.28	0.037244	0.47	0.12	4.80	0.95
River 2	Reach 2	149	100YrCHl3Hr	0.07	91.22	91.27	91.27	91.29	0.034157	0.49	0.14	4.94	0.93
River 2	Reach 2	149	2YrSCS24Hr	0.02	91.22	91.26	91.26	91.26	0.052399	0.39	0.06	3.96	1.03
River 2	Reach 2	149	5YrSCS24Hr	0.04	91.22	91.26	91.26	91.27	0.052134	0.46	0.08	4.53	1.07
River 2	Reach 2	149	10YrSCS24Hr	0.05	91.22	91.27	91.27	91.28	0.037535	0.46	0.11	4.74	0.95
River 2	Reach 2	149	25YrSCS24Hr	0.07	91.22	91.27	91.27	91.29	0.044620	0.53	0.13	4.83	1.05
River 2	Reach 2	149	50YrSCS24Hr	0.08	91.22	91.28	91.28	91.29	0.037650	0.53	0.15	5.00	0.98
River 2	Reach 2	149	100YrSCS24Hr	0.09	91.22	91.28	91.28	91.30	0.038788	0.57	0.16	5.05	1.01
River 2	Reach 2	124	2YrCHl3Hr	0.02	90.90	91.04	90.93	91.04	0.000032	0.03	0.48	5.07	0.03
River 2	Reach 2	124	5YrCHl3Hr	0.03	90.90	91.05	90.93	91.05	0.000060	0.05	0.53	5.26	0.05
River 2	Reach 2	124	10YrCHl3Hr	0.03	90.90	91.06	90.94	91.06	0.000112	0.06	0.57	6.50	0.06
River 2	Reach 2	124	25YrCHl3Hr	0.05	90.90	91.07	90.95	91.07	0.000154	0.07	0.64	6.76	0.08
River 2	Reach 2	124	50YrCHl3Hr	0.06	90.90	91.09	90.95	91.09	0.000135	0.07	0.76	7.17	0.07
River 2	Reach 2	124	100YrCHl3Hr	0.07	90.90	91.14	90.95	91.14	0.000050	0.06	1.21	8.10	0.05
River 2	Reach 2	124	2YrSCS24Hr	0.02	90.90	91.05	90.93	91.05	0.000054	0.04	0.51	5.22	0.05
River 2	Reach 2	124	5YrSCS24Hr	0.04	90.90	91.06	90.94	91.06	0.000129	0.07	0.60	6.60	0.07
River 2	Reach 2	124	10YrSCS24Hr	0.05	90.90	91.07	90.95	91.07	0.000166	0.08	0.66	6.83	0.08
River 2	Reach 2	124	25YrSCS24Hr	0.07	90.90	91.12	90.95	91.12	0.000074	0.06	1.04	7.89	0.06
River 2	Reach 2	124	50YrSCS24Hr	0.08	90.90	91.19	90.96	91.19	0.000031	0.05	1.55	8.50	0.04
River 2	Reach 2	124	100YrSCS24Hr	0.09	90.90	91.25	90.96	91.25	0.000017	0.04	2.15	9.67	0.03
River 2	Reach 2	99	2YrCHl3Hr	0.02	90.90	91.04	90.92	91.04	0.000010	0.02	0.80	7.44	0.02
River 2	Reach 2	99	5YrCHl3Hr	0.03	90.90	91.05	90.92	91.05	0.000018	0.03	0.87	7.51	0.03
River 2	Reach 2	99	10YrCHl3Hr	0.03	90.90	91.06	90.93	91.06	0.000027	0.04	0.93	7.57	0.03
River 2	Reach 2	99	25YrCHl3Hr	0.05	90.90	91.07	90.93	91.07	0.000041	0.05	1.00	7.64	0.04
River 2	Reach 2	99	50YrCHl3Hr	0.06	90.90	91.09	90.94	91.09	0.000040	0.05	1.14	7.79	0.04
River 2	Reach 2	99	100YrCHl3Hr	0.07	90.90	91.14	90.94	91.14	0.000020	0.04	1.61	8.25	0.03
River 2	Reach 2	99	2YrSCS24Hr	0.02	90.90	91.05	90.92	91.05	0.000016	0.03	0.86	7.49	0.03
River 2	Reach 2	99	5YrSCS24Hr	0.04	90.90	91.06	90.93	91.06	0.000032	0.04	0.96	7.60	0.04
River 2	Reach 2	99	10YrSCS24Hr	0.05	90.90	91.07	90.94	91.07	0.000045	0.05	1.02	7.67	0.04
River 2	Reach 2	99	25YrSCS24Hr	0.07	90.90	91.12	90.94	91.12	0.000026	0.05	1.43	8.07	0.03
River 2	Reach 2	99	50YrSCS24Hr	0.08	90.90	91.19	90.94	91.19	0.000014	0.04	1.96	8.55	0.03
River 2	Reach 2	99	100YrSCS24Hr	0.09	90.90	91.25	90.95	91.25	0.000009	0.04	2.54	9.03	0.02
River 2	Reach 2	74	2YrCHl3Hr	0.02	90.89	91.04	90.91	91.04	0.000011	0.02	0.72	6.36	0.02
River 2	Reach 2	74	5YrCHl3Hr	0.03	90.89	91.05	90.92	91.05	0.000021	0.03	0.78	6.44	0.03
River 2	Reach 2	74	10YrCHl3Hr	0.03	90.89	91.06	90.92	91.06	0.000033	0.04	0.83	6.50	0.04
River 2	Reach 2	74	25YrCHl3Hr	0.05	90.89	91.07	90.93	91.07	0.000050	0.05	0.89	6.57	0.05
River 2	Reach 2	74	50YrCHl3Hr	0.06	90.89	91.08	90.93	91.08	0.000049	0.06	1.01	6.70	0.05
River 2	Reach 2	74	100YrCHl3Hr	0.07	90.89	91.14	90.93	91.14	0.000025	0.05	1.42	7.09	0.03
River 2	Reach 2	74	2YrSCS24Hr	0.02	90.89	91.05	90.92	91.05	0.000019	0.03	0.77	6.42	0.03
River 2	Reach 2	74	5YrSCS24Hr	0.04	90.89	91.06	90.92	91.06	0.000039	0.05	0.85	6.53	0.04
River 2	Reach 2	74	10YrSCS24Hr	0.05	90.89	91.07	90.93	91.07	0.000055	0.06	0.91	6.59	0.05
River 2	Reach 2	74	25YrSCS24Hr	0.07	90.89	91.12	90.93	91.12	0.000033	0.05	1.26	6.96	0.04
River 2	Reach 2	74	50YrSCS24Hr	0.08	90.89	91.18	90.93	91.18	0.000018	0.05	1.72	7.34	0.03
River 2	Reach 2	74	100YrSCS24Hr	0.09	90.89	91.25	90.94	91.25	0.000012	0.04	2.22	7.71	0.03

HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 2	Reach 2	49	2YrCHI3Hr	0.02	91.00	91.03	91.03	91.04	0.048683	0.40	0.04	2.56	1.01
River 2	Reach 2	49	5YrCHI3Hr	0.03	91.00	91.04	91.04	91.05	0.045843	0.43	0.06	3.06	1.01
River 2	Reach 2	49	10YrCHI3Hr	0.03	91.00	91.04	91.04	91.05	0.036151	0.43	0.08	3.50	0.92
River 2	Reach 2	49	25YrCHI3Hr	0.05	91.00	91.05	91.05	91.06	0.042954	0.52	0.09	3.52	1.03
River 2	Reach 2	49	50YrCHI3Hr	0.06	91.00	91.08	91.05	91.08	0.005537	0.28	0.20	4.07	0.41
River 2	Reach 2	49	100YrCHI3Hr	0.07	91.00	91.14	91.05	91.14	0.000508	0.14	0.50	4.96	0.14
River 2	Reach 2	49	2YrSCS24Hr	0.02	91.00	91.04	91.04	91.04	0.038802	0.40	0.06	3.06	0.93
River 2	Reach 2	49	5YrSCS24Hr	0.04	91.00	91.04	91.04	91.06	0.043713	0.48	0.08	3.50	1.02
River 2	Reach 2	49	10YrSCS24Hr	0.05	91.00	91.05	91.05	91.06	0.037160	0.51	0.10	3.53	0.97
River 2	Reach 2	49	25YrSCS24Hr	0.07	91.00	91.12	91.05	91.12	0.001066	0.17	0.38	4.82	0.19
River 2	Reach 2	49	50YrSCS24Hr	0.08	91.00	91.18	91.06	91.18	0.000237	0.11	0.73	5.93	0.10
River 2	Reach 2	49	100YrSCS24Hr	0.09	91.00	91.25	91.06	91.25	0.000083	0.08	1.15	6.63	0.06
River 2	Reach 2	28	2YrCHI3Hr	0.02	90.69	90.78	90.74	90.78	0.001301	0.13	0.15	3.26	0.20
River 2	Reach 2	28	5YrCHI3Hr	0.03	90.69	90.85	90.75	90.85	0.000163	0.07	0.47	5.17	0.08
River 2	Reach 2	28	10YrCHI3Hr	0.05	90.69	90.93	90.75	90.93	0.000046	0.05	0.89	6.29	0.04
River 2	Reach 2	28	25YrCHI3Hr	0.06	90.69	91.01	90.76	91.01	0.000019	0.04	1.48	7.14	0.03
River 2	Reach 2	28	50YrCHI3Hr	0.08	90.69	91.08	90.77	91.08	0.000012	0.04	1.96	7.68	0.03
River 2	Reach 2	28	100YrCHI3Hr	0.09	90.69	91.14	90.78	91.14	0.000009	0.04	2.47	8.16	0.02
River 2	Reach 2	28	2YrSCS24Hr	0.03	90.69	90.83	90.74	90.83	0.000330	0.09	0.35	4.66	0.11
River 2	Reach 2	28	5YrSCS24Hr	0.05	90.69	90.95	90.76	90.95	0.000036	0.05	1.07	6.57	0.04
River 2	Reach 2	28	10YrSCS24Hr	0.07	90.69	91.03	90.76	91.03	0.000019	0.04	1.58	7.26	0.03
River 2	Reach 2	28	25YrSCS24Hr	0.09	90.69	91.12	90.78	91.12	0.000011	0.04	2.28	7.99	0.02
River 2	Reach 2	28	50YrSCS24Hr	0.11	90.69	91.18	90.78	91.18	0.000008	0.04	2.82	8.48	0.02
River 2	Reach 2	28	100YrSCS24Hr	0.13	90.69	91.25	90.79	91.25	0.000007	0.04	3.40	8.98	0.02
River 2	Reach 2	7	2YrCHI3Hr	0.02	90.67	90.73	90.71	90.74	0.003117	0.17	0.11	3.14	0.29
River 2	Reach 2	7	5YrCHI3Hr	0.03	90.67	90.85	90.72	90.85	0.000075	0.06	0.60	5.18	0.05
River 2	Reach 2	7	10YrCHI3Hr	0.05	90.67	90.92	90.73	90.92	0.000028	0.05	1.02	5.92	0.04
River 2	Reach 2	7	25YrCHI3Hr	0.06	90.67	91.01	90.73	91.01	0.000014	0.04	1.56	6.43	0.03
River 2	Reach 2	7	50YrCHI3Hr	0.08	90.67	91.08	90.74	91.08	0.000010	0.04	1.99	6.71	0.02
River 2	Reach 2	7	100YrCHI3Hr	0.09	90.67	91.14	90.74	91.14	0.000008	0.04	2.42	6.98	0.02
River 2	Reach 2	7	2YrSCS24Hr	0.03	90.67	90.82	90.72	90.82	0.000130	0.07	0.46	4.72	0.07
River 2	Reach 2	7	5YrSCS24Hr	0.05	90.67	90.95	90.73	90.95	0.000023	0.05	1.18	6.12	0.03
River 2	Reach 2	7	10YrSCS24Hr	0.07	90.67	91.03	90.73	91.03	0.000014	0.04	1.65	6.49	0.03
River 2	Reach 2	7	25YrSCS24Hr	0.09	90.67	91.12	90.74	91.12	0.000009	0.04	2.26	6.88	0.02
River 2	Reach 2	7	50YrSCS24Hr	0.11	90.67	91.18	90.75	91.18	0.000007	0.04	2.72	7.15	0.02
River 2	Reach 2	7	100YrSCS24Hr	0.13	90.67	91.25	90.75	91.25	0.000006	0.04	3.21	7.44	0.02
River 1	Reach 1-Upper	908	2YrCHI3Hr	0.02	94.14	94.22	94.18	94.22	0.001587	0.14	0.10	2.34	0.22
River 1	Reach 1-Upper	908	5YrCHI3Hr	0.03	94.14	94.23	94.19	94.23	0.001806	0.18	0.15	2.64	0.24
River 1	Reach 1-Upper	908	10YrCHI3Hr	0.03	94.14	94.24	94.20	94.24	0.002004	0.20	0.17	2.81	0.26
River 1	Reach 1-Upper	908	25YrCHI3Hr	0.05	94.14	94.25	94.20	94.26	0.002189	0.22	0.21	3.02	0.27
River 1	Reach 1-Upper	908	50YrCHI3Hr	0.06	94.14	94.26	94.21	94.27	0.002278	0.24	0.24	3.18	0.28
River 1	Reach 1-Upper	908	100YrCHI3Hr	0.07	94.14	94.27	94.21	94.27	0.002320	0.25	0.26	3.32	0.29
River 1	Reach 1-Upper	908	2YrSCS24Hr	0.02	94.14	94.23	94.19	94.23	0.001752	0.17	0.14	2.59	0.23
River 1	Reach 1-Upper	908	5YrSCS24Hr	0.04	94.14	94.25	94.20	94.25	0.002058	0.21	0.18	2.87	0.26
River 1	Reach 1-Upper	908	10YrSCS24Hr	0.05	94.14	94.26	94.20	94.26	0.002199	0.23	0.22	3.05	0.27
River 1	Reach 1-Upper	908	25YrSCS24Hr	0.06	94.14	94.27	94.21	94.27	0.002241	0.25	0.25	3.26	0.28
River 1	Reach 1-Upper	908	50YrSCS24Hr	0.07	94.14	94.28	94.22	94.28	0.002406	0.26	0.28	3.39	0.29
River 1	Reach 1-Upper	908	100YrSCS24Hr	0.08	94.14	94.29	94.22	94.29	0.002029	0.26	0.33	3.64	0.27
River 1	Reach 1-Upper	887	2YrCHI3Hr	0.02	94.10	94.15	94.14	94.16	0.007507	0.23	0.07	2.30	0.44
River 1	Reach 1-Upper	887	5YrCHI3Hr	0.03	94.10	94.17	94.15	94.17	0.005953	0.25	0.10	2.78	0.41
River 1	Reach 1-Upper	887	10YrCHI3Hr	0.03	94.10	94.18	94.15	94.18	0.005054	0.26	0.14	3.08	0.39
River 1	Reach 1-Upper	887	25YrCHI3Hr	0.05	94.10	94.19	94.16	94.20	0.004392	0.26	0.18	3.42	0.37
River 1	Reach 1-Upper	887	50YrCHI3Hr	0.06	94.10	94.20	94.17	94.20	0.004802	0.29	0.20	3.57	0.39
River 1	Reach 1-Upper	887	100YrCHI3Hr	0.07	94.10	94.21	94.17	94.21	0.004705	0.30	0.22	3.76	0.39
River 1	Reach 1-Upper	887	2YrSCS24Hr	0.02	94.10	94.17	94.15	94.17	0.006295	0.25	0.10	2.71	0.42
River 1	Reach 1-Upper	887	5YrSCS24Hr	0.04	94.10	94.18	94.15	94.19	0.004885	0.26	0.15	3.16	0.38
River 1	Reach 1-Upper	887	10YrSCS24Hr	0.05	94.10	94.19	94.16	94.20	0.004587	0.27	0.18	3.44	0.38
River 1	Reach 1-Upper	887	25YrSCS24Hr	0.06	94.10	94.20	94.17	94.20	0.005786	0.31	0.20	3.56	0.43
River 1	Reach 1-Upper	887	50YrSCS24Hr	0.07	94.10	94.21	94.17	94.22	0.003925	0.29	0.25	3.98	0.36
River 1	Reach 1-Upper	887	100YrSCS24Hr	0.08	94.10	94.19	94.18	94.20	0.014690	0.48	0.18	3.39	0.67
River 1	Reach 1-Upper	868	2YrCHI3Hr	0.02	93.96	94.02	94.01	94.03	0.006049	0.24	0.06	1.78	0.41
River 1	Reach 1-Upper	868	5YrCHI3Hr	0.03	93.96	94.04	94.01	94.04	0.007801	0.31	0.08	1.98	0.48
River 1	Reach 1-Upper	868	10YrCHI3Hr	0.03	93.96	94.04	94.02	94.05	0.010621	0.37	0.09	2.05	0.56
River 1	Reach 1-Upper	868	25YrCHI3Hr	0.05	93.96	94.05	94.03	94.06	0.013422	0.44	0.11	2.15	0.64
River 1	Reach 1-Upper	868	50YrCHI3Hr	0.06	93.96	94.06	94.04	94.07	0.010577	0.43	0.13	2.35	0.58
River 1	Reach 1-Upper	868	100YrCHI3Hr	0.07	93.96	94.06	94.04	94.07	0.010976	0.46	0.15	2.45	0.60
River 1	Reach 1-Upper	868	2YrSCS24Hr	0.02	93.96	94.03	94.01	94.04	0.007224	0.29	0.08	1.96	0.46
River 1	Reach 1-Upper	868	5YrSCS24Hr	0.04	93.96	94.04	94.02	94.05	0.011359	0.39	0.10	2.08	0.58
River 1	Reach 1-Upper	868	10YrSCS24Hr	0.05	93.96	94.05	94.03	94.06	0.012976	0.44	0.11	2.19	0.63
River 1	Reach 1-Upper	868	25YrSCS24Hr	0.06	93.96	94.07	94.04	94.08	0.007363	0.39	0.16	2.55	0.49
River 1	Reach 1-Upper	868	50YrSCS24Hr	0.07	93.96	94.06	94.05	94.07	0.019525	0.57	0.13	2.31	0.78
River 1	Reach 1-Upper	868	100YrSCS24Hr	0.08	93.96	94.14	94.05	94.15	0.001168	0.21	0.40	3.98	0.21
River 1	Reach 1-Upper	848	2YrCHI3Hr	0.02	93.87	93.92	93.90	93.92	0.004686	0.19	0.08	2.57	0.35
River 1	Reach 1-Upper	848	5YrCHI3Hr	0.03	93.87	93.93	93.91	93.94	0.003787	0.21	0.12	2.98	0.33
River 1	Reach 1-Upper	848	10YrCHI3Hr	0.03	93.87	93.95	93.92	93.95	0.002708	0.21	0.17	3.15	0.29
River 1	Reach 1-Upper	848	25YrCHI3Hr	0.05	93.87	93.97	93.92	93.97	0.002043	0.21	0.22	3.34	0.26
River 1	Reach 1-Upper	848	50YrCHI3Hr	0.06	93.87	93.97	93.93	93.97	0.002676	0.25	0.23	3.37	0.30
River 1	Reach 1-Upper	848	100YrCHI3Hr	0.07	93.87	93.98	93.93	93.98	0.002517	0.26	0.26	3.47	0.30
River 1	Reach 1-Upper	848	2YrSCS24Hr	0.02	93.87	93.93	93.91	93.93	0.004188	0.21	0.11	2.93	0.34
River 1	Reach 1-Upper	848	5YrSCS24Hr	0.04	93.87	93.95	93.92	93.96	0.002536	0.21	0.18	3.19	0.28
River 1	Reach 1-Upper	848	10YrSCS24Hr	0.05	93.87	93.97	93.92	93.97	0.002100	0.22	0.23	3.35	0.27
River 1	Reach 1-Upper	848	25YrSCS24Hr	0.06	93.87	93.96	93.93	93.97	0.004423	0.30	0.21	3.29	0.38
River 1	Reach 1-Upper	848	50YrSCS24Hr	0.07	93.87	94.04	93.93	94.04	0.000430	0.15	0.50	3.98	0.13

HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	848	100YrSCS24Hr	0.08	93.87	94.14	93.94	94.14	0.000088	0.09	0.94	4.75	0.06
River 1	Reach 1-Upper	828	2YrCHI3Hr	0.02	93.78	93.85	93.82	93.85	0.002687	0.16	0.09	2.47	0.27
River 1	Reach 1-Upper	828	5YrCHI3Hr	0.03	93.78	93.86	93.83	93.86	0.004045	0.22	0.12	2.90	0.34
River 1	Reach 1-Upper	828	10YrCHI3Hr	0.03	93.78	93.85	93.83	93.86	0.010289	0.33	0.10	2.68	0.54
River 1	Reach 1-Upper	828	25YrCHI3Hr	0.05	93.78	93.84	93.84	93.86	0.040257	0.61	0.08	2.23	1.04
River 1	Reach 1-Upper	828	50YrCHI3Hr	0.06	93.78	93.87	93.85	93.87	0.011893	0.40	0.14	3.16	0.59
River 1	Reach 1-Upper	828	100YrCHI3Hr	0.07	93.78	93.96	93.85	93.97	0.000365	0.13	0.50	4.07	0.12
River 1	Reach 1-Upper	828	2YrSCS24Hr	0.02	93.78	93.86	93.82	93.86	0.003210	0.19	0.12	2.95	0.30
River 1	Reach 1-Upper	828	5YrSCS24Hr	0.04	93.78	93.85	93.84	93.86	0.014294	0.39	0.10	2.58	0.63
River 1	Reach 1-Upper	828	10YrSCS24Hr	0.05	93.78	93.84	93.84	93.86	0.036015	0.59	0.08	2.34	0.99
River 1	Reach 1-Upper	828	25YrSCS24Hr	0.06	93.78	93.90	93.85	93.90	0.002459	0.25	0.25	3.50	0.29
River 1	Reach 1-Upper	828	50YrSCS24Hr	0.07	93.78	94.04	93.86	94.04	0.000005	0.02	5.50	35.21	0.01
River 1	Reach 1-Upper	828	100YrSCS24Hr	0.08	93.78	94.14	93.86	94.14	0.000001	0.01	9.06	35.66	0.01
River 1	Reach 1-Upper	807	2YrCHI3Hr	0.02	93.65	93.70	93.70	93.71	0.039865	0.46	0.03	1.40	0.97
River 1	Reach 1-Upper	807	5YrCHI3Hr	0.03	93.65	93.72	93.71	93.73	0.011679	0.35	0.07	1.90	0.57
River 1	Reach 1-Upper	807	10YrCHI3Hr	0.03	93.65	93.76	93.71	93.76	0.002625	0.22	0.16	2.63	0.29
River 1	Reach 1-Upper	807	25YrCHI3Hr	0.05	93.65	93.80	93.72	93.80	0.000718	0.16	0.30	3.53	0.16
River 1	Reach 1-Upper	807	50YrCHI3Hr	0.06	93.65	93.86	93.73	93.86	0.000227	0.12	0.51	4.43	0.10
River 1	Reach 1-Upper	807	100YrCHI3Hr	0.07	93.65	93.96	93.73	93.96	0.000003	0.02	5.71	34.82	0.01
River 1	Reach 1-Upper	807	2YrSCS24Hr	0.02	93.65	93.71	93.70	93.72	0.021814	0.43	0.06	1.70	0.76
River 1	Reach 1-Upper	807	5YrSCS24Hr	0.04	93.65	93.77	93.71	93.77	0.001862	0.20	0.19	2.86	0.25
River 1	Reach 1-Upper	807	10YrSCS24Hr	0.05	93.65	93.81	93.72	93.81	0.000588	0.15	0.33	3.67	0.15
River 1	Reach 1-Upper	807	25YrSCS24Hr	0.06	93.65	93.89	93.73	93.89	0.000119	0.10	0.70	6.11	0.07
River 1	Reach 1-Upper	807	50YrSCS24Hr	0.07	93.65	94.04	93.74	94.04	0.000001	0.01	8.37	35.13	0.01
River 1	Reach 1-Upper	807	100YrSCS24Hr	0.08	93.65	94.14	93.74	94.14	0.000000	0.01	11.92	35.53	0.01
River 1	Reach 1-Upper	789	2YrCHI3Hr	0.02	93.49	93.67	93.53	93.67	0.000035	0.04	0.33	3.14	0.04
River 1	Reach 1-Upper	789	5YrCHI3Hr	0.03	93.49	93.72	93.54	93.72	0.000038	0.06	0.45	3.66	0.04
River 1	Reach 1-Upper	789	10YrCHI3Hr	0.03	93.49	93.76	93.55	93.76	0.000039	0.07	0.54	4.24	0.04
River 1	Reach 1-Upper	789	25YrCHI3Hr	0.05	93.49	93.80	93.56	93.80	0.000037	0.07	0.65	4.99	0.04
River 1	Reach 1-Upper	789	50YrCHI3Hr	0.06	93.49	93.86	93.57	93.86	0.000030	0.07	0.78	5.73	0.04
River 1	Reach 1-Upper	789	100YrCHI3Hr	0.07	93.49	93.96	93.57	93.96	0.000016	0.06	1.04	8.28	0.03
River 1	Reach 1-Upper	789	2YrSCS24Hr	0.02	93.49	93.71	93.54	93.71	0.000038	0.06	0.43	3.55	0.04
River 1	Reach 1-Upper	789	5YrSCS24Hr	0.04	93.49	93.77	93.55	93.77	0.000038	0.07	0.56	4.42	0.04
River 1	Reach 1-Upper	789	10YrSCS24Hr	0.05	93.49	93.81	93.56	93.81	0.000037	0.07	0.67	5.12	0.04
River 1	Reach 1-Upper	789	25YrSCS24Hr	0.06	93.49	93.89	93.57	93.89	0.000025	0.07	0.87	6.17	0.04
River 1	Reach 1-Upper	789	50YrSCS24Hr	0.07	93.49	94.04	93.57	94.04	0.000011	0.06	1.22	10.07	0.03
River 1	Reach 1-Upper	789	100YrSCS24Hr	0.08	93.49	94.14	93.58	94.14	0.000008	0.06	1.46	23.56	0.02
River 1	Reach 1-Upper	764		Culvert									
River 1	Reach 1-Upper	759	2YrCHI3Hr	0.02	93.46	93.53	93.50	93.53	0.002563	0.21	0.07	1.74	0.28
River 1	Reach 1-Upper	759	5YrCHI3Hr	0.03	93.46	93.56	93.51	93.56	0.002115	0.23	0.11	2.11	0.27
River 1	Reach 1-Upper	759	10YrCHI3Hr	0.03	93.46	93.59	93.52	93.60	0.001088	0.21	0.16	2.56	0.21
River 1	Reach 1-Upper	759	25YrCHI3Hr	0.05	93.46	93.66	93.53	93.66	0.000396	0.18	0.26	3.40	0.14
River 1	Reach 1-Upper	759	50YrCHI3Hr	0.06	93.46	93.74	93.54	93.74	0.000161	0.15	0.39	4.37	0.09
River 1	Reach 1-Upper	759	100YrCHI3Hr	0.07	93.46	93.83	93.54	93.84	0.000081	0.13	0.53	6.02	0.07
River 1	Reach 1-Upper	759	2YrSCS24Hr	0.02	93.46	93.55	93.51	93.56	0.002355	0.23	0.10	2.03	0.28
River 1	Reach 1-Upper	759	5YrSCS24Hr	0.04	93.46	93.61	93.52	93.61	0.000864	0.21	0.18	2.73	0.19
River 1	Reach 1-Upper	759	10YrSCS24Hr	0.05	93.46	93.67	93.53	93.67	0.000343	0.17	0.28	3.54	0.13
River 1	Reach 1-Upper	759	25YrSCS24Hr	0.06	93.46	93.79	93.54	93.79	0.000109	0.14	0.46	4.99	0.08
River 1	Reach 1-Upper	759	50YrSCS24Hr	0.07	93.46	93.89	93.54	93.89	0.000058	0.12	0.61	6.73	0.06
River 1	Reach 1-Upper	759	100YrSCS24Hr	0.08	93.46	93.95	93.55	93.95	0.000051	0.12	0.69	7.38	0.06
River 1	Reach 1-Upper	743	2YrCHI3Hr	0.02	93.40	93.47	93.45	93.47	0.006174	0.30	0.05	1.27	0.43
River 1	Reach 1-Upper	743	5YrCHI3Hr	0.03	93.40	93.53	93.46	93.54	0.001159	0.20	0.13	1.95	0.21
River 1	Reach 1-Upper	743	10YrCHI3Hr	0.03	93.40	93.58	93.47	93.58	0.000560	0.19	0.19	2.40	0.16
River 1	Reach 1-Upper	743	25YrCHI3Hr	0.05	93.40	93.66	93.48	93.66	0.000255	0.16	0.29	3.39	0.11
River 1	Reach 1-Upper	743	50YrCHI3Hr	0.06	93.40	93.74	93.49	93.74	0.000125	0.14	0.40	5.00	0.08
River 1	Reach 1-Upper	743	100YrCHI3Hr	0.07	93.40	93.83	93.50	93.83	0.000071	0.13	0.52	7.13	0.07
River 1	Reach 1-Upper	743	2YrSCS24Hr	0.02	93.40	93.52	93.46	93.52	0.001463	0.21	0.11	1.84	0.23
River 1	Reach 1-Upper	743	5YrSCS24Hr	0.04	93.40	93.60	93.47	93.60	0.000466	0.18	0.21	2.59	0.14
River 1	Reach 1-Upper	743	10YrSCS24Hr	0.05	93.40	93.67	93.48	93.67	0.000228	0.16	0.30	3.72	0.11
River 1	Reach 1-Upper	743	25YrSCS24Hr	0.06	93.40	93.79	93.49	93.79	0.000091	0.14	0.46	6.17	0.07
River 1	Reach 1-Upper	743	50YrSCS24Hr	0.07	93.40	93.89	93.50	93.89	0.000054	0.12	0.59	7.75	0.06
River 1	Reach 1-Upper	743	100YrSCS24Hr	0.08	93.40	93.94	93.51	93.95	0.000049	0.13	0.66	9.45	0.06
River 1	Reach 1-Upper	733		Culvert									
River 1	Reach 1-Upper	728	2YrCHI3Hr	0.02	93.33	93.46	93.38	93.46	0.000507	0.12	0.12	1.51	0.14
River 1	Reach 1-Upper	728	5YrCHI3Hr	0.03	93.33	93.52	93.40	93.52	0.000283	0.13	0.20	1.94	0.11
River 1	Reach 1-Upper	728	10YrCHI3Hr	0.03	93.33	93.56	93.41	93.56	0.000213	0.13	0.26	2.26	0.10
River 1	Reach 1-Upper	728	25YrCHI3Hr	0.05	93.33	93.63	93.42	93.63	0.000137	0.13	0.36	2.78	0.08
River 1	Reach 1-Upper	728	50YrCHI3Hr	0.06	93.33	93.70	93.43	93.70	0.000088	0.13	0.45	3.31	0.07
River 1	Reach 1-Upper	728	100YrCHI3Hr	0.07	93.33	93.78	93.43	93.78	0.000060	0.12	0.56	4.21	0.06
River 1	Reach 1-Upper	728	2YrSCS24Hr	0.02	93.33	93.51	93.39	93.51	0.000306	0.13	0.19	1.87	0.11
River 1	Reach 1-Upper	728	5YrSCS24Hr	0.04	93.33	93.58	93.41	93.58	0.000196	0.14	0.28	2.37	0.10
River 1	Reach 1-Upper	728	10YrSCS24Hr	0.05	93.33	93.64	93.42	93.64	0.000129	0.13	0.37	2.86	0.08
River 1	Reach 1-Upper	728	25YrSCS24Hr	0.06	93.33	93.74	93.43	93.74	0.000071	0.12	0.51	3.65	0.06
River 1	Reach 1-Upper	728	50YrSCS24Hr	0.07	93.33	93.82	93.44	93.82	0.000049	0.12	0.63	6.17	0.06
River 1	Reach 1-Upper	728	100YrSCS24Hr	0.08	93.33	93.85	93.45	93.85	0.000053	0.13	0.67	10.91	0.06
River 1	Reach 1-Upper	715	2YrCHI3Hr	0.02	93.32	93.46	93.36	93.46	0.000165	0.09	0.17	2.22	0.08
River 1	Reach 1-Upper	715	5YrCHI3Hr	0.03	93.32	93.52	93.37	93.52	0.000134	0.10	0.25	2.80	0.08
River 1	Reach 1-Upper	715	10YrCHI3Hr	0.03	93.32	93.56	93.38	93.56	0.000117	0.11	0.31	3.23	0.08
River 1	Reach 1-Upper	715	25YrCHI3Hr	0.05	93.32	93.63	93.39	93.63	0.000086	0.12	0.41	3.92	0.07
River 1	Reach 1-Upper	715	50YrCHI3Hr	0.06	93.32	93.70	93.39	93.70	0.000061	0.11	0.51	4.63	0.06
River 1	Reach 1-Upper	715	100YrCHI3Hr	0.07	93.32	93.77	93.40	93.78	0.000044	0.11	0.61	9.10	0.05

HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	715	2YrSCS24Hr	0.02	93.32	93.51	93.36	93.51	0.000138	0.10	0.24	2.70	0.08
River 1	Reach 1-Upper	715	5YrSCS24Hr	0.04	93.32	93.57	93.38	93.57	0.000112	0.11	0.33	3.38	0.08
River 1	Reach 1-Upper	715	10YrSCS24Hr	0.05	93.32	93.64	93.39	93.64	0.000083	0.12	0.42	4.03	0.07
River 1	Reach 1-Upper	715	25YrSCS24Hr	0.06	93.32	93.74	93.40	93.74	0.000051	0.11	0.56	5.03	0.06
River 1	Reach 1-Upper	715	50YrSCS24Hr	0.07	93.32	93.82	93.40	93.82	0.000037	0.11	0.68	14.68	0.05
River 1	Reach 1-Upper	715	100YrSCS24Hr	0.08	93.32	93.85	93.41	93.85	0.000010	0.04	2.56	20.21	0.02
River 1	Reach 1-Upper	705		Culvert									
River 1	Reach 1-Upper	698	2YrCHI3Hr	0.02	93.24	93.31	93.29	93.31	0.009120	0.33	0.05	1.10	0.51
River 1	Reach 1-Upper	698	5YrCHI3Hr	0.03	93.24	93.31	93.30	93.32	0.019233	0.50	0.05	1.16	0.75
River 1	Reach 1-Upper	698	10YrCHI3Hr	0.03	93.24	93.31	93.31	93.33	0.027628	0.62	0.06	1.19	0.91
River 1	Reach 1-Upper	698	25YrCHI3Hr	0.05	93.24	93.42	93.32	93.43	0.000867	0.20	0.23	2.01	0.19
River 1	Reach 1-Upper	698	50YrCHI3Hr	0.06	93.24	93.51	93.33	93.51	0.000225	0.14	0.41	2.60	0.10
River 1	Reach 1-Upper	698	100YrCHI3Hr	0.07	93.24	93.51	93.34	93.51	0.000299	0.16	0.42	2.61	0.12
River 1	Reach 1-Upper	698	2YrSCS24Hr	0.02	93.24	93.31	93.30	93.32	0.015768	0.45	0.05	1.16	0.68
River 1	Reach 1-Upper	698	5YrSCS24Hr	0.04	93.24	93.32	93.31	93.34	0.027115	0.63	0.06	1.22	0.90
River 1	Reach 1-Upper	698	10YrSCS24Hr	0.05	93.24	93.47	93.32	93.47	0.000368	0.15	0.32	2.29	0.13
River 1	Reach 1-Upper	698	25YrSCS24Hr	0.06	93.24	93.51	93.33	93.51	0.000261	0.15	0.41	2.61	0.11
River 1	Reach 1-Upper	698	50YrSCS24Hr	0.07	93.24	93.51	93.34	93.52	0.000345	0.17	0.42	2.63	0.13
River 1	Reach 1-Upper	698	100YrSCS24Hr	0.08	93.24	93.52	93.35	93.52	0.000432	0.20	0.43	2.65	0.14
River 1	Reach 1-Upper	681	2YrCHI3Hr	0.02	93.14	93.21	93.18	93.21	0.004396	0.23	0.07	1.57	0.36
River 1	Reach 1-Upper	681	5YrCHI3Hr	0.03	93.14	93.24	93.19	93.24	0.001938	0.21	0.12	1.83	0.26
River 1	Reach 1-Upper	681	10YrCHI3Hr	0.03	93.14	93.27	93.20	93.27	0.001159	0.19	0.18	2.04	0.21
River 1	Reach 1-Upper	681	25YrCHI3Hr	0.05	93.14	93.42	93.21	93.42	0.000083	0.08	0.57	3.09	0.06
River 1	Reach 1-Upper	681	50YrCHI3Hr	0.06	93.14	93.51	93.22	93.51	0.000037	0.07	0.87	4.07	0.04
River 1	Reach 1-Upper	681	100YrCHI3Hr	0.07	93.14	93.51	93.22	93.51	0.000050	0.08	0.88	4.10	0.05
River 1	Reach 1-Upper	681	2YrSCS24Hr	0.02	93.14	93.23	93.19	93.24	0.002334	0.22	0.11	1.78	0.28
River 1	Reach 1-Upper	681	5YrSCS24Hr	0.04	93.14	93.29	93.20	93.29	0.000854	0.18	0.21	2.14	0.18
River 1	Reach 1-Upper	681	10YrSCS24Hr	0.05	93.14	93.46	93.21	93.46	0.000050	0.07	0.70	3.45	0.05
River 1	Reach 1-Upper	681	25YrSCS24Hr	0.06	93.14	93.51	93.22	93.51	0.000043	0.07	0.88	4.08	0.05
River 1	Reach 1-Upper	681	50YrSCS24Hr	0.07	93.14	93.51	93.23	93.51	0.000058	0.08	0.89	4.12	0.05
River 1	Reach 1-Upper	681	100YrSCS24Hr	0.08	93.14	93.52	93.23	93.52	0.000073	0.09	0.90	4.16	0.06
River 1	Reach 1-Upper	663	2YrCHI3Hr	0.02	93.05	93.18		93.18	0.000677	0.14	0.11	1.31	0.15
River 1	Reach 1-Upper	663	5YrCHI3Hr	0.03	93.05	93.22		93.23	0.000607	0.15	0.17	1.60	0.15
River 1	Reach 1-Upper	663	10YrCHI3Hr	0.03	93.05	93.26		93.26	0.000492	0.15	0.23	1.84	0.14
River 1	Reach 1-Upper	663	25YrCHI3Hr	0.05	93.05	93.42		93.42	0.000064	0.07	0.63	3.25	0.05
River 1	Reach 1-Upper	663	50YrCHI3Hr	0.06	93.05	93.51		93.51	0.000032	0.06	0.96	4.42	0.04
River 1	Reach 1-Upper	663	100YrCHI3Hr	0.07	93.05	93.51		93.51	0.000043	0.07	0.97	4.46	0.05
River 1	Reach 1-Upper	663	2YrSCS24Hr	0.02	93.05	93.21		93.22	0.000676	0.16	0.15	1.53	0.16
River 1	Reach 1-Upper	663	5YrSCS24Hr	0.04	93.05	93.28		93.28	0.000393	0.14	0.26	1.97	0.13
River 1	Reach 1-Upper	663	10YrSCS24Hr	0.05	93.05	93.46		93.46	0.000042	0.06	0.78	3.77	0.04
River 1	Reach 1-Upper	663	25YrSCS24Hr	0.06	93.05	93.51		93.51	0.000037	0.06	0.96	4.44	0.04
River 1	Reach 1-Upper	663	50YrSCS24Hr	0.07	93.05	93.51		93.51	0.000050	0.08	0.97	4.48	0.05
River 1	Reach 1-Upper	663	100YrSCS24Hr	0.08	93.05	93.51		93.52	0.000064	0.09	0.99	4.53	0.06
River 1	Reach 1-Upper	656	2YrCHI3Hr	0.06	93.03	93.15	93.12	93.16	0.008107	0.46	0.12	1.65	0.53
River 1	Reach 1-Upper	656	5YrCHI3Hr	0.10	93.03	93.19	93.14	93.20	0.006746	0.51	0.20	1.91	0.51
River 1	Reach 1-Upper	656	10YrCHI3Hr	0.14	93.03	93.23	93.16	93.24	0.004212	0.48	0.29	2.15	0.42
River 1	Reach 1-Upper	656	25YrCHI3Hr	0.18	93.03	93.42	93.18	93.42	0.000424	0.23	0.79	3.69	0.15
River 1	Reach 1-Upper	656	50YrCHI3Hr	0.22	93.03	93.51	93.20	93.51	0.000220	0.20	1.16	4.65	0.11
River 1	Reach 1-Upper	656	100YrCHI3Hr	0.26	93.03	93.51	93.21	93.51	0.000302	0.24	1.17	4.66	0.13
River 1	Reach 1-Upper	656	2YrSCS24Hr	0.09	93.03	93.18	93.14	93.19	0.007190	0.50	0.18	1.85	0.52
River 1	Reach 1-Upper	656	5YrSCS24Hr	0.15	93.03	93.26	93.17	93.27	0.003060	0.44	0.34	2.29	0.36
River 1	Reach 1-Upper	656	10YrSCS24Hr	0.19	93.03	93.46	93.18	93.46	0.000269	0.21	0.96	4.20	0.12
River 1	Reach 1-Upper	656	25YrSCS24Hr	0.24	93.03	93.51	93.20	93.51	0.000267	0.23	1.17	4.65	0.12
River 1	Reach 1-Upper	656	50YrSCS24Hr	0.28	93.03	93.51	93.22	93.51	0.000363	0.26	1.17	4.66	0.14
River 1	Reach 1-Upper	656	100YrSCS24Hr	0.33	93.03	93.51	93.23	93.51	0.000481	0.30	1.18	4.68	0.16
River 1	Reach 1-Upper	638	2YrCHI3Hr	0.06	92.92	93.07	93.00	93.08	0.002802	0.32	0.18	1.81	0.32
River 1	Reach 1-Upper	638	5YrCHI3Hr	0.10	92.92	93.14	93.04	93.14	0.001935	0.33	0.31	2.24	0.28
River 1	Reach 1-Upper	638	10YrCHI3Hr	0.14	92.92	93.20	93.05	93.21	0.001072	0.29	0.48	2.76	0.22
River 1	Reach 1-Upper	638	25YrCHI3Hr	0.18	92.92	93.41	93.07	93.42	0.000128	0.15	1.31	5.26	0.08
River 1	Reach 1-Upper	638	50YrCHI3Hr	0.22	92.92	93.50	93.09	93.51	0.000082	0.14	1.86	6.83	0.07
River 1	Reach 1-Upper	638	100YrCHI3Hr	0.26	92.92	93.50	93.10	93.51	0.000114	0.16	1.86	6.84	0.08
River 1	Reach 1-Upper	638	2YrSCS24Hr	0.09	92.92	93.12	93.03	93.12	0.002288	0.34	0.27	2.11	0.30
River 1	Reach 1-Upper	638	5YrSCS24Hr	0.15	92.92	93.24	93.06	93.24	0.000804	0.26	0.57	3.07	0.19
River 1	Reach 1-Upper	638	10YrSCS24Hr	0.19	92.92	93.46	93.08	93.46	0.000092	0.14	1.57	6.15	0.07
River 1	Reach 1-Upper	638	25YrSCS24Hr	0.24	92.92	93.50	93.10	93.51	0.000100	0.15	1.86	6.83	0.08
River 1	Reach 1-Upper	638	50YrSCS24Hr	0.28	92.92	93.50	93.11	93.51	0.000137	0.18	1.87	6.84	0.09
River 1	Reach 1-Upper	638	100YrSCS24Hr	0.33	92.92	93.51	93.13	93.51	0.000184	0.20	1.87	6.85	0.10
River 1	Reach 1-Upper	617	2YrCHI3Hr	0.06	92.84	93.01	92.95	93.01	0.003253	0.32	0.18	1.96	0.34
River 1	Reach 1-Upper	617	5YrCHI3Hr	0.10	92.84	93.11	92.98	93.11	0.000952	0.24	0.43	2.97	0.20
River 1	Reach 1-Upper	617	10YrCHI3Hr	0.14	92.84	93.19	93.00	93.19	0.000453	0.19	0.70	3.82	0.14
River 1	Reach 1-Upper	617	25YrCHI3Hr	0.18	92.84	93.41	93.01	93.41	0.000070	0.09	1.97	8.09	0.06
River 1	Reach 1-Upper	617	50YrCHI3Hr	0.22	92.84	93.50	93.03	93.50	0.000037	0.08	2.93	15.17	0.05
River 1	Reach 1-Upper	617	100YrCHI3Hr	0.26	92.84	93.50	93.04	93.50	0.000051	0.09	2.93	15.17	0.05
River 1	Reach 1-Upper	617	2YrSCS24Hr	0.09	92.84	93.08	92.97	93.09	0.001277	0.26	0.35	2.70	0.23
River 1	Reach 1-Upper	617	5YrSCS24Hr	0.15	92.84	93.23	93.00	93.23	0.000340	0.18	0.84	4.32	0.13
River 1	Reach 1-Upper	617	10YrSCS24Hr	0.19	92.84	93.46	93.02	93.46	0.000046	0.08	2.37	10.22	0.05
River 1	Reach 1-Upper	617	25YrSCS24Hr	0.24	92.84	93.50	93.04	93.50	0.000045	0.09	2.93	15.17	0.05
River 1	Reach 1-Upper	617	50YrSCS24Hr	0.28	92.84	93.50	93.05	93.50	0.000062	0.10	2.93	15.17	0.06
River 1	Reach 1-Upper	617	100YrSCS24Hr	0.33	92.84	93.50	93.06	93.50	0.000083	0.12	2.93	15.18	0.07
River 1	Reach 1-Upper	598	2YrCHI3Hr	0.06	92.76	92.99	92.86	92.99	0.000555	0.18	0.33	2.52	0.15
River 1	Reach 1-Upper	598	5YrCHI3Hr	0.11	92.76	93.10	92.89	93.10	0.000269	0.18	0.61	3.40	0.12
River 1	Reach 1-Upper	598	10YrCHI3Hr	0.15	92.76	93.19	92.91	93.19	0.000175	0.18	0.82	5.45	0.10

HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	598	25YrCHl3Hr	0.19	92.76	93.41	92.93	93.41	0.000054	0.14	1.39	9.84	0.06
River 1	Reach 1-Upper	598	50YrCHl3Hr	0.23	92.76	93.50	92.94	93.50	0.000020	0.08	4.94	31.21	0.04
River 1	Reach 1-Upper	598	100YrCHl3Hr	0.28	92.76	93.50	92.96	93.50	0.000028	0.09	4.93	31.21	0.04
River 1	Reach 1-Upper	598	2YrSCS24Hr	0.10	92.76	93.07	92.88	93.07	0.000322	0.18	0.53	3.17	0.12
River 1	Reach 1-Upper	598	5YrSCS24Hr	0.16	92.76	93.22	92.91	93.22	0.000147	0.17	0.91	6.16	0.09
River 1	Reach 1-Upper	598	10YrSCS24Hr	0.20	92.76	93.46	92.93	93.46	0.000045	0.13	1.50	22.56	0.06
River 1	Reach 1-Upper	598	25YrSCS24Hr	0.26	92.76	93.50	92.95	93.50	0.000025	0.09	4.94	31.21	0.04
River 1	Reach 1-Upper	598	50YrSCS24Hr	0.30	92.76	93.50	92.96	93.50	0.000034	0.10	4.93	31.21	0.05
River 1	Reach 1-Upper	598	100YrSCS24Hr	0.35	92.76	93.50	92.98	93.50	0.000046	0.12	4.93	31.21	0.05
River 1	Reach 1-Upper	589		Culvert									
River 1	Reach 1-Upper	581	2YrCHl3Hr	0.06	92.71	92.89	92.81	92.89	0.002032	0.27	0.23	2.59	0.28
River 1	Reach 1-Upper	581	5YrCHl3Hr	0.11	92.71	92.93	92.84	92.93	0.001970	0.33	0.33	3.40	0.29
River 1	Reach 1-Upper	581	10YrCHl3Hr	0.15	92.71	92.96	92.86	92.97	0.001571	0.34	0.42	4.10	0.27
River 1	Reach 1-Upper	581	25YrCHl3Hr	0.19	92.71	93.04	92.88	93.04	0.000858	0.32	0.60	5.44	0.21
River 1	Reach 1-Upper	581	50YrCHl3Hr	0.23	92.71	93.19	92.89	93.19	0.000244	0.24	0.98	9.64	0.12
River 1	Reach 1-Upper	581	100YrCHl3Hr	0.28	92.71	93.25	92.90	93.25	0.000213	0.24	1.13	30.32	0.12
River 1	Reach 1-Upper	581	2YrSCS24Hr	0.10	92.71	92.92	92.83	92.92	0.002062	0.32	0.30	3.18	0.29
River 1	Reach 1-Upper	581	5YrSCS24Hr	0.16	92.71	92.98	92.86	92.99	0.001381	0.34	0.46	4.41	0.25
River 1	Reach 1-Upper	581	10YrSCS24Hr	0.20	92.71	93.05	92.88	93.06	0.000735	0.31	0.65	5.75	0.20
River 1	Reach 1-Upper	581	25YrSCS24Hr	0.26	92.71	93.25	92.90	93.25	0.000187	0.23	1.13	30.32	0.11
River 1	Reach 1-Upper	581	50YrSCS24Hr	0.30	92.71	93.26	92.91	93.26	0.000245	0.26	1.15	30.62	0.12
River 1	Reach 1-Upper	581	100YrSCS24Hr	0.35	92.71	93.30	92.92	93.30	0.000057	0.11	4.83	35.67	0.06
River 1	Reach 1-Upper	572	2YrCHl3Hr	0.06	92.73	92.84	92.82	92.85	0.009130	0.45	0.13	1.96	0.55
River 1	Reach 1-Upper	572	5YrCHl3Hr	0.11	92.73	92.90	92.84	92.90	0.004896	0.43	0.26	2.58	0.43
River 1	Reach 1-Upper	572	10YrCHl3Hr	0.15	92.73	92.94	92.86	92.95	0.002649	0.37	0.39	3.10	0.33
River 1	Reach 1-Upper	572	25YrCHl3Hr	0.19	92.73	93.03	92.88	93.03	0.001021	0.28	0.70	4.09	0.22
River 1	Reach 1-Upper	572	50YrCHl3Hr	0.23	92.73	93.19	92.89	93.19	0.000155	0.14	2.22	26.73	0.09
River 1	Reach 1-Upper	572	100YrCHl3Hr	0.28	92.73	93.25	92.90	93.25	0.000074	0.11	4.09	35.89	0.06
River 1	Reach 1-Upper	572	2YrSCS24Hr	0.10	92.73	92.88	92.84	92.89	0.005898	0.44	0.22	2.42	0.47
River 1	Reach 1-Upper	572	5YrSCS24Hr	0.16	92.73	92.96	92.86	92.97	0.002084	0.34	0.46	3.34	0.30
River 1	Reach 1-Upper	572	10YrSCS24Hr	0.20	92.73	93.05	92.88	93.05	0.000824	0.26	0.78	4.31	0.20
River 1	Reach 1-Upper	572	25YrSCS24Hr	0.26	92.73	93.25	92.90	93.25	0.000065	0.10	4.09	35.88	0.06
River 1	Reach 1-Upper	572	50YrSCS24Hr	0.30	92.73	93.26	92.91	93.26	0.000079	0.12	4.37	36.88	0.07
River 1	Reach 1-Upper	572	100YrSCS24Hr	0.35	92.73	93.30	92.92	93.30	0.000050	0.10	6.26	42.85	0.05
River 1	Reach 1-Upper	555	2YrCHl3Hr	0.06	92.61	92.81	92.71	92.81	0.000983	0.20	0.31	2.93	0.20
River 1	Reach 1-Upper	555	5YrCHl3Hr	0.11	92.61	92.87	92.74	92.87	0.000748	0.21	0.52	3.73	0.18
River 1	Reach 1-Upper	555	10YrCHl3Hr	0.15	92.61	92.93	92.75	92.93	0.000479	0.19	0.76	4.46	0.15
River 1	Reach 1-Upper	555	25YrCHl3Hr	0.19	92.61	93.02	92.77	93.02	0.000238	0.16	1.22	5.62	0.11
River 1	Reach 1-Upper	555	50YrCHl3Hr	0.23	92.61	93.19	92.78	93.19	0.000031	0.08	4.98	37.27	0.04
River 1	Reach 1-Upper	555	100YrCHl3Hr	0.28	92.61	93.25	92.80	93.25	0.000018	0.06	7.39	40.94	0.03
River 1	Reach 1-Upper	555	2YrSCS24Hr	0.10	92.61	92.85	92.73	92.85	0.000851	0.21	0.45	3.50	0.19
River 1	Reach 1-Upper	555	5YrSCS24Hr	0.16	92.61	92.95	92.76	92.95	0.000402	0.18	0.87	4.75	0.14
River 1	Reach 1-Upper	555	10YrSCS24Hr	0.20	92.61	93.04	92.77	93.04	0.000197	0.15	1.34	5.96	0.10
River 1	Reach 1-Upper	555	25YrSCS24Hr	0.26	92.61	93.25	92.79	93.25	0.000016	0.06	7.39	40.94	0.03
River 1	Reach 1-Upper	555	50YrSCS24Hr	0.30	92.61	93.26	92.81	93.26	0.000020	0.07	7.70	41.13	0.03
River 1	Reach 1-Upper	555	100YrSCS24Hr	0.35	92.61	93.30	92.82	93.30	0.000015	0.06	9.71	43.21	0.03
River 1	Reach 1-Upper	534	2YrCHl3Hr	0.06	92.59	92.78	92.69	92.78	0.001540	0.24	0.25	2.41	0.24
River 1	Reach 1-Upper	534	5YrCHl3Hr	0.11	92.59	92.85	92.72	92.86	0.001007	0.24	0.46	3.30	0.21
River 1	Reach 1-Upper	534	10YrCHl3Hr	0.15	92.59	92.92	92.74	92.92	0.000570	0.21	0.74	8.51	0.16
River 1	Reach 1-Upper	534	25YrCHl3Hr	0.19	92.59	93.02	92.76	93.02	0.000095	0.11	3.36	40.28	0.07
River 1	Reach 1-Upper	534	50YrCHl3Hr	0.23	92.59	93.19	92.78	93.19	0.000006	0.04	11.46	51.16	0.02
River 1	Reach 1-Upper	534	100YrCHl3Hr	0.28	92.59	93.25	92.79	93.25	0.000004	0.03	14.61	51.39	0.02
River 1	Reach 1-Upper	534	2YrSCS24Hr	0.10	92.59	92.83	92.71	92.83	0.001214	0.25	0.39	3.03	0.22
River 1	Reach 1-Upper	534	5YrSCS24Hr	0.16	92.59	92.94	92.75	92.95	0.000422	0.19	1.07	17.97	0.14
River 1	Reach 1-Upper	534	10YrSCS24Hr	0.20	92.59	93.04	92.76	93.04	0.000064	0.09	4.23	42.61	0.06
River 1	Reach 1-Upper	534	25YrSCS24Hr	0.26	92.59	93.25	92.78	93.25	0.000003	0.03	14.61	51.39	0.01
River 1	Reach 1-Upper	534	50YrSCS24Hr	0.30	92.59	93.26	92.80	93.26	0.000004	0.03	14.99	51.42	0.02
River 1	Reach 1-Upper	534	100YrSCS24Hr	0.35	92.59	93.30	92.81	93.30	0.000004	0.03	17.46	51.60	0.02
River 1	Reach 1-Upper	510	2YrCHl3Hr	0.06	92.60	92.71	92.67	92.72	0.005825	0.43	0.14	2.60	0.46
River 1	Reach 1-Upper	510	5YrCHl3Hr	0.11	92.60	92.82	92.70	92.83	0.001169	0.34	0.32	4.18	0.24
River 1	Reach 1-Upper	510	10YrCHl3Hr	0.15	92.60	92.90	92.72	92.90	0.000712	0.32	0.45	5.29	0.20
River 1	Reach 1-Upper	510	25YrCHl3Hr	0.19	92.60	93.01	92.73	93.01	0.000421	0.31	0.62	14.09	0.16
River 1	Reach 1-Upper	510	50YrCHl3Hr	0.23	92.60	93.18	92.75	93.19	0.000180	0.26	0.90	109.29	0.11
River 1	Reach 1-Upper	510	100YrCHl3Hr	0.28	92.60	93.25	92.77	93.25	0.000000	0.01	42.37	109.53	0.00
River 1	Reach 1-Upper	510	2YrSCS24Hr	0.10	92.60	92.79	92.69	92.80	0.001503	0.34	0.28	3.79	0.26
River 1	Reach 1-Upper	510	5YrSCS24Hr	0.16	92.60	92.93	92.72	92.93	0.000617	0.32	0.49	5.78	0.19
River 1	Reach 1-Upper	510	10YrSCS24Hr	0.20	92.60	93.03	92.74	93.04	0.000378	0.31	0.66	15.54	0.15
River 1	Reach 1-Upper	510	25YrSCS24Hr	0.26	92.60	93.25	92.76	93.25	0.000000	0.01	42.37	109.53	0.00
River 1	Reach 1-Upper	510	50YrSCS24Hr	0.30	92.60	93.26	92.78	93.26	0.000000	0.01	43.19	109.55	0.01
River 1	Reach 1-Upper	510	100YrSCS24Hr	0.35	92.60	93.30	92.79	93.30	0.000000	0.01	48.45	109.72	0.00
River 1	Reach 1-Upper	505		Culvert									
River 1	Reach 1-Upper	502	2YrCHl3Hr	0.07	92.49	92.60	92.57	92.61	0.007956	0.50	0.13	2.20	0.54
River 1	Reach 1-Upper	502	5YrCHl3Hr	0.12	92.49	92.65	92.60	92.67	0.006462	0.60	0.20	2.74	0.52
River 1	Reach 1-Upper	502	10YrCHl3Hr	0.16	92.49	92.68	92.62	92.70	0.006042	0.66	0.25	3.06	0.52
River 1	Reach 1-Upper	502	25YrCHl3Hr	0.22	92.49	92.73	92.64	92.76	0.004047	0.66	0.33	4.01	0.45
River 1	Reach 1-Upper	502	50YrCHl3Hr	0.26	92.49	92.83	92.66	92.85	0.001665	0.54	0.48	5.45	0.31
River 1	Reach 1-Upper	502	100YrCHl3Hr	0.31	92.49	92.99	92.68	93.00	0.000619	0.43	0.72	104.79	0.20
River 1	Reach 1-Upper	502	2YrSCS24Hr	0.11	92.49	92.64	92.59	92.65	0.006729	0.58	0.19	2.62	0.53
River 1	Reach 1-Upper	502	5YrSCS24Hr	0.18	92.49	92.69	92.63	92.71	0.005546	0.67	0.27	3.21	0.51
River 1	Reach 1-Upper	502	10YrSCS24Hr	0.23	92.49	92.75	92.65	92.77	0.003381	0.64	0.36	4.41	0.42
River 1	Reach 1-Upper	502	25YrSCS24Hr	0.29	92.49	92.92	92.67	92.94	0.000902	0.47	0.62	7.34	0.24
River 1	Reach 1-Upper	502	50YrSCS24Hr	0.34	92.49	93.11	92.69	93.12	0.000353	0.38	0.90	105.15	0.16

HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	502	100YrSCS24Hr	0.40	92.49	93.30	92.71	93.30	0.000000	0.01	51.89	105.65	0.00
River 1	Reach 1-Upper	493	2YrCHI3Hr	0.07	92.34	92.60	92.42	92.60	0.000124	0.09	0.72	4.59	0.07
River 1	Reach 1-Upper	493	5YrCHI3Hr	0.12	92.34	92.65	92.45	92.65	0.000198	0.13	0.96	5.44	0.10
River 1	Reach 1-Upper	493	10YrCHI3Hr	0.16	92.34	92.68	92.46	92.68	0.000233	0.14	1.13	5.98	0.10
River 1	Reach 1-Upper	493	25YrCHI3Hr	0.22	92.34	92.74	92.48	92.74	0.000196	0.14	1.51	6.84	0.10
River 1	Reach 1-Upper	493	50YrCHI3Hr	0.26	92.34	92.84	92.49	92.84	0.000098	0.12	2.27	8.59	0.07
River 1	Reach 1-Upper	493	100YrCHI3Hr	0.31	92.34	93.00	92.50	93.00	0.000001	0.02	28.79	101.37	0.01
River 1	Reach 1-Upper	493	2YrSCS24Hr	0.11	92.34	92.64	92.44	92.64	0.000183	0.12	0.90	5.23	0.09
River 1	Reach 1-Upper	493	5YrSCS24Hr	0.18	92.34	92.70	92.46	92.70	0.000231	0.15	1.22	6.23	0.11
River 1	Reach 1-Upper	493	10YrSCS24Hr	0.23	92.34	92.76	92.48	92.76	0.000169	0.14	1.63	7.02	0.09
River 1	Reach 1-Upper	493	25YrSCS24Hr	0.29	92.34	92.93	92.50	92.93	0.000047	0.09	3.20	13.20	0.05
River 1	Reach 1-Upper	493	50YrSCS24Hr	0.34	92.34	93.12	92.51	93.12	0.000001	0.01	41.12	102.01	0.01
River 1	Reach 1-Upper	493	100YrSCS24Hr	0.40	92.34	93.30	92.52	93.30	0.000000	0.01	60.16	102.98	0.00
River 1	Reach 1-Upper	474	2YrCHI3Hr	0.07	92.41	92.60	92.50	92.60	0.000594	0.14	0.47	4.97	0.15
River 1	Reach 1-Upper	474	5YrCHI3Hr	0.12	92.41	92.64	92.53	92.65	0.000595	0.17	0.72	5.95	0.16
River 1	Reach 1-Upper	474	10YrCHI3Hr	0.16	92.41	92.67	92.54	92.68	0.000563	0.18	0.90	6.59	0.15
River 1	Reach 1-Upper	474	25YrCHI3Hr	0.22	92.41	92.73	92.56	92.74	0.000352	0.16	1.33	7.87	0.13
River 1	Reach 1-Upper	474	50YrCHI3Hr	0.26	92.41	92.84	92.57	92.84	0.000001	0.01	25.75	91.49	0.01
River 1	Reach 1-Upper	474	100YrCHI3Hr	0.31	92.41	93.00	92.58	93.00	0.000000	0.01	40.12	92.20	0.01
River 1	Reach 1-Upper	474	2YrSCS24Hr	0.11	92.41	92.63	92.52	92.63	0.000605	0.16	0.65	5.71	0.16
River 1	Reach 1-Upper	474	5YrSCS24Hr	0.18	92.41	92.69	92.55	92.69	0.000512	0.18	1.00	6.89	0.15
River 1	Reach 1-Upper	474	10YrSCS24Hr	0.23	92.41	92.75	92.56	92.75	0.000285	0.15	1.49	8.28	0.12
River 1	Reach 1-Upper	474	25YrSCS24Hr	0.29	92.41	92.93	92.57	92.93	0.000001	0.01	33.86	91.89	0.01
River 1	Reach 1-Upper	474	50YrSCS24Hr	0.34	92.41	93.12	92.58	93.12	0.000000	0.01	51.33	92.74	0.00
River 1	Reach 1-Upper	474	100YrSCS24Hr	0.40	92.41	93.30	92.59	93.30	0.000000	0.01	68.65	93.59	0.00
River 1	Reach 1-Upper	454	2YrCHI3Hr	0.07	92.44	92.58	92.50	92.58	0.001576	0.24	0.28	2.85	0.24
River 1	Reach 1-Upper	454	5YrCHI3Hr	0.12	92.44	92.62	92.53	92.63	0.001689	0.29	0.41	3.31	0.26
River 1	Reach 1-Upper	454	10YrCHI3Hr	0.16	92.44	92.65	92.55	92.66	0.001595	0.31	0.52	3.64	0.26
River 1	Reach 1-Upper	454	25YrCHI3Hr	0.22	92.44	92.72	92.56	92.72	0.000913	0.28	0.79	4.34	0.21
River 1	Reach 1-Upper	454	50YrCHI3Hr	0.26	92.44	92.84	92.57	92.84	0.000012	0.04	12.27	82.88	0.03
River 1	Reach 1-Upper	454	100YrCHI3Hr	0.31	92.44	93.00	92.59	93.00	0.000002	0.02	25.28	83.36	0.01
River 1	Reach 1-Upper	454	2YrSCS24Hr	0.11	92.44	92.61	92.52	92.62	0.001709	0.28	0.38	3.19	0.26
River 1	Reach 1-Upper	454	5YrSCS24Hr	0.18	92.44	92.67	92.55	92.67	0.001416	0.30	0.58	3.81	0.25
River 1	Reach 1-Upper	454	10YrSCS24Hr	0.23	92.44	92.74	92.56	92.74	0.000715	0.26	0.88	4.56	0.18
River 1	Reach 1-Upper	454	25YrSCS24Hr	0.29	92.44	92.93	92.58	92.93	0.000003	0.03	19.62	83.15	0.01
River 1	Reach 1-Upper	454	50YrSCS24Hr	0.34	92.44	93.12	92.60	93.12	0.000001	0.02	35.41	83.72	0.01
River 1	Reach 1-Upper	454	100YrSCS24Hr	0.40	92.44	93.30	92.61	93.30	0.000000	0.01	51.02	84.29	0.00
River 1	Reach 1-Upper	434	2YrCHI3Hr	0.07	92.42	92.53	92.49	92.54	0.003245	0.30	0.23	2.89	0.34
River 1	Reach 1-Upper	434	5YrCHI3Hr	0.12	92.42	92.58	92.51	92.59	0.002201	0.32	0.38	3.34	0.30
River 1	Reach 1-Upper	434	10YrCHI3Hr	0.16	92.42	92.62	92.52	92.62	0.001702	0.32	0.51	3.67	0.27
River 1	Reach 1-Upper	434	25YrCHI3Hr	0.22	92.42	92.72	92.54	92.72	0.000099	0.09	4.19	44.55	0.07
River 1	Reach 1-Upper	434	50YrCHI3Hr	0.26	92.42	92.84	92.55	92.84	0.000011	0.04	12.14	73.98	0.02
River 1	Reach 1-Upper	434	100YrCHI3Hr	0.31	92.42	93.00	92.56	93.00	0.000002	0.02	23.78	74.52	0.01
River 1	Reach 1-Upper	434	2YrSCS24Hr	0.11	92.42	92.57	92.50	92.57	0.002433	0.31	0.34	3.22	0.31
River 1	Reach 1-Upper	434	5YrSCS24Hr	0.18	92.42	92.64	92.53	92.64	0.001593	0.30	0.59	4.31	0.26
River 1	Reach 1-Upper	434	10YrSCS24Hr	0.23	92.42	92.74	92.54	92.74	0.000062	0.08	5.30	52.04	0.05
River 1	Reach 1-Upper	434	25YrSCS24Hr	0.29	92.42	92.93	92.55	92.93	0.000003	0.03	18.72	74.29	0.01
River 1	Reach 1-Upper	434	50YrSCS24Hr	0.34	92.42	93.12	92.57	93.12	0.000001	0.02	32.84	74.94	0.01
River 1	Reach 1-Upper	434	100YrSCS24Hr	0.40	92.42	93.30	92.58	93.30	0.000000	0.01	46.84	75.66	0.00
River 1	Reach 1-Upper	416	2YrCHI3Hr	0.07	92.34	92.51	92.42	92.51	0.000622	0.15	0.44	4.70	0.15
River 1	Reach 1-Upper	416	5YrCHI3Hr	0.12	92.34	92.57	92.45	92.57	0.000424	0.17	0.75	5.83	0.14
River 1	Reach 1-Upper	416	10YrCHI3Hr	0.16	92.34	92.62	92.46	92.62	0.000159	0.12	2.27	28.78	0.09
River 1	Reach 1-Upper	416	25YrCHI3Hr	0.22	92.34	92.72	92.48	92.72	0.000031	0.07	5.56	35.85	0.04
River 1	Reach 1-Upper	416	50YrCHI3Hr	0.26	92.34	92.84	92.48	92.84	0.000008	0.05	10.70	48.52	0.02
River 1	Reach 1-Upper	416	100YrCHI3Hr	0.31	92.34	93.00	92.49	93.00	0.000002	0.03	20.27	66.96	0.01
River 1	Reach 1-Upper	416	2YrSCS24Hr	0.11	92.34	92.56	92.44	92.56	0.000463	0.17	0.67	5.55	0.14
River 1	Reach 1-Upper	416	5YrSCS24Hr	0.18	92.34	92.64	92.47	92.64	0.000108	0.11	2.88	30.23	0.07
River 1	Reach 1-Upper	416	10YrSCS24Hr	0.23	92.34	92.74	92.48	92.74	0.000024	0.07	6.41	39.28	0.04
River 1	Reach 1-Upper	416	25YrSCS24Hr	0.29	92.34	92.93	92.49	92.93	0.000004	0.04	15.73	65.04	0.02
River 1	Reach 1-Upper	416	50YrSCS24Hr	0.34	92.34	93.12	92.50	93.12	0.000001	0.02	28.42	67.40	0.01
River 1	Reach 1-Upper	416	100YrSCS24Hr	0.40	92.34	93.30	92.51	93.30	0.000000	0.02	41.01	68.07	0.01
River 1	Reach 1-Upper	398	2YrCHI3Hr	0.07	92.28	92.50	92.40	92.50	0.000933	0.21	0.31	2.50	0.19
River 1	Reach 1-Upper	398	5YrCHI3Hr	0.12	92.28	92.56	92.42	92.56	0.000915	0.26	0.47	2.86	0.20
River 1	Reach 1-Upper	398	10YrCHI3Hr	0.16	92.28	92.61	92.44	92.61	0.000752	0.26	0.62	3.16	0.19
River 1	Reach 1-Upper	398	25YrCHI3Hr	0.22	92.28	92.71	92.46	92.72	0.000355	0.22	1.01	4.66	0.14
River 1	Reach 1-Upper	398	50YrCHI3Hr	0.26	92.28	92.84	92.47	92.84	0.000076	0.12	4.26	46.30	0.07
River 1	Reach 1-Upper	398	100YrCHI3Hr	0.31	92.28	93.00	92.49	93.00	0.000008	0.05	12.80	58.61	0.02
River 1	Reach 1-Upper	398	2YrSCS24Hr	0.11	92.28	92.54	92.42	92.55	0.000935	0.25	0.43	2.77	0.20
River 1	Reach 1-Upper	398	5YrSCS24Hr	0.18	92.28	92.63	92.44	92.63	0.000660	0.26	0.69	3.29	0.18
River 1	Reach 1-Upper	398	10YrSCS24Hr	0.23	92.28	92.74	92.46	92.74	0.000295	0.21	1.13	5.59	0.12
River 1	Reach 1-Upper	398	25YrSCS24Hr	0.29	92.28	92.93	92.48	92.93	0.000020	0.07	8.81	58.42	0.03
River 1	Reach 1-Upper	398	50YrSCS24Hr	0.34	92.28	93.12	92.50	93.12	0.000003	0.03	19.93	58.96	0.01
River 1	Reach 1-Upper	398	100YrSCS24Hr	0.40	92.28	93.30	92.51	93.30	0.000001	0.02	30.94	59.51	0.01
River 1	Reach 1-Upper	383	2YrCHI3Hr	0.07	92.34	92.47	92.42	92.47	0.004536	0.39	0.17	1.90	0.41
River 1	Reach 1-Upper	383	5YrCHI3Hr	0.12	92.34	92.53	92.45	92.54	0.002876	0.39	0.31	2.30	0.34
River 1	Reach 1-Upper	383	10YrCHI3Hr	0.16	92.34	92.59	92.47	92.59	0.001737	0.36	0.45	2.62	0.28
River 1	Reach 1-Upper	383	25YrCHI3Hr	0.22	92.34	92.70	92.49	92.71	0.000630	0.27	0.80	3.29	0.18
River 1	Reach 1-Upper	383	50YrCHI3Hr	0.26	92.34	92.83	92.50	92.84	0.000255	0.21	1.27	4.01	0.12
River 1	Reach 1-Upper	383	100YrCHI3Hr	0.31	92.34	92.99	92.52	93.00	0.000100	0.16	2.02	5.50	0.08
River 1	Reach 1-Upper	383	2YrSCS24Hr	0.11	92.34	92.51	92.44	92.52	0.003262	0.40	0.27	2.21	0.36
River 1	Reach 1-Upper	383	5YrSCS24Hr	0.18	92.34	92.61	92.47	92.62	0.001389	0.34	0.52	2.77	0.25
River 1	Reach 1-Upper	383	10YrSCS24Hr	0.23	92.34	92.73	92.49	92.73	0.000520	0.26	0.88	3.42	0.16
River 1	Reach 1-Upper	383	25YrSCS24Hr	0.29	92.34	92.93	92.51	92.93	0.000147	0.18	1.66	4.73	0.09

HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	383	50YrSCS24Hr	0.34	92.34	93.12	92.53	93.12	0.000005	0.04	15.00	51.87	0.02
River 1	Reach 1-Upper	383	100YrSCS24Hr	0.40	92.34	93.30	92.54	93.30	0.000002	0.03	24.70	52.43	0.01
River 1	Reach 1-Upper	364	2YrCHI3Hr	0.07	92.23	92.43	92.33	92.43	0.001355	0.26	0.26	2.01	0.23
River 1	Reach 1-Upper	364	5YrCHI3Hr	0.12	92.23	92.50	92.36	92.50	0.001099	0.29	0.42	2.37	0.22
River 1	Reach 1-Upper	364	10YrCHI3Hr	0.16	92.23	92.57	92.38	92.57	0.000740	0.27	0.59	2.71	0.19
River 1	Reach 1-Upper	364	25YrCHI3Hr	0.22	92.23	92.70	92.40	92.70	0.000331	0.22	0.98	3.34	0.13
River 1	Reach 1-Upper	364	50YrCHI3Hr	0.26	92.23	92.83	92.42	92.83	0.000166	0.18	1.48	4.20	0.10
River 1	Reach 1-Upper	364	100YrCHI3Hr	0.31	92.23	92.99	92.43	92.99	0.000050	0.12	4.53	43.93	0.06
River 1	Reach 1-Upper	364	2YrSCS24Hr	0.11	92.23	92.48	92.35	92.48	0.001197	0.29	0.37	2.27	0.23
River 1	Reach 1-Upper	364	5YrSCS24Hr	0.18	92.23	92.60	92.39	92.60	0.000621	0.26	0.67	2.85	0.17
River 1	Reach 1-Upper	364	10YrSCS24Hr	0.23	92.23	92.72	92.41	92.73	0.000283	0.21	1.07	3.47	0.12
River 1	Reach 1-Upper	364	25YrSCS24Hr	0.29	92.23	92.92	92.43	92.93	0.000099	0.15	1.93	5.59	0.08
River 1	Reach 1-Upper	364	50YrSCS24Hr	0.34	92.23	93.12	92.44	93.12	0.000012	0.07	9.97	44.25	0.03
River 1	Reach 1-Upper	364	100YrSCS24Hr	0.40	92.23	93.30	92.46	93.30	0.000003	0.04	18.26	45.01	0.01
River 1	Reach 1-Upper	347	2YrCHI3Hr	0.07	92.26	92.40	92.33	92.41	0.001382	0.24	0.27	2.45	0.23
River 1	Reach 1-Upper	347	5YrCHI3Hr	0.12	92.26	92.49	92.35	92.49	0.000808	0.25	0.49	2.80	0.19
River 1	Reach 1-Upper	347	10YrCHI3Hr	0.16	92.26	92.56	92.36	92.56	0.000488	0.23	0.71	3.12	0.15
River 1	Reach 1-Upper	347	25YrCHI3Hr	0.22	92.26	92.69	92.38	92.70	0.000213	0.19	1.16	3.69	0.11
River 1	Reach 1-Upper	347	50YrCHI3Hr	0.26	92.26	92.83	92.40	92.83	0.000107	0.15	1.71	4.28	0.08
River 1	Reach 1-Upper	347	100YrCHI3Hr	0.31	92.26	92.99	92.41	92.99	0.000050	0.13	2.54	7.35	0.06
River 1	Reach 1-Upper	347	2YrSCS24Hr	0.11	92.26	92.46	92.34	92.47	0.000932	0.25	0.43	2.71	0.20
River 1	Reach 1-Upper	347	5YrSCS24Hr	0.18	92.26	92.59	92.37	92.59	0.000403	0.22	0.80	3.25	0.14
River 1	Reach 1-Upper	347	10YrSCS24Hr	0.23	92.26	92.72	92.39	92.72	0.000183	0.18	1.26	3.81	0.10
River 1	Reach 1-Upper	347	25YrSCS24Hr	0.29	92.26	92.92	92.41	92.92	0.000071	0.14	2.13	5.02	0.07
River 1	Reach 1-Upper	347	50YrSCS24Hr	0.34	92.26	93.12	92.42	93.12	0.000020	0.09	6.30	37.59	0.04
River 1	Reach 1-Upper	347	100YrSCS24Hr	0.40	92.26	93.30	92.43	93.30	0.000005	0.06	13.35	38.07	0.02
River 1	Reach 1-Upper	328	2YrCHI3Hr	0.07	92.20	92.37	92.28	92.38	0.001873	0.30	0.22	1.82	0.27
River 1	Reach 1-Upper	328	5YrCHI3Hr	0.12	92.20	92.47	92.32	92.47	0.001020	0.29	0.42	2.24	0.21
River 1	Reach 1-Upper	328	10YrCHI3Hr	0.16	92.20	92.55	92.34	92.55	0.000618	0.26	0.61	2.58	0.17
River 1	Reach 1-Upper	328	25YrCHI3Hr	0.22	92.20	92.69	92.36	92.69	0.000277	0.21	1.02	3.16	0.12
River 1	Reach 1-Upper	328	50YrCHI3Hr	0.26	92.20	92.83	92.38	92.83	0.000152	0.17	1.51	4.11	0.09
River 1	Reach 1-Upper	328	100YrCHI3Hr	0.31	92.20	92.99	92.40	92.99	0.000074	0.14	2.26	5.12	0.07
River 1	Reach 1-Upper	328	2YrSCS24Hr	0.11	92.20	92.44	92.31	92.45	0.001182	0.29	0.36	2.14	0.23
River 1	Reach 1-Upper	328	5YrSCS24Hr	0.18	92.20	92.58	92.34	92.58	0.000513	0.25	0.70	2.71	0.16
River 1	Reach 1-Upper	328	10YrSCS24Hr	0.23	92.20	92.72	92.36	92.72	0.000240	0.21	1.11	3.28	0.11
River 1	Reach 1-Upper	328	25YrSCS24Hr	0.29	92.20	92.92	92.39	92.92	0.000098	0.15	1.92	4.61	0.07
River 1	Reach 1-Upper	328	50YrSCS24Hr	0.34	92.20	93.12	92.40	93.12	0.000035	0.11	4.57	29.52	0.05
River 1	Reach 1-Upper	328	100YrSCS24Hr	0.40	92.20	93.30	92.42	93.30	0.000009	0.06	10.13	29.96	0.02
River 1	Reach 1-Upper	306	2YrCHI3Hr	0.07	92.07	92.35	92.18	92.35	0.000722	0.25	0.27	1.49	0.18
River 1	Reach 1-Upper	306	5YrCHI3Hr	0.12	92.07	92.45	92.23	92.45	0.000689	0.30	0.40	1.84	0.18
River 1	Reach 1-Upper	306	10YrCHI3Hr	0.16	92.07	92.53	92.25	92.54	0.000559	0.31	0.52	2.13	0.17
River 1	Reach 1-Upper	306	25YrCHI3Hr	0.22	92.07	92.68	92.28	92.68	0.000321	0.29	0.74	2.69	0.13
River 1	Reach 1-Upper	306	50YrCHI3Hr	0.26	92.07	92.82	92.30	92.82	0.000203	0.28	0.95	3.29	0.11
River 1	Reach 1-Upper	306	100YrCHI3Hr	0.31	92.07	92.99	92.32	92.99	0.000131	0.26	1.20	4.54	0.09
River 1	Reach 1-Upper	306	2YrSCS24Hr	0.11	92.07	92.42	92.21	92.43	0.000712	0.29	0.37	1.75	0.18
River 1	Reach 1-Upper	306	5YrSCS24Hr	0.18	92.07	92.57	92.26	92.57	0.000497	0.31	0.58	2.25	0.16
River 1	Reach 1-Upper	306	10YrSCS24Hr	0.23	92.07	92.71	92.28	92.71	0.000290	0.29	0.79	2.81	0.13
River 1	Reach 1-Upper	306	25YrSCS24Hr	0.29	92.07	92.91	92.31	92.92	0.000156	0.27	1.10	3.90	0.10
River 1	Reach 1-Upper	306	50YrSCS24Hr	0.34	92.07	93.11	92.33	93.11	0.000098	0.25	1.39	20.53	0.08
River 1	Reach 1-Upper	306	100YrSCS24Hr	0.40	92.07	93.30	92.36	93.30	0.000072	0.24	1.67	20.98	0.07
River 1	Reach 1-Upper	300		Culvert									
River 1	Reach 1-Upper	294	2YrCHI3Hr	0.07	92.15	92.32	92.23	92.32	0.001567	0.31	0.22	2.08	0.26
River 1	Reach 1-Upper	294	5YrCHI3Hr	0.12	92.15	92.37	92.26	92.38	0.001840	0.41	0.29	2.34	0.30
River 1	Reach 1-Upper	294	10YrCHI3Hr	0.16	92.15	92.39	92.28	92.41	0.002165	0.49	0.33	2.48	0.33
River 1	Reach 1-Upper	294	25YrCHI3Hr	0.22	92.15	92.42	92.30	92.44	0.002528	0.57	0.38	2.64	0.36
River 1	Reach 1-Upper	294	50YrCHI3Hr	0.26	92.15	92.45	92.32	92.47	0.002769	0.63	0.41	2.76	0.38
River 1	Reach 1-Upper	294	100YrCHI3Hr	0.31	92.15	92.47	92.33	92.49	0.002956	0.69	0.45	2.87	0.40
River 1	Reach 1-Upper	294	2YrSCS24Hr	0.11	92.15	92.36	92.25	92.36	0.001762	0.39	0.28	2.28	0.29
River 1	Reach 1-Upper	294	5YrSCS24Hr	0.18	92.15	92.40	92.28	92.41	0.002296	0.51	0.35	2.52	0.34
River 1	Reach 1-Upper	294	10YrSCS24Hr	0.23	92.15	92.43	92.30	92.45	0.002610	0.59	0.39	2.66	0.37
River 1	Reach 1-Upper	294	25YrSCS24Hr	0.29	92.15	92.46	92.33	92.48	0.002895	0.67	0.43	2.82	0.40
River 1	Reach 1-Upper	294	50YrSCS24Hr	0.34	92.15	92.48	92.35	92.51	0.003128	0.73	0.47	2.94	0.42
River 1	Reach 1-Upper	294	100YrSCS24Hr	0.40	92.15	92.50	92.36	92.54	0.003396	0.80	0.50	3.05	0.44
River 1	Reach 1-Upper	279	2YrCHI3Hr	0.08	92.08	92.21	92.21	92.24	0.029991	0.80	0.10	1.51	0.99
River 1	Reach 1-Upper	279	5YrCHI3Hr	0.15	92.08	92.25	92.24	92.29	0.026320	0.91	0.16	1.84	0.98
River 1	Reach 1-Upper	279	10YrCHI3Hr	0.20	92.08	92.28		92.32	0.017826	0.87	0.23	2.04	0.83
River 1	Reach 1-Upper	279	25YrCHI3Hr	0.27	92.08	92.32		92.36	0.013314	0.86	0.31	2.27	0.74
River 1	Reach 1-Upper	279	50YrCHI3Hr	0.32	92.08	92.34		92.38	0.011695	0.87	0.37	2.42	0.71
River 1	Reach 1-Upper	279	100YrCHI3Hr	0.38	92.08	92.37		92.41	0.010643	0.88	0.43	2.57	0.69
River 1	Reach 1-Upper	279	2YrSCS24Hr	0.13	92.08	92.23	92.23	92.28	0.029039	0.90	0.14	1.75	1.01
River 1	Reach 1-Upper	279	5YrSCS24Hr	0.22	92.08	92.29		92.33	0.015917	0.86	0.25	2.10	0.80
River 1	Reach 1-Upper	279	10YrSCS24Hr	0.28	92.08	92.32		92.36	0.012955	0.86	0.32	2.30	0.74
River 1	Reach 1-Upper	279	25YrSCS24Hr	0.36	92.08	92.36		92.40	0.011055	0.88	0.41	2.51	0.70
River 1	Reach 1-Upper	279	50YrSCS24Hr	0.42	92.08	92.38		92.42	0.010063	0.89	0.47	2.66	0.67
River 1	Reach 1-Upper	279	100YrSCS24Hr	0.49	92.08	92.41		92.45	0.009502	0.91	0.54	2.81	0.66
River 1	Reach 1-Upper	277	2YrCHI3Hr	0.08	91.95	92.20		92.21	0.000695	0.21	0.39	2.70	0.17
River 1	Reach 1-Upper	277	5YrCHI3Hr	0.15	91.95	92.26		92.26	0.000856	0.28	0.54	3.02	0.20
River 1	Reach 1-Upper	277	10YrCHI3Hr	0.20	91.95	92.29		92.30	0.000927	0.32	0.64	3.19	0.21
River 1	Reach 1-Upper	277	25YrCHI3Hr	0.27	91.95	92.33		92.33	0.001006	0.37	0.76	3.41	0.23
River 1	Reach 1-Upper	277	50YrCHI3Hr	0.32	91.95	92.35		92.36	0.001068	0.41	0.85	3.55	0.24
River 1	Reach 1-Upper	277	100YrCHI3Hr	0.38	91.95	92.38		92.39	0.001131	0.44	0.95	3.69	0.25
River 1	Reach 1-Upper	277	2YrSCS24Hr	0.13	91.95	92.25		92.25	0.000826	0.26	0.50	2.94	0.20

HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	277	5YrSCS24Hr	0.22	91.95	92.30		92.31	0.000941	0.33	0.68	3.25	0.22
River 1	Reach 1-Upper	277	10YrSCS24Hr	0.28	91.95	92.33		92.34	0.001018	0.38	0.78	3.43	0.23
River 1	Reach 1-Upper	277	25YrSCS24Hr	0.36	91.95	92.37		92.38	0.001104	0.43	0.91	3.63	0.25
River 1	Reach 1-Upper	277	50YrSCS24Hr	0.42	91.95	92.39		92.40	0.001159	0.46	1.00	3.77	0.26
River 1	Reach 1-Upper	277	100YrSCS24Hr	0.49	91.95	92.42		92.43	0.001229	0.50	1.09	3.91	0.27
River 1	Reach 1-Upper	270	2YrCHI3Hr	0.08	92.03	92.20		92.20	0.001692	0.27	0.29	2.60	0.26
River 1	Reach 1-Upper	270	5YrCHI3Hr	0.15	92.03	92.25		92.25	0.001753	0.33	0.45	3.07	0.27
River 1	Reach 1-Upper	270	10YrCHI3Hr	0.20	92.03	92.28		92.29	0.001743	0.36	0.55	3.36	0.28
River 1	Reach 1-Upper	270	25YrCHI3Hr	0.27	92.03	92.32		92.33	0.001732	0.40	0.68	3.72	0.29
River 1	Reach 1-Upper	270	50YrCHI3Hr	0.32	92.03	92.34		92.35	0.001721	0.42	0.78	4.13	0.29
River 1	Reach 1-Upper	270	100YrCHI3Hr	0.38	92.03	92.37		92.38	0.001663	0.45	0.90	5.00	0.29
River 1	Reach 1-Upper	270	2YrSCS24Hr	0.13	92.03	92.24		92.24	0.001760	0.32	0.40	2.95	0.27
River 1	Reach 1-Upper	270	5YrSCS24Hr	0.22	92.03	92.29		92.30	0.001717	0.37	0.58	3.47	0.28
River 1	Reach 1-Upper	270	10YrSCS24Hr	0.28	92.03	92.32		92.33	0.001734	0.40	0.70	3.76	0.29
River 1	Reach 1-Upper	270	25YrSCS24Hr	0.36	92.03	92.36		92.37	0.001687	0.44	0.84	4.62	0.29
River 1	Reach 1-Upper	270	50YrSCS24Hr	0.42	92.03	92.38		92.39	0.001617	0.46	0.97	5.51	0.29
River 1	Reach 1-Upper	270	100YrSCS24Hr	0.49	92.03	92.41		92.42	0.001578	0.48	1.11	5.76	0.29
River 1	Reach 1-Upper	261	2YrCHI3Hr	0.08	92.00	92.18	92.10	92.18	0.002216	0.32	0.25	2.09	0.30
River 1	Reach 1-Upper	261	5YrCHI3Hr	0.15	92.00	92.23	92.13	92.24	0.002543	0.41	0.36	2.34	0.33
River 1	Reach 1-Upper	261	10YrCHI3Hr	0.20	92.00	92.26	92.15	92.27	0.002719	0.46	0.43	2.48	0.35
River 1	Reach 1-Upper	261	25YrCHI3Hr	0.27	92.00	92.29	92.18	92.31	0.002882	0.51	0.52	2.66	0.37
River 1	Reach 1-Upper	261	50YrCHI3Hr	0.32	92.00	92.32	92.19	92.33	0.003012	0.55	0.59	2.78	0.38
River 1	Reach 1-Upper	261	100YrCHI3Hr	0.38	92.00	92.34	92.21	92.36	0.003124	0.58	0.66	2.90	0.39
River 1	Reach 1-Upper	261	2YrSCS24Hr	0.13	92.00	92.22	92.12	92.22	0.002466	0.39	0.33	2.27	0.32
River 1	Reach 1-Upper	261	5YrSCS24Hr	0.22	92.00	92.27	92.16	92.28	0.002719	0.47	0.46	2.53	0.35
River 1	Reach 1-Upper	261	10YrSCS24Hr	0.28	92.00	92.30	92.18	92.31	0.002908	0.52	0.54	2.68	0.37
River 1	Reach 1-Upper	261	25YrSCS24Hr	0.36	92.00	92.33	92.20	92.35	0.003077	0.57	0.63	2.84	0.38
River 1	Reach 1-Upper	261	50YrSCS24Hr	0.42	92.00	92.36	92.22	92.38	0.003155	0.60	0.70	2.97	0.39
River 1	Reach 1-Upper	261	100YrSCS24Hr	0.49	92.00	92.38	92.24	92.40	0.003314	0.63	0.77	3.10	0.41
River 1	Reach 1-Upper	239	2YrCHI3Hr	0.08	91.93	92.05	92.03	92.07	0.018146	0.68	0.12	1.54	0.79
River 1	Reach 1-Upper	239	5YrCHI3Hr	0.15	91.93	92.09	92.07	92.12	0.014163	0.75	0.20	1.88	0.73
River 1	Reach 1-Upper	239	10YrCHI3Hr	0.20	91.93	92.12	92.09	92.15	0.012598	0.78	0.25	2.06	0.71
River 1	Reach 1-Upper	239	25YrCHI3Hr	0.27	91.93	92.15	92.12	92.19	0.011181	0.82	0.33	2.23	0.69
River 1	Reach 1-Upper	239	50YrCHI3Hr	0.32	91.93	92.18	92.13	92.21	0.010479	0.85	0.38	2.36	0.68
River 1	Reach 1-Upper	239	100YrCHI3Hr	0.38	91.93	92.20	92.15	92.24	0.009912	0.88	0.44	2.49	0.67
River 1	Reach 1-Upper	239	2YrSCS24Hr	0.13	91.93	92.08	92.06	92.11	0.014943	0.73	0.18	1.79	0.75
River 1	Reach 1-Upper	239	5YrSCS24Hr	0.22	91.93	92.13	92.10	92.16	0.012137	0.79	0.27	2.10	0.70
River 1	Reach 1-Upper	239	10YrSCS24Hr	0.28	91.93	92.16	92.12	92.19	0.011036	0.83	0.34	2.26	0.68
River 1	Reach 1-Upper	239	25YrSCS24Hr	0.36	91.93	92.19	92.14	92.23	0.010147	0.86	0.41	2.43	0.67
River 1	Reach 1-Upper	239	50YrSCS24Hr	0.42	91.93	92.22	92.16	92.26	0.009585	0.89	0.47	2.56	0.66
River 1	Reach 1-Upper	239	100YrSCS24Hr	0.49	91.93	92.24	92.18	92.28	0.009080	0.91	0.54	2.69	0.65
River 1	Reach 1-Upper	218	2YrCHI3Hr	0.08	91.82	91.97	91.89	91.97	0.002000	0.29	0.27	2.48	0.28
River 1	Reach 1-Upper	218	5YrCHI3Hr	0.15	91.82	92.02	91.92	92.02	0.002151	0.37	0.40	2.72	0.30
River 1	Reach 1-Upper	218	10YrCHI3Hr	0.20	91.82	92.05	91.94	92.05	0.002198	0.40	0.49	2.86	0.31
River 1	Reach 1-Upper	218	25YrCHI3Hr	0.27	91.82	92.08	91.96	92.09	0.002327	0.45	0.59	3.03	0.33
River 1	Reach 1-Upper	218	50YrCHI3Hr	0.32	91.82	92.11	91.98	92.12	0.002390	0.49	0.67	3.15	0.34
River 1	Reach 1-Upper	218	100YrCHI3Hr	0.38	91.82	92.13	91.99	92.14	0.002438	0.52	0.75	3.27	0.34
River 1	Reach 1-Upper	218	2YrSCS24Hr	0.13	91.82	92.00	91.92	92.01	0.002117	0.35	0.37	2.66	0.30
River 1	Reach 1-Upper	218	5YrSCS24Hr	0.22	91.82	92.06	91.95	92.06	0.002238	0.42	0.51	2.91	0.32
River 1	Reach 1-Upper	218	10YrSCS24Hr	0.28	91.82	92.09	91.96	92.10	0.002340	0.46	0.60	3.05	0.33
River 1	Reach 1-Upper	218	25YrSCS24Hr	0.36	91.82	92.12	91.98	92.13	0.002418	0.50	0.71	3.22	0.34
River 1	Reach 1-Upper	218	50YrSCS24Hr	0.42	91.82	92.14	92.00	92.16	0.002473	0.53	0.79	3.36	0.35
River 1	Reach 1-Upper	218	100YrSCS24Hr	0.49	91.82	92.17	92.02	92.19	0.002504	0.56	0.88	3.53	0.35
River 1	Reach 1-Upper	197	2YrCHI3Hr	0.08	91.73	91.85	91.84	91.87	0.016181	0.66	0.12	1.55	0.75
River 1	Reach 1-Upper	197	5YrCHI3Hr	0.15	91.73	91.90	91.87	91.93	0.013293	0.73	0.20	1.87	0.72
River 1	Reach 1-Upper	197	10YrCHI3Hr	0.20	91.73	91.93	91.89	91.96	0.012335	0.78	0.25	2.02	0.71
River 1	Reach 1-Upper	197	25YrCHI3Hr	0.27	91.73	91.96	91.92	91.99	0.011527	0.84	0.32	2.18	0.70
River 1	Reach 1-Upper	197	50YrCHI3Hr	0.32	91.73	91.98	91.94	92.02	0.010809	0.87	0.37	2.29	0.69
River 1	Reach 1-Upper	197	100YrCHI3Hr	0.38	91.73	92.00	91.96	92.04	0.010540	0.91	0.42	2.39	0.69
River 1	Reach 1-Upper	197	2YrSCS24Hr	0.13	91.73	91.89	91.87	91.91	0.013973	0.71	0.18	1.81	0.72
River 1	Reach 1-Upper	197	5YrSCS24Hr	0.22	91.73	91.93	91.90	91.97	0.012083	0.80	0.27	2.06	0.70
River 1	Reach 1-Upper	197	10YrSCS24Hr	0.28	91.73	91.96	91.92	92.00	0.011418	0.84	0.33	2.20	0.70
River 1	Reach 1-Upper	197	25YrSCS24Hr	0.36	91.73	91.99	91.95	92.03	0.010650	0.89	0.40	2.34	0.69
River 1	Reach 1-Upper	197	50YrSCS24Hr	0.42	91.73	92.02	91.97	92.06	0.010407	0.93	0.45	2.44	0.69
River 1	Reach 1-Upper	197	100YrSCS24Hr	0.49	91.73	92.04	91.99	92.08	0.010221	0.96	0.51	2.55	0.69
River 1	Reach 1-Upper	174	2YrCHI3Hr	0.08	91.52	91.70	91.63	91.71	0.004212	0.41	0.19	1.80	0.40
River 1	Reach 1-Upper	174	5YrCHI3Hr	0.15	91.52	91.75	91.67	91.76	0.004464	0.50	0.30	2.17	0.43
River 1	Reach 1-Upper	174	10YrCHI3Hr	0.20	91.52	91.78	91.69	91.79	0.004633	0.55	0.36	2.31	0.45
River 1	Reach 1-Upper	174	25YrCHI3Hr	0.27	91.52	91.81	91.72	91.83	0.004788	0.61	0.44	2.47	0.46
River 1	Reach 1-Upper	174	50YrCHI3Hr	0.32	91.52	91.83	91.74	91.85	0.004947	0.65	0.50	2.58	0.48
River 1	Reach 1-Upper	174	100YrCHI3Hr	0.38	91.52	91.85	91.76	91.88	0.005078	0.69	0.56	2.69	0.49
River 1	Reach 1-Upper	174	2YrSCS24Hr	0.13	91.52	91.74	91.66	91.75	0.004366	0.47	0.27	2.08	0.42
River 1	Reach 1-Upper	174	5YrSCS24Hr	0.22	91.52	91.78	91.70	91.80	0.004685	0.57	0.38	2.35	0.45
River 1	Reach 1-Upper	174	10YrSCS24Hr	0.28	91.52	91.81	91.73	91.83	0.004821	0.62	0.45	2.49	0.46
River 1	Reach 1-Upper	174	25YrSCS24Hr	0.36	91.52	91.84	91.75	91.87	0.005024	0.67	0.53	2.65	0.48
River 1	Reach 1-Upper	174	50YrSCS24Hr	0.42	91.52	91.87	91.77	91.89	0.005141	0.71	0.59	2.76	0.49
River 1	Reach 1-Upper	174	100YrSCS24Hr	0.49	91.52	91.89	91.79	91.92	0.005179	0.75	0.66	2.87	0.50
River 1	Reach 1-Upper	154	2YrCHI3Hr	0.08	91.43	91.61	91.56	91.62	0.004328	0.39	0.21	2.16	0.40
River 1	Reach 1-Upper	154	5YrCHI3Hr	0.15	91.43	91.66	91.59	91.67	0.004181	0.46	0.32	2.60	0.41
River 1	Reach 1-Upper	154	10YrCHI3Hr	0.20	91.43	91.69	91.61	91.70	0.004190	0.49	0.40	2.83	0.42
River 1	Reach 1-Upper	154	25YrCHI3Hr	0.27	91.43	91.72	91.64	91.74	0.004087	0.53	0.50	3.11	0.42
River 1	Reach 1-Upper	154	50YrCHI3Hr	0.32	91.43	91.75	91.65	91.76	0.003985	0.56	0.58	3.28	0.43
River 1	Reach 1-Upper	154	100YrCHI3Hr	0.38	91.43	91.77	91.67	91.79	0.003882	0.58	0.66	3.44	0.43

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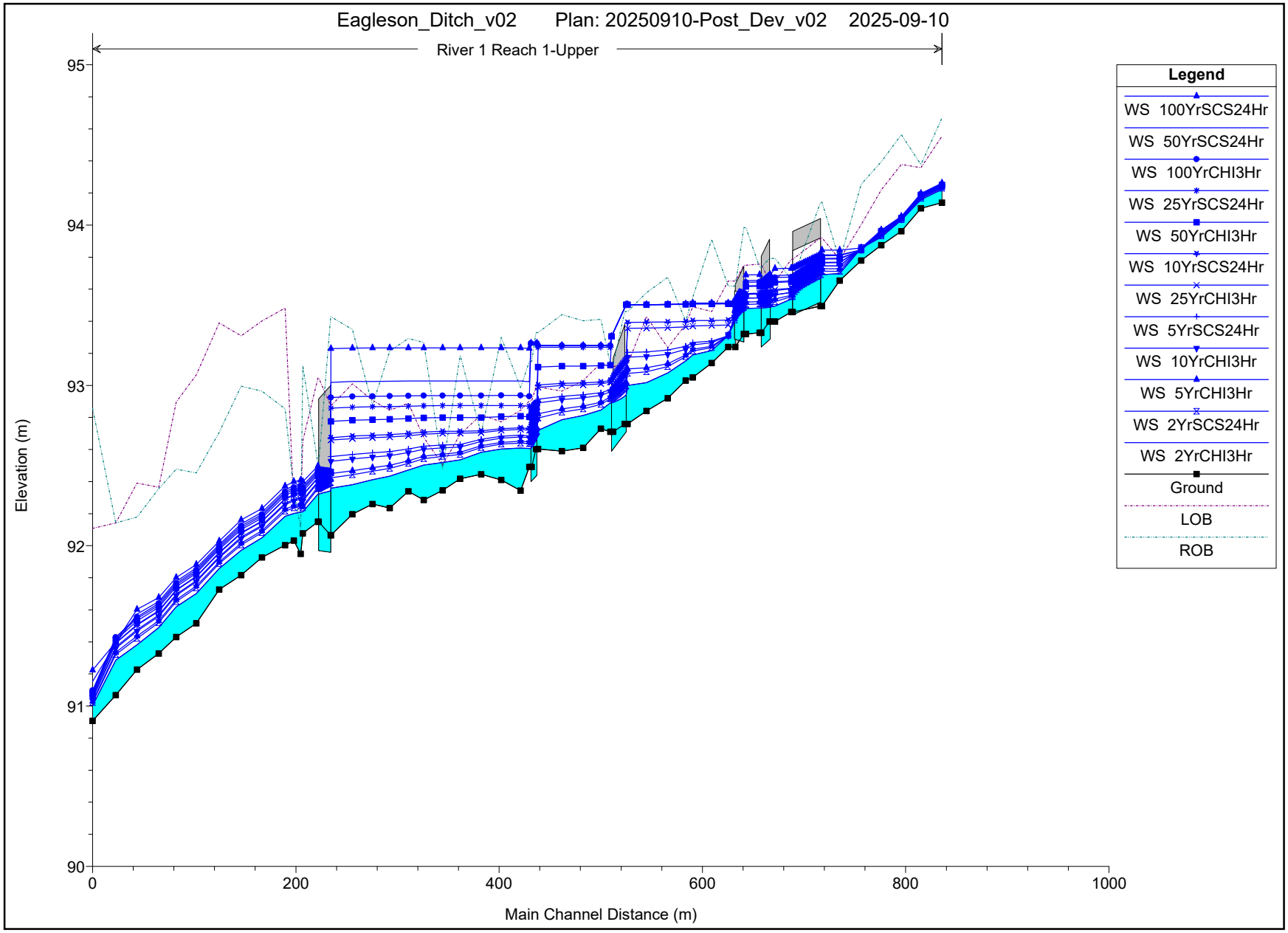
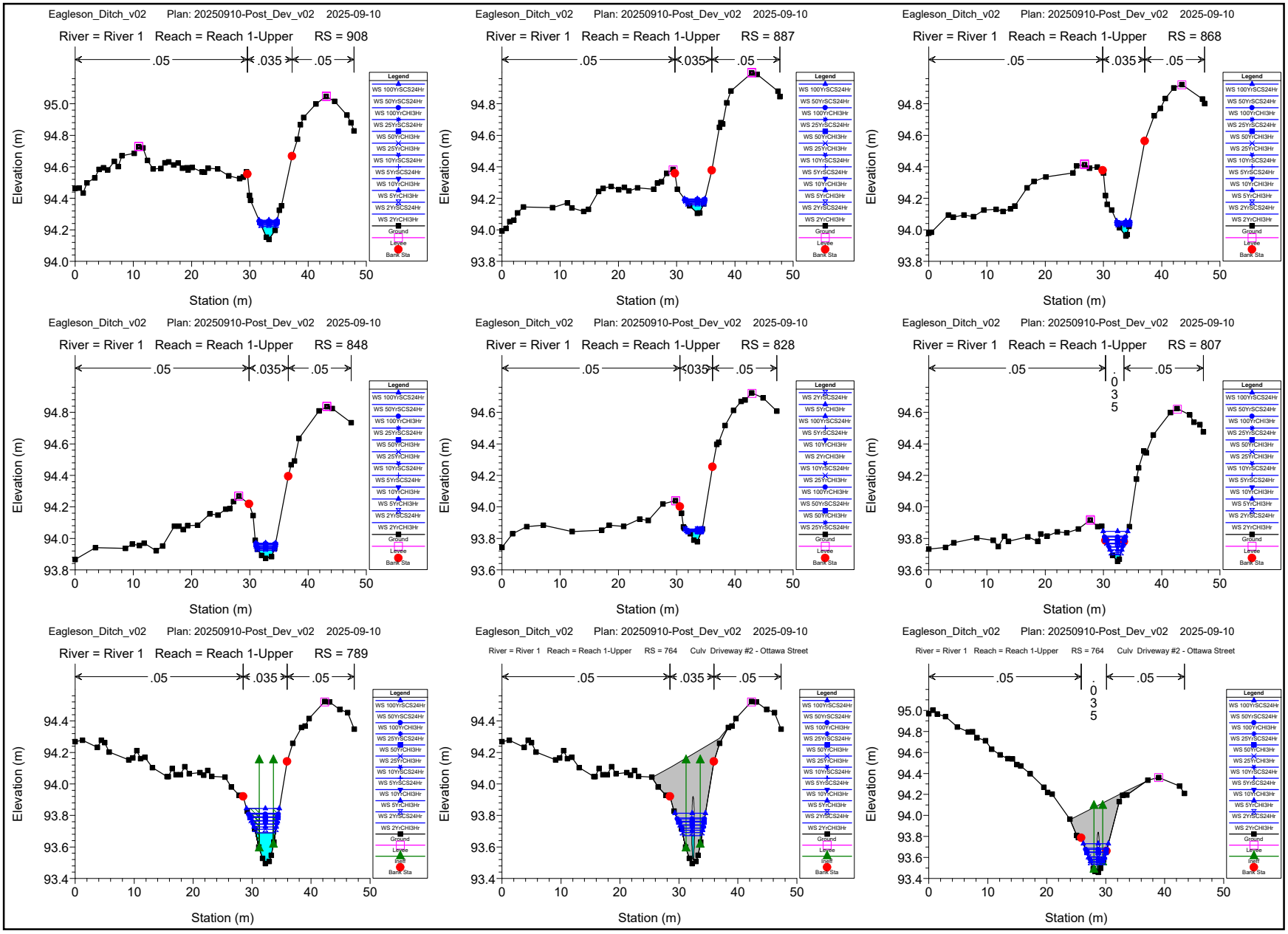
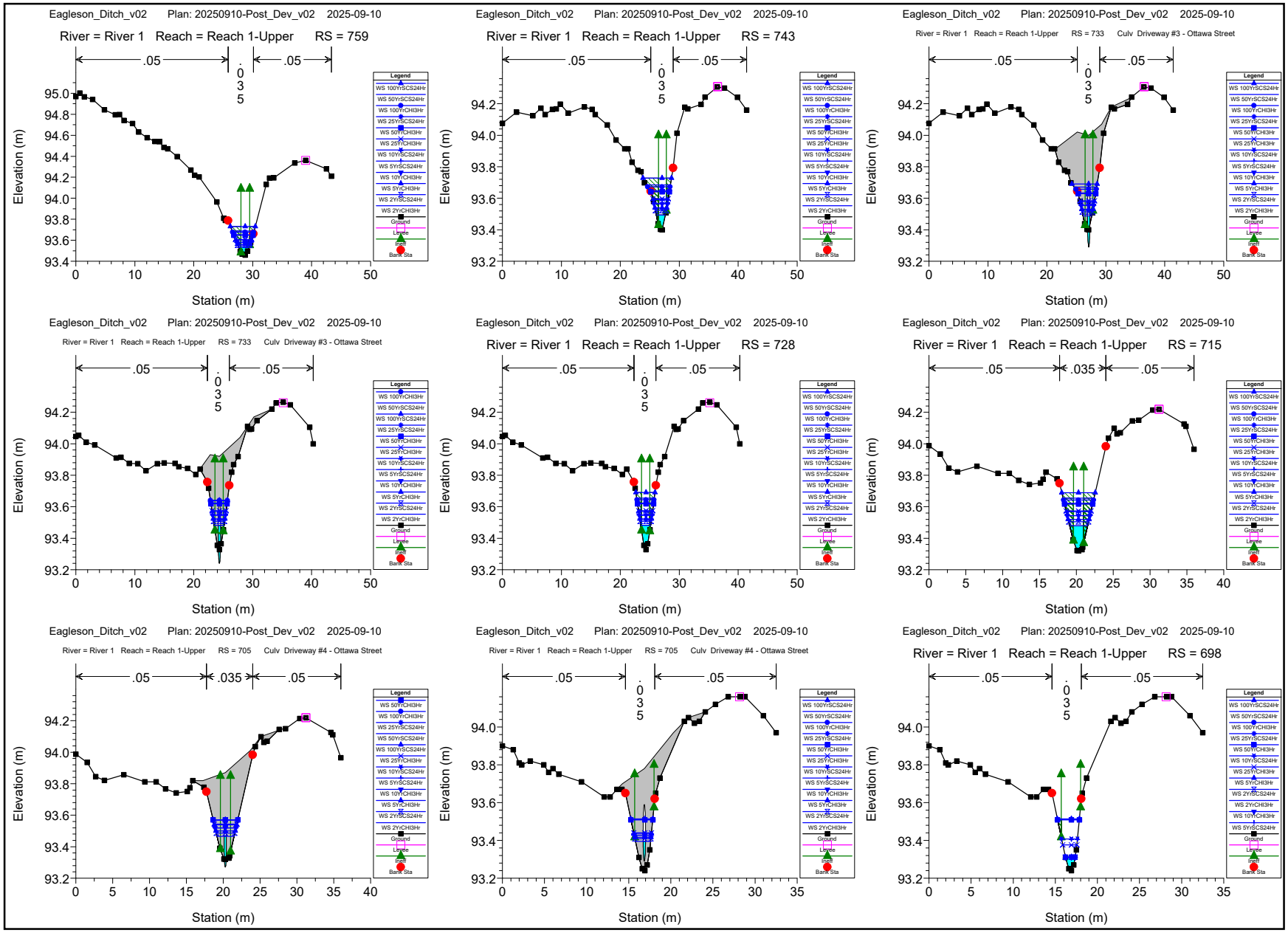
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	154	2YrSCS24Hr	0.13	91.43	91.65	91.58	91.66	0.004251	0.44	0.29	2.49	0.41
River 1	Reach 1-Upper	154	5YrSCS24Hr	0.22	91.43	91.70	91.62	91.71	0.004167	0.51	0.43	2.91	0.42
River 1	Reach 1-Upper	154	10YrSCS24Hr	0.28	91.43	91.73	91.64	91.74	0.004071	0.54	0.51	3.14	0.43
River 1	Reach 1-Upper	154	25YrSCS24Hr	0.36	91.43	91.76	91.66	91.78	0.003925	0.57	0.62	3.37	0.43
River 1	Reach 1-Upper	154	50YrSCS24Hr	0.42	91.43	91.79	91.68	91.80	0.003830	0.60	0.71	3.53	0.43
River 1	Reach 1-Upper	154	100YrSCS24Hr	0.49	91.43	91.81	91.70	91.83	0.003747	0.62	0.79	3.69	0.43
River 1	Reach 1-Upper	137	2YrCHI3Hr	0.08	91.33	91.48	91.46	91.50	0.012189	0.63	0.13	1.39	0.66
River 1	Reach 1-Upper	137	5YrCHI3Hr	0.15	91.33	91.53	91.50	91.56	0.011338	0.73	0.20	1.65	0.67
River 1	Reach 1-Upper	137	10YrCHI3Hr	0.20	91.33	91.56	91.52	91.59	0.011017	0.79	0.25	1.80	0.67
River 1	Reach 1-Upper	137	25YrCHI3Hr	0.27	91.33	91.60	91.55	91.63	0.010550	0.84	0.32	1.99	0.67
River 1	Reach 1-Upper	137	50YrCHI3Hr	0.32	91.33	91.62	91.57	91.66	0.010206	0.88	0.37	2.12	0.67
River 1	Reach 1-Upper	137	100YrCHI3Hr	0.38	91.33	91.65	91.59	91.69	0.009820	0.90	0.42	2.25	0.66
River 1	Reach 1-Upper	137	2YrSCS24Hr	0.13	91.33	91.52	91.49	91.54	0.011464	0.71	0.18	1.58	0.67
River 1	Reach 1-Upper	137	5YrSCS24Hr	0.22	91.33	91.57	91.53	91.60	0.010898	0.80	0.27	1.85	0.67
River 1	Reach 1-Upper	137	10YrSCS24Hr	0.28	91.33	91.60	91.55	91.64	0.010487	0.85	0.33	2.01	0.67
River 1	Reach 1-Upper	137	25YrSCS24Hr	0.36	91.33	91.63	91.58	91.68	0.009938	0.89	0.40	2.20	0.67
River 1	Reach 1-Upper	137	50YrSCS24Hr	0.42	91.33	91.66	91.60	91.70	0.009574	0.92	0.46	2.33	0.66
River 1	Reach 1-Upper	137	100YrSCS24Hr	0.49	91.33	91.69	91.62	91.73	0.009283	0.95	0.52	2.46	0.66
River 1	Reach 1-Upper	116	2YrCHI3Hr	0.08	91.23	91.38	91.32	91.39	0.003082	0.36	0.22	2.06	0.35
River 1	Reach 1-Upper	116	5YrCHI3Hr	0.15	91.23	91.43	91.35	91.44	0.002930	0.42	0.35	2.36	0.35
River 1	Reach 1-Upper	116	10YrCHI3Hr	0.20	91.23	91.47	91.37	91.48	0.002864	0.46	0.43	2.55	0.36
River 1	Reach 1-Upper	116	25YrCHI3Hr	0.27	91.23	91.51	91.39	91.52	0.002818	0.50	0.54	2.77	0.36
River 1	Reach 1-Upper	116	50YrCHI3Hr	0.32	91.23	91.54	91.41	91.55	0.002807	0.52	0.62	2.92	0.36
River 1	Reach 1-Upper	116	100YrCHI3Hr	0.38	91.23	91.56	91.42	91.58	0.002814	0.55	0.70	3.06	0.37
River 1	Reach 1-Upper	116	2YrSCS24Hr	0.13	91.23	91.42	91.34	91.43	0.002964	0.41	0.31	2.29	0.35
River 1	Reach 1-Upper	116	5YrSCS24Hr	0.22	91.23	91.48	91.37	91.49	0.002843	0.47	0.46	2.61	0.36
River 1	Reach 1-Upper	116	10YrSCS24Hr	0.28	91.23	91.51	91.39	91.53	0.002817	0.50	0.55	2.79	0.36
River 1	Reach 1-Upper	116	25YrSCS24Hr	0.36	91.23	91.55	91.42	91.57	0.002792	0.54	0.66	3.00	0.37
River 1	Reach 1-Upper	116	50YrSCS24Hr	0.42	91.23	91.58	91.43	91.60	0.002600	0.55	0.76	3.16	0.36
River 1	Reach 1-Upper	116	100YrSCS24Hr	0.49	91.23	91.61	91.45	91.63	0.002607	0.58	0.85	3.28	0.36
River 1	Reach 1-Upper	95	2YrCHI3Hr	0.08	91.07	91.28	91.23	91.29	0.006001	0.51	0.16	1.35	0.48
River 1	Reach 1-Upper	95	5YrCHI3Hr	0.15	91.07	91.33	91.27	91.35	0.006981	0.63	0.23	1.60	0.53
River 1	Reach 1-Upper	95	10YrCHI3Hr	0.20	91.07	91.36	91.30	91.39	0.007514	0.71	0.28	1.73	0.56
River 1	Reach 1-Upper	95	25YrCHI3Hr	0.27	91.07	91.39	91.33	91.43	0.008051	0.78	0.34	1.89	0.59
River 1	Reach 1-Upper	95	50YrCHI3Hr	0.32	91.07	91.42	91.35	91.45	0.008531	0.84	0.38	1.99	0.61
River 1	Reach 1-Upper	95	100YrCHI3Hr	0.38	91.07	91.42	91.37	91.47	0.011364	0.98	0.39	2.01	0.71
River 1	Reach 1-Upper	95	2YrSCS24Hr	0.13	91.07	91.32	91.26	91.34	0.006833	0.61	0.21	1.53	0.52
River 1	Reach 1-Upper	95	5YrSCS24Hr	0.22	91.07	91.37	91.30	91.40	0.007484	0.72	0.30	1.78	0.56
River 1	Reach 1-Upper	95	10YrSCS24Hr	0.28	91.07	91.40	91.33	91.43	0.008260	0.80	0.35	1.90	0.60
River 1	Reach 1-Upper	95	25YrSCS24Hr	0.36	91.07	91.43	91.36	91.47	0.008800	0.87	0.41	2.08	0.63
River 1	Reach 1-Upper	95	50YrSCS24Hr	0.42	91.07	91.39	91.38	91.47	0.022828	1.30	0.32	1.85	0.99
River 1	Reach 1-Upper	95	100YrSCS24Hr	0.49	91.07	91.41	91.41	91.50	0.022422	1.34	0.37	1.95	0.99
River 1	Reach 1-Upper	72	2YrCHI3Hr	0.08	90.91	91.00	91.00	91.03	0.030836	0.74	0.11	1.93	0.99
River 1	Reach 1-Upper	72	5YrCHI3Hr	0.15	90.91	91.03	91.03	91.07	0.028202	0.84	0.18	2.40	0.99
River 1	Reach 1-Upper	72	10YrCHI3Hr	0.20	90.91	91.05	91.05	91.09	0.027394	0.90	0.22	2.63	0.99
River 1	Reach 1-Upper	72	25YrCHI3Hr	0.27	90.91	91.07	91.07	91.12	0.026901	0.98	0.27	2.82	1.01
River 1	Reach 1-Upper	72	50YrCHI3Hr	0.32	90.91	91.08	91.08	91.14	0.025605	1.02	0.32	2.96	1.00
River 1	Reach 1-Upper	72	100YrCHI3Hr	0.38	90.91	91.11	91.10	91.16	0.016324	0.92	0.42	3.23	0.82
River 1	Reach 1-Upper	72	2YrSCS24Hr	0.13	90.91	91.02	91.02	91.06	0.027869	0.80	0.16	2.30	0.97
River 1	Reach 1-Upper	72	5YrSCS24Hr	0.22	90.91	91.05	91.05	91.10	0.028793	0.94	0.23	2.67	1.02
River 1	Reach 1-Upper	72	10YrSCS24Hr	0.28	90.91	91.07	91.07	91.12	0.025957	0.98	0.28	2.86	0.99
River 1	Reach 1-Upper	72	25YrSCS24Hr	0.36	90.91	91.09	91.09	91.15	0.025859	1.06	0.34	3.02	1.01
River 1	Reach 1-Upper	72	50YrSCS24Hr	0.42	90.91	91.17	91.11	91.19	0.006772	0.70	0.60	3.69	0.55
River 1	Reach 1-Upper	72	100YrSCS24Hr	0.49	90.91	91.24	91.12	91.26	0.002972	0.55	0.89	4.14	0.38
River 1	Reach 1-Lower	56	2YrCHI3Hr	0.14	90.47	90.73	90.57	90.73	0.000365	0.19	0.73	10.09	0.13
River 1	Reach 1-Lower	56	5YrCHI3Hr	0.26	90.47	90.84	90.60	90.85	0.000293	0.23	1.14	14.27	0.13
River 1	Reach 1-Lower	56	10YrCHI3Hr	0.36	90.47	90.92	90.62	90.92	0.000277	0.26	1.40	17.00	0.13
River 1	Reach 1-Lower	56	25YrCHI3Hr	0.49	90.47	91.01	90.64	91.01	0.000267	0.29	1.71	19.79	0.13
River 1	Reach 1-Lower	56	50YrCHI3Hr	0.60	90.47	91.07	90.66	91.08	0.000264	0.31	1.93	20.02	0.13
River 1	Reach 1-Lower	56	100YrCHI3Hr	0.72	90.47	91.13	90.68	91.14	0.000264	0.34	2.15	20.02	0.14
River 1	Reach 1-Lower	56	2YrSCS24Hr	0.23	90.47	90.82	90.59	90.82	0.000307	0.22	1.05	13.08	0.13
River 1	Reach 1-Lower	56	5YrSCS24Hr	0.40	90.47	90.95	90.63	90.95	0.000273	0.27	1.50	18.26	0.13
River 1	Reach 1-Lower	56	10YrSCS24Hr	0.52	90.47	91.02	90.65	91.02	0.000269	0.29	1.75	19.92	0.13
River 1	Reach 1-Lower	56	25YrSCS24Hr	0.68	90.47	91.11	90.67	91.12	0.000263	0.33	2.07	20.02	0.14
River 1	Reach 1-Lower	56	50YrSCS24Hr	0.80	90.47	91.17	90.70	91.18	0.000261	0.35	2.30	20.02	0.14
River 1	Reach 1-Lower	56	100YrSCS24Hr	0.94	90.47	91.24	90.71	91.25	0.000262	0.37	2.53	20.02	0.14
River 1	Reach 1-Lower	50		Culvert									
River 1	Reach 1-Lower	38	2YrCHI3Hr	0.14	90.46	90.57	90.53	90.58	0.004969	0.42	0.33	30.00	0.43
River 1	Reach 1-Lower	38	5YrCHI3Hr	0.26	90.46	90.60	90.55	90.62	0.006999	0.60	0.44	34.38	0.54
River 1	Reach 1-Lower	38	10YrCHI3Hr	0.36	90.46	90.61	90.57	90.64	0.008612	0.72	0.50	35.69	0.61
River 1	Reach 1-Lower	38	25YrCHI3Hr	0.49	90.46	90.63	90.60	90.67	0.010692	0.87	0.56	36.54	0.70
River 1	Reach 1-Lower	38	50YrCHI3Hr	0.60	90.46	90.64	90.62	90.69	0.012409	0.99	0.61	36.97	0.76
River 1	Reach 1-Lower	38	100YrCHI3Hr	0.72	90.46	90.66	90.64	90.72	0.014104	1.11	0.65	37.73	0.82
River 1	Reach 1-Lower	38	2YrSCS24Hr	0.23	90.46	90.59	90.55	90.61	0.006395	0.56	0.42	33.55	0.51
River 1	Reach 1-Lower	38	5YrSCS24Hr	0.40	90.46	90.62	90.58	90.65	0.009230	0.77	0.52	36.26	0.64
River 1	Reach 1-Lower	38	10YrSCS24Hr	0.52	90.46	90.64	90.60	90.68	0.011069	0.90	0.57	36.60	0.71
River 1	Reach 1-Lower	38	25YrSCS24Hr	0.68	90.46	90.65	90.63	90.71	0.013373	1.06	0.64	37.45	0.79
River 1	Reach 1-Lower	38	50YrSCS24Hr	0.80	90.46	90.66	90.64	90.74	0.015442	1.19	0.68	38.06	0.86
River 1	Reach 1-Lower	38	100YrSCS24Hr	0.94	90.46	90.67	90.66	90.76	0.018005	1.32	0.71	38.54	0.94
River 1	Reach 1-Lower	0	2YrCHI3Hr	0.14	90.42	90.50	90.46	90.50	0.001001	0.13	1.06	18.74	0.18
River 1	Reach 1-Lower	0	5YrCHI3Hr	0.26	90.42	90.53	90.47	90.53	0.001000	0.17	1.59	20.04	0.19
River 1	Reach 1-Lower	0	10YrCHI3Hr	0.36	90.42	90.54	90.48	90.55	0.001000	0.19	1.92	20.29	0.19

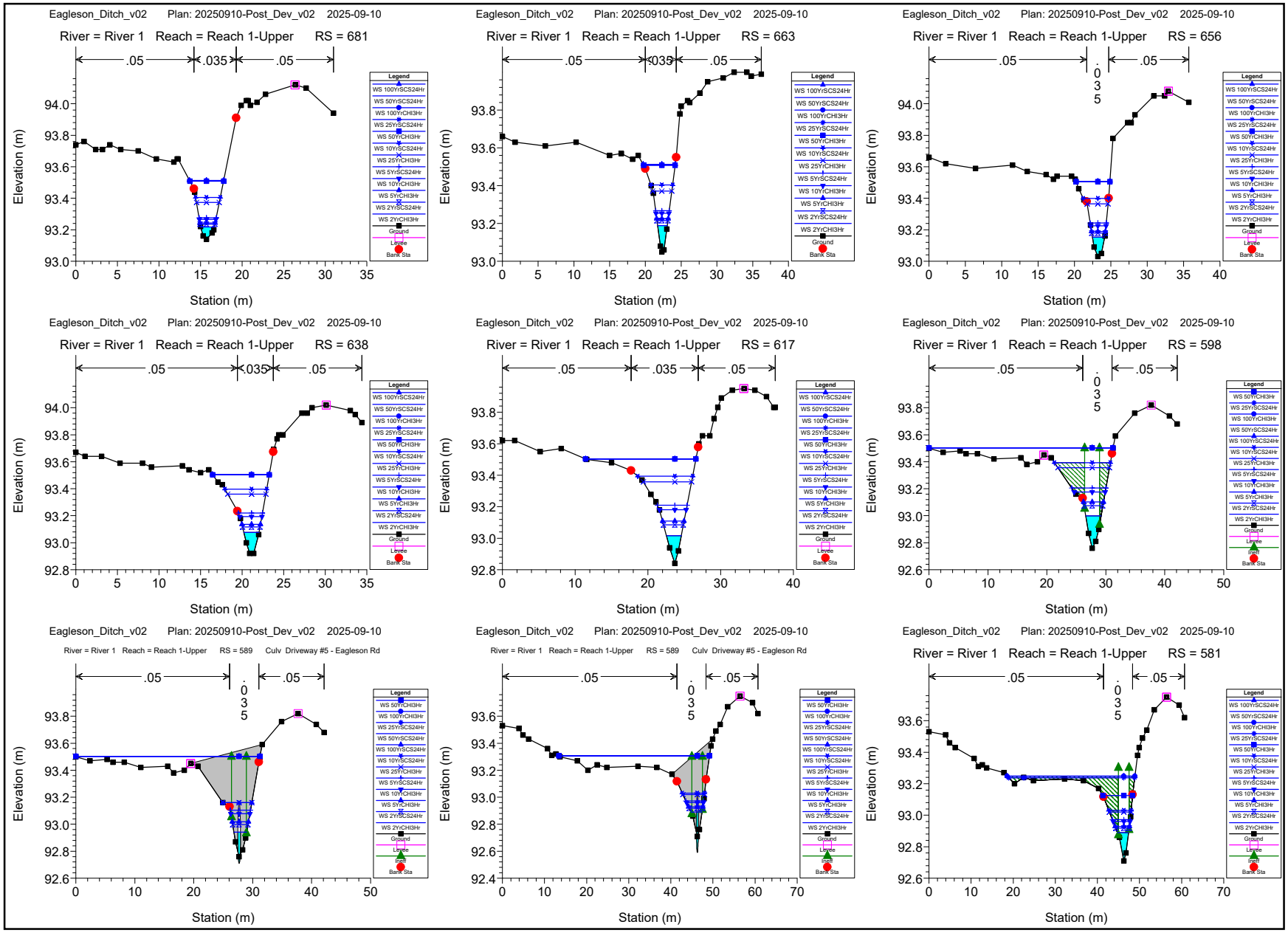
HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

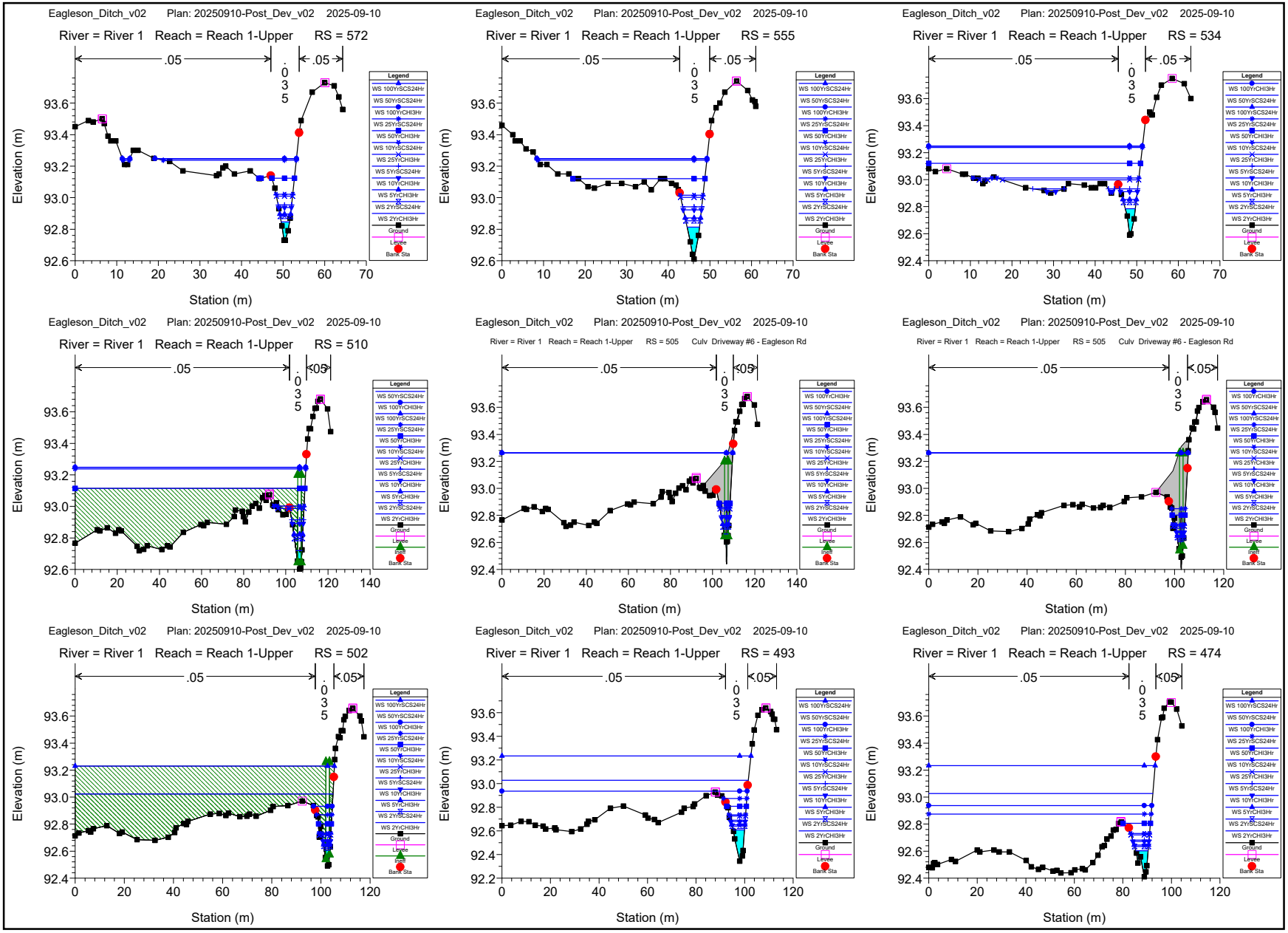
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Lower	0	25YrCHI3Hr	0.49	90.42	90.56	90.49	90.57	0.001001	0.21	2.33	20.58	0.20
River 1	Reach 1-Lower	0	50YrCHI3Hr	0.60	90.42	90.58	90.49	90.58	0.001000	0.23	2.64	20.80	0.20
River 1	Reach 1-Lower	0	100YrCHI3Hr	0.72	90.42	90.59	90.50	90.60	0.001000	0.24	2.98	21.46	0.21
River 1	Reach 1-Lower	0	2YrSCS24Hr	0.23	90.42	90.52	90.46	90.52	0.001000	0.16	1.47	19.96	0.19
River 1	Reach 1-Lower	0	5YrSCS24Hr	0.40	90.42	90.55	90.48	90.55	0.001001	0.20	2.05	20.38	0.20
River 1	Reach 1-Lower	0	10YrSCS24Hr	0.52	90.42	90.57	90.48	90.57	0.001001	0.22	2.40	20.63	0.20
River 1	Reach 1-Lower	0	25YrSCS24Hr	0.68	90.42	90.59	90.49	90.59	0.001000	0.24	2.85	21.31	0.21
River 1	Reach 1-Lower	0	50YrSCS24Hr	0.80	90.42	90.60	90.50	90.61	0.001001	0.25	3.18	21.58	0.21
River 1	Reach 1-Lower	0	100YrSCS24Hr	0.94	90.42	90.62	90.51	90.62	0.001000	0.27	3.51	21.78	0.21

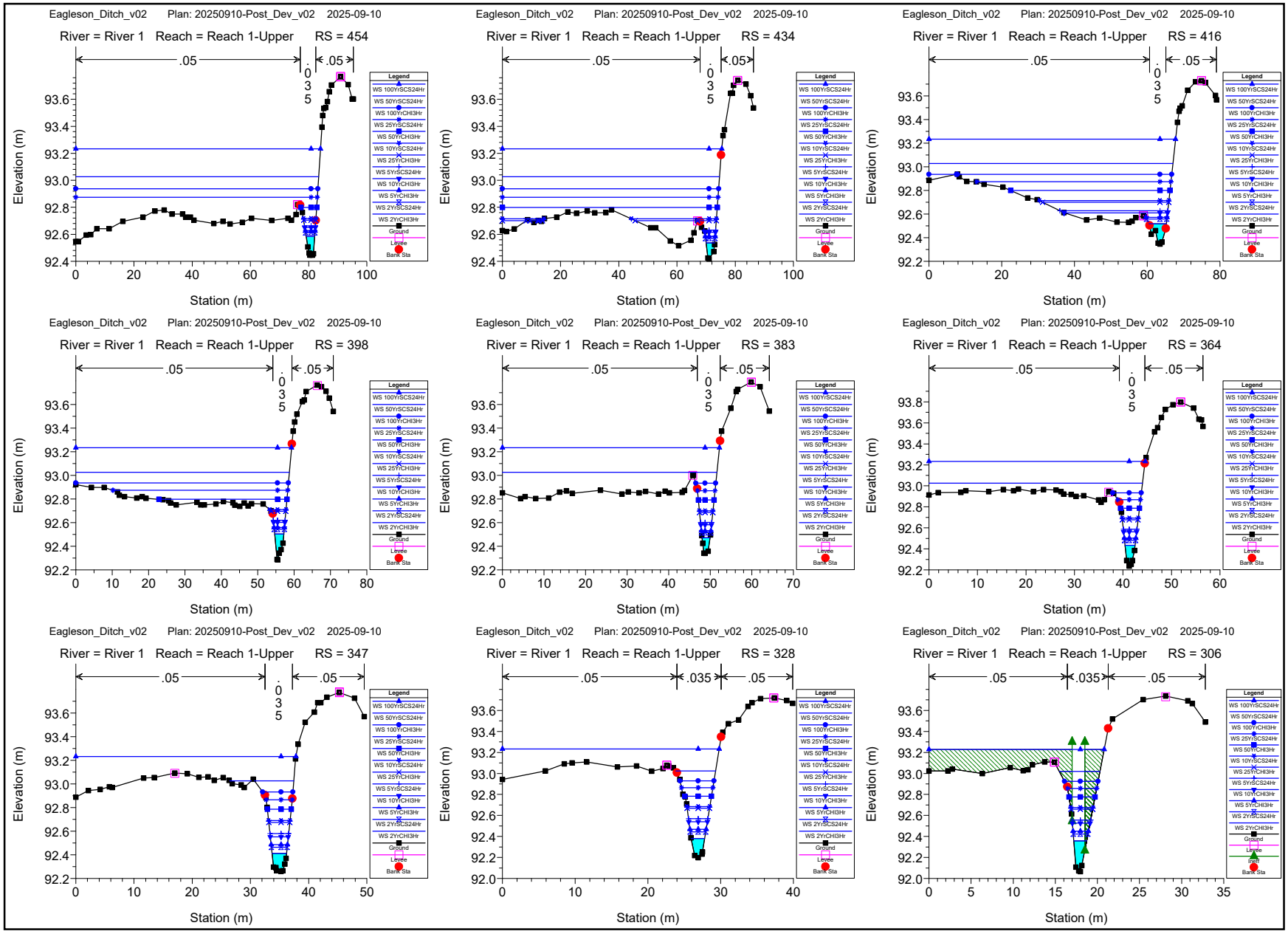

Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River 1 Reach 1-Upper
Elevation (m)
95
94
93
92
91
90
0
200
400
600
800
1000
Main Channel Distance (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
LOB
ROB

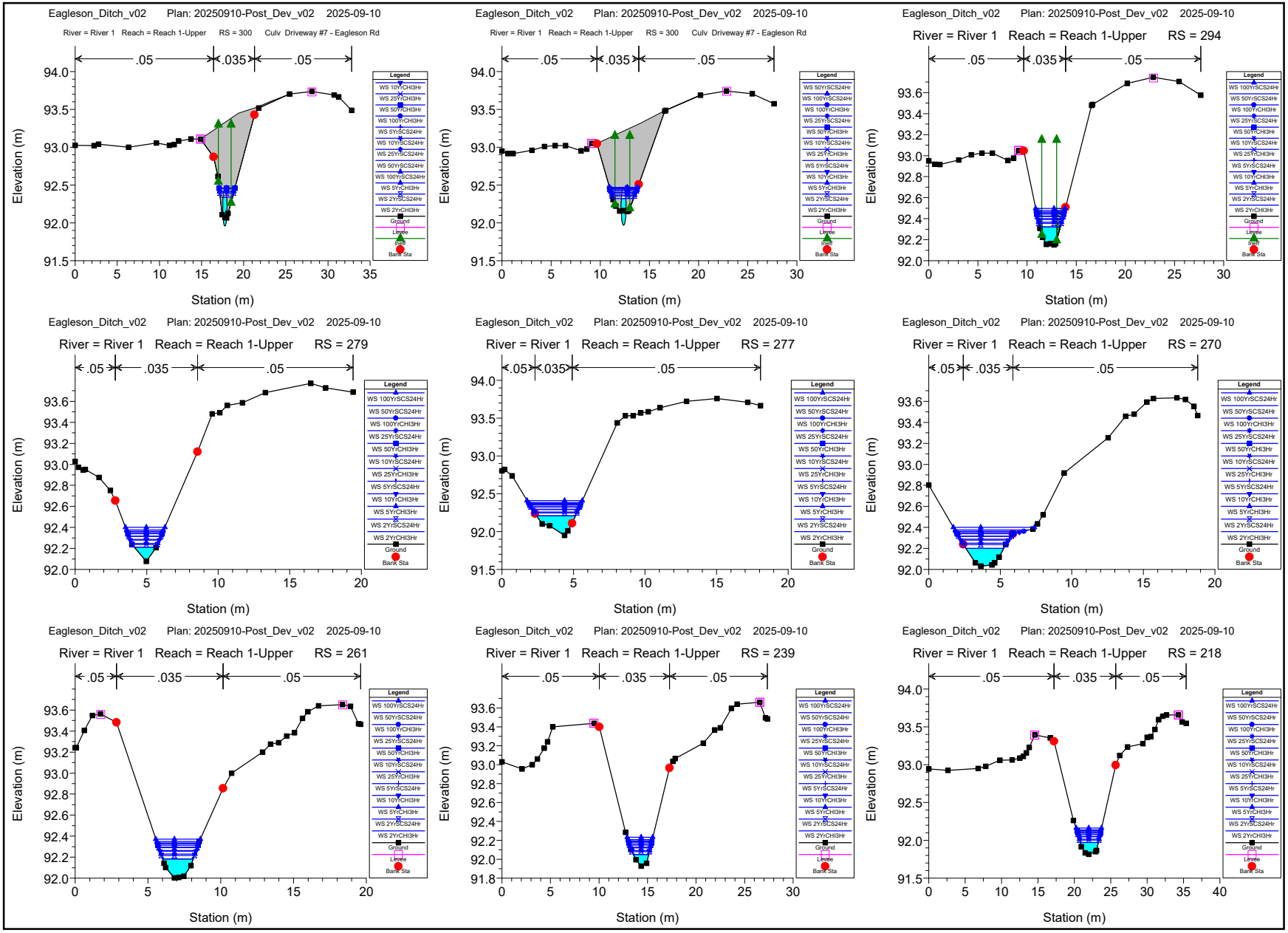

Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 908
River = River 1 Reach = Reach 1-Upper RS = 887
River = River 1 Reach = Reach 1-Upper RS = 868
River = River 1 Reach = Reach 1-Upper RS = 848
River = River 1 Reach = Reach 1-Upper RS = 828
River = River 1 Reach = Reach 1-Upper RS = 807
River = River 1 Reach = Reach 1-Upper RS = 789
River = River 1 Reach = Reach 1-Upper RS = 764 Culv Driveway #2 - Ottawa Street
.05
.035
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 25YrCHI3Hr
WS 10YrSCS24Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta

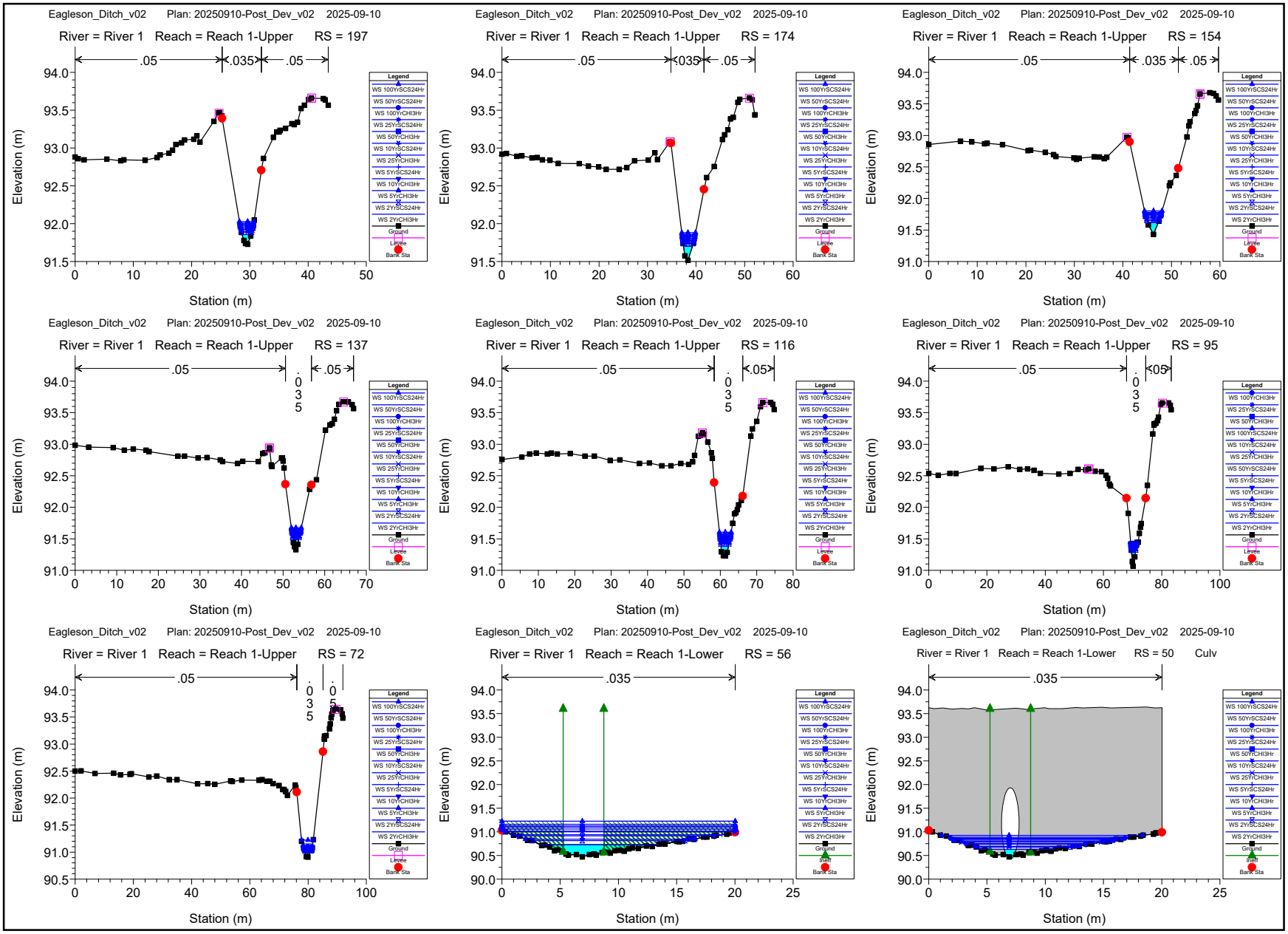

Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 759
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 25YrCHI3Hr
WS 10YrSCS24Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Inert
Bank Sta
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 743
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 733 Culv Driveway #3 - Ottawa Street
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 733 Culv Driveway #3 - Ottawa Street
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 728
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 715
.035
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 705 Culv Driveway #4 - Ottawa Street
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 705 Culv Driveway #4 - Ottawa Street
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 698

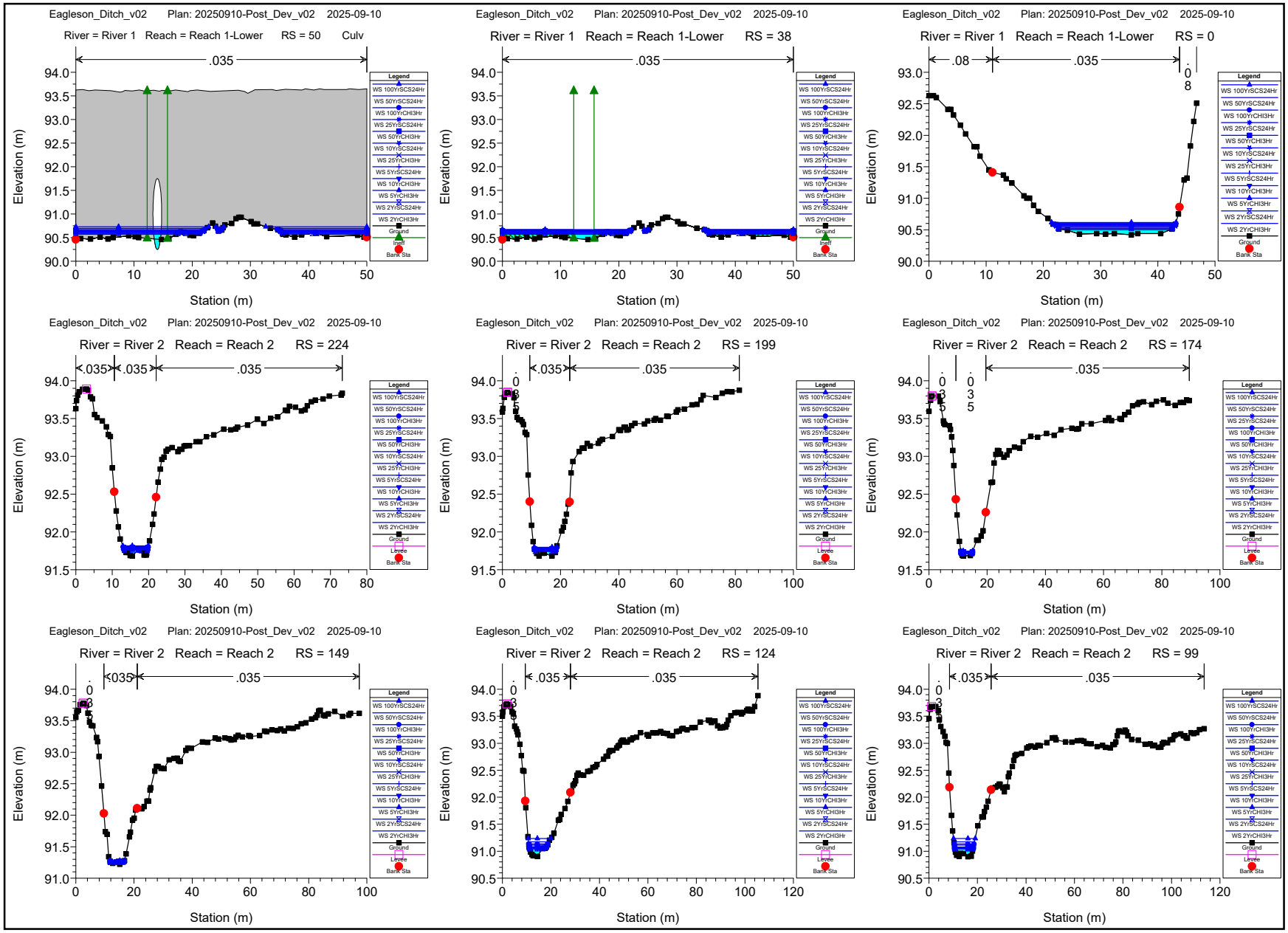

Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 681
.05 .035 .05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 663
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 656
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 638
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 617
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 598
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 589 Culv Driveway #5 - Eagleson Rd
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 589 Culv Driveway #5 - Eagleson Rd
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 581
.05 .035 .05
Elevation (m)
Station (m)

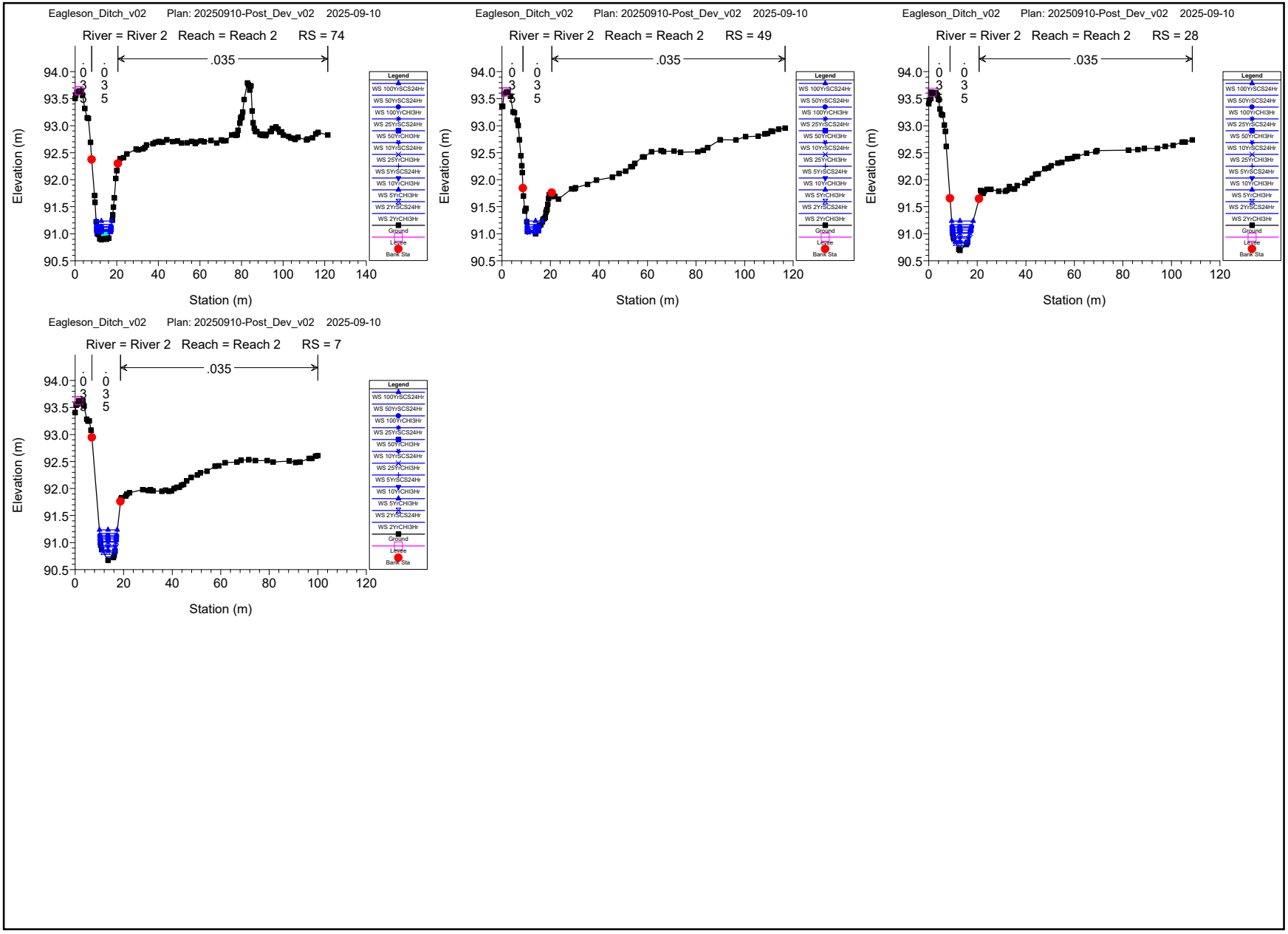

Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 572
River = River 1 Reach = Reach 1-Upper RS = 555
River = River 1 Reach = Reach 1-Upper RS = 534
River = River 1 Reach = Reach 1-Upper RS = 510
River = River 1 Reach = Reach 1-Upper RS = 505 Culv Driveway #6 - Eagleson Rd
River = River 1 Reach = Reach 1-Upper RS = 502
River = River 1 Reach = Reach 1-Upper RS = 493
River = River 1 Reach = Reach 1-Upper RS = 474
Elevation (m)
Station (m)
.05
.035
Legend
Ground
Levee
Bank Sta


Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 454
.05 .05 .035
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 434
.05 .05 .035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 416
.05 .05 .035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 398
.05 .05 .035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 383
.05 .05 .035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 364
.05 .05 .035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 347
.05 .05 .035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 328
.05 .035 .05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 306
.05 .035 .05
Elevation (m)
Station (m)


Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 300 Culv Driveway #7 - Eagleson Rd
.05 .035 .05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 294
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 279
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 277
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 270
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 261
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 239
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 218


Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 197
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 174
.05
.035
.05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 154
.05
.035
.05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 137
.05
.035
.05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 116
.05
.035
.05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 95
.05
.035
.05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Upper RS = 72
.05
.035
.05
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Lower RS = 56
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Lower RS = 50 Culv
.035
Elevation (m)
Station (m)


Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Lower RS = 50 Culv
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Lower RS = 38
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 1 Reach = Reach 1-Lower RS = 0
.08
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 224
.035
.035
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 199
.035
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 174
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 149
.035
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 124
.035
.035
Elevation (m)
Station (m)
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 99
.035
.035
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta


Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 74
.035
.035
.035
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 49
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 28
Eagleson_Ditch_v02 Plan: 20250910-Post_Dev_v02 2025-09-10
River = River 2 Reach = Reach 2 RS = 7

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	908	2YrCHI3Hr	0.02	94.14	94.22	94.18	94.22	0.001632	0.16	0.12	2.47	0.22
Reach 1-Upper	908	5YrCHI3Hr	0.03	94.14	94.23	94.19	94.23	0.001834	0.18	0.15	2.66	0.24
Reach 1-Upper	908	10YrCHI3Hr	0.03	94.14	94.24	94.19	94.24	0.001946	0.19	0.17	2.76	0.25
Reach 1-Upper	908	25YrCHI3Hr	0.04	94.14	94.25	94.20	94.25	0.002058	0.21	0.18	2.87	0.26
Reach 1-Upper	908	50YrCHI3Hr	0.04	94.14	94.25	94.20	94.25	0.002138	0.22	0.20	2.95	0.27
Reach 1-Upper	908	100YrCHI3Hr	0.05	94.14	94.26	94.20	94.26	0.002189	0.23	0.21	3.04	0.27
Reach 1-Upper	908	2YrSCS24Hr	0.02	94.14	94.23	94.19	94.23	0.001752	0.17	0.14	2.59	0.23
Reach 1-Upper	908	5YrSCS24Hr	0.03	94.14	94.24	94.19	94.24	0.001946	0.19	0.17	2.76	0.25
Reach 1-Upper	908	10YrSCS24Hr	0.04	94.14	94.24	94.20	94.25	0.002043	0.20	0.18	2.85	0.26
Reach 1-Upper	908	25YrSCS24Hr	0.04	94.14	94.25	94.20	94.25	0.002153	0.22	0.20	2.97	0.27
Reach 1-Upper	908	50YrSCS24Hr	0.05	94.14	94.26	94.20	94.26	0.002199	0.23	0.22	3.05	0.27
Reach 1-Upper	908	100YrSCS24Hr	0.06	94.14	94.26	94.21	94.26	0.002259	0.24	0.23	3.15	0.28
Reach 1-Upper	887	2YrCHI3Hr	0.02	94.10	94.16	94.14	94.16	0.007210	0.24	0.08	2.48	0.44
Reach 1-Upper	887	5YrCHI3Hr	0.03	94.10	94.17	94.15	94.17	0.005770	0.25	0.11	2.82	0.40
Reach 1-Upper	887	10YrCHI3Hr	0.03	94.10	94.18	94.15	94.18	0.005292	0.25	0.13	2.98	0.39
Reach 1-Upper	887	25YrCHI3Hr	0.04	94.10	94.18	94.15	94.19	0.004885	0.26	0.15	3.16	0.38
Reach 1-Upper	887	50YrCHI3Hr	0.04	94.10	94.19	94.16	94.19	0.004480	0.26	0.17	3.32	0.37
Reach 1-Upper	887	100YrCHI3Hr	0.05	94.10	94.19	94.16	94.20	0.004579	0.27	0.18	3.42	0.38
Reach 1-Upper	887	2YrSCS24Hr	0.02	94.10	94.17	94.15	94.17	0.006295	0.25	0.10	2.71	0.42
Reach 1-Upper	887	5YrSCS24Hr	0.03	94.10	94.18	94.15	94.18	0.005292	0.25	0.13	2.98	0.39
Reach 1-Upper	887	10YrSCS24Hr	0.04	94.10	94.18	94.15	94.19	0.004912	0.26	0.14	3.14	0.38
Reach 1-Upper	887	25YrSCS24Hr	0.04	94.10	94.19	94.16	94.19	0.004434	0.26	0.17	3.35	0.37
Reach 1-Upper	887	50YrSCS24Hr	0.05	94.10	94.19	94.16	94.20	0.004587	0.27	0.18	3.44	0.38
Reach 1-Upper	887	100YrSCS24Hr	0.06	94.10	94.20	94.16	94.20	0.004863	0.29	0.19	3.53	0.39
Reach 1-Upper	868	2YrCHI3Hr	0.02	93.96	94.03	94.01	94.03	0.006094	0.26	0.07	1.89	0.41
Reach 1-Upper	868	5YrCHI3Hr	0.03	93.96	94.04	94.02	94.04	0.008117	0.32	0.09	1.99	0.49
Reach 1-Upper	868	10YrCHI3Hr	0.03	93.96	94.04	94.02	94.04	0.009697	0.35	0.09	2.03	0.53
Reach 1-Upper	868	25YrCHI3Hr	0.04	93.96	94.04	94.02	94.05	0.011359	0.39	0.10	2.08	0.58
Reach 1-Upper	868	50YrCHI3Hr	0.04	93.96	94.04	94.03	94.05	0.012637	0.42	0.10	2.12	0.62
Reach 1-Upper	868	100YrCHI3Hr	0.05	93.96	94.05	94.03	94.06	0.013009	0.44	0.11	2.18	0.63
Reach 1-Upper	868	2YrSCS24Hr	0.02	93.96	94.03	94.01	94.04	0.007224	0.29	0.08	1.96	0.46
Reach 1-Upper	868	5YrSCS24Hr	0.03	93.96	94.04	94.02	94.04	0.009697	0.35	0.09	2.03	0.53
Reach 1-Upper	868	10YrSCS24Hr	0.04	93.96	94.04	94.02	94.05	0.011232	0.39	0.10	2.07	0.58
Reach 1-Upper	868	25YrSCS24Hr	0.04	93.96	94.04	94.03	94.05	0.013016	0.43	0.10	2.13	0.63
Reach 1-Upper	868	50YrSCS24Hr	0.05	93.96	94.05	94.03	94.06	0.012976	0.44	0.11	2.19	0.63
Reach 1-Upper	868	100YrSCS24Hr	0.06	93.96	94.05	94.04	94.06	0.011619	0.44	0.12	2.30	0.60
Reach 1-Upper	848	2YrCHI3Hr	0.02	93.87	93.92	93.90	93.93	0.004549	0.20	0.09	2.73	0.35
Reach 1-Upper	848	5YrCHI3Hr	0.03	93.87	93.94	93.91	93.94	0.003629	0.21	0.13	3.01	0.32
Reach 1-Upper	848	10YrCHI3Hr	0.03	93.87	93.94	93.91	93.95	0.002995	0.21	0.15	3.10	0.30
Reach 1-Upper	848	25YrCHI3Hr	0.04	93.87	93.95	93.92	93.96	0.002536	0.21	0.18	3.19	0.28
Reach 1-Upper	848	50YrCHI3Hr	0.04	93.87	93.96	93.92	93.96	0.002177	0.21	0.21	3.28	0.27
Reach 1-Upper	848	100YrCHI3Hr	0.05	93.87	93.97	93.92	93.97	0.002108	0.22	0.22	3.34	0.27
Reach 1-Upper	848	2YrSCS24Hr	0.02	93.87	93.93	93.91	93.93	0.004188	0.21	0.11	2.93	0.34
Reach 1-Upper	848	5YrSCS24Hr	0.03	93.87	93.94	93.91	93.95	0.002995	0.21	0.15	3.10	0.30
Reach 1-Upper	848	10YrSCS24Hr	0.04	93.87	93.95	93.92	93.95	0.002574	0.21	0.18	3.18	0.29
Reach 1-Upper	848	25YrSCS24Hr	0.04	93.87	93.96	93.92	93.96	0.002104	0.21	0.21	3.30	0.26
Reach 1-Upper	848	50YrSCS24Hr	0.05	93.87	93.97	93.92	93.97	0.002100	0.22	0.23	3.35	0.27
Reach 1-Upper	848	100YrSCS24Hr	0.06	93.87	93.97	93.92	93.97	0.002380	0.23	0.23	3.38	0.28
Reach 1-Upper	828	2YrCHI3Hr	0.02	93.78	93.86	93.82	93.86	0.002644	0.17	0.11	2.77	0.27
Reach 1-Upper	828	5YrCHI3Hr	0.03	93.78	93.86	93.83	93.86	0.004666	0.23	0.12	2.86	0.37
Reach 1-Upper	828	10YrCHI3Hr	0.03	93.78	93.86	93.83	93.86	0.007085	0.28	0.11	2.81	0.45
Reach 1-Upper	828	25YrCHI3Hr	0.04	93.78	93.85	93.84	93.86	0.014294	0.39	0.10	2.58	0.63
Reach 1-Upper	828	50YrCHI3Hr	0.04	93.78	93.84	93.84	93.86	0.029914	0.53	0.08	2.30	0.90
Reach 1-Upper	828	100YrCHI3Hr	0.05	93.78	93.84	93.84	93.86	0.034267	0.57	0.08	2.34	0.97
Reach 1-Upper	828	2YrSCS24Hr	0.02	93.78	93.86	93.82	93.86	0.003210	0.19	0.12	2.95	0.30
Reach 1-Upper	828	5YrSCS24Hr	0.03	93.78	93.86	93.83	93.86	0.007085	0.28	0.11	2.81	0.45
Reach 1-Upper	828	10YrSCS24Hr	0.04	93.78	93.85	93.84	93.86	0.012962	0.37	0.10	2.61	0.60
Reach 1-Upper	828	25YrSCS24Hr	0.04	93.78	93.84	93.84	93.86	0.035615	0.57	0.08	2.22	0.98
Reach 1-Upper	828	50YrSCS24Hr	0.05	93.78	93.84	93.84	93.86	0.036015	0.59	0.08	2.34	0.99
Reach 1-Upper	828	100YrSCS24Hr	0.06	93.78	93.86	93.85	93.87	0.020193	0.48	0.11	2.83	0.76
Reach 1-Upper	807	2YrCHI3Hr	0.02	93.65	93.70	93.70	93.71	0.044163	0.52	0.04	1.46	1.04
Reach 1-Upper	807	5YrCHI3Hr	0.03	93.65	93.73	93.71	93.73	0.007733	0.31	0.09	2.04	0.47
Reach 1-Upper	807	10YrCHI3Hr	0.03	93.65	93.75	93.71	93.75	0.003849	0.25	0.13	2.40	0.35
Reach 1-Upper	807	25YrCHI3Hr	0.04	93.65	93.77	93.71	93.77	0.001862	0.20	0.19	2.86	0.25
Reach 1-Upper	807	50YrCHI3Hr	0.04	93.65	93.79	93.72	93.79	0.001072	0.17	0.25	3.27	0.20
Reach 1-Upper	807	100YrCHI3Hr	0.05	93.65	93.81	93.72	93.81	0.000618	0.15	0.32	3.62	0.15
Reach 1-Upper	807	2YrSCS24Hr	0.02	93.65	93.71	93.70	93.72	0.021814	0.43	0.06	1.70	0.76
Reach 1-Upper	807	5YrSCS24Hr	0.03	93.65	93.75	93.71	93.75	0.003849	0.25	0.13	2.40	0.35
Reach 1-Upper	807	10YrSCS24Hr	0.04	93.65	93.77	93.71	93.77	0.002057	0.21	0.18	2.79	0.26
Reach 1-Upper	807	25YrSCS24Hr	0.04	93.65	93.79	93.72	93.79	0.000946	0.17	0.26	3.34	0.18
Reach 1-Upper	807	50YrSCS24Hr	0.05	93.65	93.81	93.72	93.82	0.000538	0.15	0.34	3.71	0.14
Reach 1-Upper	807	100YrSCS24Hr	0.06	93.65	93.84	93.73	93.85	0.000286	0.13	0.46	4.22	0.11
Reach 1-Upper	789	2YrCHI3Hr	0.02	93.49	93.69	93.53	93.69	0.000037	0.05	0.38	3.33	0.04
Reach 1-Upper	789	5YrCHI3Hr	0.03	93.49	93.73	93.54	93.73	0.000036	0.06	0.47	3.77	0.04
Reach 1-Upper	789	10YrCHI3Hr	0.03	93.49	93.74	93.55	93.74	0.000038	0.06	0.51	4.05	0.04
Reach 1-Upper	789	25YrCHI3Hr	0.04	93.49	93.77	93.55	93.77	0.000038	0.07	0.56	4.42	0.04
Reach 1-Upper	789	50YrCHI3Hr	0.04	93.49	93.79	93.55	93.79	0.000038	0.07	0.61	4.75	0.04

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	789	100YrCHI3Hr	0.05	93.49	93.81	93.56	93.81	0.000036	0.07	0.66	5.08	0.04
Reach 1-Upper	789	2YrSCS24Hr	0.02	93.49	93.71	93.54	93.71	0.000038	0.06	0.43	3.55	0.04
Reach 1-Upper	789	5YrSCS24Hr	0.03	93.49	93.74	93.55	93.74	0.000038	0.06	0.51	4.05	0.04
Reach 1-Upper	789	10YrSCS24Hr	0.04	93.49	93.76	93.55	93.76	0.000038	0.07	0.56	4.37	0.04
Reach 1-Upper	789	25YrSCS24Hr	0.04	93.49	93.79	93.56	93.79	0.000037	0.07	0.62	4.81	0.04
Reach 1-Upper	789	50YrSCS24Hr	0.05	93.49	93.81	93.56	93.81	0.000035	0.07	0.67	5.17	0.04
Reach 1-Upper	789	100YrSCS24Hr	0.06	93.49	93.84	93.56	93.84	0.000032	0.07	0.75	5.59	0.04
Reach 1-Upper	764		Culvert									
Reach 1-Upper	759	2YrCHI3Hr	0.02	93.46	93.54	93.50	93.54	0.002883	0.23	0.08	1.83	0.30
Reach 1-Upper	759	5YrCHI3Hr	0.03	93.46	93.56	93.51	93.56	0.001988	0.23	0.12	2.15	0.26
Reach 1-Upper	759	10YrCHI3Hr	0.03	93.46	93.58	93.51	93.58	0.001375	0.22	0.14	2.40	0.23
Reach 1-Upper	759	25YrCHI3Hr	0.04	93.46	93.61	93.52	93.61	0.000864	0.21	0.18	2.73	0.19
Reach 1-Upper	759	50YrCHI3Hr	0.04	93.46	93.65	93.52	93.65	0.000433	0.18	0.24	3.23	0.14
Reach 1-Upper	759	100YrCHI3Hr	0.05	93.46	93.68	93.53	93.68	0.000309	0.17	0.29	3.59	0.12
Reach 1-Upper	759	2YrSCS24Hr	0.02	93.46	93.55	93.51	93.56	0.002355	0.23	0.10	2.03	0.28
Reach 1-Upper	759	5YrSCS24Hr	0.03	93.46	93.58	93.51	93.58	0.001375	0.22	0.14	2.40	0.23
Reach 1-Upper	759	10YrSCS24Hr	0.04	93.46	93.60	93.52	93.60	0.000932	0.21	0.18	2.67	0.19
Reach 1-Upper	759	25YrSCS24Hr	0.04	93.46	93.65	93.52	93.65	0.000408	0.17	0.25	3.29	0.14
Reach 1-Upper	759	50YrSCS24Hr	0.05	93.46	93.69	93.53	93.69	0.000262	0.16	0.31	3.73	0.11
Reach 1-Upper	759	100YrSCS24Hr	0.06	93.46	93.73	93.53	93.73	0.000176	0.15	0.37	4.23	0.10
Reach 1-Upper	743	2YrCHI3Hr	0.02	93.40	93.49	93.45	93.50	0.002754	0.25	0.08	1.55	0.30
Reach 1-Upper	743	5YrCHI3Hr	0.03	93.40	93.54	93.46	93.54	0.001046	0.20	0.13	2.00	0.20
Reach 1-Upper	743	10YrCHI3Hr	0.03	93.40	93.57	93.47	93.57	0.000686	0.19	0.17	2.25	0.17
Reach 1-Upper	743	25YrCHI3Hr	0.04	93.40	93.60	93.47	93.60	0.000466	0.18	0.21	2.59	0.14
Reach 1-Upper	743	50YrCHI3Hr	0.04	93.40	93.64	93.48	93.64	0.000265	0.16	0.27	3.11	0.11
Reach 1-Upper	743	100YrCHI3Hr	0.05	93.40	93.67	93.48	93.67	0.000207	0.16	0.31	3.83	0.10
Reach 1-Upper	743	2YrSCS24Hr	0.02	93.40	93.52	93.46	93.52	0.001463	0.21	0.11	1.84	0.23
Reach 1-Upper	743	5YrSCS24Hr	0.03	93.40	93.57	93.47	93.57	0.000686	0.19	0.17	2.25	0.17
Reach 1-Upper	743	10YrSCS24Hr	0.04	93.40	93.59	93.47	93.59	0.000495	0.18	0.20	2.53	0.15
Reach 1-Upper	743	25YrSCS24Hr	0.04	93.40	93.65	93.48	93.65	0.000254	0.16	0.27	3.18	0.11
Reach 1-Upper	743	50YrSCS24Hr	0.05	93.40	93.68	93.48	93.69	0.000181	0.15	0.32	4.15	0.10
Reach 1-Upper	743	100YrSCS24Hr	0.06	93.40	93.73	93.49	93.73	0.000134	0.14	0.38	4.85	0.09
Reach 1-Upper	733		Culvert									
Reach 1-Upper	728	2YrCHI3Hr	0.02	93.33	93.48	93.39	93.48	0.000387	0.13	0.15	1.68	0.12
Reach 1-Upper	728	5YrCHI3Hr	0.03	93.33	93.52	93.40	93.52	0.000273	0.13	0.21	1.98	0.11
Reach 1-Upper	728	10YrCHI3Hr	0.03	93.33	93.55	93.40	93.55	0.000233	0.13	0.24	2.16	0.10
Reach 1-Upper	728	25YrCHI3Hr	0.04	93.33	93.58	93.41	93.58	0.000196	0.14	0.28	2.37	0.10
Reach 1-Upper	728	50YrCHI3Hr	0.04	93.33	93.62	93.41	93.62	0.000131	0.13	0.34	2.70	0.08
Reach 1-Upper	728	100YrCHI3Hr	0.05	93.33	93.64	93.42	93.64	0.000117	0.13	0.38	2.90	0.08
Reach 1-Upper	728	2YrSCS24Hr	0.02	93.33	93.51	93.39	93.51	0.000306	0.13	0.19	1.87	0.11
Reach 1-Upper	728	5YrSCS24Hr	0.03	93.33	93.55	93.40	93.55	0.000233	0.13	0.24	2.16	0.10
Reach 1-Upper	728	10YrSCS24Hr	0.04	93.33	93.57	93.41	93.57	0.000202	0.14	0.27	2.34	0.10
Reach 1-Upper	728	25YrSCS24Hr	0.04	93.33	93.62	93.41	93.62	0.000128	0.13	0.35	2.74	0.08
Reach 1-Upper	728	50YrSCS24Hr	0.05	93.33	93.66	93.42	93.66	0.000106	0.12	0.39	2.98	0.08
Reach 1-Upper	728	100YrSCS24Hr	0.06	93.33	93.69	93.42	93.69	0.000091	0.12	0.44	3.24	0.07
Reach 1-Upper	715	2YrCHI3Hr	0.02	93.32	93.48	93.36	93.48	0.000151	0.10	0.20	2.44	0.08
Reach 1-Upper	715	5YrCHI3Hr	0.03	93.32	93.52	93.37	93.52	0.000132	0.11	0.26	2.85	0.08
Reach 1-Upper	715	10YrCHI3Hr	0.03	93.32	93.54	93.37	93.54	0.000123	0.11	0.29	3.09	0.08
Reach 1-Upper	715	25YrCHI3Hr	0.04	93.32	93.57	93.38	93.57	0.000112	0.11	0.33	3.38	0.08
Reach 1-Upper	715	50YrCHI3Hr	0.04	93.32	93.62	93.38	93.62	0.000081	0.11	0.39	3.82	0.07
Reach 1-Upper	715	100YrCHI3Hr	0.05	93.32	93.64	93.39	93.64	0.000075	0.11	0.43	4.07	0.06
Reach 1-Upper	715	2YrSCS24Hr	0.02	93.32	93.51	93.36	93.51	0.000138	0.10	0.24	2.70	0.08
Reach 1-Upper	715	5YrSCS24Hr	0.03	93.32	93.54	93.37	93.54	0.000123	0.11	0.29	3.09	0.08
Reach 1-Upper	715	10YrSCS24Hr	0.04	93.32	93.57	93.38	93.57	0.000114	0.11	0.32	3.33	0.08
Reach 1-Upper	715	25YrSCS24Hr	0.04	93.32	93.62	93.39	93.62	0.000080	0.11	0.40	3.86	0.07
Reach 1-Upper	715	50YrSCS24Hr	0.05	93.32	93.65	93.39	93.65	0.000070	0.11	0.44	4.19	0.06
Reach 1-Upper	715	100YrSCS24Hr	0.06	93.32	93.69	93.39	93.69	0.000062	0.11	0.49	4.53	0.06
Reach 1-Upper	705		Culvert									
Reach 1-Upper	698	2YrCHI3Hr	0.02	93.24	93.31	93.29	93.32	0.010647	0.37	0.05	1.15	0.56
Reach 1-Upper	698	5YrCHI3Hr	0.03	93.24	93.31	93.30	93.33	0.018452	0.50	0.05	1.17	0.74
Reach 1-Upper	698	10YrCHI3Hr	0.03	93.24	93.31	93.31	93.33	0.030771	0.62	0.05	1.15	0.95
Reach 1-Upper	698	25YrCHI3Hr	0.04	93.24	93.38	93.31	93.38	0.002195	0.26	0.15	1.67	0.28
Reach 1-Upper	698	50YrCHI3Hr	0.04	93.24	93.51	93.32	93.51	0.000131	0.11	0.41	2.59	0.08
Reach 1-Upper	698	100YrCHI3Hr	0.05	93.24	93.51	93.32	93.51	0.000158	0.12	0.41	2.60	0.09
Reach 1-Upper	698	2YrSCS24Hr	0.02	93.24	93.31	93.30	93.32	0.016098	0.46	0.05	1.16	0.69
Reach 1-Upper	698	5YrSCS24Hr	0.03	93.24	93.31	93.31	93.33	0.033358	0.64	0.05	1.14	0.98
Reach 1-Upper	698	10YrSCS24Hr	0.04	93.24	93.41	93.31	93.41	0.000855	0.18	0.20	1.88	0.18
Reach 1-Upper	698	25YrSCS24Hr	0.04	93.24	93.51	93.32	93.51	0.000135	0.11	0.41	2.59	0.08
Reach 1-Upper	698	50YrSCS24Hr	0.05	93.24	93.51	93.32	93.51	0.000162	0.12	0.41	2.61	0.09
Reach 1-Upper	698	100YrSCS24Hr	0.06	93.24	93.51	93.33	93.52	0.000196	0.13	0.42	2.63	0.10
Reach 1-Upper	681	2YrCHI3Hr	0.02	93.14	93.22	93.19	93.22	0.003726	0.23	0.08	1.65	0.34
Reach 1-Upper	681	5YrCHI3Hr	0.03	93.14	93.24	93.20	93.25	0.001985	0.21	0.13	1.84	0.26
Reach 1-Upper	681	10YrCHI3Hr	0.03	93.14	93.27	93.20	93.27	0.001166	0.19	0.17	2.00	0.21
Reach 1-Upper	681	25YrCHI3Hr	0.04	93.14	93.37	93.20	93.37	0.000122	0.09	0.42	2.74	0.07

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	681	50YrCHI3Hr	0.04	93.14	93.51	93.21	93.51	0.000021	0.05	0.87	4.05	0.03
Reach 1-Upper	681	100YrCHI3Hr	0.05	93.14	93.51	93.21	93.51	0.000026	0.06	0.88	4.08	0.04
Reach 1-Upper	681	2YrSCS24Hr	0.02	93.14	93.24	93.19	93.24	0.002292	0.21	0.11	1.78	0.27
Reach 1-Upper	681	5YrSCS24Hr	0.03	93.14	93.28	93.20	93.28	0.000837	0.17	0.19	2.07	0.18
Reach 1-Upper	681	10YrSCS24Hr	0.04	93.14	93.41	93.20	93.41	0.000067	0.07	0.52	2.97	0.05
Reach 1-Upper	681	25YrSCS24Hr	0.04	93.14	93.51	93.21	93.51	0.000022	0.05	0.87	4.07	0.03
Reach 1-Upper	681	50YrSCS24Hr	0.05	93.14	93.51	93.21	93.51	0.000027	0.06	0.88	4.09	0.04
Reach 1-Upper	681	100YrSCS24Hr	0.06	93.14	93.51	93.22	93.51	0.000033	0.06	0.89	4.13	0.04
Reach 1-Upper	663	2YrCHI3Hr	0.02	93.05	93.19		93.19	0.000887	0.16	0.12	1.35	0.18
Reach 1-Upper	663	5YrCHI3Hr	0.03	93.05	93.22		93.23	0.000652	0.16	0.17	1.60	0.16
Reach 1-Upper	663	10YrCHI3Hr	0.03	93.05	93.25		93.25	0.000460	0.15	0.22	1.80	0.13
Reach 1-Upper	663	25YrCHI3Hr	0.04	93.05	93.37		93.37	0.000079	0.08	0.48	2.67	0.06
Reach 1-Upper	663	50YrCHI3Hr	0.04	93.05	93.51		93.51	0.000018	0.05	0.96	4.41	0.03
Reach 1-Upper	663	100YrCHI3Hr	0.05	93.05	93.51		93.51	0.000022	0.05	0.96	4.44	0.03
Reach 1-Upper	663	2YrSCS24Hr	0.02	93.05	93.22		93.22	0.000662	0.16	0.15	1.54	0.16
Reach 1-Upper	663	5YrSCS24Hr	0.03	93.05	93.27		93.27	0.000342	0.13	0.24	1.90	0.12
Reach 1-Upper	663	10YrSCS24Hr	0.04	93.05	93.40		93.40	0.000049	0.06	0.57	3.04	0.05
Reach 1-Upper	663	25YrSCS24Hr	0.04	93.05	93.51		93.51	0.000019	0.05	0.96	4.42	0.03
Reach 1-Upper	663	50YrSCS24Hr	0.05	93.05	93.51		93.51	0.000023	0.05	0.97	4.46	0.03
Reach 1-Upper	663	100YrSCS24Hr	0.06	93.05	93.51		93.51	0.000028	0.06	0.98	4.50	0.04
Reach 1-Upper	656	2YrCHI3Hr	0.06	93.03	93.15	93.12	93.16	0.007897	0.46	0.13	1.69	0.53
Reach 1-Upper	656	5YrCHI3Hr	0.10	93.03	93.19	93.14	93.20	0.006746	0.51	0.20	1.91	0.51
Reach 1-Upper	656	10YrCHI3Hr	0.13	93.03	93.23	93.16	93.24	0.004563	0.48	0.27	2.12	0.43
Reach 1-Upper	656	25YrCHI3Hr	0.17	93.03	93.36	93.18	93.37	0.000762	0.28	0.62	2.87	0.19
Reach 1-Upper	656	50YrCHI3Hr	0.20	93.03	93.51	93.19	93.51	0.000191	0.19	1.16	4.64	0.10
Reach 1-Upper	656	100YrCHI3Hr	0.24	93.03	93.51	93.20	93.51	0.000260	0.22	1.17	4.65	0.12
Reach 1-Upper	656	2YrSCS24Hr	0.09	93.03	93.18	93.14	93.19	0.007161	0.50	0.18	1.86	0.52
Reach 1-Upper	656	5YrSCS24Hr	0.14	93.03	93.24	93.17	93.25	0.003570	0.45	0.31	2.22	0.39
Reach 1-Upper	656	10YrSCS24Hr	0.18	93.03	93.40	93.18	93.40	0.000513	0.24	0.73	3.49	0.16
Reach 1-Upper	656	25YrSCS24Hr	0.22	93.03	93.51	93.20	93.51	0.000228	0.21	1.16	4.65	0.11
Reach 1-Upper	656	50YrSCS24Hr	0.26	93.03	93.51	93.21	93.51	0.000307	0.24	1.17	4.66	0.13
Reach 1-Upper	656	100YrSCS24Hr	0.30	93.03	93.51	93.22	93.51	0.000401	0.28	1.17	4.67	0.15
Reach 1-Upper	638	2YrCHI3Hr	0.06	92.92	93.08	93.01	93.08	0.002811	0.33	0.19	1.85	0.33
Reach 1-Upper	638	5YrCHI3Hr	0.10	92.92	93.14	93.04	93.14	0.001935	0.33	0.31	2.24	0.28
Reach 1-Upper	638	10YrCHI3Hr	0.13	92.92	93.19	93.05	93.20	0.001151	0.29	0.45	2.68	0.23
Reach 1-Upper	638	25YrCHI3Hr	0.17	92.92	93.36	93.07	93.36	0.000204	0.17	1.05	4.59	0.10
Reach 1-Upper	638	50YrCHI3Hr	0.20	92.92	93.50	93.08	93.50	0.000071	0.13	1.86	6.83	0.06
Reach 1-Upper	638	100YrCHI3Hr	0.24	92.92	93.50	93.10	93.51	0.000098	0.15	1.86	6.83	0.08
Reach 1-Upper	638	2YrSCS24Hr	0.09	92.92	93.12	93.03	93.12	0.002263	0.34	0.27	2.12	0.30
Reach 1-Upper	638	5YrSCS24Hr	0.14	92.92	93.22	93.06	93.22	0.000920	0.27	0.52	2.92	0.20
Reach 1-Upper	638	10YrSCS24Hr	0.18	92.92	93.40	93.07	93.40	0.000146	0.16	1.22	5.04	0.09
Reach 1-Upper	638	25YrSCS24Hr	0.22	92.92	93.50	93.09	93.51	0.000085	0.14	1.86	6.83	0.07
Reach 1-Upper	638	50YrSCS24Hr	0.26	92.92	93.50	93.10	93.51	0.000115	0.16	1.86	6.84	0.08
Reach 1-Upper	638	100YrSCS24Hr	0.30	92.92	93.50	93.12	93.51	0.000152	0.18	1.87	6.84	0.09
Reach 1-Upper	617	2YrCHI3Hr	0.06	92.84	93.02	92.95	93.02	0.002976	0.32	0.19	2.05	0.33
Reach 1-Upper	617	5YrCHI3Hr	0.10	92.84	93.11	92.98	93.11	0.000952	0.24	0.43	2.97	0.20
Reach 1-Upper	617	10YrCHI3Hr	0.13	92.84	93.18	92.99	93.18	0.000487	0.20	0.66	3.68	0.15
Reach 1-Upper	617	25YrCHI3Hr	0.17	92.84	93.36	93.01	93.36	0.000104	0.11	1.56	6.63	0.07
Reach 1-Upper	617	50YrCHI3Hr	0.20	92.84	93.50	93.02	93.50	0.000032	0.07	2.93	15.16	0.04
Reach 1-Upper	617	100YrCHI3Hr	0.24	92.84	93.50	93.04	93.50	0.000044	0.09	2.93	15.17	0.05
Reach 1-Upper	617	2YrSCS24Hr	0.09	92.84	93.08	92.97	93.09	0.001249	0.26	0.35	2.72	0.23
Reach 1-Upper	617	5YrSCS24Hr	0.14	92.84	93.21	93.00	93.21	0.000388	0.18	0.77	4.08	0.13
Reach 1-Upper	617	10YrSCS24Hr	0.18	92.84	93.39	93.01	93.39	0.000078	0.10	1.82	7.56	0.06
Reach 1-Upper	617	25YrSCS24Hr	0.22	92.84	93.50	93.03	93.50	0.000038	0.08	2.93	15.17	0.05
Reach 1-Upper	617	50YrSCS24Hr	0.26	92.84	93.50	93.04	93.50	0.000052	0.09	2.93	15.17	0.05
Reach 1-Upper	617	100YrSCS24Hr	0.30	92.84	93.50	93.06	93.50	0.000069	0.11	2.93	15.18	0.06
Reach 1-Upper	598	2YrCHI3Hr	0.06	92.76	93.00	92.86	93.00	0.000514	0.18	0.36	2.60	0.15
Reach 1-Upper	598	5YrCHI3Hr	0.11	92.76	93.10	92.89	93.10	0.000269	0.18	0.61	3.40	0.12
Reach 1-Upper	598	10YrCHI3Hr	0.14	92.76	93.18	92.91	93.18	0.000184	0.18	0.80	5.26	0.10
Reach 1-Upper	598	25YrCHI3Hr	0.19	92.76	93.36	92.92	93.36	0.000070	0.15	1.25	8.76	0.07
Reach 1-Upper	598	50YrCHI3Hr	0.22	92.76	93.50	92.94	93.50	0.000018	0.07	4.94	31.21	0.03
Reach 1-Upper	598	100YrCHI3Hr	0.26	92.76	93.50	92.95	93.50	0.000024	0.09	4.94	31.21	0.04
Reach 1-Upper	598	2YrSCS24Hr	0.10	92.76	93.07	92.88	93.08	0.000317	0.18	0.54	3.19	0.12
Reach 1-Upper	598	5YrSCS24Hr	0.15	92.76	93.20	92.91	93.21	0.000160	0.17	0.87	5.82	0.10
Reach 1-Upper	598	10YrSCS24Hr	0.19	92.76	93.39	92.93	93.39	0.000059	0.14	1.34	9.49	0.06
Reach 1-Upper	598	25YrSCS24Hr	0.24	92.76	93.50	92.94	93.50	0.000021	0.08	4.94	31.21	0.04
Reach 1-Upper	598	50YrSCS24Hr	0.28	92.76	93.50	92.96	93.50	0.000029	0.09	4.93	31.21	0.04
Reach 1-Upper	598	100YrSCS24Hr	0.33	92.76	93.50	92.97	93.50	0.000039	0.11	4.93	31.21	0.05
Reach 1-Upper	589		Culvert									
Reach 1-Upper	581	2YrCHI3Hr	0.06	92.71	92.89	92.81	92.89	0.002034	0.27	0.24	2.66	0.28
Reach 1-Upper	581	5YrCHI3Hr	0.11	92.71	92.93	92.84	92.93	0.001970	0.33	0.33	3.40	0.29
Reach 1-Upper	581	10YrCHI3Hr	0.14	92.71	92.96	92.86	92.97	0.001627	0.34	0.41	4.01	0.27
Reach 1-Upper	581	25YrCHI3Hr	0.19	92.71	93.02	92.88	93.03	0.000990	0.33	0.56	5.14	0.22
Reach 1-Upper	581	50YrCHI3Hr	0.22	92.71	93.13	92.89	93.13	0.000386	0.27	0.83	7.07	0.15
Reach 1-Upper	581	100YrCHI3Hr	0.26	92.71	93.25	92.90	93.25	0.000184	0.23	1.13	30.32	0.11
Reach 1-Upper	581	2YrSCS24Hr	0.10	92.71	92.92	92.84	92.92	0.002055	0.32	0.31	3.20	0.29

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	581	5YrSCS24Hr	0.15	92.71	92.97	92.86	92.98	0.001468	0.34	0.44	4.26	0.26
Reach 1-Upper	581	10YrSCS24Hr	0.19	92.71	93.03	92.88	93.04	0.000901	0.32	0.59	5.33	0.21
Reach 1-Upper	581	25YrSCS24Hr	0.24	92.71	93.24	92.89	93.24	0.000175	0.22	1.11	29.51	0.10
Reach 1-Upper	581	50YrSCS24Hr	0.28	92.71	93.25	92.90	93.25	0.000220	0.25	1.13	30.33	0.12
Reach 1-Upper	581	100YrSCS24Hr	0.33	92.71	93.25	92.91	93.25	0.000294	0.29	1.13	30.33	0.14
Reach 1-Upper	572	2YrCHI3Hr	0.06	92.73	92.85	92.82	92.86	0.008674	0.45	0.14	2.02	0.54
Reach 1-Upper	572	5YrCHI3Hr	0.11	92.73	92.90	92.84	92.90	0.004896	0.43	0.26	2.58	0.43
Reach 1-Upper	572	10YrCHI3Hr	0.14	92.73	92.94	92.86	92.94	0.002847	0.38	0.38	3.03	0.34
Reach 1-Upper	572	25YrCHI3Hr	0.19	92.73	93.01	92.87	93.01	0.001251	0.30	0.62	3.87	0.24
Reach 1-Upper	572	50YrCHI3Hr	0.22	92.73	93.12	92.88	93.12	0.000367	0.19	1.14	5.93	0.13
Reach 1-Upper	572	100YrCHI3Hr	0.26	92.73	93.25	92.90	93.25	0.000064	0.10	4.09	35.88	0.06
Reach 1-Upper	572	2YrSCS24Hr	0.10	92.73	92.88	92.84	92.89	0.005817	0.44	0.22	2.44	0.46
Reach 1-Upper	572	5YrSCS24Hr	0.15	92.73	92.95	92.86	92.96	0.002326	0.36	0.43	3.23	0.31
Reach 1-Upper	572	10YrSCS24Hr	0.19	92.73	93.02	92.88	93.03	0.001095	0.28	0.67	4.01	0.22
Reach 1-Upper	572	25YrSCS24Hr	0.24	92.73	93.24	92.89	93.24	0.000067	0.10	3.72	33.49	0.06
Reach 1-Upper	572	50YrSCS24Hr	0.28	92.73	93.25	92.90	93.25	0.000076	0.11	4.10	35.90	0.06
Reach 1-Upper	572	100YrSCS24Hr	0.33	92.73	93.25	92.92	93.25	0.000102	0.13	4.10	35.94	0.07
Reach 1-Upper	555	2YrCHI3Hr	0.06	92.61	92.81	92.71	92.81	0.000982	0.20	0.32	2.99	0.20
Reach 1-Upper	555	5YrCHI3Hr	0.11	92.61	92.87	92.74	92.87	0.000748	0.21	0.52	3.73	0.18
Reach 1-Upper	555	10YrCHI3Hr	0.14	92.61	92.92	92.75	92.92	0.000505	0.19	0.73	4.38	0.15
Reach 1-Upper	555	25YrCHI3Hr	0.19	92.61	93.00	92.77	93.00	0.000277	0.17	1.12	5.37	0.12
Reach 1-Upper	555	50YrCHI3Hr	0.22	92.61	93.12	92.78	93.12	0.000080	0.11	2.69	31.73	0.07
Reach 1-Upper	555	100YrCHI3Hr	0.26	92.61	93.25	92.79	93.25	0.000015	0.06	7.39	40.94	0.03
Reach 1-Upper	555	2YrSCS24Hr	0.10	92.61	92.85	92.73	92.86	0.000843	0.21	0.46	3.51	0.19
Reach 1-Upper	555	5YrSCS24Hr	0.15	92.61	92.94	92.76	92.94	0.000435	0.19	0.82	4.62	0.14
Reach 1-Upper	555	10YrSCS24Hr	0.19	92.61	93.02	92.77	93.02	0.000251	0.16	1.19	5.53	0.11
Reach 1-Upper	555	25YrSCS24Hr	0.24	92.61	93.24	92.79	93.24	0.000016	0.06	6.96	40.67	0.03
Reach 1-Upper	555	50YrSCS24Hr	0.28	92.61	93.25	92.80	93.25	0.000018	0.07	7.39	40.94	0.03
Reach 1-Upper	555	100YrSCS24Hr	0.33	92.61	93.25	92.81	93.25	0.000025	0.08	7.39	40.94	0.04
Reach 1-Upper	534	2YrCHI3Hr	0.06	92.59	92.79	92.69	92.79	0.001542	0.25	0.26	2.47	0.24
Reach 1-Upper	534	5YrCHI3Hr	0.11	92.59	92.85	92.72	92.86	0.001007	0.24	0.46	3.30	0.21
Reach 1-Upper	534	10YrCHI3Hr	0.14	92.59	92.91	92.74	92.91	0.000612	0.21	0.68	6.64	0.17
Reach 1-Upper	534	25YrCHI3Hr	0.19	92.59	93.00	92.76	93.00	0.000148	0.12	2.58	34.75	0.09
Reach 1-Upper	534	50YrCHI3Hr	0.22	92.59	93.12	92.77	93.12	0.000015	0.05	8.09	50.92	0.03
Reach 1-Upper	534	100YrCHI3Hr	0.26	92.59	93.25	92.78	93.25	0.000003	0.03	14.61	51.39	0.01
Reach 1-Upper	534	2YrSCS24Hr	0.10	92.59	92.83	92.71	92.84	0.001197	0.25	0.39	3.05	0.22
Reach 1-Upper	534	5YrSCS24Hr	0.15	92.59	92.93	92.74	92.93	0.000491	0.20	0.89	13.42	0.15
Reach 1-Upper	534	10YrSCS24Hr	0.19	92.59	93.01	92.76	93.01	0.000110	0.11	3.08	38.60	0.07
Reach 1-Upper	534	25YrSCS24Hr	0.24	92.59	93.24	92.78	93.24	0.000003	0.03	14.06	51.35	0.01
Reach 1-Upper	534	50YrSCS24Hr	0.28	92.59	93.25	92.79	93.25	0.000004	0.03	14.61	51.39	0.02
Reach 1-Upper	534	100YrSCS24Hr	0.33	92.59	93.25	92.80	93.25	0.000005	0.04	14.61	51.39	0.02
Reach 1-Upper	510	2YrCHI3Hr	0.06	92.60	92.72	92.68	92.73	0.004446	0.41	0.16	2.77	0.41
Reach 1-Upper	510	5YrCHI3Hr	0.11	92.60	92.82	92.70	92.83	0.001169	0.34	0.32	4.18	0.24
Reach 1-Upper	510	10YrCHI3Hr	0.14	92.60	92.89	92.71	92.90	0.000746	0.33	0.43	5.14	0.20
Reach 1-Upper	510	25YrCHI3Hr	0.19	92.60	92.99	92.73	92.99	0.000465	0.32	0.59	11.84	0.17
Reach 1-Upper	510	50YrCHI3Hr	0.22	92.60	93.11	92.75	93.12	0.000243	0.28	0.79	109.05	0.13
Reach 1-Upper	510	100YrCHI3Hr	0.26	92.60	93.25	92.76	93.25	0.000000	0.01	42.37	109.53	0.00
Reach 1-Upper	510	2YrSCS24Hr	0.10	92.60	92.80	92.69	92.80	0.001471	0.34	0.28	3.82	0.26
Reach 1-Upper	510	5YrSCS24Hr	0.15	92.60	92.91	92.72	92.92	0.000658	0.32	0.47	5.55	0.19
Reach 1-Upper	510	10YrSCS24Hr	0.19	92.60	93.00	92.73	93.01	0.000435	0.31	0.61	13.01	0.16
Reach 1-Upper	510	25YrSCS24Hr	0.24	92.60	93.24	92.75	93.24	0.000000	0.01	41.20	109.49	0.00
Reach 1-Upper	510	50YrSCS24Hr	0.28	92.60	93.25	92.77	93.25	0.000000	0.01	42.37	109.53	0.00
Reach 1-Upper	510	100YrSCS24Hr	0.33	92.60	93.25	92.78	93.25	0.000000	0.01	42.37	109.53	0.01
Reach 1-Upper	505		Culvert									
Reach 1-Upper	502	2YrCHI3Hr	0.07	92.49	92.61	92.57	92.62	0.007737	0.51	0.14	2.26	0.54
Reach 1-Upper	502	5YrCHI3Hr	0.12	92.49	92.65	92.60	92.67	0.006529	0.60	0.20	2.74	0.53
Reach 1-Upper	502	10YrCHI3Hr	0.16	92.49	92.67	92.62	92.70	0.006103	0.66	0.24	3.03	0.52
Reach 1-Upper	502	25YrCHI3Hr	0.21	92.49	92.72	92.64	92.74	0.004564	0.67	0.31	3.72	0.47
Reach 1-Upper	502	50YrCHI3Hr	0.25	92.49	92.80	92.65	92.82	0.002112	0.57	0.43	5.24	0.34
Reach 1-Upper	502	100YrCHI3Hr	0.29	92.49	92.93	92.67	92.94	0.000855	0.47	0.63	7.55	0.23
Reach 1-Upper	502	2YrSCS24Hr	0.11	92.49	92.64	92.59	92.65	0.006707	0.58	0.19	2.62	0.53
Reach 1-Upper	502	5YrSCS24Hr	0.17	92.49	92.68	92.62	92.71	0.005738	0.66	0.26	3.15	0.51
Reach 1-Upper	502	10YrSCS24Hr	0.22	92.49	92.73	92.64	92.75	0.004158	0.66	0.33	3.95	0.45
Reach 1-Upper	502	25YrSCS24Hr	0.27	92.49	92.87	92.66	92.88	0.001286	0.51	0.53	6.24	0.27
Reach 1-Upper	502	50YrSCS24Hr	0.32	92.49	93.02	92.68	93.03	0.000528	0.42	0.76	104.88	0.19
Reach 1-Upper	502	100YrSCS24Hr	0.37	92.49	93.23	92.70	93.24	0.000228	0.34	1.08	105.45	0.13
Reach 1-Upper	493	2YrCHI3Hr	0.07	92.34	92.61	92.42	92.61	0.000133	0.10	0.75	4.68	0.08
Reach 1-Upper	493	5YrCHI3Hr	0.12	92.34	92.65	92.45	92.65	0.000201	0.13	0.96	5.45	0.10
Reach 1-Upper	493	10YrCHI3Hr	0.16	92.34	92.68	92.46	92.68	0.000231	0.14	1.12	5.93	0.10
Reach 1-Upper	493	25YrCHI3Hr	0.21	92.34	92.73	92.47	92.73	0.000214	0.15	1.42	6.71	0.10
Reach 1-Upper	493	50YrCHI3Hr	0.25	92.34	92.81	92.49	92.81	0.000122	0.12	2.01	8.05	0.08
Reach 1-Upper	493	100YrCHI3Hr	0.29	92.34	92.94	92.50	92.94	0.000003	0.02	22.75	101.14	0.01
Reach 1-Upper	493	2YrSCS24Hr	0.11	92.34	92.64	92.44	92.64	0.000184	0.12	0.90	5.25	0.09
Reach 1-Upper	493	5YrSCS24Hr	0.17	92.34	92.69	92.46	92.69	0.000232	0.14	1.18	6.13	0.11
Reach 1-Upper	493	10YrSCS24Hr	0.22	92.34	92.74	92.48	92.74	0.000200	0.15	1.49	6.81	0.10
Reach 1-Upper	493	25YrSCS24Hr	0.27	92.34	92.87	92.49	92.87	0.000073	0.11	2.58	9.70	0.06

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	493	50YrSCS24Hr	0.32	92.34	93.03	92.50	93.03	0.000001	0.02	31.90	101.53	0.01
Reach 1-Upper	493	100YrSCS24Hr	0.37	92.34	93.23	92.52	93.23	0.000000	0.01	52.95	102.61	0.00
Reach 1-Upper	474	2YrCHI3Hr	0.07	92.41	92.60	92.50	92.60	0.000597	0.15	0.49	5.07	0.15
Reach 1-Upper	474	5YrCHI3Hr	0.12	92.41	92.64	92.53	92.65	0.000602	0.17	0.72	5.95	0.16
Reach 1-Upper	474	10YrCHI3Hr	0.16	92.41	92.67	92.54	92.67	0.000570	0.18	0.88	6.52	0.16
Reach 1-Upper	474	25YrCHI3Hr	0.21	92.41	92.72	92.55	92.72	0.000404	0.17	1.23	7.58	0.13
Reach 1-Upper	474	50YrCHI3Hr	0.25	92.41	92.81	92.56	92.81	0.000152	0.13	1.98	11.32	0.09
Reach 1-Upper	474	100YrCHI3Hr	0.29	92.41	92.94	92.57	92.94	0.000001	0.01	34.63	91.93	0.01
Reach 1-Upper	474	2YrSCS24Hr	0.11	92.41	92.63	92.52	92.64	0.000604	0.16	0.66	5.73	0.16
Reach 1-Upper	474	5YrSCS24Hr	0.17	92.41	92.68	92.54	92.68	0.000532	0.18	0.96	6.77	0.15
Reach 1-Upper	474	10YrSCS24Hr	0.22	92.41	92.73	92.56	92.73	0.000363	0.16	1.31	7.81	0.13
Reach 1-Upper	474	25YrSCS24Hr	0.27	92.41	92.87	92.57	92.87	0.000001	0.01	28.89	91.64	0.01
Reach 1-Upper	474	50YrSCS24Hr	0.32	92.41	93.03	92.58	93.03	0.000000	0.01	42.95	92.33	0.00
Reach 1-Upper	474	100YrSCS24Hr	0.37	92.41	93.23	92.59	93.23	0.000000	0.01	62.09	93.27	0.00
Reach 1-Upper	454	2YrCHI3Hr	0.07	92.44	92.58	92.51	92.59	0.001604	0.25	0.29	2.89	0.25
Reach 1-Upper	454	5YrCHI3Hr	0.12	92.44	92.62	92.53	92.63	0.001687	0.29	0.42	3.32	0.26
Reach 1-Upper	454	10YrCHI3Hr	0.16	92.44	92.65	92.54	92.66	0.001616	0.31	0.51	3.60	0.26
Reach 1-Upper	454	25YrCHI3Hr	0.21	92.44	92.70	92.56	92.71	0.001084	0.29	0.72	4.18	0.22
Reach 1-Upper	454	50YrCHI3Hr	0.25	92.44	92.80	92.57	92.80	0.000421	0.22	1.17	5.42	0.14
Reach 1-Upper	454	100YrCHI3Hr	0.29	92.44	92.94	92.58	92.94	0.000003	0.02	20.32	83.17	0.01
Reach 1-Upper	454	2YrSCS24Hr	0.11	92.44	92.61	92.52	92.62	0.001708	0.28	0.38	3.20	0.26
Reach 1-Upper	454	5YrSCS24Hr	0.17	92.44	92.66	92.55	92.67	0.001485	0.31	0.56	3.74	0.25
Reach 1-Upper	454	10YrSCS24Hr	0.22	92.44	92.72	92.56	92.72	0.000949	0.28	0.77	4.30	0.21
Reach 1-Upper	454	25YrSCS24Hr	0.27	92.44	92.87	92.58	92.87	0.000007	0.03	15.12	82.99	0.02
Reach 1-Upper	454	50YrSCS24Hr	0.32	92.44	93.03	92.59	93.03	0.000001	0.02	27.84	83.45	0.01
Reach 1-Upper	454	100YrSCS24Hr	0.37	92.44	93.23	92.60	93.23	0.000000	0.01	45.11	84.07	0.01
Reach 1-Upper	434	2YrCHI3Hr	0.07	92.42	92.54	92.49	92.54	0.003131	0.30	0.24	2.93	0.33
Reach 1-Upper	434	5YrCHI3Hr	0.12	92.42	92.58	92.51	92.59	0.002184	0.32	0.39	3.35	0.30
Reach 1-Upper	434	10YrCHI3Hr	0.16	92.42	92.61	92.52	92.62	0.001764	0.32	0.50	3.63	0.27
Reach 1-Upper	434	25YrCHI3Hr	0.21	92.42	92.70	92.53	92.70	0.000136	0.10	3.47	39.92	0.08
Reach 1-Upper	434	50YrCHI3Hr	0.25	92.42	92.80	92.55	92.80	0.000022	0.05	9.17	73.84	0.03
Reach 1-Upper	434	100YrCHI3Hr	0.29	92.42	92.94	92.56	92.94	0.000003	0.03	19.34	74.32	0.01
Reach 1-Upper	434	2YrSCS24Hr	0.11	92.42	92.57	92.50	92.57	0.002416	0.31	0.34	3.23	0.31
Reach 1-Upper	434	5YrSCS24Hr	0.17	92.42	92.63	92.52	92.64	0.001606	0.31	0.56	4.00	0.26
Reach 1-Upper	434	10YrSCS24Hr	0.22	92.42	92.71	92.54	92.71	0.000108	0.09	4.02	43.59	0.07
Reach 1-Upper	434	25YrSCS24Hr	0.27	92.42	92.87	92.55	92.87	0.000006	0.03	14.69	74.10	0.02
Reach 1-Upper	434	50YrSCS24Hr	0.32	92.42	93.03	92.56	93.03	0.000001	0.02	26.07	74.63	0.01
Reach 1-Upper	434	100YrSCS24Hr	0.37	92.42	93.23	92.57	93.23	0.000000	0.01	41.53	75.37	0.01
Reach 1-Upper	416	2YrCHI3Hr	0.07	92.34	92.52	92.42	92.52	0.000594	0.15	0.47	4.81	0.15
Reach 1-Upper	416	5YrCHI3Hr	0.12	92.34	92.57	92.45	92.57	0.000421	0.17	0.75	5.85	0.14
Reach 1-Upper	416	10YrCHI3Hr	0.16	92.34	92.61	92.46	92.61	0.000173	0.13	2.14	28.43	0.09
Reach 1-Upper	416	25YrCHI3Hr	0.21	92.34	92.70	92.47	92.70	0.000038	0.08	4.95	34.66	0.05
Reach 1-Upper	416	50YrCHI3Hr	0.25	92.34	92.80	92.48	92.80	0.000012	0.05	8.86	43.80	0.03
Reach 1-Upper	416	100YrCHI3Hr	0.29	92.34	92.94	92.49	92.94	0.000004	0.04	16.28	66.50	0.02
Reach 1-Upper	416	2YrSCS24Hr	0.11	92.34	92.56	92.44	92.56	0.000460	0.17	0.67	5.57	0.14
Reach 1-Upper	416	5YrSCS24Hr	0.17	92.34	92.63	92.46	92.63	0.000124	0.11	2.65	29.68	0.08
Reach 1-Upper	416	10YrSCS24Hr	0.22	92.34	92.71	92.47	92.71	0.000032	0.07	5.42	35.57	0.04
Reach 1-Upper	416	25YrSCS24Hr	0.27	92.34	92.87	92.49	92.87	0.000006	0.04	12.48	53.40	0.02
Reach 1-Upper	416	50YrSCS24Hr	0.32	92.34	93.03	92.49	93.03	0.000002	0.03	22.33	67.07	0.01
Reach 1-Upper	416	100YrSCS24Hr	0.37	92.34	93.23	92.50	93.23	0.000001	0.02	36.24	67.81	0.01
Reach 1-Upper	398	2YrCHI3Hr	0.07	92.28	92.50	92.40	92.51	0.000938	0.22	0.33	2.54	0.20
Reach 1-Upper	398	5YrCHI3Hr	0.12	92.28	92.56	92.42	92.56	0.000913	0.26	0.48	2.86	0.20
Reach 1-Upper	398	10YrCHI3Hr	0.16	92.28	92.60	92.44	92.61	0.000768	0.26	0.61	3.13	0.19
Reach 1-Upper	398	25YrCHI3Hr	0.21	92.28	92.70	92.46	92.70	0.000401	0.23	0.93	4.03	0.14
Reach 1-Upper	398	50YrCHI3Hr	0.25	92.28	92.80	92.47	92.80	0.000150	0.16	2.51	35.14	0.09
Reach 1-Upper	398	100YrCHI3Hr	0.29	92.28	92.94	92.48	92.94	0.000018	0.07	9.30	58.44	0.03
Reach 1-Upper	398	2YrSCS24Hr	0.11	92.28	92.54	92.42	92.55	0.000934	0.25	0.43	2.78	0.20
Reach 1-Upper	398	5YrSCS24Hr	0.17	92.28	92.62	92.44	92.62	0.000689	0.26	0.67	3.24	0.18
Reach 1-Upper	398	10YrSCS24Hr	0.22	92.28	92.71	92.46	92.71	0.000365	0.22	0.99	4.50	0.14
Reach 1-Upper	398	25YrSCS24Hr	0.27	92.28	92.87	92.48	92.87	0.000042	0.10	5.90	48.09	0.05
Reach 1-Upper	398	50YrSCS24Hr	0.32	92.28	93.03	92.49	93.03	0.000006	0.04	14.60	58.70	0.02
Reach 1-Upper	398	100YrSCS24Hr	0.37	92.28	93.23	92.50	93.23	0.000001	0.02	26.77	59.29	0.01
Reach 1-Upper	383	2YrCHI3Hr	0.07	92.34	92.47	92.42	92.48	0.004360	0.39	0.19	1.94	0.40
Reach 1-Upper	383	5YrCHI3Hr	0.12	92.34	92.53	92.45	92.54	0.002848	0.39	0.31	2.30	0.34
Reach 1-Upper	383	10YrCHI3Hr	0.16	92.34	92.58	92.46	92.59	0.001812	0.36	0.43	2.59	0.28
Reach 1-Upper	383	25YrCHI3Hr	0.21	92.34	92.69	92.48	92.69	0.000720	0.28	0.74	3.18	0.19
Reach 1-Upper	383	50YrCHI3Hr	0.25	92.34	92.79	92.50	92.80	0.000334	0.22	1.11	3.78	0.13
Reach 1-Upper	383	100YrCHI3Hr	0.29	92.34	92.93	92.51	92.94	0.000138	0.17	1.71	4.83	0.09
Reach 1-Upper	383	2YrSCS24Hr	0.11	92.34	92.51	92.44	92.52	0.003235	0.40	0.27	2.21	0.36
Reach 1-Upper	383	5YrSCS24Hr	0.17	92.34	92.60	92.47	92.61	0.001493	0.35	0.49	2.71	0.26
Reach 1-Upper	383	10YrSCS24Hr	0.22	92.34	92.70	92.49	92.70	0.000650	0.28	0.78	3.26	0.18
Reach 1-Upper	383	25YrSCS24Hr	0.27	92.34	92.87	92.51	92.87	0.000205	0.19	1.42	4.21	0.11
Reach 1-Upper	383	50YrSCS24Hr	0.32	92.34	93.03	92.52	93.03	0.000014	0.06	10.30	51.61	0.03
Reach 1-Upper	383	100YrSCS24Hr	0.37	92.34	93.23	92.53	93.23	0.000002	0.03	21.02	52.21	0.01
Reach 1-Upper	364	2YrCHI3Hr	0.07	92.23	92.43	92.33	92.44	0.001347	0.27	0.27	2.04	0.23
Reach 1-Upper	364	5YrCHI3Hr	0.12	92.23	92.50	92.36	92.51	0.001091	0.29	0.42	2.38	0.22

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	364	10YrCHI3Hr	0.16	92.23	92.56	92.38	92.57	0.000763	0.28	0.57	2.68	0.19
Reach 1-Upper	364	25YrCHI3Hr	0.21	92.23	92.68	92.40	92.68	0.000366	0.23	0.92	3.24	0.14
Reach 1-Upper	364	50YrCHI3Hr	0.25	92.23	92.79	92.41	92.79	0.000203	0.19	1.31	3.88	0.11
Reach 1-Upper	364	100YrCHI3Hr	0.29	92.23	92.93	92.43	92.93	0.000094	0.15	1.98	5.87	0.07
Reach 1-Upper	364	2YrSCS24Hr	0.11	92.23	92.48	92.35	92.49	0.001191	0.29	0.37	2.28	0.23
Reach 1-Upper	364	5YrSCS24Hr	0.17	92.23	92.59	92.38	92.59	0.000655	0.27	0.64	2.80	0.18
Reach 1-Upper	364	10YrSCS24Hr	0.22	92.23	92.69	92.40	92.70	0.000339	0.22	0.97	3.32	0.13
Reach 1-Upper	364	25YrSCS24Hr	0.27	92.23	92.87	92.42	92.87	0.000135	0.17	1.64	4.67	0.09
Reach 1-Upper	364	50YrSCS24Hr	0.32	92.23	93.03	92.44	93.03	0.000033	0.10	5.95	44.01	0.05
Reach 1-Upper	364	100YrSCS24Hr	0.37	92.23	93.23	92.45	93.23	0.000005	0.04	15.12	44.59	0.02
Reach 1-Upper	347	2YrCHI3Hr	0.07	92.26	92.41	92.33	92.41	0.001311	0.25	0.29	2.48	0.23
Reach 1-Upper	347	5YrCHI3Hr	0.12	92.26	92.49	92.35	92.49	0.000799	0.25	0.49	2.81	0.19
Reach 1-Upper	347	10YrCHI3Hr	0.16	92.26	92.55	92.36	92.56	0.000505	0.23	0.69	3.09	0.16
Reach 1-Upper	347	25YrCHI3Hr	0.21	92.26	92.67	92.38	92.68	0.000235	0.19	1.09	3.61	0.11
Reach 1-Upper	347	50YrCHI3Hr	0.25	92.26	92.79	92.39	92.79	0.000131	0.16	1.52	4.09	0.09
Reach 1-Upper	347	100YrCHI3Hr	0.29	92.26	92.93	92.41	92.93	0.000067	0.13	2.17	5.17	0.06
Reach 1-Upper	347	2YrSCS24Hr	0.11	92.26	92.46	92.34	92.47	0.000924	0.25	0.43	2.71	0.20
Reach 1-Upper	347	5YrSCS24Hr	0.17	92.26	92.58	92.37	92.58	0.000426	0.22	0.77	3.20	0.14
Reach 1-Upper	347	10YrSCS24Hr	0.22	92.26	92.69	92.38	92.69	0.000218	0.19	1.15	3.67	0.11
Reach 1-Upper	347	25YrSCS24Hr	0.27	92.26	92.87	92.40	92.87	0.000091	0.15	1.87	4.46	0.07
Reach 1-Upper	347	50YrSCS24Hr	0.32	92.26	93.03	92.41	93.03	0.000042	0.12	2.84	10.46	0.05
Reach 1-Upper	347	100YrSCS24Hr	0.37	92.26	93.23	92.43	93.23	0.000008	0.06	10.68	37.82	0.02
Reach 1-Upper	328	2YrCHI3Hr	0.07	92.20	92.38	92.29	92.38	0.001752	0.30	0.24	1.87	0.27
Reach 1-Upper	328	5YrCHI3Hr	0.12	92.20	92.47	92.32	92.47	0.001008	0.29	0.42	2.25	0.21
Reach 1-Upper	328	10YrCHI3Hr	0.16	92.20	92.54	92.33	92.54	0.000638	0.26	0.60	2.55	0.17
Reach 1-Upper	328	25YrCHI3Hr	0.21	92.20	92.67	92.36	92.67	0.000304	0.22	0.95	3.08	0.13
Reach 1-Upper	328	50YrCHI3Hr	0.25	92.20	92.78	92.37	92.78	0.000178	0.19	1.34	3.69	0.10
Reach 1-Upper	328	100YrCHI3Hr	0.29	92.20	92.93	92.39	92.93	0.000093	0.15	1.96	4.66	0.07
Reach 1-Upper	328	2YrSCS24Hr	0.11	92.20	92.44	92.31	92.45	0.001172	0.29	0.37	2.14	0.23
Reach 1-Upper	328	5YrSCS24Hr	0.17	92.20	92.57	92.34	92.57	0.000541	0.26	0.67	2.67	0.16
Reach 1-Upper	328	10YrSCS24Hr	0.22	92.20	92.68	92.36	92.69	0.000283	0.22	1.00	3.14	0.12
Reach 1-Upper	328	25YrSCS24Hr	0.27	92.20	92.86	92.38	92.87	0.000127	0.16	1.67	4.31	0.08
Reach 1-Upper	328	50YrSCS24Hr	0.32	92.20	93.02	92.40	93.02	0.000064	0.13	2.44	5.46	0.06
Reach 1-Upper	328	100YrSCS24Hr	0.37	92.20	93.23	92.41	93.23	0.000014	0.07	8.02	29.79	0.03
Reach 1-Upper	306	2YrCHI3Hr	0.07	92.07	92.36	92.19	92.36	0.000723	0.26	0.28	1.53	0.18
Reach 1-Upper	306	5YrCHI3Hr	0.12	92.07	92.45	92.22	92.45	0.000687	0.30	0.40	1.84	0.18
Reach 1-Upper	306	10YrCHI3Hr	0.16	92.07	92.53	92.25	92.53	0.000564	0.31	0.51	2.11	0.17
Reach 1-Upper	306	25YrCHI3Hr	0.21	92.07	92.66	92.27	92.66	0.000340	0.29	0.71	2.60	0.14
Reach 1-Upper	306	50YrCHI3Hr	0.25	92.07	92.78	92.29	92.78	0.000232	0.28	0.89	3.10	0.12
Reach 1-Upper	306	100YrCHI3Hr	0.29	92.07	92.92	92.31	92.93	0.000151	0.26	1.11	3.98	0.10
Reach 1-Upper	306	2YrSCS24Hr	0.11	92.07	92.42	92.22	92.43	0.000711	0.29	0.37	1.75	0.18
Reach 1-Upper	306	5YrSCS24Hr	0.17	92.07	92.56	92.26	92.56	0.000514	0.31	0.56	2.21	0.16
Reach 1-Upper	306	10YrSCS24Hr	0.22	92.07	92.67	92.28	92.68	0.000325	0.29	0.74	2.67	0.13
Reach 1-Upper	306	25YrSCS24Hr	0.27	92.07	92.86	92.31	92.86	0.000182	0.27	1.01	3.45	0.11
Reach 1-Upper	306	50YrSCS24Hr	0.32	92.07	93.02	92.32	93.02	0.000121	0.25	1.25	4.84	0.09
Reach 1-Upper	306	100YrSCS24Hr	0.37	92.07	93.23	92.34	93.23	0.000077	0.24	1.57	20.82	0.07
Reach 1-Upper	300		Culvert									
Reach 1-Upper	294	2YrCHI3Hr	0.07	92.15	92.32	92.23	92.33	0.001574	0.32	0.23	2.11	0.26
Reach 1-Upper	294	5YrCHI3Hr	0.12	92.15	92.37	92.26	92.38	0.001843	0.41	0.30	2.35	0.30
Reach 1-Upper	294	10YrCHI3Hr	0.16	92.15	92.39	92.27	92.40	0.002090	0.48	0.33	2.47	0.32
Reach 1-Upper	294	25YrCHI3Hr	0.21	92.15	92.42	92.30	92.44	0.002418	0.56	0.38	2.62	0.35
Reach 1-Upper	294	50YrCHI3Hr	0.25	92.15	92.44	92.31	92.46	0.002632	0.61	0.41	2.73	0.37
Reach 1-Upper	294	100YrCHI3Hr	0.29	92.15	92.46	92.33	92.49	0.002788	0.66	0.44	2.84	0.39
Reach 1-Upper	294	2YrSCS24Hr	0.11	92.15	92.36	92.25	92.36	0.001772	0.39	0.28	2.29	0.29
Reach 1-Upper	294	5YrSCS24Hr	0.17	92.15	92.40	92.28	92.41	0.002190	0.50	0.34	2.51	0.33
Reach 1-Upper	294	10YrSCS24Hr	0.22	92.15	92.42	92.30	92.44	0.002481	0.57	0.38	2.64	0.36
Reach 1-Upper	294	25YrSCS24Hr	0.27	92.15	92.45	92.32	92.48	0.002750	0.64	0.43	2.79	0.39
Reach 1-Upper	294	50YrSCS24Hr	0.32	92.15	92.48	92.34	92.50	0.002924	0.70	0.46	2.90	0.40
Reach 1-Upper	294	100YrSCS24Hr	0.37	92.15	92.50	92.35	92.53	0.003160	0.76	0.49	3.01	0.42
Reach 1-Upper	279	2YrCHI3Hr	0.09	92.08	92.21	92.21	92.25	0.030968	0.83	0.10	1.54	1.01
Reach 1-Upper	279	5YrCHI3Hr	0.15	92.08	92.25	92.24	92.29	0.025757	0.90	0.16	1.85	0.97
Reach 1-Upper	279	10YrCHI3Hr	0.20	92.08	92.28		92.32	0.017921	0.87	0.23	2.03	0.83
Reach 1-Upper	279	25YrCHI3Hr	0.26	92.08	92.31		92.35	0.013590	0.86	0.30	2.25	0.75
Reach 1-Upper	279	50YrCHI3Hr	0.31	92.08	92.34		92.38	0.011935	0.87	0.36	2.40	0.71
Reach 1-Upper	279	100YrCHI3Hr	0.37	92.08	92.36		92.40	0.010878	0.88	0.42	2.54	0.69
Reach 1-Upper	279	2YrSCS24Hr	0.13	92.08	92.24	92.24	92.28	0.028026	0.89	0.15	1.77	1.00
Reach 1-Upper	279	5YrSCS24Hr	0.21	92.08	92.29		92.33	0.016973	0.87	0.24	2.08	0.82
Reach 1-Upper	279	10YrSCS24Hr	0.27	92.08	92.32		92.36	0.013275	0.86	0.31	2.27	0.74
Reach 1-Upper	279	25YrSCS24Hr	0.34	92.08	92.35		92.39	0.011320	0.87	0.39	2.47	0.70
Reach 1-Upper	279	50YrSCS24Hr	0.40	92.08	92.38		92.42	0.010426	0.89	0.45	2.61	0.68
Reach 1-Upper	279	100YrSCS24Hr	0.47	92.08	92.40		92.44	0.009682	0.90	0.52	2.76	0.67
Reach 1-Upper	277	2YrCHI3Hr	0.09	91.95	92.21		92.21	0.000715	0.22	0.40	2.73	0.18
Reach 1-Upper	277	5YrCHI3Hr	0.15	91.95	92.26		92.26	0.000859	0.28	0.55	3.02	0.20
Reach 1-Upper	277	10YrCHI3Hr	0.20	91.95	92.29		92.29	0.000926	0.32	0.64	3.19	0.21
Reach 1-Upper	277	25YrCHI3Hr	0.26	91.95	92.32		92.33	0.000998	0.37	0.75	3.39	0.23
Reach 1-Upper	277	50YrCHI3Hr	0.31	91.95	92.35		92.36	0.001055	0.40	0.84	3.52	0.24

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	277	100YrCHI3Hr	0.37	91.95	92.37		92.38	0.001115	0.43	0.92	3.65	0.25
Reach 1-Upper	277	2YrSCS24Hr	0.13	91.95	92.25		92.25	0.000829	0.26	0.51	2.95	0.20
Reach 1-Upper	277	5YrSCS24Hr	0.21	91.95	92.30		92.30	0.000956	0.33	0.66	3.23	0.22
Reach 1-Upper	277	10YrSCS24Hr	0.27	91.95	92.33		92.34	0.001007	0.37	0.77	3.41	0.23
Reach 1-Upper	277	25YrSCS24Hr	0.34	91.95	92.36		92.37	0.001088	0.42	0.88	3.60	0.24
Reach 1-Upper	277	50YrSCS24Hr	0.40	91.95	92.39		92.40	0.001147	0.45	0.97	3.73	0.25
Reach 1-Upper	277	100YrSCS24Hr	0.47	91.95	92.41		92.42	0.001203	0.48	1.06	3.86	0.26
Reach 1-Upper	270	2YrCHI3Hr	0.09	92.03	92.20		92.20	0.001702	0.28	0.31	2.65	0.26
Reach 1-Upper	270	5YrCHI3Hr	0.15	92.03	92.25		92.26	0.001752	0.33	0.45	3.08	0.28
Reach 1-Upper	270	10YrCHI3Hr	0.20	92.03	92.28		92.29	0.001743	0.36	0.54	3.36	0.28
Reach 1-Upper	270	25YrCHI3Hr	0.26	92.03	92.31		92.32	0.001731	0.40	0.67	3.69	0.29
Reach 1-Upper	270	50YrCHI3Hr	0.31	92.03	92.34		92.35	0.001733	0.42	0.76	3.96	0.29
Reach 1-Upper	270	100YrCHI3Hr	0.37	92.03	92.36		92.37	0.001677	0.44	0.86	4.77	0.29
Reach 1-Upper	270	2YrSCS24Hr	0.13	92.03	92.24		92.24	0.001762	0.32	0.41	2.96	0.27
Reach 1-Upper	270	5YrSCS24Hr	0.21	92.03	92.29		92.29	0.001769	0.37	0.57	3.43	0.28
Reach 1-Upper	270	10YrSCS24Hr	0.27	92.03	92.32		92.33	0.001732	0.40	0.68	3.72	0.29
Reach 1-Upper	270	25YrSCS24Hr	0.34	92.03	92.35		92.36	0.001702	0.43	0.81	4.41	0.29
Reach 1-Upper	270	50YrSCS24Hr	0.40	92.03	92.38		92.39	0.001650	0.45	0.93	5.21	0.29
Reach 1-Upper	270	100YrSCS24Hr	0.47	92.03	92.40		92.41	0.001589	0.48	1.06	5.67	0.29
Reach 1-Upper	261	2YrCHI3Hr	0.09	92.00	92.18	92.10	92.19	0.002251	0.33	0.26	2.11	0.30
Reach 1-Upper	261	5YrCHI3Hr	0.15	92.00	92.23	92.13	92.24	0.002551	0.41	0.36	2.34	0.33
Reach 1-Upper	261	10YrCHI3Hr	0.20	92.00	92.26	92.15	92.27	0.002717	0.45	0.43	2.48	0.35
Reach 1-Upper	261	25YrCHI3Hr	0.26	92.00	92.29	92.17	92.30	0.002863	0.50	0.52	2.64	0.36
Reach 1-Upper	261	50YrCHI3Hr	0.31	92.00	92.31	92.19	92.33	0.002989	0.54	0.58	2.75	0.38
Reach 1-Upper	261	100YrCHI3Hr	0.37	92.00	92.34	92.21	92.35	0.003096	0.57	0.64	2.86	0.39
Reach 1-Upper	261	2YrSCS24Hr	0.13	92.00	92.22	92.12	92.22	0.002475	0.39	0.33	2.28	0.32
Reach 1-Upper	261	5YrSCS24Hr	0.21	92.00	92.26	92.16	92.28	0.002821	0.47	0.45	2.51	0.36
Reach 1-Upper	261	10YrSCS24Hr	0.27	92.00	92.29	92.18	92.31	0.002885	0.51	0.53	2.66	0.37
Reach 1-Upper	261	25YrSCS24Hr	0.34	92.00	92.33	92.20	92.34	0.003049	0.56	0.61	2.81	0.38
Reach 1-Upper	261	50YrSCS24Hr	0.40	92.00	92.35	92.22	92.37	0.003150	0.59	0.68	2.92	0.39
Reach 1-Upper	261	100YrSCS24Hr	0.47	92.00	92.37	92.23	92.39	0.003253	0.62	0.75	3.06	0.40
Reach 1-Upper	239	2YrCHI3Hr	0.09	91.93	92.05	92.04	92.07	0.017641	0.69	0.12	1.58	0.78
Reach 1-Upper	239	5YrCHI3Hr	0.15	91.93	92.09	92.07	92.12	0.014089	0.75	0.20	1.89	0.73
Reach 1-Upper	239	10YrCHI3Hr	0.20	91.93	92.12	92.09	92.15	0.012625	0.78	0.25	2.05	0.71
Reach 1-Upper	239	25YrCHI3Hr	0.26	91.93	92.15	92.11	92.18	0.011287	0.82	0.32	2.22	0.69
Reach 1-Upper	239	50YrCHI3Hr	0.31	91.93	92.17	92.13	92.21	0.010600	0.84	0.37	2.34	0.68
Reach 1-Upper	239	100YrCHI3Hr	0.37	91.93	92.20	92.15	92.23	0.010052	0.87	0.42	2.45	0.67
Reach 1-Upper	239	2YrSCS24Hr	0.13	91.93	92.08	92.06	92.11	0.014856	0.73	0.18	1.80	0.74
Reach 1-Upper	239	5YrSCS24Hr	0.21	91.93	92.13	92.10	92.16	0.012234	0.79	0.27	2.09	0.70
Reach 1-Upper	239	10YrSCS24Hr	0.27	91.93	92.15	92.12	92.19	0.011165	0.82	0.33	2.24	0.69
Reach 1-Upper	239	25YrSCS24Hr	0.34	91.93	92.19	92.14	92.22	0.010287	0.86	0.40	2.40	0.67
Reach 1-Upper	239	50YrSCS24Hr	0.40	91.93	92.21	92.16	92.25	0.009763	0.88	0.45	2.52	0.66
Reach 1-Upper	239	100YrSCS24Hr	0.47	91.93	92.23	92.17	92.27	0.009233	0.90	0.52	2.64	0.65
Reach 1-Upper	218	2YrCHI3Hr	0.09	91.82	91.97	91.90	91.98	0.002011	0.30	0.29	2.50	0.28
Reach 1-Upper	218	5YrCHI3Hr	0.15	91.82	92.02	91.92	92.02	0.002154	0.37	0.41	2.72	0.30
Reach 1-Upper	218	10YrCHI3Hr	0.20	91.82	92.05	91.94	92.05	0.002195	0.40	0.49	2.86	0.31
Reach 1-Upper	218	25YrCHI3Hr	0.26	91.82	92.08	91.96	92.09	0.002317	0.45	0.58	3.01	0.33
Reach 1-Upper	218	50YrCHI3Hr	0.31	91.82	92.10	91.97	92.11	0.002380	0.48	0.65	3.13	0.34
Reach 1-Upper	218	100YrCHI3Hr	0.37	91.82	92.12	91.99	92.14	0.002427	0.51	0.72	3.24	0.34
Reach 1-Upper	218	2YrSCS24Hr	0.13	91.82	92.00	91.92	92.01	0.002121	0.35	0.37	2.66	0.30
Reach 1-Upper	218	5YrSCS24Hr	0.21	91.82	92.05	91.94	92.06	0.002229	0.42	0.51	2.90	0.32
Reach 1-Upper	218	10YrSCS24Hr	0.27	91.82	92.08	91.96	92.09	0.002328	0.45	0.59	3.03	0.33
Reach 1-Upper	218	25YrSCS24Hr	0.34	91.82	92.11	91.98	92.13	0.002406	0.50	0.69	3.19	0.34
Reach 1-Upper	218	50YrSCS24Hr	0.40	91.82	92.14	92.00	92.15	0.002454	0.52	0.77	3.31	0.35
Reach 1-Upper	218	100YrSCS24Hr	0.47	91.82	92.16	92.01	92.18	0.002479	0.55	0.85	3.47	0.35
Reach 1-Upper	197	2YrCHI3Hr	0.09	91.73	91.86	91.84	91.88	0.015766	0.67	0.13	1.59	0.75
Reach 1-Upper	197	5YrCHI3Hr	0.15	91.73	91.90	91.87	91.93	0.013264	0.74	0.20	1.88	0.72
Reach 1-Upper	197	10YrCHI3Hr	0.20	91.73	91.92	91.89	91.96	0.012348	0.78	0.25	2.01	0.71
Reach 1-Upper	197	25YrCHI3Hr	0.26	91.73	91.95	91.92	91.99	0.011605	0.83	0.31	2.16	0.70
Reach 1-Upper	197	50YrCHI3Hr	0.31	91.73	91.98	91.94	92.01	0.010864	0.86	0.36	2.27	0.69
Reach 1-Upper	197	100YrCHI3Hr	0.37	91.73	92.00	91.95	92.04	0.010606	0.90	0.41	2.36	0.69
Reach 1-Upper	197	2YrSCS24Hr	0.13	91.73	91.89	91.87	91.91	0.013909	0.72	0.18	1.81	0.72
Reach 1-Upper	197	5YrSCS24Hr	0.21	91.73	91.93	91.90	91.96	0.012137	0.79	0.27	2.05	0.70
Reach 1-Upper	197	10YrSCS24Hr	0.27	91.73	91.96	91.92	91.99	0.011514	0.84	0.32	2.18	0.70
Reach 1-Upper	197	25YrSCS24Hr	0.34	91.73	91.99	91.95	92.03	0.010714	0.88	0.39	2.32	0.69
Reach 1-Upper	197	50YrSCS24Hr	0.40	91.73	92.01	91.96	92.05	0.010482	0.92	0.44	2.41	0.69
Reach 1-Upper	197	100YrSCS24Hr	0.47	91.73	92.03	91.98	92.08	0.010295	0.95	0.49	2.51	0.69
Reach 1-Upper	174	2YrCHI3Hr	0.09	91.52	91.70	91.64	91.71	0.004240	0.42	0.20	1.84	0.40
Reach 1-Upper	174	5YrCHI3Hr	0.15	91.52	91.75	91.67	91.76	0.004464	0.50	0.30	2.18	0.43
Reach 1-Upper	174	10YrCHI3Hr	0.20	91.52	91.78	91.70	91.79	0.004630	0.55	0.36	2.30	0.45
Reach 1-Upper	174	25YrCHI3Hr	0.26	91.52	91.81	91.72	91.82	0.004764	0.60	0.43	2.46	0.46
Reach 1-Upper	174	50YrCHI3Hr	0.31	91.52	91.83	91.74	91.85	0.004920	0.64	0.48	2.56	0.47
Reach 1-Upper	174	100YrCHI3Hr	0.37	91.52	91.85	91.76	91.87	0.005045	0.68	0.54	2.67	0.48
Reach 1-Upper	174	2YrSCS24Hr	0.13	91.52	91.74	91.67	91.75	0.004376	0.48	0.27	2.09	0.42
Reach 1-Upper	174	5YrSCS24Hr	0.21	91.52	91.78	91.70	91.80	0.004673	0.56	0.37	2.34	0.45
Reach 1-Upper	174	10YrSCS24Hr	0.27	91.52	91.81	91.72	91.83	0.004791	0.61	0.44	2.47	0.46
Reach 1-Upper	174	25YrSCS24Hr	0.34	91.52	91.84	91.75	91.86	0.004993	0.67	0.51	2.62	0.48

HEC-RAS Plan: 20250910-Post_Dev_v02 River: River 1 Reach: Reach 1-Upper (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 1-Upper	174	50YrSCS24Hr	0.40	91.52	91.86	91.77	91.89	0.005106	0.70	0.57	2.72	0.49
Reach 1-Upper	174	100YrSCS24Hr	0.47	91.52	91.88	91.78	91.91	0.005150	0.73	0.63	2.83	0.50
Reach 1-Upper	154	2YrCHI3Hr	0.09	91.43	91.62	91.56	91.63	0.004316	0.40	0.22	2.21	0.40
Reach 1-Upper	154	5YrCHI3Hr	0.15	91.43	91.66	91.59	91.67	0.004196	0.46	0.33	2.61	0.41
Reach 1-Upper	154	10YrCHI3Hr	0.20	91.43	91.69	91.61	91.70	0.004192	0.49	0.40	2.83	0.42
Reach 1-Upper	154	25YrCHI3Hr	0.26	91.43	91.72	91.63	91.74	0.004098	0.53	0.49	3.08	0.42
Reach 1-Upper	154	50YrCHI3Hr	0.31	91.43	91.74	91.65	91.76	0.004007	0.55	0.56	3.25	0.43
Reach 1-Upper	154	100YrCHI3Hr	0.37	91.43	91.77	91.67	91.78	0.003907	0.58	0.64	3.40	0.43
Reach 1-Upper	154	2YrSCS24Hr	0.13	91.43	91.65	91.58	91.66	0.004250	0.44	0.29	2.50	0.41
Reach 1-Upper	154	5YrSCS24Hr	0.21	91.43	91.70	91.62	91.71	0.004172	0.50	0.42	2.89	0.42
Reach 1-Upper	154	10YrSCS24Hr	0.27	91.43	91.72	91.64	91.74	0.004085	0.53	0.50	3.11	0.42
Reach 1-Upper	154	25YrSCS24Hr	0.34	91.43	91.76	91.66	91.77	0.003951	0.57	0.60	3.33	0.43
Reach 1-Upper	154	50YrSCS24Hr	0.40	91.43	91.78	91.67	91.80	0.003859	0.59	0.68	3.48	0.43
Reach 1-Upper	154	100YrSCS24Hr	0.47	91.43	91.80	91.69	91.82	0.003775	0.61	0.76	3.63	0.43
Reach 1-Upper	137	2YrCHI3Hr	0.09	91.33	91.49	91.46	91.51	0.011391	0.63	0.14	1.43	0.65
Reach 1-Upper	137	5YrCHI3Hr	0.15	91.33	91.53	91.50	91.56	0.011329	0.73	0.20	1.66	0.67
Reach 1-Upper	137	10YrCHI3Hr	0.20	91.33	91.56	91.52	91.59	0.011021	0.78	0.25	1.80	0.67
Reach 1-Upper	137	25YrCHI3Hr	0.26	91.33	91.59	91.55	91.63	0.010598	0.84	0.31	1.97	0.67
Reach 1-Upper	137	50YrCHI3Hr	0.31	91.33	91.62	91.57	91.65	0.010270	0.87	0.36	2.09	0.67
Reach 1-Upper	137	100YrCHI3Hr	0.37	91.33	91.64	91.58	91.68	0.009883	0.90	0.41	2.22	0.67
Reach 1-Upper	137	2YrSCS24Hr	0.13	91.33	91.52	91.49	91.55	0.011458	0.71	0.18	1.59	0.67
Reach 1-Upper	137	5YrSCS24Hr	0.21	91.33	91.57	91.53	91.60	0.010925	0.80	0.26	1.84	0.67
Reach 1-Upper	137	10YrSCS24Hr	0.27	91.33	91.60	91.55	91.63	0.010544	0.84	0.32	1.99	0.67
Reach 1-Upper	137	25YrSCS24Hr	0.34	91.33	91.63	91.58	91.67	0.010099	0.89	0.39	2.16	0.67
Reach 1-Upper	137	50YrSCS24Hr	0.40	91.33	91.65	91.60	91.69	0.009709	0.91	0.44	2.29	0.66
Reach 1-Upper	137	100YrSCS24Hr	0.47	91.33	91.68	91.61	91.72	0.009370	0.93	0.50	2.42	0.66
Reach 1-Upper	116	2YrCHI3Hr	0.09	91.23	91.38	91.32	91.39	0.003211	0.37	0.23	2.08	0.35
Reach 1-Upper	116	5YrCHI3Hr	0.15	91.23	91.44	91.35	91.44	0.002924	0.42	0.35	2.37	0.35
Reach 1-Upper	116	10YrCHI3Hr	0.20	91.23	91.47	91.37	91.48	0.002866	0.46	0.43	2.54	0.36
Reach 1-Upper	116	25YrCHI3Hr	0.26	91.23	91.50	91.39	91.52	0.002818	0.49	0.53	2.75	0.36
Reach 1-Upper	116	50YrCHI3Hr	0.31	91.23	91.53	91.41	91.54	0.002810	0.52	0.60	2.89	0.36
Reach 1-Upper	116	100YrCHI3Hr	0.37	91.23	91.56	91.42	91.57	0.002804	0.54	0.68	3.03	0.37
Reach 1-Upper	116	2YrSCS24Hr	0.13	91.23	91.42	91.34	91.43	0.002958	0.41	0.32	2.29	0.35
Reach 1-Upper	116	5YrSCS24Hr	0.21	91.23	91.48	91.37	91.49	0.002849	0.47	0.45	2.59	0.36
Reach 1-Upper	116	10YrSCS24Hr	0.27	91.23	91.51	91.39	91.52	0.002820	0.50	0.54	2.77	0.36
Reach 1-Upper	116	25YrSCS24Hr	0.34	91.23	91.54	91.41	91.56	0.002805	0.53	0.64	2.96	0.37
Reach 1-Upper	116	50YrSCS24Hr	0.40	91.23	91.57	91.43	91.59	0.002678	0.55	0.73	3.11	0.36
Reach 1-Upper	116	100YrSCS24Hr	0.47	91.23	91.60	91.45	91.62	0.002583	0.57	0.82	3.24	0.36
Reach 1-Upper	95	2YrCHI3Hr	0.09	91.07	91.29	91.23	91.30	0.006154	0.52	0.16	1.38	0.48
Reach 1-Upper	95	5YrCHI3Hr	0.15	91.07	91.33	91.27	91.35	0.006882	0.63	0.24	1.61	0.53
Reach 1-Upper	95	10YrCHI3Hr	0.20	91.07	91.36	91.30	91.39	0.007544	0.71	0.28	1.73	0.56
Reach 1-Upper	95	25YrCHI3Hr	0.26	91.07	91.39	91.33	91.42	0.007915	0.77	0.34	1.88	0.58
Reach 1-Upper	95	50YrCHI3Hr	0.31	91.07	91.41	91.35	91.45	0.008499	0.83	0.37	1.97	0.61
Reach 1-Upper	95	100YrCHI3Hr	0.37	91.07	91.43	91.37	91.47	0.009495	0.90	0.41	2.07	0.65
Reach 1-Upper	95	2YrSCS24Hr	0.13	91.07	91.32	91.26	91.34	0.006702	0.60	0.21	1.55	0.52
Reach 1-Upper	95	5YrSCS24Hr	0.21	91.07	91.37	91.30	91.39	0.007595	0.72	0.29	1.76	0.57
Reach 1-Upper	95	10YrSCS24Hr	0.27	91.07	91.39	91.33	91.43	0.008212	0.79	0.34	1.88	0.60
Reach 1-Upper	95	25YrSCS24Hr	0.34	91.07	91.42	91.36	91.46	0.008586	0.86	0.40	2.03	0.62
Reach 1-Upper	95	50YrSCS24Hr	0.40	91.07	91.39	91.38	91.46	0.019163	1.20	0.33	1.87	0.91
Reach 1-Upper	95	100YrSCS24Hr	0.47	91.07	91.40	91.40	91.49	0.023191	1.34	0.35	1.90	1.00
Reach 1-Upper	72	2YrCHI3Hr	0.09	90.91	91.00	91.00	91.03	0.030446	0.75	0.12	1.98	0.99
Reach 1-Upper	72	5YrCHI3Hr	0.15	90.91	91.03	91.03	91.07	0.029306	0.85	0.18	2.40	1.01
Reach 1-Upper	72	10YrCHI3Hr	0.20	90.91	91.05	91.05	91.09	0.027108	0.89	0.22	2.63	0.99
Reach 1-Upper	72	25YrCHI3Hr	0.26	90.91	91.06	91.06	91.11	0.027545	0.98	0.27	2.80	1.02
Reach 1-Upper	72	50YrCHI3Hr	0.31	90.91	91.08	91.08	91.13	0.025861	1.01	0.31	2.94	1.00
Reach 1-Upper	72	100YrCHI3Hr	0.37	90.91	91.10	91.09	91.15	0.022250	1.01	0.36	3.09	0.95
Reach 1-Upper	72	2YrSCS24Hr	0.13	90.91	91.02	91.02	91.06	0.029339	0.82	0.16	2.29	1.00
Reach 1-Upper	72	5YrSCS24Hr	0.21	90.91	91.05	91.05	91.09	0.027610	0.92	0.23	2.67	1.00
Reach 1-Upper	72	10YrSCS24Hr	0.27	90.91	91.07	91.07	91.12	0.025875	0.97	0.28	2.84	0.99
Reach 1-Upper	72	25YrSCS24Hr	0.34	90.91	91.09	91.09	91.14	0.025973	1.05	0.33	2.99	1.01
Reach 1-Upper	72	50YrSCS24Hr	0.40	90.91	91.15	91.10	91.18	0.008061	0.73	0.55	3.56	0.59
Reach 1-Upper	72	100YrSCS24Hr	0.47	90.91	91.22	91.11	91.24	0.003417	0.57	0.82	4.07	0.40