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June 05, 2025 Project Number: P2710(e01)

Stratford Foxrun
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Attention: **Joshua Laginski, P.Eng**

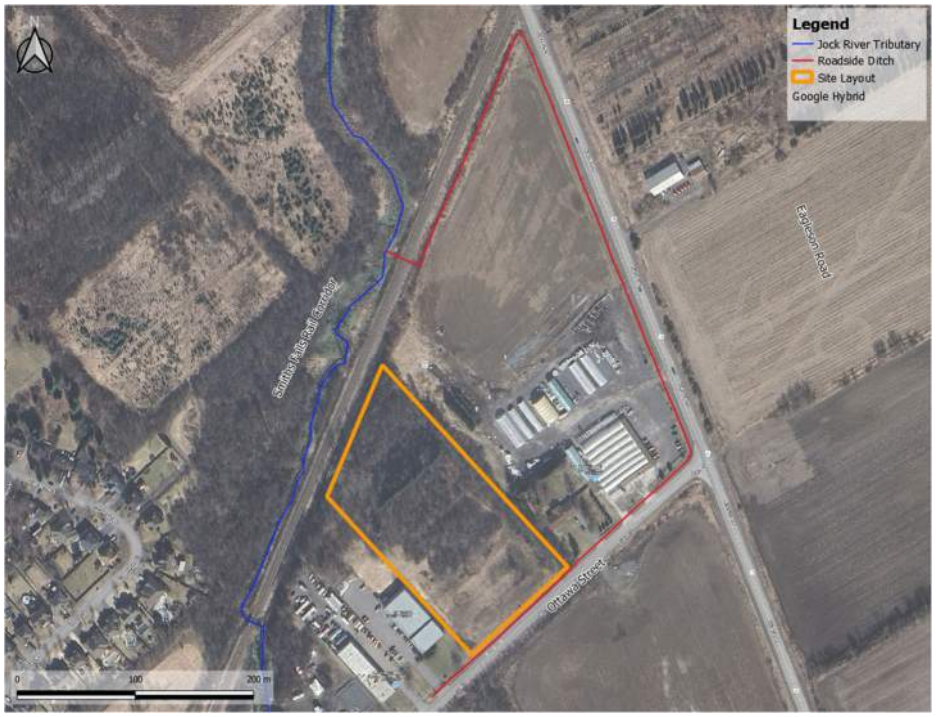
Subject: **Stratford Foxrun Development- 5923 Ottawa Street, Richmond Ditch Hydrologic and Hydraulic Analysis**

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 turns 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

1.1.1 Drainage Areas

Existing drainage areas for the 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. 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. 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.

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 **85 mm** orifice at the bottom of the localized depression area and a small **30cm** overflow weir at an elevation of **94.40m** and **94.35m** for the west and east site respectively.

Results

Onsite Controls Summary

As mentioned, the modelling accurately reflects the site's detailed grading, particularly the localized depressions. **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.

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

Storm	Site 1 (0.48 ha)			Site 2 (0.45 ha)		
	Peak Outflow (m^3/s)	Required Storage (m^3)	Ponding Depth (m)	Peak Outflow (m^3/s)	Required Storage (m^3)	Ponding Depth (m)
2YRCHI3Hr	0.008	41	0.31	0.009	40	0.40
5YRCHI3Hr	0.009	72	0.39	0.010	68	0.48
10YRCHI3Hr	0.010	93	0.44	0.011	87	0.53
25YRCHI3Hr	0.010	122	0.50	0.012	112	0.59
50YRCHI3Hr	0.011	143	0.54	0.014	127	0.62
100YRCHI3Hr	**0.014**	**163**	**0.58**	**0.018**	**141**	**0.65**
2YrSCS24Hr	0.008	46	0.33	0.009	44	0.41
5YrSCS24Hr	0.009	75	0.40	0.010	70	0.49
10YrSCS24Hr	0.010	95	0.44	0.011	87	0.53
25YrSCS24Hr	0.010	120	0.49	0.011	109	0.58
50YrSCS24Hr	0.011	139	0.53	0.013	124	0.62
100YrSCS24Hr	0.013	158	0.57	0.017	137	0.64

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.

This analysis indicates minor increases in peak flows to the ditch for lower return periods under post-development conditions. However, for larger events (e.g., 100-year), peak flows are either less than or equal to existing conditions. Both sites will utilize an **85 mm** orifice at the outlet to maximize the storage capacity of these depression areas. While this orifice could be further reduced to ensure all post-development peak flows are less than pre-development levels, doing so carries the risk of increased likelihood of blockages due to its small size, increasing the potential for on-site flooding if not regularly inspected.

Table 2: Pre and Post Development Peak Flow Summary

	Node	J1		Node	J2		Node	J3		Node	J4	
Event	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	0.024	0.009	0.057	0.066	0.009	0.061	0.070	0.009	0.067	0.077	0.010
5YRCHI3Hr	0.026	0.032	0.006	0.102	0.107	0.005	0.109	0.114	0.005	0.121	0.127	0.006
10YRCHI3Hr	0.035	0.037	0.002	0.136	0.137	0.001	0.145	0.146	0.001	0.162	0.164	0.002
25YRCHI3Hr	0.047	0.043	-0.004	0.181	0.178	-0.003	0.194	0.190	-0.004	0.218	0.214	-0.004
50YRCHI3Hr	0.057	0.050	-0.007	0.219	0.212	-0.007	0.234	0.228	-0.006	0.263	0.257	-0.006
100YRCHI3Hr	0.067	0.060	-0.007	0.258	0.253	-0.005	0.277	0.271	-0.006	0.311	0.306	-0.005
2YrSCS24Hr	0.024	0.028	0.004	0.090	0.095	0.005	0.096	0.102	0.006	0.107	0.113	0.006
5YrSCS24Hr	0.038	0.037	-0.001	0.148	0.146	-0.002	0.158	0.157	-0.001	0.177	0.176	-0.001
10YrSCS24Hr	0.049	0.042	-0.007	0.189	0.182	-0.007	0.202	0.196	-0.006	0.227	0.221	-0.006
25YrSCS24Hr	0.062	0.049	-0.013	0.242	0.228	-0.014	0.259	0.247	-0.012	0.291	0.279	-0.012
50YrSCS24Hr	0.073	0.055	-0.018	0.284	0.267	-0.017	0.305	0.288	-0.017	0.343	0.326	-0.017
100YrSCS24Hr	0.084	0.063	-0.021	0.329	0.310	-0.019	0.354	0.335	-0.019	0.399	0.380	-0.019

Table 2: Pre and Post Development Peak Flow Summary

	Node	J5		Node	J6		Node	J7		Node	J8	
Event	**Pre**	**Post**	**Diff**	**Pre**	**Post**	**Diff**	**Pre**	**Post**	**Diff**	**Pre**	**Post**	**Diff**
Area (ha)	6.86	7.24	0.38	1.01	1.02	0.01	1.83	1.46	-0.37	13.1	13.1	0
2YRCHI3Hr	0.080	0.091	0.011	0.016	0.021	0.005	0.019	0.018	-0.001	0.141	0.151	0.010
5YRCHI3Hr	0.147	0.154	0.007	0.025	0.031	0.006	0.035	0.034	-0.001	0.264	0.270	0.006
10YRCHI3Hr	0.197	0.201	0.004	0.034	0.037	0.003	0.047	0.047	0.000	0.361	0.363	0.002
25YRCHI3Hr	0.267	0.266	-0.001	0.047	0.047	0.000	0.065	0.064	-0.001	0.493	0.489	-0.004
50YRCHI3Hr	0.323	0.320	-0.003	0.057	0.057	0.000	0.079	0.078	-0.001	0.602	0.594	-0.008
100YRCHI3Hr	0.384	0.381	-0.003	0.069	0.069	0.000	0.095	0.094	-0.001	0.721	0.712	-0.009
2YrSCS24Hr	0.128	0.135	0.007	0.023	0.023	0.000	0.032	0.031	-0.001	0.233	0.239	0.006
5YrSCS24Hr	0.215	0.216	0.001	0.039	0.039	0.000	0.054	0.053	-0.001	0.400	0.399	-0.001
10YrSCS24Hr	0.277	0.273	-0.004	0.051	0.051	0.000	0.070	0.069	-0.001	0.517	0.511	-0.006
25YrSCS24Hr	0.357	0.347	-0.010	0.066	0.066	0.000	0.092	0.090	-0.002	0.675	0.661	-0.014
50YrSCS24Hr	0.421	0.407	-0.014	0.079	0.079	0.000	0.110	0.107	-0.003	0.800	0.782	-0.018
100YrSCS24Hr	0.491	0.474	-0.017	0.093	0.093	0.000	0.129	0.126	-0.003	0.939	0.914	-0.025

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 for establishing cross-sections involved using detailed topographic measurements. These measurements were typically taken at approximately 50-meter intervals along the watercourse and supplemented with LiDAR in the floodplain. This close spacing is crucial for accurately capturing the unique hydraulic characteristics and flow conveyance capacity of the existing watercourse. In addition to the surveyed locations, supplementary cross-sections were added in areas that weren't explicitly surveyed. These were created by sampling the merged LiDAR and topographic Digital Terrain Model (DTM). This was done to ensure that critical cross-sections were included in the model to accurately capture the channel hydraulics. **Figure C1 in Attachment C** outlines the extent and location of model cross sections.

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 significant difference in drainage area between Marlborough Creek and the roadside ditch. This approach was chosen because Marlborough Creek (a tributary of the Jock River) experiences flooding predominantly from spring snowmelt and rainfall, whereas the critical storm for a roadside ditch of this size typically occurs during summer events. Therefore, these two critical events can never coincide.

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 85 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 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 — Subcatchment Name

3.212 ha — Subcatchment Area (ha)

SCALE: 1:3000

0 50 100 150 m

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Figure A1: Existing Drainage Areas

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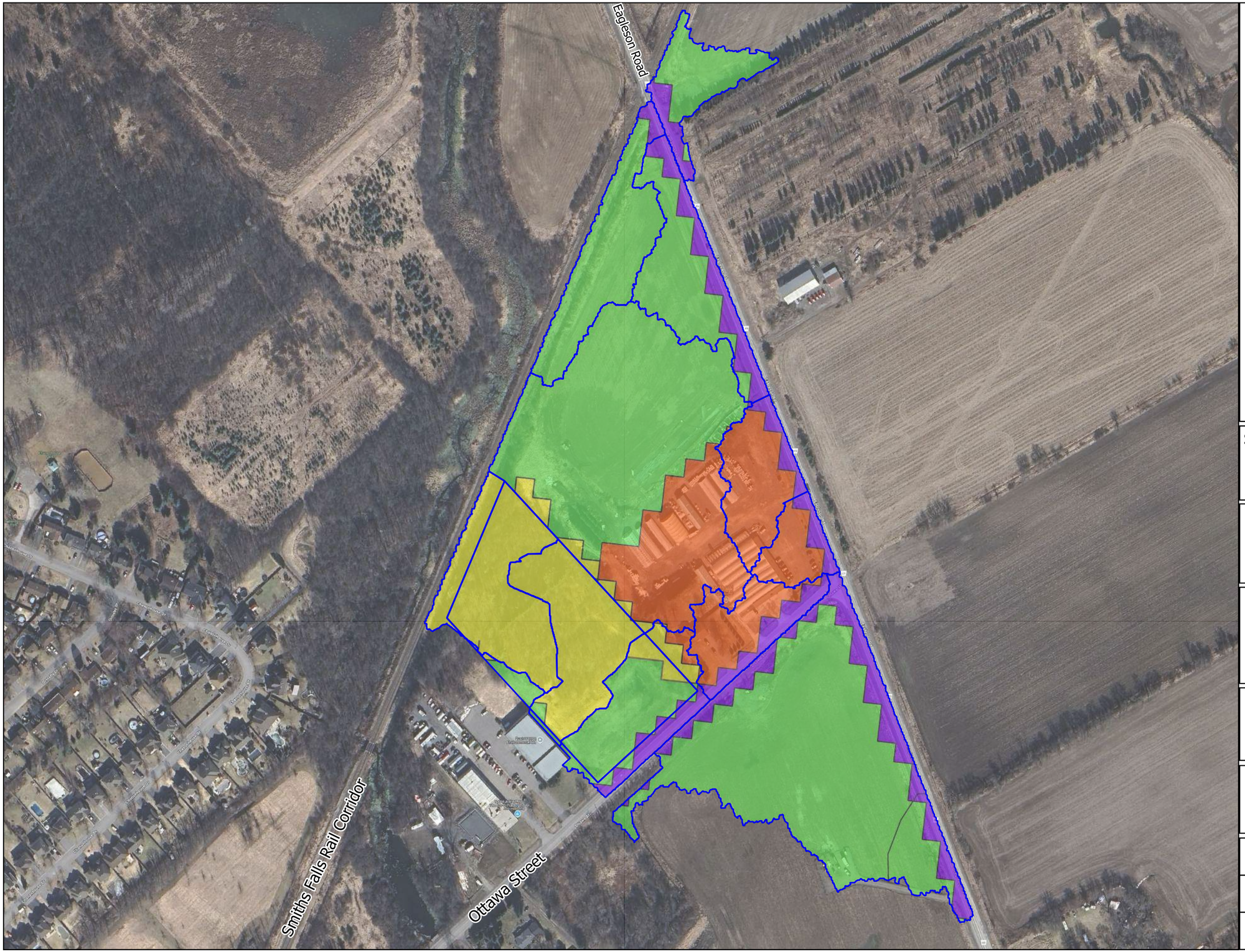

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Legend

- 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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Figure A2: Land Use Data

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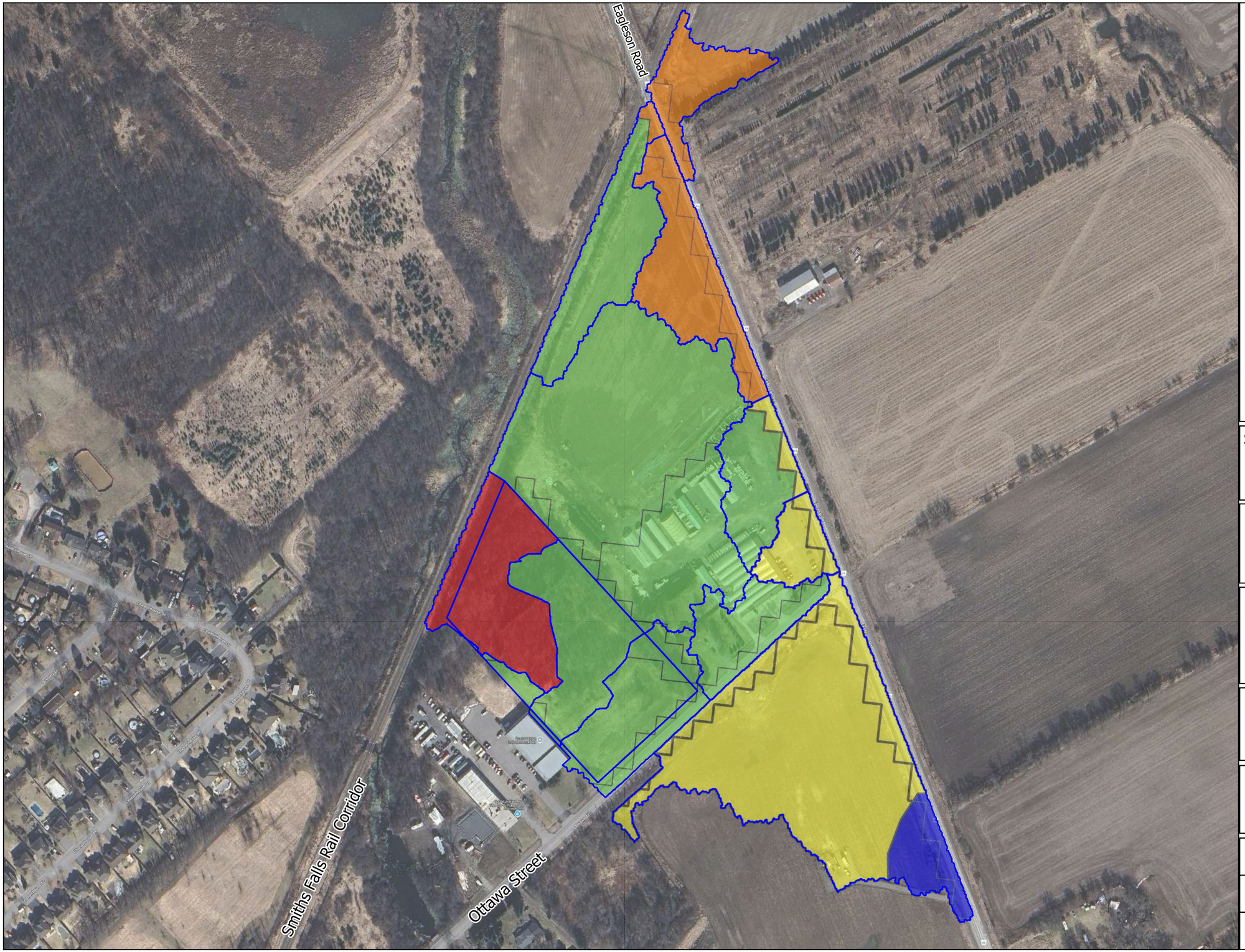

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Legend

- 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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Figure A3: Soil Type

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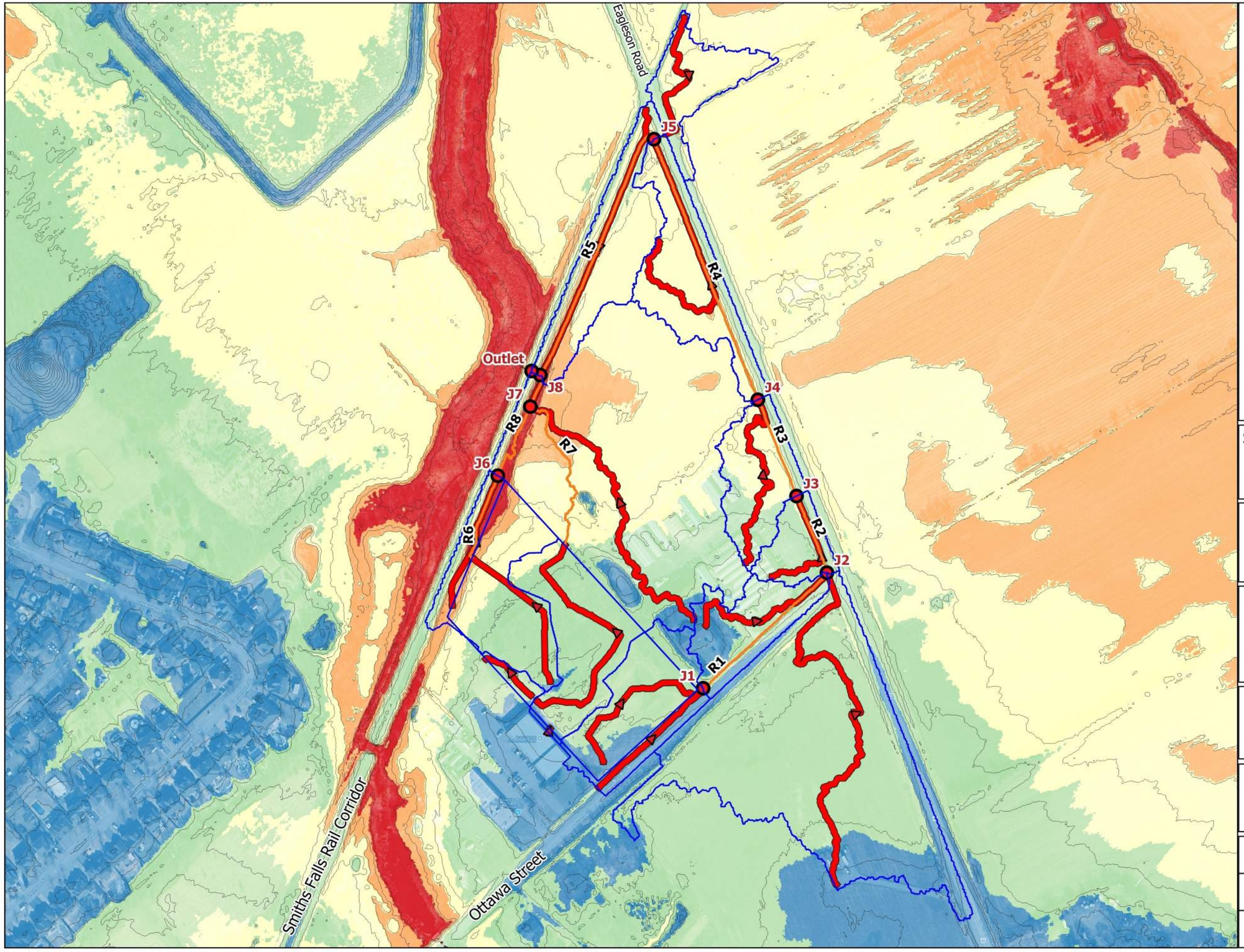

Legend

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

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Figure A4: Flow Paths and Route Channels

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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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
*%-----------------|-------------------------------------------------------------|
*%  100-Year, 24-Hour SCS Storm + 20%
*START                TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[998]
*%                    ["SC24100x+.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=[999]
*                    ["100YRCHI3HR+.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
FINISH
```

```
===========================================================================================

SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222     000    11   5555   =========
S       W W W   MM MM   H   H    Y Y    MM MM   O   O           2    0   0   11   5
SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O           2    0   0   11   5      Ver 5.500
    S    W W    M   M   H   H     Y     M   M   O   O         222    0   0   11   555    FEB  2015
SSSSS    W W    M   M   H   H     Y     M   M    OOO         2       0   0   11     5    =========
                                                             2       0   0   11     5    # 2134335
      StormWater Management HYdrologic Model                  222     000    11   555    =========

*******************************************************************************************
*************************************  SWMHYMO Ver 5.500  *********************************
******************  A single event and continuous hydrologic simulation model  ***********
******************     based on the principles of HYMO and its successors      ***********
******************                 OTTHYMO-83 and OTTHYMO-89.                  ***********
*******************************************************************************************
****************** Distributed by:  J.F. Sabourin and Associates Inc.          ***********
******************                  Ottawa,  Ontario: (613) 836-3884           ***********
******************                  Gatineau, Quebec: (819) 243-6858           ***********
******************                  E-Mail: swmhymo@jfsa.Com                   ***********
*******************************************************************************************

+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+++++++++++++++++ Licensed user: JFSA                                    +++++++++++++++++
+++++++++++++++++                in any City           SERIAL#:2134335   +++++++++++++++++
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

*******************************************************************************************
******************             ++++++ PROGRAM ARRAY DIMENSIONS ++++++        ***********
******************             Maximum value for ID numbers  :     11        ***********
******************             Max. number of rainfall points: 105408        ***********
******************             Max. number of flow points    : 105408        ***********
*******************************************************************************************


*******************************   S U M M A R Y   O U T P U T   **************************
*******************************************************************************************
*                  RUN DATE: 2025-04-15     TIME: 12:55:54     RUN COUNTER: 000657        *
*******************************************************************************************
* Input   file: T:\PROJ\2710(e01)-24 SHAREPOINT\Design\SWMHYMO\20250205-PreDev\Ott_St-Pre_v04.dat*
* Output  file: T:\PROJ\2710(e01)-24 SHAREPOINT\Design\SWMHYMO\20250205-PreDev\Ott_St-Pre_v04.out*
* Summary file: T:\PROJ\2710(e01)-24 SHAREPOINT\Design\SWMHYMO\20250205-PreDev\Ott_St-Pre_v04.sum*
* User comments:                                                                          *
* 1:______________________________________________________________________________________*
* 2:______________________________________________________________________________________*
* 3:______________________________________________________________________________________*
*******************************************************************************************


#******************************************************************************************
#  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
#******************************************************************************************
  ** END OF RUN :    1

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





 RUN#:COMMAND#
R0002:C00001-------------------------------------------------------------------------------
      START
       [TZERO =    .00 hrs on        0]
       [METOUT=   2    (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN  = 0002 ]
#******************************************************************************************
#  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
#******************************************************************************************
R0002:C00002-------------------------------------------------------------------------------
      READ STORM
       Filename = STORM.001
       Comment  = CHICAGO STORM 2 Year, 3 Hours
       [SDT=10.00:SDUR=   3.00:PTOT=  31.86]
#******************************************************************************************
# EXT1
#******************************************************************************************
R0002:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT1           3.21     .037 No_date    1:58    8.15 .256      .000
       [CN= 80.0: N= 3.00: Tp=  .72]
#******************************************************************************************
# EXT2
#******************************************************************************************
R0002:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT2            .28     .007 No_date    1:25   10.26 .322      .000
       [CN= 85.0: N= 3.00: Tp=  .33]
#******************************************************************************************
# EXT3
#******************************************************************************************
R0002:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT3            .56     .011 No_date    1:24    8.15 .256      .000
       [CN= 80.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT4
#******************************************************************************************
R0002:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT4            .31     .006 No_date    1:22    7.80 .245      .000
       [CN= 79.0: N= 3.00: Tp=  .29]
#******************************************************************************************
# EXT5
#******************************************************************************************
R0002:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT5            .59     .008 No_date    1:36    6.88 .216      .000
       [CN= 76.0: N= 3.00: Tp=  .45]
#******************************************************************************************
# EXT6
#******************************************************************************************
R0002:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT6            .86     .015 No_date    1:44   10.27 .322      .000
       [CN= 85.0: N= 3.00: Tp=  .56]
#******************************************************************************************
# EXT7
#******************************************************************************************
R0002:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT7            .47     .011 No_date    1:24    9.33 .293      .000
       [CN= 83.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT8
#******************************************************************************************
R0002:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT8            .83     .013 No_date    1:33    7.81 .245      .000
       [CN= 79.0: N= 3.00: Tp=  .42]
#******************************************************************************************
# EXT9
#******************************************************************************************
R0002:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT9           3.57     .045 No_date    1:38    6.88 .216      .000
       [CN= 76.0: N= 3.00: Tp=  .48]
#******************************************************************************************
# EXT9a
#******************************************************************************************
R0002:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT9a           .01     .001 No_date    1:00    7.47 .234      .000
       [CN= 78.0: N= 3.00: Tp=  .04]
#******************************************************************************************
# EXT10
#******************************************************************************************
R0002:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT10           .20     .002 No_date    1:34    5.64 .177      .000
       [CN= 71.0: N= 3.00: Tp=  .42]
#******************************************************************************************
# Pre2
#******************************************************************************************
R0002:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre2            .57     .008 No_date    1:36    7.48 .235      .000
       [CN= 78.0: N= 3.00: Tp=  .46]
#******************************************************************************************
# Pre9
#******************************************************************************************
R0002:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre9            .83     .007 No_date    1:52    5.65 .177      .000
       [CN= 71.0: N= 3.00: Tp=  .64]
#******************************************************************************************
# Pre10
#******************************************************************************************
R0002:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre10           .80     .011 No_date    1:22    5.65 .177      .000
       [CN= 71.0: N= 3.00: Tp=  .29]
#******************************************************************************************
# Pre11
#******************************************************************************************
R0002:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre11           .07     .002 No_date    1:15    7.47 .235      .000
       [CN= 78.0: N= 3.00: Tp=  .21]
#******************************************************************************************
R0002:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:EXT2            .28     .007 No_date    1:25   10.26  n/a      .000
                     +     1.0 02:Pre2            .57     .008 No_date    1:36    7.48  n/a      .000
                  SUM=     1.0 01:J1              .85     .015 No_date    1:30    8.41  n/a      .000
R0002:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J1              .85     .015 No_date    1:30    8.41  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R1              .85     .014 No_date    1:40    8.41  n/a      .000
       [L/S/n=  143./ .394/.035]
       {Vmax=  .240:Dmax=  .082}
R0002:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R1              .85     .014 No_date    1:40    8.41  n/a      .000
                     +     1.0 02:EXT3            .56     .011 No_date    1:24    8.15  n/a      .000
                     +     1.0 02:EXT1           3.21     .037 No_date    1:58    8.15  n/a      .000
                  SUM=     1.0 01:J2             4.62     .057 No_date    1:46    8.20  n/a      .000
R0002:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J2             4.62     .057 No_date    1:46    8.20  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R2             4.62     .057 No_date    1:49    8.20  n/a      .000
       [L/S/n=   73./ .425/.035]
       {Vmax=  .350:Dmax=  .155}
R0002:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R2             4.62     .057 No_date    1:49    8.20  n/a      .000
                     +     1.0 02:EXT4            .31     .006 No_date    1:22    7.80  n/a      .000
                  SUM=     1.0 01:J3             4.93     .061 No_date    1:46    8.17  n/a      .000
R0002:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J3             4.93     .061 No_date    1:46    8.17  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R3             4.93     .060 No_date    1:52    8.17  n/a      .000
       [L/S/n=   92./ .274/.035]
       {Vmax=  .288:Dmax=  .161}
R0002:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R3             4.93     .060 No_date    1:52    8.17  n/a      .000
                     +     1.0 02:EXT5            .59     .008 No_date    1:36    6.88  n/a      .000
                  SUM=     1.0 01:J4             5.52     .067 No_date    1:50    8.04  n/a      .000
R0002:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J4             5.52     .067 No_date    1:50    8.04  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R4             5.52     .061 No_date    2:05    8.04  n/a      .000
       [L/S/n=  251./ .190/.035]
       {Vmax=  .266:Dmax=  .173}
R0002:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R4             5.52     .061 No_date    2:05    8.04  n/a      .000
                     +     1.0 02:EXT6            .86     .015 No_date    1:44   10.27  n/a      .000
                     +     1.0 02:EXT7            .47     .011 No_date    1:24    9.33  n/a      .000
                  SUM=     1.0 01:J5             6.86     .080 No_date    1:59    8.41  n/a      .000
R0002:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J5             6.86     .080 No_date    1:59    8.41  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R5             6.86     .078 No_date    2:07    8.41  n/a      .000
       [L/S/n=  237./ .644/.035]
       {Vmax=  .432:Dmax=  .166}
R0002:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:Pre10           .80     .011 No_date    1:22    5.65  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R6              .80     .011 No_date    1:25    5.65  n/a      .000
       [L/S/n=   77./ .776/.035]
       {Vmax=  .492:Dmax=  .008}
R0002:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:Pre9            .83     .007 No_date    1:52    5.65  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R7              .83     .007 No_date    1:56    5.65  n/a      .000
       [L/S/n=  159./1.576/.035]
       {Vmax=  .797:Dmax=  .002}
R0002:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R6              .80     .016 No_date    4:19    5.76  n/a      .000
                     +     1.0 02:EXT10           .20     .002 No_date    1:34    5.64  n/a      .000
                  SUM=     1.0 01:J6             1.01     .016 No_date    4:19    5.74  n/a      .000
R0002:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J6             1.01     .016 No_date    4:19    5.74  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R8             1.01     .013 No_date    1:30    5.74  n/a      .000
       [L/S/n=   79./ .522/.035]
       {Vmax=  .423:Dmax=  .011}
R0002:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R8             1.01     .013 No_date    1:30    5.74  n/a      .000
                     +     1.0 02:R7              .83     .007 No_date    1:56    5.67  n/a      .000
                  SUM=     1.0 01:J7             1.83     .019 No_date    1:35    5.71  n/a      .000
R0002:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J7             1.83     .019 No_date    1:35    5.71  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R9             1.83     .019 No_date    1:36    5.71  n/a      .000
       [L/S/n=   29./ .887/.035]
       {Vmax=  .543:Dmax=  .013}
R0002:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:EXT9           3.57     .045 No_date    1:38    6.88  n/a      .000
                     +     1.0 02:R9             1.83     .019 No_date    1:36    5.71  n/a      .000
                     +     1.0 02:EXT8            .83     .013 No_date    1:33    7.81  n/a      .000
                     +     1.0 02:R5             6.86     .078 No_date    2:07    8.41  n/a      .000
                  SUM=     1.0 01:J8            13.10     .141 No_date    1:54    7.58  n/a      .000
R0002:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE PIPE      ->    1.0 02:J8            13.10     .141 No_date    1:54    7.58  n/a      .000
 *    [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .141 No_date    1:55    7.58  n/a      .000
       [L/S/n=    8./ .010/.013]
       {Vmax=  .304:Dmax=  .672}
       [Din=  .53:Dused=  .82]
################################################################################
# STORMS
################################################################################
  ** END OF RUN :    4

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





 RUN#:COMMAND#
R0005:C00001-------------------------------------------------------------------------------
      START
       [TZERO =    .00 hrs on        0]
       [METOUT=   2    (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN  = 0005 ]
#******************************************************************************************
#  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
#******************************************************************************************
R0005:C00002-------------------------------------------------------------------------------
      READ STORM
       Filename = STORM.001
       Comment  = CHICAGO STORM  5 Year, 3 Hours
       [SDT=10.00:SDUR=   3.00:PTOT=  42.51]
#******************************************************************************************
# EXT1
#******************************************************************************************
R0005:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT1           3.21     .066 No_date    1:55   14.13 .332      .000
       [CN= 80.0: N= 3.00: Tp=  .72]
#******************************************************************************************
# EXT2
#******************************************************************************************
R0005:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT2            .28     .012 No_date    1:23   17.32 .407      .000
       [CN= 85.0: N= 3.00: Tp=  .33]
#******************************************************************************************
# EXT3
#******************************************************************************************
R0005:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT3            .56     .020 No_date    1:23   14.13 .332      .000
       [CN= 80.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT4
#******************************************************************************************
R0005:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT4            .31     .011 No_date    1:21   13.59 .320      .000
       [CN= 79.0: N= 3.00: Tp=  .29]
#******************************************************************************************
# EXT5
#******************************************************************************************
R0005:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT5            .59     .014 No_date    1:34   12.13 .285      .000
       [CN= 76.0: N= 3.00: Tp=  .45]
#******************************************************************************************
# EXT6
#******************************************************************************************
R0005:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT6            .86     .026 No_date    1:42   17.32 .407      .000
       [CN= 85.0: N= 3.00: Tp=  .56]
#******************************************************************************************
# EXT7
#******************************************************************************************
R0005:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT7            .47     .019 No_date    1:23   15.94 .375      .000
       [CN= 83.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT8
#******************************************************************************************
R0005:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT8            .83     .024 No_date    1:31   13.59 .320      .000
       [CN= 79.0: N= 3.00: Tp=  .42]
#******************************************************************************************
# EXT9
#******************************************************************************************
R0005:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT9           3.57     .083 No_date    1:36   12.13 .285      .000
       [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                1.0 02:EXT2            .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                1.0 02:R1             .85     .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                1.0 02:R2             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                1.0 02:R3             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                1.0 02:R4             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                1.0 02:R6             .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=  .018]
00464> R0005:C00032-------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00465>      ADD HYD                1.0 02:R8             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                1.0 02:EXT9           3.57    .083 No_date    1:36   12.13 n/a      .000
00475>                        +    1.0 02:R9             1.83    .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                1.0 02:EXT2           .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                1.0 02:R1             .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                1.0 02:R2             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                1.0 02:R3             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                1.0 02:R4             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                1.0 02:R6             .80     .029 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                1.0 02:R8             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                1.0 02:EXT9           3.57    .111 No_date    1:36   16.08 n/a      .000
00688>                        +    1.0 02:R9             1.83    .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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#  Date          : [2025 FEB 05]
#  Modeller      : [MM]
#  Company       : JFSA Canada Inc.
#  License #     : 2549237
#*******************************************************************************************
# Model developed to simulate runoff from subcatchments under pre development conditions
#*******************************************************************************************
R0025:C00002------------------------------------------------------------------------------------
     READ STORM
      Filename = STORM.001
      Comment  = CHICAGO STORM   25 Year, 3 Hours
      [SDT=10.00:SDUR=   3.00:PTOT=  58.23]
#*******************************************************************************************
# EXT1
#*******************************************************************************************
R0025:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT1           3.21     .118 No_date    1:53   24.50 .421      .000
      [CN= 80.0: N= 3.00: Tp=  .72]
#*******************************************************************************************
# EXT2
#*******************************************************************************************
R0025:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT2            .28     .022 No_date    1:22   29.15 .501      .000
      [CN= 85.0: N= 3.00: Tp=  .33]
#*******************************************************************************************
# EXT3
#*******************************************************************************************
R0025:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT3            .56     .036 No_date    1:22   24.50 .421      .000
      [CN= 80.0: N= 3.00: Tp=  .32]
#*******************************************************************************************
# EXT4
#*******************************************************************************************
R0025:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT4            .31     .020 No_date    1:20   23.69 .407      .000
      [CN= 79.0: N= 3.00: Tp=  .29]
#*******************************************************************************************
# EXT5
#*******************************************************************************************
R0025:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT5            .59     .026 No_date    1:33   21.44 .368      .000
      [CN= 76.0: N= 3.00: Tp=  .45]
#*******************************************************************************************
# EXT6
#*******************************************************************************************
R0025:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT6            .86     .046 No_date    1:40   29.15 .501      .000
      [CN= 85.0: N= 3.00: Tp=  .56]
#*******************************************************************************************
# EXT7
#*******************************************************************************************
R0025:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT7            .47     .034 No_date    1:22   27.17 .467      .000
      [CN= 83.0: N= 3.00: Tp=  .32]
#*******************************************************************************************
# EXT8
#*******************************************************************************************
R0025:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT8            .83     .043 No_date    1:30   23.69 .407      .000
      [CN= 79.0: N= 3.00: Tp=  .42]
#*******************************************************************************************
# EXT9
#*******************************************************************************************
R0025:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9           3.57     .151 No_date    1:35   21.44 .368      .000
      [CN= 76.0: N= 3.00: Tp=  .48]
#*******************************************************************************************
# EXT9a
#*******************************************************************************************
R0025:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9a           .01     .002 No_date    1:00   22.90 .393      .000
      [CN= 78.0: N= 3.00: Tp=  .04]
#*******************************************************************************************
# EXT10
#*******************************************************************************************
R0025:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT10           .20     .008 No_date    1:31   18.23 .313      .000
      [CN= 71.0: N= 3.00: Tp=  .42]
#*******************************************************************************************
# Pre2
#*******************************************************************************************
R0025:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre2            .57     .027 No_date    1:33   22.91 .393      .000
      [CN= 78.0: N= 3.00: Tp=  .46]
#*******************************************************************************************
# Pre9
#*******************************************************************************************
R0025:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre9            .83     .024 No_date    1:48   18.23 .313      .000
      [CN= 71.0: N= 3.00: Tp=  .64]
#*******************************************************************************************
# Pre10
#*******************************************************************************************
R0025:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre10           .80     .040 No_date    1:20   18.23 .313      .000
      [CN= 71.0: N= 3.00: Tp=  .29]
#*******************************************************************************************
# Pre11
#*******************************************************************************************
R0025:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre11           .07     .005 No_date    1:13   22.90 .393      .000
      [CN= 78.0: N= 3.00: Tp=  .21]
#*******************************************************************************************
R0025:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:EXT2            .28     .022 No_date    1:22   29.15  n/a      .000
                     +    1.0 02:Pre2            .57     .027 No_date    1:33   22.91  n/a      .000
                  SUM=    1.0 01:J1              .85     .047 No_date    1:27   25.00  n/a      .000
R0025:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J1              .85     .047 No_date    1:27   25.00  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R1              .85     .045 No_date    1:34   25.00  n/a      .000
      [L/S/n=  143./ .394/.035]
      {Vmax=  .340:Dmax=  .139}
R0025:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R1              .85     .045 No_date    1:34   25.00  n/a      .000
                     +    1.0 02:EXT3            .56     .036 No_date    1:22   24.50  n/a      .000
                     +    1.0 02:EXT1           3.21     .118 No_date    1:53   24.50  n/a      .000
                  SUM=    1.0 01:J2             4.62     .181 No_date    1:41   24.59  n/a      .000
R0025:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J2             4.62     .181 No_date    1:41   24.59  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R2             4.62     .181 No_date    1:43   24.59  n/a      .000
      [L/S/n=   73./ .425/.035]
      {Vmax=  .480:Dmax=  .246}
R0025:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R2             4.62     .181 No_date    1:43   24.59  n/a      .000
                     +    1.0 02:EXT4            .31     .020 No_date    1:20   23.69  n/a      .000
                  SUM=    1.0 01:J3             4.93     .194 No_date    1:40   24.54  n/a      .000
R0025:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J3             4.93     .194 No_date    1:40   24.54  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R3             4.93     .193 No_date    1:44   24.54  n/a      .000
      [L/S/n=   92./ .274/.035]
      {Vmax=  .393:Dmax=  .255}
R0025:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R3             4.93     .193 No_date    1:44   24.54  n/a      .000
                     +    1.0 02:EXT5            .59     .026 No_date    1:33   21.44  n/a      .000
                  SUM=    1.0 01:J4             5.52     .218 No_date    1:42   24.20  n/a      .000
R0025:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J4             5.52     .218 No_date    1:42   24.20  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R4             5.52     .205 No_date    1:53   24.20  n/a      .000
      [L/S/n=  251./ .190/.035]
      {Vmax=  .384:Dmax=  .285}
R0025:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R4             5.52     .205 No_date    1:53   24.20  n/a      .000
                     +    1.0 02:EXT6            .86     .046 No_date    1:40   29.15  n/a      .000
                     +    1.0 02:EXT7            .47     .034 No_date    1:22   27.17  n/a      .000
                  SUM=    1.0 01:J5             6.86     .267 No_date    1:49   25.03  n/a      .000
R0025:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J5             6.86     .267 No_date    1:49   25.03  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R5             6.86     .263 No_date    1:54   25.03  n/a      .000
      [L/S/n=  237./ .644/.035]
      {Vmax=  .623:Dmax=  .267}
R0025:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:Pre10           .80     .040 No_date    1:20   18.23  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R6              .80     .039 No_date    1:23   18.23  n/a      .000
      [L/S/n=   77./ .776/.035]
      {Vmax=  .492:Dmax=  .029}
R0025:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:Pre9            .83     .024 No_date    1:48   18.23  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R7              .83     .024 No_date    1:52   18.23  n/a      .000
      [L/S/n=  159./1.576/.035]
      {Vmax=  .797:Dmax=  .007}
R0025:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R6              .80     .039 No_date    1:23   18.43  n/a      .000
                     +    1.0 02:EXT10           .20     .008 No_date    1:31   18.23  n/a      .000
                  SUM=    1.0 01:J6             1.01     .047 No_date    1:24   18.39  n/a      .000
R0025:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J6             1.01     .047 No_date    1:24   18.39  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R8             1.01     .046 No_date    1:27   18.39  n/a      .000
      [L/S/n=   79./ .522/.035]
      {Vmax=  .423:Dmax=  .034}
R0025:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R8             1.01     .046 No_date    1:27   18.39  n/a      .000
                     +    1.0 02:R7              .83     .024 No_date    1:52   18.26  n/a      .000
                  SUM=    1.0 01:J7             1.83     .065 No_date    1:32   18.33  n/a      .000
R0025:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J7             1.83     .065 No_date    1:32   18.33  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R9             1.83     .065 No_date    1:33   18.33  n/a      .000
      [L/S/n=   29./ .887/.035]
      {Vmax=  .543:Dmax=  .044}
R0025:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:EXT9           3.57     .151 No_date    1:35   21.44  n/a      .000
                     +    1.0 02:R9             1.83     .065 No_date    1:33   18.34  n/a      .000
                     +    1.0 02:EXT8            .83     .043 No_date    1:30   23.69  n/a      .000
                     +    1.0 02:R5             6.86     .263 No_date    1:54   25.03  n/a      .000
                  SUM=    1.0 01:J8            13.10     .493 No_date    1:45   23.03  n/a      .000
R0025:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE PIPE      ->    1.0 02:J8            13.10     .493 No_date    1:45   23.03  n/a      .000
 *   [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .493 No_date    1:45   23.03  n/a      .000
      [L/S/n=    8./ .010/.013]
      {Vmax=  .417:Dmax= 1.075}
      [Din=  .53:Dused= 1.31}
################################################################################
# STORMS
################################################################################
  ** END OF RUN :   49

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





 RUN#:COMMAND#
R0050:C00001------------------------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on        0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  = 0050 ]
#*******************************************************************************************
#  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
#*******************************************************************************************
R0050:C00002------------------------------------------------------------------------------------
     READ STORM
      Filename = STORM.001
      Comment  = CHICAGO STORM  50 Year, 3 Hours
      [SDT=10.00:SDUR=   3.00:PTOT=  64.81]
#*******************************************************************************************
# EXT1
#*******************************************************************************************
R0050:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT1           3.21     .142 No_date    1:53   29.25 .451      .000
      [CN= 80.0: N= 3.00: Tp=  .72]
#*******************************************************************************************
# EXT2
#*******************************************************************************************
R0050:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT2            .28     .026 No_date    1:22   34.45 .532      .000
      [CN= 85.0: N= 3.00: Tp=  .33]
#*******************************************************************************************
# EXT3
#*******************************************************************************************
R0050:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT3            .56     .044 No_date    1:22   29.25 .451      .000
      [CN= 80.0: N= 3.00: Tp=  .32]
#*******************************************************************************************
# EXT4
#*******************************************************************************************
R0050:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT4            .31     .025 No_date    1:19   28.33 .437      .000
      [CN= 79.0: N= 3.00: Tp=  .29]
#*******************************************************************************************
# EXT5
#*******************************************************************************************
R0050:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT5            .59     .032 No_date    1:32   25.77 .398      .000
      [CN= 76.0: N= 3.00: Tp=  .45]
#*******************************************************************************************
# EXT6
#*******************************************************************************************
R0050:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT6            .86     .055 No_date    1:40   34.45 .532      .000
      [CN= 85.0: N= 3.00: Tp=  .56]
#*******************************************************************************************
# EXT7
#*******************************************************************************************
R0050:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT7            .47     .041 No_date    1:21   32.24 .498      .000
      [CN= 83.0: N= 3.00: Tp=  .32]
#*******************************************************************************************
# EXT8
#*******************************************************************************************
R0050:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT8            .83     .052 No_date    1:30   28.33 .437      .000
      [CN= 79.0: N= 3.00: Tp=  .42]
#*******************************************************************************************
# EXT9
#*******************************************************************************************
R0050:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9           3.57     .183 No_date    1:35   25.77 .398      .000
      [CN= 76.0: N= 3.00: Tp=  .48]
#*******************************************************************************************
# EXT9a
#*******************************************************************************************
R0050:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9a           .01     .002 No_date    1:00   27.43 .423      .000
      [CN= 78.0: N= 3.00: Tp=  .04]
#*******************************************************************************************
# EXT10
#*******************************************************************************************
R0050:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT10           .20     .010 No_date    1:30   22.06 .340      .000
      [CN= 71.0: N= 3.00: Tp=  .42]
#*******************************************************************************************
# Pre2
#*******************************************************************************************
R0050:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre2            .57     .032 No_date    1:33   27.44 .423      .000
      [CN= 78.0: N= 3.00: Tp=  .46]
#*******************************************************************************************
# Pre9
#*******************************************************************************************
R0050:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre9            .83     .029 No_date    1:48   22.07 .340      .000
      [CN= 71.0: N= 3.00: Tp=  .64]
#*******************************************************************************************
# Pre10
#*******************************************************************************************
R0050:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre10           .80     .049 No_date    1:20   22.07 .340      .000
      [CN= 71.0: N= 3.00: Tp=  .29]
#*******************************************************************************************
# Pre11
#*******************************************************************************************
R0050:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre11           .07     .007 No_date    1:13   27.44 .423      .000
      [CN= 78.0: N= 3.00: Tp=  .21]
#*******************************************************************************************
R0050:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:EXT2            .28     .026 No_date    1:22   34.45  n/a      .000
                     +    1.0 02:Pre2            .57     .032 No_date    1:33   27.44  n/a      .000
                  SUM=    1.0 01:J1              .85     .057 No_date    1:27   29.79  n/a      .000
R0050:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J1              .85     .057 No_date    1:27   29.79  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R1              .85     .054 No_date    1:33   29.79  n/a      .000
      [L/S/n=  143./ .394/.035]
      {Vmax=  .360:Dmax=  .151}
R0050:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R1              .85     .054 No_date    1:33   29.79  n/a      .000
                     +    1.0 02:EXT3            .56     .044 No_date    1:22   29.25  n/a      .000
                     +    1.0 02:EXT1           3.21     .142 No_date    1:53   29.25  n/a      .000
                  SUM=    1.0 01:J2             4.62     .219 No_date    1:40   29.35  n/a      .000
R0050:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J2             4.62     .219 No_date    1:40   29.35  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R2             4.62     .218 No_date    1:42   29.35  n/a      .000
      [L/S/n=   73./ .425/.035]
      {Vmax=  .505:Dmax=  .266}
R0050:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R2             4.62     .218 No_date    1:42   29.35  n/a      .000
                     +    1.0 02:EXT4            .31     .025 No_date    1:19   28.33  n/a      .000
                  SUM=    1.0 01:J3             4.93     .234 No_date    1:40   29.29  n/a      .000
R0050:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J3             4.93     .234 No_date    1:40   29.29  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R3             4.93     .232 No_date    1:42   29.29  n/a      .000
      [L/S/n=   92./ .274/.035]
      {Vmax=  .412:Dmax=  .274}
R0050:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R3             4.93     .232 No_date    1:42   29.29  n/a      .000
                     +    1.0 02:EXT5            .59     .032 No_date    1:32   25.77  n/a      .000
                  SUM=    1.0 01:J4             5.52     .263 No_date    1:41   28.91  n/a      .000
R0050:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J4             5.52     .263 No_date    1:41   28.91  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R4             5.52     .248 No_date    1:52   28.91  n/a      .000
      [L/S/n=  251./ .190/.035]
      {Vmax=  .406:Dmax=  .309}
R0050:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R4             5.52     .248 No_date    1:52   28.91  n/a      .000
                     +    1.0 02:EXT6            .86     .055 No_date    1:40   34.45  n/a      .000
                     +    1.0 02:EXT7            .47     .041 No_date    1:21   32.24  n/a      .000
                  SUM=    1.0 01:J5             6.86     .323 No_date    1:47   29.83  n/a      .000
R0050:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J5             6.86     .323 No_date    1:47   29.83  n/a      .000
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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=  .233}
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> #*******************************************************************************************************
```

```
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   42.40  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            1.83     .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]
```

```
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>       [RDT= 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>       [RDT= 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>       [RDT= 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>       [RDT= 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>       [RDT= 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>       [RDT= 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>       [RDT= 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>       [RDT= 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>       [RDT= 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> *   [RDT= 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> R0199:C00002-------------------------------------------------------------------------------------
02619>     FINISH
02620> -------------------------------------------------------------------------------------------------
02621> *****************************************************************************************
02622>      WARNINGS / ERRORS / NOTES
02623>      -------------------------
02624> R0002:C00035  ROUTE PIPE      ->
02625> *** WARNING: New pipe size used for routing.
02626> *** WARNING: New pipe size used for routing.
02627> *** WARNING: New pipe size used for routing.
02628> *** WARNING: New pipe size used for routing.
02629> *** WARNING: New pipe size used for routing.
02630> *** WARNING: New pipe size used for routing.
02631> *** WARNING: New pipe size used for routing.
02632> *** WARNING: New pipe size used for routing.
02633> *** WARNING: New pipe size used for routing.
02634> *** WARNING: New pipe size used for routing.
02635> *** WARNING: New pipe size used for routing.
02636> *** WARNING: New pipe size used for routing.
02637>    Simulation ended on 2025-04-15     at 12:56:14
02638> =================================================================================================
02639>
```

Attachment B

Post-Development Hydrology

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

					Quality Control 1		Overflow			
					Vertical Orifice		Broad Crested Weir			
					Dia (m)	0.085	L (m)	0.300		
					Area (m^2)	0.006				
					Invert (m)	93.86	C_w	1.580		
					C_o	0.61	Invert (m)	94.40		
					Q @ D	0.003	n contr.	2	Total	
Elevation (m)	Storage 1 (m^3)	Storage 2 (m^3)	Total Volume (m^3)	Demarkation Points	Depth (m)	Outflow (m^3/s)	Depth (m)	Outflow (m^3/s)	Outflow (m^3/s)	Storage (ha·m)
93.86		**0.0**	**0.0**	**Pond Bottom**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
93.87		0.0	0.0		0.010	0.000	0.000	0.000	0.000	0.000
93.88		0.1	0.1		0.020	0.001	0.000	0.000	0.001	0.000
93.89		0.3	0.3		0.030	0.001	0.000	0.000	0.001	0.000
93.90		0.5	0.5		0.040	0.001	0.000	0.000	0.001	0.000
93.91		0.8	0.8		0.050	0.002	0.000	0.000	0.002	0.000
93.92		1.2	1.2		0.060	0.002	0.000	0.000	0.002	0.000
93.93		1.7	1.7		0.070	0.003	0.000	0.000	0.003	0.000
93.94		2.2	2.2		0.080	0.003	0.000	0.000	0.003	0.000
93.95		2.7	2.7		0.090	0.003	0.000	0.000	0.003	0.000
93.96		3.3	3.3		0.100	0.004	0.000	0.000	0.004	0.000
93.97		4.0	4.0		0.110	0.004	0.000	0.000	0.004	0.000
93.98		4.8	4.8		0.120	0.004	0.000	0.000	0.004	0.000
93.99		5.6	5.6		0.130	0.005	0.000	0.000	0.005	0.001
94.00		6.5	6.5		0.140	0.005	0.000	0.000	0.005	0.001
94.01		7.4	7.4		0.150	0.005	0.000	0.000	0.005	0.001
94.02		8.4	8.4		0.160	0.005	0.000	0.000	0.005	0.001
94.03	0.0	9.5	9.5		0.170	0.005	0.000	0.000	0.005	0.001
94.04	0.0	10.6	10.7		0.180	0.006	0.000	0.000	0.006	0.001
94.05	0.2	11.8	12.0		0.190	0.006	0.000	0.000	0.006	0.001
94.06	0.4	13.1	13.5		0.200	0.006	0.000	0.000	0.006	0.001
94.07	0.8	14.5	15.2		0.210	0.006	0.000	0.000	0.006	0.002
94.08	1.2	15.9	17.1		0.220	0.006	0.000	0.000	0.006	0.002
94.09	1.8	17.4	19.2		0.230	0.007	0.000	0.000	0.007	0.002
94.10	2.5	19.0	21.5		0.240	0.007	0.000	0.000	0.007	0.002
94.11	3.2	20.7	23.9		0.250	0.007	0.000	0.000	0.007	0.002
94.12	4.1	22.4	26.5		0.260	0.007	0.000	0.000	0.007	0.003
94.13	5.1	24.2	29.3		0.270	0.007	0.000	0.000	0.007	0.003
94.14	6.2	26.1	32.2		0.280	0.007	0.000	0.000	0.007	0.003
94.15	7.4	28.0	35.3		0.290	0.008	0.000	0.000	0.008	0.004
94.16	8.7	29.9	38.6		0.300	0.008	0.000	0.000	0.008	0.004
94.17	10.1	31.9	42.0		0.310	0.008	0.000	0.000	0.008	0.004
94.18	10.7	33.8	44.5		0.320	0.008	0.000	0.000	0.008	0.004
94.19	12.3	35.9	48.2		0.330	0.008	0.000	0.000	0.008	0.005
94.20	14.1	37.9	52.0		0.340	0.008	0.000	0.000	0.008	0.005
94.21	16.0	39.9	56.0		0.350	0.009	0.000	0.000	0.009	0.006
94.22	18.1	42.0	60.1		0.360	0.009	0.000	0.000	0.009	0.006
94.23	20.2	44.1	64.3		0.370	0.009	0.000	0.000	0.009	0.006
94.24	22.4	46.3	68.7		0.380	0.009	0.000	0.000	0.009	0.007
94.25	24.6	48.4	73.0		0.390	0.009	0.000	0.000	0.009	0.007
94.26	26.9	50.6	77.5		0.400	0.009	0.000	0.000	0.009	0.008
94.27	29.1	52.9	82.0		0.410	0.009	0.000	0.000	0.009	0.008
94.28	31.4	55.1	86.6		0.420	0.009	0.000	0.000	0.009	0.009
94.29	33.8	57.4	91.2		0.430	0.010	0.000	0.000	0.010	0.009
94.30	36.1	59.7	95.9		0.440	0.010	0.000	0.000	0.010	0.010
94.31	38.5	62.1	100.6		0.450	0.010	0.000	0.000	0.010	0.010
94.32	40.9	64.5	105.4		0.460	0.010	0.000	0.000	0.010	0.011
94.33	43.4	66.9	110.2		0.470	0.010	0.000	0.000	0.010	0.011
94.34	45.9	69.3	115.2		0.480	0.010	0.000	0.000	0.010	0.012
94.35	48.4	71.8	120.1		0.490	0.010	0.000	0.000	0.010	0.012
94.36	50.9	74.3	125.2		0.500	0.010	0.000	0.000	0.010	0.013
94.37	53.4	76.9	130.3		0.510	0.010	0.000	0.000	0.010	0.013
94.38	56.0	79.4	135.5		0.520	0.011	0.000	0.000	0.011	0.014
94.39	58.6	82.1	140.7		0.530	0.011	0.000	0.000	0.011	0.014
94.40	**61.3**	**84.7**	**146.0**	**Overflow Weir**	**0.540**	**0.011**	**0.000**	**0.000**	**0.011**	**0.015**
94.41	64.0	87.4	151.4		0.550	0.011	0.010	0.000	0.011	0.015
94.42	66.7	90.2	156.8		0.560	0.011	0.020	0.001	0.012	0.016
94.43	69.4	92.9	162.3		0.570	0.011	0.030	0.002	0.014	0.016
94.44	**72.1**	**95.7**	**167.9**	**100-Yr WSE**	**0.580**	**0.011**	**0.040**	**0.004**	**0.015**	**0.017**
94.45	74.9	98.6	173.5		0.590	0.011	0.050	0.005	0.016	0.017
94.46	77.7	101.5	179.2		0.600	0.011	0.060	0.007	0.018	0.018
94.47	80.6	104.4	185.0		0.610	0.012	0.070	0.008	0.020	0.019
94.48	83.5	107.4	190.9		0.620	0.012	0.080	0.010	0.022	0.019
94.49	86.4	110.4	196.8		0.630	0.012	0.090	0.012	0.024	0.020
94.50	**89.3**	**113.5**	**202.8**	**Top of Pond**	**0.640**	**0.012**	**0.100**	**0.014**	**0.026**	**0.020**

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

					Quality Control 1		Emergency Overflow			
					Vertical Orifice		Broad Crested Weir			
					Dia (m)	0.085	L (m)	0.300		
					Area (m^2)	0.006				
					Invert (m)	93.76	C_w	1.580		
					C_o	0.61	Invert (m)	94.35		
					Q @ D	0.003	n contr.	2	Total	
Elevation (m)	Storage 3 (m^3)	Storage 4 (m^3)	Total Volume (m^3)	Demarkation Points	Depth (m)	Outflow (m^3/s)	Depth (m)	Outflow (m^3/s)	Outflow (m^3/s)	Storage (ha·m)
93.76		**0.0**	**0.0**	**Pond Bottom**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
93.77		0.1	0.1		0.010	0.000	0.000	0.000	0.000	0.000
93.78		0.2	0.2		0.020	0.001	0.000	0.000	0.001	0.000
93.79		0.4	0.4		0.030	0.001	0.000	0.000	0.001	0.000
93.80		0.6	0.6		0.040	0.001	0.000	0.000	0.001	0.000
93.81		0.9	0.9		0.050	0.002	0.000	0.000	0.002	0.000
93.82		1.3	1.3		0.060	0.002	0.000	0.000	0.002	0.000
93.83		1.8	1.8		0.070	0.003	0.000	0.000	0.003	0.000
93.84		2.4	2.4		0.080	0.003	0.000	0.000	0.003	0.000
93.85		3.0	3.0		0.090	0.003	0.000	0.000	0.003	0.000
93.86		3.7	3.7		0.100	0.004	0.000	0.000	0.004	0.000
93.87		4.5	4.5		0.110	0.004	0.000	0.000	0.004	0.000
93.88		5.2	5.2		0.120	0.004	0.000	0.000	0.004	0.001
93.89		6.0	6.0		0.130	0.005	0.000	0.000	0.005	0.001
93.90		6.8	6.8		0.140	0.005	0.000	0.000	0.005	0.001
93.91		7.6	7.6		0.150	0.005	0.000	0.000	0.005	0.001
93.92		8.4	8.4		0.160	0.005	0.000	0.000	0.005	0.001
93.93		9.3	9.3		0.170	0.005	0.000	0.000	0.005	0.001
93.94		10.1	10.1		0.180	0.006	0.000	0.000	0.006	0.001
93.95		11.0	11.0		0.190	0.006	0.000	0.000	0.006	0.001
93.96		11.9	11.9		0.200	0.006	0.000	0.000	0.006	0.001
93.97		12.8	12.8		0.210	0.006	0.000	0.000	0.006	0.001
93.98		13.7	13.7		0.220	0.006	0.000	0.000	0.006	0.001
93.99		14.6	14.6		0.230	0.007	0.000	0.000	0.007	0.001
94.00		15.6	15.6		0.240	0.007	0.000	0.000	0.007	0.002
94.01		16.6	16.6		0.250	0.007	0.000	0.000	0.007	0.002
94.02		17.6	17.6		0.260	0.007	0.000	0.000	0.007	0.002
94.03		18.6	18.6		0.270	0.007	0.000	0.000	0.007	0.002
94.04	0.0	19.7	19.7		0.280	0.007	0.000	0.000	0.007	0.002
94.05	0.1	20.8	20.9		0.290	0.008	0.000	0.000	0.008	0.002
94.06	0.4	21.8	22.2		0.300	0.008	0.000	0.000	0.008	0.002
94.07	0.8	23.0	23.7		0.310	0.008	0.000	0.000	0.008	0.002
94.08	1.3	24.1	25.4		0.320	0.008	0.000	0.000	0.008	0.003
94.09	1.8	25.3	27.1		0.330	0.008	0.000	0.000	0.008	0.003
94.10	2.5	26.5	29.0		0.340	0.008	0.000	0.000	0.008	0.003
94.11	3.3	27.7	31.0		0.350	0.009	0.000	0.000	0.009	0.003
94.12	4.1	29.0	33.1		0.360	0.009	0.000	0.000	0.009	0.003
94.13	4.5	30.2	34.8		0.370	0.009	0.000	0.000	0.009	0.003
94.14	5.6	31.5	37.2		0.380	0.009	0.000	0.000	0.009	0.004
94.15	6.8	32.9	39.7		0.390	0.009	0.000	0.000	0.009	0.004
94.16	8.1	34.2	42.3		0.400	0.009	0.000	0.000	0.009	0.004
94.17	8.6	35.6	44.2		0.410	0.009	0.000	0.000	0.009	0.004
94.18	10.1	37.1	47.1		0.420	0.009	0.000	0.000	0.009	0.005
94.19	11.7	38.5	50.2		0.430	0.010	0.000	0.000	0.010	0.005
94.20	13.4	40.0	53.5		0.440	0.010	0.000	0.000	0.010	0.005
94.21	15.3	41.6	56.9		0.450	0.010	0.000	0.000	0.010	0.006
94.22	17.2	43.1	60.4		0.460	0.010	0.000	0.000	0.010	0.006
94.23	19.3	44.7	64.0		0.470	0.010	0.000	0.000	0.010	0.006
94.24	21.4	46.4	67.8		0.480	0.010	0.000	0.000	0.010	0.007
94.25	23.5	48.1	71.6		0.490	0.010	0.000	0.000	0.010	0.007
94.26	25.7	49.8	75.5		0.500	0.010	0.000	0.000	0.010	0.008
94.27	27.9	51.5	79.4		0.510	0.010	0.000	0.000	0.010	0.008
94.28	30.1	53.3	83.4		0.520	0.011	0.000	0.000	0.011	0.008
94.29	32.4	55.1	87.5		0.530	0.011	0.000	0.000	0.011	0.009
94.30	34.7	57.0	91.7		0.540	0.011	0.000	0.000	0.011	0.009
94.31	37.0	58.9	95.9		0.550	0.011	0.000	0.000	0.011	0.010
94.32	39.3	60.9	100.2		0.560	0.011	0.000	0.000	0.011	0.010
94.33	41.7	62.9	104.6		0.570	0.011	0.000	0.000	0.011	0.010
94.34	44.1	65.0	109.1		0.580	0.011	0.000	0.000	0.011	0.011
94.35	**46.5**	**67.1**	**113.6**	**Overflow Weir**	**0.590**	**0.011**	**0.000**	**0.000**	**0.011**	**0.011**
94.36	49.0	69.2	118.2		0.600	0.011	0.010	0.000	0.012	0.012
94.37	51.5	71.4	122.9		0.610	0.012	0.020	0.001	0.013	0.012
94.38	54.0	73.7	127.7		0.620	0.012	0.030	0.002	0.014	0.013
94.39	56.5	76.0	132.5		0.630	0.012	0.040	0.004	0.015	0.013
94.40	59.1	78.4	137.5		0.640	0.012	0.050	0.005	0.017	0.014
94.41	61.7	80.8	142.5	**100-Yr WSE**	0.650	0.012	0.060	0.007	0.019	0.014
94.42	64.4	83.3	147.7		0.660	0.012	0.070	0.008	0.020	0.015
94.43	67.0	85.9	152.9		0.670	0.012	0.080	0.010	0.022	0.015
94.44	69.7	88.5	158.2		0.680	0.012	0.090	0.012	0.024	0.016
94.45	**72.4**	**91.2**	**163.6**	**Top of Pond**	**0.690**	**0.012**	**0.100**	**0.014**	**0.026**	**0.016**

N

Legend

- Jock River Tributary
- Post-development Subcatchments
- EGIS AutoCAD layer Design for Post Subcatchments

Google Hybrid

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

```
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
```

```
55  *#*********************************************************************************
    ***********
56  CALIB NASHYD        NHYD=["EXT5"], DT[1](min), AREA=[0.594](ha),
57                      DWF=[0](cms), CN=[76],
58                      IA=[4.67](mm), N=[3], TP[0.45](hrs),
59                      RAINFALL[ , , -1]
60  *#*********************************************************************************
    ***********
61  *# EXT6
62  *#*********************************************************************************
    ***********
63  CALIB NASHYD        NHYD=["EXT6"], DT[1](min), AREA=[0.864](ha),
64                      DWF=[0](cms), CN=[85],
65                      IA=[4.67](mm), N=[3], TP[0.56](hrs),
66                      RAINFALL[ , , -1]
67  *#*********************************************************************************
    ***********
68  *# EXT7
69  *#*********************************************************************************
    ***********
70  CALIB NASHYD        NHYD=["EXT7"], DT[1](min), AREA=[0.471](ha),
71                      DWF=[0](cms), CN=[83],
72                      IA=[4.67](mm), N=[3], TP[0.32](hrs),
73                      RAINFALL[ , , -1]
74  *#*********************************************************************************
    ***********
75  *# EXT8
76  *#*********************************************************************************
    ***********
77  CALIB NASHYD        NHYD=["EXT8"], DT[1](min), AREA=[0.834](ha),
78                      DWF=[0](cms), CN=[79],
79                      IA=[4.67](mm), N=[3], TP[0.42](hrs),
80                      RAINFALL[ , , -1]
81  *#*********************************************************************************
    ***********
82  *# EXT9
83  *#*********************************************************************************
    ***********
84  CALIB NASHYD        NHYD=["EXT9"], DT[1](min), AREA=[3.571](ha),
85                      DWF=[0](cms), CN=[76],
86                      IA=[4.67](mm), N=[3], TP[0.48](hrs),
87                      RAINFALL[ , , -1]
88  *#*********************************************************************************
    ***********
89  *# EXT9a
90  *#*********************************************************************************
    ***********
91  CALIB NASHYD        NHYD=["EXT9a"], DT[1](min), AREA=[0.011](ha),
92                      DWF=[0](cms), CN=[78],
93                      IA=[4.67](mm), N=[3], TP[0.04](hrs),
94                      RAINFALL[ , , -1]
95  *#*********************************************************************************
    ***********
96  *# EXT10
97  *#*********************************************************************************
    ***********
98  CALIB NASHYD        NHYD=["EXT10"], DT[1](min), AREA=[0.203](ha),
99                      DWF=[0](cms), CN=[71],
100                     IA=[4.67](mm), N=[3], TP[0.42](hrs),
101                     RAINFALL[ , , -1]
102 *#*********************************************************************************
    ***********
103 *# Pre2_1
104 *#*********************************************************************************
    ***********
105 CALIB NASHYD        NHYD=["Pre2_1"], DT[1](min), AREA=[0.013](ha),
106                     DWF=[0](cms), CN=[72],
107                     IA=[4.67](mm), N=[3], TP[0.03](hrs),
108                     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=[0.42](ha),
                    XIMP=[0.47], TIMP=[0.57], DWF=[0](cms),
                    LOSS=[1], SLOPE=[1.0](%), RAINFALL=[ , , -1](mm/hr)
*# Site 1 - Roof
*#*******************************************************************************************
DESIGN STANDHYD     NHYD=["S1-Roof"], DT=[1](min), AREA=[0.07](ha),
                    XIMP=[0.99], TIMP=[0.99], DWF=[0](cms),
                    LOSS=[1], SLOPE=[0.5](%), RAINFALL=[ , , -1](mm/hr)
*%-----------------|-----------------------------------------------------------------------
----|-------------------------|
* Rooftop Storage-Outflow Curve for B3 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 , 0 ]
                                    [ 0.00074 , 0.00001 ]
                                    [ 0.00149 , 0.00005 ]
                                    [ 0.00297 , 0.00022 ]
                                    [ 0.00368 , 0.00033 ]
                                    [ 0.00479 , 0.00065 ]
                                    [ 0.00526 , 0.00084 ]
                                    [ 0.00646 , 0.00171 ]
                                    [ 0.00747 , 0.00322 ]
                                    [ 0.00808 , 0.00445 ]
                                    [ 0.00891 , 0.00687 ]
                                    [ 0.00917 , 0.00775 ]
                                    [ 0.00967 , 0.00959 ]
                                    [ 0.00991 , 0.01054 ]
                                    [ 0.01037 , 0.01252 ]
                                    [ 0.01059 , 0.01355 ]
                                    [ 0.01235 , 0.01568 ]
                                    [ 0.01493 , 0.01679 ]
                                    [ 0.0218 , 0.01909 ]
                                    [ 0.02584 , 0.02028 ]
                                    [ -1 , -1 ]
                                 NHYDovf=["SITE1-Over"],
*%-----------------|-------------------------------------------------------------------------------|-------------------------|
*#*****************************************************************************************************
*# Site 2
*#*****************************************************************************************************
DESIGN STANDHYD      NHYD=["S2-B3"], DT=[1](min), AREA=[0.35](ha),
                     XIMP=[0.46], TIMP=[0.56], DWF=[0](cms),
                     LOSS=[1], SLOPE=[1.0](%), RAINFALL=[ , , -1](mm/hr)

*#*****************************************************************************************************
*# Site 2 - Roof
*#*****************************************************************************************************
DESIGN STANDHYD      NHYD=["S2-Roof"], DT=[1](min), AREA=[0.09](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 ]
                                    [ 0.0007 , 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 ]
                                    [ 0.0141 , 0.0128 ]
                                    [ 0.017 , 0.0138 ]
                                    [ 0.0243 , 0.0158 ]
                                    [ 0.0263 , 0.0164 ]
                                    [ -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
* NOTE: SEGROUGH will be adjusted after completing the 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],
```

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                        ( 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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]
```

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                                                    [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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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
* NOTE: SEGROUGH will be adjusted after completing the 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"]
```

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*%-----------------|-------------------------------------------------------------|
* NOTE: Cross-section number 7 is taken from HEC-RAS Model
* NOTE: SEGROUGH will be adjusted after completing the 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
*%-----------------|-------------------------------------------------------------|
```

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*%  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
*%-----------------|-------------------------------------------------------------|
*%  100-Year, 24-Hour SCS Storm + 20%
*START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[998]
*%                   ["SC24100x+.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=[999]
*                   ["100YRCHI3HR+.stm"] <--storm filename, one per line for NSTORM time
*%-----------------|-------------------------------------------------------------|
FINISH
```

```
==========================================================================================

SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO         222     000    11   5555   =========
S       W W W   MM MM   H   H    Y Y    MM MM   O   O          2    0   0   11   5
SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O          2    0   0   11   5      Ver 5.500
    S    W W    M   M   H   H     Y     M   M   O   O        222    0   0   11   555    FEB  2015
SSSSS    W W    M   M   H   H     Y     M   M    OOO         2      0   0   11     5    =========
                                                             2      0   0   11     5    # 2549237
      StormWater Management HYdrologic Model                 222     000    11   555    =========

******************************************************************************************
**************************************  SWMHYMO Ver 5.500  ********************************
******************  A single event and continuous hydrologic simulation model  ************
******************     based on the principles of HYMO and its successors      ************
******************                 OTTHYMO-83 and OTTHYMO-89.                  ************
******************************************************************************************
****************** Distributed by:  J.F. Sabourin and Associates Inc.         ************
******************                  Ottawa,  Ontario: (613) 836-3884          ************
******************                  Gatineau, Quebec: (819) 243-6858          ************
******************                  E-Mail: swmhymo@jfsa.Com                  ************
******************************************************************************************

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++++++++ Licensed user: JFSAinc.                                ++++++++++++++++
++++++++++++++++++                Ottawa              SERIAL#:2549237     ++++++++++++++++
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

******************************************************************************************
******************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++       ****************
******************           Maximum value for ID numbers  :     11       ****************
******************           Max. number of rainfall points: 105408       ****************
******************           Max. number of flow points    : 105408       ****************
******************************************************************************************


*******************************   S U M M A R Y   O U T P U T   **************************
******************************************************************************************
*                 RUN DATE: 2025-06-02     TIME: 18:47:18     RUN COUNTER: 006684        *
******************************************************************************************
* Input   file: C:\Temp\20250428-PostDev\Ott_St-Post_v09.dat                             *
* Output  file: C:\Temp\20250428-PostDev\Ott_St-Post_v09.out                             *
* Summary file: C:\Temp\20250428-PostDev\Ott_St-Post_v09.sum                             *
* User comments:                                                                         *
* 1:_____________________________________________________________________________________*
* 2:_____________________________________________________________________________________*
* 3:_____________________________________________________________________________________*
******************************************************************************************


#*****************************************************************************************
#  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 pre development conditions
#*****************************************************************************************
  ** END OF RUN :    1

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






 RUN#:COMMAND#
R0002:C00001-----------------------------------------------------------------------------
      START
       [TZERO =    .00 hrs on        0]
       [METOUT=   2    (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN  = 0002 ]
#*****************************************************************************************
#  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 pre development conditions
#*****************************************************************************************
R0002:C00002-----------------------------------------------------------------------------
      READ STORM
       Filename = STORM.001
       Comment  = CHICAGO STORM 2 Year, 3 Hours
       [SDT=10.00:SDUR=   3.00:PTOT=  31.86]
#*****************************************************************************************
R0002:C00003-----------------------------------------------------------------------------
      DEFAULT VALUES
       Filename = C:\Temp\20250428-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
#*****************************************************************************************
R0002:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT1            3.21     .037 No_date    1:58    8.15 .256      .000
      [CN= 80.0: N= 3.00: Tp=  .72]
#*****************************************************************************************
# EXT2
#*****************************************************************************************
R0002:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT2             .28     .007 No_date    1:25   10.26 .322      .000
      [CN= 85.0: N= 3.00: Tp=  .33]
#*****************************************************************************************
# EXT3
#*****************************************************************************************
R0002:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT3             .56     .011 No_date    1:24    8.15 .256      .000
      [CN= 80.0: N= 3.00: Tp=  .32]
#*****************************************************************************************
# EXT4
#*****************************************************************************************
R0002:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT4             .31     .006 No_date    1:22    7.80 .245      .000
      [CN= 79.0: N= 3.00: Tp=  .29]
#*****************************************************************************************
# EXT5
#*****************************************************************************************
R0002:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT5             .59     .008 No_date    1:36    6.88 .216      .000
      [CN= 76.0: N= 3.00: Tp=  .45]
#*****************************************************************************************
# EXT6
#*****************************************************************************************
R0002:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT6             .86     .015 No_date    1:44   10.27 .322      .000
      [CN= 85.0: N= 3.00: Tp=  .56]
#*****************************************************************************************
# EXT7
#*****************************************************************************************
R0002:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT7             .47     .011 No_date    1:24    9.33 .293      .000
      [CN= 83.0: N= 3.00: Tp=  .32]
#*****************************************************************************************
# EXT8
#*****************************************************************************************
R0002:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT8             .83     .013 No_date    1:33    7.81 .245      .000
      [CN= 79.0: N= 3.00: Tp=  .42]
#*****************************************************************************************
# EXT9
#*****************************************************************************************
R0002:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9            3.57     .045 No_date    1:38    6.88 .216      .000
      [CN= 76.0: N= 3.00: Tp=  .48]
#*****************************************************************************************
# EXT9a
#*****************************************************************************************
R0002:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9a            .01     .001 No_date    1:00    7.47 .234      .000
      [CN= 78.0: N= 3.00: Tp=  .04]
#*****************************************************************************************
# EXT10
#*****************************************************************************************
R0002:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT10            .20     .002 No_date    1:34    5.64 .177      .000
      [CN= 71.0: N= 3.00: Tp=  .42]
#*****************************************************************************************
# Pre2_1
#*****************************************************************************************
R0002:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD          1.0 01:Pre2_1           .01     .001 No_date    1:00    5.86 .184      .000
      [CN= 72.0: N= 3.00: Tp=  .03]
#*****************************************************************************************
# Pre2_2
#*****************************************************************************************
R0002:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD          1.0 01:Pre2_2           .00     .000 No_date    1:00    7.46 .234      .000
      [CN= 78.0: N= 3.00: Tp=  .02]
#*****************************************************************************************
# Pre9_1
#*****************************************************************************************
R0002:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre9_1           .44     .005 No_date    1:30    5.64 .177      .000
      [CN= 71.0: N= 3.00: Tp=  .38]
#*****************************************************************************************
# Pre9_2
#*****************************************************************************************
R0002:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD          1.0 01:Pre9_2           .01     .000 No_date    1:00    3.62 .114      .000
      [CN= 59.0: N= 3.00: Tp=  .03]
#*****************************************************************************************
# Pre10_1
#*****************************************************************************************
R0002:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre10_1          .80     .011 No_date    1:22    5.65 .177      .000
      [CN= 71.0: N= 3.00: Tp=  .29]
#*****************************************************************************************
# Pre11_1
#*****************************************************************************************
R0002:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre11_1          .07     .002 No_date    1:15    7.47 .235      .000
      [CN= 78.0: N= 3.00: Tp=  .21]
#*****************************************************************************************
# Site 1
#*****************************************************************************************
R0002:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S1-B1            .42     .044 No_date    1:00   17.32 .544      .000
      [XIMP=.47:TIMP=.57]
      [SLP=1.00:DT= 1.00]
      [LOSS= 1 : HORTONS]
# Site 1 - Roof
#*****************************************************************************************
R0002:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S1-Roof          .07     .015 No_date    1:00   30.01 .942      .000
      [XIMP=.99:TIMP=.99]
      [SLP= .50:DT= 1.00]
      [LOSS= 1 : HORTONS]
R0002:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:S1-Roof          .07     .015 No_date    1:00   30.01  n/a      .000
                out <=    1.0 01:S1-Roof-Ou       .07     .001 No_date    1:31   30.01  n/a      .000
           overflow <=    1.0 03:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a      .000
     {MxStoUsed=.1413E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0002:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:S1-B1            .42     .044 No_date    1:00   17.32  n/a      .000
                   +      1.0 02:S1-Roof-Ou       .07     .001 No_date    1:31   30.01  n/a      .000
                   +      1.0 02:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a      .000
                SUM=      1.0 01:SITE1-IN         .49     .045 No_date    1:00   19.13  n/a      .000
R0002:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:SITE1-IN         .49     .045 No_date    1:00   19.13  n/a      .000
                out <=    1.0 01:SITE1-Out        .49     .008 No_date    1:33   19.13  n/a      .000
           overflow <=    1.0 03:SITE1-Over       .00     .000 No_date    0:00     .00  n/a      .000
     {MxStoUsed=.4120E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
#*****************************************************************************************
# Site 2
#*****************************************************************************************
R0002:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S2-B3            .35     .036 No_date    1:00   17.06 .535      .000
      [XIMP=.46:TIMP=.56]
      [SLP=1.00:DT= 1.00]
      [LOSS= 1 : HORTONS]
#*****************************************************************************************
# Site 2 - Roof
#*****************************************************************************************
R0002:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S2-Roof          .09     .019 No_date    1:00   30.02 .942      .000
      [XIMP=.99:TIMP=.99]
      [SLP= .50:DT= 1.00]
      [LOSS= 1 : HORTONS]
#*****************************************************************************************
R0002:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:S2-Roof          .09     .019 No_date    1:00   30.02  n/a      .000
                out <=    1.0 01:S2-Roof-Ou       .09     .006 No_date    1:10   30.03  n/a      .000
           overflow <=    1.0 03:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a      .000
     {MxStoUsed=.1070E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0002:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:S2-B3            .35     .036 No_date    1:00   17.06  n/a      .000
                   +      1.0 02:S2-Roof-Ou       .09     .006 No_date    1:10   30.03  n/a      .000
                   +      1.0 02:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a      .000
                SUM=      1.0 01:SITE2-IN         .44     .042 No_date    1:00   19.71  n/a      .000
R0002:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:SITE2-IN         .44     .042 No_date    1:00   19.71  n/a      .000
                out <=    1.0 01:SITE2-Out        .44     .009 No_date    1:37   19.71  n/a      .000
           overflow <=    1.0 03:SITE2-Over       .00     .000 No_date    0:00     .00  n/a      .000
     {MxStoUsed=.4040E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0002:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:SITE1-Out        .49     .008 No_date    1:33   19.13  n/a      .000
                   +      1.0 02:SITE1-Over       .00     .000 No_date    0:00     .00  n/a      .000
                SUM=      1.0 01:Site1            .49     .008 No_date    1:33   19.13  n/a      .000
R0002:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:SITE2-Out        .44     .009 No_date    1:37   19.71  n/a      .000
                   +      1.0 02:SITE2-Over       .00     .000 No_date    0:00     .00  n/a      .000
                SUM=      1.0 01:Site2            .44     .009 No_date    1:37   19.71  n/a      .000
R0002:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:EXT2             .28     .007 No_date    1:25   10.26  n/a      .000
                   +      1.0 02:Pre2_1           .01     .001 No_date    1:00    5.86  n/a      .000
                   +      1.0 02:Site1            .49     .008 No_date    1:33   19.13  n/a      .000
                   +      1.0 02:Site2            .44     .009 No_date    1:37   19.71  n/a      .000
                SUM=      1.0 01:J1              1.23     .024 No_date    1:26   17.14  n/a      .000
R0002:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J1              1.23     .024 No_date    1:26   17.14  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R1              1.23     .024 No_date    1:33   17.14  n/a      .000
      [L/S/n=  143./ .394/.035]
      {Vmax=  .280:Dmax=  .104}
R0002:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R1              1.23     .024 No_date    1:33   17.14  n/a      .000
                   +      1.0 02:EXT3             .56     .011 No_date    1:24    8.15  n/a      .000
                   +      1.0 02:EXT1            3.21     .037 No_date    1:58    8.15  n/a      .000
                SUM=      1.0 01:J2              5.00     .066 No_date    1:45   10.36  n/a      .000
R0002:C00036-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J2              5.00     .066 No_date    1:45   10.36  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R2              5.00     .066 No_date    1:48   10.36  n/a      .000
      [L/S/n=   73./ .425/.035]
      {Vmax=  .368:Dmax=  .165}
R0002:C00037-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R2              5.00     .066 No_date    1:48   10.36  n/a      .000
                   +      1.0 02:EXT4             .31     .006 No_date    1:22    7.80  n/a      .000
                SUM=      1.0 01:J3              5.31     .070 No_date    1:45   10.21  n/a      .000
R0002:C00038-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J3              5.31     .070 No_date    1:45   10.21  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R3              5.31     .070 No_date    1:50   10.21  n/a      .000
      [L/S/n=   92./ .274/.035]
      {Vmax=  .299:Dmax=  .170}
R0002:C00039-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R3              5.31     .070 No_date    1:50   10.21  n/a      .000
                   +      1.0 02:EXT5             .59     .008 No_date    1:36    6.88  n/a      .000
                SUM=      1.0 01:J4              5.90     .077 No_date    1:48    9.88  n/a      .000
R0002:C00040-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J4              5.90     .077 No_date    1:48    9.88  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R4              5.90     .071 No_date    2:04    9.88  n/a      .000
      [L/S/n=  251./ .190/.035]
      {Vmax=  .279:Dmax=  .183}
R0002:C00041-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R4              5.90     .071 No_date    2:04    9.88  n/a      .000
                   +      1.0 02:EXT6             .86     .015 No_date    1:44   10.27  n/a      .000
                   +      1.0 02:EXT7             .47     .011 No_date    1:24    9.33  n/a      .000
                SUM=      1.0 01:J5              7.24     .091 No_date    1:57    9.89  n/a      .000
R0002:C00042-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J5              7.24     .091 No_date    1:57    9.89  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R5              7.24     .089 No_date    2:04    9.89  n/a      .000
      [L/S/n=  237./ .644/.035]
      {Vmax=  .455:Dmax=  .176}
R0002:C00043-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:Pre10_1          .80     .011 No_date    1:22    5.65  n/a      .000
                   +      1.0 02:Pre9_2           .01     .000 No_date    1:00    3.62  n/a      .000
                   +      1.0 02:Pre2_2           .00     .000 No_date    1:00    7.46  n/a      .000
                SUM=      1.0 01:Pre              .81     .011 No_date    1:22    5.62  n/a      .000
R0002:C00044-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:Pre              .81     .011 No_date    1:22    5.62  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R6               .81     .011 No_date    1:25    5.62  n/a      .000
      [L/S/n=   77./ .776/.035]
      {Vmax=  .492:Dmax=  .008}
R0002:C00045-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:Pre9_1           .44     .005 No_date    1:30    5.64  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R7               .44     .005 No_date    1:34    5.64  n/a      .000
      [L/S/n=  159./1.576/.035]
      {Vmax=  .797:Dmax=  .002}
R0002:C00046-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R6               .81     .021 No_date    4:19    5.77  n/a      .000
                   +      1.0 02:EXT10            .20     .002 No_date    1:34    5.64  n/a      .000
                SUM=      1.0 01:J6              1.02     .021 No_date    4:19    5.75  n/a      .000
R0002:C00047-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J6              1.02     .021 No_date    4:19    5.75  n/a      .000
     [RDT= 1.00] out<-    1.0 01:R8              1.02     .013 No_date    1:30    5.75  n/a      .000
      [L/S/n=   79./ .522/.035]
      {Vmax=  .423:Dmax=  .016}
R0002:C00048-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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    ADD HYD              1.0 02:R8             1.02      .015 No_date    4:41    5.83  n/a     .000
                   +     1.0 02:R7              .44      .016 No_date    4:37    5.86  n/a     .000
                SUM=     1.0 01:J7             1.46      .018 No_date    1:31    5.84  n/a     .000
R0002:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J7             1.46      .018 No_date    1:31    5.84  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R9             1.46      .018 No_date    1:32    5.84  n/a     .000
      [L/S/n=   29./ .887/.035]
      {Vmax=  .543:Dmax=  .012}
R0002:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:EXT9           3.57      .045 No_date    1:38    6.88  n/a     .000
                   +     1.0 02:R9             1.46      .018 No_date    1:32    5.89  n/a     .000
                   +     1.0 02:EXT8            .83      .013 No_date    1:33    7.81  n/a     .000
                   +     1.0 02:R5             7.24      .089 No_date    2:04    9.89  n/a     .000
                SUM=     1.0 01:J8            13.10      .151 No_date    1:52    8.49  n/a     .000
R0002:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE PIPE      ->   1.0 02:J8            13.10      .151 No_date    1:52    8.49  n/a     .000
 *   [RDT= 1.00] out<-   1.0 01:Outlet        13.10      .151 No_date    1:52    8.49  n/a     .000
      [L/S/n=    8./ .010/.013]
      {Vmax=  .310:Dmax=  .691}
      [Din=  .53:Dused=  .84}
################################################################################
# STORMS
################################################################################
  ** END OF RUN :    4

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

 RUN#:COMMAND#
R0005:C00001-----------------------------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on        0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  = 0005 ]
#****************************************************************************************************
#  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 pre development conditions
#****************************************************************************************************
R0005:C00002-----------------------------------------------------------------------------------------
     READ STORM
      Filename = STORM.001
      Comment  = CHICAGO STORM  5 Year, 3 Hours
      [SDT=10.00:SDUR=   3.00:PTOT=  42.51]
#****************************************************************************************************
R0005:C00003-----------------------------------------------------------------------------------------
     DEFAULT VALUES
      Filename = C:\Temp\20250428-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
#****************************************************************************************************
R0005:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT1           3.21      .066 No_date    1:55   14.13 .332     .000
      [CN= 80.0: N= 3.00: Tp=  .72]
#****************************************************************************************************
# EXT2
#****************************************************************************************************
R0005:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT2            .28      .012 No_date    1:23   17.32 .407     .000
      [CN= 85.0: N= 3.00: Tp=  .33]
#****************************************************************************************************
# EXT3
#****************************************************************************************************
R0005:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT3            .56      .020 No_date    1:23   14.13 .332     .000
      [CN= 80.0: N= 3.00: Tp=  .32]
#****************************************************************************************************
# EXT4
#****************************************************************************************************
R0005:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT4            .31      .011 No_date    1:21   13.59 .320     .000
      [CN= 79.0: N= 3.00: Tp=  .29]
#****************************************************************************************************
# EXT5
#****************************************************************************************************
R0005:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT5            .59      .014 No_date    1:34   12.13 .285     .000
      [CN= 76.0: N= 3.00: Tp=  .45]
#****************************************************************************************************
# EXT6
#****************************************************************************************************
R0005:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT6            .86      .026 No_date    1:42   17.32 .407     .000
      [CN= 85.0: N= 3.00: Tp=  .56]
#****************************************************************************************************
# EXT7
#****************************************************************************************************
R0005:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT7            .47      .019 No_date    1:23   15.94 .375     .000
      [CN= 83.0: N= 3.00: Tp=  .32]
#****************************************************************************************************
# EXT8
#****************************************************************************************************
R0005:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT8            .83      .024 No_date    1:31   13.59 .320     .000
      [CN= 79.0: N= 3.00: Tp=  .42]
#****************************************************************************************************
# EXT9
#****************************************************************************************************
R0005:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT9           3.57      .083 No_date    1:36   12.13 .285     .000
      [CN= 76.0: N= 3.00: Tp=  .48]
#****************************************************************************************************
# EXT9a
#****************************************************************************************************
R0005:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT9a           .01      .001 No_date    1:00   13.07 .307     .000
      [CN= 78.0: N= 3.00: Tp=  .04]
#****************************************************************************************************
# EXT10
#****************************************************************************************************
R0005:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:EXT10           .20      .004 No_date    1:32   10.11 .238     .000
      [CN= 71.0: N= 3.00: Tp=  .42]
#****************************************************************************************************
# Pre2_1
#****************************************************************************************************
R0005:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD         1.0 01:Pre2_1          .01      .001 No_date    1:00   10.48 .246     .000
      [CN= 72.0: N= 3.00: Tp=  .03]
#****************************************************************************************************
# Pre2_2
#****************************************************************************************************
R0005:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD         1.0 01:Pre2_2          .00      .000 No_date    1:00   13.06 .307     .000
      [CN= 78.0: N= 3.00: Tp=  .02]
#****************************************************************************************************
# Pre9_1
#****************************************************************************************************
R0005:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:Pre9_1          .44      .010 No_date    1:29   10.11 .238     .000
      [CN= 71.0: N= 3.00: Tp=  .38]
#****************************************************************************************************
# Pre9_2
#****************************************************************************************************
R0005:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD         1.0 01:Pre9_2          .01      .001 No_date    1:00    6.67 .157     .000
      [CN= 59.0: N= 3.00: Tp=  .03]
#****************************************************************************************************
# Pre10_1
#****************************************************************************************************
R0005:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:Pre10_1         .80      .021 No_date    1:21   10.11 .238     .000
      [CN= 71.0: N= 3.00: Tp=  .29]
#****************************************************************************************************
# Pre11_1
#****************************************************************************************************
R0005:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD         1.0 01:Pre11_1         .07      .003 No_date    1:14   13.07 .308     .000
      [CN= 78.0: N= 3.00: Tp=  .21]
#****************************************************************************************************
# Site 1
#****************************************************************************************************
R0005:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD      1.0 01:S1-B1           .42      .067 No_date    1:00   25.83 .608     .000
      [XIMP=.47:TIMP=.57]
      [SLP=1.00:DT= 1.00]
      [LOSS= 1 : HORTONS]
# Site 1 - Roof
#****************************************************************************************************
R0005:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD      1.0 01:S1-Roof         .07      .020 No_date    1:00   40.61 .955     .000
      [XIMP=.99:TIMP=.99]
      [SLP= .50:DT= 1.00]
      [LOSS= 1 : HORTONS]
R0005:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->   1.0 02:S1-Roof         .07      .020 No_date    1:00   40.61  n/a     .000
                out <=   1.0 01:S1-Roof-Ou      .07      .002 No_date    1:30   40.61  n/a     .000
           overflow <=   1.0 03:S1-Roof-Ov      .00      .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.1907E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0005:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:S1-B1           .42      .067 No_date    1:00   25.83  n/a     .000
                   +     1.0 02:S1-Roof-Ou      .07      .002 No_date    1:30   40.61  n/a     .000
                   +     1.0 02:S1-Roof-Ov      .00      .000 No_date    0:00     .00  n/a     .000
                SUM=     1.0 01:SITE1-IN        .49      .069 No_date    1:00   27.94  n/a     .000
R0005:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->   1.0 02:SITE1-IN        .49      .069 No_date    1:00   27.94  n/a     .000
                out <=   1.0 01:SITE1-Out       .49      .009 No_date    1:37   27.94  n/a     .000
           overflow <=   1.0 03:SITE1-Over      .00      .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.7169E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
#****************************************************************************************************
# Site 2
#****************************************************************************************************
R0005:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD      1.0 01:S2-B3           .35      .055 No_date    1:00   25.51 .600     .000
      [XIMP=.46:TIMP=.56]
      [SLP=1.00:DT= 1.00]
      [LOSS= 1 : HORTONS]
#****************************************************************************************************
# Site 2 - Roof
#****************************************************************************************************
R0005:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD      1.0 01:S2-Roof         .09      .026 No_date    1:00   40.62 .955     .000
      [XIMP=.99:TIMP=.99]
      [SLP= .50:DT= 1.00]
      [LOSS= 1 : HORTONS]
#****************************************************************************************************
R0005:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->   1.0 02:S2-Roof         .09      .026 No_date    1:00   40.62  n/a     .000
                out <=   1.0 01:S2-Roof-Ou      .09      .007 No_date    1:11   40.62  n/a     .000
           overflow <=   1.0 03:S2-Roof-Ov      .00      .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.1586E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0005:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:S2-B3           .35      .055 No_date    1:00   25.51  n/a     .000
                   +     1.0 02:S2-Roof-Ou      .09      .007 No_date    1:11   40.62  n/a     .000
                   +     1.0 02:S2-Roof-Ov      .00      .000 No_date    0:00     .00  n/a     .000
                SUM=     1.0 01:SITE2-IN        .44      .062 No_date    1:00   28.60  n/a     .000
R0005:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->   1.0 02:SITE2-IN        .44      .062 No_date    1:00   28.60  n/a     .000
                out <=   1.0 01:SITE2-Out       .44      .010 No_date    1:42   28.60  n/a     .000
           overflow <=   1.0 03:SITE2-Over      .00      .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.6759E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0005:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:SITE1-Out       .49      .009 No_date    1:37   27.94  n/a     .000
                   +     1.0 02:SITE1-Over      .00      .000 No_date    0:00     .00  n/a     .000
                SUM=     1.0 01:Site1           .49      .009 No_date    1:37   27.94  n/a     .000
R0005:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:SITE2-Out       .44      .010 No_date    1:42   28.60  n/a     .000
                   +     1.0 02:SITE2-Over      .00      .000 No_date    0:00     .00  n/a     .000
                SUM=     1.0 01:Site2           .44      .010 No_date    1:42   28.60  n/a     .000
R0005:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:EXT2            .28      .012 No_date    1:23   17.32  n/a     .000
                   +     1.0 02:Pre2_1          .01      .001 No_date    1:00   10.48  n/a     .000
                   +     1.0 02:Site1           .49      .009 No_date    1:37   27.94  n/a     .000
                   +     1.0 02:Site2           .44      .010 No_date    1:42   28.60  n/a     .000
                SUM=     1.0 01:J1             1.23      .032 No_date    1:24   25.53  n/a     .000
R0005:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J1             1.23      .032 No_date    1:24   25.53  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R1             1.23      .031 No_date    1:32   25.53  n/a     .000
      [L/S/n=  143./ .394/.035]
      {Vmax=  .303:Dmax=  .117}
R0005:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:R1             1.23      .031 No_date    1:32   25.53  n/a     .000
                   +     1.0 02:EXT3            .56      .020 No_date    1:23   14.13  n/a     .000
                   +     1.0 02:EXT1           3.21      .066 No_date    1:55   14.13  n/a     .000
                SUM=     1.0 01:J2             5.00      .107 No_date    1:44   16.93  n/a     .000
R0005:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J2             5.00      .107 No_date    1:44   16.93  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R2             5.00      .107 No_date    1:46   16.93  n/a     .000
      [L/S/n=   73./ .425/.035]
      {Vmax=  .419:Dmax=  .200}
R0005:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:R2             5.00      .107 No_date    1:46   16.93  n/a     .000
                   +     1.0 02:EXT4            .31      .011 No_date    1:21   13.59  n/a     .000
                SUM=     1.0 01:J3             5.31      .114 No_date    1:42   16.74  n/a     .000
R0005:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J3             5.31      .114 No_date    1:42   16.74  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R3             5.31      .113 No_date    1:46   16.74  n/a     .000
      [L/S/n=   92./ .274/.035]
      {Vmax=  .342:Dmax=  .206}
R0005:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:R3             5.31      .113 No_date    1:46   16.74  n/a     .000
                   +     1.0 02:EXT5            .59      .014 No_date    1:34   12.13  n/a     .000
                SUM=     1.0 01:J4             5.90      .127 No_date    1:44   16.27  n/a     .000
R0005:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J4             5.90      .127 No_date    1:44   16.27  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R4             5.90      .119 No_date    1:58   16.27  n/a     .000
      [L/S/n=  251./ .190/.035]
      {Vmax=  .327:Dmax=  .225}
R0005:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:R4             5.90      .119 No_date    1:58   16.27  n/a     .000
                   +     1.0 02:EXT6            .86      .026 No_date    1:42   17.32  n/a     .000
                   +     1.0 02:EXT7            .47      .019 No_date    1:23   15.94  n/a     .000
                SUM=     1.0 01:J5             7.24      .154 No_date    1:52   16.38  n/a     .000
R0005:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J5             7.24      .154 No_date    1:52   16.38  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R5             7.24      .152 No_date    1:59   16.38  n/a     .000
      [L/S/n=  237./ .644/.035]
      {Vmax=  .526:Dmax=  .214}
R0005:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:Pre10_1         .80      .021 No_date    1:21   10.11  n/a     .000
                   +     1.0 02:Pre9_2          .01      .001 No_date    1:00    6.67  n/a     .000
                   +     1.0 02:Pre2_2          .00      .000 No_date    1:00   13.06  n/a     .000
                SUM=     1.0 01:Pre             .81      .021 No_date    1:21   10.06  n/a     .000
R0005:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:Pre             .81      .021 No_date    1:21   10.06  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R6              .81      .021 No_date    1:24   10.06  n/a     .000
      [L/S/n=   77./ .776/.035]
      {Vmax=  .492:Dmax=  .016}
R0005:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:Pre9_1          .44      .010 No_date    1:29   10.11  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R7              .44      .010 No_date    1:32   10.11  n/a     .000
      [L/S/n=  159./1.576/.035]
      {Vmax=  .797:Dmax=  .003}
R0005:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:R6              .81      .031 No_date    4:24   10.29  n/a     .000
                   +     1.0 02:EXT10           .20      .004 No_date    1:32   10.11  n/a     .000
                SUM=     1.0 01:J6             1.02      .031 No_date    4:24   10.25  n/a     .000
R0005:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J6             1.02      .031 No_date    4:24   10.25  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R8             1.02      .025 No_date    1:28   10.25  n/a     .000
      [L/S/n=   79./ .522/.035]
      {Vmax=  .423:Dmax=  .023}
R0005:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:R8             1.02      .025 No_date    1:28   10.39  n/a     .000
                   +     1.0 02:R7              .44      .023 No_date    4:43   10.43  n/a     .000
                SUM=     1.0 01:J7             1.46      .034 No_date    1:29   10.40  n/a     .000
R0005:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->   1.0 02:J7             1.46      .034 No_date    1:29   10.40  n/a     .000
     [RDT= 1.00] out<-   1.0 01:R9             1.46      .034 No_date    1:30   10.40  n/a     .000
      [L/S/n=   29./ .887/.035]
      {Vmax=  .543:Dmax=  .023}
R0005:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD              1.0 02:EXT9           3.57      .083 No_date    1:36   12.13  n/a     .000
                   +     1.0 02:R9             1.46      .034 No_date    1:30   10.48  n/a     .000
                   +     1.0 02:EXT8            .83      .024 No_date    1:31   13.59  n/a     .000
                   +     1.0 02:R5             7.24      .152 No_date    1:59   16.38  n/a     .000
                SUM=     1.0 01:J8            13.10      .270 No_date    1:47   14.39  n/a     .000
R0005:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE PIPE      ->   1.0 02:J8            13.10      .270 No_date    1:47   14.39  n/a     .000
 *   [RDT= 1.00] out<-   1.0 01:Outlet        13.10      .270 No_date    1:48   14.39  n/a     .000
      [L/S/n=    8./ .010/.013]
      {Vmax=  .358:Dmax=  .858}
      [Din=  .53:Dused= 1.05}
################################################################################
# STORMS
################################################################################
  ** END OF RUN :    9

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

 RUN#:COMMAND#
R0010:C00001-----------------------------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on        0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  = 0010 ]
```

```
00721> #*****************************************************************************************
00722> #  SWMHYMO  / INPUT DATA FILE
00723> #*****************************************************************************************
00724> #  Project Name  : [5923 Ottawa St]
00725> #  Project Number: [P2710(e01)]
00726> #  Date          : [2025 April 28]
00727> #  Modeller      : [MM]
00728> #  Company       : JFSA Canada Inc.
00729> #  License #     : 2549237
00730> #*****************************************************************************************
00731> # Model developed to simulate runoff from subcatchments under pre development conditions
00732> #*****************************************************************************************
00733> R0010:C00002-------------------------------------------------------------------------------
00734>      READ STORM
00735>        Filename = STORM.001
00736>        Comment  = CHICAGO STORM 10 Year, 3 Hours
00737>        [SDT=10.00:SDUR=   3.00:PTOT=  58.23]
00738> #*****************************************************************************************
00739> R0010:C00003-------------------------------------------------------------------------------
00740>      DEFAULT VALUES
00741>        Filename = C:\Temp\20250428-PostDev\Ottawa.val
00742>        ICASEdv  = 1 (read and print data)
00743>        FileTitle= File comment: [Parameters for City of Ottawa Projects]
00744>                   THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
00745>        Horton's infiltration equation parameters:
00746>        [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
00747>        Parameters for PERVIOUS surfaces in STANDHYD:
00748>        [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
00749>        Parameters for IMPERVIOUS surfaces in STANDHYD:
00750>        [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
00751>        Parameters used in NASHYD:
00752>        [Ia=   4.67 mm] [N= 3.00]
00753>        Average monthly Pan Evaporation data in    (mm)
00754>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
00755>    .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
00756>        Average monthly Potential Evapotranspiration in   (mm)
00757>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
00758>    .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
00759> #*****************************************************************************************
00760> # EXT1
00761> #*****************************************************************************************
00762> R0010:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00763>      CALIB NASHYD          1.0 01:EXT1          3.21     .088 No_date    1:54   18.55 .375     .000
00764>        [CN= 80.0: N= 3.00: Tp=  .72]
00765> #*****************************************************************************************
00766> # EXT2
00767> #*****************************************************************************************
00768> R0010:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00769>      CALIB NASHYD          1.0 01:EXT2           .28     .016 No_date    1:23   22.42 .453     .000
00770>        [CN= 85.0: N= 3.00: Tp=  .33]
00771> #*****************************************************************************************
00772> # EXT3
00773> #*****************************************************************************************
00774> R0010:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00775>      CALIB NASHYD          1.0 01:EXT3           .56     .027 No_date    1:23   18.55 .375     .000
00776>        [CN= 80.0: N= 3.00: Tp=  .32]
00777> #*****************************************************************************************
00778> # EXT4
00779> #*****************************************************************************************
00780> R0010:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00781>      CALIB NASHYD          1.0 01:EXT4           .31     .015 No_date    1:20   17.89 .361     .000
00782>        [CN= 79.0: N= 3.00: Tp=  .29]
00783> #*****************************************************************************************
00784> # EXT5
00785> #*****************************************************************************************
00786> R0010:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00787>      CALIB NASHYD          1.0 01:EXT5           .59     .019 No_date    1:33   16.07 .325     .000
00788>        [CN= 76.0: N= 3.00: Tp=  .45]
00789> #*****************************************************************************************
00790> # EXT6
00791> #*****************************************************************************************
00792> R0010:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00793>      CALIB NASHYD          1.0 01:EXT6           .86     .035 No_date    1:41   22.42 .453     .000
00794>        [CN= 85.0: N= 3.00: Tp=  .56]
00795> #*****************************************************************************************
00796> # EXT7
00797> #*****************************************************************************************
00798> R0010:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00799>      CALIB NASHYD          1.0 01:EXT7           .47     .025 No_date    1:22   20.75 .419     .000
00800>        [CN= 83.0: N= 3.00: Tp=  .32]
00801> #*****************************************************************************************
00802> # EXT8
00803> #*****************************************************************************************
00804> R0010:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00805>      CALIB NASHYD          1.0 01:EXT8           .83     .032 No_date    1:31   17.89 .361     .000
00806>        [CN= 79.0: N= 3.00: Tp=  .42]
00807> #*****************************************************************************************
00808> # EXT9
00809> #*****************************************************************************************
00810> R0010:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00811>      CALIB NASHYD          1.0 01:EXT9          3.57     .111 No_date    1:36   16.08 .325     .000
00812>        [CN= 76.0: N= 3.00: Tp=  .48]
00813> #*****************************************************************************************
00814> # EXT9a
00815> #*****************************************************************************************
00816> R0010:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00817>      CALIB NASHYD          1.0 01:EXT9a          .01     .001 No_date    1:00   17.25 .348     .000
00818>        [CN= 78.0: N= 3.00: Tp=  .04]
00819> #*****************************************************************************************
00820> # EXT10
00821> #*****************************************************************************************
00822> R0010:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00823>      CALIB NASHYD          1.0 01:EXT10          .20     .006 No_date    1:31   13.53 .273     .000
00824>        [CN= 71.0: N= 3.00: Tp=  .42]
00825> #*****************************************************************************************
00826> # Pre2_1
00827> #*****************************************************************************************
00828> R0010:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00829>  *   CALIB NASHYD          1.0 01:Pre2_1         .01     .001 No_date    1:00   13.99 .283     .000
00830>        [CN= 72.0: N= 3.00: Tp=  .03]
00831> #*****************************************************************************************
00832> # Pre2_2
00833> #*****************************************************************************************
00834> R0010:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00835>  *   CALIB NASHYD          1.0 01:Pre2_2         .00     .000 No_date    1:00   17.23 .348     .000
00836>        [CN= 78.0: N= 3.00: Tp=  .02]
00837> #*****************************************************************************************
00838> # Pre9_1
00839> #*****************************************************************************************
00840> R0010:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00841>      CALIB NASHYD          1.0 01:Pre9_1         .44     .013 No_date    1:28   13.53 .273     .000
00842>        [CN= 71.0: N= 3.00: Tp=  .38]
00843> #*****************************************************************************************
00844> # Pre9_2
00845> #*****************************************************************************************
00846> R0010:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00847>  *   CALIB NASHYD          1.0 01:Pre9_2         .01     .001 No_date    1:00    9.08 .183     .000
00848>        [CN= 59.0: N= 3.00: Tp=  .03]
00849> #*****************************************************************************************
00850> # Pre10_1
00851> #*****************************************************************************************
00852> R0010:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00853>      CALIB NASHYD          1.0 01:Pre10_1        .80     .029 No_date    1:21   13.53 .273     .000
00854>        [CN= 71.0: N= 3.00: Tp=  .29]
00855> #*****************************************************************************************
00856> # Pre11_1
00857> #*****************************************************************************************
00858> R0010:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00859>      CALIB NASHYD          1.0 01:Pre11_1        .07     .004 No_date    1:14   17.25 .348     .000
00860>        [CN= 78.0: N= 3.00: Tp=  .21]
00861> #*****************************************************************************************
00862> # Site 1
00863> #*****************************************************************************************
00864> R0010:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00865>      DESIGN STANDHYD       1.0 01:S1-B1          .42     .086 No_date    1:00   31.73 .641     .000
00866>        [XIMP=.47:TIMP=.57]
00867>        [SLP=1.00:DT= 1.00]
00868>        [LOSS= 1 : HORTONS]
00869> # Site 1 - Roof
00870> #*****************************************************************************************
00871> R0010:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00872>      DESIGN STANDHYD       1.0 01:S1-Roof        .07     .024 No_date    1:00   47.58 .961     .000
00873>        [XIMP=.99:TIMP=.99]
00874>        [SLP= .50:DT= 1.00]
00875>        [LOSS= 1 : HORTONS]
00876> R0010:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00877>      ROUTE RESERVOIR ->    1.0 02:S1-Roof        .07     .024 No_date    1:00   47.58  n/a     .000
00878>                    out <=    1.0 01:S1-Roof-Ou     .07     .002 No_date    1:30   47.58  n/a     .000
00879>                 overflow <=  1.0 03:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
00880>       (MxStoUsed=.2239E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00881> R0010:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00882>      ADD HYD               1.0 02:S1-B1          .42     .086 No_date    1:00   31.73  n/a     .000
00883>                        +   1.0 02:S1-Roof-Ou     .07     .002 No_date    1:30   47.58  n/a     .000
00884>                        +   1.0 02:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
00885>                      SUM=  1.0 01:SITE1-IN       .49     .088 No_date    1:00   33.99  n/a     .000
00886> R0010:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00887>      ROUTE RESERVOIR ->    1.0 02:SITE1-IN       .49     .088 No_date    1:00   33.99  n/a     .000
00888>                    out <=    1.0 01:SITE1-Out      .49     .010 No_date    1:39   33.99  n/a     .000
00889>                 overflow <=  1.0 03:SITE1-Over     .00     .000 No_date    0:00     .00  n/a     .000
00890>       (MxStoUsed=.9334E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00891> #*****************************************************************************************
00892> # Site 2
00893> #*****************************************************************************************
00894> R0010:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00895>      DESIGN STANDHYD       1.0 01:S2-B3          .35     .071 No_date    1:00   31.37 .634     .000
00896>        [XIMP=.46:TIMP=.56]
00897>        [SLP=1.00:DT= 1.00]
00898>        [LOSS= 1 : HORTONS]
00899> #*****************************************************************************************
00900> # Site 2 - Roof
00901> #*****************************************************************************************
00902> R0010:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00903>      DESIGN STANDHYD       1.0 01:S2-Roof        .09     .030 No_date    1:00   47.58 .961     .000
00904>        [XIMP=.99:TIMP=.99]
00905>        [SLP= .50:DT= 1.00]
00906>        [LOSS= 1 : HORTONS]
00907> #*****************************************************************************************
00908> R0010:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00909>      ROUTE RESERVOIR ->    1.0 02:S2-Roof        .09     .030 No_date    1:00   47.58  n/a     .000
00910>                    out <=    1.0 02:S2-Roof-Ou     .09     .007 No_date    1:11   47.60  n/a     .000
00911>                 overflow <=  1.0 03:S2-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
00912>       (MxStoUsed=.1940E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00913> R0010:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00914>      ADD HYD               1.0 02:S2-B3          .35     .071 No_date    1:00   31.37  n/a     .000
00915>                        +   1.0 02:S2-Roof-Ou     .09     .007 No_date    1:11   47.60  n/a     .000
00916>                        +   1.0 02:S2-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
00917>                      SUM=  1.0 01:SITE2-IN       .44     .078 No_date    1:00   34.69  n/a     .000
00918> R0010:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00919>      ROUTE RESERVOIR ->    1.0 02:SITE2-IN       .44     .078 No_date    1:00   34.69  n/a     .000
00920>                    out <=    1.0 01:SITE2-Out      .44     .011 No_date    1:44   34.70  n/a     .000
00921>                 overflow <=  1.0 03:SITE2-Over     .00     .000 No_date    0:00     .00  n/a     .000
00922>       (MxStoUsed=.8674E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
00923> R0010:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00924>      ADD HYD               1.0 02:SITE1-Out      .49     .010 No_date    1:39   33.99  n/a     .000
00925>                        +   1.0 02:SITE1-Over     .00     .000 No_date    0:00     .00  n/a     .000
00926>                      SUM=  1.0 01:Site1          .49     .010 No_date    1:39   33.99  n/a     .000
00927> R0010:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00928>      ADD HYD               1.0 02:SITE2-Out      .44     .011 No_date    1:44   34.70  n/a     .000
00929>                        +   1.0 02:SITE2-Over     .00     .000 No_date    0:00     .00  n/a     .000
00930>                      SUM=  1.0 01:Site2          .44     .011 No_date    1:44   34.70  n/a     .000
00931> R0010:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00932>      ADD HYD               1.0 02:EXT2           .28     .016 No_date    1:23   22.42  n/a     .000
00933>                        +   1.0 02:Pre2_1         .01     .001 No_date    1:00   13.99  n/a     .000
00934>                        +   1.0 02:Site1          .49     .010 No_date    1:39   33.99  n/a     .000
00935>                        +   1.0 02:Site2          .44     .011 No_date    1:44   34.70  n/a     .000
00936>                      SUM=  1.0 01:J1            1.23     .037 No_date    1:23   31.35  n/a     .000
00937> R0010:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00938>      ROUTE CHANNEL    ->   1.0 02:J1            1.23     .037 No_date    1:23   31.35  n/a     .000
00939>        [RD= 1.00] out<-    1.0 01:R1            1.23     .036 No_date    1:30   31.35  n/a     .000
00940>         [L/S/n=  143./ .394/.035]
00941>         {Vmax=  .315:Dmax=  .124}
00942> R0010:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00943>      ADD HYD               1.0 02:R1            1.23     .036 No_date    1:30   31.35  n/a     .000
00944>                        +   1.0 02:EXT3           .56     .027 No_date    1:23   18.55  n/a     .000
00945>                        +   1.0 02:EXT1          3.21     .088 No_date    1:54   18.55  n/a     .000
00946>                      SUM=  1.0 01:J2            5.00     .137 No_date    1:43   21.70  n/a     .000
00947> R0010:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00948>      ROUTE CHANNEL    ->   1.0 02:J2            5.00     .137 No_date    1:43   21.70  n/a     .000
00949>        [RD= 1.00] out<-    1.0 01:R2            5.00     .137 No_date    1:45   21.70  n/a     .000
00950>         [L/S/n=   73./ .425/.035]
00951>         {Vmax=  .446:Dmax=  .220}
00952> R0010:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00953>      ADD HYD               1.0 02:R2            5.00     .137 No_date    1:45   21.70  n/a     .000
00954>                        +   1.0 02:EXT4           .31     .015 No_date    1:20   17.89  n/a     .000
00955>                      SUM=  1.0 01:J3            5.31     .146 No_date    1:42   21.48  n/a     .000
00956> R0010:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00957>      ROUTE CHANNEL    ->   1.0 02:J3            5.31     .146 No_date    1:42   21.48  n/a     .000
00958>        [RD= 1.00] out<-    1.0 01:R3            5.31     .146 No_date    1:45   21.48  n/a     .000
00959>         [L/S/n=   92./ .274/.035]
00960>         {Vmax=  .365:Dmax=  .228}
00961> R0010:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00962>      ADD HYD               1.0 02:R3            5.31     .146 No_date    1:45   21.48  n/a     .000
00963>                        +   1.0 02:EXT5           .59     .019 No_date    1:33   16.07  n/a     .000
00964>                      SUM=  1.0 01:J4            5.90     .164 No_date    1:43   20.93  n/a     .000
00965> R0010:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00966>      ROUTE CHANNEL    ->   1.0 02:J4            5.90     .164 No_date    1:43   20.93  n/a     .000
00967>        [RD= 1.00] out<-    1.0 01:R4            5.90     .154 No_date    1:55   20.93  n/a     .000
00968>         [L/S/n=  251./ .190/.035]
00969>         {Vmax=  .354:Dmax=  .252}
00970> R0010:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00971>      ADD HYD               1.0 02:R4            5.90     .154 No_date    1:55   20.93  n/a     .000
00972>                        +   1.0 02:EXT6           .86     .035 No_date    1:41   22.42  n/a     .000
00973>                        +   1.0 02:EXT7           .47     .025 No_date    1:22   20.75  n/a     .000
00974>                      SUM=  1.0 01:J5            7.24     .201 No_date    1:49   21.10  n/a     .000
00975> R0010:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00976>      ROUTE CHANNEL    ->   1.0 02:J5            7.24     .201 No_date    1:49   21.10  n/a     .000
00977>        [RD= 1.00] out<-    1.0 01:R5            7.24     .199 No_date    1:55   21.10  n/a     .000
00978>         [L/S/n=  237./ .644/.035]
00979>         {Vmax=  .577:Dmax=  .240}
00980> R0010:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00981>      ADD HYD               1.0 02:Pre10_1        .80     .029 No_date    1:21   13.53  n/a     .000
00982>                        +   1.0 02:Pre9_2         .01     .001 No_date    1:00    9.08  n/a     .000
00983>                        +   1.0 02:Pre2_2         .00     .000 No_date    1:00   17.23  n/a     .000
00984>                      SUM=  1.0 01:Pre           .81     .029 No_date    1:20   13.46  n/a     .000
00985> R0010:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00986>      ROUTE CHANNEL    ->   1.0 02:Pre           .81     .029 No_date    1:20   13.46  n/a     .000
00987>        [RD= 1.00] out<-    1.0 01:R6            .81     .029 No_date    1:23   13.46  n/a     .000
00988>         [L/S/n=   77./ .776/.035]
00989>         {Vmax=  .492:Dmax=  .021}
00990> R0010:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00991>      ROUTE CHANNEL    ->   1.0 02:Pre9_1        .44     .013 No_date    1:28   13.53  n/a     .000
00992>        [RD= 1.00] out<-    1.0 01:R7            .44     .013 No_date    1:32   13.53  n/a     .000
00993>         [L/S/n=  159./1.576/.035]
00994>         {Vmax=  .797:Dmax=  .004}
00995> R0010:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
00996>      ADD HYD               1.0 02:R6             .81     .037 No_date    4:26   13.73  n/a     .000
00997>                        +   1.0 02:EXT10          .20     .006 No_date    1:31   13.53  n/a     .000
00998>                      SUM=  1.0 01:J6            1.02     .037 No_date    4:26   13.69  n/a     .000
00999> R0010:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01000>      ROUTE CHANNEL    ->   1.0 02:J6            1.02     .037 No_date    4:26   13.69  n/a     .000
01001>        [RD= 1.00] out<-    1.0 01:R8            1.02     .034 No_date    1:28   13.69  n/a     .000
01002>         [L/S/n=   79./ .522/.035]
01003>         {Vmax=  .423:Dmax=  .027}
01004> R0010:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01005>      ADD HYD               1.0 02:R8            1.02     .034 No_date    1:28   13.84  n/a     .000
01006>                        +   1.0 02:R7             .44     .027 No_date    4:45   13.90  n/a     .000
01007>                      SUM=  1.0 01:J7            1.46     .047 No_date    1:29   13.86  n/a     .000
01008> R0010:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01009>      ROUTE CHANNEL    ->   1.0 02:J7            1.46     .047 No_date    1:29   13.86  n/a     .000
01010>        [RD= 1.00] out<-    1.0 01:R9            1.46     .047 No_date    1:30   13.86  n/a     .000
01011>         [L/S/n=   29./ .887/.035]
01012>         {Vmax=  .543:Dmax=  .032}
01013> R0010:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01014>      ADD HYD               1.0 02:EXT9          3.57     .111 No_date    1:36   16.08  n/a     .000
01015>                        +   1.0 02:R9            1.46     .047 No_date    1:30   13.96  n/a     .000
01016>                        +   1.0 02:EXT8           .83     .032 No_date    1:31   17.89  n/a     .000
01017>                        +   1.0 02:R5            7.24     .199 No_date    1:55   21.10  n/a     .000
01018>                      SUM=  1.0 01:J8           13.10     .363 No_date    1:45   18.73  n/a     .000
01019> R0010:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01020>      ROUTE PIPE       ->   1.0 02:J8           13.10     .363 No_date    1:45   18.73  n/a     .000
01021>  *   [RD= 1.00] out<-    1.0 01:Outlet        13.10     .363 No_date    1:45   18.73  n/a     .000
01022>         [L/S/n=    8./ .010/.013]
01023>         {Vmax=  .386:Dmax=  .959}
01024>         [Din=  .53:Dused= 1.17]
01025> ##########################################################################
01026> # STORMS
01027> ##########################################################################
01028>   ** END OF RUN :  24
01029>
01030> *****************************************************************************************
01031>
01032>
01033>
01034>
01035>
01036>  RUN#:COMMAND#
01037> R0025:C00001-------------------------------------------------------------------------------
01038>      START
01039>        [TZERO =    .00 hrs on        0]
01040>        [METOUT=  2   (1=imperial, 2=metric output)]
01041>        [NSTORM=  1 ]
01042>        [NRUN  = 0025 ]
01043> #*****************************************************************************************
01044> #  SWMHYMO  / INPUT DATA FILE
01045> #*****************************************************************************************
01046> #  Project Name  : [5923 Ottawa St]
01047> #  Project Number: [P2710(e01)]
01048> #  Date          : [2025 April 28]
01049> #  Modeller      : [MM]
01050> #  Company       : JFSA Canada Inc.
01051> #  License #     : 2549237
01052> #*****************************************************************************************
01053> # Model developed to simulate runoff from subcatchments under pre development conditions
01054> #*****************************************************************************************
01055> R0025:C00002-------------------------------------------------------------------------------
01056>      READ STORM
01057>        Filename = STORM.001
01058>        Comment  = CHICAGO STORM   25 Year, 3 Hours
01059>        [SDT=10.00:SDUR=   3.00:PTOT=  58.23]
01060> #*****************************************************************************************
01061> R0025:C00003-------------------------------------------------------------------------------
01062>      DEFAULT VALUES
01063>        Filename = C:\Temp\20250428-PostDev\Ottawa.val
01064>        ICASEdv  = 1 (read and print data)
01065>        FileTitle= File comment: [Parameters for City of Ottawa Projects]
01066>                   THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
01067>        Horton's infiltration equation parameters:
01068>        [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
01069>        Parameters for PERVIOUS surfaces in STANDHYD:
01070>        [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
01071>        Parameters for IMPERVIOUS surfaces in STANDHYD:
01072>        [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
01073>        Parameters used in NASHYD:
01074>        [Ia=   4.67 mm] [N= 3.00]
01075>        Average monthly Pan Evaporation data in    (mm)
01076>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
01077>    .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
01078>        Average monthly Potential Evapotranspiration in    (mm)
01079>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
01080>    .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
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01081> #*********************************************************************************************
01082> # EXT1
01083> #*********************************************************************************************
01084> R0025:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01085>     CALIB NASHYD          1.0 01:EXT1          3.21     .118 No_date    1:53   24.50 .421     .000
01086>          [CN= 80.0: N= 3.00: Tp=  .72]
01087> #*********************************************************************************************
01088> # EXT2
01089> #*********************************************************************************************
01090> R0025:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01091>     CALIB NASHYD          1.0 01:EXT2          .28     .022 No_date    1:22   29.15 .501     .000
01092>          [CN= 85.0: N= 3.00: Tp=  .33]
01093> #*********************************************************************************************
01094> # EXT3
01095> #*********************************************************************************************
01096> R0025:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01097>     CALIB NASHYD          1.0 01:EXT3           .56     .036 No_date    1:22   24.50 .421     .000
01098>          [CN= 80.0: N= 3.00: Tp=  .32]
01099> #*********************************************************************************************
01100> # EXT4
01101> #*********************************************************************************************
01102> R0025:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01103>     CALIB NASHYD          1.0 01:EXT4           .31     .020 No_date    1:20   23.69 .407     .000
01104>          [CN= 79.0: N= 3.00: Tp=  .29]
01105> #*********************************************************************************************
01106> # EXT5
01107> #*********************************************************************************************
01108> R0025:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01109>     CALIB NASHYD          1.0 01:EXT5           .59     .026 No_date    1:33   21.44 .368     .000
01110>          [CN= 76.0: N= 3.00: Tp=  .45]
01111> #*********************************************************************************************
01112> # EXT6
01113> #*********************************************************************************************
01114> R0025:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01115>     CALIB NASHYD          1.0 01:EXT6           .86     .046 No_date    1:40   29.15 .501     .000
01116>          [CN= 85.0: N= 3.00: Tp=  .56]
01117> #*********************************************************************************************
01118> # EXT7
01119> #*********************************************************************************************
01120> R0025:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01121>     CALIB NASHYD          1.0 01:EXT7           .47     .034 No_date    1:22   27.17 .467     .000
01122>          [CN= 83.0: N= 3.00: Tp=  .32]
01123> #*********************************************************************************************
01124> # EXT8
01125> #*********************************************************************************************
01126> R0025:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01127>     CALIB NASHYD          1.0 01:EXT8           .83     .043 No_date    1:30   23.69 .407     .000
01128>          [CN= 79.0: N= 3.00: Tp=  .42]
01129> #*********************************************************************************************
01130> # EXT9
01131> #*********************************************************************************************
01132> R0025:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01133>     CALIB NASHYD          1.0 01:EXT9          3.57     .151 No_date    1:35   21.44 .368     .000
01134>          [CN= 76.0: N= 3.00: Tp=  .48]
01135> #*********************************************************************************************
01136> # EXT9a
01137> #*********************************************************************************************
01138> R0025:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01139>     CALIB NASHYD          1.0 01:EXT9a          .01     .002 No_date    1:00   22.90 .393     .000
01140>          [CN= 78.0: N= 3.00: Tp=  .04]
01141> #*********************************************************************************************
01142> # EXT10
01143> #*********************************************************************************************
01144> R0025:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01145>     CALIB NASHYD          1.0 01:EXT10          .20     .008 No_date    1:31   18.23 .313     .000
01146>          [CN= 71.0: N= 3.00: Tp=  .42]
01147> #*********************************************************************************************
01148> # Pre2_1
01149> #*********************************************************************************************
01150> R0025:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01151>  *  CALIB NASHYD          1.0 01:Pre2_1         .01     .002 No_date    1:00   18.82 .323     .000
01152>          [CN= 72.0: N= 3.00: Tp=  .03]
01153> #*********************************************************************************************
01154> # Pre2_2
01155> #*********************************************************************************************
01156> R0025:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01157>  *  CALIB NASHYD          1.0 01:Pre2_2         .00     .000 No_date    1:00   22.87 .393     .000
01158>          [CN= 78.0: N= 3.00: Tp=  .02]
01159> #*********************************************************************************************
01160> # Pre9_1
01161> #*********************************************************************************************
01162> R0025:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01163>     CALIB NASHYD          1.0 01:Pre9_1         .44     .018 No_date    1:27   18.23 .313     .000
01164>          [CN= 71.0: N= 3.00: Tp=  .38]
01165> #*********************************************************************************************
01166> # Pre9_2
01167> #*********************************************************************************************
01168> R0025:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01169>  *  CALIB NASHYD          1.0 01:Pre9_2         .01     .001 No_date    1:00   12.46 .214     .000
01170>          [CN= 59.0: N= 3.00: Tp=  .03]
01171> #*********************************************************************************************
01172> # Pre10_1
01173> #*********************************************************************************************
01174> R0025:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01175>     CALIB NASHYD          1.0 01:Pre10_1        .80     .040 No_date    1:20   18.23 .313     .000
01176>          [CN= 71.0: N= 3.00: Tp=  .29]
01177> #*********************************************************************************************
01178> # Pre11_1
01179> #*********************************************************************************************
01180> R0025:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01181>     CALIB NASHYD          1.0 01:Pre11_1        .07     .005 No_date    1:13   22.90 .393     .000
01182>          [CN= 78.0: N= 3.00: Tp=  .21]
01183> #*********************************************************************************************
01184> # Site 1
01185> #*********************************************************************************************
01186> R0025:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01187>     DESIGN STANDHYD       1.0 01:S1-B1          .42     .109 No_date    1:00   39.40 .677     .000
01188>        [XIMP=.47:TIMP=.57]
01189>        [SLP=1.00:DT= 1.00]
01190>        [LOSS= 1 : HORTONS]
01191> # Site 1 - Roof
01192> #*********************************************************************************************
01193> R0025:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01194>     DESIGN STANDHYD       1.0 01:S1-Roof        .07     .028 No_date    1:00   56.28 .967     .000
01195>        [XIMP=.99:TIMP=.99]
01196>        [SLP= .50:DT= 1.00]
01197>        [LOSS= 1 : HORTONS]
01198> R0025:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01199>     ROUTE RESERVOIR ->    1.0 02:S1-Roof        .07     .028 No_date    1:00   56.28  n/a     .000
01200>                   out <=    1.0 01:S1-Roof-Ou     .07     .003 No_date    1:30   56.28  n/a     .000
01201>               overflow <=    1.0 03:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
01202>       [MxStoUsed=.2657E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovr=    0, TotDurOvf=    0.hrs]
01203> R0025:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01204>     ADD HYD               1.0 02:S1-B1          .42     .109 No_date    1:00   39.40  n/a     .000
01205>                       +    1.0 02:S1-Roof-Ou     .07     .003 No_date    1:30   56.28  n/a     .000
01206>                       +    1.0 02:S1-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
01207>                     SUM=    1.0 01:S1E1-IN        .49     .111 No_date    1:00   41.81  n/a     .000
01208> R0025:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01209>     ROUTE RESERVOIR ->    1.0 02:S1E1-IN        .49     .111 No_date    1:00   41.81  n/a     .000
01210>                   out <=    1.0 01:S1E1-Out       .49     .010 No_date    1:42   41.81  n/a     .000
01211>               overflow <=    1.0 03:S1E1-Over      .00     .000 No_date    0:00     .00  n/a     .000
01212>       [MxStoUsed=.1218E-01  m3, TotOvrVol=.0000E+00  m3, N-Ovr=    0, TotDurOvf=    0.hrs]
01213> #*********************************************************************************************
01214> # Site 2
01215> #*********************************************************************************************
01216> R0025:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01217>     DESIGN STANDHYD       1.0 01:S2-B3          .35     .090 No_date    1:00   39.04 .670     .000
01218>        [XIMP=.46:TIMP=.56]
01219>        [SLP=1.00:DT= 1.00]
01220>        [LOSS= 1 : HORTONS]
01221> #*********************************************************************************************
01222> # Site 2 - Roof
01223> #*********************************************************************************************
01224> R0025:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01225>     DESIGN STANDHYD       1.0 01:S2-Roof        .09     .036 No_date    1:00   56.27 .966     .000
01226>        [XIMP=.99:TIMP=.99]
01227>        [SLP= .50:DT= 1.00]
01228>        [LOSS= 1 : HORTONS]
01229> #*********************************************************************************************
01230> R0025:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01231>     ROUTE RESERVOIR ->    1.0 02:S2-Roof        .09     .036 No_date    1:00   56.27  n/a     .000
01232>                   out <=    1.0 01:S2-Roof-Ou     .09     .008 No_date    1:11   56.28  n/a     .000
01233>               overflow <=    1.0 03:S2-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
01234>       [MxStoUsed=.2398E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovr=    0, TotDurOvf=    0.hrs]
01235> R0025:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01236>     ADD HYD               1.0 02:S2-B3          .35     .090 No_date    1:00   39.04  n/a     .000
01237>                       +    1.0 02:S2-Roof-Ou     .09     .008 No_date    1:11   56.28  n/a     .000
01238>                       +    1.0 02:S2-Roof-Ov     .00     .000 No_date    0:00     .00  n/a     .000
01239>                     SUM=    1.0 01:S2E2-IN        .44     .098 No_date    1:00   42.57  n/a     .000
01240> R0025:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01241>     ROUTE RESERVOIR ->    1.0 02:S2E2-IN        .44     .098 No_date    1:00   42.57  n/a     .000
01242>                   out <=    1.0 01:S2E2-Out       .44     .012 No_date    1:49   42.57  n/a     .000
01243>               overflow <=    1.0 03:S2E2-Over      .00     .000 No_date    0:00     .00  n/a     .000
01244>       [MxStoUsed=.1116E-01  m3, TotOvrVol=.0000E+00  m3, N-Ovr=    0, TotDurOvf=    0.hrs]
01245> R0025:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01246>     ADD HYD               1.0 02:S2E2-Out       .44     .012 No_date    1:42   41.81  n/a     .000
01247>                       +    1.0 02:S2E2-Over      .00     .000 No_date    0:00     .00  n/a     .000
01248>                     SUM=    1.0 01:Site1          .49     .010 No_date    1:42   41.81  n/a     .000
01249> R0025:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01250>     ADD HYD               1.0 02:S2E2-Out       .44     .012 No_date    1:49   42.57  n/a     .000
01251>                       +    1.0 02:S2E2-Over      .00     .000 No_date    0:00     .00  n/a     .000
01252>                     SUM=    1.0 01:Site2          .44     .012 No_date    1:49   42.57  n/a     .000
01253> R0025:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01254>     ADD HYD               1.0 02:EXT2           .28     .022 No_date    1:22   29.15  n/a     .000
01255>                       +    1.0 02:Pre2_1         .01     .002 No_date    1:00   18.82  n/a     .000
01256>                       +    1.0 02:Site1          .49     .010 No_date    1:42   41.81  n/a     .000
01257>                       +    1.0 02:Site2          .44     .012 No_date    1:49   42.57  n/a     .000
01258>                     SUM=    1.0 01:J1            1.23     .043 No_date    1:22   38.90  n/a     .000
01259> R0025:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01260>     ROUTE CHANNEL   ->    1.0 02:J1            1.23     .043 No_date    1:22   38.90  n/a     .000
01261>       [RDT= 1.00] out<-    1.0 01:R1            1.23     .042 No_date    1:29   38.90  n/a     .000
01262>        [L/S/n=  143./ .394/.035]
01263>        [Vmax=  .331:Dmax=  .134]
01264> R0025:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01265>     ADD HYD               1.0 02:R1            1.23     .042 No_date    1:29   38.90  n/a     .000
01266>                       +    1.0 02:EXT3           .56     .036 No_date    1:22   24.50  n/a     .000
01267>                       +    1.0 02:EXT1           .21     .118 No_date    1:53   24.50  n/a     .000
01268>                     SUM=    1.0 01:J2            5.00     .178 No_date    1:42   28.04  n/a     .000
01269> R0025:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01270>     ROUTE CHANNEL   ->    1.0 02:J2            5.00     .178 No_date    1:42   28.04  n/a     .000
01271>       [RDT= 1.00] out<-    1.0 01:R2            5.00     .177 No_date    1:44   28.04  n/a     .000
01272>        [L/S/n=   73./ .425/.035]
01273>        [Vmax=  .478:Dmax=  .245]
01274> R0025:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01275>     ADD HYD               1.0 02:R2            5.00     .177 No_date    1:44   28.04  n/a     .000
01276>                       +    1.0 02:EXT4           .31     .020 No_date    1:20   23.69  n/a     .000
01277>                     SUM=    1.0 01:J3            5.31     .190 No_date    1:41   27.79  n/a     .000
01278> R0025:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01279>     ROUTE CHANNEL   ->    1.0 02:J3            5.31     .190 No_date    1:41   27.79  n/a     .000
01280>       [RDT= 1.00] out<-    1.0 01:R3            5.31     .189 No_date    1:44   27.79  n/a     .000
01281>        [L/S/n=   92./ .274/.035]
01282>        [Vmax=  .391:Dmax=  .253]
01283> R0025:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01284>     ADD HYD               1.0 02:R3            5.31     .189 No_date    1:44   27.79  n/a     .000
01285>                       +    1.0 02:EXT5           .59     .026 No_date    1:33   21.44  n/a     .000
01286>                     SUM=    1.0 01:J4            5.90     .214 No_date    1:42   27.15  n/a     .000
01287> R0025:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01288>     ROUTE CHANNEL   ->    1.0 02:J4            5.90     .214 No_date    1:42   27.15  n/a     .000
01289>       [RDT= 1.00] out<-    1.0 01:R4            5.90     .203 No_date    1:53   27.15  n/a     .000
01290>        [L/S/n=  251./ .190/.035]
01291>        [Vmax=  .383:Dmax=  .283]
01292> R0025:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01293>     ADD HYD               1.0 02:R4            5.90     .203 No_date    1:53   27.15  n/a     .000
01294>                       +    1.0 02:EXT6           .86     .046 No_date    1:40   29.15  n/a     .000
01295>                       +    1.0 02:EXT7           .47     .034 No_date    1:22   27.17  n/a     .000
01296>                     SUM=    1.0 01:J5            7.24     .266 No_date    1:47   27.39  n/a     .000
01297> R0025:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01298>     ROUTE CHANNEL   ->    1.0 02:J5            7.24     .266 No_date    1:47   27.39  n/a     .000
01299>       [RDT= 1.00] out<-    1.0 01:R5            7.24     .262 No_date    1:53   27.39  n/a     .000
01300>        [L/S/n=  237./ .644/.035]
01301>        [Vmax=  .622:Dmax=  .266]
01302> R0025:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01303>     ADD HYD               1.0 02:Pre10_1        .80     .040 No_date    1:20   18.23  n/a     .000
01304>                       +    1.0 02:Pre9_2         .01     .001 No_date    1:00   12.46  n/a     .000
01305>                       +    1.0 02:Pre2_2         .00     .000 No_date    1:00   22.87  n/a     .000
01306>                     SUM=    1.0 01:Pre           .81     .040 No_date    1:20   18.15  n/a     .000
01307> R0025:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01308>     ROUTE CHANNEL   ->    1.0 02:Pre           .81     .040 No_date    1:20   18.15  n/a     .000
01309>       [RDT= 1.00] out<-    1.0 01:R6            .81     .039 No_date    1:23   18.15  n/a     .000
01310>        [L/S/n=   77./ .776/.035]
01311>        [Vmax=  .492:Dmax=  .029]
01312> R0025:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01313>     ROUTE CHANNEL   ->    1.0 02:Pre9_1         .44     .018 No_date    1:27   18.23  n/a     .000
01314>       [RDT= 1.00] out<-    1.0 01:R7            .44     .018 No_date    1:31   18.23  n/a     .000
01315>        [L/S/n=  159./1.576/.035]
01316>        [Vmax=  .797:Dmax=  .005]
01317> R0025:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01318>     ADD HYD               1.0 02:R6            .81     .043 No_date    4:27   18.46  n/a     .000
01319>                       +    1.0 02:EXT10          .20     .008 No_date    1:31   18.23  n/a     .000
01320>                     SUM=    1.0 01:J6            1.02     .047 No_date    1:24   18.41  n/a     .000
01321> R0025:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01322>     ROUTE CHANNEL   ->    1.0 02:J6            1.02     .047 No_date    1:24   18.41  n/a     .000
01323>       [RDT= 1.00] out<-    1.0 01:R8            1.02     .046 No_date    1:27   18.41  n/a     .000
01324>        [L/S/n=   79./ .522/.035]
01325>        [Vmax=  .423:Dmax=  .034]
01326> R0025:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01327>     ADD HYD               1.0 02:R8            1.02     .046 No_date    1:27   18.59  n/a     .000
01328>                       +    1.0 02:R7             .44     .031 No_date    4:48   18.66  n/a     .000
01329>                     SUM=    1.0 01:J7            1.46     .064 No_date    1:28   18.61  n/a     .000
01330> R0025:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01331>     ROUTE CHANNEL   ->    1.0 02:J7            1.46     .064 No_date    1:28   18.61  n/a     .000
01332>       [RDT= 1.00] out<-    1.0 01:R9            1.46     .064 No_date    1:29   18.61  n/a     .000
01333>        [L/S/n=   29./ .887/.035]
01334>        [Vmax=  .543:Dmax=  .043]
01335> R0025:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01336>     ADD HYD               1.0 02:EXT9          3.57     .151 No_date    1:35   21.44  n/a     .000
01337>                       +    1.0 02:R9            1.46     .064 No_date    1:29   18.72  n/a     .000
01338>                       +    1.0 02:EXT8           .83     .043 No_date    1:30   23.69  n/a     .000
01339>                       +    1.0 02:R5            7.24     .262 No_date    1:53   27.39  n/a     .000
01340>                     SUM=    1.0 01:J8           13.10     .489 No_date    1:42   24.57  n/a     .000
01341> R0025:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01342>     ROUTE PIPE      ->    1.0 02:J8           13.10     .489 No_date    1:42   24.57  n/a     .000
01343>  *  [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .489 No_date    1:44   24.57  n/a     .000
01344>        [L/S/n=   8./ .010/.013]
01345>        [Vmax=  .416:Dmax= 1.072]
01346>        [Din=  .53:Dused= 1.31]
01347> ##################################################################################
01348> # STORMS
01349> ##################################################################################
01350>   ** END OF RUN : 49
01351>
01352> ***********************************************************************************************
01353>
01354>
01355>
01356>
01357>
01358> RUN#:COMMAND#
01359> R0050:C00001-----------------------------------------------------------------------------------
01360>      START
01361>       [ZERO =    .00 hrs on        0]
01362>       [METOUT=   2   (1=imperial, 2=metric output)]
01363>       [NSTORM=   1 ]
01364>       [NRUN  = 0050 ]
01365> ***********************************************************************************************
01366> #  SWMHYMO  / INPUT DATA FILE
01367> ***********************************************************************************************
01368> #  Project Name  : [5923 Ottawa St]
01369> #  Project Number: [P2710(e01)]
01370> #  Date          : [2025 April 28]
01371> #  Modeller      : [MM]
01372> #  Company       : JFSA Canada Inc.
01373> #  License #     : 2549237
01374> ***********************************************************************************************
01375> # Model developed to simulate runoff from subcatchments under pre development conditions
01376> ***********************************************************************************************
01377> R0050:C00002-----------------------------------------------------------------------------------
01378>      READ STORM
01379>       Filename = STORM.001
01380>       Comment  = CHICAGO STORM  50 Year, 3 Hours
01381>       [SDT=10.00:SDUR=    3.00:PTOT=  64.81]
01382> ***********************************************************************************************
01383> R0050:C00003-----------------------------------------------------------------------------------
01384>      DEFAULT VALUES
01385>       Filename = C:\Temp\20250428-PostDev\Ottawa.val
01386>       ICASEdv  = 1 (read and print data)
01387>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
01388>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
01389>       Horton's infiltration equation parameters:
01390>       [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr]  [F=  .00 mm]
01391>       Parameters for PERVIOUS surfaces in STANDHYD:
01392>       [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
01393>       Parameters for IMPERVIOUS surfaces in STANDHYD:
01394>       [IAimp=   1.57 mm] [CLI= 1.50]    [MNI= .013]
01395>       Parameters used in NASHYD:
01396>       [Ia=   4.67 mm] [N= 3.00]
01397>       Average monthly Pan Evaporation data in    (mm)
01398>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
01399>   .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
01400>       Average monthly Potential Evapotranspiration in    (mm)
01401>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
01402>   .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
01403> ***********************************************************************************************
01404> # EXT1
01405> ***********************************************************************************************
01406> R0050:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01407>     CALIB NASHYD          1.0 01:EXT1          3.21     .142 No_date    1:53   29.25 .451     .000
01408>          [CN= 80.0: N= 3.00: Tp=  .72]
01409> ***********************************************************************************************
01410> # EXT2
01411> ***********************************************************************************************
01412> R0050:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01413>     CALIB NASHYD          1.0 01:EXT2           .28     .026 No_date    1:22   34.45 .532     .000
01414>          [CN= 85.0: N= 3.00: Tp=  .33]
01415> ***********************************************************************************************
01416> # EXT3
01417> ***********************************************************************************************
01418> R0050:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01419>     CALIB NASHYD          1.0 01:EXT3           .56     .044 No_date    1:22   29.25 .451     .000
01420>          [CN= 80.0: N= 3.00: Tp=  .32]
01421> ***********************************************************************************************
01422> # EXT4
01423> ***********************************************************************************************
01424> R0050:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01425>     CALIB NASHYD          1.0 01:EXT4           .31     .025 No_date    1:19   28.33 .437     .000
01426>          [CN= 79.0: N= 3.00: Tp=  .29]
01427> ***********************************************************************************************
01428> # EXT5
01429> ***********************************************************************************************
01430> R0050:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01431>     CALIB NASHYD          1.0 01:EXT5           .59     .032 No_date    1:32   25.77 .398     .000
01432>          [CN= 76.0: N= 3.00: Tp=  .45]
01433> ***********************************************************************************************
01434> # EXT6
01435> ***********************************************************************************************
01436> R0050:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01437>     CALIB NASHYD          1.0 01:EXT6           .86     .055 No_date    1:40   34.45 .532     .000
01438>          [CN= 85.0: N= 3.00: Tp=  .56]
01439> ***********************************************************************************************
01440> # EXT7
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01441> #*******************************************************************************
01442> R0050:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01443>      CALIB NASHYD            1.0 01:EXT7             .47     .041 No_date    1:21   32.24 .498    .000
01444>        [CN= 83.0: N= 3.00: Tp=  .32]
01445> #*******************************************************************************
01446> # EXT8
01447> #*******************************************************************************
01448> R0050:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01449>      CALIB NASHYD            1.0 01:EXT8             .83     .052 No_date    1:30   28.33 .437    .000
01450>        [CN= 79.0: N= 3.00: Tp=  .42]
01451> #*******************************************************************************
01452> # EXT9
01453> #*******************************************************************************
01454> R0050:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01455>      CALIB NASHYD            1.0 01:EXT9            3.57     .183 No_date    1:35   25.77 .398    .000
01456>        [CN= 76.0: N= 3.00: Tp=  .48]
01457> #*******************************************************************************
01458> # EXT9a
01459> #*******************************************************************************
01460> R0050:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01461>      CALIB NASHYD            1.0 01:EXT9a            .01     .002 No_date    1:00   27.43 .423    .000
01462>        [CN= 78.0: N= 3.00: Tp=  .04]
01463> #*******************************************************************************
01464> # EXT10
01465> #*******************************************************************************
01466> R0050:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01467>      CALIB NASHYD            1.0 01:EXT10            .20     .010 No_date    1:30   22.06 .340    .000
01468>        [CN= 71.0: N= 3.00: Tp=  .42]
01469> #*******************************************************************************
01470> # Pre2_1
01471> #*******************************************************************************
01472> R0050:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01473> *    CALIB NASHYD            1.0 01:Pre2_1           .01     .002 No_date    1:00   22.75 .351    .000
01474>        [CN= 72.0: N= 3.00: Tp=  .03]
01475> #*******************************************************************************
01476> # Pre2_2
01477> #*******************************************************************************
01478> R0050:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01479> *    CALIB NASHYD            1.0 01:Pre2_2           .00     .000 No_date    1:00   27.40 .423    .000
01480>        [CN= 78.0: N= 3.00: Tp=  .02]
01481> #*******************************************************************************
01482> # Pre9_1
01483> #*******************************************************************************
01484> R0050:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01485>      CALIB NASHYD            1.0 01:Pre9_1           .44     .022 No_date    1:27   22.07 .340    .000
01486>        [CN= 71.0: N= 3.00: Tp=  .38]
01487> #*******************************************************************************
01488> # Pre9_2
01489> #*******************************************************************************
01490> R0050:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01491> *    CALIB NASHYD            1.0 01:Pre9_2           .01     .002 No_date    1:00   15.27 .236    .000
01492>        [CN= 59.0: N= 3.00: Tp=  .03]
01493> #*******************************************************************************
01494> # Pre10_1
01495> #*******************************************************************************
01496> R0050:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01497>      CALIB NASHYD            1.0 01:Pre10_1           .80     .048 No_date    1:20   22.07 .340    .000
01498>        [CN= 71.0: N= 3.00: Tp=  .29]
01499> #*******************************************************************************
01500> # Pre11_1
01501> #*******************************************************************************
01502> R0050:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01503>      CALIB NASHYD            1.0 01:Pre11_1           .07     .006 No_date    1:13   27.44 .423    .000
01504>        [CN= 78.0: N= 3.00: Tp=  .21]
01505> #*******************************************************************************
01506> # Site 1
01507> #*******************************************************************************
01508> R0050:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01509>      DESIGN STANDHYD         1.0 01:S1-B1            .42     .125 No_date    1:00   45.26 .698    .000
01510>        [XIMP=.47:TIMP=.57]
01511>        [SLP=1.00:DT= 1.00]
01512>        [LOSS= 1 : HORTONS]
01513> # Site 1 - Roof
01514> #*******************************************************************************
01515> R0050:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01516>      DESIGN STANDHYD         1.0 01:S1-Roof          .07     .031 No_date    1:00   62.84 .970    .000
01517>        [XIMP=.99:TIMP=.99]
01518>        [SLP= .50:DT= 1.00]
01519>        [LOSS= 1 : HORTONS]
01520> R0050:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01521>      ROUTE RESERVOIR ->      1.0 02:S1-Roof          .07     .031 No_date    1:00   62.84  n/a    .000
01522>                  out <=      1.0 01:S1-Roof-Ou       .07     .003 No_date    1:30   62.84  n/a    .000
01523>              overflow <=     1.0 03:S1-Roof-Ov       .00     .000 No_date    0:00    .00  n/a    .000
01524>      (MxStoUsed=.2971E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01525> R0050:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01526>      ADD HYD                 1.0 02:S1-B1            .42     .125 No_date    1:00   45.26  n/a    .000
01527>                        +     1.0 02:S1-Roof-Ou       .07     .003 No_date    1:30   62.84  n/a    .000
01528>                        +     1.0 02:S1-Roof-Ov       .00     .000 No_date    0:00    .00  n/a    .000
01529>                      SUM=    1.0 01:SITE1-IN         .49     .127 No_date    1:00   47.77  n/a    .000
01530> R0050:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01531>      ROUTE RESERVOIR ->      1.0 02:SITE1-IN         .49     .127 No_date    1:00   47.77  n/a    .000
01532>                  out <=      1.0 01:SITE1-Out        .49     .011 No_date    1:43   47.77  n/a    .000
01533>              overflow <=     1.0 03:SITE1-Over       .00     .000 No_date    0:00    .00  n/a    .000
01534>      (MxStoUsed=.1431E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01535> #*******************************************************************************
01536> # Site 2
01537> #*******************************************************************************
01538> R0050:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01539>      DESIGN STANDHYD         1.0 01:S2-B3            .35     .106 No_date    1:00   44.84 .692    .000
01540>        [XIMP=.46:TIMP=.56]
01541>        [SLP=1.00:DT= 1.00]
01542>        [LOSS= 1 : HORTONS]
01543> #*******************************************************************************
01544> # Site 2 - Roof
01545> #*******************************************************************************
01546> R0050:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01547>      DESIGN STANDHYD         1.0 01:S2-Roof          .09     .040 No_date    1:00   62.84 .970    .000
01548>        [XIMP=.99:TIMP=.99]
01549>        [SLP= .50:DT= 1.00]
01550>        [LOSS= 1 : HORTONS]
01551> #*******************************************************************************
01552> R0050:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01553>      ROUTE RESERVOIR ->      1.0 02:S2-Roof          .09     .040 No_date    1:00   62.84  n/a    .000
01554>                  out <=      1.0 01:S2-Roof-Ou       .09     .008 No_date    1:11   62.85  n/a    .000
01555>              overflow <=     1.0 03:S2-Roof-Ov       .00     .000 No_date    0:00    .00  n/a    .000
01556>      (MxStoUsed=.2749E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01557> R0050:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01558>      ADD HYD                 1.0 02:S2-B3            .35     .106 No_date    1:00   44.84  n/a    .000
01559>                        +     1.0 02:S2-Roof-Ou       .09     .008 No_date    1:11   62.85  n/a    .000
01560>                        +     1.0 02:S2-Roof-Ov       .00     .000 No_date    0:00    .00  n/a    .000
01561>                      SUM=    1.0 01:SITE2-IN         .44     .114 No_date    1:00   48.53  n/a    .000
01562> R0050:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01563>      ROUTE RESERVOIR ->      1.0 02:SITE2-IN         .44     .114 No_date    1:00   48.53  n/a    .000
01564>                  out <=      1.0 01:SITE2-Out        .44     .014 No_date    1:43   48.53  n/a    .000
01565>              overflow <=     1.0 03:SITE2-Over       .00     .000 No_date    0:00    .00  n/a    .000
01566>      (MxStoUsed=.1274E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01567> R0050:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01568>      ADD HYD                 1.0 02:SITE1-Out        .49     .011 No_date    1:43   47.77  n/a    .000
01569>                        +     1.0 02:SITE1-Over       .00     .000 No_date    0:00    .00  n/a    .000
01570>                      SUM=    1.0 01:Site1            .49     .011 No_date    1:43   47.77  n/a    .000
01571> R0050:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01572>      ADD HYD                 1.0 02:SITE2-Out        .44     .014 No_date    1:43   48.53  n/a    .000
01573>                        +     1.0 02:SITE2-Over       .00     .000 No_date    0:00    .00  n/a    .000
01574>                      SUM=    1.0 01:Site2            .44     .014 No_date    1:43   48.53  n/a    .000
01575> R0050:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01576>      ADD HYD                 1.0 02:EXT2             .28     .026 No_date    1:22   34.45  n/a    .000
01577>                        +     1.0 02:Pre2_1           .01     .002 No_date    1:00   22.75  n/a    .000
01578>                        +     1.0 02:Site1            .49     .011 No_date    1:43   47.77  n/a    .000
01579>                        +     1.0 02:Site2            .44     .014 No_date    1:43   48.53  n/a    .000
01580>                      SUM=    1.0 01:J1              1.23     .050 No_date    1:25   44.69  n/a    .000
01581> R0050:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01582>      ROUTE CHANNEL   ->      1.0 02:J1              1.23     .050 No_date    1:25   44.69  n/a    .000
01583>        [RD= 1.00] out<-      1.0 01:R1              1.23     .049 No_date    1:30   44.69  n/a    .000
01584>        [L/S/n=  143./ .394/.035]
01585>        (Vmax=  .348:Dmax=  .144)
01586> R0050:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01587>      ADD HYD                 1.0 02:R1              1.23     .049 No_date    1:30   44.69  n/a    .000
01588>                        +     1.0 02:EXT3             .56     .044 No_date    1:22   29.25  n/a    .000
01589>                        +     1.0 02:EXT1             3.21     .142 No_date    1:53   29.25  n/a    .000
01590>                      SUM=    1.0 01:J2              5.00     .212 No_date    1:41   33.04  n/a    .000
01591> R0050:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01592>      ROUTE CHANNEL   ->      1.0 02:J2              5.00     .212 No_date    1:41   33.04  n/a    .000
01593>        [RD= 1.00] out<-      1.0 01:R2              5.00     .212 No_date    1:43   33.04  n/a    .000
01594>        [L/S/n=   73./ .425/.035]
01595>        (Vmax=  .501:Dmax=  .263)
01596> R0050:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01597>      ADD HYD                 1.0 02:R2              5.00     .212 No_date    1:43   33.04  n/a    .000
01598>                        +     1.0 02:EXT4             .31     .025 No_date    1:19   28.33  n/a    .000
01599>                      SUM=    1.0 01:J3              5.31     .228 No_date    1:40   32.77  n/a    .000
01600> R0050:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01601>      ROUTE CHANNEL   ->      1.0 02:J3              5.31     .228 No_date    1:40   32.77  n/a    .000
01602>        [RD= 1.00] out<-      1.0 01:R3              5.31     .226 No_date    1:43   32.77  n/a    .000
01603>        [L/S/n=   92./ .274/.035]
01604>        (Vmax=  .409:Dmax=  .271)
01605> R0050:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01606>      ADD HYD                 1.0 02:R3              5.31     .226 No_date    1:43   32.77  n/a    .000
01607>                        +     1.0 02:EXT5             .59     .032 No_date    1:32   25.77  n/a    .000
01608>                      SUM=    1.0 01:J4              5.90     .257 No_date    1:41   32.06  n/a    .000
01609> R0050:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01610>      ROUTE CHANNEL   ->      1.0 02:J4              5.90     .257 No_date    1:41   32.06  n/a    .000
01611>        [RD= 1.00] out<-      1.0 01:R4              5.90     .244 No_date    1:52   32.06  n/a    .000
01612>        [L/S/n=  251./ .190/.035]
01613>        (Vmax=  .402:Dmax=  .306)
01614> R0050:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01615>      ADD HYD                 1.0 02:R4              5.90     .244 No_date    1:52   32.06  n/a    .000
01616>                        +     1.0 02:EXT6             .86     .055 No_date    1:40   34.44  n/a    .000
01617>                        +     1.0 02:EXT7             .47     .041 No_date    1:21   32.24  n/a    .000
01618>                      SUM=    1.0 01:J5              7.24     .320 No_date    1:46   32.36  n/a    .000
01619> R0050:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01620>      ROUTE CHANNEL   ->      1.0 02:J5              7.24     .320 No_date    1:46   32.36  n/a    .000
01621>      [RD= 1.00] out<-      1.0 01:R5              7.24     .316 No_date    1:52   32.36  n/a    .000
01622>        [L/S/n=  237./ .644/.035]
01623>        (Vmax=  .655:Dmax=  .286)
01624> R0050:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01625>      ADD HYD                 1.0 02:Pre10_1          .80     .048 No_date    1:20   22.07  n/a    .000
01626>                        +     1.0 02:Pre9_2           .01     .002 No_date    1:00   15.27  n/a    .000
01627>                        +     1.0 02:Pre2_2           .00     .000 No_date    1:00   27.40  n/a    .000
01628>                      SUM=    1.0 01:Pre              .81     .049 No_date    1:20   21.96  n/a    .000
01629> R0050:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01630>      ROUTE CHANNEL   ->      1.0 02:Pre              .81     .049 No_date    1:20   21.96  n/a    .000
01631>      [RD= 1.00] out<-      1.0 01:R6               .81     .048 No_date    1:23   21.96  n/a    .000
01632>        [L/S/n=   77./ .776/.035]
01633>        (Vmax=  .492:Dmax=  .036)
01634> R0050:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01635>      ROUTE CHANNEL   ->      1.0 02:Pre9_1           .44     .022 No_date    1:27   22.07  n/a    .000
01636>      [RD= 1.00] out<-      1.0 01:R7               .44     .022 No_date    1:31   22.07  n/a    .000
01637>        [L/S/n=  159./1.576/.035]
01638>        (Vmax=  .797:Dmax=  .007)
01639> R0050:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01640>      ADD HYD                 1.0 02:R6               .81     .048 No_date    1:23   22.30  n/a    .000
01641>                        +     1.0 02:EXT10            .20     .010 No_date    1:30   22.06  n/a    .000
01642>                      SUM=    1.0 01:J6              1.02     .057 No_date    1:24   22.25  n/a    .000
01643> R0050:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01644>      ROUTE CHANNEL   ->      1.0 02:J6              1.02     .057 No_date    1:24   22.25  n/a    .000
01645>      [RD= 1.00] out<-      1.0 01:R8              1.02     .057 No_date    1:27   22.25  n/a    .000
01646>        [L/S/n=   79./ .522/.035]
01647>        (Vmax=  .423:Dmax=  .042)
01648> R0050:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01649>      ADD HYD                 1.0 02:R8              1.02     .057 No_date    1:27   22.44  n/a    .000
01650>                        +     1.0 02:R7               .44     .034 No_date    4:50   22.53  n/a    .000
01651>                      SUM=    1.0 01:J7              1.46     .078 No_date    1:28   22.47  n/a    .000
01652> R0050:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01653>      ROUTE CHANNEL   ->      1.0 02:J7              1.46     .078 No_date    1:28   22.47  n/a    .000
01654>      [RD= 1.00] out<-      1.0 01:R9              1.46     .078 No_date    1:29   22.47  n/a    .000
01655>        [L/S/n=   29./ .887/.035]
01656>        (Vmax=  .543:Dmax=  .053)
01657> R0050:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01658>      ADD HYD                 1.0 02:EXT9            3.57     .183 No_date    1:35   25.77  n/a    .000
01659>                        +     1.0 02:R9               1.46     .078 No_date    1:29   22.58  n/a    .000
01660>                        +     1.0 02:EXT8             .83     .052 No_date    1:30   28.33  n/a    .000
01661>                        +     1.0 02:R5               7.24     .316 No_date    1:52   32.36  n/a    .000
01662>                      SUM=    1.0 01:J8              13.10     .594 No_date    1:42   29.22  n/a    .000
01663> R0050:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01664>      ROUTE PIPE      ->      1.0 02:J8              13.10     .594 No_date    1:42   29.22  n/a    .000
01665> *    [RD= 1.00] out<-      1.0 01:Outlet          13.10     .594 No_date    1:43   29.22  n/a    .000
01666>        [L/S/n=   8./ .010/.013]
01667>        (Vmax=  .436:Dmax= 1.153)
01668>        [Din=  .53:Dused= 1.41]
01669> ################################################################################
01670> # STORMS
01671> ################################################################################
01672>    ** END OF RUN :  98
01673>
01674> ********************************************************************************
01675>
01676>
01677>
01678>
01679>
01680>  RUN#:COMMAND#
01681> R0099:C00001------------------------------------------------------------------
01682>      START
01683>       [TZERO =    .00 hrs on        0]
01684>       [METOUT=   2    (1=imperial, 2=metric output)]
01685>       [NSTORM=   1 ]
01686>       [NRUN  = 0099 ]
01687> ********************************************************************************
01688> #  SWMHYMO  / INPUT DATA FILE
01689> ********************************************************************************
01690> #  Project Name  : [5923 Ottawa St]
01691> #  Project Number: [P2710(e01)]
01692> #  Date          : [2025 April 28]
01693> #  Modellier     : [MM]
01694> #  Company       : JFSA Canada Inc.
01695> #  License #     : 2549237
01696> ********************************************************************************
01697> # Model developed to simulate runoff from subcatchments under pre development conditions
01698> ********************************************************************************
01699> R0099:C00002------------------------------------------------------------------
01700>      READ STORM
01701>       Filename = STORM.001
01702>       Comment  = CHICAGO STORM   100 Year, 3 Hours
01703>       [SDT=10.00:SDUR=    3.00:PTOT=  71.66]
01704> ********************************************************************************
01705> R0099:C00003------------------------------------------------------------------
01706>      DEFAULT VALUES
01707>       Filename = C:\Temp\20250428-PostDev\Ottawa.val
01708>       ICASEdv  = 1 (read and print data)
01709>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
01710>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
01711>       Horton's infiltration equation parameters:
01712>       [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
01713>       Parameters for PERVIOUS surfaces in STANDHYD:
01714>       [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
01715>       Parameters for IMPERVIOUS surfaces in STANDHYD:
01716>       [IAimp=   1.57 mm] [CLI= 1.50]    [MNI= .013]
01717>       Parameters used in NASHYD:
01718>       [Ia=   4.67 mm] [N= 3.00]
01719>       Average monthly Fan Evaporation data in    (mm)
01720>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01721>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01722>       Average monthly Potential Evapotranspiration in    (mm)
01723>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
01724>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
01725> ********************************************************************************
01726> # EXT1
01727> ********************************************************************************
01728> R0099:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01729>      CALIB NASHYD            1.0 01:EXT1             3.21     .167 No_date    1:52   34.39 .480    .000
01730>        [CN= 80.0: N= 3.00: Tp=  .72]
01731> ********************************************************************************
01732> # EXT2
01733> ********************************************************************************
01734> R0099:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01735>      CALIB NASHYD            1.0 01:EXT2             .28     .031 No_date    1:22   40.14 .560    .000
01736>        [CN= 85.0: N= 3.00: Tp=  .33]
01737> ********************************************************************************
01738> # EXT3
01739> ********************************************************************************
01740> R0099:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01741>      CALIB NASHYD            1.0 01:EXT3             .56     .052 No_date    1:21   34.39 .480    .000
01742>        [CN= 80.0: N= 3.00: Tp=  .32]
01743> ********************************************************************************
01744> # EXT4
01745> ********************************************************************************
01746> R0099:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01747>      CALIB NASHYD            1.0 01:EXT4             .31     .029 No_date    1:19   33.37 .466    .000
01748>        [CN= 79.0: N= 3.00: Tp=  .29]
01749> ********************************************************************************
01750> # EXT5
01751> ********************************************************************************
01752> R0099:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01753>      CALIB NASHYD            1.0 01:EXT5             .59     .038 No_date    1:32   30.49 .425    .000
01754>        [CN= 76.0: N= 3.00: Tp=  .45]
01755> ********************************************************************************
01756> # EXT6
01757> ********************************************************************************
01758> R0099:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01759>      CALIB NASHYD            1.0 01:EXT6             .86     .064 No_date    1:39   40.14 .560    .000
01760>        [CN= 85.0: N= 3.00: Tp=  .56]
01761> ********************************************************************************
01762> # EXT7
01763> ********************************************************************************
01764> R0099:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01765>      CALIB NASHYD            1.0 01:EXT7             .47     .048 No_date    1:21   37.71 .526    .000
01766>        [CN= 83.0: N= 3.00: Tp=  .32]
01767> ********************************************************************************
01768> # EXT8
01769> ********************************************************************************
01770> R0099:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01771>      CALIB NASHYD            1.0 01:EXT8             .83     .062 No_date    1:29   33.37 .466    .000
01772>        [CN= 79.0: N= 3.00: Tp=  .42]
01773> ********************************************************************************
01774> # EXT9
01775> ********************************************************************************
01776> R0099:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01777>      CALIB NASHYD            1.0 01:EXT9            3.57     .218 No_date    1:34   30.49 .425    .000
01778>        [CN= 76.0: N= 3.00: Tp=  .48]
01779> ********************************************************************************
01780> # EXT9a
01781> ********************************************************************************
01782> R0099:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01783>      CALIB NASHYD            1.0 01:EXT9a            .01     .003 No_date    1:00   32.37 .452    .000
01784>        [CN= 78.0: N= 3.00: Tp=  .04]
01785> ********************************************************************************
01786> # EXT10
01787> ********************************************************************************
01788> R0099:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01789>      CALIB NASHYD            1.0 01:EXT10            .20     .012 No_date    1:30   26.28 .367    .000
01790>        [CN= 71.0: N= 3.00: Tp=  .42]
01791> ********************************************************************************
01792> # Pre2_1
01793> ********************************************************************************
01794> R0099:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01795> *    CALIB NASHYD            1.0 01:Pre2_1           .01     .003 No_date    1:00   27.07 .378    .000
01796>        [CN= 72.0: N= 3.00: Tp=  .03]
01797> ********************************************************************************
01798> # Pre2_2
01799> ********************************************************************************
01800> R0099:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
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01801>  *  CALIB NASHYD          1.0 01:Pre2_2          .00     .001 No_date    1:00   32.36 .451    .000
01802>       [CN= 78.0: N= 3.00: Tp=  .02]
01803> #*****************************************************************************************
01804> # Pre9_1
01805> #*****************************************************************************************
01806> R0099:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01807>      CALIB NASHYD          1.0 01:Pre9_1          .44     .027 No_date    1:27   26.29 .367    .000
01808>       [CN= 71.0: N= 3.00: Tp=  .38]
01809> #*****************************************************************************************
01810> # Pre9_2
01811> #*****************************************************************************************
01812> R0099:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01813>  *  CALIB NASHYD          1.0 01:Pre9_2          .01     .002 No_date    1:00   18.43 .257    .000
01814>       [CN= 59.0: N= 3.00: Tp=  .03]
01815> #*****************************************************************************************
01816> # Pre10_1
01817> #*****************************************************************************************
01818> R0099:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01819>      CALIB NASHYD          1.0 01:Pre10_1         .80     .058 No_date    1:20   26.29 .367    .000
01820>       [CN= 71.0: N= 3.00: Tp=  .29]
01821> #*****************************************************************************************
01822> # Pre11_1
01823> #*****************************************************************************************
01824> R0099:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01825>      CALIB NASHYD          1.0 01:Pre11_1         .07     .008 No_date    1:13   32.37 .452    .000
01826>       [CN= 78.0: N= 3.00: Tp=  .21]
01827> #*****************************************************************************************
01828> # Site 1
01829> #*****************************************************************************************
01830> R0099:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01831>      DESIGN STANDHYD       1.0 01:S1-B1           .42     .146 No_date    1:00   51.46 .718    .000
01832>        [XIMP=.47:TIMP=.57]
01833>        [SLP=1.00:DT= 1.00]
01834>        [LOSS= 1 : HORTONS]
01835> # Site 1 - Roof
01836> #*****************************************************************************************
01837> R0099:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01838>      DESIGN STANDHYD       1.0 01:S1-Roof         .07     .035 No_date    1:00   69.68 .972    .000
01839>        [XIMP=.99:TIMP=.99]
01840>        [SLP= .50:DT= 1.00]
01841>        [LOSS= 1 : HORTONS]
01842> R0099:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01843>      ROUTE RESERVOIR ->    1.0 02:S1-Roof         .07     .035 No_date    1:00   69.68  n/a    .000
01844>                  out <=    1.0 01:S1-Roof-Ou      .07     .003 No_date    1:30   69.68  n/a    .000
01845>              overflow <=   1.0 01:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a    .000
01846>      (MxStoUsed=.3296E-02  m3, TotOvFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01847> R0099:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01848>      ADD HYD               1.0 02:S1-B1           .42     .146 No_date    1:00   51.46  n/a    .000
01849>                      +     1.0 02:S1-Roof-Ou      .07     .003 No_date    1:30   69.68  n/a    .000
01850>                      +     1.0 02:S1-Roof-Ov      .00     .000 No_date    0:00    .00  n/a    .000
01851>                    SUM=    1.0 01:S1TE1-IN        .49     .148 No_date    1:00   54.06  n/a    .000
01852> R0099:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01853>      ROUTE RESERVOIR ->    1.0 02:S1TE1-IN        .49     .148 No_date    1:00   54.06  n/a    .000
01854>                  out <=    1.0 01:S1TE1-Out       .49     .014 No_date    1:41   54.06  n/a    .000
01855>              overflow <=   1.0 01:S1TE1-Over      .00     .000 No_date    0:00    .00  n/a    .000
01856>      (MxStoUsed=.1634E-01  m3, TotOvFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01857> #*****************************************************************************************
01858> # Site 2
01859> #*****************************************************************************************
01860> R0099:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01861>      DESIGN STANDHYD       1.0 01:S2-B3           .35     .121 No_date    1:00   51.06 .712    .000
01862>        [XIMP=.46:TIMP=.56]
01863>        [SLP=1.00:DT= 1.00]
01864>        [LOSS= 1 : HORTONS]
01865> #*****************************************************************************************
01866> # Site 2 - Roof
01867> #*****************************************************************************************
01868> R0099:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01869>      DESIGN STANDHYD       1.0 01:S2-Roof         .09     .044 No_date    1:00   69.68 .972    .000
01870>        [XIMP=.99:TIMP=.99]
01871>        [SLP= .50:DT= 1.00]
01872>        [LOSS= 1 : HORTONS]
01873> #*****************************************************************************************
01874> R0099:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01875>      ROUTE RESERVOIR ->    1.0 02:S2-Roof         .09     .044 No_date    1:00   69.68  n/a    .000
01876>                  out <=    1.0 01:S2-Roof-Ou      .09     .009 No_date    1:12   69.70  n/a    .000
01877>              overflow <=   1.0 01:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a    .000
01878>      (MxStoUsed=.3119E-02  m3, TotOvFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01879> R0099:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01880>      ADD HYD               1.0 02:S2-B3           .35     .121 No_date    1:00   51.06  n/a    .000
01881>                      +     1.0 02:S2-Roof-Ou      .09     .009 No_date    1:12   69.70  n/a    .000
01882>                      +     1.0 02:S2-Roof-Ov      .00     .000 No_date    0:00    .00  n/a    .000
01883>                    SUM=    1.0 01:S1TE2-IN        .44     .129 No_date    1:00   54.87  n/a    .000
01884> R0099:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01885>      ROUTE RESERVOIR ->    1.0 02:S1TE2-IN        .44     .129 No_date    1:00   54.87  n/a    .000
01886>                  out <=    1.0 01:S1TE2-Out       .44     .018 No_date    1:39   54.87  n/a    .000
01887>              overflow <=   1.0 01:S1TE2-Over      .00     .000 No_date    0:00    .00  n/a    .000
01888>      (MxStoUsed=.1413E-01  m3, TotOvFVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
01889> R0099:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01890>      ADD HYD               1.0 02:S1TE1-Out       .49     .014 No_date    1:41   54.06  n/a    .000
01891>                      +     1.0 02:S1TE1-Over      .00     .000 No_date    0:00    .00  n/a    .000
01892>                    SUM=    1.0 01:Site1           .49     .014 No_date    1:41   54.06  n/a    .000
01893> R0099:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01894>      ADD HYD               1.0 02:S1TE2-Out       .44     .018 No_date    1:39   54.87  n/a    .000
01895>                      +     1.0 02:S1TE2-Over      .00     .000 No_date    0:00    .00  n/a    .000
01896>                    SUM=    1.0 01:Site2           .44     .018 No_date    1:39   54.87  n/a    .000
01897> R0099:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01898>      ADD HYD               1.0 02:EXT2            .28     .031 No_date    1:22   40.14  n/a    .000
01899>                      +     1.0 02:Pre2_1          .01     .003 No_date    1:00   27.07  n/a    .000
01900>                      +     1.0 02:Site1           .49     .014 No_date    1:41   54.06  n/a    .000
01901>                      +     1.0 02:Site2           .44     .018 No_date    1:39   54.87  n/a    .000
01902>                    SUM=    1.0 01:J1             1.23     .060 No_date    1:27   50.84  n/a    .000
01903> R0099:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01904>      ROUTE CHANNEL   ->    1.0 02:J1             1.23     .060 No_date    1:27   50.84  n/a    .000
01905>        [RDT= 1.00] out<-     1.0 01:R1             1.23     .059 No_date    1:32   50.84  n/a    .000
01906>         [L/S/n=  143./ .394/.035]
01907>         [Vmax=  .365:Dmax=  .155]
01908> R0099:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01909>      ADD HYD               1.0 02:R1             1.23     .059 No_date    1:32   50.84  n/a    .000
01910>                      +     1.0 02:EXT3            .56     .052 No_date    1:21   34.39  n/a    .000
01911>                      +     1.0 02:EXT1           3.21     .167 No_date    1:52   34.39  n/a    .000
01912>                    SUM=    1.0 01:J2             5.00     .253 No_date    1:41   38.43  n/a    .000
01913> R0099:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01914>      ROUTE CHANNEL   ->    1.0 02:J2             5.00     .253 No_date    1:41   38.43  n/a    .000
01915>        [RDT= 1.00] out<-     1.0 01:R2             5.00     .253 No_date    1:43   38.43  n/a    .000
01916>         [L/S/n=   73./ .425/.035]
01917>         [Vmax=  .524:Dmax=  .282]
01918> R0099:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01919>      ADD HYD               1.0 02:R2             5.00     .253 No_date    1:43   38.43  n/a    .000
01920>                      +     1.0 02:EXT4            .31     .029 No_date    1:19   33.37  n/a    .000
01921>                    SUM=    1.0 01:J3             5.31     .271 No_date    1:39   38.14  n/a    .000
01922> R0099:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01923>      ROUTE CHANNEL   ->    1.0 02:J3             5.31     .271 No_date    1:39   38.14  n/a    .000
01924>        [RDT= 1.00] out<-     1.0 01:R3             5.31     .270 No_date    1:43   38.14  n/a    .000
01925>         [L/S/n=   92./ .274/.035]
01926>         [Vmax=  .429:Dmax=  .291]
01927> R0099:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01928>      ADD HYD               1.0 02:R3             5.31     .270 No_date    1:43   38.14  n/a    .000
01929>                      +     1.0 02:EXT5            .59     .038 No_date    1:32   30.49  n/a    .000
01930>                    SUM=    1.0 01:J4             5.90     .306 No_date    1:41   37.37  n/a    .000
01931> R0099:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01932>      ROUTE CHANNEL   ->    1.0 02:J4             5.90     .306 No_date    1:41   37.37  n/a    .000
01933>        [RDT= 1.00] out<-     1.0 01:R4             5.90     .291 No_date    1:51   37.37  n/a    .000
01934>         [L/S/n=  251./ .190/.035]
01935>         [Vmax=  .423:Dmax=  .330]
01936> R0099:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01937>      ADD HYD               1.0 02:R4             5.90     .291 No_date    1:51   37.37  n/a    .000
01938>                      +     1.0 02:EXT6            .86     .064 No_date    1:39   40.14  n/a    .000
01939>                      +     1.0 02:EXT7            .47     .048 No_date    1:21   37.71  n/a    .000
01940>                    SUM=    1.0 01:J5             7.24     .381 No_date    1:46   37.72  n/a    .000
01941> R0099:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01942>      ROUTE CHANNEL   ->    1.0 02:J5             7.24     .381 No_date    1:46   37.72  n/a    .000
01943>        [RDT= 1.00] out<-     1.0 01:R5             7.24     .377 No_date    1:50   37.72  n/a    .000
01944>         [L/S/n=  237./ .644/.035]
01945>         [Vmax=  .697:Dmax=  .309]
01946> R0099:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01947>      ADD HYD               1.0 02:Pre10_1         .80     .058 No_date    1:20   26.29  n/a    .000
01948>                      +     1.0 02:Pre9_2          .01     .002 No_date    1:00   18.43  n/a    .000
01949>                      +     1.0 02:Pre2_2          .00     .001 No_date    1:00   32.36  n/a    .000
01950>                    SUM=    1.0 01:Pre            .81     .059 No_date    1:20   26.17  n/a    .000
01951> R0099:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01952>      ROUTE CHANNEL   ->    1.0 02:Pre            .81     .059 No_date    1:20   26.17  n/a    .000
01953>        [RDT= 1.00] out<-     1.0 01:R6             .81     .058 No_date    1:22   26.17  n/a    .000
01954>         [L/S/n=   77./ .776/.035]
01955>         [Vmax=  .492:Dmax=  .043]
01956> R0099:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01957>      ROUTE CHANNEL   ->    1.0 02:Pre9_1          .44     .027 No_date    1:27   26.29  n/a    .000
01958>        [RDT= 1.00] out<-     1.0 01:R7             .44     .026 No_date    1:30   26.29  n/a    .000
01959>         [L/S/n=  159./1.576/.035]
01960>         [Vmax=  .797:Dmax=  .008]
01961> R0099:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01962>      ADD HYD               1.0 02:R6             .81     .058 No_date    1:22   26.52  n/a    .000
01963>                      +     1.0 02:EXT10           .20     .012 No_date    1:30   26.28  n/a    .000
01964>                    SUM=    1.0 01:J6             1.02     .069 No_date    1:23   26.48  n/a    .000
01965> R0099:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01966>      ROUTE CHANNEL   ->    1.0 02:J6             1.02     .069 No_date    1:23   26.48  n/a    .000
01967>        [RDT= 1.00] out<-     1.0 01:R8             1.02     .068 No_date    1:27   26.47  n/a    .000
01968>         [L/S/n=   79./ .522/.035]
01969>         [Vmax=  .423:Dmax=  .051]
01970> R0099:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01971>      ADD HYD               1.0 02:R8             1.02     .068 No_date    1:27   26.67  n/a    .000
01972>                      +     1.0 02:R7              .44     .036 No_date    4:51   26.78  n/a    .000
01973>                    SUM=    1.0 01:J7             1.46     .094 No_date    1:28   26.71  n/a    .000
01974> R0099:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01975>      ROUTE CHANNEL   ->    1.0 02:J7             1.46     .094 No_date    1:28   26.71  n/a    .000
01976>        [RDT= 1.00] out<-     1.0 01:R9             1.46     .094 No_date    1:29   26.71  n/a    .000
01977>         [L/S/n=   29./ .887/.035]
01978>         [Vmax=  .543:Dmax=  .064]
01979> R0099:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01980>      ADD HYD               1.0 02:EXT9           3.57     .218 No_date    1:34   30.49  n/a    .000
01981>                      +     1.0 02:R9             1.46     .094 No_date    1:29   26.83  n/a    .000
01982>                      +     1.0 02:EXT8            .83     .062 No_date    1:29   33.37  n/a    .000
01983>                      +     1.0 02:R5             7.24     .377 No_date    1:50   37.72  n/a    .000
01984>                    SUM=    1.0 01:J8            13.10     .712 No_date    1:41   34.26  n/a    .000
01985> R0099:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
01986>      ROUTE PIPE      ->    1.0 02:J8            13.10     .712 No_date    1:41   34.26  n/a    .000
01987>  *   [RDT= 1.00] out<-     1.0 01:Outlet        13.10     .712 No_date    1:42   34.26  n/a    .000
01988>         [L/S/n=   8./ .010/.013]
01989>         [Vmax=  .457:Dmax= 1.234]
01990>         [Dim=  .53:Dusad= 1.50]
01991> ##############################################################################
01992> # STORMS
01993> ##############################################################################
01994>  ** END OF RUN :  101
01995>
01996> ******************************************************************************************
01997>
01998>
01999>
02000>
02001>
02002>  RUN#:COMMAND#
02003> R0102:C00001----------------------------------------------------------------------------------
02004>      START
02005>       [TZERO =    .00 hrs on        0]
02006>       [METOUT=   2  (1=imperial, 2=metric output)]
02007>       [NSTORM=   1 ]
02008>       [NRUN  = 0102 ]
02009> #*****************************************************************************************
02010> #  SWMHYMO  / INPUT DATA FILE
02011> #*****************************************************************************************
02012> #  Project Name  : [5923 Ottawa St]
02013> #  Project Number: [P2710(e01)]
02014> #  Date          : [2025 April 28]
02015> #  Modeller      : [MM]
02016> #  Company       : JFSA Canada Inc.
02017> #  License #     : 2549237
02018> #*****************************************************************************************
02019> # Model developed to simulate runoff from subcatchments under pre development conditions
02020> #*****************************************************************************************
02021> R0102:C00002----------------------------------------------------------------------------------
02022>      READ STORM
02023>       Filename = STORM.001
02024>       Comment  = 2 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
02025>       [SDT=10.00:SDUR=  24.00:PTOT=  48.46]
02026> #*****************************************************************************************
02027> R0102:C00003----------------------------------------------------------------------------------
02028>      DEFAULT VALUES
02029>       Filename = C:\Temp\20250428-PostDev\Ottawa.val
02030>       ICASEdv  = 1 (read and print data)
02031>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
02032>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
02033>       Horton's infiltration equation parameters:
02034>       [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
02035>       Parameters for PERVIOUS surfaces in STANDHYD:
02036>       [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
02037>       Parameters for IMPERVIOUS surfaces in STANDHYD:
02038>       [IAimp=   1.57 mm] [CLI= 1.50]    [MNI= .013]
02039>       Parameters used in NASHYD:
02040>       [Ia=   4.67 mm] [N= 3.00]
02041>       Average monthly Pan Evaporation data in    (mm)
02042>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
02043>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
02044>       Average monthly Potential Evapotranspiration in    (mm)
02045>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
02046>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
02047> #*****************************************************************************************
02048> # EXT1
02049> #*****************************************************************************************
02050> R0102:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02051>      CALIB NASHYD          1.0 01:EXT1            3.21     .058 No_date   12:42   17.87 .369    .000
02052>       [CN= 80.0: N= 3.00: Tp=  .72]
02053> #*****************************************************************************************
02054> # EXT2
02055> #*****************************************************************************************
02056> R0102:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02057>      CALIB NASHYD          1.0 01:EXT2             .28     .011 No_date   12:14   21.63 .446    .000
02058>       [CN= 85.0: N= 3.00: Tp=  .33]
02059> #*****************************************************************************************
02060> # EXT3
02061> #*****************************************************************************************
02062> R0102:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02063>      CALIB NASHYD          1.0 01:EXT3             .56     .018 No_date   12:13   17.87 .369    .000
02064>       [CN= 80.0: N= 3.00: Tp=  .32]
02065> #*****************************************************************************************
02066> # EXT4
02067> #*****************************************************************************************
02068> R0102:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02069>      CALIB NASHYD          1.0 01:EXT4             .31     .010 No_date   12:12   17.22 .355    .000
02070>       [CN= 79.0: N= 3.00: Tp=  .29]
02071> #*****************************************************************************************
02072> # EXT5
02073> #*****************************************************************************************
02074> R0102:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02075>      CALIB NASHYD          1.0 01:EXT5             .59     .013 No_date   12:22   15.46 .319    .000
02076>       [CN= 76.0: N= 3.00: Tp=  .45]
02077> #*****************************************************************************************
02078> # EXT6
02079> #*****************************************************************************************
02080> R0102:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02081>      CALIB NASHYD          1.0 01:EXT6             .86     .023 No_date   12:30   21.64 .446    .000
02082>       [CN= 85.0: N= 3.00: Tp=  .56]
02083> #*****************************************************************************************
02084> # EXT7
02085> #*****************************************************************************************
02086> R0102:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02087>      CALIB NASHYD          1.0 01:EXT7             .47     .017 No_date   12:13   20.01 .413    .000
02088>       [CN= 83.0: N= 3.00: Tp=  .32]
02089> #*****************************************************************************************
02090> # EXT8
02091> #*****************************************************************************************
02092> R0102:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02093>      CALIB NASHYD          1.0 01:EXT8             .83     .021 No_date   12:20   17.22 .355    .000
02094>       [CN= 79.0: N= 3.00: Tp=  .42]
02095> #*****************************************************************************************
02096> # EXT9
02097> #*****************************************************************************************
02098> R0102:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02099>      CALIB NASHYD          1.0 01:EXT9            3.57     .074 No_date   12:25   15.46 .319    .000
02100>       [CN= 76.0: N= 3.00: Tp=  .48]
02101> #*****************************************************************************************
02102> # EXT9a
02103> #*****************************************************************************************
02104> R0102:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02105>      CALIB NASHYD          1.0 01:EXT9a            .01     .001 No_date   12:00   16.59 .342    .000
02106>       [CN= 78.0: N= 3.00: Tp=  .04]
02107> #*****************************************************************************************
02108> # EXT10
02109> #*****************************************************************************************
02110> R0102:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02111>      CALIB NASHYD          1.0 01:EXT10            .20     .004 No_date   12:20   12.99 .268    .000
02112>       [CN= 71.0: N= 3.00: Tp=  .42]
02113> #*****************************************************************************************
02114> # Pre2_1
02115> #*****************************************************************************************
02116> R0102:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02117>  *  CALIB NASHYD          1.0 01:Pre2_1           .01     .001 No_date   12:00   13.44 .277    .000
02118>       [CN= 72.0: N= 3.00: Tp=  .03]
02119> #*****************************************************************************************
02120> # Pre2_2
02121> #*****************************************************************************************
02122> R0102:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02123>  *  CALIB NASHYD          1.0 01:Pre2_2           .00     .000 No_date   12:00   16.60 .343    .000
02124>       [CN= 78.0: N= 3.00: Tp=  .02]
02125> #*****************************************************************************************
02126> # Pre9_1
02127> #*****************************************************************************************
02128> R0102:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02129>      CALIB NASHYD          1.0 01:Pre9_1           .44     .009 No_date   12:18   12.99 .268    .000
02130>       [CN= 71.0: N= 3.00: Tp=  .28]
02131> #*****************************************************************************************
02132> # Pre9_2
02133> #*****************************************************************************************
02134> R0102:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02135>  *  CALIB NASHYD          1.0 01:Pre9_2           .01     .001 No_date   12:00    8.70 .179    .000
02136>       [CN= 59.0: N= 3.00: Tp=  .03]
02137> #*****************************************************************************************
02138> # Pre10_1
02139> #*****************************************************************************************
02140> R0102:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02141>      CALIB NASHYD          1.0 01:Pre10_1          .80     .020 No_date   12:12   12.99 .268    .000
02142>       [CN= 71.0: N= 3.00: Tp=  .29]
02143> #*****************************************************************************************
02144> # Pre11_1
02145> #*****************************************************************************************
02146> R0102:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02147>      CALIB NASHYD          1.0 01:Pre11_1          .07     .003 No_date   12:07   16.60 .343    .000
02148>       [CN= 78.0: N= 3.00: Tp=  .21]
02149> #*****************************************************************************************
02150> # Site 1
02151> #*****************************************************************************************
02152> R0102:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02153>      DESIGN STANDHYD       1.0 01:S1-B1           .42     .042 No_date   12:00   27.57 .569    .000
02154>        [XIMP=.47:TIMP=.57]
02155>        [SLP=1.00:DT= 1.00]
02156>        [LOSS= 1 : HORTONS]
02157> # Site 1 - Roof
02158> #*****************************************************************************************
02159> R0102:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02160>      DESIGN STANDHYD       1.0 01:S1-Roof         .07     .011 No_date   12:00   46.49 .959    .000
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02161>       [XIMP=.99:TIMP=.99]
02162>       [SLP= .50:DT= 1.00]
02163>       [LOSS= 1 : HORTONS]
02164> R0102:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02165>     ROUTE RESERVOIR ->    1.0 02:S1-Roof          .07     .011 No_date   12:00   46.49  n/a     .000
02166>                 out <=    1.0 01:S1-Roof-Ou       .07     .002 No_date   12:08   46.49  n/a     .000
02167>             overflow <=   1.0 03:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
02168>      (MxStOused=.1501E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
02169> R0102:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02170>     ADD HYD               1.0 02:S1-B1            .42     .042 No_date   12:00   27.57  n/a     .000
02171>                   +       1.0 02:S1-Roof-Ou       .07     .002 No_date   12:08   46.49  n/a     .000
02172>                   +       1.0 02:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
02173>                  SUM=     1.0 01:SITE1-IN         .49     .043 No_date   12:00   30.27  n/a     .000
02174> R0102:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02175>     ROUTE RESERVOIR ->    1.0 02:SITE1-IN         .49     .043 No_date   12:00   30.27  n/a     .000
02176>                 out <=    1.0 01:SITE1-Out        .49     .008 No_date   12:31   30.27  n/a     .000
02177>             overflow <=   1.0 03:SITE1-Over       .00     .000 No_date    0:00     .00  n/a     .000
02178>      (MxStOused=.4631E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
02179> #*****************************************************************************************
02180> # Site 2
02181> #*****************************************************************************************
02182> R0102:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02183>     DESIGN STANDHYD       1.0 01:S2-B3            .35     .035 No_date   12:00   27.18 .561     .000
02184>       [XIMP=.46:TIMP=.56]
02185>       [SLP=1.00:DT= 1.00]
02186>       [LOSS= 1 : HORTONS]
02187> #*****************************************************************************************
02188> # Site 2 - Roof
02189> #*****************************************************************************************
02190> R0102:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02191>     DESIGN STANDHYD       1.0 01:S2-Roof          .09     .015 No_date   12:00   46.49 .959     .000
02192>       [XIMP=.99:TIMP=.99]
02193>       [SLP= .50:DT= 1.00]
02194>       [LOSS= 1 : HORTONS]
02195> #*****************************************************************************************
02196> R0102:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02197>     ROUTE RESERVOIR ->    1.0 02:S2-Roof          .09     .015 No_date   12:00   46.49  n/a     .000
02198>                 out <=    1.0 01:S2-Roof-Ou       .09     .006 No_date   12:03   46.49  n/a     .000
02199>             overflow <=   1.0 03:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
02200>      (MxStOused=.1023E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
02201> R0102:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02202>     ADD HYD               1.0 02:S2-B3            .35     .035 No_date   12:00   27.18  n/a     .000
02203>                   +       1.0 02:S2-Roof-Ou       .09     .006 No_date   12:03   46.49  n/a     .000
02204>                   +       1.0 02:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
02205>                  SUM=     1.0 01:SITE2-IN         .44     .040 No_date   12:00   31.13  n/a     .000
02206> R0102:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02207>     ROUTE RESERVOIR ->    1.0 02:SITE2-IN         .44     .040 No_date   12:00   31.13  n/a     .000
02208>                 out <=    1.0 01:SITE2-Out        .44     .009 No_date   12:32   31.13  n/a     .000
02209>             overflow <=   1.0 03:SITE2-Over       .00     .000 No_date    0:00     .00  n/a     .000
02210>      (MxStOused=.4378E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
02211> R0102:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02212>     ADD HYD               1.0 02:SITE1-Out        .49     .008 No_date   12:31   30.27  n/a     .000
02213>                   +       1.0 02:SITE1-Over       .00     .000 No_date    0:00     .00  n/a     .000
02214>                  SUM=     1.0 01:Site1            .49     .008 No_date   12:31   30.27  n/a     .000
02215> R0102:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02216>     ADD HYD               1.0 02:SITE2-Out        .44     .009 No_date   12:32   31.13  n/a     .000
02217>                   +       1.0 02:SITE2-Over       .00     .000 No_date    0:00     .00  n/a     .000
02218>                  SUM=     1.0 01:Site2            .44     .009 No_date   12:32   31.13  n/a     .000
02219> R0102:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02220>     ADD HYD               1.0 02:EXT2             .28     .011 No_date   12:14   21.63  n/a     .000
02221>                   +       1.0 02:Pre2_1           .01     .001 No_date   12:00   13.44  n/a     .000
02222>                   +       1.0 02:Site1            .49     .008 No_date   12:31   30.27  n/a     .000
02223>                   +       1.0 02:Site2            .44     .009 No_date   12:32   31.13  n/a     .000
02224>                  SUM=     1.0 01:J1              1.23     .028 No_date   12:15   28.40  n/a     .000
02225> R0102:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02226>     ROUTE CHANNEL   ->    1.0 02:J1              1.23     .028 No_date   12:15   28.40  n/a     .000
02227>       [RD= 1.00] out<-    1.0 01:R1              1.23     .027 No_date   12:22   28.40  n/a     .000
02228>       [L/S/n=  143./ .394/.035]
02229>       [Vmax=  .296:Dmax=  .112]
02230> R0102:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02231>     ADD HYD               1.0 02:R1              1.23     .027 No_date   12:22   28.40  n/a     .000
02232>                   +       1.0 02:EXT3             .56     .018 No_date   12:13   17.87  n/a     .000
02233>                   +       1.0 02:EXT1            3.21     .058 No_date   12:42   17.87  n/a     .000
02234>                  SUM=     1.0 01:J2              5.00     .095 No_date   12:30   20.46  n/a     .000
02235> R0102:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02236>     ROUTE CHANNEL   ->    1.0 02:J2              5.00     .095 No_date   12:30   20.46  n/a     .000
02237>       [RD= 1.00] out<-    1.0 01:R2              5.00     .095 No_date   12:33   20.46  n/a     .000
02238>       [L/S/n=   73./ .425/.035]
02239>       [Vmax=  .404:Dmax=  .190]
02240> R0102:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02241>     ADD HYD               1.0 02:R2              5.00     .095 No_date   12:33   20.46  n/a     .000
02242>                   +       1.0 02:EXT4             .31     .010 No_date   12:12   17.22  n/a     .000
02243>                  SUM=     1.0 01:J3              5.31     .102 No_date   12:30   20.27  n/a     .000
02244> R0102:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02245>     ROUTE CHANNEL   ->    1.0 02:J3              5.31     .102 No_date   12:30   20.27  n/a     .000
02246>       [RD= 1.00] out<-    1.0 01:R3              5.31     .101 No_date   12:34   20.27  n/a     .000
02247>       [L/S/n=   92./ .274/.035]
02248>       [Vmax=  .331:Dmax=  .197]
02249> R0102:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02250>     ADD HYD               1.0 02:R3              5.31     .101 No_date   12:34   20.27  n/a     .000
02251>                   +       1.0 02:EXT5             .59     .013 No_date   12:22   15.46  n/a     .000
02252>                  SUM=     1.0 01:J4              5.90     .113 No_date   12:32   19.78  n/a     .000
02253> R0102:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02254>     ROUTE CHANNEL   ->    1.0 02:J4              5.90     .113 No_date   12:32   19.78  n/a     .000
02255>       [RD= 1.00] out<-    1.0 01:R4              5.90     .105 No_date   12:45   19.78  n/a     .000
02256>       [L/S/n=  251./ .190/.035]
02257>       [Vmax=  .315:Dmax=  .214]
02258> R0102:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02259>     ADD HYD               1.0 02:R4              5.90     .105 No_date   12:45   19.78  n/a     .000
02260>                   +       1.0 02:EXT6             .86     .023 No_date   12:30   21.64  n/a     .000
02261>                   +       1.0 02:EXT7             .47     .017 No_date   12:13   20.01  n/a     .000
02262>                  SUM=     1.0 01:J5              7.24     .135 No_date   12:39   20.02  n/a     .000
02263> R0102:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02264>     ROUTE CHANNEL   ->    1.0 02:J5              7.24     .135 No_date   12:39   20.02  n/a     .000
02265>       [RD= 1.00] out<-    1.0 01:R5              7.24     .132 No_date   12:46   20.02  n/a     .000
02266>       [L/S/n=  237./ .644/.035]
02267>       [Vmax=  .508:Dmax=  .204]
02268> R0102:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02269>     ADD HYD               1.0 02:Pre10_1          .80     .020 No_date   12:12   12.99  n/a     .000
02270>                   +       1.0 02:Pre9_2           .01     .001 No_date   12:00    8.70  n/a     .000
02271>                   +       1.0 02:Pre2_2           .00     .000 No_date   12:00   16.60  n/a     .000
02272>                  SUM=     1.0 01:Pre              .81     .020 No_date   12:12   12.93  n/a     .000
02273> R0102:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02274>     ROUTE CHANNEL   ->    1.0 02:Pre              .81     .020 No_date   12:12   12.93  n/a     .000
02275>       [RD= 1.00] out<-    1.0 01:R6               .81     .019 No_date   12:15   12.93  n/a     .000
02276>       [L/S/n=   77./ .776/.035]
02277>       [Vmax=  .492:Dmax=  .014]
02278> R0102:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02279>     ROUTE CHANNEL   ->    1.0 02:Pre9_1           .44     .009 No_date   12:18   12.99  n/a     .000
02280>       [RD= 1.00] out<-    1.0 01:R7               .44     .009 No_date   12:21   12.99  n/a     .000
02281>       [L/S/n=  159./1.576/.035]
02282>       [Vmax=  .797:Dmax=  .003]
02283> R0102:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02284>     ADD HYD               1.0 02:R6               .81     .019 No_date   12:15   12.96  n/a     .000
02285>                   +       1.0 02:EXT10            .20     .004 No_date   12:20   12.99  n/a     .000
02286>                  SUM=     1.0 01:J6              1.02     .023 No_date   12:15   12.97  n/a     .000
02287> R0102:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02288>     ROUTE CHANNEL   ->    1.0 02:J6              1.02     .023 No_date   12:15   12.97  n/a     .000
02289>       [RD= 1.00] out<-    1.0 01:R8              1.02     .023 No_date   12:19   12.97  n/a     .000
02290>       [L/S/n=   79./ .522/.035]
02291>       [Vmax=  .423:Dmax=  .017]
02292> R0102:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02293>     ADD HYD               1.0 02:R8              1.02     .023 No_date   12:19   12.99  n/a     .000
02294>                   +       1.0 02:R7               .44     .009 No_date   12:21   13.05  n/a     .000
02295>                  SUM=     1.0 01:J7              1.46     .031 No_date   12:19   13.01  n/a     .000
02296> R0102:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02297>     ROUTE CHANNEL   ->    1.0 02:J7              1.46     .031 No_date   12:19   13.01  n/a     .000
02298>       [RD= 1.00] out<-    1.0 01:R9              1.46     .031 No_date   12:20   13.01  n/a     .000
02299>       [L/S/n=   29./ .887/.035]
02300>       [Vmax=  .543:Dmax=  .021]
02301> R0102:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02302>     ADD HYD               1.0 02:EXT9             3.57     .074 No_date   12:25   15.46  n/a     .000
02303>                   +       1.0 02:R9               1.46     .031 No_date   12:20   13.02  n/a     .000
02304>                   +       1.0 02:EXT8             .83     .021 No_date   12:20   17.22  n/a     .000
02305>                   +       1.0 02:R5               7.24     .132 No_date   12:46   20.02  n/a     .000
02306>                  SUM=     1.0 01:J8              13.10     .239 No_date   12:33   17.82  n/a     .000
02307> R0102:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02308>     ROUTE PIPE      ->    1.0 02:J8              13.10     .239 No_date   12:33   17.82  n/a     .000
02309> *   [RD= 1.00] out<-    1.0 01:Outlet          13.10     .238 No_date   12:36   17.82  n/a     .000
02310>       [L/S/n=    8./ .010/.013]
02311>       [Vmax=  .347:Dmax=  .819]
02312>       [Din=  .53:Dused= 1.00]
02313> ##########################################################################
02314> # STORMS
02315> ##########################################################################
02316>  ** END OF RUN :  104
02317> ****************************************************************************
02318> ****************************************************************************
02319>
02320>
02321>
02322>
02323>
02324>  RUN#:COMMAND#
02325> R0105:C00001------------------------------------------------------------------------
02326>       START
02327>       [TZERO =    .00 hrs on         0]
02328>       [METOUT=  2    (1=imperial, 2=metric output)]
02329>       [NSTORM=  1 ]
02330>       [NRUN  = 0105 ]
02331> #*****************************************************************************
02332> #  SWMM5MO  / INPUT DATA FILE
02333> #*****************************************************************************
02334> #  Project Name  : [5923 Ottawa St]
02335> #  Project Number: [P2710(e01)]
02336> #  Date          : [2025 April 28]
02337> #  Modeller      : [MM]
02338> #  Company       : JFSA Canada Inc.
02339> #  License #     : 2549237
02340> #*****************************************************************************
02341> # Model developed to simulate runoff from subcatchments under pre development conditions
02342> #*****************************************************************************
02343> R0105:C00002------------------------------------------------------------------------
02344>       READ STORM
02345>         Filename = STORM.001
02346>         Comment  = 5 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
02347>         [SDT=10.00:SDUR=  24.00:FTOT=  64.11]
02348> #*****************************************************************************
02349> R0105:C00003------------------------------------------------------------------------
02350>       DEFAULT VALUES
02351>         Filename = C:\Temp\20250428-PostDev\Ottawa.val
02352>         ICASEdv  = 1 (read and print data)
02353>         FileTitle= File comment: [Parameters for City of Ottawa Projects]
02354>                    THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
02355>         Horton's infiltration equation parameters:
02356>         [F0= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
02357>         Parameters for PERVIOUS surfaces in STANDHYD:
02358>         [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
02359>         Parameters for IMPERVIOUS surfaces in STANDHYD:
02360>         [IAimp=   1.57 mm] [CLI= 1.50]     [MNI= .013]
02361>         Parameters used in NASHYD:
02362>         [Ia=   4.67 mm] [N= 3.00]
02363>         Average monthly Pan Evaporation data in     (mm)
02364>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
02365>   .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
02366>         Average monthly Potential Evapotranspiration in     (mm)
02367>    JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
02368>   .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00  .00
02369> #*****************************************************************************
02370> # EXT1
02371> #*****************************************************************************
02372> R0105:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02373>     CALIB NASHYD          1.0 01:EXT1             3.21     .095 No_date   12:41  28.73 .448     .000
02374>       [CN= 80.0: N= 3.00: Tp=  .72]
02375> #*****************************************************************************
02376> # EXT2
02377> #*****************************************************************************
02378> R0105:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02379>     CALIB NASHYD          1.0 01:EXT2             .28     .018 No_date   12:13  33.88 .529     .000
02380>       [CN= 85.0: N= 3.00: Tp=  .33]
02381> #*****************************************************************************
02382> # EXT3
02383> #*****************************************************************************
02384> R0105:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02385>     CALIB NASHYD          1.0 01:EXT3             .56     .030 No_date   12:13  28.73 .448     .000
02386>       [CN= 80.0: N= 3.00: Tp=  .32]
02387> #*****************************************************************************
02388> # EXT4
02389> #*****************************************************************************
02390> R0105:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02391>     CALIB NASHYD          1.0 01:EXT4             .31     .017 No_date   12:11  27.82 .434     .000
02392>       [CN= 79.0: N= 3.00: Tp=  .29]
02393> #*****************************************************************************
02394> # EXT5
02395> #*****************************************************************************
02396> R0105:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02397>     CALIB NASHYD          1.0 01:EXT5             .59     .021 No_date   12:22  25.29 .395     .000
02398>       [CN= 76.0: N= 3.00: Tp=  .45]
02399> #*****************************************************************************
02400> # EXT6
02401> #*****************************************************************************
02402> R0105:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02403>     CALIB NASHYD          1.0 01:EXT6             .86     .037 No_date   12:29  33.88 .529     .000
02404>       [CN= 85.0: N= 3.00: Tp=  .56]
02405> #*****************************************************************************
02406> # EXT7
02407> #*****************************************************************************
02408> R0105:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02409>     CALIB NASHYD          1.0 01:EXT7             .47     .028 No_date   12:13  31.69 .494     .000
02410>       [CN= 83.0: N= 3.00: Tp=  .32]
02411> #*****************************************************************************
02412> # EXT8
02413> #*****************************************************************************
02414> R0105:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02415>     CALIB NASHYD          1.0 01:EXT8             .83     .035 No_date   12:20  27.82 .434     .000
02416>       [CN= 79.0: N= 3.00: Tp=  .42]
02417> #*****************************************************************************
02418> # EXT9
02419> #*****************************************************************************
02420> R0105:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02421>     CALIB NASHYD          1.0 01:EXT9            3.57     .123 No_date   12:24  25.30 .395     .000
02422>       [CN= 76.0: N= 3.00: Tp=  .48]
02423> #*****************************************************************************
02424> # EXT9a
02425> #*****************************************************************************
02426> R0105:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02427>     CALIB NASHYD          1.0 01:EXT9a            .01     .001 No_date   12:00  26.94 .420     .000
02428>       [CN= 78.0: N= 3.00: Tp=  .04]
02429> #*****************************************************************************
02430> # EXT10
02431> #*****************************************************************************
02432> R0105:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02433>     CALIB NASHYD          1.0 01:EXT10            .20     .006 No_date   12:20  21.64 .338     .000
02434>       [CN= 71.0: N= 3.00: Tp=  .42]
02435> #*****************************************************************************
02436> # Pre2_1
02437> #*****************************************************************************
02438> R0105:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02439> *   CALIB NASHYD          1.0 01:Pre2_1           .01     .001 No_date   12:00  22.32 .348     .000
02440>       [CN= 72.0: N= 3.00: Tp=  .03]
02441> #*****************************************************************************
02442> # Pre2_2
02443> #*****************************************************************************
02444> R0105:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02445> *   CALIB NASHYD          1.0 01:Pre2_2           .00     .000 No_date   12:00  26.94 .420     .000
02446>       [CN= 78.0: N= 3.00: Tp=  .02]
02447> #*****************************************************************************
02448> # Pre9_1
02449> #*****************************************************************************
02450> R0105:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02451>     CALIB NASHYD          1.0 01:Pre9_1           .44     .015 No_date   12:17  21.65 .338     .000
02452>       [CN= 71.0: N= 3.00: Tp=  .38]
02453> #*****************************************************************************
02454> # Pre9_2
02455> #*****************************************************************************
02456> R0105:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02457> *   CALIB NASHYD          1.0 01:Pre9_2           .01     .001 No_date   12:00  14.97 .233     .000
02458>       [CN= 59.0: N= 3.00: Tp=  .03]
02459> #*****************************************************************************
02460> # Pre10_1
02461> #*****************************************************************************
02462> R0105:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02463>     CALIB NASHYD          1.0 01:Pre10_1          .80     .033 No_date   12:11  21.65 .338     .000
02464>       [CN= 71.0: N= 3.00: Tp=  .29]
02465> #*****************************************************************************
02466> # Pre11_1
02467> #*****************************************************************************
02468> R0105:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02469>     CALIB NASHYD          1.0 01:Pre11_1          .07     .004 No_date   12:07  26.94 .420     .000
02470>       [CN= 78.0: N= 3.00: Tp=  .21]
02471> #*****************************************************************************
02472> # Site 1
02473> #*****************************************************************************
02474> R0105:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02475>     DESIGN STANDHYD       1.0 01:S1-B1            .42     .063 No_date   12:00  38.55 .601     .000
02476>       [XIMP=.47:TIMP=.57]
02477>       [SLP=1.00:DT= 1.00]
02478>       [LOSS= 1 : HORTONS]
02479> # Site 1 - Roof
02480> #*****************************************************************************
02481> R0105:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02482>     DESIGN STANDHYD       1.0 01:S1-Roof          .07     .015 No_date   12:00  62.04 .968     .000
02483>       [XIMP=.99:TIMP=.99]
02484>       [SLP= .50:DT= 1.00]
02485>       [LOSS= 1 : HORTONS]
02486> R0105:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02487>     ROUTE RESERVOIR ->    1.0 02:S1-Roof          .07     .015 No_date   12:00  62.03  n/a     .000
02488>                 out <=    1.0 01:S1-Roof-Ou       .07     .002 No_date   12:06  62.03  n/a     .000
02489>             overflow <=   1.0 03:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
02490>      (MxStOused=.1988E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
02491> R0105:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02492>     ADD HYD               1.0 02:S1-B1            .42     .063 No_date   12:00  38.55  n/a     .000
02493>                   +       1.0 02:S1-Roof-Ou       .07     .002 No_date   12:06  62.03  n/a     .000
02494>                   +       1.0 02:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
02495>                  SUM=     1.0 01:SITE1-IN         .49     .065 No_date   12:00  41.91  n/a     .000
02496> R0105:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02497>     ROUTE RESERVOIR ->    1.0 02:SITE1-IN         .49     .065 No_date   12:00  41.91  n/a     .000
02498>                 out <=    1.0 01:SITE1-Out        .49     .009 No_date   12:32  41.91  n/a     .000
02499>             overflow <=   1.0 03:SITE1-Over       .00     .000 No_date    0:00     .00  n/a     .000
02500>      (MxStOused=.7538E-02  m3, TotOvrVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs)
02501> #*****************************************************************************
02502> # Site 2
02503> #*****************************************************************************
02504> R0105:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02505>     DESIGN STANDHYD       1.0 01:S2-B3            .35     .053 No_date   12:00  38.06 .594     .000
02506>       [XIMP=.46:TIMP=.56]
02507>       [SLP=1.00:DT= 1.00]
02508>       [LOSS= 1 : HORTONS]
02509> #*****************************************************************************
02510> # Site 2 - Roof
02511> #*****************************************************************************
02512> R0105:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02513>     DESIGN STANDHYD       1.0 01:S2-Roof          .09     .020 No_date   12:00  62.04 .968     .000
02514>       [XIMP=.99:TIMP=.99]
02515>       [SLP= .50:DT= 1.00]
02516>       [LOSS= 1 : HORTONS]
02517> #*****************************************************************************
02518> R0105:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
02519>     ROUTE RESERVOIR ->    1.0 02:S2-Roof          .09     .020 No_date   12:00  62.04  n/a     .000
02520>                 out <=    1.0 01:S2-Roof-Ou       .09     .007 No_date   12:02  62.04  n/a     .000
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```
            overflow <=    1.0 03:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
       {MxStoUsed=.1468E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0105:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:S2-B3            .35     .053 No_date   12:00   38.06  n/a     .000
                      +    1.0 02:S2-Roof-Ou       .09     .007 No_date   12:02   62.04  n/a     .000
                      +    1.0 02:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
                   SUM=    1.0 01:SITE2-IN         .44     .060 No_date   12:00   42.96  n/a     .000
R0105:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:SITE2-IN         .44     .060 No_date   12:00   42.96  n/a     .000
                 out <=    1.0 01:SITE2-Out        .44     .010 No_date   12:33   42.96  n/a     .000
            overflow <=    1.0 03:SITE2-Over       .00     .000 No_date    0:00     .00  n/a     .000
       {MxStoUsed=.6956E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0105:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:SITE1-Out        .49     .009 No_date   12:32   41.91  n/a     .000
                      +    1.0 02:SITE1-Over       .00     .000 No_date    0:00     .00  n/a     .000
                   SUM=    1.0 01:Site1            .49     .009 No_date   12:32   41.91  n/a     .000
R0105:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:SITE2-Out        .44     .010 No_date   12:33   42.96  n/a     .000
                      +    1.0 02:SITE2-Over       .00     .000 No_date    0:00     .00  n/a     .000
                   SUM=    1.0 01:Site2            .44     .010 No_date   12:33   42.96  n/a     .000
R0105:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:EXT2             .28     .018 No_date   12:13   33.88  n/a     .000
                      +    1.0 02:Pre2_1           .01     .001 No_date   12:00   22.32  n/a     .000
                      +    1.0 02:Site1            .49     .009 No_date   12:32   41.91  n/a     .000
                      +    1.0 02:Site2            .44     .010 No_date   12:33   42.96  n/a     .000
                   SUM=    1.0 01:J1              1.23     .037 No_date   12:14   40.22  n/a     .000
R0105:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J1              1.23     .037 No_date   12:14   40.22  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R1              1.23     .035 No_date   12:21   40.22  n/a     .000
       [L/S/n=  143./ .394/.035]
       {Vmax=  .315:Dmax=  .124}
R0105:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R1              1.23     .035 No_date   12:21   40.22  n/a     .000
                      +    1.0 02:EXT3             .56     .030 No_date   12:13   28.73  n/a     .000
                      +    1.0 02:EXT1            3.21     .095 No_date   12:41   28.73  n/a     .000
                   SUM=    1.0 01:J2              5.00     .146 No_date   12:30   31.55  n/a     .000
R0105:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J2              5.00     .146 No_date   12:30   31.55  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R2              5.00     .146 No_date   12:32   31.55  n/a     .000
       [L/S/n=   73./ .425/.035]
       {Vmax=  .454:Dmax=  .226}
R0105:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R2              5.00     .146 No_date   12:32   31.55  n/a     .000
                      +    1.0 02:EXT4             .31     .017 No_date   12:11   27.82  n/a     .000
                   SUM=    1.0 01:J3              5.31     .157 No_date   12:28   31.34  n/a     .000
R0105:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J3              5.31     .157 No_date   12:28   31.34  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R3              5.31     .156 No_date   12:32   31.34  n/a     .000
       [L/S/n=   92./ .274/.035]
       {Vmax=  .372:Dmax=  .234}
R0105:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R3              5.31     .156 No_date   12:32   31.34  n/a     .000
                      +    1.0 02:EXT5             .59     .021 No_date   12:22   25.29  n/a     .000
                   SUM=    1.0 01:J4              5.90     .176 No_date   12:30   30.73  n/a     .000
R0105:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J4              5.90     .176 No_date   12:30   30.73  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R4              5.90     .165 No_date   12:42   30.73  n/a     .000
       [L/S/n=  251./ .190/.035]
       {Vmax=  .360:Dmax=  .259}
R0105:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R4              5.90     .165 No_date   12:42   30.73  n/a     .000
                      +    1.0 02:EXT6             .86     .037 No_date   12:29   33.88  n/a     .000
                      +    1.0 02:EXT7             .47     .028 No_date   12:13   31.69  n/a     .000
                   SUM=    1.0 01:J5              7.24     .216 No_date   12:36   31.17  n/a     .000
R0105:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J5              7.24     .216 No_date   12:36   31.17  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R5              7.24     .213 No_date   12:41   31.17  n/a     .000
       [L/S/n=  237./ .644/.035]
       {Vmax=  .594:Dmax=  .247}
R0105:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:Pre10_1          .80     .033 No_date   12:11   21.65  n/a     .000
                      +    1.0 02:Pre9_2           .01     .001 No_date   12:00   14.97  n/a     .000
                      +    1.0 02:Pre2_2           .00     .000 No_date   12:00   26.94  n/a     .000
                   SUM=    1.0 01:Pre              .81     .033 No_date   12:11   21.55  n/a     .000
R0105:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:Pre              .81     .033 No_date   12:11   21.55  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R6               .81     .033 No_date   12:14   21.55  n/a     .000
       [L/S/n=   77./ .776/.035]
       {Vmax=  .492:Dmax=  .024}
R0105:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:Pre9_1           .44     .015 No_date   12:17   21.65  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R7               .44     .015 No_date   12:21   21.65  n/a     .000
       [L/S/n=  159./1.576/.035]
       {Vmax=  .797:Dmax=  .004}
R0105:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R6               .81     .033 No_date   12:14   21.59  n/a     .000
                      +    1.0 02:EXT10            .20     .006 No_date   12:20   21.64  n/a     .000
                   SUM=    1.0 01:J6              1.02     .039 No_date   12:15   21.60  n/a     .000
R0105:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J6              1.02     .039 No_date   12:15   21.60  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R8              1.02     .038 No_date   12:18   21.60  n/a     .000
       [L/S/n=   79./ .522/.035]
       {Vmax=  .423:Dmax=  .029}
R0105:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R8              1.02     .038 No_date   12:18   21.63  n/a     .000
                      +    1.0 02:R7               .44     .015 No_date   12:21   21.72  n/a     .000
                   SUM=    1.0 01:J7              1.46     .053 No_date   12:19   21.66  n/a     .000
R0105:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J7              1.46     .053 No_date   12:19   21.66  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R9              1.46     .053 No_date   12:20   21.66  n/a     .000
       [L/S/n=   29./ .887/.035]
       {Vmax=  .543:Dmax=  .036}
R0105:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:EXT9            3.57     .123 No_date   12:24   25.30  n/a     .000
                      +    1.0 02:R9              1.46     .053 No_date   12:20   21.67  n/a     .000
                      +    1.0 02:EXT8             .83     .035 No_date   12:20   27.82  n/a     .000
                      +    1.0 02:R5              7.24     .213 No_date   12:41   31.17  n/a     .000
                   SUM=    1.0 01:J8             13.10     .399 No_date   12:31   28.30  n/a     .000
R0105:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE PIPE      ->    1.0 02:J8             13.10     .399 No_date   12:31   28.30  n/a     .000
 *    [RDT= 1.00] out<-    1.0 01:Outlet         13.10     .398 No_date   12:33   28.30  n/a     .000
       [L/S/n=    8./ .010/.013]
       {Vmax=  .395:Dmax=  .993}
       [Din=  .53:Dused= 1.21]
################################################################################
# STORMS
################################################################################
  ** END OF RUN :  109

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

 RUN#:COMMAND#
R0110:C00001-------------------------------------------------------------------------------------
      START
       [TZERO =    .00 hrs on        0]
       [METOUT=   2    (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN  = 0110 ]
#************************************************************************************************
#  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 pre development conditions
#************************************************************************************************
R0110:C00002-------------------------------------------------------------------------------------
      READ STORM
       Filename = STORM.001
       Comment  = 10 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
       [SDT=10.00:SDUR=  24.00:PTOT=  74.35]
#************************************************************************************************
R0110:C00003-------------------------------------------------------------------------------------
      DEFAULT VALUES
       Filename = C:\Temp\20250428-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
#************************************************************************************************
R0110:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT1            3.21     .121 No_date   12:40   36.46 .490     .000
       [CN= 80.0: N= 3.00: Tp=  .72]
#************************************************************************************************
# EXT2
#************************************************************************************************
R0110:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT2             .28     .022 No_date   12:13   42.40 .570     .000
       [CN= 85.0: N= 3.00: Tp=  .33]
#************************************************************************************************
# EXT3
#************************************************************************************************
R0110:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT3             .56     .038 No_date   12:13   36.46 .490     .000
       [CN= 80.0: N= 3.00: Tp=  .32]
#************************************************************************************************
# EXT4
#************************************************************************************************
R0110:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT4             .31     .022 No_date   12:11   35.39 .476     .000
       [CN= 79.0: N= 3.00: Tp=  .29]
#************************************************************************************************
# EXT5
#************************************************************************************************
R0110:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT5             .59     .028 No_date   12:22   32.39 .436     .000
       [CN= 76.0: N= 3.00: Tp=  .45]
#************************************************************************************************
# EXT6
#************************************************************************************************
R0110:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT6             .86     .046 No_date   12:29   42.40 .570     .000
       [CN= 85.0: N= 3.00: Tp=  .56]
#************************************************************************************************
# EXT7
#************************************************************************************************
R0110:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT7             .47     .035 No_date   12:13   39.90 .537     .000
       [CN= 83.0: N= 3.00: Tp=  .32]
#************************************************************************************************
# EXT8
#************************************************************************************************
R0110:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT8             .83     .045 No_date   12:19   35.39 .476     .000
       [CN= 79.0: N= 3.00: Tp=  .42]
#************************************************************************************************
# EXT9
#************************************************************************************************
R0110:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT9            3.57     .158 No_date   12:24   32.39 .436     .000
       [CN= 76.0: N= 3.00: Tp=  .48]
#************************************************************************************************
# EXT9a
#************************************************************************************************
R0110:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT9a            .01     .002 No_date   12:00   34.35 .462     .000
       [CN= 78.0: N= 3.00: Tp=  .04]
#************************************************************************************************
# EXT10
#************************************************************************************************
R0110:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT10            .20     .008 No_date   12:20   27.99 .377     .000
       [CN= 71.0: N= 3.00: Tp=  .42]
#************************************************************************************************
# Pre2_1
#************************************************************************************************
R0110:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *   CALIB NASHYD          1.0 01:Pre2_1           .01     .002 No_date   12:00   28.81 .388     .000
       [CN= 72.0: N= 3.00: Tp=  .03]
#************************************************************************************************
# Pre2_2
#************************************************************************************************
R0110: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   34.35 .462     .000
       [CN= 78.0: N= 3.00: Tp=  .02]
#************************************************************************************************
# Pre9_1
#************************************************************************************************
R0110:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre9_1           .44     .020 No_date   12:17   28.00 .377     .000
       [CN= 71.0: N= 3.00: Tp=  .38]
#************************************************************************************************
# Pre9_2
#************************************************************************************************
R0110: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   19.72 .265     .000
       [CN= 59.0: N= 3.00: Tp=  .03]
#************************************************************************************************
# Pre10_1
#************************************************************************************************
R0110:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre10_1          .80     .043 No_date   12:11   28.00 .377     .000
       [CN= 71.0: N= 3.00: Tp=  .29]
#************************************************************************************************
# Pre11_1
#************************************************************************************************
R0110:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre11_1          .07     .006 No_date   12:07   34.35 .462     .000
       [CN= 78.0: N= 3.00: Tp=  .21]
#************************************************************************************************
# Site 1
#************************************************************************************************
R0110:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S1-B1            .42     .077 No_date   12:00   45.90 .617     .000
       [XIMP=.47:TIMP=.57]
       [SLP=1.00:DT= 1.00]
       [LOSS= 1 : HORTONS]
# Site 1 - Roof
#************************************************************************************************
R0110:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S1-Roof          .07     .018 No_date   12:00   72.21 .971     .000
       [XIMP=.99:TIMP=.99]
       [SLP= .50:DT= 1.00]
       [LOSS= 1 : HORTONS]
R0110:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:S1-Roof          .07     .018 No_date   12:00   72.21  n/a     .000
                 out <=    1.0 01:S1-Roof-Ou       .07     .002 No_date   12:06   72.21  n/a     .000
            overflow <=    1.0 03:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
       {MxStoUsed=.2309E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0110:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:S1-B1            .42     .077 No_date   12:00   45.90  n/a     .000
                      +    1.0 02:S1-Roof-Ou       .07     .002 No_date   12:06   72.21  n/a     .000
                      +    1.0 02:S1-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
                   SUM=    1.0 01:SITE1-IN         .49     .080 No_date   12:00   49.66  n/a     .000
R0110:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:SITE1-IN         .49     .080 No_date   12:00   49.66  n/a     .000
                 out <=    1.0 01:SITE1-Out        .49     .010 No_date   12:32   49.66  n/a     .000
            overflow <=    1.0 03:SITE1-Over       .00     .000 No_date    0:00     .00  n/a     .000
       {MxStoUsed=.9530E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
#************************************************************************************************
# Site 2
#************************************************************************************************
R0110:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S2-B3            .35     .064 No_date   12:00   45.35 .610     .000
       [XIMP=.46:TIMP=.56]
       [SLP=1.00:DT= 1.00]
       [LOSS= 1 : HORTONS]
#************************************************************************************************
# Site 2 - Roof
#************************************************************************************************
R0110:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S2-Roof          .09     .023 No_date   12:00   72.22 .971     .000
       [XIMP=.99:TIMP=.99]
       [SLP= .50:DT= 1.00]
       [LOSS= 1 : HORTONS]
#************************************************************************************************
R0110:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:S2-Roof          .09     .023 No_date   12:00   72.22  n/a     .000
                 out <=    1.0 01:S2-Roof-Ou       .09     .007 No_date   12:02   72.22  n/a     .000
            overflow <=    1.0 03:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
       {MxStoUsed=.1769E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0110:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:S2-B3            .35     .064 No_date   12:00   45.35  n/a     .000
                      +    1.0 02:S2-Roof-Ou       .09     .007 No_date   12:02   72.22  n/a     .000
                      +    1.0 02:S2-Roof-Ov       .00     .000 No_date    0:00     .00  n/a     .000
                   SUM=    1.0 01:SITE2-IN         .44     .071 No_date   12:00   50.85  n/a     .000
R0110:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:SITE2-IN         .44     .071 No_date   12:00   50.85  n/a     .000
                 out <=    1.0 01:SITE2-Out        .44     .011 No_date   12:34   50.85  n/a     .000
            overflow <=    1.0 03:SITE2-Over       .00     .000 No_date    0:00     .00  n/a     .000
       {MxStoUsed=.8694E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0110:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:SITE1-Out        .49     .010 No_date   12:32   49.66  n/a     .000
                      +    1.0 02:SITE1-Over       .00     .000 No_date    0:00     .00  n/a     .000
                   SUM=    1.0 01:Site1            .49     .010 No_date   12:32   49.66  n/a     .000
R0110:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:SITE2-Out        .44     .011 No_date   12:34   50.85  n/a     .000
                      +    1.0 02:SITE2-Over       .00     .000 No_date    0:00     .00  n/a     .000
                   SUM=    1.0 01:Site2            .44     .011 No_date   12:34   50.85  n/a     .000
R0110:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:EXT2             .28     .022 No_date   12:13   42.40  n/a     .000
                      +    1.0 02:Pre2_1           .01     .002 No_date   12:00   28.81  n/a     .000
                      +    1.0 02:Site1            .49     .010 No_date   12:32   49.66  n/a     .000
                      +    1.0 02:Site2            .44     .011 No_date   12:34   50.85  n/a     .000
                   SUM=    1.0 01:J1              1.23     .042 No_date   12:14   48.18  n/a     .000
R0110:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J1              1.23     .042 No_date   12:14   48.18  n/a     .000
      [RDT= 1.00] out<-    1.0 01:R1              1.23     .041 No_date   12:20   48.18  n/a     .000
       [L/S/n=  143./ .394/.035]
       {Vmax=  .328:Dmax=  .133}
R0110:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R1              1.23     .041 No_date   12:20   48.18  n/a     .000
                      +    1.0 02:EXT3             .56     .038 No_date   12:13   36.46  n/a     .000
                      +    1.0 02:EXT1            3.21     .121 No_date   12:40   36.46  n/a     .000
                   SUM=    1.0 01:J2              5.00     .182 No_date   12:29   39.34  n/a     .000
R0110:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J2              5.00     .182 No_date   12:29   39.34  n/a     .000
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      [RDT= 1.00] out<-    1.0 01:R2             5.00      .182 No_date   12:31   39.34  n/a      .000
       [L/S/n=   73./ .425/.035]
       {Vmax=  .481:Dmax=  .247}
R0110:C00037-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R2             5.00      .182 No_date   12:31   39.34  n/a      .000
                      +    1.0 02:EXT4            .31      .022 No_date   12:11   35.39  n/a      .000
                   SUM=    1.0 01:J3             5.31      .196 No_date   12:27   39.11  n/a      .000
R0110:C00038-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J3             5.31      .196 No_date   12:27   39.11  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R3             5.31      .195 No_date   12:31   39.11  n/a      .000
       [L/S/n=   92./ .274/.035]
       {Vmax=  .394:Dmax=  .256}
R0110:C00039-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R3             5.31      .195 No_date   12:31   39.11  n/a      .000
                      +    1.0 02:EXT5            .59      .028 No_date   12:22   32.39  n/a      .000
                   SUM=    1.0 01:J4             5.90      .221 No_date   12:29   38.43  n/a      .000
R0110:C00040-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J4             5.90      .221 No_date   12:29   38.43  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R4             5.90      .209 No_date   12:40   38.43  n/a      .000
       [L/S/n=  251./ .190/.035]
       {Vmax=  .386:Dmax=  .287}
R0110:C00041-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R4             5.90      .209 No_date   12:40   38.43  n/a      .000
                      +    1.0 02:EXT6            .86      .046 No_date   12:29   42.40  n/a      .000
                      +    1.0 02:EXT7            .47      .035 No_date   12:13   39.90  n/a      .000
                   SUM=    1.0 01:J5             7.24      .273 No_date   12:35   39.00  n/a      .000
R0110:C00042-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J5             7.24      .273 No_date   12:35   39.00  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R5             7.24      .269 No_date   12:41   39.00  n/a      .000
       [L/S/n=  237./ .644/.035]
       {Vmax=  .626:Dmax=  .269}
R0110:C00043-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:Pre10_1         .80      .043 No_date   12:11   28.00  n/a      .000
                      +    1.0 02:Pre9_2          .01      .001 No_date   12:00   19.72  n/a      .000
                      +    1.0 02:Pre2_2          .00      .000 No_date   12:00   34.35  n/a      .000
                   SUM=    1.0 01:Pre             .81      .043 No_date   12:11   27.87  n/a      .000
R0110:C00044-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:Pre             .81      .043 No_date   12:11   27.87  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R6              .81      .043 No_date   12:14   27.87  n/a      .000
       [L/S/n=   77./ .776/.035]
       {Vmax=  .492:Dmax=  .032}
R0110:C00045-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:Pre9_1          .44      .020 No_date   12:17   28.00  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R7              .44      .019 No_date   12:21   28.00  n/a      .000
       [L/S/n=  159./1.576/.035]
       {Vmax=  .797:Dmax=  .006}
R0110:C00046-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R6              .81      .043 No_date   12:14   27.92  n/a      .000
                      +    1.0 02:EXT10           .20      .008 No_date   12:20   27.99  n/a      .000
                   SUM=    1.0 01:J6             1.02      .051 No_date   12:15   27.94  n/a      .000
R0110:C00047-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J6             1.02      .051 No_date   12:15   27.94  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R8             1.02      .050 No_date   12:18   27.94  n/a      .000
       [L/S/n=   79./ .522/.035]
       {Vmax=  .423:Dmax=  .037}
R0110:C00048-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R8             1.02      .050 No_date   12:18   27.97  n/a      .000
                      +    1.0 02:R7              .44      .019 No_date   12:21   28.07  n/a      .000
                   SUM=    1.0 01:J7             1.46      .069 No_date   12:19   28.00  n/a      .000
R0110:C00049-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J7             1.46      .069 No_date   12:19   28.00  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R9             1.46      .069 No_date   12:20   28.00  n/a      .000
       [L/S/n=   29./ .887/.035]
       {Vmax=  .543:Dmax=  .047}
R0110:C00050-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:EXT9           3.57      .158 No_date   12:24   32.39  n/a      .000
                      +    1.0 02:R9             1.46      .069 No_date   12:20   28.02  n/a      .000
                      +    1.0 02:EXT8            .83      .045 No_date   12:19   35.39  n/a      .000
                      +    1.0 02:R5             7.24      .269 No_date   12:41   39.00  n/a      .000
                   SUM=    1.0 01:J8            13.10      .511 No_date   12:30   35.75  n/a      .000
R0110:C00051-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE PIPE      ->    1.0 02:J8            13.10      .511 No_date   12:30   35.75  n/a      .000
 *    [RDT= 1.00] out<-    1.0 01:Outlet        13.10      .504 No_date   12:35   35.75  n/a      .000
       [L/S/n=    8./ .010/.013]
       {Vmax=  .420:Dmax= 1.090}
       [Din=  .53:Dused= 1.33]
#################################################################################
# STORMS
#################################################################################
  ** END OF RUN :  124

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





 RUN#:COMMAND#
R0125:C00001-------------------------------------------------------------------------------------
      START
       [TZERO =    .00 hrs on        0]
       [METOUT=   2    (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN  = 0125 ]
#******************************************************************************************
#  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 pre development conditions
#******************************************************************************************
R0125:C00002-------------------------------------------------------------------------------------
      READ STORM
        Filename = STORM.001
        Comment  = 25 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
        [SDT=10.00:SDUR=  24.00:PTOT=  86.89]
#******************************************************************************************
R0125:C00003-------------------------------------------------------------------------------------
      DEFAULT VALUES
        Filename = C:\Temp\20250428-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
#******************************************************************************************
R0125:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT1           3.21      .155 No_date   12:40   46.39 .534      .000
       [CN= 80.0: N= 3.00: Tp=  .72]
#******************************************************************************************
# EXT2
#******************************************************************************************
R0125:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT2            .28      .028 No_date   12:13   53.21 .612      .000
       [CN= 85.0: N= 3.00: Tp=  .33]
#******************************************************************************************
# EXT3
#******************************************************************************************
R0125:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT3            .56      .048 No_date   12:13   46.39 .534      .000
       [CN= 80.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT4
#******************************************************************************************
R0125:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT4            .31      .028 No_date   12:11   45.14 .520      .000
       [CN= 79.0: N= 3.00: Tp=  .29]
#******************************************************************************************
# EXT5
#******************************************************************************************
R0125:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT5            .59      .036 No_date   12:21   41.61 .479      .000
       [CN= 76.0: N= 3.00: Tp=  .45]
#******************************************************************************************
# EXT6
#******************************************************************************************
R0125:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT6            .86      .058 No_date   12:28   53.21 .612      .000
       [CN= 85.0: N= 3.00: Tp=  .56]
#******************************************************************************************
# EXT7
#******************************************************************************************
R0125:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT7            .47      .045 No_date   12:13   50.35 .580      .000
       [CN= 83.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT8
#******************************************************************************************
R0125:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT8            .83      .058 No_date   12:19   45.14 .520      .000
       [CN= 79.0: N= 3.00: Tp=  .42]
#******************************************************************************************
# EXT9
#******************************************************************************************
R0125:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT9           3.57      .205 No_date   12:23   41.62 .479      .000
       [CN= 76.0: N= 3.00: Tp=  .48]
#******************************************************************************************
# EXT9a
#******************************************************************************************
R0125:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT9a           .01      .002 No_date   12:00   43.92 .506      .000
       [CN= 78.0: N= 3.00: Tp=  .04]
#******************************************************************************************
# EXT10
#******************************************************************************************
R0125:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:EXT10           .20      .011 No_date   12:20   36.34 .418      .000
       [CN= 71.0: N= 3.00: Tp=  .42]
#******************************************************************************************
# Pre2_1
#******************************************************************************************
R0125:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *   CALIB NASHYD          1.0 01:Pre2_1          .01      .002 No_date   12:00   37.34 .430      .000
       [CN= 72.0: N= 3.00: Tp=  .03]
#******************************************************************************************
# Pre2_2
#******************************************************************************************
R0125: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   43.92 .506      .000
       [CN= 78.0: N= 3.00: Tp=  .02]
#******************************************************************************************
# Pre9_1
#******************************************************************************************
R0125:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre9_1          .44      .026 No_date   12:17   36.35 .418      .000
       [CN= 71.0: N= 3.00: Tp=  .38]
#******************************************************************************************
# Pre9_2
#******************************************************************************************
R0125:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *   CALIB NASHYD          1.0 01:Pre9_2          .01      .002 No_date   12:00   26.12 .301      .000
       [CN= 59.0: N= 3.00: Tp=  .03]
#******************************************************************************************
# Pre10_1
#******************************************************************************************
R0125:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre10_1         .80      .057 No_date   12:11   36.35 .418      .000
       [CN= 71.0: N= 3.00: Tp=  .29]
#******************************************************************************************
# Pre11_1
#******************************************************************************************
R0125:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     CALIB NASHYD          1.0 01:Pre11_1         .07      .007 No_date   12:06   43.93 .506      .000
       [CN= 78.0: N= 3.00: Tp=  .21]
#******************************************************************************************
# Site 1
#******************************************************************************************
R0125:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S1-B1           .42      .095 No_date   12:00   55.02 .633      .000
       [XIMP=.47:TIMP=.57]
       [SLP=1.00:DT= 1.00]
       [LOSS= 1 : HORTONS]
# Site 1 - Roof
#******************************************************************************************
R0125:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S1-Roof         .07      .021 No_date   12:00   84.69 .975      .000
       [XIMP=.99:TIMP=.99]
       [SLP= .50:DT= 1.00]
       [LOSS= 1 : HORTONS]
R0125:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:S1-Roof         .07      .021 No_date   12:00   84.69  n/a      .000
                 out <=    1.0 01:S1-Roof-Ou      .07      .003 No_date   12:05   84.68  n/a      .000
            overflow <=    1.0 03:S1-Roof-Ov      .00      .000 No_date    0:00     .00  n/a      .000
      {MxStoUsed=.2704E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0125:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:S1-B1           .42      .095 No_date   12:00   55.02  n/a      .000
                      +    1.0 02:S1-Roof-Ou      .07      .003 No_date   12:05   84.68  n/a      .000
                      +    1.0 02:S1-Roof-Ov      .00      .000 No_date    0:00     .00  n/a      .000
                   SUM=    1.0 01:SITE1-IN        .49      .098 No_date   12:00   59.25  n/a      .000
R0125:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:SITE1-IN        .49      .098 No_date   12:00   59.25  n/a      .000
                 out <=    1.0 01:SITE1-Out       .49      .010 No_date   12:34   59.25  n/a      .000
            overflow <=    1.0 03:SITE1-Over      .00      .000 No_date    0:00     .00  n/a      .000
      {MxStoUsed=.1201E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
#******************************************************************************************
# Site 2
#******************************************************************************************
R0125:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S2-B3           .35      .079 No_date   12:00   54.41 .626      .000
       [XIMP=.46:TIMP=.56]
       [SLP=1.00:DT= 1.00]
       [LOSS= 1 : HORTONS]
#******************************************************************************************
# Site 2 - Roof
#******************************************************************************************
R0125:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     DESIGN STANDHYD       1.0 01:S2-Roof         .09      .027 No_date   12:00   84.69 .975      .000
       [XIMP=.99:TIMP=.99]
       [SLP= .50:DT= 1.00]
       [LOSS= 1 : HORTONS]
#******************************************************************************************
R0125:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:S2-Roof         .09      .027 No_date   12:00   84.69  n/a      .000
                 out <=    1.0 01:S2-Roof-Ou      .09      .008 No_date   12:02   84.69  n/a      .000
            overflow <=    1.0 03:S2-Roof-Ov      .00      .000 No_date    0:00     .00  n/a      .000
      {MxStoUsed=.2150E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0125:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:S2-B3           .35      .079 No_date   12:00   54.41  n/a      .000
                      +    1.0 02:S2-Roof-Ou      .09      .008 No_date   12:02   84.69  n/a      .000
                      +    1.0 02:S2-Roof-Ov      .00      .000 No_date    0:00     .00  n/a      .000
                   SUM=    1.0 01:SITE2-IN        .44      .086 No_date   12:00   60.61  n/a      .000
R0125:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE RESERVOIR ->    1.0 02:SITE2-IN        .44      .086 No_date   12:00   60.61  n/a      .000
                 out <=    1.0 01:SITE2-Out       .44      .011 No_date   12:38   60.61  n/a      .000
            overflow <=    1.0 03:SITE2-Over      .00      .000 No_date    0:00     .00  n/a      .000
      {MxStoUsed=.1089E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0125:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:SITE1-Out       .49      .010 No_date   12:34   59.25  n/a      .000
                      +    1.0 02:SITE1-Over      .00      .000 No_date    0:00     .00  n/a      .000
                   SUM=    1.0 01:Site1           .49      .010 No_date   12:34   59.25  n/a      .000
R0125:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:SITE2-Out       .44      .011 No_date   12:38   60.61  n/a      .000
                      +    1.0 02:SITE2-Over      .00      .000 No_date    0:00     .00  n/a      .000
                   SUM=    1.0 01:Site2           .44      .011 No_date   12:38   60.61  n/a      .000
R0125:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:EXT2            .28      .028 No_date   12:13   53.21  n/a      .000
                      +    1.0 02:Pre2_1          .01      .002 No_date   12:00   37.34  n/a      .000
                      +    1.0 02:Site1           .49      .010 No_date   12:34   59.25  n/a      .000
                      +    1.0 02:Site2           .44      .011 No_date   12:38   60.61  n/a      .000
                   SUM=    1.0 01:J1             1.23      .049 No_date   12:14   58.10  n/a      .000
R0125:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J1             1.23      .049 No_date   12:14   58.10  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R1             1.23      .047 No_date   12:19   58.10  n/a      .000
       [L/S/n=  143./ .394/.035]
       {Vmax=  .346:Dmax=  .143}
R0125:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R1             1.23      .047 No_date   12:19   58.10  n/a      .000
                      +    1.0 02:EXT3            .56      .048 No_date   12:13   46.39  n/a      .000
                      +    1.0 02:EXT1           3.21      .155 No_date   12:40   46.39  n/a      .000
                   SUM=    1.0 01:J2             5.00      .228 No_date   12:29   49.27  n/a      .000
R0125:C00036-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J2             5.00      .228 No_date   12:29   49.27  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R2             5.00      .228 No_date   12:31   49.27  n/a      .000
       [L/S/n=   73./ .425/.035]
       {Vmax=  .512:Dmax=  .271}
R0125:C00037-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R2             5.00      .228 No_date   12:31   49.27  n/a      .000
                      +    1.0 02:EXT4            .31      .028 No_date   12:11   45.14  n/a      .000
                   SUM=    1.0 01:J3             5.31      .247 No_date   12:27   49.03  n/a      .000
R0125:C00038-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J3             5.31      .247 No_date   12:27   49.03  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R3             5.31      .245 No_date   12:30   49.03  n/a      .000
       [L/S/n=   92./ .274/.035]
       {Vmax=  .418:Dmax=  .280}
R0125:C00039-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R3             5.31      .245 No_date   12:30   49.03  n/a      .000
                      +    1.0 02:EXT5            .59      .036 No_date   12:21   41.61  n/a      .000
                   SUM=    1.0 01:J4             5.90      .279 No_date   12:29   48.28  n/a      .000
R0125:C00040-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J4             5.90      .279 No_date   12:29   48.28  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R4             5.90      .265 No_date   12:38   48.28  n/a      .000
       [L/S/n=  251./ .190/.035]
       {Vmax=  .413:Dmax=  .317}
R0125:C00041-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:R4             5.90      .265 No_date   12:38   48.28  n/a      .000
                      +    1.0 02:EXT6            .86      .058 No_date   12:28   53.21  n/a      .000
                      +    1.0 02:EXT7            .47      .045 No_date   12:13   50.35  n/a      .000
                   SUM=    1.0 01:J5             7.24      .347 No_date   12:34   49.00  n/a      .000
R0125:C00042-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:J5             7.24      .347 No_date   12:34   49.00  n/a      .000
      [RDT= 1.00] out<-    1.0 01:R5             7.24      .343 No_date   12:39   49.00  n/a      .000
       [L/S/n=  237./ .644/.035]
       {Vmax=  .674:Dmax=  .297}
R0125:C00043-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ADD HYD               1.0 02:Pre10_1         .80      .057 No_date   12:11   36.35  n/a      .000
                      +    1.0 02:Pre9_2          .01      .002 No_date   12:00   26.12  n/a      .000
                      +    1.0 02:Pre2_2          .00      .000 No_date   12:00   43.92  n/a      .000
                   SUM=    1.0 01:Pre             .81      .057 No_date   12:11   36.19  n/a      .000
R0125:C00044-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
     ROUTE CHANNEL   ->    1.0 02:Pre             .81      .057 No_date   12:11   36.19  n/a      .000
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03241>      [RDT= 1.00] out<-    1.0 01:R6              .81     .056 No_date   12:14   36.19  n/a     .000
03242>      [L/S/n=  77./ .776/.035]
03243>      [Vmax=  .492:Dmax=  .041]
03244> R0125:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03245>     ROUTE CHANNEL   ->    1.0 02:Pre9_1          .44     .026 No_date   12:17   36.35  n/a     .000
03246>      [RDT= 1.00] out<-    1.0 01:R7              .44     .025 No_date   12:21   36.35  n/a     .000
03247>      [L/S/n=  159./1.576/.035]
03248>      [Vmax=  .797:Dmax=  .008]
03249> R0125:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03250>     ADD HYD              1.0 02:R6              .81     .056 No_date   12:14   36.25  n/a     .000
03251>                    +     1.0 02:EXT10           .20     .011 No_date   12:20   36.34  n/a     .000
03252>                   SUM=   1.0 01:J6              1.02    .066 No_date   12:15   36.27  n/a     .000
03253> R0125:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03254>     ROUTE CHANNEL   ->    1.0 02:J6              1.02    .066 No_date   12:15   36.27  n/a     .000
03255>      [RDT= 1.00] out<-    1.0 01:R8              1.02    .065 No_date   12:18   36.27  n/a     .000
03256>      [L/S/n=  79./ .522/.035]
03257>      [Vmax=  .423:Dmax=  .049]
03258> R0125:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03259>     ADD HYD              1.0 02:R8              1.02    .065 No_date   12:18   36.31  n/a     .000
03260>                    +     1.0 02:R7              .44     .025 No_date   12:21   36.31  n/a     .000
03261>                   SUM=   1.0 01:J7              1.46    .090 No_date   12:19   36.34  n/a     .000
03262> R0125:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03263>     ROUTE CHANNEL   ->    1.0 02:J7              1.46    .090 No_date   12:19   36.34  n/a     .000
03264>      [RDT= 1.00] out<-    1.0 01:R9              1.46    .090 No_date   12:19   36.34  n/a     .000
03265>      [L/S/n=  29./ .887/.035]
03266>      [Vmax=  .543:Dmax=  .061]
03267> R0125:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03268>     ADD HYD              1.0 02:EXT9            3.57    .205 No_date   12:23   41.62  n/a     .000
03269>                    +     1.0 02:R9              1.46    .090 No_date   12:19   36.37  n/a     .000
03270>                    +     1.0 02:EXT8            .83     .058 No_date   12:19   45.14  n/a     .000
03271>                    +     1.0 02:R5              7.24    .343 No_date   12:39   49.00  n/a     .000
03272>                   SUM=   1.0 01:J8              13.10   .661 No_date   12:29   45.34  n/a     .000
03273> R0125:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03274>     ROUTE PIPE      ->    1.0 02:J8              13.10   .661 No_date   12:29   45.34  n/a     .000
03275> *   [RDT= 1.00] out<-    1.0 01:Outlet          13.10   .651 No_date   12:35   45.34  n/a     .000
03276>      [L/S/n=   8./ .010/.013]
03277>      [Vmax=  .448:Dmax= 1.201]
03278>      [Din=  .53:Dused= 1.46]
03279> ##########################################################################################
03280> # STORMS
03281> ##########################################################################################
03282>    ** END OF RUN :  149
03283>
03284> ******************************************************************************************
03285>
03286>
03287>
03288>
03289>
03290>  RUN#:COMMAND#
03291> R0150:C00001-----------------------------------------------------------------------------
03292>        START
03293>        [TZERO =    .00 hrs on        0]
03294>        [METOUT=   2    (1=imperial, 2=metric output)]
03295>        [NTORM=   1 ]
03296>        [NRUN  = 0150 ]
03297> ******************************************************************************************
03298> #  SMMHYMO  / INPUT DATA FILE
03299> ******************************************************************************************
03300> #  Project Name  : [5923 Ottawa St]
03301> #  Project Number: [P2710(e01)]
03302> #  Date          : [2025 April 28]
03303> #  Modeller      : [MM]
03304> #  Company       : JFSA Canada Inc.
03305> #  License #     : 2549237
03306> ******************************************************************************************
03307> # Model developed to simulate runoff from subcatchments under pre development conditions
03308> ******************************************************************************************
03309> R0150:C00002-----------------------------------------------------------------------------
03310>      READ STORM
03311>       Filename = STORM.001
03312>       Comment  = 50 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
03313>       [SDT=10.00:SDUR=  24.00:PTOT=  96.53]
03314> ******************************************************************************************
03315> R0150:C00003-----------------------------------------------------------------------------
03316>      DEFAULT VALUES
03317>       Filename = C:\Temp\20250428-PostDev\Ottawa.val
03318>       ICASEdv  = 1 (read and print data)
03319>       FileTitle= File comment: [Parameters for City of Ottawa Projects]
03320>                  THE FOLLOWING PARAMETERS ARE USED IN THE DESIGN STANDHYD COM
03321>       Horton's infiltration equation parameters:
03322>       [Fo= 76.20 mm/hr] [Fc=13.20 mm/hr] [DCAY= 4.14 /hr] [F=  .00 mm]
03323>       Parameters for PERVIOUS surfaces in STANDHYD:
03324>       [IAper=   4.67 mm] [LGP=40.00 m] [MNP= .250]
03325>       Parameters for IMPERVIOUS surfaces in STANDHYD:
03326>       [IAimp=   1.57 mm] [CLI= 1.50]   [MNI= .013]
03327>       Parameters used in NASHYD:
03328>       [Ia=   4.67 mm] [N= 3.00]
03329>       Average monthly Pan Evaporation data in     (mm)
03330>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03331>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03332>       Average monthly Potential Evapotranspiration in     (mm)
03333>    JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC
03334>   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
03335> ******************************************************************************************
03336> # EXT1
03337> ******************************************************************************************
03338> R0150:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03339>     CALIB NASHYD         1.0 01:EXT1            3.21    .182 No_date   12:40   54.31 .563     .000
03340>      [CN= 80.0: N= 3.00: Tp=  .72]
03341> ******************************************************************************************
03342> # EXT2
03343> ******************************************************************************************
03344> R0150:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03345>     CALIB NASHYD         1.0 01:EXT2            .28     .033 No_date   12:13   61.73 .640     .000
03346>      [CN= 85.0: N= 3.00: Tp=  .33]
03347> ******************************************************************************************
03348> # EXT3
03349> ******************************************************************************************
03350> R0150:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03351>     CALIB NASHYD         1.0 01:EXT3            .56     .057 No_date   12:13   54.31 .563     .000
03352>      [CN= 80.0: N= 3.00: Tp=  .32]
03353> ******************************************************************************************
03354> # EXT4
03355> ******************************************************************************************
03356> R0150:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03357>     CALIB NASHYD         1.0 01:EXT4            .31     .033 No_date   12:11   52.94 .548     .000
03358>      [CN= 79.0: N= 3.00: Tp=  .29]
03359> ******************************************************************************************
03360> # EXT5
03361> ******************************************************************************************
03362> R0150:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03363>     CALIB NASHYD         1.0 01:EXT5            .59     .042 No_date   12:21   49.04 .508     .000
03364>      [CN= 76.0: N= 3.00: Tp=  .45]
03365> ******************************************************************************************
03366> # EXT6
03367> ******************************************************************************************
03368> R0150:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03369>     CALIB NASHYD         1.0 01:EXT6            .86     .068 No_date   12:28   61.73 .640     .000
03370>      [CN= 85.0: N= 3.00: Tp=  .56]
03371> ******************************************************************************************
03372> # EXT7
03373> ******************************************************************************************
03374> R0150:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03375>     CALIB NASHYD         1.0 01:EXT7            .47     .052 No_date   12:12   58.64 .608     .000
03376>      [CN= 83.0: N= 3.00: Tp=  .32]
03377> ******************************************************************************************
03378> # EXT8
03379> ******************************************************************************************
03380> R0150:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03381>     CALIB NASHYD         1.0 01:EXT8            .83     .068 No_date   12:19   52.94 .548     .000
03382>      [CN= 79.0: N= 3.00: Tp=  .42]
03383> ******************************************************************************************
03384> # EXT9
03385> ******************************************************************************************
03386> R0150:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03387>     CALIB NASHYD         1.0 01:EXT9            3.57    .242 No_date   12:23   49.04 .508     .000
03388>      [CN= 76.0: N= 3.00: Tp=  .48]
03389> ******************************************************************************************
03390> # EXT9a
03391> ******************************************************************************************
03392> R0150:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03393>     CALIB NASHYD         1.0 01:EXT9a           .01     .002 No_date   12:00   51.60 .535     .000
03394>      [CN= 78.0: N= 3.00: Tp=  .04]
03395> ******************************************************************************************
03396> # EXT10
03397> ******************************************************************************************
03398> R0150:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03399>     CALIB NASHYD         1.0 01:EXT10           .20     .013 No_date   12:19   43.13 .447     .000
03400>      [CN= 71.0: N= 3.00: Tp=  .42]
03401> ******************************************************************************************
03402> # Pre2_1
03403> ******************************************************************************************
03404> R0150:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03405> *   CALIB NASHYD         1.0 01:Pre2_1          .01     .003 No_date   12:00   44.25 .458     .000
03406>      [CN= 72.0: N= 3.00: Tp=  .03]
03407> ******************************************************************************************
03408> # Pre2_2
03409> ******************************************************************************************
03410> R0150:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03411> *   CALIB NASHYD         1.0 01:Pre2_2          .00     .000 No_date   12:00   51.59 .535     .000
03412>      [CN= 78.0: N= 3.00: Tp=  .02]
03413> ******************************************************************************************
03414> # Pre9_1
03415> ******************************************************************************************
03416> R0150:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03417>     CALIB NASHYD         1.0 01:Pre9_1          .44     .030 No_date   12:17   43.13 .447     .000
03418>      [CN= 71.0: N= 3.00: Tp=  .38]
03419> ******************************************************************************************
03420> # Pre9_2
03421> ******************************************************************************************
03422> R0150:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03423> *   CALIB NASHYD         1.0 01:Pre9_2          .01     .002 No_date   12:00   31.44 .326     .000
03424>      [CN= 59.0: N= 3.00: Tp=  .03]
03425> ******************************************************************************************
03426> # Pre10_1
03427> ******************************************************************************************
03428> R0150:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03429>     CALIB NASHYD         1.0 01:Pre10_1         .80     .067 No_date   12:11   43.14 .447     .000
03430>      [CN= 71.0: N= 3.00: Tp=  .39]
03431> ******************************************************************************************
03432> # Pre11_1
03433> ******************************************************************************************
03434> R0150:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03435>     CALIB NASHYD         1.0 01:Pre11_1         .07     .008 No_date   12:06   51.60 .535     .000
03436>      [CN= 78.0: N= 3.00: Tp=  .21]
03437> ******************************************************************************************
03438> # Site 1
03439> ******************************************************************************************
03440> R0150:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03441>     DESIGN STANDHYD      1.0 01:S1-B1           .42     .109 No_date   12:00   61.99 .642     .000
03442>      [XIMP=.47:TIMP=.57]
03443>      [SLP=1.00:DT= 1.00]
03444>      [LOSS= 1 : HORTONS]
03445> # Site 1 - Roof
03446> ******************************************************************************************
03447> R0150:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03448>     DESIGN STANDHYD      1.0 01:S1-Roof         .07     .023 No_date   12:00   94.28 .977     .000
03449>      [XIMP=.99:TIMP=.99]
03450>      [SLP= .50:DT= 1.00]
03451>      [LOSS= 1 : HORTONS]
03452> R0150:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03453>     ROUTE RESERVOIR ->    1.0 02:S1-Roof         .07     .023 No_date   12:00   94.28  n/a     .000
03454>                   out <=    1.0 01:S1-Roof-Ou      .07     .003 No_date   12:05   94.28  n/a     .000
03455>                overflow <=    1.0 03:S1-Roof-Ov      .00     .000 No_date   0:00    .00  n/a     .000
03456>      (MxStOSed=.3008E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
03457> R0150:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03458>     ADD HYD              1.0 02:S1-B1           .42     .109 No_date   12:00   61.99  n/a     .000
03459>                    +     1.0 02:S1-Roof-Ou      .07     .003 No_date   12:05   94.28  n/a     .000
03460>                    +     1.0 02:S1-Roof-Ov      .00     .000 No_date   0:00    .00  n/a     .000
03461>                   SUM=   1.0 01:SITE1-IN        .49     .112 No_date   12:00   66.60  n/a     .000
03462> R0150:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03463>     ROUTE RESERVOIR ->    1.0 02:SITE1-IN        .49     .112 No_date   12:00   66.60  n/a     .000
03464>                   out <=    1.0 01:SITE1-Out       .49     .011 No_date   12:35   66.60  n/a     .000
03465>                overflow <=    1.0 03:SITE1-Over      .00     .000 No_date   0:00    .00  n/a     .000
03466>      (MxStOSed=.1392E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
03467> ******************************************************************************************
03468> # Site 2
03469> ******************************************************************************************
03470> R0150:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03471>     DESIGN STANDHYD      1.0 01:S2-B3           .35     .090 No_date   12:00   61.34 .635     .000
03472>      [XIMP=.46:TIMP=.56]
03473>      [SLP=1.00:DT= 1.00]
03474>      [LOSS= 1 : HORTONS]
03475> ******************************************************************************************
03476> # Site 2 - Roof
03477> ******************************************************************************************
03478> R0150:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03479>     DESIGN STANDHYD      1.0 01:S2-Roof         .09     .029 No_date   12:00   94.29 .977     .000
03480>      [XIMP=.99:TIMP=.99]
03481>      [SLP= .50:DT= 1.00]
03482>      [LOSS= 1 : HORTONS]
03483> ******************************************************************************************
03484> R0150:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03485>     ROUTE RESERVOIR ->    1.0 02:S2-Roof         .09     .029 No_date   12:00   94.29  n/a     .000
03486>                   out <=    1.0 01:S2-Roof-Ou      .09     .008 No_date   12:02   94.29  n/a     .000
03487>                overflow <=    1.0 03:S2-Roof-Ov      .00     .000 No_date   0:00    .00  n/a     .000
03488>      (MxStOSed=.2446E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
03489> R0150:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03490>     ADD HYD              1.0 02:S2-B3           .35     .090 No_date   12:00   61.34  n/a     .000
03491>                    +     1.0 02:S2-Roof-Ou      .09     .008 No_date   12:02   94.29  n/a     .000
03492>                    +     1.0 02:S2-Roof-Ov      .00     .000 No_date   0:00    .00  n/a     .000
03493>                   SUM=   1.0 01:SITE2-IN        .44     .098 No_date   12:00   68.08  n/a     .000
03494> R0150:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03495>     ROUTE RESERVOIR ->    1.0 02:SITE2-IN        .44     .098 No_date   12:00   68.08  n/a     .000
03496>                   out <=    1.0 01:SITE2-Out       .44     .013 No_date   12:35   68.08  n/a     .000
03497>                overflow <=    1.0 03:SITE2-Over      .00     .000 No_date   0:00    .00  n/a     .000
03498>      (MxStOSed=.1236E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=   0.hrs)
03499> R0150:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03500>     ADD HYD              1.0 02:SITE1-Out       .49     .011 No_date   12:35   66.60  n/a     .000
03501>                    +     1.0 02:SITE1-Over      .00     .000 No_date   0:00    .00  n/a     .000
03502>                   SUM=   1.0 01:Site1           .49     .011 No_date   12:35   66.60  n/a     .000
03503> R0150:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03504>     ADD HYD              1.0 02:SITE2-Out       .44     .013 No_date   12:35   68.08  n/a     .000
03505>                    +     1.0 02:SITE2-Over      .00     .000 No_date   0:00    .00  n/a     .000
03506>                   SUM=   1.0 01:Site2           .44     .013 No_date   12:35   68.08  n/a     .000
03507> R0150:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03508>     ADD HYD              1.0 02:EXT2            .28     .033 No_date   12:13   61.73  n/a     .000
03509>                    +     1.0 02:Pre2_1          .01     .003 No_date   12:00   44.25  n/a     .000
03510>                    +     1.0 02:Site1           .49     .011 No_date   12:35   66.60  n/a     .000
03511>                    +     1.0 02:Site2           .44     .013 No_date   12:35   68.08  n/a     .000
03512>                   SUM=   1.0 01:J1              1.23    .055 No_date   12:15   65.76  n/a     .000
03513> R0150:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03514>     ROUTE CHANNEL   ->    1.0 02:J1              1.23    .055 No_date   12:15   65.76  n/a     .000
03515>      [RDT= 1.00] out<-    1.0 01:R1              1.23    .053 No_date   12:20   65.76  n/a     .000
03516>      [L/S/n=  143./ .394/.035]
03517>      [Vmax=  .358:Dmax=  .150]
03518> R0150:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03519>     ADD HYD              1.0 02:R1              1.23    .053 No_date   12:20   65.76  n/a     .000
03520>                    +     1.0 02:EXT3            .56     .057 No_date   12:13   54.31  n/a     .000
03521>                    +     1.0 02:EXT1            3.21    .182 No_date   12:40   54.31  n/a     .000
03522>                   SUM=   1.0 01:J2              5.00    .267 No_date   12:28   57.12  n/a     .000
03523> R0150:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03524>     ROUTE CHANNEL   ->    1.0 02:J2              5.00    .267 No_date   12:28   57.12  n/a     .000
03525>      [RDT= 1.00] out<-    1.0 01:R2              5.00    .266 No_date   12:30   57.12  n/a     .000
03526>      [L/S/n=   73./ .425/.035]
03527>      [Vmax=  .531:Dmax=  .288]
03528> R0150:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03529>     ADD HYD              1.0 02:R2              5.00    .266 No_date   12:30   57.12  n/a     .000
03530>                    +     1.0 02:EXT4            .31     .033 No_date   12:11   52.94  n/a     .000
03531>                   SUM=   1.0 01:J3              5.31    .288 No_date   12:27   56.88  n/a     .000
03532> R0150:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03533>     ROUTE CHANNEL   ->    1.0 02:J3              5.31    .288 No_date   12:27   56.88  n/a     .000
03534>      [RDT= 1.00] out<-    1.0 01:R3              5.31    .286 No_date   12:30   56.88  n/a     .000
03535>      [L/S/n=   92./ .274/.035]
03536>      [Vmax=  .435:Dmax=  .298]
03537> R0150:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03538>     ADD HYD              1.0 02:R3              5.31    .286 No_date   12:30   56.88  n/a     .000
03539>                    +     1.0 02:EXT5            .59     .042 No_date   12:21   49.04  n/a     .000
03540>                   SUM=   1.0 01:J4              5.90    .326 No_date   12:29   56.09  n/a     .000
03541> R0150:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03542>     ROUTE CHANNEL   ->    1.0 02:J4              5.90    .326 No_date   12:29   56.09  n/a     .000
03543>      [RDT= 1.00] out<-    1.0 01:R4              5.90    .310 No_date   12:38   56.09  n/a     .000
03544>      [L/S/n=  251./ .190/.035]
03545>      [Vmax=  .431:Dmax=  .340]
03546> R0150:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03547>     ADD HYD              1.0 02:R4              5.90    .310 No_date   12:38   56.09  n/a     .000
03548>                    +     1.0 02:EXT6            .86     .068 No_date   12:28   61.73  n/a     .000
03549>                    +     1.0 02:EXT7            .47     .052 No_date   12:12   58.64  n/a     .000
03550>                   SUM=   1.0 01:J5              7.24    .407 No_date   12:33   56.93  n/a     .000
03551> R0150:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03552>     ROUTE CHANNEL   ->    1.0 02:J5              7.24    .407 No_date   12:33   56.93  n/a     .000
03553>      [RDT= 1.00] out<-    1.0 01:R5              7.24    .402 No_date   12:38   56.93  n/a     .000
03554>      [L/S/n=  237./ .644/.035]
03555>      [Vmax=  .708:Dmax=  .316]
03556> R0150:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03557>     ADD HYD              1.0 02:Pre10_1         .80     .067 No_date   12:11   43.14  n/a     .000
03558>                    +     1.0 02:Pre9_2          .01     .002 No_date   12:00   31.44  n/a     .000
03559>                    +     1.0 02:Pre2_2          .00     .000 No_date   12:00   51.59  n/a     .000
03560>                   SUM=   1.0 01:Pre             .81     .068 No_date   12:11   42.96  n/a     .000
03561> R0150:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03562>     ROUTE CHANNEL   ->    1.0 02:Pre             .81     .068 No_date   12:11   42.96  n/a     .000
03563>      [RDT= 1.00] out<-    1.0 01:R6              .81     .066 No_date   12:14   42.95  n/a     .000
03564>      [L/S/n=   77./ .776/.035]
03565>      [Vmax=  .492:Dmax=  .049]
03566> R0150:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03567>     ROUTE CHANNEL   ->    1.0 02:Pre9_1          .44     .030 No_date   12:17   43.13  n/a     .000
03568>      [RDT= 1.00] out<-    1.0 01:R7              .44     .030 No_date   12:20   43.13  n/a     .000
03569>      [L/S/n=  159./1.576/.035]
03570>      [Vmax=  .797:Dmax=  .009]
03571> R0150:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03572>     ADD HYD              1.0 02:R6              .81     .066 No_date   12:14   43.02  n/a     .000
03573>                    +     1.0 02:EXT10           .20     .013 No_date   12:19   43.13  n/a     .000
03574>                   SUM=   1.0 01:J6              1.02    .079 No_date   12:14   43.04  n/a     .000
03575> R0150:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03576>     ROUTE CHANNEL   ->    1.0 02:J6              1.02    .079 No_date   12:14   43.04  n/a     .000
03577>      [RDT= 1.00] out<-    1.0 01:R8              1.02    .078 No_date   12:18   43.04  n/a     .000
03578>      [L/S/n=   79./ .522/.035]
03579>      [Vmax=  .423:Dmax=  .058]
03580> R0150:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03581>     ADD HYD              1.0 02:R8              1.02    .078 No_date   12:18   43.08  n/a     .000
03582>                    +     1.0 02:R7              .44     .030 No_date   12:20   43.23  n/a     .000
03583>                   SUM=   1.0 01:J7              1.46    .107 No_date   12:18   43.13  n/a     .000
03584> R0150:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03585>     ROUTE CHANNEL   ->    1.0 02:J7              1.46    .107 No_date   12:18   43.13  n/a     .000
03586>      [RDT= 1.00] out<-    1.0 01:R9              1.46    .107 No_date   12:19   43.13  n/a     .000
03587>      [L/S/n=   29./ .887/.035]
03588>      [Vmax=  .543:Dmax=  .073]
03589> R0150:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03590>     ADD HYD              1.0 02:EXT9            3.57    .242 No_date   12:23   49.04  n/a     .000
03591>                    +     1.0 02:R9              1.46    .107 No_date   12:19   43.15  n/a     .000
03592>                    +     1.0 02:EXT8            .83     .068 No_date   12:19   52.94  n/a     .000
03593>                    +     1.0 02:R5              7.24    .402 No_date   12:38   56.93  n/a     .000
03594>                   SUM=   1.0 01:J8              13.10   .782 No_date   12:28   52.99  n/a     .000
03595> R0150:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
03596>     ROUTE PIPE      ->    1.0 02:J8              13.10   .782 No_date   12:28   52.99  n/a     .000
03597> *   [RDT= 1.00] out<-    1.0 01:Outlet          13.10   .781 No_date   12:30   52.99  n/a     .000
03598>      [L/S/n=   8./ .010/.013]
03599>      [Vmax=  .468:Dmax= 1.279]
03600>      [Din=  .53:Dused= 1.56]
```

```
##############################################################################
# STORMS
##############################################################################
  ** END OF RUN :  198
*******************************************************************************************
 RUN#:COMMAND#
R0199:C00001-------------------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on        0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  = 0199 ]
#******************************************************************************************
#  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 pre development conditions
#******************************************************************************************
R0199:C00002-------------------------------------------------------------------------------
     READ STORM
      Filename = STORM.001
      Comment  = 100 years SCS Type 2 Storm 24 Hours step 10 min, City of Ottawa
      [SDT=10.00:SDUR=  24.00:PTOT= 106.73]
#******************************************************************************************
R0199:C00003-------------------------------------------------------------------------------
     DEFAULT VALUES
      Filename = C:\Temp\20250428-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
#******************************************************************************************
R0199:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT1           3.21     .212 No_date   12:39   62.92 .589     .000
      [CN= 80.0: N= 3.00: Tp=  .72]
#******************************************************************************************
# EXT2
#******************************************************************************************
R0199:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT2            .28     .037 No_date   12:13   70.91 .664     .000
      [CN= 85.0: N= 3.00: Tp=  .33]
#******************************************************************************************
# EXT3
#******************************************************************************************
R0199:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT3            .56     .066 No_date   12:13   62.92 .589     .000
      [CN= 80.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT4
#******************************************************************************************
R0199:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT4            .31     .038 No_date   12:11   61.42 .576     .000
      [CN= 79.0: N= 3.00: Tp=  .29]
#******************************************************************************************
# EXT5
#******************************************************************************************
R0199:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT5            .59     .049 No_date   12:21   57.15 .535     .000
      [CN= 76.0: N= 3.00: Tp=  .45]
#******************************************************************************************
# EXT6
#******************************************************************************************
R0199:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT6            .86     .078 No_date   12:28   70.92 .664     .000
      [CN= 85.0: N= 3.00: Tp=  .56]
#******************************************************************************************
# EXT7
#******************************************************************************************
R0199:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT7            .47     .060 No_date   12:12   67.60 .633     .000
      [CN= 83.0: N= 3.00: Tp=  .32]
#******************************************************************************************
# EXT8
#******************************************************************************************
R0199:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT8            .83     .079 No_date   12:19   61.42 .576     .000
      [CN= 79.0: N= 3.00: Tp=  .42]
#******************************************************************************************
# EXT9
#******************************************************************************************
R0199:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9           3.57     .284 No_date   12:23   57.15 .535     .000
      [CN= 76.0: N= 3.00: Tp=  .48]
#******************************************************************************************
# EXT9a
#******************************************************************************************
R0199:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT9a           .01     .003 No_date   12:00   59.96 .562     .000
      [CN= 78.0: N= 3.00: Tp=  .04]
#******************************************************************************************
# EXT10
#******************************************************************************************
R0199:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:EXT10           .20     .016 No_date   12:19   50.61 .474     .000
      [CN= 71.0: N= 3.00: Tp=  .42]
#******************************************************************************************
# Pre2_1
#******************************************************************************************
R0199:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD          1.0 01:Pre2_1          .01     .003 No_date   12:00   51.86 .486     .000
      [CN= 72.0: N= 3.00: Tp=  .03]
#******************************************************************************************
# Pre2_2
#******************************************************************************************
R0199:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD          1.0 01:Pre2_2          .00     .001 No_date   12:00   59.95 .562     .000
      [CN= 78.0: N= 3.00: Tp=  .02]
#******************************************************************************************
# Pre9_1
#******************************************************************************************
R0199:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre9_1          .44     .036 No_date   12:17   50.61 .474     .000
      [CN= 71.0: N= 3.00: Tp=  .38]
#******************************************************************************************
# Pre9_2
#******************************************************************************************
R0199:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
 *  CALIB NASHYD          1.0 01:Pre9_2          .01     .002 No_date   12:00   37.39 .350     .000
      [CN= 59.0: N= 3.00: Tp=  .03]
#******************************************************************************************
# Pre10_1
#******************************************************************************************
R0199:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre10_1         .80     .079 No_date   12:11   50.61 .474     .000
      [CN= 71.0: N= 3.00: Tp=  .29]
#******************************************************************************************
# Pre11_1
#******************************************************************************************
R0199:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    CALIB NASHYD          1.0 01:Pre11_1         .07     .010 No_date   12:06   59.96 .562     .000
      [CN= 78.0: N= 3.00: Tp=  .21]
#******************************************************************************************
# Site 1
#******************************************************************************************
R0199:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S1-B1           .42     .122 No_date   12:00   69.27 .649     .000
      [XIMP=.47:TIMP=.57]
      [SLP=1.00:DT= 1.00]
      [LOSS= 1 : HORTONS]
# Site 1 - Roof
#******************************************************************************************
R0199:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S1-Roof         .07     .025 No_date   12:00  104.44 .979     .000
      [XIMP=.99:TIMP=.99]
      [SLP= .50:DT= 1.00]
      [LOSS= 1 : HORTONS]
R0199:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:S1-Roof         .07     .025 No_date   12:00  104.44  n/a     .000
                out <=    1.0 01:S1-Roof-Ou      .07     .003 No_date   12:05  104.44  n/a     .000
           overflow <=    1.0 03:S1-Roof-Ov      .00     .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.3331E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0199:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:S1-B1           .42     .122 No_date   12:00   69.27  n/a     .000
                   +      1.0 02:S1-Roof-Ou      .07     .003 No_date   12:05  104.44  n/a     .000
                   +      1.0 02:S1-Roof-Ov      .00     .000 No_date    0:00     .00  n/a     .000
                SUM=      1.0 01:SITE1-IN        .49     .125 No_date   12:00   74.30  n/a     .000
R0199:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:SITE1-IN        .49     .125 No_date   12:00   74.30  n/a     .000
                out <=    1.0 01:SITE1-Out       .49     .013 No_date   12:35   74.30  n/a     .000
           overflow <=    1.0 03:SITE1-Over      .00     .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.1578E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
#******************************************************************************************
# Site 2
#******************************************************************************************
R0199:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S2-B3           .35     .101 No_date   12:00   68.56 .642     .000
      [XIMP=.46:TIMP=.56]
      [SLP=1.00:DT= 1.00]
      [LOSS= 1 : HORTONS]
#******************************************************************************************
# Site 2 - Roof
#******************************************************************************************
R0199:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    DESIGN STANDHYD       1.0 01:S2-Roof         .09     .033 No_date   12:00  104.44 .979     .000
      [XIMP=.99:TIMP=.99]
      [SLP= .50:DT= 1.00]
      [LOSS= 1 : HORTONS]
#******************************************************************************************
R0199:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:S2-Roof         .09     .033 No_date   12:00  104.44  n/a     .000
                out <=    1.0 01:S2-Roof-Ou      .09     .008 No_date   12:02  104.44  n/a     .000
           overflow <=    1.0 03:S2-Roof-Ov      .00     .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.2765E-02  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0199:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:S2-B3           .35     .101 No_date   12:00   68.56  n/a     .000
                   +      1.0 02:S2-Roof-Ou      .09     .008 No_date   12:02  104.44  n/a     .000
                   +      1.0 02:S2-Roof-Ov      .00     .000 No_date    0:00     .00  n/a     .000
                SUM=      1.0 01:SITE2-IN        .44     .110 No_date   12:00   75.90  n/a     .000
R0199:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE RESERVOIR ->    1.0 02:SITE2-IN        .44     .110 No_date   12:00   75.90  n/a     .000
                out <=    1.0 01:SITE2-Out       .44     .017 No_date   12:32   75.90  n/a     .000
           overflow <=    1.0 03:SITE2-Over      .00     .000 No_date    0:00     .00  n/a     .000
     {MxStoUsed=.1369E-01  m3, TotOvfVol=.0000E+00  m3, N-Ovf=    0, TotDurOvf=    0.hrs}
R0199:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:SITE1-Out       .49     .013 No_date   12:35   74.30  n/a     .000
                   +      1.0 02:SITE1-Over      .00     .000 No_date    0:00     .00  n/a     .000
                SUM=      1.0 01:Site1           .49     .013 No_date   12:35   74.30  n/a     .000
R0199:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:SITE2-Out       .44     .017 No_date   12:32   75.90  n/a     .000
                   +      1.0 02:SITE2-Over      .00     .000 No_date    0:00     .00  n/a     .000
                SUM=      1.0 01:Site2           .44     .017 No_date   12:32   75.90  n/a     .000
R0199:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:EXT2            .28     .037 No_date   12:13   70.91  n/a     .000
                   +      1.0 02:Pre2_1          .01     .003 No_date   12:00   51.86  n/a     .000
                   +      1.0 02:Site1           .49     .013 No_date   12:35   74.30  n/a     .000
                   +      1.0 02:Site2           .44     .017 No_date   12:32   75.90  n/a     .000
                SUM=      1.0 01:J1             1.23     .063 No_date   12:16   73.85  n/a     .000
R0199:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J1             1.23     .063 No_date   12:16   73.85  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R1             1.23     .061 No_date   12:22   73.85  n/a     .000
      [L/S/n=  143./ .394/.035]
      {Vmax=  .370:Dmax=  .159}
R0199:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R1             1.23     .061 No_date   12:22   73.85  n/a     .000
                   +      1.0 02:EXT3            .56     .066 No_date   12:13   62.92  n/a     .000
                   +      1.0 02:EXT1           3.21     .212 No_date   12:39   62.92  n/a     .000
                SUM=      1.0 01:J2             5.00     .310 No_date   12:29   65.60  n/a     .000
R0199:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J2             5.00     .310 No_date   12:29   65.60  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R2             5.00     .310 No_date   12:31   65.60  n/a     .000
      [L/S/n=   73./ .425/.035]
      {Vmax=  .553:Dmax=  .306}
R0199:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R2             5.00     .310 No_date   12:31   65.60  n/a     .000
                   +      1.0 02:EXT4            .31     .038 No_date   12:11   61.42  n/a     .000
                SUM=      1.0 01:J3             5.31     .335 No_date   12:27   65.36  n/a     .000
R0199:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J3             5.31     .335 No_date   12:27   65.36  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R3             5.31     .333 No_date   12:30   65.36  n/a     .000
      [L/S/n=   92./ .274/.035]
      {Vmax=  .453:Dmax=  .316}
R0199:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R3             5.31     .333 No_date   12:30   65.36  n/a     .000
                   +      1.0 02:EXT5            .59     .049 No_date   12:21   57.15  n/a     .000
                SUM=      1.0 01:J4             5.90     .380 No_date   12:29   64.53  n/a     .000
R0199:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J4             5.90     .380 No_date   12:29   64.53  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R4             5.90     .362 No_date   12:38   64.53  n/a     .000
      [L/S/n=  251./ .190/.035]
      {Vmax=  .450:Dmax=  .363}
R0199:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R4             5.90     .362 No_date   12:38   64.53  n/a     .000
                   +      1.0 02:EXT6            .86     .078 No_date   12:28   70.92  n/a     .000
                   +      1.0 02:EXT7            .47     .060 No_date   12:12   67.60  n/a     .000
                SUM=      1.0 01:J5             7.24     .474 No_date   12:33   65.49  n/a     .000
R0199:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J5             7.24     .474 No_date   12:33   65.49  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R5             7.24     .468 No_date   12:38   65.49  n/a     .000
      [L/S/n=  237./ .644/.035]
      {Vmax=  .737:Dmax=  .335}
R0199:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:Pre10_1         .80     .079 No_date   12:11   50.61  n/a     .000
                   +      1.0 02:Pre9_2          .01     .002 No_date   12:00   37.39  n/a     .000
                   +      1.0 02:Pre2_2          .00     .001 No_date   12:00   59.95  n/a     .000
                SUM=      1.0 01:Pre             .81     .080 No_date   12:11   50.41  n/a     .000
R0199:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:Pre             .81     .080 No_date   12:11   50.41  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R6              .81     .078 No_date   12:14   50.41  n/a     .000
      [L/S/n=   77./ .776/.035]
      {Vmax=  .492:Dmax=  .058}
R0199:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:Pre9_1          .44     .036 No_date   12:17   50.61  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R7              .44     .035 No_date   12:20   50.61  n/a     .000
      [L/S/n=  159./1.576/.035]
      {Vmax=  .797:Dmax=  .011}
R0199:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R6              .81     .078 No_date   12:14   50.48  n/a     .000
                   +      1.0 02:EXT10           .20     .016 No_date   12:19   50.61  n/a     .000
                SUM=      1.0 01:J6             1.02     .093 No_date   12:14   50.51  n/a     .000
R0199:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J6             1.02     .093 No_date   12:14   50.51  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R8             1.02     .091 No_date   12:18   50.51  n/a     .000
      [L/S/n=   79./ .522/.035]
      {Vmax=  .423:Dmax=  .068}
R0199:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:R8             1.02     .091 No_date   12:18   50.55  n/a     .000
                   +      1.0 02:R7              .44     .035 No_date   12:20   50.71  n/a     .000
                SUM=      1.0 01:J7             1.46     .126 No_date   12:18   50.60  n/a     .000
R0199:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE CHANNEL   ->    1.0 02:J7             1.46     .126 No_date   12:18   50.60  n/a     .000
     [RDT= 1.00] out<-    1.0 01:R9             1.46     .126 No_date   12:19   50.60  n/a     .000
      [L/S/n=   29./ .887/.035]
      {Vmax=  .543:Dmax=  .086}
R0199:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ADD HYD               1.0 02:EXT9           3.57     .284 No_date   12:23   57.15  n/a     .000
                   +      1.0 02:R9             1.46     .126 No_date   12:19   50.62  n/a     .000
                   +      1.0 02:EXT8            .83     .079 No_date   12:19   61.43  n/a     .000
                   +      1.0 02:R5             7.24     .468 No_date   12:38   65.49  n/a     .000
                SUM=      1.0 01:J8            13.10     .914 No_date   12:28   61.31  n/a     .000
R0199:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm----RVmm-R.C.---DWFcms
    ROUTE PIPE      ->    1.0 02:J8            13.10     .914 No_date   12:28   61.31  n/a     .000
 *   [RDT= 1.00] out<-    1.0 01:Outlet        13.10     .900 No_date   12:34   61.31  n/a     .000
      [L/S/n=    8./ .010/.013]
      {Vmax=  .486:Dmax= 1.356}
      [Din=  .53:Dused= 1.65]
##############################################################################
# STORMS
##############################################################################
R0199:C00002-------------------------------------------------------------------------------
    FINISH
-------------------------------------------------------------------------------------------
*******************************************************************************************
     WARNINGS / ERRORS / NOTES
     -------------------------
R0002:C00015  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0002:C00016  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0002:C00018  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0002:C00051  ROUTE PIPE      ->
*** WARNING: New pipe size used for routing.
R0005:C00015  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0005:C00016  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0005:C00018  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0005:C00051  ROUTE PIPE      ->
*** WARNING: New pipe size used for routing.
R0010:C00015  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0010:C00016  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0010:C00018  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0010:C00051  ROUTE PIPE      ->
*** WARNING: New pipe size used for routing.
R0025:C00015  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0025:C00016  CALIB NASHYD
*** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
R0025:C00018  CALIB NASHYD
```

```
03961> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03962> R0025:C00051  ROUTE PIPE      ->
03963> *** WARNING: New pipe size used for routing.
03964> R0050:C00015  CALIB NASHYD
03965> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03966> R0050:C00016  CALIB NASHYD
03967> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03968> R0050:C00018  CALIB NASHYD
03969> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03970> R0050:C00051  ROUTE PIPE      ->
03971> *** WARNING: New pipe size used for routing.
03972> R0099:C00015  CALIB NASHYD
03973> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03974> R0099:C00016  CALIB NASHYD
03975> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03976> R0099:C00018  CALIB NASHYD
03977> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03978> R0099:C00051  ROUTE PIPE      ->
03979> *** WARNING: New pipe size used for routing.
03980> R0102:C00015  CALIB NASHYD
03981> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03982> R0102:C00016  CALIB NASHYD
03983> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03984> R0102:C00018  CALIB NASHYD
03985> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03986> R0102:C00051  ROUTE PIPE      ->
03987> *** WARNING: New pipe size used for routing.
03988> R0105:C00015  CALIB NASHYD
03989> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03990> R0105:C00016  CALIB NASHYD
03991> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03992> R0105:C00018  CALIB NASHYD
03993> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03994> R0105:C00051  ROUTE PIPE      ->
03995> *** WARNING: New pipe size used for routing.
03996> R0110:C00015  CALIB NASHYD
03997> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
03998> R0110:C00016  CALIB NASHYD
03999> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04000> R0110:C00018  CALIB NASHYD
04001> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04002> R0110:C00051  ROUTE PIPE      ->
04003> *** WARNING: New pipe size used for routing.
04004> R0125:C00015  CALIB NASHYD
04005> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04006> R0125:C00016  CALIB NASHYD
04007> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04008> R0125:C00018  CALIB NASHYD
04009> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04010> R0125:C00051  ROUTE PIPE      ->
04011> *** WARNING: New pipe size used for routing.
04012> R0150:C00015  CALIB NASHYD
04013> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04014> R0150:C00016  CALIB NASHYD
04015> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04016> R0150:C00018  CALIB NASHYD
04017> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04018> R0150:C00051  ROUTE PIPE      ->
04019> *** WARNING: New pipe size used for routing.
04020> R0199:C00015  CALIB NASHYD
04021> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04022> R0199:C00016  CALIB NASHYD
04023> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04024> R0199:C00018  CALIB NASHYD
04025> *** WARNING: Time step is too large for value of TP. RV may be ok.  Peak flow could be off.
04026> R0199:C00051  ROUTE PIPE      ->
04027> *** WARNING: New pipe size used for routing.
04028>    Simulation ended on 2025-06-02     at 18:47:34
04029> ==============================================================================================
04030>
```

Attachment C

Hydraulic Analysis

N

Legend

- Site Boundary
- Jock River Tributary
- HEC-RAS Cross Sections
- Centerline

SCALE: 1:3000

0 50 100 150 m

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

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Figure C1: HEC-RAS Cross Sections

PROJECT	P2710(e01)
DRAWN	MM
DATE	5 June 2025

C:\Users\BrennanThomas\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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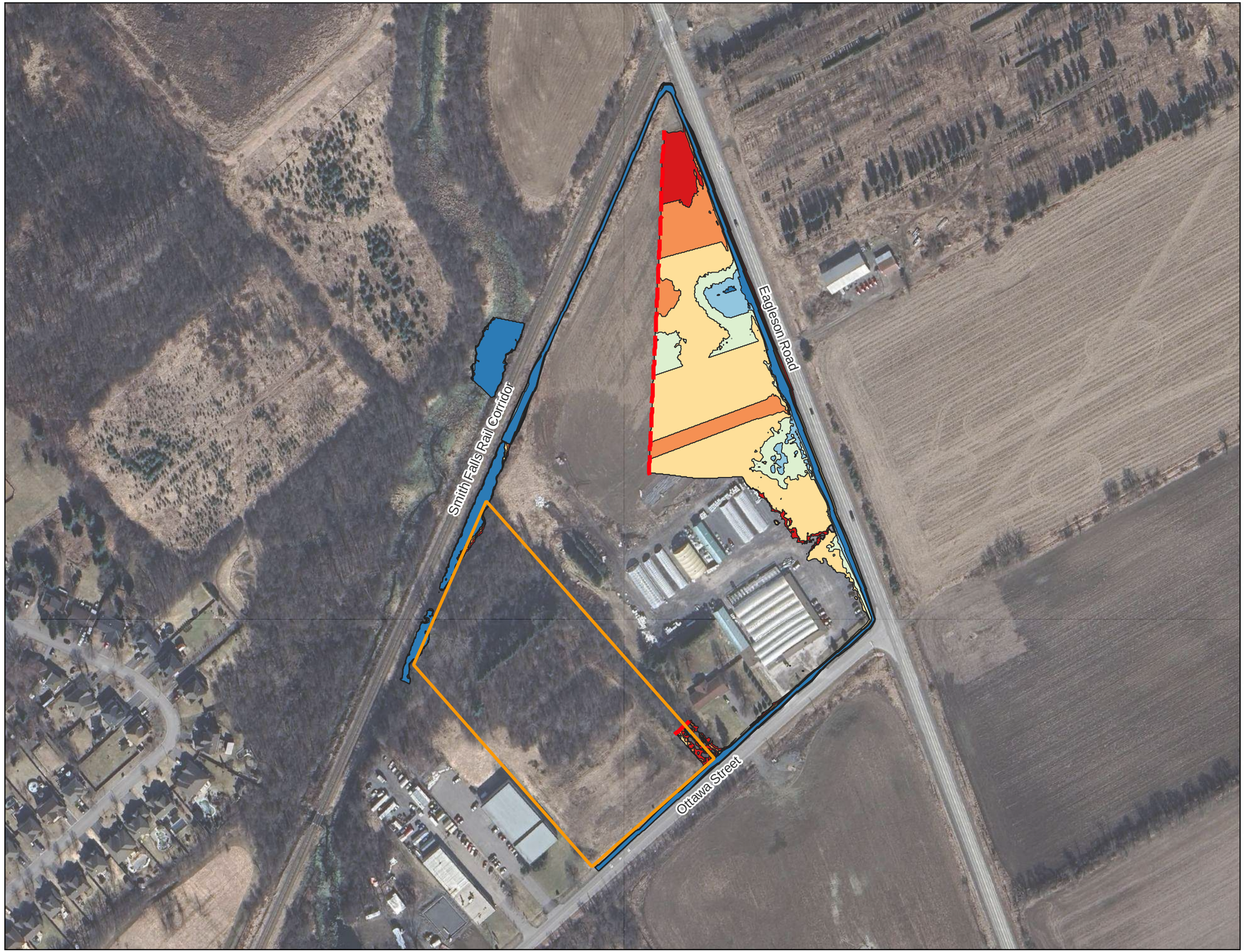
5923 Ottawa St - Richmond

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

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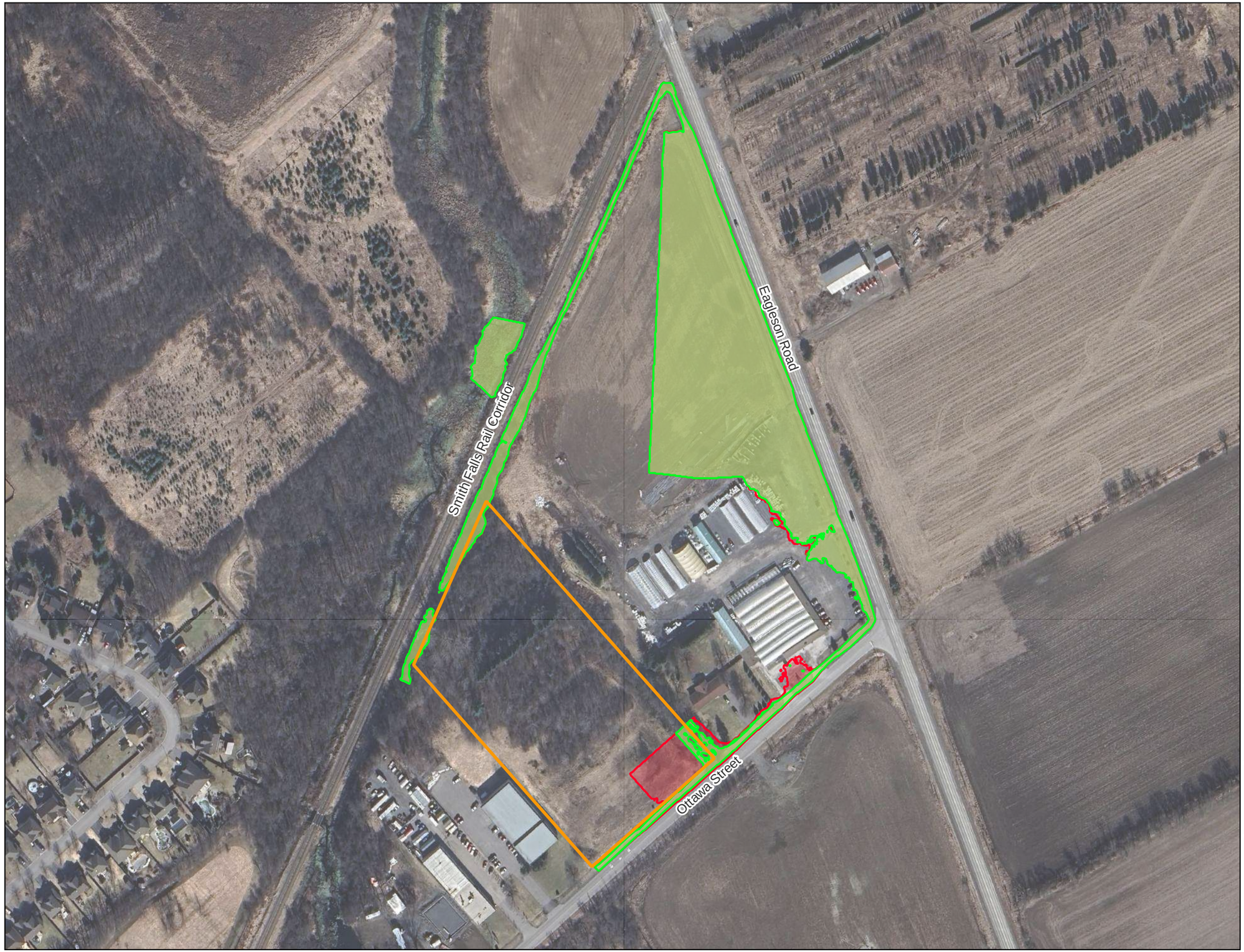
5923 Ottawa St - Richmond

Figure C3: Post-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
- Pre-Development 100yr
- Post-Development 100yr

SCALE: 1:2500

0 50 100 m

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

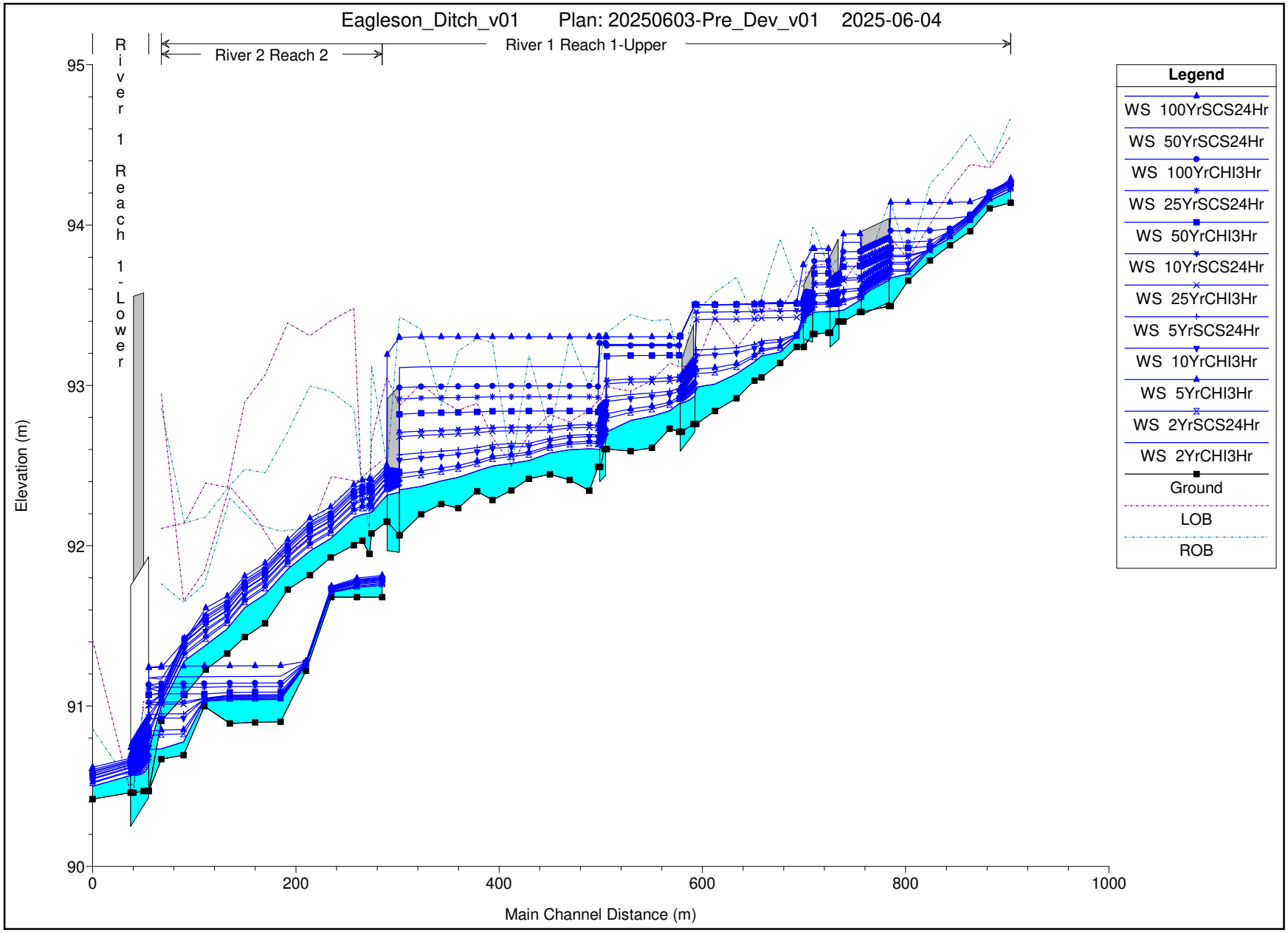
egis

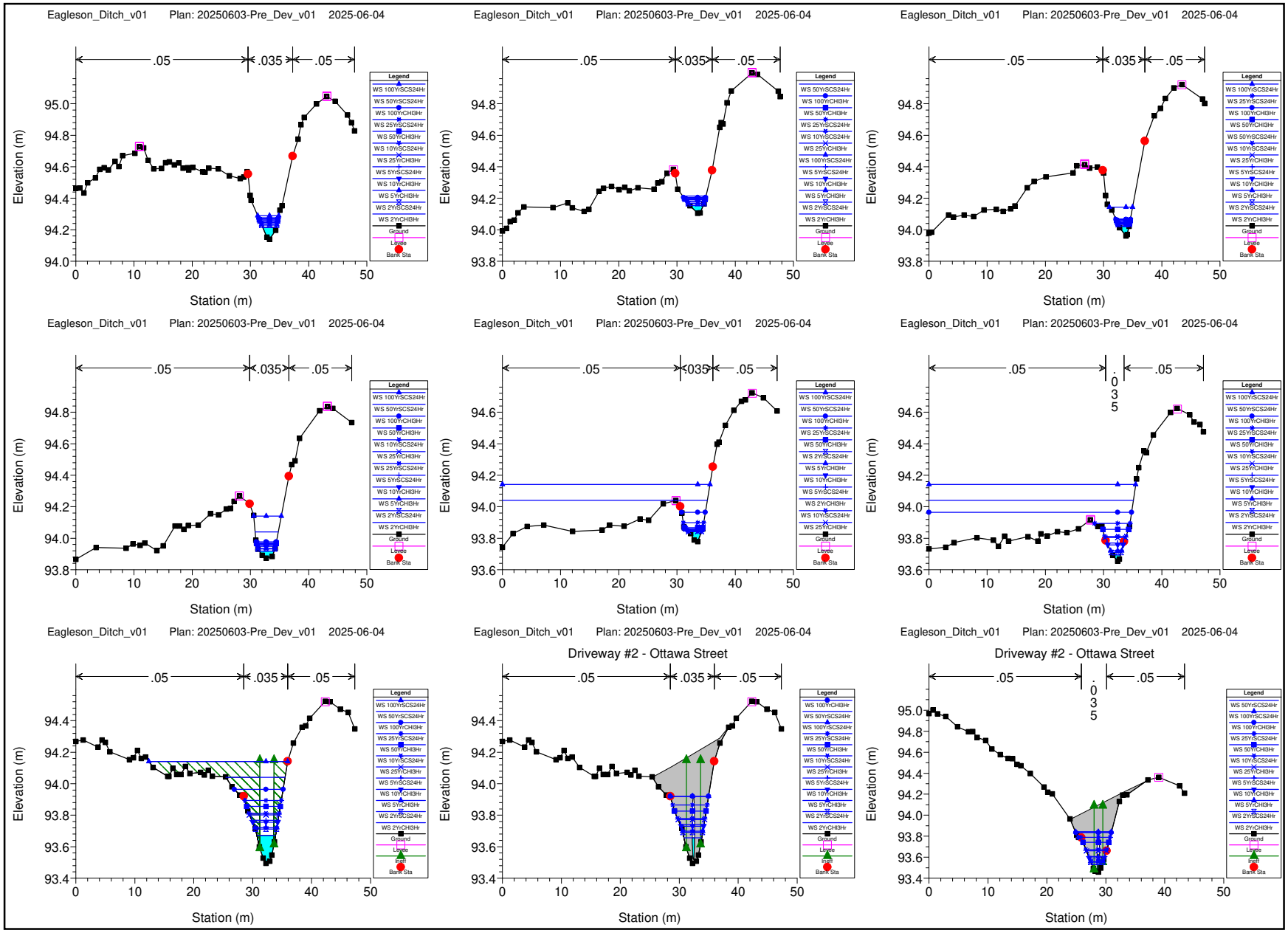
5923 Ottawa St - Richmond

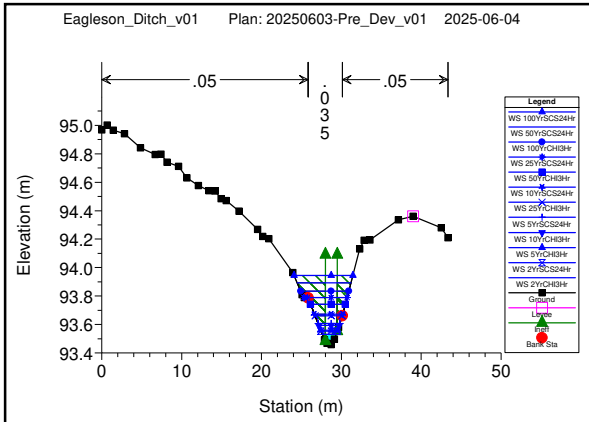
Figure C4: 100-yr Floodplain Extents Comparison

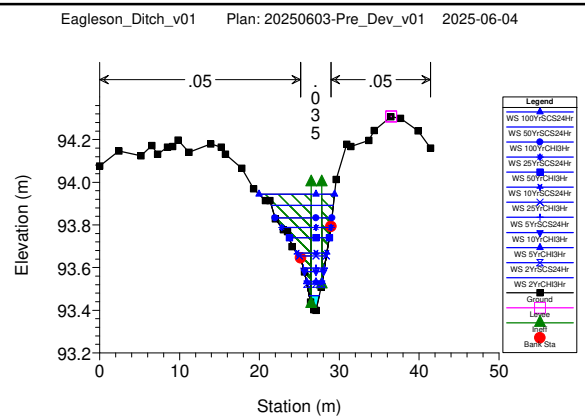
PROJECT	P2719(e01)
DRAWN	BT
DATE	5 June 2025

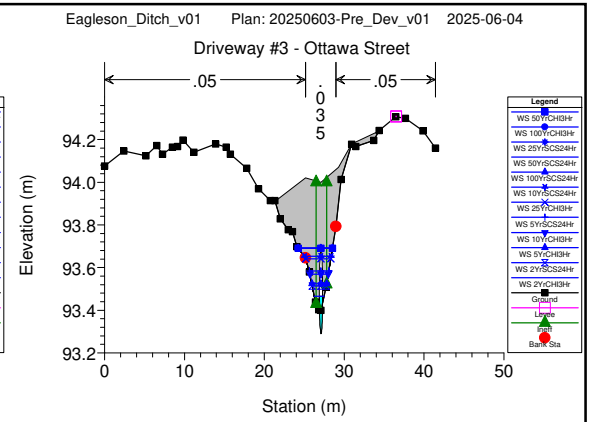
C:\Users\BrennanThomas\J.F. Sabourin and Associates Inc\JFSA-OTTAWA-SERVER - Documents\PROJ\2710(e01)\Design\GIS\20250605-Flood Extent Figures

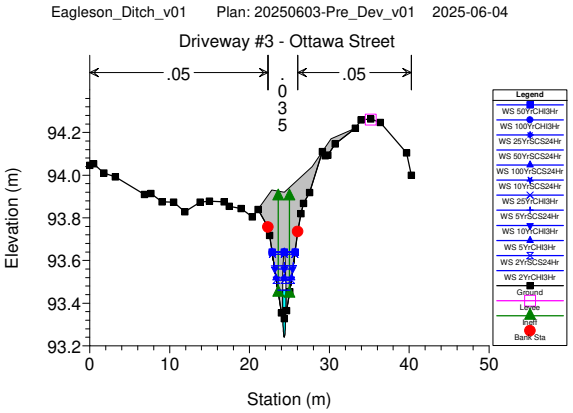

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
River 2 Reach 2
River 1 Reach 1-Upper
River 1 Reach 1-Lower
Elevation (m)
Main Channel Distance (m)
95
94
93
92
91
90
0
200
400
600
800
1000
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr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

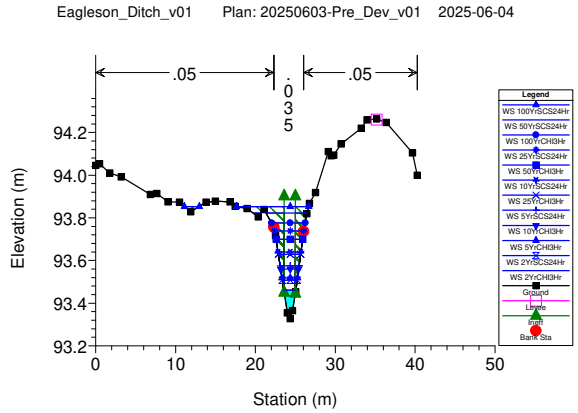

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Driveway #2 - Ottawa Street
.05
.035
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground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

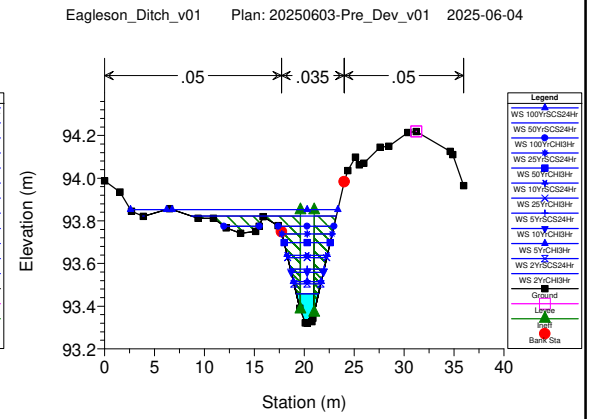

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Path
Bank Sta

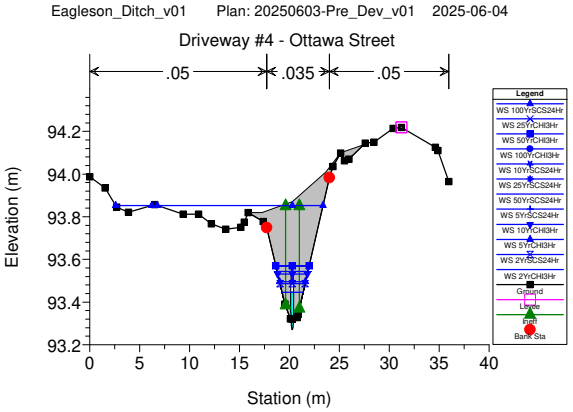

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Path
Bank Sta

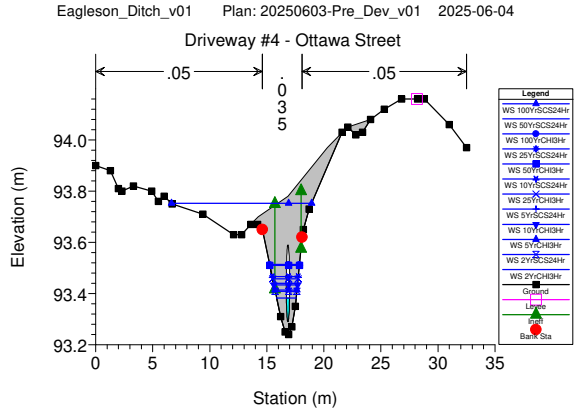

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Driveway #3 - Ottawa Street
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 50YrCHI3Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrSCS24Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr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

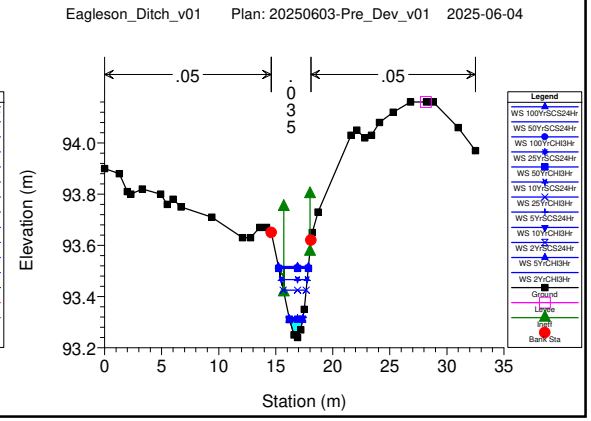

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Driveway #3 - Ottawa Street
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 50YrCHI3Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrSCS24Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr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


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
Path
Bank Sta

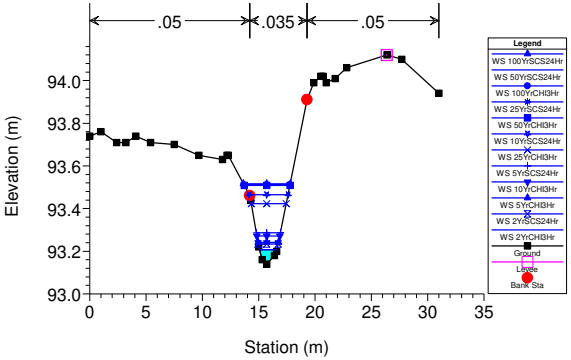

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Path
Bank Sta


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


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Driveway #4 - Ottawa Street
.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
Path
Bank Sta


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
Path
Bank Sta

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04



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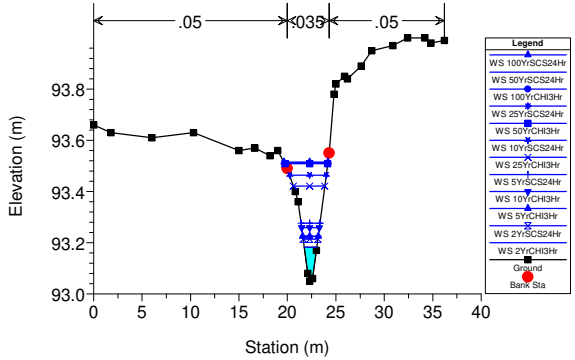

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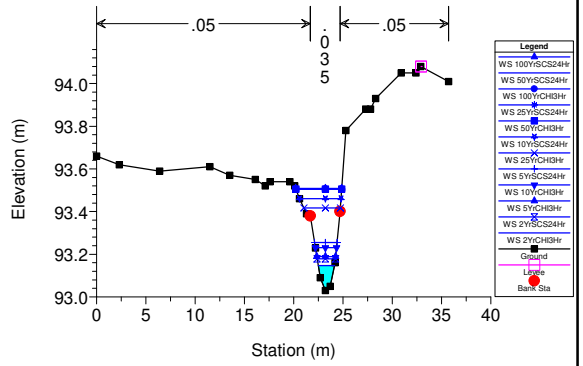

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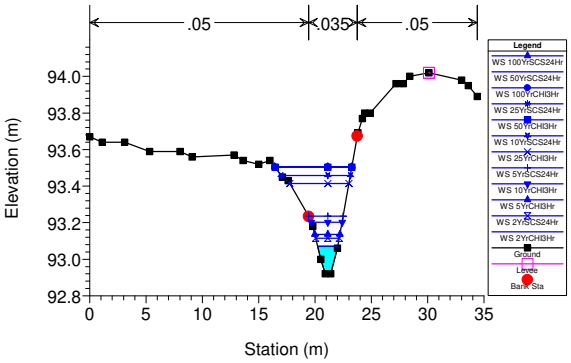

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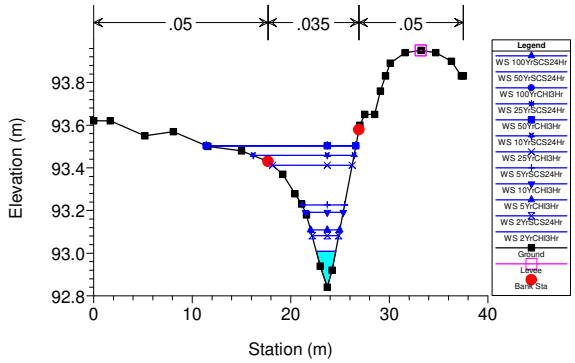
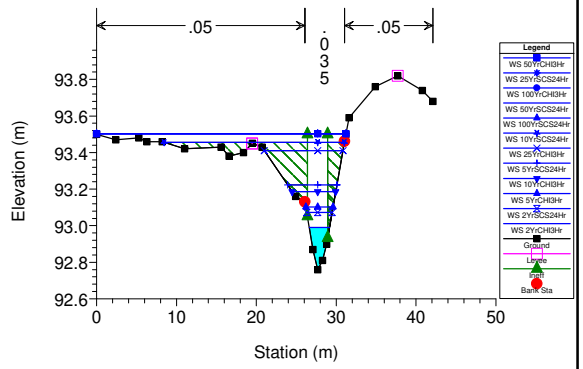
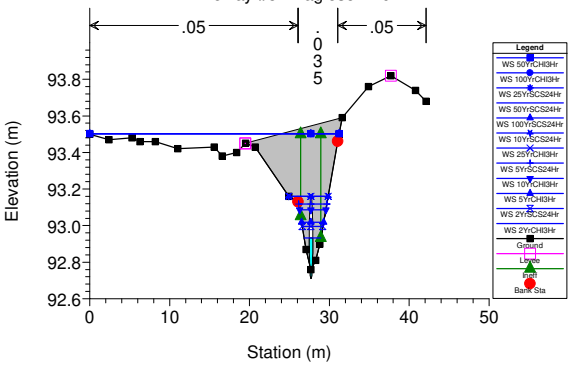


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04



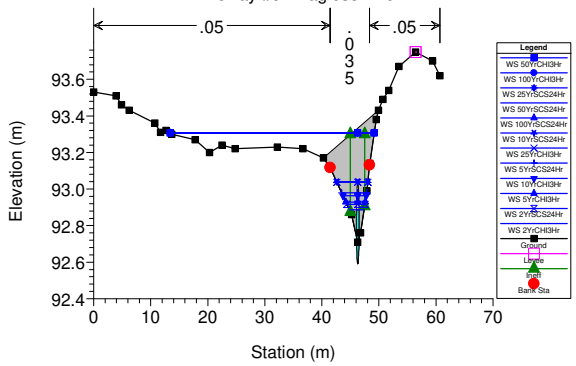
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

Driveway #5 - Eagleson Rd

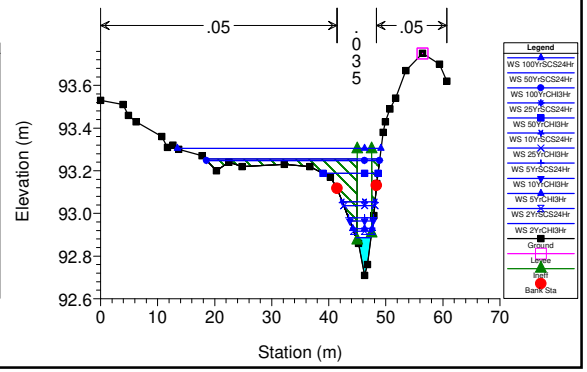


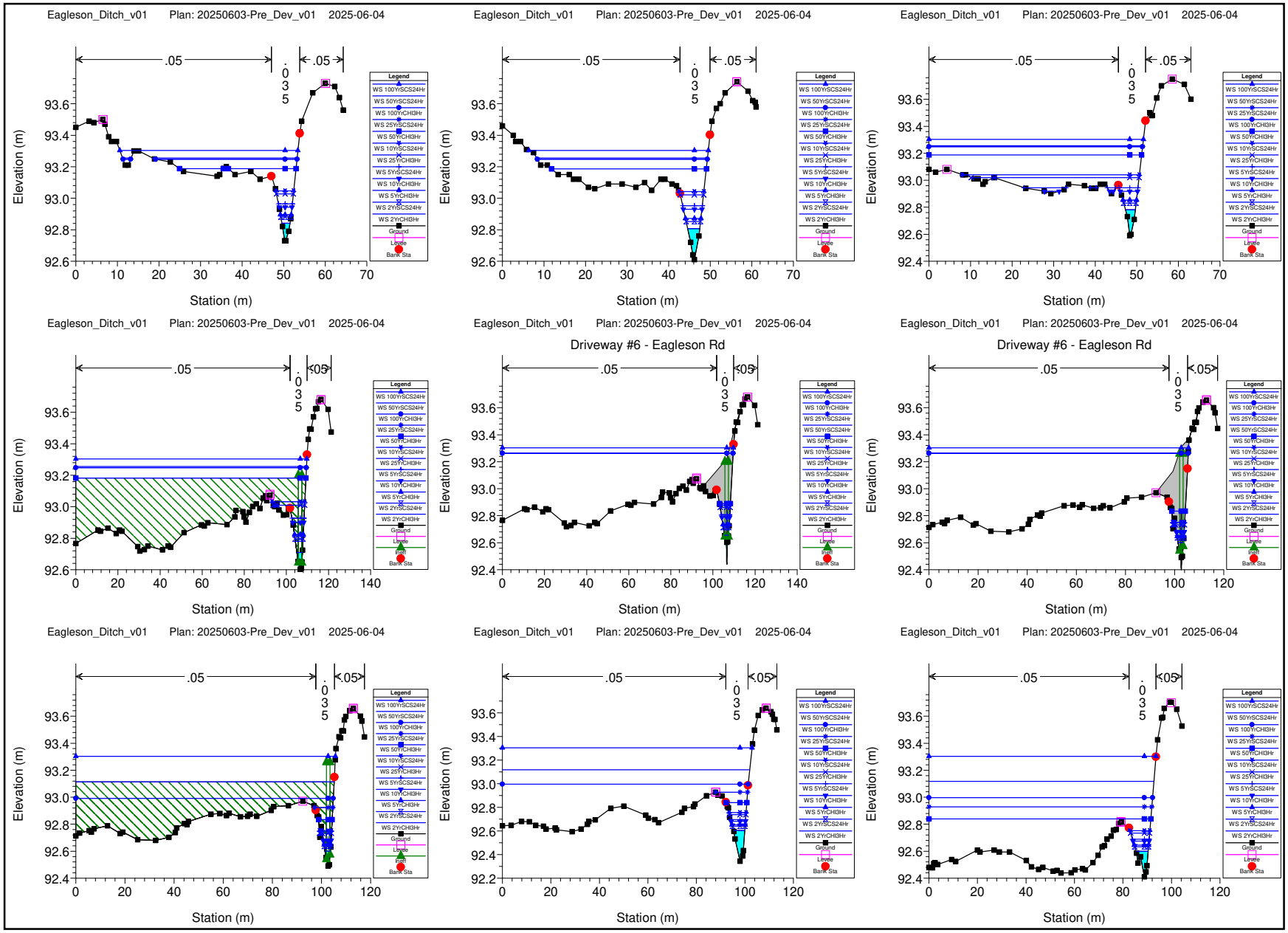
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

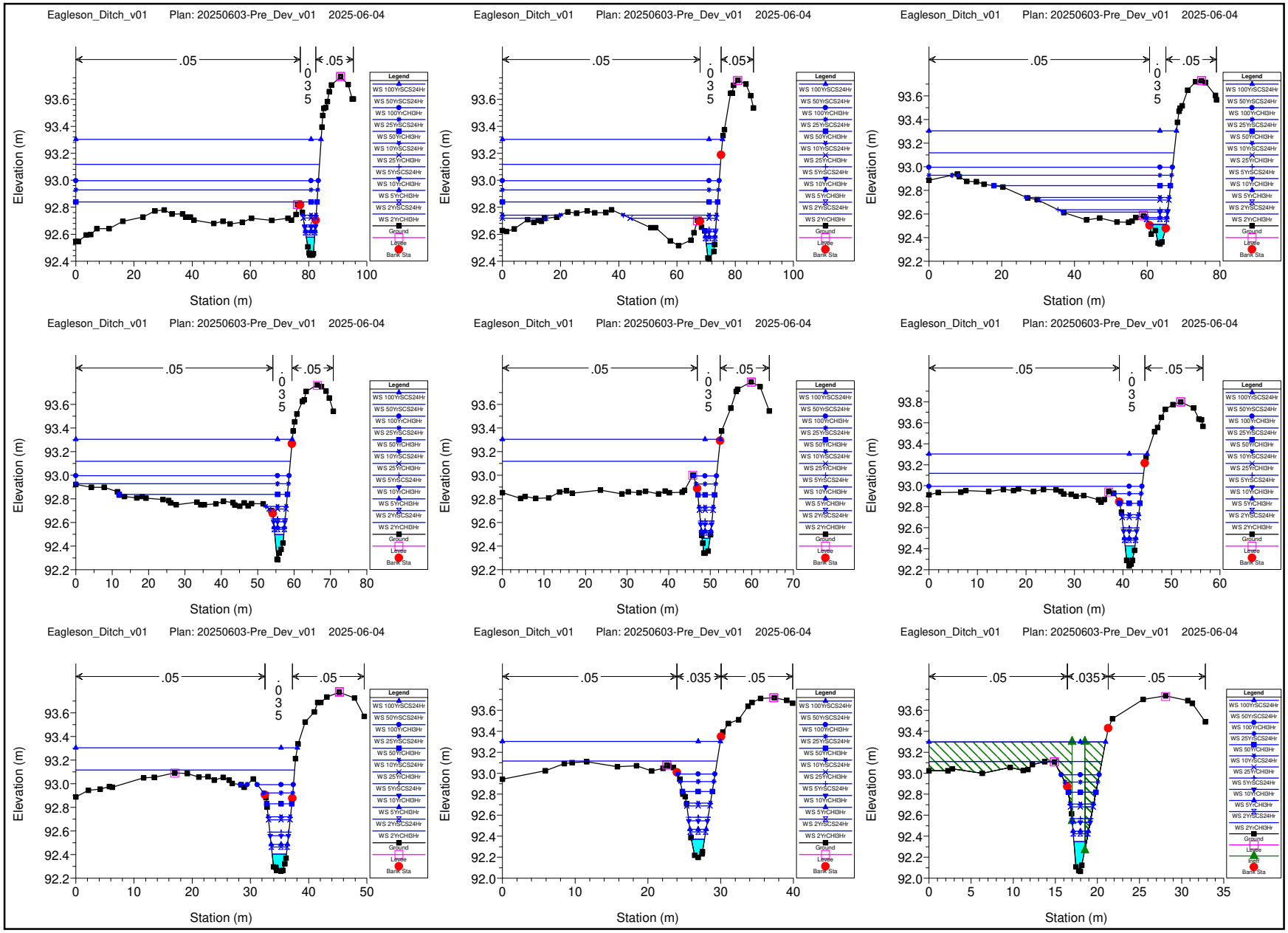
Driveway #5 - Eagleson Rd

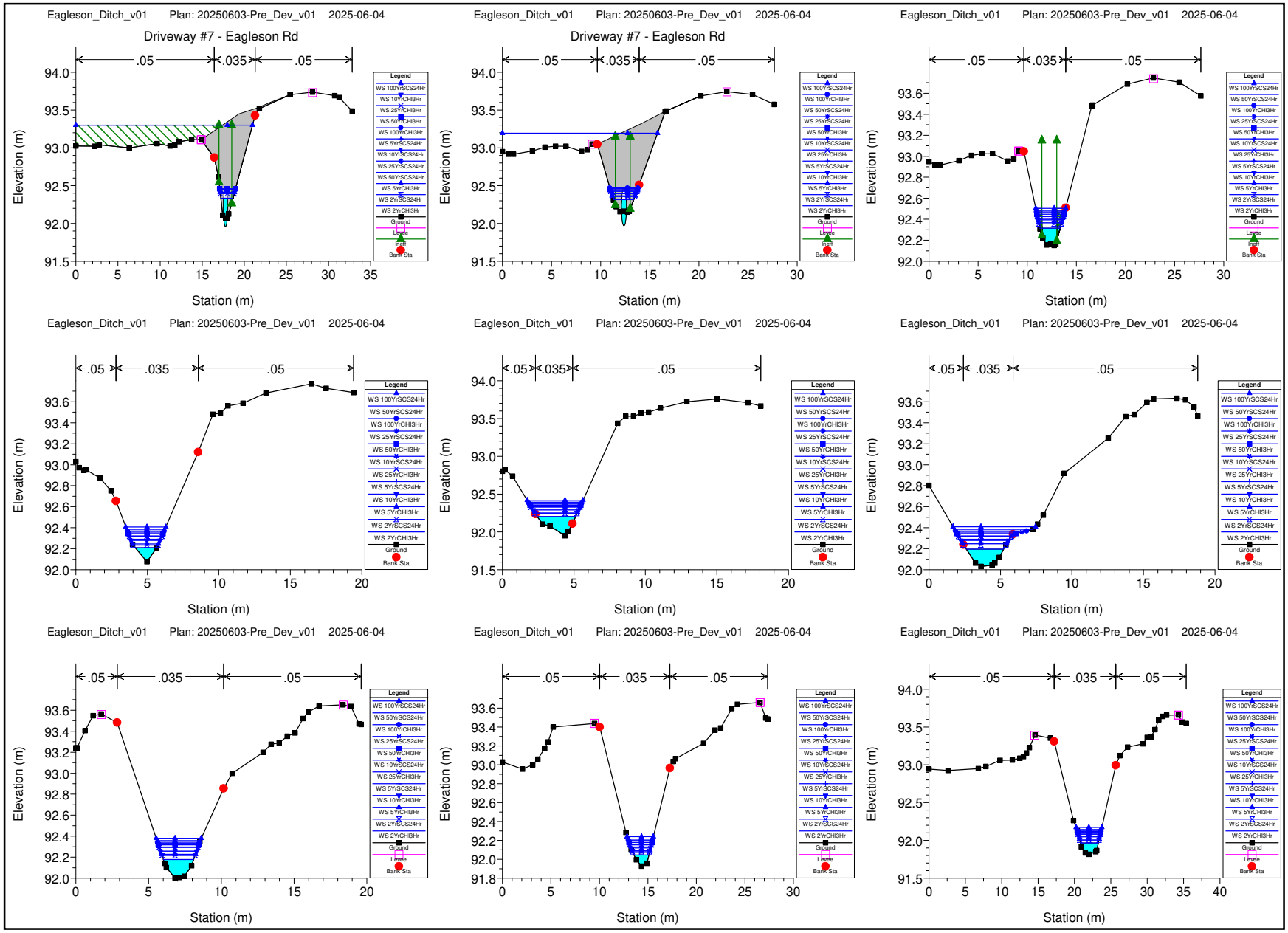


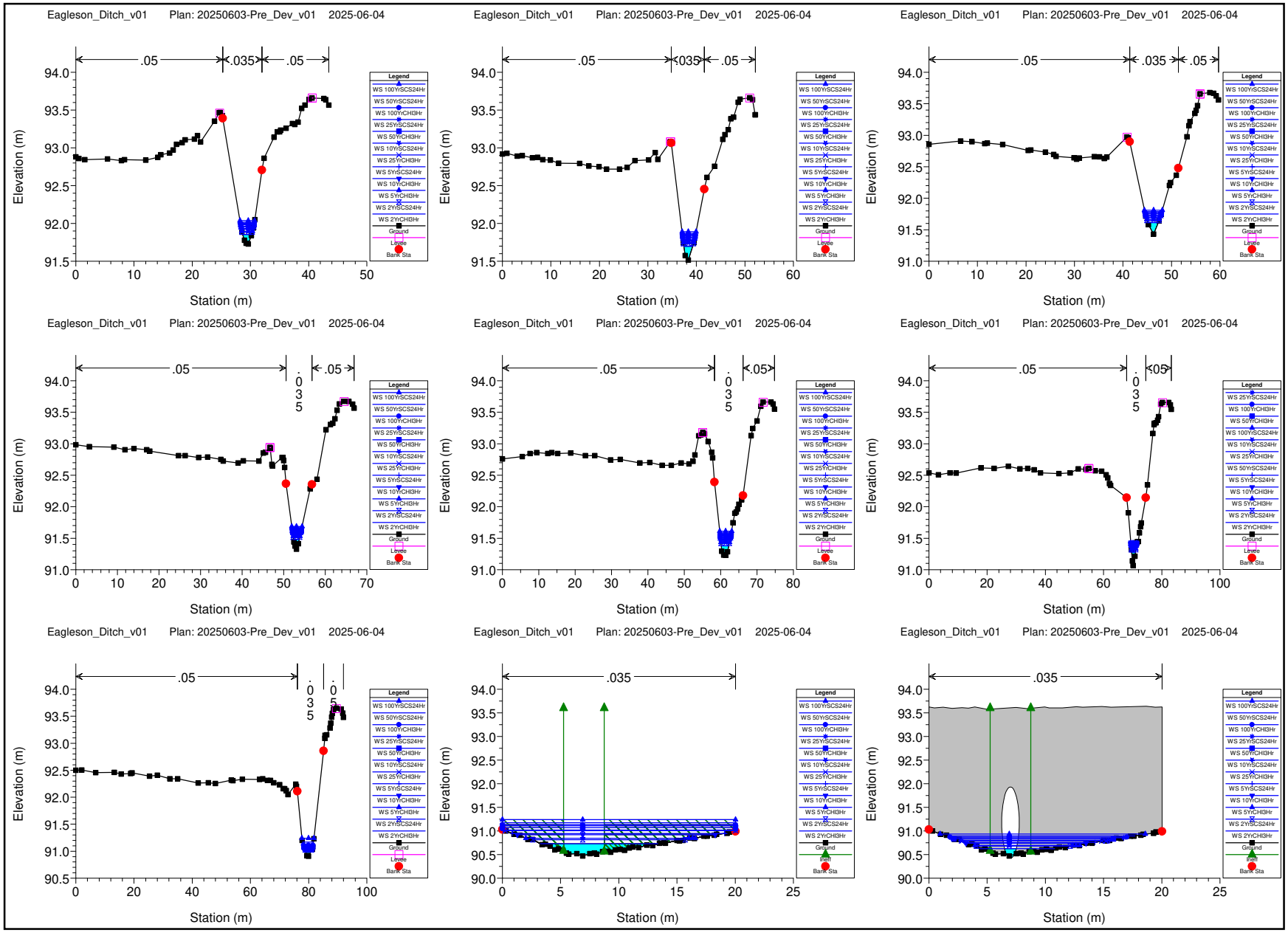
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04

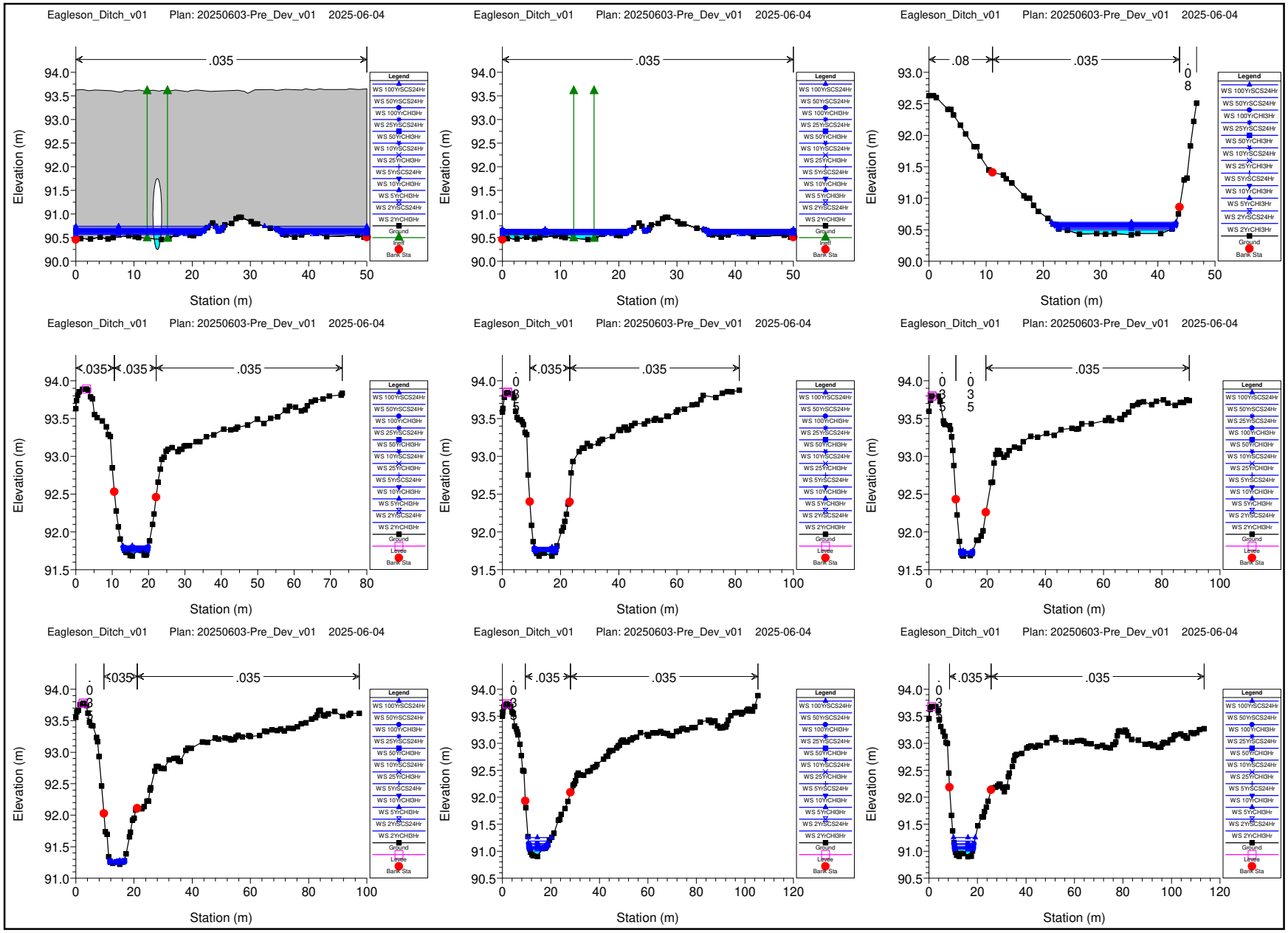



Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Driveway #6 - Eagleson Rd
.05
.035
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground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

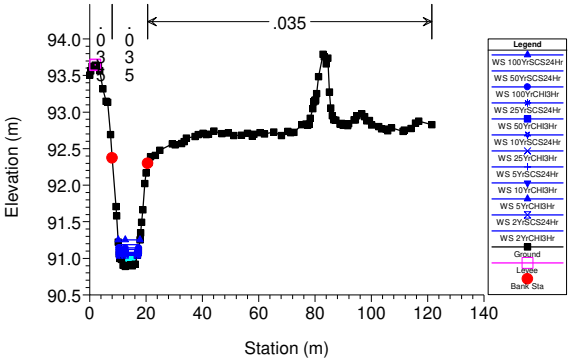

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
Elevation (m)
Station (m)
.05
.035
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
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

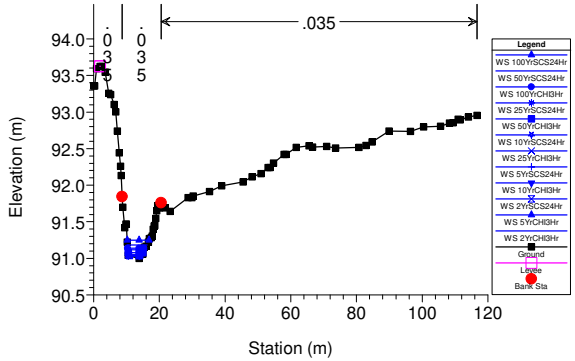

Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Inefl


Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04
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

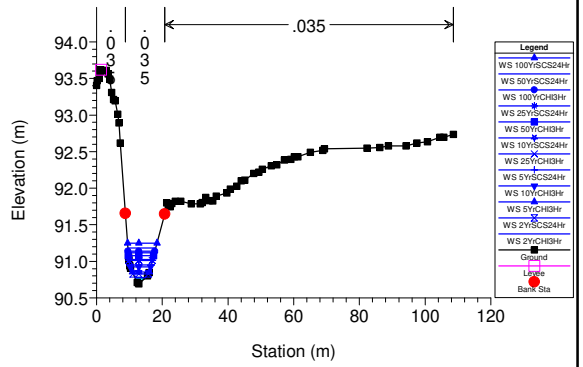
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04



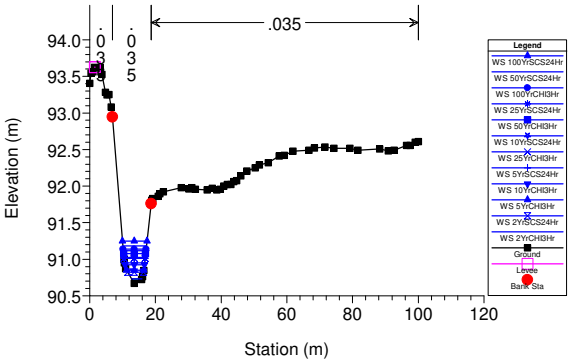
Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04



Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04



Eagleson_Ditch_v01 Plan: 20250603-Pre_Dev_v01 2025-06-04



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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	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	5YrCHI3Hr	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	10YrCHI3Hr	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	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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)

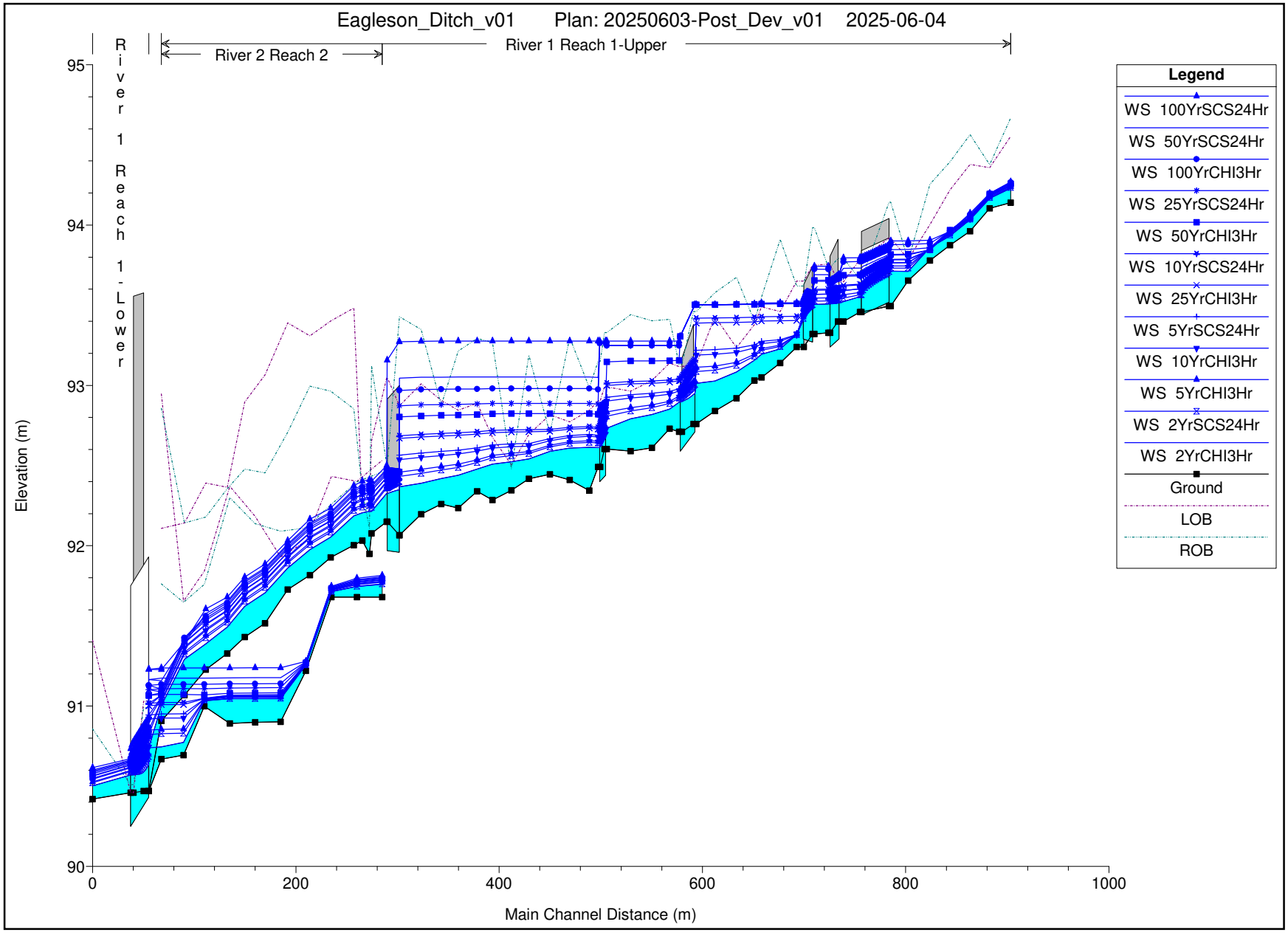
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	277	5YrSCS24Hr	0.22	91.95	92.30		92.31	0.000941	0.33	0.68	3.25	0.22
River 1	Reach 1-Upper	277	10YrSCS24Hr	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

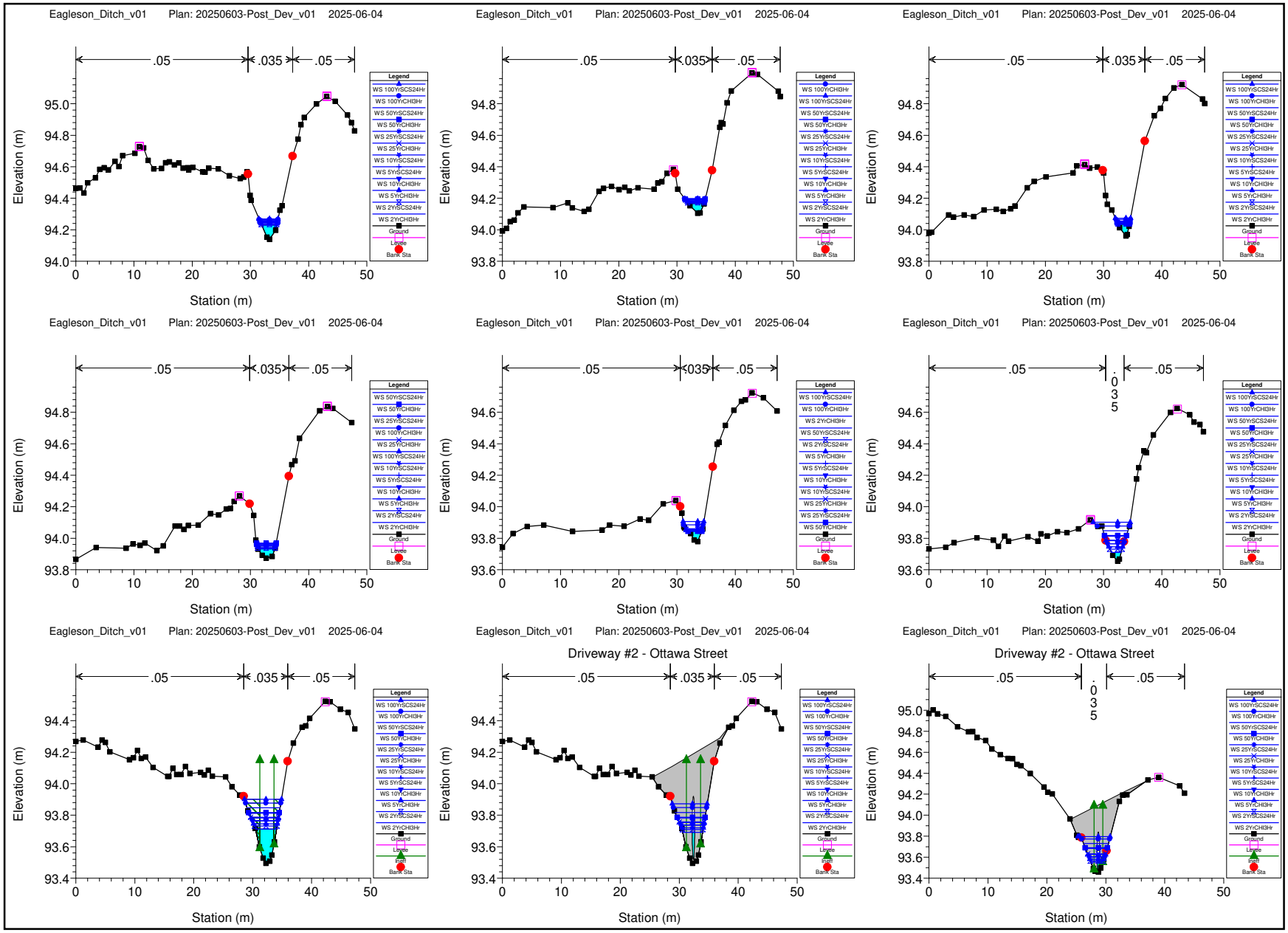
HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

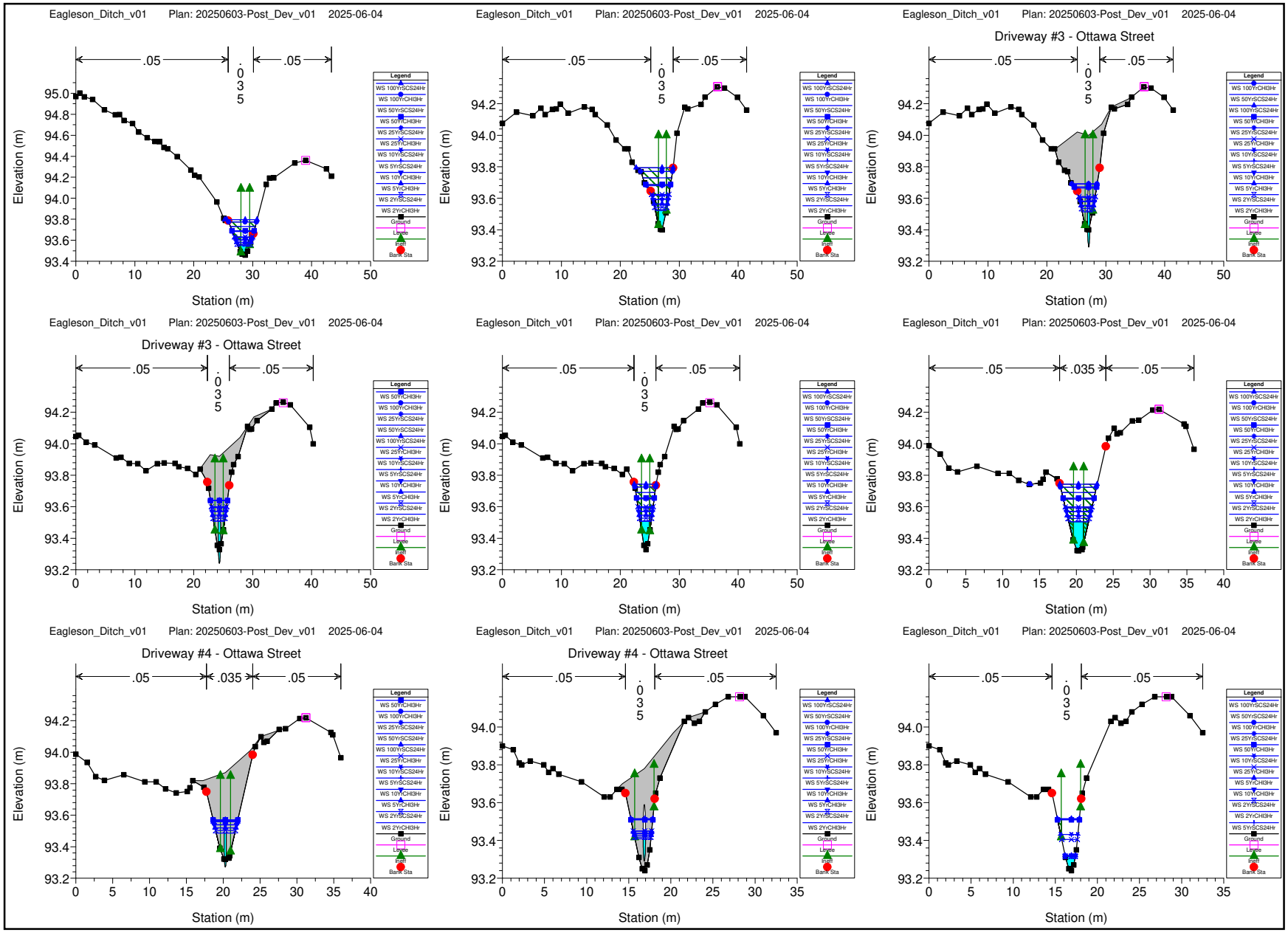
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Upper	154	2YrSCS24Hr	0.13	91.43	91.65	91.58	91.66	0.004251	0.44	0.29	2.49	0.41
River 1	Reach 1-Upper	154	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

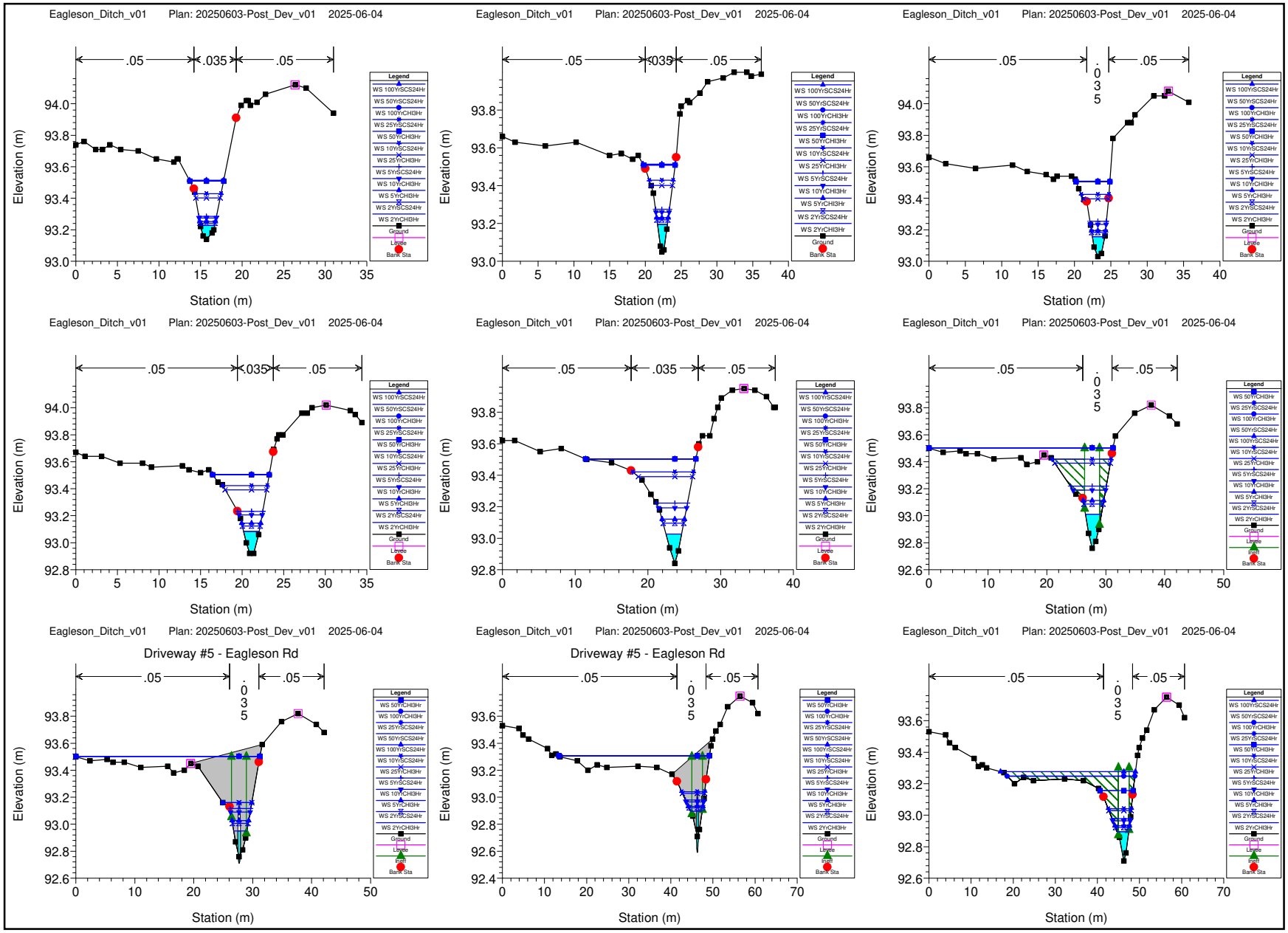
HEC-RAS Plan: 20250603-Pre_Dev_v01 (Continued)

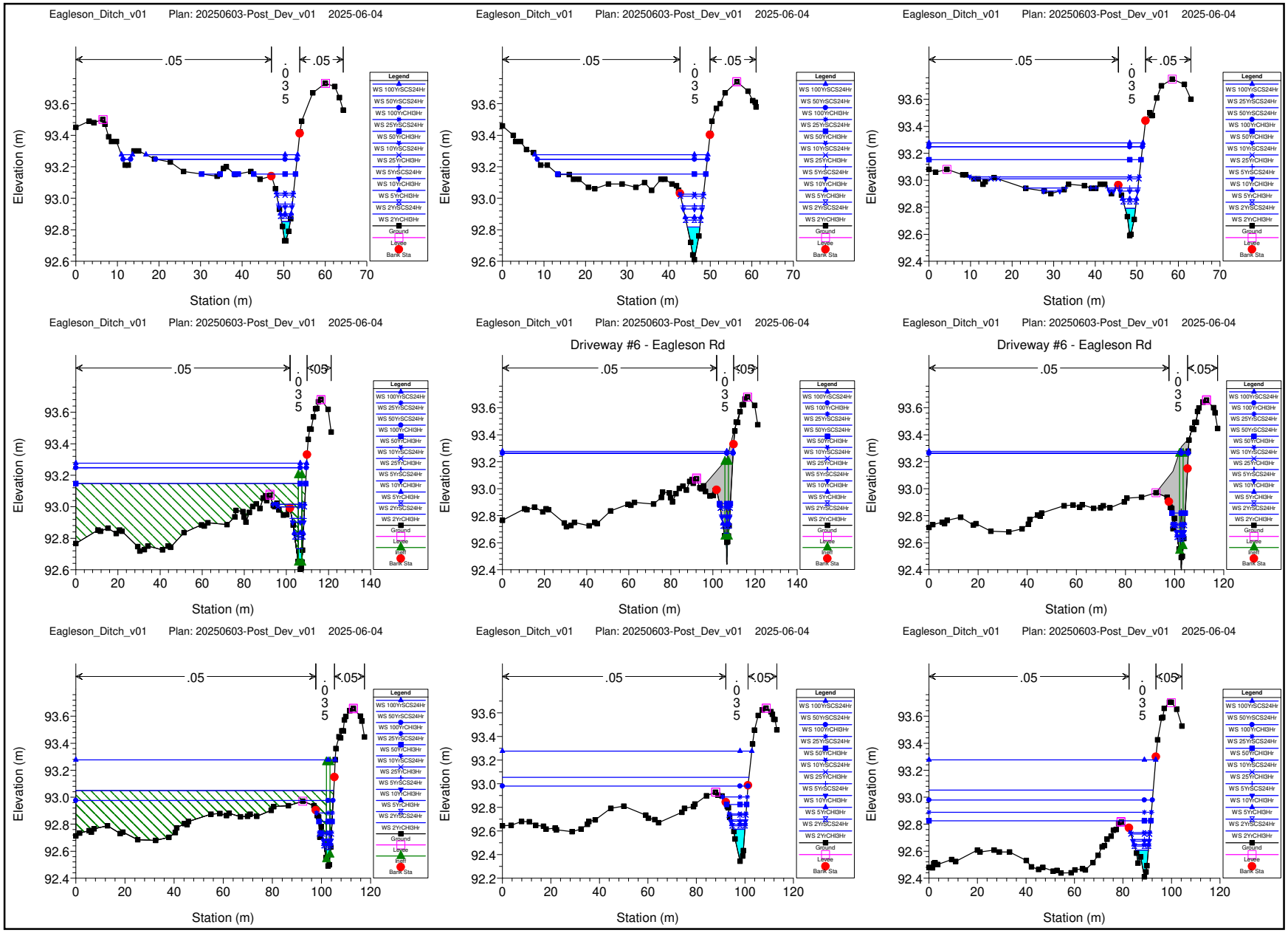
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
River 1	Reach 1-Lower	0	25YrCHI3Hr	0.49	90.42	90.56	90.49	90.57	0.001001	0.21	2.33	20.58	0.20
River 1	Reach 1-Lower	0	50YrCHI3Hr	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

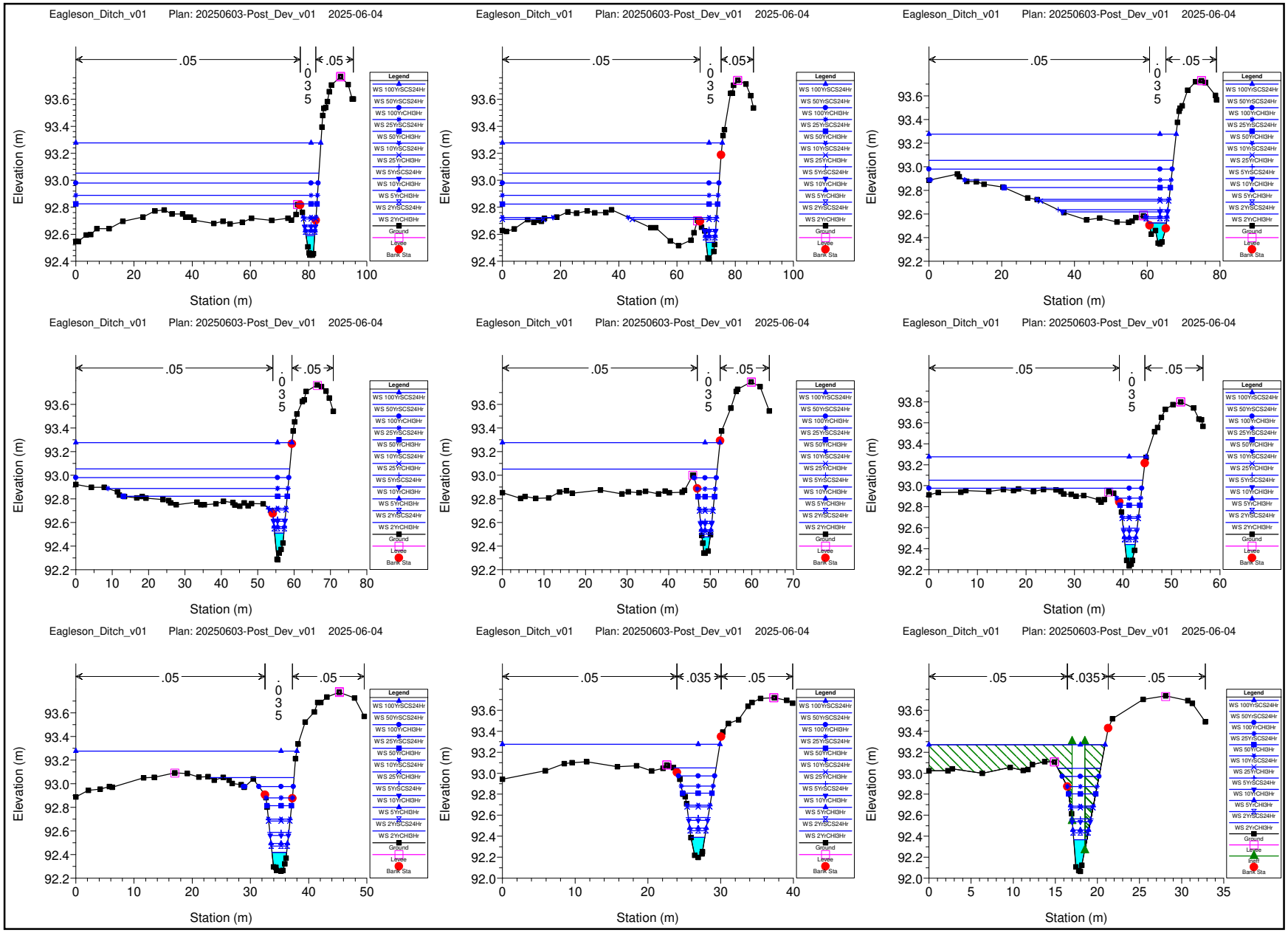

Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
River 2 Reach 2
River 1 Reach 1-Upper
River 1 Reach 1-Lower
Elevation (m)
Main Channel Distance (m)
95
94
93
92
91
90
0
200
400
600
800
1000
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
LOB
ROB

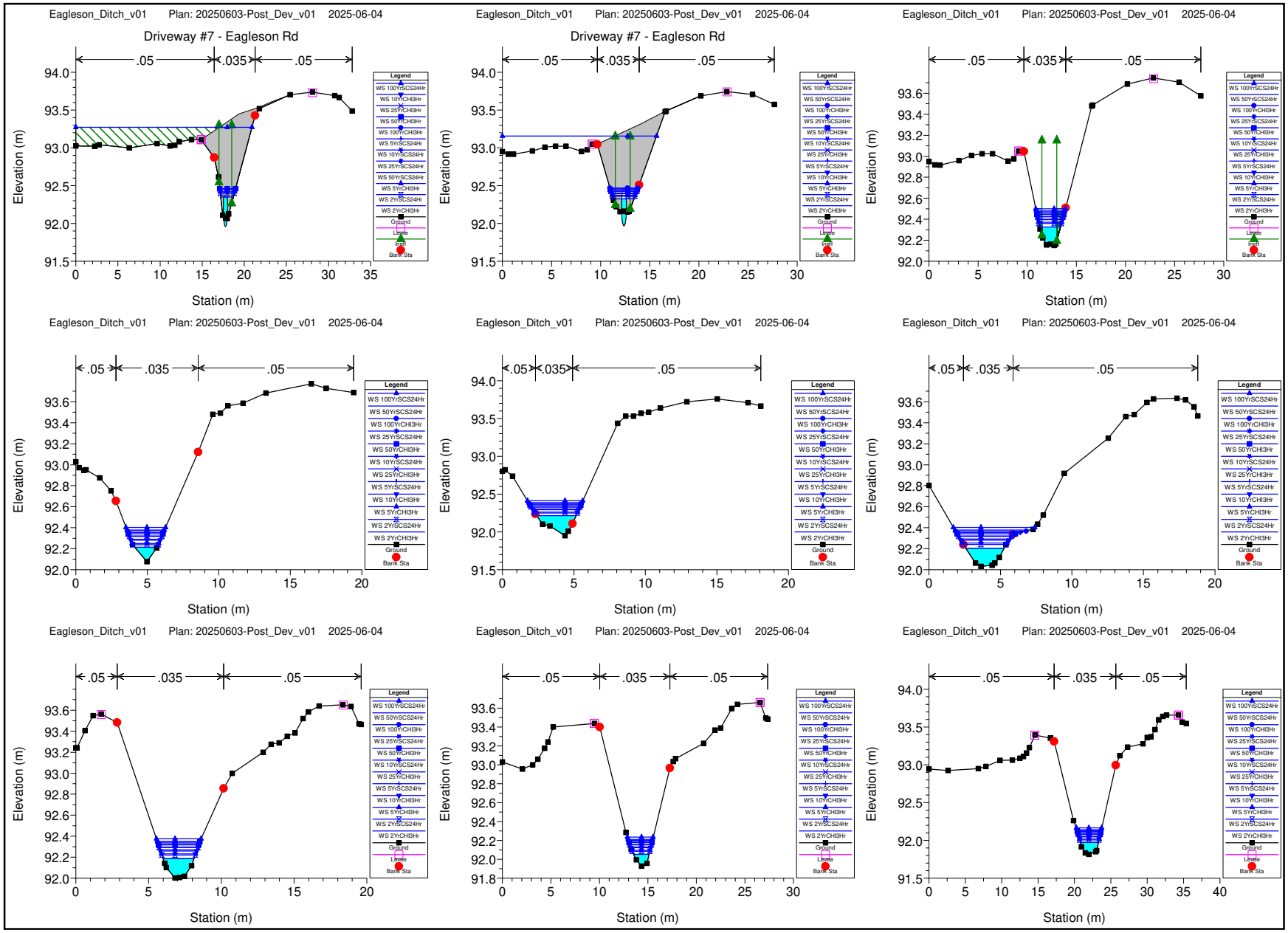

Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 100YrCHI3Hr
WS 50YrSCS24Hr
WS 50YrCHI3Hr
WS 25YrSCS24Hr
WS 25YrCHI3Hr
WS 10YrSCS24Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Driveway #2 - Ottawa Street
Path

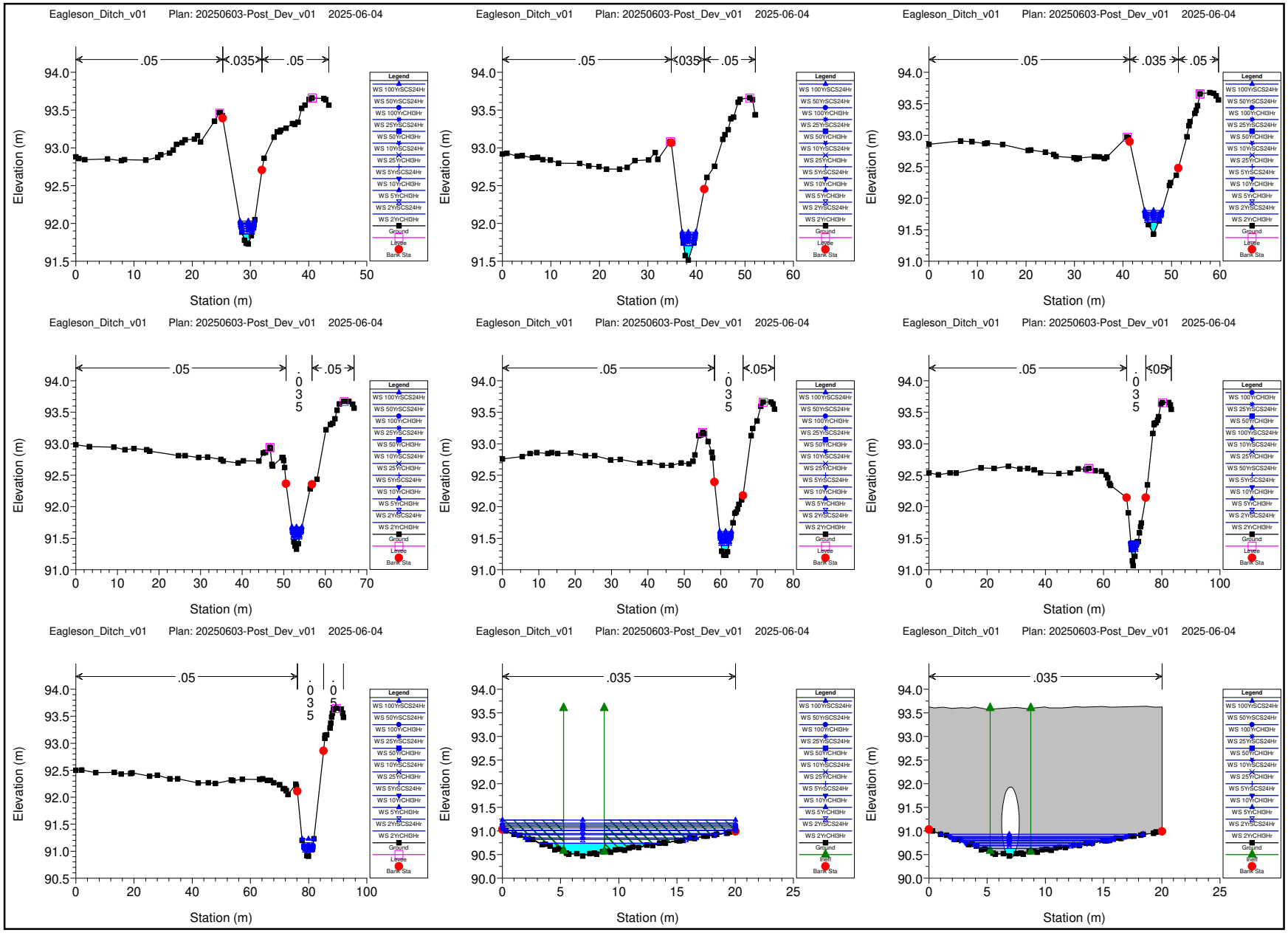

Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
Driveway #3 - Ottawa Street
Driveway #4 - Ottawa Street
.05
.035
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 100YrCHI3Hr
WS 50YrSCS24Hr
WS 50YrCHI3Hr
WS 25YrSCS24Hr
WS 25YrCHI3Hr
WS 10YrSCS24Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Path
Bank Sta

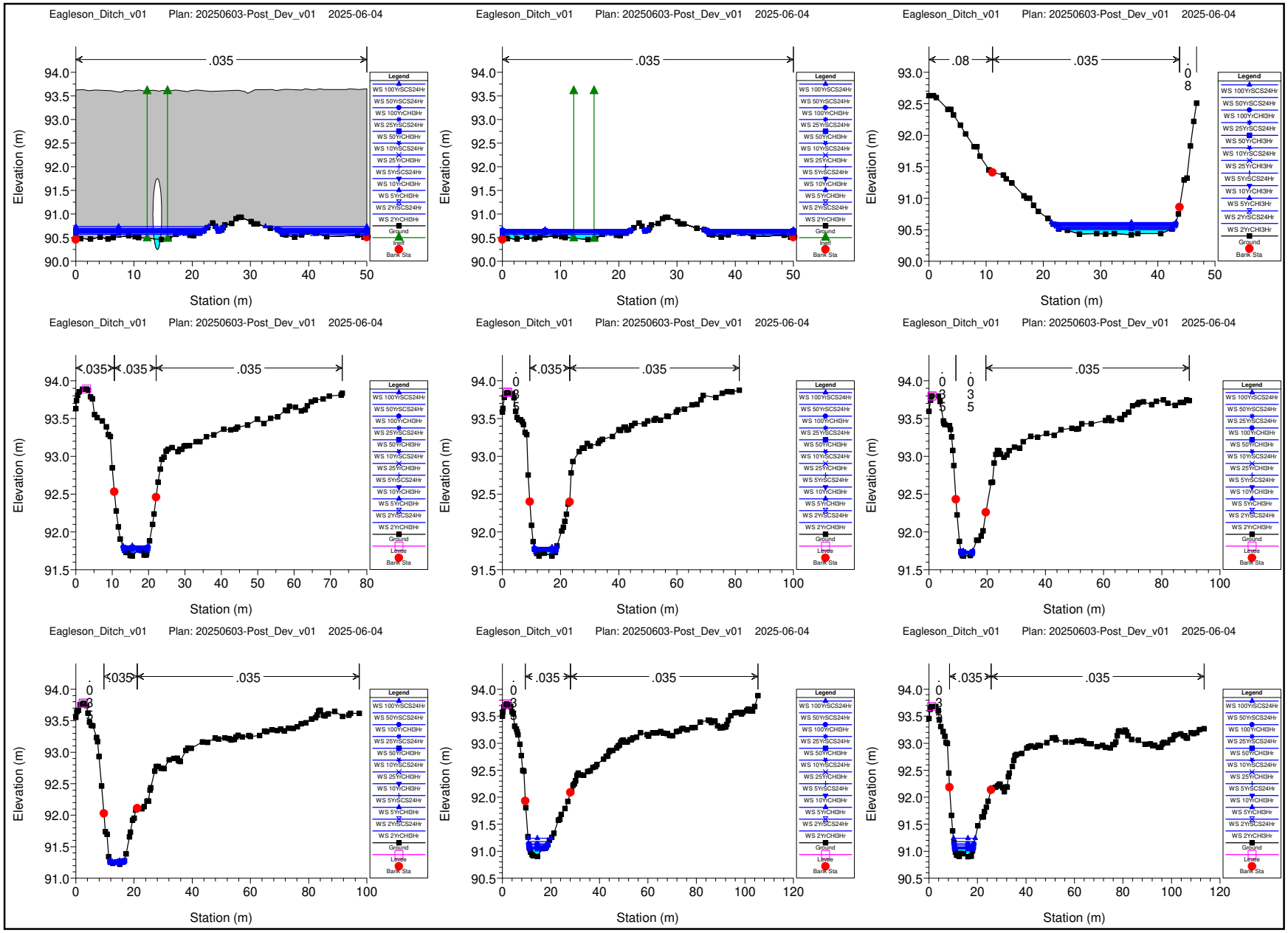

Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
Driveway #5 - Eagleson Rd
Elevation (m)
Station (m)
.05
.035
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Path
Bank Sta


Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
Driveway #6 - Eagleson Rd
.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

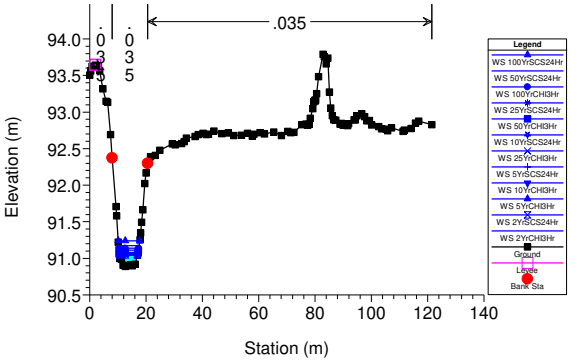

Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
Elevation (m)
Station (m)
.05
.035
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta


Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
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

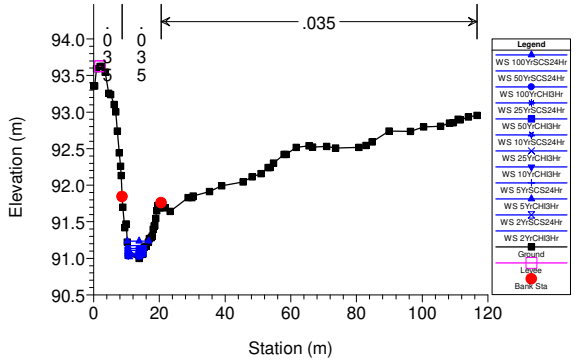

Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
.05
.035
.05
Elevation (m)
Station (m)
Legend
WS 100YrSCS24Hr
WS 50YrSCS24Hr
WS 100YrCHI3Hr
WS 25YrSCS24Hr
WS 50YrCHI3Hr
WS 10YrSCS24Hr
WS 25YrCHI3Hr
WS 5YrSCS24Hr
WS 10YrCHI3Hr
WS 5YrCHI3Hr
WS 2YrSCS24Hr
WS 2YrCHI3Hr
Ground
Levee
Bank Sta
Ineff


Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04
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

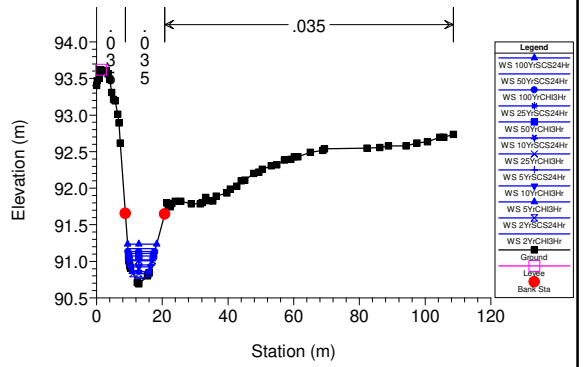
Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04



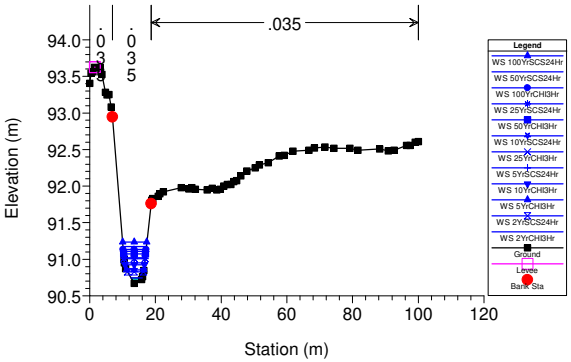
Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04



Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04



Eagleson_Ditch_v01 Plan: 20250603-Post_Dev_v01 2025-06-04



HEC-RAS Plan: 20250603-Post_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	2YrCHI3Hr	0.02	91.68	91.76	91.71	91.76	0.000697	0.09	0.23	5.59	0.14
River 2	Reach 2	224	5YrCHI3Hr	0.03	91.68	91.77	91.72	91.77	0.000738	0.10	0.31	6.45	0.15
River 2	Reach 2	224	10YrCHI3Hr	0.04	91.68	91.78	91.72	91.78	0.000754	0.11	0.34	6.51	0.15
River 2	Reach 2	224	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	0.02	91.68	91.75	91.71	91.75	0.000471	0.07	0.28	6.87	0.12
River 2	Reach 2	199	5YrCHI3Hr	0.03	91.68	91.76	91.71	91.76	0.000460	0.08	0.37	7.09	0.12
River 2	Reach 2	199	10YrCHI3Hr	0.04	91.68	91.76	91.72	91.76	0.000521	0.09	0.39	7.17	0.13
River 2	Reach 2	199	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	0.02	91.68	91.71	91.70	91.72	0.008871	0.23	0.09	3.47	0.47
River 2	Reach 2	174	5YrCHI3Hr	0.03	91.68	91.72	91.71	91.72	0.009858	0.28	0.11	3.63	0.51
River 2	Reach 2	174	10YrCHI3Hr	0.04	91.68	91.72	91.71	91.73	0.009862	0.30	0.12	3.70	0.51
River 2	Reach 2	174	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	0.02	91.22	91.26	91.26	91.26	0.055689	0.39	0.05	3.77	1.06
River 2	Reach 2	149	5YrCHI3Hr	0.03	91.22	91.26	91.26	91.27	0.043989	0.40	0.08	4.47	0.97
River 2	Reach 2	149	10YrCHI3Hr	0.04	91.22	91.26	91.26	91.27	0.044110	0.43	0.09	4.54	0.99
River 2	Reach 2	149	25YrCHI3Hr	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	50YrCHI3Hr	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	100YrCHI3Hr	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	2YrCHI3Hr	0.02	90.90	91.05	90.93	91.05	0.000047	0.04	0.51	5.19	0.04
River 2	Reach 2	124	5YrCHI3Hr	0.03	90.90	91.06	90.94	91.06	0.000089	0.06	0.55	5.84	0.06
River 2	Reach 2	124	10YrCHI3Hr	0.04	90.90	91.06	90.94	91.06	0.000122	0.06	0.59	6.56	0.07
River 2	Reach 2	124	25YrCHI3Hr	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	50YrCHI3Hr	0.06	90.90	91.08	90.95	91.08	0.000148	0.08	0.74	7.10	0.08
River 2	Reach 2	124	100YrCHI3Hr	0.07	90.90	91.14	90.95	91.14	0.000055	0.06	1.18	8.05	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	91.11	90.95	91.12	0.000090	0.07	0.98	7.81	0.06
River 2	Reach 2	124	50YrSCS24Hr	0.08	90.90	91.18	90.96	91.18	0.000036	0.05	1.48	8.41	0.04
River 2	Reach 2	124	100YrSCS24Hr	0.09	90.90	91.24	90.96	91.24	0.000020	0.05	2.03	9.41	0.03
River 2	Reach 2	99	2YrCHI3Hr	0.02	90.90	91.05	90.93	91.05	0.000014	0.02	0.84	7.48	0.02
River 2	Reach 2	99	5YrCHI3Hr	0.03	90.90	91.05	90.93	91.05	0.000024	0.03	0.91	7.55	0.03
River 2	Reach 2	99	10YrCHI3Hr	0.04	90.90	91.06	90.93	91.06	0.000030	0.04	0.94	7.58	0.04
River 2	Reach 2	99	25YrCHI3Hr	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	50YrCHI3Hr	0.06	90.90	91.08	90.94	91.08	0.000043	0.05	1.11	7.76	0.04
River 2	Reach 2	99	100YrCHI3Hr	0.07	90.90	91.14	90.94	91.14	0.000021	0.04	1.57	8.21	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	91.11	90.94	91.11	0.000030	0.05	1.37	8.01	0.04
River 2	Reach 2	99	50YrSCS24Hr	0.08	90.90	91.18	90.94	91.18	0.000016	0.04	1.88	8.49	0.03
River 2	Reach 2	99	100YrSCS24Hr	0.09	90.90	91.24	90.95	91.24	0.000010	0.04	2.43	8.94	0.02
River 2	Reach 2	74	2YrCHI3Hr	0.02	90.89	91.05	90.92	91.05	0.000016	0.03	0.76	6.41	0.03
River 2	Reach 2	74	5YrCHI3Hr	0.03	90.89	91.05	90.92	91.05	0.000029	0.04	0.81	6.48	0.03
River 2	Reach 2	74	10YrCHI3Hr	0.04	90.89	91.06	90.92	91.06	0.000037	0.04	0.84	6.52	0.04
River 2	Reach 2	74	25YrCHI3Hr	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	50YrCHI3Hr	0.06	90.89	91.08	90.93	91.08	0.000053	0.06	0.98	6.68	0.05
River 2	Reach 2	74	100YrCHI3Hr	0.07	90.89	91.14	90.93	91.14	0.000027	0.05	1.39	7.06	0.04
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	91.11	90.93	91.11	0.000038	0.05	1.21	6.91	0.04
River 2	Reach 2	74	50YrSCS24Hr	0.08	90.89	91.18	90.93	91.18	0.000020	0.05	1.65	7.28	0.03
River 2	Reach 2	74	100YrSCS24Hr	0.09	90.89	91.24	90.94	91.24	0.000013	0.04	2.12	7.64	0.03

HEC-RAS Plan: 20250603-Post_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	0.054210	0.44	0.05	2.78	1.08
River 2	Reach 2	49	5YrCHI3Hr	0.03	91.00	91.04	91.04	91.05	0.044076	0.45	0.07	3.35	1.00
River 2	Reach 2	49	10YrCHI3Hr	0.04	91.00	91.04	91.04	91.05	0.038624	0.46	0.08	3.50	0.96
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	91.07	91.05	91.08	0.007772	0.32	0.18	3.99	0.48
River 2	Reach 2	49	100YrCHI3Hr	0.07	91.00	91.14	91.05	91.14	0.000594	0.15	0.48	4.93	0.15
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	91.11	91.05	91.11	0.001479	0.19	0.34	4.59	0.23
River 2	Reach 2	49	50YrSCS24Hr	0.08	91.00	91.17	91.06	91.17	0.000297	0.12	0.68	5.81	0.11
River 2	Reach 2	49	100YrSCS24Hr	0.09	91.00	91.24	91.06	91.24	0.000105	0.09	1.07	6.54	0.07
River 2	Reach 2	28	2YrCHI3Hr	0.02	90.69	90.77	90.73	90.77	0.001515	0.14	0.13	3.11	0.21
River 2	Reach 2	28	5YrCHI3Hr	0.03	90.69	90.86	90.75	90.86	0.000133	0.07	0.50	5.25	0.07
River 2	Reach 2	28	10YrCHI3Hr	0.05	90.69	90.93	90.75	90.93	0.000046	0.05	0.90	6.29	0.04
River 2	Reach 2	28	25YrCHI3Hr	0.06	90.69	91.01	90.76	91.01	0.000020	0.04	1.46	7.11	0.03
River 2	Reach 2	28	50YrCHI3Hr	0.08	90.69	91.07	90.77	91.07	0.000013	0.04	1.93	7.65	0.03
River 2	Reach 2	28	100YrCHI3Hr	0.09	90.69	91.14	90.78	91.14	0.000009	0.04	2.43	8.13	0.02
River 2	Reach 2	28	2YrSCS24Hr	0.03	90.69	90.83	90.74	90.83	0.000261	0.08	0.37	4.76	0.10
River 2	Reach 2	28	5YrSCS24Hr	0.05	90.69	90.95	90.76	90.95	0.000035	0.05	1.06	6.56	0.04
River 2	Reach 2	28	10YrSCS24Hr	0.07	90.69	91.02	90.76	91.02	0.000019	0.04	1.55	7.24	0.03
River 2	Reach 2	28	25YrSCS24Hr	0.09	90.69	91.11	90.77	91.11	0.000011	0.04	2.21	7.92	0.02
River 2	Reach 2	28	50YrSCS24Hr	0.11	90.69	91.17	90.78	91.17	0.000008	0.04	2.74	8.41	0.02
River 2	Reach 2	28	100YrSCS24Hr	0.13	90.69	91.24	90.79	91.24	0.000007	0.04	3.29	8.89	0.02
River 2	Reach 2	7	2YrCHI3Hr	0.02	90.67	90.75	90.71	90.75	0.001146	0.12	0.15	3.37	0.18
River 2	Reach 2	7	5YrCHI3Hr	0.03	90.67	90.86	90.72	90.86	0.000063	0.05	0.62	5.26	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	1.54	6.42	0.03
River 2	Reach 2	7	50YrCHI3Hr	0.08	90.67	91.07	90.74	91.07	0.000010	0.04	1.96	6.69	0.02
River 2	Reach 2	7	100YrCHI3Hr	0.09	90.67	91.14	90.74	91.14	0.000008	0.04	2.39	6.96	0.02
River 2	Reach 2	7	2YrSCS24Hr	0.03	90.67	90.83	90.72	90.83	0.000105	0.06	0.49	4.81	0.06
River 2	Reach 2	7	5YrSCS24Hr	0.05	90.67	90.95	90.73	90.95	0.000023	0.05	1.17	6.11	0.03
River 2	Reach 2	7	10YrSCS24Hr	0.07	90.67	91.02	90.73	91.02	0.000014	0.04	1.63	6.48	0.03
River 2	Reach 2	7	25YrSCS24Hr	0.09	90.67	91.11	90.74	91.11	0.000010	0.04	2.20	6.84	0.02
River 2	Reach 2	7	50YrSCS24Hr	0.11	90.67	91.17	90.75	91.17	0.000008	0.04	2.66	7.12	0.02
River 2	Reach 2	7	100YrSCS24Hr	0.13	90.67	91.24	90.76	91.24	0.000007	0.04	3.11	7.38	0.02
River 1	Reach 1-Upper	908	2YrCHI3Hr	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	5YrCHI3Hr	0.03	94.14	94.24	94.19	94.24	0.001946	0.19	0.17	2.76	0.25
River 1	Reach 1-Upper	908	10YrCHI3Hr	0.04	94.14	94.24	94.20	94.25	0.002043	0.20	0.18	2.85	0.26
River 1	Reach 1-Upper	908	25YrCHI3Hr	0.04	94.14	94.25	94.20	94.25	0.002127	0.22	0.20	2.96	0.27
River 1	Reach 1-Upper	908	50YrCHI3Hr	0.05	94.14	94.26	94.20	94.26	0.002210	0.23	0.22	3.07	0.28
River 1	Reach 1-Upper	908	100YrCHI3Hr	0.06	94.14	94.27	94.21	94.27	0.002252	0.24	0.25	3.23	0.28
River 1	Reach 1-Upper	908	2YrSCS24Hr	0.03	94.14	94.23	94.19	94.24	0.001856	0.18	0.15	2.68	0.24
River 1	Reach 1-Upper	908	5YrSCS24Hr	0.04	94.14	94.24	94.20	94.25	0.002043	0.20	0.18	2.85	0.26
River 1	Reach 1-Upper	908	10YrSCS24Hr	0.04	94.14	94.25	94.20	94.25	0.002124	0.22	0.19	2.94	0.27
River 1	Reach 1-Upper	908	25YrSCS24Hr	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	50YrSCS24Hr	0.06	94.14	94.26	94.21	94.26	0.002260	0.24	0.23	3.15	0.28
River 1	Reach 1-Upper	908	100YrSCS24Hr	0.06	94.14	94.27	94.21	94.27	0.002214	0.25	0.26	3.28	0.28
River 1	Reach 1-Upper	887	2YrCHI3Hr	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	5YrCHI3Hr	0.03	94.10	94.18	94.15	94.18	0.005292	0.25	0.13	2.98	0.39
River 1	Reach 1-Upper	887	10YrCHI3Hr	0.04	94.10	94.18	94.15	94.19	0.004912	0.26	0.14	3.14	0.38
River 1	Reach 1-Upper	887	25YrCHI3Hr	0.04	94.10	94.19	94.16	94.19	0.004656	0.26	0.16	3.30	0.38
River 1	Reach 1-Upper	887	50YrCHI3Hr	0.05	94.10	94.19	94.16	94.20	0.004554	0.27	0.18	3.46	0.38
River 1	Reach 1-Upper	887	100YrCHI3Hr	0.06	94.10	94.20	94.17	94.20	0.005462	0.31	0.20	3.56	0.42
River 1	Reach 1-Upper	887	2YrSCS24Hr	0.03	94.10	94.17	94.15	94.17	0.005714	0.25	0.11	2.85	0.40
River 1	Reach 1-Upper	887	5YrSCS24Hr	0.04	94.10	94.18	94.15	94.19	0.004912	0.26	0.14	3.14	0.38
River 1	Reach 1-Upper	887	10YrSCS24Hr	0.04	94.10	94.19	94.16	94.19	0.004513	0.26	0.16	3.29	0.37
River 1	Reach 1-Upper	887	25YrSCS24Hr	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	50YrSCS24Hr	0.06	94.10	94.20	94.16	94.20	0.004954	0.29	0.19	3.52	0.39
River 1	Reach 1-Upper	887	100YrSCS24Hr	0.06	94.10	94.20	94.17	94.20	0.006457	0.33	0.19	3.52	0.45
River 1	Reach 1-Upper	868	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.96	94.04	94.02	94.04	0.009697	0.35	0.09	2.03	0.53
River 1	Reach 1-Upper	868	10YrCHI3Hr	0.04	93.96	94.04	94.02	94.05	0.011232	0.39	0.10	2.07	0.58
River 1	Reach 1-Upper	868	25YrCHI3Hr	0.04	93.96	94.04	94.03	94.05	0.012506	0.42	0.10	2.12	0.61
River 1	Reach 1-Upper	868	50YrCHI3Hr	0.05	93.96	94.05	94.03	94.06	0.013181	0.45	0.11	2.20	0.64
River 1	Reach 1-Upper	868	100YrCHI3Hr	0.06	93.96	94.06	94.04	94.07	0.008320	0.40	0.15	2.47	0.52
River 1	Reach 1-Upper	868	2YrSCS24Hr	0.03	93.96	94.04	94.02	94.04	0.008571	0.33	0.09	1.99	0.50
River 1	Reach 1-Upper	868	5YrSCS24Hr	0.04	93.96	94.04	94.02	94.05	0.011232	0.39	0.10	2.07	0.58
River 1	Reach 1-Upper	868	10YrSCS24Hr	0.04	93.96	94.04	94.03	94.05	0.012446	0.42	0.10	2.11	0.61
River 1	Reach 1-Upper	868	25YrSCS24Hr	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	50YrSCS24Hr	0.06	93.96	94.06	94.04	94.06	0.011152	0.43	0.13	2.31	0.59
River 1	Reach 1-Upper	868	100YrSCS24Hr	0.06	93.96	94.07	94.04	94.08	0.006475	0.37	0.17	2.61	0.46
River 1	Reach 1-Upper	848	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.87	93.94	93.91	93.95	0.002995	0.21	0.15	3.10	0.30
River 1	Reach 1-Upper	848	10YrCHI3Hr	0.04	93.87	93.95	93.92	93.95	0.002574	0.21	0.18	3.18	0.29
River 1	Reach 1-Upper	848	25YrCHI3Hr	0.04	93.87	93.96	93.92	93.96	0.002211	0.21	0.20	3.28	0.27
River 1	Reach 1-Upper	848	50YrCHI3Hr	0.05	93.87	93.97	93.92	93.97	0.002070	0.22	0.23	3.37	0.26
River 1	Reach 1-Upper	848	100YrCHI3Hr	0.06	93.87	93.96	93.93	93.97	0.003639	0.28	0.22	3.32	0.35
River 1	Reach 1-Upper	848	2YrSCS24Hr	0.03	93.87	93.94	93.91	93.94	0.003360	0.21	0.13	3.03	0.31
River 1	Reach 1-Upper	848	5YrSCS24Hr	0.04	93.87	93.95	93.92	93.95	0.002574	0.21	0.18	3.18	0.29
River 1	Reach 1-Upper	848	10YrSCS24Hr	0.04	93.87	93.96	93.92	93.96	0.002254	0.21	0.20	3.26	0.27
River 1	Reach 1-Upper	848	25YrSCS24Hr	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	50YrSCS24Hr	0.06	93.87	93.97	93.92	93.97	0.002494	0.24	0.23	3.37	0.29

HEC-RAS Plan: 20250603-Post_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	0.06	93.87	93.96	93.93	93.96	0.005013	0.31	0.20	3.26	0.41
River 1	Reach 1-Upper	828	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.78	93.86	93.83	93.86	0.007085	0.28	0.11	2.81	0.45
River 1	Reach 1-Upper	828	10YrCHI3Hr	0.04	93.78	93.85	93.84	93.86	0.012962	0.37	0.10	2.61	0.60
River 1	Reach 1-Upper	828	25YrCHI3Hr	0.04	93.78	93.84	93.84	93.86	0.027482	0.51	0.08	2.34	0.87
River 1	Reach 1-Upper	828	50YrCHI3Hr	0.05	93.78	93.84	93.84	93.86	0.037796	0.60	0.08	2.33	1.02
River 1	Reach 1-Upper	828	100YrCHI3Hr	0.06	93.78	93.88	93.85	93.89	0.004443	0.29	0.20	3.38	0.38
River 1	Reach 1-Upper	828	2YrSCS24Hr	0.03	93.78	93.86	93.83	93.86	0.005209	0.24	0.12	2.83	0.39
River 1	Reach 1-Upper	828	5YrSCS24Hr	0.04	93.78	93.85	93.84	93.86	0.012962	0.37	0.10	2.61	0.60
River 1	Reach 1-Upper	828	10YrSCS24Hr	0.04	93.78	93.85	93.84	93.86	0.023615	0.48	0.09	2.40	0.81
River 1	Reach 1-Upper	828	25YrSCS24Hr	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	50YrSCS24Hr	0.06	93.78	93.86	93.85	93.87	0.017759	0.46	0.12	2.91	0.71
River 1	Reach 1-Upper	828	100YrSCS24Hr	0.06	93.78	93.91	93.85	93.91	0.001940	0.23	0.28	3.55	0.26
River 1	Reach 1-Upper	807	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.65	93.75	93.71	93.75	0.003849	0.25	0.13	2.40	0.35
River 1	Reach 1-Upper	807	10YrCHI3Hr	0.04	93.65	93.77	93.71	93.77	0.002057	0.21	0.18	2.79	0.26
River 1	Reach 1-Upper	807	25YrCHI3Hr	0.04	93.65	93.79	93.72	93.79	0.001125	0.17	0.25	3.25	0.20
River 1	Reach 1-Upper	807	50YrCHI3Hr	0.05	93.65	93.82	93.72	93.82	0.000498	0.14	0.35	3.78	0.14
River 1	Reach 1-Upper	807	100YrCHI3Hr	0.06	93.65	93.88	93.73	93.88	0.000155	0.11	0.61	5.55	0.08
River 1	Reach 1-Upper	807	2YrSCS24Hr	0.03	93.65	93.73	93.71	93.74	0.006535	0.29	0.10	2.12	0.44
River 1	Reach 1-Upper	807	5YrSCS24Hr	0.04	93.65	93.77	93.71	93.77	0.002057	0.21	0.18	2.79	0.26
River 1	Reach 1-Upper	807	10YrSCS24Hr	0.04	93.65	93.78	93.72	93.79	0.001247	0.18	0.23	3.18	0.21
River 1	Reach 1-Upper	807	25YrSCS24Hr	0.05	93.65	93.81	93.72	93.81	0.000553	0.15	0.34	3.70	0.15
River 1	Reach 1-Upper	807	50YrSCS24Hr	0.06	93.65	93.85	93.73	93.85	0.000265	0.12	0.47	4.27	0.11
River 1	Reach 1-Upper	807	100YrSCS24Hr	0.06	93.65	93.90	93.73	93.90	0.000106	0.10	0.75	6.37	0.07
River 1	Reach 1-Upper	789	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.49	93.74	93.55	93.74	0.000038	0.06	0.51	4.05	0.04
River 1	Reach 1-Upper	789	10YrCHI3Hr	0.04	93.49	93.76	93.55	93.76	0.000038	0.07	0.56	4.37	0.04
River 1	Reach 1-Upper	789	25YrCHI3Hr	0.04	93.49	93.79	93.55	93.79	0.000038	0.07	0.61	4.73	0.04
River 1	Reach 1-Upper	789	50YrCHI3Hr	0.05	93.49	93.82	93.56	93.82	0.000035	0.07	0.68	5.23	0.04
River 1	Reach 1-Upper	789	100YrCHI3Hr	0.06	93.49	93.88	93.57	93.88	0.000027	0.07	0.83	5.99	0.04
River 1	Reach 1-Upper	789	2YrSCS24Hr	0.03	93.49	93.73	93.54	93.73	0.000037	0.06	0.48	3.83	0.04
River 1	Reach 1-Upper	789	5YrSCS24Hr	0.04	93.49	93.76	93.55	93.76	0.000038	0.07	0.56	4.37	0.04
River 1	Reach 1-Upper	789	10YrSCS24Hr	0.04	93.49	93.78	93.55	93.78	0.000038	0.07	0.60	4.67	0.04
River 1	Reach 1-Upper	789	25YrSCS24Hr	0.05	93.49	93.81	93.56	93.81	0.000036	0.07	0.67	5.15	0.04
River 1	Reach 1-Upper	789	50YrSCS24Hr	0.06	93.49	93.85	93.56	93.85	0.000031	0.07	0.75	5.62	0.04
River 1	Reach 1-Upper	789	100YrSCS24Hr	0.06	93.49	93.90	93.57	93.90	0.000024	0.07	0.88	6.26	0.04
River 1	Reach 1-Upper	764		Culvert									
River 1	Reach 1-Upper	759	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.46	93.58	93.51	93.58	0.001375	0.22	0.14	2.40	0.23
River 1	Reach 1-Upper	759	10YrCHI3Hr	0.04	93.46	93.60	93.52	93.60	0.000932	0.21	0.18	2.67	0.19
River 1	Reach 1-Upper	759	25YrCHI3Hr	0.04	93.46	93.63	93.52	93.63	0.000592	0.19	0.22	3.05	0.16
River 1	Reach 1-Upper	759	50YrCHI3Hr	0.05	93.46	93.69	93.53	93.69	0.000264	0.16	0.31	3.75	0.11
River 1	Reach 1-Upper	759	100YrCHI3Hr	0.06	93.46	93.77	93.54	93.77	0.000125	0.14	0.43	4.71	0.08
River 1	Reach 1-Upper	759	2YrSCS24Hr	0.03	93.46	93.57	93.51	93.57	0.001859	0.23	0.12	2.20	0.26
River 1	Reach 1-Upper	759	5YrSCS24Hr	0.04	93.46	93.60	93.52	93.60	0.000932	0.21	0.18	2.67	0.19
River 1	Reach 1-Upper	759	10YrSCS24Hr	0.04	93.46	93.63	93.52	93.63	0.000639	0.20	0.21	2.98	0.17
River 1	Reach 1-Upper	759	25YrSCS24Hr	0.05	93.46	93.68	93.53	93.68	0.000285	0.16	0.30	3.67	0.12
River 1	Reach 1-Upper	759	50YrSCS24Hr	0.06	93.46	93.73	93.53	93.73	0.000174	0.15	0.37	4.24	0.09
River 1	Reach 1-Upper	759	100YrSCS24Hr	0.06	93.46	93.80	93.54	93.80	0.000105	0.13	0.47	5.36	0.08
River 1	Reach 1-Upper	743	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.40	93.57	93.47	93.57	0.000686	0.19	0.17	2.25	0.17
River 1	Reach 1-Upper	743	10YrCHI3Hr	0.04	93.40	93.59	93.47	93.59	0.000494	0.18	0.20	2.53	0.15
River 1	Reach 1-Upper	743	25YrCHI3Hr	0.04	93.40	93.62	93.48	93.63	0.000350	0.17	0.25	2.92	0.13
River 1	Reach 1-Upper	743	50YrCHI3Hr	0.05	93.40	93.69	93.48	93.69	0.000183	0.15	0.33	4.20	0.10
River 1	Reach 1-Upper	743	100YrCHI3Hr	0.06	93.40	93.77	93.49	93.77	0.000101	0.14	0.44	5.44	0.08
River 1	Reach 1-Upper	743	2YrSCS24Hr	0.03	93.40	93.54	93.46	93.55	0.000951	0.20	0.14	2.05	0.19
River 1	Reach 1-Upper	743	5YrSCS24Hr	0.04	93.40	93.59	93.47	93.59	0.000494	0.18	0.20	2.53	0.15
River 1	Reach 1-Upper	743	10YrSCS24Hr	0.04	93.40	93.62	93.48	93.62	0.000370	0.18	0.24	2.85	0.13
River 1	Reach 1-Upper	743	25YrSCS24Hr	0.05	93.40	93.68	93.48	93.68	0.000195	0.15	0.32	4.01	0.10
River 1	Reach 1-Upper	743	50YrSCS24Hr	0.06	93.40	93.73	93.49	93.73	0.000132	0.14	0.38	4.86	0.08
River 1	Reach 1-Upper	743	100YrSCS24Hr	0.06	93.40	93.79	93.49	93.80	0.000089	0.14	0.47	6.32	0.07
River 1	Reach 1-Upper	733		Culvert									
River 1	Reach 1-Upper	728	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.33	93.55	93.40	93.55	0.000233	0.13	0.24	2.16	0.10
River 1	Reach 1-Upper	728	10YrCHI3Hr	0.04	93.33	93.57	93.41	93.57	0.000202	0.14	0.27	2.34	0.10
River 1	Reach 1-Upper	728	25YrCHI3Hr	0.04	93.33	93.60	93.41	93.60	0.000169	0.14	0.32	2.57	0.09
River 1	Reach 1-Upper	728	50YrCHI3Hr	0.05	93.33	93.66	93.42	93.66	0.000110	0.13	0.39	2.99	0.08
River 1	Reach 1-Upper	728	100YrCHI3Hr	0.06	93.33	93.72	93.43	93.73	0.000076	0.12	0.49	3.52	0.07
River 1	Reach 1-Upper	728	2YrSCS24Hr	0.03	93.33	93.53	93.40	93.53	0.000264	0.13	0.21	2.01	0.11
River 1	Reach 1-Upper	728	5YrSCS24Hr	0.04	93.33	93.57	93.41	93.57	0.000202	0.14	0.27	2.34	0.10
River 1	Reach 1-Upper	728	10YrSCS24Hr	0.04	93.33	93.60	93.41	93.60	0.000174	0.14	0.31	2.53	0.09
River 1	Reach 1-Upper	728	25YrSCS24Hr	0.05	93.33	93.65	93.42	93.65	0.000113	0.13	0.39	2.94	0.08
River 1	Reach 1-Upper	728	50YrSCS24Hr	0.06	93.33	93.69	93.42	93.69	0.000090	0.12	0.44	3.25	0.07
River 1	Reach 1-Upper	728	100YrSCS24Hr	0.06	93.33	93.74	93.43	93.74	0.000070	0.12	0.52	3.70	0.06
River 1	Reach 1-Upper	715	2YrCHI3Hr	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	5YrCHI3Hr	0.03	93.32	93.54	93.37	93.54	0.000123	0.11	0.29	3.09	0.08
River 1	Reach 1-Upper	715	10YrCHI3Hr	0.04	93.32	93.57	93.38	93.57	0.000114	0.11	0.32	3.33	0.08
River 1	Reach 1-Upper	715	25YrCHI3Hr	0.04	93.32	93.60	93.38	93.60	0.000102	0.12	0.37	3.63	0.07
River 1	Reach 1-Upper	715	50YrCHI3Hr	0.05	93.32	93.65	93.39	93.66	0.000072	0.11	0.44	4.19	0.06
River 1	Reach 1-Upper	715	100YrCHI3Hr	0.06	93.32	93.72	93.39	93.72	0.000054	0.11	0.54	4.88	0.06

HEC-RAS Plan: 20250603-Post_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	0.03	93.32	93.52	93.37	93.53	0.000130	0.11	0.26	2.89	0.08
River 1	Reach 1-Upper	715	5YrSCS24Hr	0.04	93.32	93.57	93.38	93.57	0.000114	0.11	0.32	3.33	0.08
River 1	Reach 1-Upper	715	10YrSCS24Hr	0.04	93.32	93.59	93.38	93.59	0.000104	0.12	0.36	3.58	0.07
River 1	Reach 1-Upper	715	25YrSCS24Hr	0.05	93.32	93.65	93.39	93.65	0.000074	0.11	0.44	4.13	0.06
River 1	Reach 1-Upper	715	50YrSCS24Hr	0.06	93.32	93.69	93.39	93.69	0.000061	0.11	0.49	4.54	0.06
River 1	Reach 1-Upper	715	100YrSCS24Hr	0.06	93.32	93.74	93.40	93.74	0.000051	0.11	0.57	5.33	0.06
River 1	Reach 1-Upper	705		Culvert									
River 1	Reach 1-Upper	698	2YrCHI3Hr	0.02	93.24	93.32	93.30	93.33	0.011619	0.41	0.06	1.21	0.59
River 1	Reach 1-Upper	698	5YrCHI3Hr	0.03	93.24	93.32	93.31	93.33	0.017273	0.51	0.06	1.23	0.72
River 1	Reach 1-Upper	698	10YrCHI3Hr	0.04	93.24	93.32	93.31	93.34	0.025269	0.61	0.06	1.22	0.87
River 1	Reach 1-Upper	698	25YrCHI3Hr	0.04	93.24	93.41	93.32	93.41	0.001221	0.22	0.20	1.87	0.22
River 1	Reach 1-Upper	698	50YrCHI3Hr	0.05	93.24	93.51	93.33	93.51	0.000175	0.12	0.41	2.59	0.09
River 1	Reach 1-Upper	698	100YrCHI3Hr	0.06	93.24	93.51	93.33	93.51	0.000242	0.15	0.41	2.61	0.11
River 1	Reach 1-Upper	698	2YrSCS24Hr	0.03	93.24	93.32	93.30	93.33	0.015763	0.48	0.06	1.21	0.69
River 1	Reach 1-Upper	698	5YrSCS24Hr	0.04	93.24	93.32	93.31	93.34	0.028385	0.64	0.06	1.20	0.92
River 1	Reach 1-Upper	698	10YrSCS24Hr	0.04	93.24	93.43	93.32	93.43	0.000585	0.17	0.25	2.05	0.15
River 1	Reach 1-Upper	698	25YrSCS24Hr	0.05	93.24	93.51	93.32	93.51	0.000166	0.12	0.41	2.60	0.09
River 1	Reach 1-Upper	698	50YrSCS24Hr	0.06	93.24	93.51	93.33	93.51	0.000202	0.13	0.41	2.61	0.10
River 1	Reach 1-Upper	698	100YrSCS24Hr	0.06	93.24	93.52	93.33	93.52	0.000253	0.15	0.42	2.63	0.11
River 1	Reach 1-Upper	681	2YrCHI3Hr	0.02	93.14	93.23	93.19	93.23	0.003325	0.24	0.10	1.73	0.32
River 1	Reach 1-Upper	681	5YrCHI3Hr	0.03	93.14	93.25	93.20	93.25	0.002014	0.23	0.14	1.89	0.26
River 1	Reach 1-Upper	681	10YrCHI3Hr	0.04	93.14	93.27	93.20	93.28	0.001201	0.20	0.19	2.05	0.21
River 1	Reach 1-Upper	681	25YrCHI3Hr	0.04	93.14	93.40	93.21	93.40	0.000094	0.08	0.51	2.95	0.07
River 1	Reach 1-Upper	681	50YrCHI3Hr	0.05	93.14	93.51	93.21	93.51	0.000029	0.06	0.87	4.06	0.04
River 1	Reach 1-Upper	681	100YrCHI3Hr	0.06	93.14	93.51	93.22	93.51	0.000040	0.07	0.88	4.09	0.04
River 1	Reach 1-Upper	681	2YrSCS24Hr	0.03	93.14	93.24	93.20	93.24	0.002280	0.23	0.12	1.83	0.28
River 1	Reach 1-Upper	681	5YrSCS24Hr	0.04	93.14	93.28	93.20	93.29	0.000864	0.18	0.21	2.13	0.18
River 1	Reach 1-Upper	681	10YrSCS24Hr	0.04	93.14	93.43	93.21	93.43	0.000059	0.07	0.59	3.14	0.05
River 1	Reach 1-Upper	681	25YrSCS24Hr	0.05	93.14	93.51	93.21	93.51	0.000027	0.06	0.87	4.07	0.04
River 1	Reach 1-Upper	681	50YrSCS24Hr	0.06	93.14	93.51	93.22	93.51	0.000033	0.06	0.88	4.10	0.04
River 1	Reach 1-Upper	681	100YrSCS24Hr	0.06	93.14	93.51	93.22	93.51	0.000042	0.07	0.89	4.14	0.05
River 1	Reach 1-Upper	663	2YrCHI3Hr	0.02	93.05	93.19		93.20	0.001200	0.19	0.12	1.39	0.21
River 1	Reach 1-Upper	663	5YrCHI3Hr	0.03	93.05	93.23		93.23	0.000807	0.18	0.18	1.64	0.18
River 1	Reach 1-Upper	663	10YrCHI3Hr	0.04	93.05	93.26		93.26	0.000532	0.16	0.23	1.85	0.15
River 1	Reach 1-Upper	663	25YrCHI3Hr	0.04	93.05	93.40		93.40	0.000069	0.08	0.56	3.00	0.06
River 1	Reach 1-Upper	663	50YrCHI3Hr	0.05	93.05	93.51		93.51	0.000025	0.05	0.96	4.41	0.03
River 1	Reach 1-Upper	663	100YrCHI3Hr	0.06	93.05	93.51		93.51	0.000035	0.06	0.97	4.45	0.04
River 1	Reach 1-Upper	663	2YrSCS24Hr	0.03	93.05	93.22		93.22	0.000807	0.17	0.16	1.56	0.17
River 1	Reach 1-Upper	663	5YrSCS24Hr	0.04	93.05	93.27		93.28	0.000390	0.14	0.26	1.95	0.13
River 1	Reach 1-Upper	663	10YrSCS24Hr	0.04	93.05	93.43		93.43	0.000047	0.06	0.65	3.34	0.05
River 1	Reach 1-Upper	663	25YrSCS24Hr	0.05	93.05	93.51		93.51	0.000024	0.05	0.96	4.43	0.03
River 1	Reach 1-Upper	663	50YrSCS24Hr	0.06	93.05	93.51		93.51	0.000029	0.06	0.97	4.47	0.04
River 1	Reach 1-Upper	663	100YrSCS24Hr	0.06	93.05	93.51		93.51	0.000037	0.06	0.98	4.51	0.04
River 1	Reach 1-Upper	656	2YrCHI3Hr	0.07	93.03	93.16	93.12	93.17	0.007808	0.47	0.14	1.72	0.53
River 1	Reach 1-Upper	656	5YrCHI3Hr	0.11	93.03	93.19	93.15	93.21	0.006501	0.51	0.21	1.94	0.50
River 1	Reach 1-Upper	656	10YrCHI3Hr	0.14	93.03	93.23	93.16	93.24	0.004115	0.47	0.29	2.16	0.41
River 1	Reach 1-Upper	656	25YrCHI3Hr	0.18	93.03	93.40	93.18	93.40	0.000544	0.25	0.72	3.45	0.16
River 1	Reach 1-Upper	656	50YrCHI3Hr	0.21	93.03	93.51	93.19	93.51	0.000206	0.20	1.16	4.65	0.11
River 1	Reach 1-Upper	656	100YrCHI3Hr	0.25	93.03	93.51	93.21	93.51	0.000291	0.24	1.17	4.65	0.13
River 1	Reach 1-Upper	656	2YrSCS24Hr	0.09	93.03	93.18	93.14	93.20	0.007027	0.51	0.19	1.88	0.51
River 1	Reach 1-Upper	656	5YrSCS24Hr	0.15	93.03	93.25	93.16	93.26	0.003125	0.44	0.33	2.27	0.36
River 1	Reach 1-Upper	656	10YrSCS24Hr	0.18	93.03	93.42	93.18	93.43	0.000386	0.23	0.82	3.78	0.14
River 1	Reach 1-Upper	656	25YrSCS24Hr	0.23	93.03	93.51	93.20	93.51	0.000238	0.21	1.16	4.65	0.12
River 1	Reach 1-Upper	656	50YrSCS24Hr	0.27	93.03	93.51	93.21	93.51	0.000323	0.25	1.17	4.66	0.13
River 1	Reach 1-Upper	656	100YrSCS24Hr	0.31	93.03	93.51	93.23	93.51	0.000430	0.29	1.17	4.67	0.15
River 1	Reach 1-Upper	638	2YrCHI3Hr	0.07	92.92	93.08	93.01	93.09	0.002729	0.33	0.20	1.89	0.32
River 1	Reach 1-Upper	638	5YrCHI3Hr	0.11	92.92	93.14	93.04	93.15	0.001802	0.33	0.33	2.30	0.28
River 1	Reach 1-Upper	638	10YrCHI3Hr	0.14	92.92	93.21	93.05	93.21	0.001049	0.28	0.48	2.79	0.22
River 1	Reach 1-Upper	638	25YrCHI3Hr	0.18	92.92	93.39	93.07	93.39	0.000154	0.16	1.20	4.99	0.09
River 1	Reach 1-Upper	638	50YrCHI3Hr	0.21	92.92	93.50	93.09	93.50	0.000077	0.13	1.86	6.83	0.07
River 1	Reach 1-Upper	638	100YrCHI3Hr	0.25	92.92	93.50	93.10	93.51	0.000109	0.16	1.86	6.84	0.08
River 1	Reach 1-Upper	638	2YrSCS24Hr	0.09	92.92	93.12	93.03	93.13	0.002117	0.33	0.28	2.17	0.29
River 1	Reach 1-Upper	638	5YrSCS24Hr	0.15	92.92	93.23	93.06	93.24	0.000815	0.26	0.56	3.04	0.19
River 1	Reach 1-Upper	638	10YrSCS24Hr	0.18	92.92	93.42	93.07	93.42	0.000119	0.15	1.36	5.36	0.08
River 1	Reach 1-Upper	638	25YrSCS24Hr	0.23	92.92	93.50	93.09	93.51	0.000089	0.14	1.86	6.83	0.07
River 1	Reach 1-Upper	638	50YrSCS24Hr	0.27	92.92	93.50	93.11	93.51	0.000122	0.16	1.86	6.84	0.08
River 1	Reach 1-Upper	638	100YrSCS24Hr	0.31	92.92	93.51	93.12	93.51	0.000163	0.19	1.87	6.84	0.10
River 1	Reach 1-Upper	617	2YrCHI3Hr	0.07	92.84	93.03	92.95	93.03	0.002518	0.31	0.22	2.15	0.31
River 1	Reach 1-Upper	617	5YrCHI3Hr	0.11	92.84	93.12	92.98	93.12	0.000858	0.23	0.46	3.08	0.19
River 1	Reach 1-Upper	617	10YrCHI3Hr	0.14	92.84	93.19	93.00	93.20	0.000444	0.19	0.71	3.86	0.14
River 1	Reach 1-Upper	617	25YrCHI3Hr	0.18	92.84	93.39	93.01	93.39	0.000082	0.10	1.79	7.45	0.06
River 1	Reach 1-Upper	617	50YrCHI3Hr	0.21	92.84	93.50	93.03	93.50	0.000035	0.08	2.93	15.17	0.04
River 1	Reach 1-Upper	617	100YrCHI3Hr	0.25	92.84	93.50	93.04	93.50	0.000049	0.09	2.93	15.17	0.05
River 1	Reach 1-Upper	617	2YrSCS24Hr	0.09	92.84	93.09	92.97	93.10	0.001101	0.25	0.38	2.82	0.21
River 1	Reach 1-Upper	617	5YrSCS24Hr	0.15	92.84	93.22	93.00	93.22	0.000343	0.18	0.83	4.28	0.13
River 1	Reach 1-Upper	617	10YrSCS24Hr	0.18	92.84	93.42	93.01	93.42	0.000065	0.09	2.03	8.33	0.06
River 1	Reach 1-Upper	617	25YrSCS24Hr	0.23	92.84	93.50	93.03	93.50	0.000040	0.08	2.93	15.17	0.05
River 1	Reach 1-Upper	617	50YrSCS24Hr	0.27	92.84	93.50	93.04	93.50	0.000055	0.10	2.93	15.17	0.06
River 1	Reach 1-Upper	617	100YrSCS24Hr	0.31	92.84	93.50	93.06	93.50	0.000074	0.11	2.93	15.18	0.06
River 1	Reach 1-Upper	598	2YrCHI3Hr	0.07	92.76	93.01	92.87	93.01	0.000473	0.18	0.38	2.69	0.14
River 1	Reach 1-Upper	598	5YrCHI3Hr	0.11	92.76	93.11	92.89	93.12	0.000252	0.18	0.64	3.49	0.11
River 1	Reach 1-Upper	598	10YrCHI3Hr	0.15	92.76	93.19	92.91	93.19	0.000173	0.18	0.83	5.51	0.10

HEC-RAS Plan: 20250603-Post_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	25YrCHI3Hr	0.19	92.76	93.39	92.93	93.39	0.000060	0.14	1.33	9.41	0.06
River 1	Reach 1-Upper	598	50YrCHI3Hr	0.23	92.76	93.50	92.94	93.50	0.000019	0.08	4.94	31.21	0.03
River 1	Reach 1-Upper	598	100YrCHI3Hr	0.27	92.76	93.50	92.95	93.50	0.000027	0.09	4.93	31.21	0.04
River 1	Reach 1-Upper	598	2YrSCS24Hr	0.10	92.76	93.09	92.89	93.09	0.000296	0.18	0.57	3.28	0.12
River 1	Reach 1-Upper	598	5YrSCS24Hr	0.16	92.76	93.22	92.91	93.22	0.000149	0.17	0.90	6.10	0.09
River 1	Reach 1-Upper	598	10YrSCS24Hr	0.20	92.76	93.42	92.93	93.42	0.000053	0.14	1.41	10.00	0.06
River 1	Reach 1-Upper	598	25YrSCS24Hr	0.25	92.76	93.50	92.95	93.50	0.000022	0.08	4.94	31.21	0.04
River 1	Reach 1-Upper	598	50YrSCS24Hr	0.29	92.76	93.50	92.96	93.50	0.000030	0.10	4.93	31.21	0.04
River 1	Reach 1-Upper	598	100YrSCS24Hr	0.33	92.76	93.50	92.97	93.50	0.000041	0.11	4.93	31.21	0.05
River 1	Reach 1-Upper	589		Culvert									
River 1	Reach 1-Upper	581	2YrCHI3Hr	0.07	92.71	92.89	92.82	92.90	0.002047	0.28	0.25	2.75	0.28
River 1	Reach 1-Upper	581	5YrCHI3Hr	0.11	92.71	92.93	92.84	92.94	0.001929	0.33	0.34	3.49	0.29
River 1	Reach 1-Upper	581	10YrCHI3Hr	0.15	92.71	92.97	92.86	92.97	0.001556	0.34	0.43	4.12	0.27
River 1	Reach 1-Upper	581	25YrCHI3Hr	0.19	92.71	93.03	92.88	93.03	0.000917	0.33	0.58	5.30	0.22
River 1	Reach 1-Upper	581	50YrCHI3Hr	0.23	92.71	93.16	92.89	93.16	0.000310	0.25	0.90	7.86	0.13
River 1	Reach 1-Upper	581	100YrCHI3Hr	0.27	92.71	93.25	92.90	93.25	0.000204	0.24	1.13	30.32	0.11
River 1	Reach 1-Upper	581	2YrSCS24Hr	0.10	92.71	92.92	92.84	92.93	0.002022	0.32	0.32	3.28	0.29
River 1	Reach 1-Upper	581	5YrSCS24Hr	0.16	92.71	92.98	92.87	92.98	0.001396	0.34	0.46	4.38	0.26
River 1	Reach 1-Upper	581	10YrSCS24Hr	0.20	92.71	93.04	92.88	93.05	0.000827	0.32	0.61	5.51	0.21
River 1	Reach 1-Upper	581	25YrSCS24Hr	0.25	92.71	93.25	92.89	93.25	0.000170	0.22	1.13	30.32	0.10
River 1	Reach 1-Upper	581	50YrSCS24Hr	0.29	92.71	93.25	92.91	93.25	0.000231	0.25	1.13	30.33	0.12
River 1	Reach 1-Upper	581	100YrSCS24Hr	0.33	92.71	93.28	92.92	93.28	0.000256	0.28	1.20	32.04	0.13
River 1	Reach 1-Upper	572	2YrCHI3Hr	0.07	92.73	92.85	92.82	92.86	0.008247	0.45	0.15	2.09	0.53
River 1	Reach 1-Upper	572	5YrCHI3Hr	0.11	92.73	92.90	92.84	92.91	0.004531	0.42	0.27	2.64	0.42
River 1	Reach 1-Upper	572	10YrCHI3Hr	0.15	92.73	92.95	92.86	92.95	0.002601	0.37	0.40	3.12	0.33
River 1	Reach 1-Upper	572	25YrCHI3Hr	0.19	92.73	93.02	92.87	93.02	0.001121	0.29	0.66	3.99	0.22
River 1	Reach 1-Upper	572	50YrCHI3Hr	0.23	92.73	93.15	92.89	93.16	0.000259	0.17	1.45	15.47	0.11
River 1	Reach 1-Upper	572	100YrCHI3Hr	0.27	92.73	93.25	92.90	93.25	0.000071	0.11	4.09	35.89	0.06
River 1	Reach 1-Upper	572	2YrSCS24Hr	0.10	92.73	92.89	92.84	92.90	0.005425	0.43	0.24	2.49	0.45
River 1	Reach 1-Upper	572	5YrSCS24Hr	0.16	92.73	92.96	92.86	92.97	0.002123	0.35	0.45	3.32	0.30
River 1	Reach 1-Upper	572	10YrSCS24Hr	0.20	92.73	93.03	92.88	93.04	0.000971	0.27	0.72	4.14	0.21
River 1	Reach 1-Upper	572	25YrSCS24Hr	0.25	92.73	93.25	92.89	93.25	0.000059	0.10	4.09	35.88	0.06
River 1	Reach 1-Upper	572	50YrSCS24Hr	0.29	92.73	93.25	92.91	93.25	0.000080	0.12	4.10	35.91	0.07
River 1	Reach 1-Upper	572	100YrSCS24Hr	0.33	92.73	93.28	92.92	93.28	0.000068	0.11	5.15	39.12	0.06
River 1	Reach 1-Upper	555	2YrCHI3Hr	0.07	92.61	92.82	92.72	92.82	0.001001	0.21	0.34	3.06	0.20
River 1	Reach 1-Upper	555	5YrCHI3Hr	0.11	92.61	92.88	92.74	92.88	0.000708	0.21	0.55	3.83	0.17
River 1	Reach 1-Upper	555	10YrCHI3Hr	0.15	92.61	92.93	92.76	92.93	0.000472	0.19	0.77	4.49	0.15
River 1	Reach 1-Upper	555	25YrCHI3Hr	0.19	92.61	93.01	92.77	93.01	0.000255	0.16	1.17	5.51	0.11
River 1	Reach 1-Upper	555	50YrCHI3Hr	0.23	92.61	93.15	92.78	93.15	0.000051	0.10	3.73	35.66	0.05
River 1	Reach 1-Upper	555	100YrCHI3Hr	0.27	92.61	93.25	92.80	93.25	0.000017	0.06	7.39	40.94	0.03
River 1	Reach 1-Upper	555	2YrSCS24Hr	0.10	92.61	92.86	92.73	92.86	0.000804	0.21	0.48	3.60	0.18
River 1	Reach 1-Upper	555	5YrSCS24Hr	0.16	92.61	92.95	92.76	92.95	0.000407	0.18	0.86	4.73	0.14
River 1	Reach 1-Upper	555	10YrSCS24Hr	0.20	92.61	93.03	92.77	93.03	0.000229	0.16	1.25	5.68	0.11
River 1	Reach 1-Upper	555	25YrSCS24Hr	0.25	92.61	93.25	92.79	93.25	0.000014	0.06	7.39	40.94	0.03
River 1	Reach 1-Upper	555	50YrSCS24Hr	0.29	92.61	93.25	92.80	93.25	0.000019	0.07	7.39	40.94	0.03
River 1	Reach 1-Upper	555	100YrSCS24Hr	0.33	92.61	93.28	92.81	93.28	0.000018	0.07	8.55	41.65	0.03
River 1	Reach 1-Upper	534	2YrCHI3Hr	0.07	92.59	92.79	92.70	92.79	0.001558	0.25	0.28	2.54	0.25
River 1	Reach 1-Upper	534	5YrCHI3Hr	0.11	92.59	92.86	92.72	92.86	0.000934	0.24	0.48	3.41	0.20
River 1	Reach 1-Upper	534	10YrCHI3Hr	0.15	92.59	92.92	92.74	92.92	0.000559	0.20	0.76	9.05	0.16
River 1	Reach 1-Upper	534	25YrCHI3Hr	0.19	92.59	93.01	92.76	93.01	0.000116	0.11	2.99	37.02	0.08
River 1	Reach 1-Upper	534	50YrCHI3Hr	0.23	92.59	93.15	92.77	93.15	0.000009	0.04	9.72	51.04	0.02
River 1	Reach 1-Upper	534	100YrCHI3Hr	0.27	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	92.84	92.72	92.84	0.001116	0.24	0.42	3.15	0.22
River 1	Reach 1-Upper	534	5YrSCS24Hr	0.16	92.59	92.94	92.75	92.94	0.000434	0.19	1.04	17.37	0.14
River 1	Reach 1-Upper	534	10YrSCS24Hr	0.20	92.59	93.02	92.76	93.02	0.000089	0.10	3.56	40.73	0.07
River 1	Reach 1-Upper	534	25YrSCS24Hr	0.25	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	0.29	92.59	93.25	92.79	93.25	0.000004	0.03	14.61	51.39	0.02
River 1	Reach 1-Upper	534	100YrSCS24Hr	0.33	92.59	93.28	92.81	93.28	0.000004	0.03	16.05	51.49	0.02
River 1	Reach 1-Upper	510	2YrCHI3Hr	0.07	92.60	92.73	92.68	92.74	0.003415	0.39	0.18	2.95	0.37
River 1	Reach 1-Upper	510	5YrCHI3Hr	0.11	92.60	92.83	92.70	92.84	0.001076	0.33	0.34	4.33	0.23
River 1	Reach 1-Upper	510	10YrCHI3Hr	0.15	92.60	92.90	92.72	92.91	0.000704	0.32	0.45	5.33	0.20
River 1	Reach 1-Upper	510	25YrCHI3Hr	0.19	92.60	93.00	92.73	93.00	0.000440	0.31	0.61	12.66	0.16
River 1	Reach 1-Upper	510	50YrCHI3Hr	0.23	92.60	93.15	92.75	93.15	0.000211	0.27	0.84	109.17	0.12
River 1	Reach 1-Upper	510	100YrCHI3Hr	0.27	92.60	93.25	92.76	93.25	0.000000	0.01	42.37	109.53	0.00
River 1	Reach 1-Upper	510	2YrSCS24Hr	0.10	92.60	92.81	92.69	92.81	0.001328	0.34	0.30	3.97	0.25
River 1	Reach 1-Upper	510	5YrSCS24Hr	0.16	92.60	92.93	92.72	92.93	0.000623	0.32	0.49	5.74	0.19
River 1	Reach 1-Upper	510	10YrSCS24Hr	0.20	92.60	93.01	92.74	93.02	0.000410	0.31	0.63	14.62	0.16
River 1	Reach 1-Upper	510	25YrSCS24Hr	0.25	92.60	93.25	92.75	93.25	0.000000	0.01	42.37	109.53	0.00
River 1	Reach 1-Upper	510	50YrSCS24Hr	0.29	92.60	93.25	92.77	93.25	0.000000	0.01	42.37	109.53	0.00
River 1	Reach 1-Upper	510	100YrSCS24Hr	0.33	92.60	93.28	92.78	93.28	0.000000	0.01	45.44	109.63	0.01
River 1	Reach 1-Upper	505		Culvert									
River 1	Reach 1-Upper	502	2YrCHI3Hr	0.08	92.49	92.61	92.58	92.63	0.007402	0.52	0.15	2.32	0.53
River 1	Reach 1-Upper	502	5YrCHI3Hr	0.13	92.49	92.65	92.60	92.67	0.006455	0.61	0.21	2.78	0.52
River 1	Reach 1-Upper	502	10YrCHI3Hr	0.16	92.49	92.68	92.62	92.70	0.006009	0.66	0.25	3.08	0.52
River 1	Reach 1-Upper	502	25YrCHI3Hr	0.21	92.49	92.73	92.64	92.75	0.004266	0.67	0.32	3.89	0.46
River 1	Reach 1-Upper	502	50YrCHI3Hr	0.26	92.49	92.82	92.66	92.84	0.001871	0.56	0.46	5.35	0.32
River 1	Reach 1-Upper	502	100YrCHI3Hr	0.31	92.49	92.97	92.67	92.98	0.000675	0.44	0.69	104.74	0.21
River 1	Reach 1-Upper	502	2YrSCS24Hr	0.11	92.49	92.64	92.60	92.66	0.006605	0.59	0.19	2.67	0.52
River 1	Reach 1-Upper	502	5YrSCS24Hr	0.18	92.49	92.69	92.62	92.71	0.005579	0.67	0.26	3.20	0.51
River 1	Reach 1-Upper	502	10YrSCS24Hr	0.22	92.49	92.74	92.64	92.76	0.003886	0.66	0.34	4.12	0.44
River 1	Reach 1-Upper	502	25YrSCS24Hr	0.28	92.49	92.88	92.66	92.90	0.001173	0.50	0.56	6.47	0.26
River 1	Reach 1-Upper	502	50YrSCS24Hr	0.33	92.49	93.05	92.68	93.06	0.000467	0.41	0.80	104.96	0.18

HEC-RAS Plan: 20250603-Post_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	0.38	92.49	93.28	92.70	93.28	0.000000	0.01	48.99	105.56	0.01
River 1	Reach 1-Upper	493	2YrCHI3Hr	0.08	92.34	92.61	92.43	92.61	0.000140	0.10	0.77	4.77	0.08
River 1	Reach 1-Upper	493	5YrCHI3Hr	0.13	92.34	92.66	92.45	92.66	0.000206	0.13	0.98	5.52	0.10
River 1	Reach 1-Upper	493	10YrCHI3Hr	0.16	92.34	92.68	92.46	92.68	0.000234	0.14	1.14	6.01	0.11
River 1	Reach 1-Upper	493	25YrCHI3Hr	0.21	92.34	92.73	92.48	92.73	0.000204	0.15	1.47	6.78	0.10
River 1	Reach 1-Upper	493	50YrCHI3Hr	0.26	92.34	92.82	92.49	92.83	0.000109	0.12	2.14	8.33	0.08
River 1	Reach 1-Upper	493	100YrCHI3Hr	0.31	92.34	92.98	92.50	92.98	0.000002	0.02	27.11	101.30	0.01
River 1	Reach 1-Upper	493	2YrSCS24Hr	0.11	92.34	92.64	92.44	92.65	0.000190	0.12	0.93	5.32	0.09
River 1	Reach 1-Upper	493	5YrSCS24Hr	0.18	92.34	92.69	92.46	92.70	0.000232	0.15	1.21	6.21	0.11
River 1	Reach 1-Upper	493	10YrSCS24Hr	0.22	92.34	92.74	92.48	92.74	0.000189	0.14	1.54	6.89	0.10
River 1	Reach 1-Upper	493	25YrSCS24Hr	0.28	92.34	92.89	92.50	92.89	0.000065	0.10	2.72	10.17	0.06
River 1	Reach 1-Upper	493	50YrSCS24Hr	0.33	92.34	93.05	92.51	93.05	0.000001	0.02	34.55	101.67	0.01
River 1	Reach 1-Upper	493	100YrSCS24Hr	0.38	92.34	93.28	92.52	93.28	0.000000	0.01	57.34	102.84	0.00
River 1	Reach 1-Upper	474	2YrCHI3Hr	0.08	92.41	92.61	92.50	92.61	0.000593	0.15	0.52	5.18	0.15
River 1	Reach 1-Upper	474	5YrCHI3Hr	0.13	92.41	92.65	92.53	92.65	0.000598	0.17	0.74	6.03	0.16
River 1	Reach 1-Upper	474	10YrCHI3Hr	0.16	92.41	92.68	92.54	92.68	0.000560	0.18	0.91	6.62	0.15
River 1	Reach 1-Upper	474	25YrCHI3Hr	0.21	92.41	92.73	92.56	92.73	0.000375	0.17	1.29	7.74	0.13
River 1	Reach 1-Upper	474	50YrCHI3Hr	0.26	92.41	92.82	92.57	92.82	0.000002	0.01	24.36	91.42	0.01
River 1	Reach 1-Upper	474	100YrCHI3Hr	0.31	92.41	92.98	92.57	92.98	0.000000	0.01	38.60	92.12	0.01
River 1	Reach 1-Upper	474	2YrSCS24Hr	0.11	92.41	92.64	92.52	92.64	0.000601	0.17	0.68	5.81	0.16
River 1	Reach 1-Upper	474	5YrSCS24Hr	0.18	92.41	92.69	92.55	92.69	0.000516	0.18	0.99	6.87	0.15
River 1	Reach 1-Upper	474	10YrSCS24Hr	0.22	92.41	92.74	92.56	92.74	0.000335	0.16	1.37	7.98	0.12
River 1	Reach 1-Upper	474	25YrSCS24Hr	0.28	92.41	92.89	92.57	92.89	0.000001	0.01	30.17	91.71	0.01
River 1	Reach 1-Upper	474	50YrSCS24Hr	0.33	92.41	93.05	92.58	93.05	0.000000	0.01	45.36	92.45	0.00
River 1	Reach 1-Upper	474	100YrSCS24Hr	0.38	92.41	93.28	92.59	93.28	0.000000	0.01	66.08	93.46	0.00
River 1	Reach 1-Upper	454	2YrCHI3Hr	0.08	92.44	92.59	92.51	92.59	0.001595	0.25	0.31	2.95	0.25
River 1	Reach 1-Upper	454	5YrCHI3Hr	0.13	92.44	92.63	92.53	92.63	0.001681	0.30	0.43	3.36	0.26
River 1	Reach 1-Upper	454	10YrCHI3Hr	0.16	92.44	92.66	92.55	92.66	0.001585	0.31	0.53	3.66	0.26
River 1	Reach 1-Upper	454	25YrCHI3Hr	0.21	92.44	92.71	92.56	92.72	0.000986	0.28	0.76	4.27	0.21
River 1	Reach 1-Upper	454	50YrCHI3Hr	0.26	92.44	92.82	92.57	92.82	0.000017	0.04	11.00	82.83	0.03
River 1	Reach 1-Upper	454	100YrCHI3Hr	0.31	92.44	92.98	92.59	92.98	0.000002	0.02	23.90	83.31	0.01
River 1	Reach 1-Upper	454	2YrSCS24Hr	0.11	92.44	92.62	92.53	92.62	0.001702	0.29	0.39	3.25	0.26
River 1	Reach 1-Upper	454	5YrSCS24Hr	0.18	92.44	92.67	92.55	92.67	0.001428	0.31	0.58	3.79	0.25
River 1	Reach 1-Upper	454	10YrSCS24Hr	0.22	92.44	92.73	92.56	92.73	0.000862	0.27	0.81	4.39	0.20
River 1	Reach 1-Upper	454	25YrSCS24Hr	0.28	92.44	92.89	92.58	92.89	0.000006	0.03	16.27	83.03	0.02
River 1	Reach 1-Upper	454	50YrSCS24Hr	0.33	92.44	93.05	92.59	93.05	0.000001	0.02	30.02	83.53	0.01
River 1	Reach 1-Upper	454	100YrSCS24Hr	0.38	92.44	93.28	92.61	93.28	0.000000	0.01	48.71	84.20	0.00
River 1	Reach 1-Upper	434	2YrCHI3Hr	0.08	92.42	92.54	92.49	92.55	0.003018	0.30	0.25	2.97	0.33
River 1	Reach 1-Upper	434	5YrCHI3Hr	0.13	92.42	92.59	92.51	92.59	0.002121	0.32	0.40	3.39	0.29
River 1	Reach 1-Upper	434	10YrCHI3Hr	0.16	92.42	92.62	92.52	92.63	0.001672	0.31	0.52	3.69	0.27
River 1	Reach 1-Upper	434	25YrCHI3Hr	0.21	92.42	92.71	92.54	92.71	0.000117	0.10	3.85	43.01	0.07
River 1	Reach 1-Upper	434	50YrCHI3Hr	0.26	92.42	92.82	92.55	92.82	0.000014	0.04	11.01	73.93	0.03
River 1	Reach 1-Upper	434	100YrCHI3Hr	0.31	92.42	92.98	92.56	92.98	0.000002	0.02	22.55	74.47	0.01
River 1	Reach 1-Upper	434	2YrSCS24Hr	0.11	92.42	92.57	92.50	92.58	0.002333	0.31	0.36	3.27	0.30
River 1	Reach 1-Upper	434	5YrSCS24Hr	0.18	92.42	92.64	92.53	92.64	0.001598	0.30	0.58	4.26	0.26
River 1	Reach 1-Upper	434	10YrSCS24Hr	0.22	92.42	92.72	92.54	92.72	0.000089	0.09	4.45	47.65	0.06
River 1	Reach 1-Upper	434	25YrSCS24Hr	0.28	92.42	92.89	92.55	92.89	0.000005	0.03	15.73	74.15	0.02
River 1	Reach 1-Upper	434	50YrSCS24Hr	0.33	92.42	93.05	92.57	93.05	0.000001	0.02	28.02	74.72	0.01
River 1	Reach 1-Upper	434	100YrSCS24Hr	0.38	92.42	93.28	92.58	93.28	0.000000	0.01	44.76	75.55	0.00
River 1	Reach 1-Upper	416	2YrCHI3Hr	0.08	92.34	92.52	92.42	92.53	0.000570	0.16	0.50	4.92	0.15
River 1	Reach 1-Upper	416	5YrCHI3Hr	0.13	92.34	92.58	92.45	92.58	0.000411	0.17	0.78	5.95	0.14
River 1	Reach 1-Upper	416	10YrCHI3Hr	0.16	92.34	92.62	92.46	92.62	0.000153	0.12	2.34	28.94	0.09
River 1	Reach 1-Upper	416	25YrCHI3Hr	0.21	92.34	92.71	92.47	92.71	0.000034	0.07	5.28	35.31	0.04
River 1	Reach 1-Upper	416	50YrCHI3Hr	0.26	92.34	92.82	92.48	92.82	0.000009	0.05	9.98	45.71	0.02
River 1	Reach 1-Upper	416	100YrCHI3Hr	0.31	92.34	92.98	92.49	92.98	0.000003	0.03	19.16	66.90	0.01
River 1	Reach 1-Upper	416	2YrSCS24Hr	0.11	92.34	92.56	92.44	92.56	0.000446	0.17	0.70	5.67	0.14
River 1	Reach 1-Upper	416	5YrSCS24Hr	0.18	92.34	92.64	92.47	92.64	0.000111	0.11	2.84	30.13	0.07
River 1	Reach 1-Upper	416	10YrSCS24Hr	0.22	92.34	92.72	92.48	92.72	0.000029	0.07	5.77	36.29	0.04
River 1	Reach 1-Upper	416	25YrSCS24Hr	0.28	92.34	92.89	92.49	92.89	0.000006	0.04	13.26	57.17	0.02
River 1	Reach 1-Upper	416	50YrSCS24Hr	0.33	92.34	93.05	92.50	93.05	0.000002	0.03	24.08	67.16	0.01
River 1	Reach 1-Upper	416	100YrSCS24Hr	0.38	92.34	93.28	92.50	93.28	0.000000	0.02	39.14	67.97	0.01
River 1	Reach 1-Upper	398	2YrCHI3Hr	0.08	92.28	92.51	92.40	92.51	0.000941	0.23	0.34	2.57	0.20
River 1	Reach 1-Upper	398	5YrCHI3Hr	0.13	92.28	92.56	92.43	92.57	0.000911	0.26	0.49	2.89	0.20
River 1	Reach 1-Upper	398	10YrCHI3Hr	0.16	92.28	92.61	92.44	92.61	0.000744	0.26	0.63	3.17	0.19
River 1	Reach 1-Upper	398	25YrCHI3Hr	0.21	92.28	92.71	92.46	92.71	0.000375	0.22	0.97	4.34	0.14
River 1	Reach 1-Upper	398	50YrCHI3Hr	0.26	92.28	92.82	92.47	92.82	0.000101	0.14	3.54	45.04	0.08
River 1	Reach 1-Upper	398	100YrCHI3Hr	0.31	92.28	92.98	92.49	92.98	0.000010	0.05	11.83	58.56	0.02
River 1	Reach 1-Upper	398	2YrSCS24Hr	0.11	92.28	92.55	92.42	92.55	0.000929	0.25	0.45	2.81	0.20
River 1	Reach 1-Upper	398	5YrSCS24Hr	0.18	92.28	92.63	92.44	92.63	0.000665	0.26	0.69	3.28	0.18
River 1	Reach 1-Upper	398	10YrSCS24Hr	0.22	92.28	92.72	92.46	92.72	0.000340	0.22	1.03	4.90	0.13
River 1	Reach 1-Upper	398	25YrSCS24Hr	0.28	92.28	92.89	92.48	92.89	0.000034	0.09	6.58	49.48	0.04
River 1	Reach 1-Upper	398	50YrSCS24Hr	0.33	92.28	93.05	92.49	93.05	0.000005	0.04	16.13	58.78	0.02
River 1	Reach 1-Upper	398	100YrSCS24Hr	0.38	92.28	93.28	92.51	93.28	0.000001	0.02	29.31	59.42	0.01
River 1	Reach 1-Upper	383	2YrCHI3Hr	0.08	92.34	92.48	92.42	92.49	0.004195	0.39	0.20	1.99	0.40
River 1	Reach 1-Upper	383	5YrCHI3Hr	0.13	92.34	92.54	92.45	92.54	0.002725	0.39	0.32	2.34	0.34
River 1	Reach 1-Upper	383	10YrCHI3Hr	0.16	92.34	92.59	92.46	92.60	0.001702	0.36	0.46	2.64	0.28
River 1	Reach 1-Upper	383	25YrCHI3Hr	0.21	92.34	92.70	92.49	92.70	0.000669	0.28	0.77	3.24	0.18
River 1	Reach 1-Upper	383	50YrCHI3Hr	0.26	92.34	92.82	92.50	92.82	0.000280	0.21	1.21	3.92	0.12
River 1	Reach 1-Upper	383	100YrCHI3Hr	0.31	92.34	92.98	92.52	92.98	0.000109	0.16	1.93	5.32	0.08
River 1	Reach 1-Upper	383	2YrSCS24Hr	0.11	92.34	92.52	92.44	92.53	0.003103	0.40	0.28	2.24	0.36
River 1	Reach 1-Upper	383	5YrSCS24Hr	0.18	92.34	92.61	92.47	92.62	0.001407	0.34	0.51	2.76	0.25
River 1	Reach 1-Upper	383	10YrSCS24Hr	0.22	92.34	92.71	92.49	92.71	0.000603	0.27	0.82	3.32	0.17
River 1	Reach 1-Upper	383	25YrSCS24Hr	0.28	92.34	92.88	92.51	92.89	0.000190	0.19	1.48	4.29	0.10

HEC-RAS Plan: 20250603-Post_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	0.33	92.34	93.05	92.52	93.05	0.000010	0.05	11.65	51.68	0.03
River 1	Reach 1-Upper	383	100YrSCS24Hr	0.38	92.34	93.28	92.54	93.28	0.000002	0.03	23.26	52.34	0.01
River 1	Reach 1-Upper	364	2YrCHI3Hr	0.08	92.23	92.44	92.34	92.44	0.001335	0.27	0.28	2.08	0.23
River 1	Reach 1-Upper	364	5YrCHI3Hr	0.13	92.23	92.51	92.36	92.51	0.001059	0.29	0.44	2.41	0.22
River 1	Reach 1-Upper	364	10YrCHI3Hr	0.16	92.23	92.57	92.38	92.58	0.000730	0.27	0.60	2.72	0.19
River 1	Reach 1-Upper	364	25YrCHI3Hr	0.21	92.23	92.69	92.40	92.69	0.000346	0.23	0.95	3.30	0.13
River 1	Reach 1-Upper	364	50YrCHI3Hr	0.26	92.23	92.82	92.42	92.82	0.000178	0.18	1.41	4.08	0.10
River 1	Reach 1-Upper	364	100YrCHI3Hr	0.31	92.23	92.98	92.43	92.98	0.000062	0.13	3.78	43.88	0.06
River 1	Reach 1-Upper	364	2YrSCS24Hr	0.11	92.23	92.49	92.36	92.49	0.001160	0.29	0.39	2.31	0.23
River 1	Reach 1-Upper	364	5YrSCS24Hr	0.18	92.23	92.60	92.39	92.60	0.000628	0.26	0.66	2.84	0.17
River 1	Reach 1-Upper	364	10YrSCS24Hr	0.22	92.23	92.70	92.40	92.71	0.000320	0.22	1.00	3.37	0.13
River 1	Reach 1-Upper	364	25YrSCS24Hr	0.28	92.23	92.88	92.42	92.88	0.000125	0.16	1.71	4.91	0.08
River 1	Reach 1-Upper	364	50YrSCS24Hr	0.33	92.23	93.05	92.44	93.05	0.000024	0.09	7.11	44.08	0.04
River 1	Reach 1-Upper	364	100YrSCS24Hr	0.38	92.23	93.28	92.46	93.28	0.000003	0.04	17.03	44.82	0.02
River 1	Reach 1-Upper	347	2YrCHI3Hr	0.08	92.26	92.42	92.33	92.42	0.001247	0.25	0.31	2.52	0.22
River 1	Reach 1-Upper	347	5YrCHI3Hr	0.13	92.26	92.49	92.35	92.50	0.000764	0.25	0.51	2.84	0.19
River 1	Reach 1-Upper	347	10YrCHI3Hr	0.16	92.26	92.56	92.37	92.57	0.000481	0.23	0.72	3.13	0.15
River 1	Reach 1-Upper	347	25YrCHI3Hr	0.21	92.26	92.68	92.38	92.69	0.000223	0.19	1.13	3.65	0.11
River 1	Reach 1-Upper	347	50YrCHI3Hr	0.26	92.26	92.81	92.40	92.81	0.000114	0.16	1.64	4.21	0.08
River 1	Reach 1-Upper	347	100YrCHI3Hr	0.31	92.26	92.98	92.41	92.98	0.000054	0.13	2.42	6.23	0.06
River 1	Reach 1-Upper	347	2YrSCS24Hr	0.11	92.26	92.47	92.35	92.48	0.000881	0.25	0.45	2.74	0.20
River 1	Reach 1-Upper	347	5YrSCS24Hr	0.18	92.26	92.59	92.37	92.59	0.000407	0.22	0.80	3.24	0.14
River 1	Reach 1-Upper	347	10YrSCS24Hr	0.22	92.26	92.70	92.38	92.70	0.000206	0.19	1.19	3.72	0.11
River 1	Reach 1-Upper	347	25YrSCS24Hr	0.28	92.26	92.88	92.40	92.88	0.000085	0.14	1.93	4.52	0.07
River 1	Reach 1-Upper	347	50YrSCS24Hr	0.33	92.26	93.05	92.41	93.05	0.000037	0.12	3.16	14.13	0.05
River 1	Reach 1-Upper	347	100YrSCS24Hr	0.38	92.26	93.28	92.43	93.28	0.000006	0.06	12.31	37.97	0.02
River 1	Reach 1-Upper	328	2YrCHI3Hr	0.08	92.20	92.39	92.29	92.39	0.001651	0.30	0.26	1.92	0.26
River 1	Reach 1-Upper	328	5YrCHI3Hr	0.13	92.20	92.48	92.32	92.48	0.000966	0.29	0.44	2.28	0.21
River 1	Reach 1-Upper	328	10YrCHI3Hr	0.16	92.20	92.55	92.34	92.55	0.000609	0.26	0.62	2.59	0.17
River 1	Reach 1-Upper	328	25YrCHI3Hr	0.21	92.20	92.68	92.36	92.68	0.000289	0.22	0.99	3.12	0.12
River 1	Reach 1-Upper	328	50YrCHI3Hr	0.26	92.20	92.81	92.38	92.81	0.000165	0.18	1.44	4.02	0.09
River 1	Reach 1-Upper	328	100YrCHI3Hr	0.31	92.20	92.97	92.39	92.98	0.000079	0.14	2.18	4.99	0.07
River 1	Reach 1-Upper	328	2YrSCS24Hr	0.11	92.20	92.45	92.31	92.46	0.001116	0.29	0.39	2.18	0.22
River 1	Reach 1-Upper	328	5YrSCS24Hr	0.18	92.20	92.58	92.34	92.58	0.000518	0.25	0.69	2.70	0.16
River 1	Reach 1-Upper	328	10YrSCS24Hr	0.22	92.20	92.70	92.36	92.70	0.000268	0.21	1.04	3.19	0.12
River 1	Reach 1-Upper	328	25YrSCS24Hr	0.28	92.20	92.88	92.38	92.88	0.000119	0.16	1.73	4.39	0.08
River 1	Reach 1-Upper	328	50YrSCS24Hr	0.33	92.20	93.05	92.40	93.05	0.000056	0.13	2.59	5.81	0.06
River 1	Reach 1-Upper	328	100YrSCS24Hr	0.38	92.20	93.28	92.42	93.28	0.000010	0.07	9.31	29.89	0.03
River 1	Reach 1-Upper	306	2YrCHI3Hr	0.08	92.07	92.37	92.19	92.37	0.000732	0.26	0.29	1.56	0.18
River 1	Reach 1-Upper	306	5YrCHI3Hr	0.13	92.07	92.46	92.23	92.46	0.000682	0.31	0.42	1.87	0.18
River 1	Reach 1-Upper	306	10YrCHI3Hr	0.16	92.07	92.54	92.25	92.54	0.000557	0.31	0.53	2.14	0.17
River 1	Reach 1-Upper	306	25YrCHI3Hr	0.21	92.07	92.67	92.28	92.67	0.000330	0.29	0.73	2.65	0.13
River 1	Reach 1-Upper	306	50YrCHI3Hr	0.26	92.07	92.80	92.30	92.81	0.000212	0.28	0.93	3.22	0.11
River 1	Reach 1-Upper	306	100YrCHI3Hr	0.31	92.07	92.97	92.32	92.97	0.000136	0.26	1.18	4.39	0.09
River 1	Reach 1-Upper	306	2YrSCS24Hr	0.11	92.07	92.43	92.22	92.44	0.000706	0.30	0.38	1.78	0.18
River 1	Reach 1-Upper	306	5YrSCS24Hr	0.18	92.07	92.57	92.26	92.57	0.000500	0.31	0.57	2.24	0.16
River 1	Reach 1-Upper	306	10YrSCS24Hr	0.22	92.07	92.69	92.28	92.69	0.000315	0.29	0.75	2.72	0.13
River 1	Reach 1-Upper	306	25YrSCS24Hr	0.28	92.07	92.87	92.31	92.88	0.000176	0.27	1.03	3.52	0.10
River 1	Reach 1-Upper	306	50YrSCS24Hr	0.33	92.07	93.05	92.33	93.05	0.000113	0.25	1.29	5.08	0.09
River 1	Reach 1-Upper	306	100YrSCS24Hr	0.38	92.07	93.27	92.35	93.27	0.000071	0.23	1.63	20.92	0.07
River 1	Reach 1-Upper	300		Culvert									
River 1	Reach 1-Upper	294	2YrCHI3Hr	0.08	92.15	92.33	92.24	92.33	0.001623	0.33	0.23	2.13	0.27
River 1	Reach 1-Upper	294	5YrCHI3Hr	0.13	92.15	92.37	92.26	92.38	0.001907	0.42	0.30	2.36	0.30
River 1	Reach 1-Upper	294	10YrCHI3Hr	0.16	92.15	92.39	92.28	92.41	0.002165	0.49	0.34	2.49	0.33
River 1	Reach 1-Upper	294	25YrCHI3Hr	0.21	92.15	92.42	92.30	92.44	0.002461	0.56	0.38	2.64	0.36
River 1	Reach 1-Upper	294	50YrCHI3Hr	0.26	92.15	92.45	92.32	92.47	0.002689	0.62	0.41	2.75	0.38
River 1	Reach 1-Upper	294	100YrCHI3Hr	0.31	92.15	92.47	92.33	92.49	0.002898	0.68	0.45	2.87	0.40
River 1	Reach 1-Upper	294	2YrSCS24Hr	0.11	92.15	92.36	92.25	92.37	0.001813	0.40	0.28	2.31	0.29
River 1	Reach 1-Upper	294	5YrSCS24Hr	0.18	92.15	92.40	92.28	92.41	0.002263	0.51	0.35	2.52	0.34
River 1	Reach 1-Upper	294	10YrSCS24Hr	0.22	92.15	92.43	92.30	92.44	0.002532	0.58	0.38	2.65	0.36
River 1	Reach 1-Upper	294	25YrSCS24Hr	0.28	92.15	92.46	92.32	92.48	0.002786	0.65	0.43	2.80	0.39
River 1	Reach 1-Upper	294	50YrSCS24Hr	0.33	92.15	92.48	92.34	92.50	0.002974	0.71	0.46	2.92	0.41
River 1	Reach 1-Upper	294	100YrSCS24Hr	0.38	92.15	92.50	92.36	92.53	0.003240	0.77	0.49	3.02	0.43
River 1	Reach 1-Upper	279	2YrCHI3Hr	0.09	92.08	92.21	92.21	92.25	0.030677	0.84	0.11	1.56	1.01
River 1	Reach 1-Upper	279	5YrCHI3Hr	0.15	92.08	92.25	92.25	92.29	0.024457	0.90	0.17	1.87	0.95
River 1	Reach 1-Upper	279	10YrCHI3Hr	0.20	92.08	92.28		92.32	0.017438	0.87	0.23	2.05	0.83
River 1	Reach 1-Upper	279	25YrCHI3Hr	0.27	92.08	92.32		92.36	0.013351	0.86	0.31	2.26	0.74
River 1	Reach 1-Upper	279	50YrCHI3Hr	0.32	92.08	92.34		92.38	0.011757	0.87	0.37	2.42	0.71
River 1	Reach 1-Upper	279	100YrCHI3Hr	0.38	92.08	92.37		92.41	0.010680	0.88	0.43	2.57	0.69
River 1	Reach 1-Upper	279	2YrSCS24Hr	0.14	92.08	92.24	92.24	92.28	0.027916	0.90	0.15	1.79	1.00
River 1	Reach 1-Upper	279	5YrSCS24Hr	0.22	92.08	92.29		92.33	0.015850	0.86	0.25	2.11	0.79
River 1	Reach 1-Upper	279	10YrSCS24Hr	0.27	92.08	92.32		92.36	0.013094	0.86	0.32	2.29	0.74
River 1	Reach 1-Upper	279	25YrSCS24Hr	0.35	92.08	92.35		92.39	0.011229	0.87	0.40	2.49	0.70
River 1	Reach 1-Upper	279	50YrSCS24Hr	0.41	92.08	92.38		92.42	0.010330	0.89	0.46	2.63	0.68
River 1	Reach 1-Upper	279	100YrSCS24Hr	0.47	92.08	92.40		92.44	0.009621	0.90	0.52	2.77	0.66
River 1	Reach 1-Upper	277	2YrCHI3Hr	0.09	91.95	92.21		92.22	0.000731	0.22	0.41	2.76	0.18
River 1	Reach 1-Upper	277	5YrCHI3Hr	0.15	91.95	92.26		92.27	0.000866	0.29	0.56	3.04	0.20
River 1	Reach 1-Upper	277	10YrCHI3Hr	0.20	91.95	92.29		92.30	0.000933	0.33	0.65	3.21	0.22
River 1	Reach 1-Upper	277	25YrCHI3Hr	0.27	91.95	92.33		92.33	0.001005	0.37	0.76	3.40	0.23
River 1	Reach 1-Upper	277	50YrCHI3Hr	0.32	91.95	92.35		92.36	0.001064	0.41	0.85	3.54	0.24
River 1	Reach 1-Upper	277	100YrCHI3Hr	0.38	91.95	92.38		92.39	0.001128	0.44	0.94	3.68	0.25
River 1	Reach 1-Upper	277	2YrSCS24Hr	0.14	91.95	92.25		92.25	0.000837	0.27	0.52	2.97	0.20

HEC-RAS Plan: 20250603-Post_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	0.000942	0.34	0.68	3.26	0.22
River 1	Reach 1-Upper	277	10YrSCS24Hr	0.27	91.95	92.33		92.34	0.001013	0.38	0.77	3.42	0.23
River 1	Reach 1-Upper	277	25YrSCS24Hr	0.35	91.95	92.36		92.37	0.001094	0.42	0.89	3.61	0.24
River 1	Reach 1-Upper	277	50YrSCS24Hr	0.41	91.95	92.39		92.40	0.001153	0.46	0.98	3.74	0.25
River 1	Reach 1-Upper	277	100YrSCS24Hr	0.47	91.95	92.41		92.42	0.001212	0.49	1.07	3.88	0.26
River 1	Reach 1-Upper	270	2YrCHI3Hr	0.09	92.03	92.21		92.21	0.001711	0.28	0.32	2.69	0.26
River 1	Reach 1-Upper	270	5YrCHI3Hr	0.15	92.03	92.25		92.26	0.001749	0.34	0.46	3.12	0.28
River 1	Reach 1-Upper	270	10YrCHI3Hr	0.20	92.03	92.28		92.29	0.001743	0.37	0.55	3.39	0.28
River 1	Reach 1-Upper	270	25YrCHI3Hr	0.27	92.03	92.32		92.33	0.001732	0.40	0.68	3.71	0.29
River 1	Reach 1-Upper	270	50YrCHI3Hr	0.32	92.03	92.34		92.35	0.001724	0.42	0.77	4.08	0.29
River 1	Reach 1-Upper	270	100YrCHI3Hr	0.38	92.03	92.37		92.38	0.001666	0.45	0.89	4.95	0.29
River 1	Reach 1-Upper	270	2YrSCS24Hr	0.14	92.03	92.24		92.25	0.001760	0.32	0.42	2.99	0.27
River 1	Reach 1-Upper	270	5YrSCS24Hr	0.22	92.03	92.29		92.30	0.001718	0.37	0.59	3.47	0.28
River 1	Reach 1-Upper	270	10YrSCS24Hr	0.27	92.03	92.32		92.33	0.001733	0.40	0.69	3.75	0.29
River 1	Reach 1-Upper	270	25YrSCS24Hr	0.35	92.03	92.35		92.36	0.001697	0.43	0.82	4.48	0.29
River 1	Reach 1-Upper	270	50YrSCS24Hr	0.41	92.03	92.38		92.39	0.001643	0.46	0.94	5.31	0.29
River 1	Reach 1-Upper	270	100YrSCS24Hr	0.47	92.03	92.40		92.41	0.001586	0.48	1.08	5.71	0.29
River 1	Reach 1-Upper	261	2YrCHI3Hr	0.09	92.00	92.19	92.11	92.19	0.002280	0.34	0.27	2.14	0.30
River 1	Reach 1-Upper	261	5YrCHI3Hr	0.15	92.00	92.23	92.14	92.24	0.002570	0.41	0.37	2.36	0.33
River 1	Reach 1-Upper	261	10YrCHI3Hr	0.20	92.00	92.26	92.15	92.27	0.002733	0.46	0.44	2.49	0.35
River 1	Reach 1-Upper	261	25YrCHI3Hr	0.27	92.00	92.29	92.18	92.31	0.002879	0.51	0.52	2.65	0.37
River 1	Reach 1-Upper	261	50YrCHI3Hr	0.32	92.00	92.32	92.19	92.33	0.003006	0.54	0.59	2.77	0.38
River 1	Reach 1-Upper	261	100YrCHI3Hr	0.38	92.00	92.34	92.21	92.36	0.003119	0.58	0.66	2.89	0.39
River 1	Reach 1-Upper	261	2YrSCS24Hr	0.14	92.00	92.22	92.13	92.23	0.002496	0.39	0.34	2.30	0.33
River 1	Reach 1-Upper	261	5YrSCS24Hr	0.22	92.00	92.27	92.16	92.28	0.002723	0.47	0.46	2.54	0.35
River 1	Reach 1-Upper	261	10YrSCS24Hr	0.27	92.00	92.30	92.18	92.31	0.002897	0.51	0.53	2.67	0.37
River 1	Reach 1-Upper	261	25YrSCS24Hr	0.35	92.00	92.33	92.20	92.34	0.003059	0.56	0.62	2.82	0.38
River 1	Reach 1-Upper	261	50YrSCS24Hr	0.41	92.00	92.35	92.22	92.37	0.003161	0.59	0.69	2.94	0.39
River 1	Reach 1-Upper	261	100YrSCS24Hr	0.47	92.00	92.37	92.24	92.39	0.003275	0.63	0.76	3.07	0.40
River 1	Reach 1-Upper	239	2YrCHI3Hr	0.09	91.93	92.05	92.04	92.08	0.017237	0.70	0.13	1.61	0.78
River 1	Reach 1-Upper	239	5YrCHI3Hr	0.15	91.93	92.10	92.07	92.12	0.013911	0.75	0.21	1.91	0.73
River 1	Reach 1-Upper	239	10YrCHI3Hr	0.20	91.93	92.12	92.09	92.15	0.012488	0.78	0.26	2.07	0.71
River 1	Reach 1-Upper	239	25YrCHI3Hr	0.27	91.93	92.15	92.12	92.19	0.011193	0.82	0.32	2.23	0.69
River 1	Reach 1-Upper	239	50YrCHI3Hr	0.32	91.93	92.18	92.13	92.21	0.010512	0.85	0.38	2.35	0.68
River 1	Reach 1-Upper	239	100YrCHI3Hr	0.38	91.93	92.20	92.15	92.24	0.009943	0.87	0.44	2.48	0.67
River 1	Reach 1-Upper	239	2YrSCS24Hr	0.14	91.93	92.08	92.06	92.11	0.014638	0.74	0.18	1.83	0.74
River 1	Reach 1-Upper	239	5YrSCS24Hr	0.22	91.93	92.13	92.10	92.16	0.012117	0.79	0.27	2.11	0.70
River 1	Reach 1-Upper	239	10YrSCS24Hr	0.27	91.93	92.16	92.12	92.19	0.011093	0.82	0.33	2.25	0.69
River 1	Reach 1-Upper	239	25YrSCS24Hr	0.35	91.93	92.19	92.14	92.23	0.010240	0.86	0.40	2.41	0.67
River 1	Reach 1-Upper	239	50YrSCS24Hr	0.41	91.93	92.21	92.16	92.25	0.009700	0.88	0.46	2.53	0.66
River 1	Reach 1-Upper	239	100YrSCS24Hr	0.47	91.93	92.23	92.18	92.28	0.009178	0.90	0.52	2.66	0.65
River 1	Reach 1-Upper	218	2YrCHI3Hr	0.09	91.82	91.98	91.90	91.98	0.002022	0.31	0.30	2.52	0.28
River 1	Reach 1-Upper	218	5YrCHI3Hr	0.15	91.82	92.02	91.93	92.03	0.002161	0.37	0.41	2.74	0.31
River 1	Reach 1-Upper	218	10YrCHI3Hr	0.20	91.82	92.05	91.94	92.06	0.002207	0.41	0.49	2.87	0.31
River 1	Reach 1-Upper	218	25YrCHI3Hr	0.27	91.82	92.08	91.96	92.09	0.002325	0.45	0.59	3.03	0.33
River 1	Reach 1-Upper	218	50YrCHI3Hr	0.32	91.82	92.10	91.97	92.12	0.002387	0.48	0.66	3.14	0.34
River 1	Reach 1-Upper	218	100YrCHI3Hr	0.38	91.82	92.13	91.99	92.14	0.002436	0.51	0.74	3.27	0.34
River 1	Reach 1-Upper	218	2YrSCS24Hr	0.14	91.82	92.01	91.92	92.01	0.002130	0.35	0.38	2.68	0.30
River 1	Reach 1-Upper	218	5YrSCS24Hr	0.22	91.82	92.06	91.95	92.06	0.002240	0.42	0.52	2.91	0.32
River 1	Reach 1-Upper	218	10YrSCS24Hr	0.27	91.82	92.08	91.96	92.09	0.002335	0.46	0.60	3.04	0.33
River 1	Reach 1-Upper	218	25YrSCS24Hr	0.35	91.82	92.12	91.98	92.13	0.002410	0.50	0.70	3.20	0.34
River 1	Reach 1-Upper	218	50YrSCS24Hr	0.41	91.82	92.14	92.00	92.15	0.002460	0.53	0.78	3.33	0.35
River 1	Reach 1-Upper	218	100YrSCS24Hr	0.47	91.82	92.17	92.01	92.18	0.002488	0.55	0.86	3.49	0.35
River 1	Reach 1-Upper	197	2YrCHI3Hr	0.09	91.73	91.86	91.84	91.88	0.015440	0.67	0.14	1.62	0.74
River 1	Reach 1-Upper	197	5YrCHI3Hr	0.15	91.73	91.90	91.88	91.93	0.013158	0.74	0.21	1.89	0.71
River 1	Reach 1-Upper	197	10YrCHI3Hr	0.20	91.73	91.93	91.90	91.96	0.012270	0.78	0.26	2.03	0.70
River 1	Reach 1-Upper	197	25YrCHI3Hr	0.27	91.73	91.96	91.92	91.99	0.011534	0.84	0.32	2.17	0.70
River 1	Reach 1-Upper	197	50YrCHI3Hr	0.32	91.73	91.98	91.94	92.02	0.010821	0.87	0.37	2.28	0.69
River 1	Reach 1-Upper	197	100YrCHI3Hr	0.38	91.73	92.00	91.96	92.04	0.010553	0.90	0.42	2.38	0.69
River 1	Reach 1-Upper	197	2YrSCS24Hr	0.14	91.73	91.89	91.87	91.92	0.013722	0.72	0.19	1.83	0.72
River 1	Reach 1-Upper	197	5YrSCS24Hr	0.22	91.73	91.93	91.90	91.97	0.012069	0.80	0.27	2.07	0.70
River 1	Reach 1-Upper	197	10YrSCS24Hr	0.27	91.73	91.96	91.92	92.00	0.011461	0.84	0.32	2.19	0.70
River 1	Reach 1-Upper	197	25YrSCS24Hr	0.35	91.73	91.99	91.95	92.03	0.010693	0.88	0.39	2.33	0.69
River 1	Reach 1-Upper	197	50YrSCS24Hr	0.41	91.73	92.01	91.96	92.05	0.010457	0.92	0.44	2.42	0.69
River 1	Reach 1-Upper	197	100YrSCS24Hr	0.47	91.73	92.03	91.98	92.08	0.010270	0.96	0.50	2.52	0.69
River 1	Reach 1-Upper	174	2YrCHI3Hr	0.09	91.52	91.71	91.64	91.72	0.004267	0.43	0.21	1.87	0.41
River 1	Reach 1-Upper	174	5YrCHI3Hr	0.15	91.52	91.75	91.68	91.77	0.004475	0.50	0.31	2.19	0.43
River 1	Reach 1-Upper	174	10YrCHI3Hr	0.20	91.52	91.78	91.70	91.79	0.004646	0.55	0.36	2.32	0.45
River 1	Reach 1-Upper	174	25YrCHI3Hr	0.27	91.52	91.81	91.72	91.83	0.004785	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	0.004939	0.65	0.49	2.58	0.47
River 1	Reach 1-Upper	174	100YrCHI3Hr	0.38	91.52	91.85	91.76	91.88	0.005072	0.69	0.55	2.69	0.49
River 1	Reach 1-Upper	174	2YrSCS24Hr	0.14	91.52	91.74	91.67	91.75	0.004398	0.48	0.28	2.12	0.42
River 1	Reach 1-Upper	174	5YrSCS24Hr	0.22	91.52	91.79	91.70	91.80	0.004687	0.57	0.38	2.35	0.45
River 1	Reach 1-Upper	174	10YrSCS24Hr	0.27	91.52	91.81	91.72	91.83	0.004808	0.61	0.44	2.48	0.46
River 1	Reach 1-Upper	174	25YrSCS24Hr	0.35	91.52	91.84	91.75	91.86	0.005003	0.67	0.52	2.63	0.48
River 1	Reach 1-Upper	174	50YrSCS24Hr	0.41	91.52	91.86	91.77	91.89	0.005118	0.71	0.58	2.73	0.49
River 1	Reach 1-Upper	174	100YrSCS24Hr	0.47	91.52	91.89	91.78	91.91	0.005160	0.74	0.64	2.85	0.50
River 1	Reach 1-Upper	154	2YrCHI3Hr	0.09	91.43	91.62	91.56	91.63	0.004368	0.40	0.23	2.24	0.41
River 1	Reach 1-Upper	154	5YrCHI3Hr	0.15	91.43	91.67	91.60	91.68	0.004241	0.46	0.33	2.63	0.42
River 1	Reach 1-Upper	154	10YrCHI3Hr	0.20	91.43	91.69	91.61	91.70	0.004186	0.50	0.40	2.85	0.42
River 1	Reach 1-Upper	154	25YrCHI3Hr	0.27	91.43	91.72	91.64	91.74	0.004089	0.53	0.50	3.10	0.42
River 1	Reach 1-Upper	154	50YrCHI3Hr	0.32	91.43	91.75	91.65	91.76	0.003991	0.56	0.57	3.27	0.43
River 1	Reach 1-Upper	154	100YrCHI3Hr	0.38	91.43	91.77	91.67	91.79	0.003887	0.58	0.65	3.43	0.43

HEC-RAS Plan: 20250603-Post_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	154	2YrSCS24Hr	0.14	91.43	91.65	91.59	91.66	0.004250	0.45	0.30	2.53	0.41
River 1	Reach 1-Upper	154	5YrSCS24Hr	0.22	91.43	91.70	91.62	91.71	0.004166	0.51	0.43	2.91	0.42
River 1	Reach 1-Upper	154	10YrSCS24Hr	0.27	91.43	91.73	91.64	91.74	0.004078	0.54	0.51	3.13	0.43
River 1	Reach 1-Upper	154	25YrSCS24Hr	0.35	91.43	91.76	91.66	91.77	0.003941	0.57	0.61	3.34	0.43
River 1	Reach 1-Upper	154	50YrSCS24Hr	0.41	91.43	91.78	91.67	91.80	0.003849	0.59	0.69	3.49	0.43
River 1	Reach 1-Upper	154	100YrSCS24Hr	0.47	91.43	91.80	91.69	91.82	0.003765	0.61	0.77	3.65	0.43
River 1	Reach 1-Upper	137	2YrCHI3Hr	0.09	91.33	91.49	91.46	91.51	0.011873	0.65	0.14	1.44	0.66
River 1	Reach 1-Upper	137	5YrCHI3Hr	0.15	91.33	91.54	91.50	91.56	0.011294	0.74	0.21	1.67	0.67
River 1	Reach 1-Upper	137	10YrCHI3Hr	0.20	91.33	91.56	91.52	91.59	0.010987	0.79	0.25	1.81	0.67
River 1	Reach 1-Upper	137	25YrCHI3Hr	0.27	91.33	91.59	91.55	91.63	0.010557	0.84	0.32	1.98	0.67
River 1	Reach 1-Upper	137	50YrCHI3Hr	0.32	91.33	91.62	91.57	91.66	0.010224	0.87	0.37	2.11	0.67
River 1	Reach 1-Upper	137	100YrCHI3Hr	0.38	91.33	91.64	91.59	91.69	0.009831	0.90	0.42	2.25	0.66
River 1	Reach 1-Upper	137	2YrSCS24Hr	0.14	91.33	91.52	91.49	91.55	0.011421	0.72	0.19	1.61	0.67
River 1	Reach 1-Upper	137	5YrSCS24Hr	0.22	91.33	91.57	91.53	91.60	0.010887	0.80	0.27	1.85	0.67
River 1	Reach 1-Upper	137	10YrSCS24Hr	0.27	91.33	91.60	91.55	91.63	0.010513	0.85	0.32	2.00	0.67
River 1	Reach 1-Upper	137	25YrSCS24Hr	0.35	91.33	91.63	91.58	91.67	0.010071	0.89	0.39	2.17	0.67
River 1	Reach 1-Upper	137	50YrSCS24Hr	0.41	91.33	91.65	91.60	91.70	0.009667	0.91	0.45	2.30	0.66
River 1	Reach 1-Upper	137	100YrSCS24Hr	0.47	91.33	91.68	91.62	91.72	0.009323	0.94	0.51	2.43	0.66
River 1	Reach 1-Upper	116	2YrCHI3Hr	0.09	91.23	91.39	91.32	91.40	0.003087	0.37	0.24	2.11	0.35
River 1	Reach 1-Upper	116	5YrCHI3Hr	0.15	91.23	91.44	91.35	91.45	0.002919	0.43	0.36	2.39	0.35
River 1	Reach 1-Upper	116	10YrCHI3Hr	0.20	91.23	91.47	91.37	91.48	0.002861	0.46	0.44	2.56	0.36
River 1	Reach 1-Upper	116	25YrCHI3Hr	0.27	91.23	91.51	91.39	91.52	0.002819	0.50	0.54	2.76	0.36
River 1	Reach 1-Upper	116	50YrCHI3Hr	0.32	91.23	91.53	91.41	91.55	0.002809	0.52	0.61	2.91	0.36
River 1	Reach 1-Upper	116	100YrCHI3Hr	0.38	91.23	91.56	91.43	91.58	0.002814	0.55	0.69	3.05	0.37
River 1	Reach 1-Upper	116	2YrSCS24Hr	0.14	91.23	91.43	91.34	91.43	0.002948	0.41	0.33	2.32	0.35
River 1	Reach 1-Upper	116	5YrSCS24Hr	0.22	91.23	91.48	91.37	91.49	0.002848	0.47	0.46	2.61	0.36
River 1	Reach 1-Upper	116	10YrSCS24Hr	0.27	91.23	91.51	91.39	91.52	0.002816	0.50	0.55	2.78	0.36
River 1	Reach 1-Upper	116	25YrSCS24Hr	0.35	91.23	91.55	91.41	91.56	0.002808	0.54	0.65	2.98	0.37
River 1	Reach 1-Upper	116	50YrSCS24Hr	0.41	91.23	91.58	91.43	91.59	0.002653	0.55	0.74	3.12	0.36
River 1	Reach 1-Upper	116	100YrSCS24Hr	0.47	91.23	91.61	91.45	91.62	0.002570	0.57	0.83	3.26	0.36
River 1	Reach 1-Upper	95	2YrCHI3Hr	0.09	91.07	91.29	91.24	91.31	0.006025	0.53	0.17	1.41	0.48
River 1	Reach 1-Upper	95	5YrCHI3Hr	0.15	91.07	91.34	91.27	91.36	0.007024	0.64	0.24	1.62	0.54
River 1	Reach 1-Upper	95	10YrCHI3Hr	0.20	91.07	91.36	91.30	91.39	0.007632	0.71	0.28	1.74	0.57
River 1	Reach 1-Upper	95	25YrCHI3Hr	0.27	91.07	91.39	91.33	91.42	0.008133	0.79	0.34	1.88	0.59
River 1	Reach 1-Upper	95	50YrCHI3Hr	0.32	91.07	91.41	91.35	91.45	0.008601	0.84	0.38	1.98	0.62
River 1	Reach 1-Upper	95	100YrCHI3Hr	0.38	91.07	91.43	91.37	91.47	0.010479	0.95	0.40	2.04	0.68
River 1	Reach 1-Upper	95	2YrSCS24Hr	0.14	91.07	91.32	91.26	91.34	0.006791	0.61	0.22	1.56	0.52
River 1	Reach 1-Upper	95	5YrSCS24Hr	0.22	91.07	91.37	91.30	91.40	0.007803	0.73	0.29	1.77	0.57
River 1	Reach 1-Upper	95	10YrSCS24Hr	0.27	91.07	91.40	91.33	91.43	0.008086	0.79	0.35	1.90	0.59
River 1	Reach 1-Upper	95	25YrSCS24Hr	0.35	91.07	91.42	91.36	91.46	0.008817	0.87	0.40	2.03	0.63
River 1	Reach 1-Upper	95	50YrSCS24Hr	0.41	91.07	91.39	91.38	91.47	0.020127	1.23	0.33	1.86	0.93
River 1	Reach 1-Upper	95	100YrSCS24Hr	0.47	91.07	91.40	91.40	91.49	0.023204	1.35	0.35	1.91	1.01
River 1	Reach 1-Upper	72	2YrCHI3Hr	0.09	90.91	91.00	91.00	91.03	0.032221	0.77	0.12	2.00	1.02
River 1	Reach 1-Upper	72	5YrCHI3Hr	0.15	90.91	91.03	91.03	91.07	0.028410	0.85	0.18	2.44	0.99
River 1	Reach 1-Upper	72	10YrCHI3Hr	0.20	90.91	91.05	91.05	91.09	0.026746	0.90	0.22	2.65	0.98
River 1	Reach 1-Upper	72	25YrCHI3Hr	0.27	90.91	91.07	91.07	91.12	0.026304	0.97	0.27	2.83	1.00
River 1	Reach 1-Upper	72	50YrCHI3Hr	0.32	90.91	91.08	91.08	91.13	0.025112	1.01	0.32	2.96	0.99
River 1	Reach 1-Upper	72	100YrCHI3Hr	0.38	90.91	91.11	91.10	91.15	0.019074	0.97	0.39	3.17	0.88
River 1	Reach 1-Upper	72	2YrSCS24Hr	0.14	90.91	91.03	91.03	91.06	0.028884	0.82	0.16	2.32	0.99
River 1	Reach 1-Upper	72	5YrSCS24Hr	0.22	90.91	91.05	91.05	91.10	0.026334	0.91	0.24	2.69	0.98
River 1	Reach 1-Upper	72	10YrSCS24Hr	0.27	90.91	91.07	91.07	91.12	0.026938	0.99	0.28	2.83	1.01
River 1	Reach 1-Upper	72	25YrSCS24Hr	0.35	90.91	91.09	91.09	91.14	0.024807	1.03	0.34	3.02	0.99
River 1	Reach 1-Upper	72	50YrSCS24Hr	0.41	90.91	91.16	91.10	91.18	0.007645	0.72	0.57	3.60	0.58
River 1	Reach 1-Upper	72	100YrSCS24Hr	0.47	90.91	91.23	91.12	91.24	0.003374	0.57	0.83	4.09	0.40
River 1	Reach 1-Lower	56	2YrCHI3Hr	0.15	90.47	90.74	90.58	90.74	0.000351	0.20	0.77	10.31	0.13
River 1	Reach 1-Lower	56	5YrCHI3Hr	0.27	90.47	90.85	90.60	90.85	0.000292	0.23	1.16	14.65	0.13
River 1	Reach 1-Lower	56	10YrCHI3Hr	0.36	90.47	90.92	90.62	90.92	0.000280	0.26	1.40	17.01	0.13
River 1	Reach 1-Lower	56	25YrCHI3Hr	0.49	90.47	91.00	90.64	91.01	0.000270	0.29	1.70	19.75	0.13
River 1	Reach 1-Lower	56	50YrCHI3Hr	0.59	90.47	91.07	90.66	91.07	0.000264	0.31	1.92	20.02	0.13
River 1	Reach 1-Lower	56	100YrCHI3Hr	0.71	90.47	91.13	90.68	91.13	0.000265	0.33	2.14	20.02	0.14
River 1	Reach 1-Lower	56	2YrSCS24Hr	0.24	90.47	90.82	90.60	90.82	0.000304	0.22	1.06	13.59	0.13
River 1	Reach 1-Lower	56	5YrSCS24Hr	0.40	90.47	90.94	90.63	90.95	0.000274	0.27	1.49	18.21	0.13
River 1	Reach 1-Lower	56	10YrSCS24Hr	0.51	90.47	91.02	90.64	91.02	0.000269	0.29	1.74	19.88	0.13
River 1	Reach 1-Lower	56	25YrSCS24Hr	0.66	90.47	91.10	90.67	91.11	0.000265	0.32	2.04	20.02	0.14
River 1	Reach 1-Lower	56	50YrSCS24Hr	0.78	90.47	91.17	90.69	91.17	0.000261	0.34	2.27	20.02	0.14
River 1	Reach 1-Lower	56	100YrSCS24Hr	0.91	90.47	91.23	90.71	91.24	0.000263	0.37	2.49	20.02	0.14
River 1	Reach 1-Lower	50		Culvert									
River 1	Reach 1-Lower	38	2YrCHI3Hr	0.15	90.46	90.57	90.53	90.58	0.005136	0.44	0.35	30.55	0.44
River 1	Reach 1-Lower	38	5YrCHI3Hr	0.27	90.46	90.60	90.55	90.62	0.007100	0.61	0.44	34.54	0.54
River 1	Reach 1-Lower	38	10YrCHI3Hr	0.36	90.46	90.61	90.57	90.64	0.008644	0.73	0.50	35.72	0.61
River 1	Reach 1-Lower	38	25YrCHI3Hr	0.49	90.46	90.63	90.60	90.67	0.010630	0.87	0.56	36.53	0.69
River 1	Reach 1-Lower	38	50YrCHI3Hr	0.59	90.46	90.64	90.61	90.69	0.012282	0.98	0.60	36.92	0.75
River 1	Reach 1-Lower	38	100YrCHI3Hr	0.71	90.46	90.66	90.63	90.72	0.013950	1.10	0.65	37.68	0.81
River 1	Reach 1-Lower	38	2YrSCS24Hr	0.24	90.46	90.59	90.55	90.61	0.006473	0.56	0.42	33.74	0.52
River 1	Reach 1-Lower	38	5YrSCS24Hr	0.40	90.46	90.62	90.58	90.65	0.009216	0.77	0.52	36.25	0.64
River 1	Reach 1-Lower	38	10YrSCS24Hr	0.51	90.46	90.63	90.60	90.68	0.010974	0.89	0.57	36.59	0.71
River 1	Reach 1-Lower	38	25YrSCS24Hr	0.66	90.46	90.65	90.63	90.71	0.013194	1.05	0.63	37.35	0.79
River 1	Reach 1-Lower	38	50YrSCS24Hr	0.78	90.46	90.66	90.64	90.73	0.015131	1.17	0.67	38.00	0.85
River 1	Reach 1-Lower	38	100YrSCS24Hr	0.91	90.46	90.67	90.66	90.76	0.017508	1.30	0.70	38.44	0.92
River 1	Reach 1-Lower	0	2YrCHI3Hr	0.15	90.42	90.50	90.46	90.50	0.001001	0.14	1.11	19.02	0.18
River 1	Reach 1-Lower	0	5YrCHI3Hr	0.27	90.42	90.53	90.47	90.53	0.001000	0.17	1.61	20.06	0.19
River 1	Reach 1-Lower	0	10YrCHI3Hr	0.36	90.42	90.54	90.48	90.55	0.001000	0.19	1.93	20.29	0.19

HEC-RAS Plan: 20250603-Post_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	90.56	0.001001	0.21	2.32	20.57	0.20
River 1	Reach 1-Lower	0	50YrCHI3Hr	0.59	90.42	90.58	90.49	90.58	0.001000	0.23	2.62	20.78	0.20
River 1	Reach 1-Lower	0	100YrCHI3Hr	0.71	90.42	90.59	90.50	90.60	0.001000	0.24	2.95	21.44	0.21
River 1	Reach 1-Lower	0	2YrSCS24Hr	0.24	90.42	90.52	90.46	90.52	0.001000	0.16	1.49	19.97	0.19
River 1	Reach 1-Lower	0	5YrSCS24Hr	0.40	90.42	90.55	90.48	90.55	0.001000	0.20	2.04	20.38	0.20
River 1	Reach 1-Lower	0	10YrSCS24Hr	0.51	90.42	90.57	90.49	90.57	0.001001	0.21	2.38	20.62	0.20
River 1	Reach 1-Lower	0	25YrSCS24Hr	0.66	90.42	90.59	90.49	90.59	0.001001	0.24	2.81	21.20	0.21
River 1	Reach 1-Lower	0	50YrSCS24Hr	0.78	90.42	90.60	90.50	90.60	0.001001	0.25	3.13	21.55	0.21
River 1	Reach 1-Lower	0	100YrSCS24Hr	0.91	90.42	90.62	90.51	90.62	0.001000	0.26	3.45	21.74	0.21