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Functional Servicing & Stormwater Management Report

1029 & 1017 Brebeuf Road

1029 & 1017 Brebeuf Road, Town of Midland, County of Simcoe

Town of Midland

August 2024

The Jones Consulting Group Ltd.
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Functional Servicing & Stormwater Management Report

1029 & 1017 Brebeuf Road
Town of Midland, County of Simcoe

1. Introduction

1.1. Appointment

The Jones Consulting Group Ltd. (TJCG) was retained by The Sarjeant Co. LTD., (Client) to provide engineering services for a proposed Ready-Mix Concrete Mixing Plant located in the Town of Midland (Town) legally described as Part of Lot 100, Concession 1, Town of Midland. The lands subject to the applications are known municipally as 1017 & 1029 Brebeuf Road in the town of Midland.

This *Functional Servicing & Stormwater Management Report* (FS&SWMR) has been prepared in support of the Official Plan Amendment, Zoning By-Law Agreement and Site Plan Application. The *Site Plan* has been prepared by TJCG dated July 11, 2024. A copy of the *Site Plan* has been attached in **Appendix A**. This report examines the proposed servicing infrastructure and demonstrates how the site can be serviced appropriately while not adversely impacting the downstream environment.

1.2. Property Description

The subject site is approximately 5.74 hectares (ha) in size and is rectangularly shaped. The property is mostly undeveloped and contains an abandoned residential building and garage on 1029 Brebeuf Road, and a currently occupied residence on 1017 Brebeuf Road. The site is municipally known as 1017 & 1029 Brebeuf Road Town of Midland, County of Simcoe.

North of the site is a vacant lot which is mostly pasture lands with treed vegetation immediately adjacent to Brebeuf Road. To the west of the site is the Brebeuf Road right-of-way followed by single detached dwellings, agricultural lands and vacant lands west of Brebeuf Road. South of the site is an existing residential home, outdoor storage yard, Agricultural lands, and the Brooklea Golf & Country Club to the south-west. East of the site is the existing Team Aggregate quarry. Access to the proposed development will be provided through the existing quarry.

1.3. Current Site Conditions

The proposed subject site is mainly vegetated with forest type land cover and has two existing residential houses with a shed and workshop. The property is mostly undeveloped and contains an abandoned residential building and garage on 1029 Brebeuf Road and a currently occupied residence on 1017 Brebeuf Road, both with gravel driveways. Topography of the site generally ranges in elevation from 233.7 to 220.0 m and slopes inwards to a central location before flowing southwards towards existing ditches within the Brebeuf Road right-of-way. The site currently has one existing well onsite and two wells along the Brebeuf Road frontage. The onsite well is used to service the residence at 1017 Brebeuf Road. The existing building at 1017 Brebeuf Road will be removed at the ultimate build out of the proposed development. The location of the site is shown in **Figure 1**.



Figure 1 – Site Location

1.4. Existing Municipal Infrastructure

Public sanitary and water servicing is not available in the vicinity of the subject site. There currently is an existing drilled well used to service the currently occupied residential property. An additional two wells are located in the eastern ditch of Brebeuf Road. Additionally Harden Environmental has conducted a search of the MECP (2024b) water well records and has identified another public supply wells present onsite. Please refer to Harden Environmental's *Hydrogeological Assessment* for

additional information. All existing wells are privately owned and are to be decommissioned in accordance with R.R.O. 1990 Regulation 903: Wells under the Ontario Water Resources Act (OWRA). The well servicing the currently occupied residence will be decommissioned after the residence is no longer occupied.

An existing overhead Hydro corridor is also present within the Brebeuf Road right-of-way.

1.5. Existing Land Use

According to the town's zoning on-line mapping information the proposed site is classified as Industrial Zone One (Holding), M1-H. A copy of the *Zoning Map* has been included in **Appendix A**.

The subject lands are currently designated Greenlands and Strategic Growth Areas I on the town's *Official Plan (OP) Schedule 'A'*; Greenlands and Mixed Use Districts on *OP Schedule 'B'*; and Natural Heritage and Commercial Corridor on *OP Schedule 'C'*. A copy of the town's *OP Schedule 'A'*, *'B'* and *'C'* has been attached in **Appendix A**.

1.6. Proposed Land Use – Site Plan

The proposed *Site Plan* shows the location of the Concrete Mixing Plant and Access Route. The existing site accesses from Brebeuf Road are proposed to be removed as the site will only be accessed through the adjacent Team Aggregate quarry.

The site will be graded to be consistent with the adjacent quarry elevations, as such, the site will be approximately 20 meters lower in grade than Brebeuf Road. The site will contain a concrete mixing plant, aggregate storage bins, conveyor belt system and silo. The proposed building will be serviced by a private drilled well, a septic system east of the building and overhead and underground hydro infrastructure. Sanitary flows will be treated by the proposed septic system and infiltrated into the ground. A copy of the *1029 & 1017 Brebeuf Road, Site Plan* is attached in **Appendix A**.

1.7. Supporting Documents

The following documents have been referenced in the preparation of this report:

- Town of Midland, *Engineering Development Design Standards*, April 2024,
- Town of Midland, *Official Plan*, November 2019,

- Town of Midland, *Zoning By-law 2004-90*, March 22, 2024,
- TJCG, *Site Plan, 1029 & 1017 Brebeuf Road*, July 11, 2024,
- Ministry of Environment, Conservation and Parks, *Stormwater Management Planning & Design Manual*, March 2003,
- Ministry of Transportation, *Drainage Management Manual*, February 2008,
- O. Reg. 332/12: Ontario Building Code,
- Birks Natural Heritage Consultants, *1017 & 1029 Brebeuf Road Town of Midland Environmental Impact Study*, August 7, 2024,
- Harden Environmental Services Limited, *Hydrogeological Assessment*, August 9, 2024,
- Tatham Engineering, *1017-1029 Brebeuf Road Transportation Impact Study*, August 6, 2024,
- Soil Engineers LTD., *A Slope Stability Assessment for Proposed Ready-Mix Plant Development, 1029 Brebeuf Road, Town of Midland*, August 2024,

2. Stormwater Management

Stormwater Management (SWM) is intended to provide an environmentally sound approach to addressing stormwater related issues. These issues can be divided into three (3) main categories: quantity control, quality control and water balance.

This report outlines a proposed design for the Site Plan stormwater management system to meet the post-development quantity and quality control requirements of the Town of Midland & MECP. Refer to the following **Table 1** below for a list of the Stormwater Management Design Criteria to be addressed in the proposed Stormwater Management Plan.

Table 1 – Stormwater Management Design Criteria

1017 & 1029 Brebeuf Road – Stormwater Management Design Criteria		
Category	Sub-Category	Target
Quantity Control	Peak Flow Control	Control post-development peak flows to pre-development levels. <i>(ToM, MECP)</i>
	Minor-Major System Conveyance	Major System to convey 100-year event <i>(ToM)</i>
	Regulatory Storm Conveyance	Convey the Regional Event to a sufficient outlet <i>(ToM)</i>
Quality Control	Total Suspended Solids	Provide Level 1 (Enhanced) Protection, 80% Long Term Removal <i>(ToM, MECP)</i>
Water Balance	Water Balance	Minimize changes in water balance between pre- and post-development conditions <i>(ToM)</i>
	Runoff Volume Control	Provide a minimum infiltration equivalent to the first 5mm of any given rainfall event <i>(ToM)</i>

2.1. Site Physiography

2.1.1. Existing Soil Conditions

The *Soil Survey of Simcoe County Report No. 29* and *Agricultural Information Atlas Mapping (AgMaps)* shows that the site is comprised of Tioga Loamy Sand (Tis) and Vasey Sandy Loam (Vasl).

Tioga Loamy Sand (Tis) can be described as grey, calcareous outwash sand, generally having good drainage features. The underlying topography is smooth, gently to irregular, and steeply sloping. It is stone free to moderately stony and has a medium acidic PH and belongs to the Podzol Great Soil group. The soils are classified as Group A under the SCS Hydrologic Soil Group Classification.

Vasey sandy loam (Vasl) can be described as light grey, calcareous, and non-calcareous, sandy loam till, generally having good drainage features. The underlying topography is smooth, moderately to steeply sloping, is moderate to very stony, has a slight to medium pH and belongs to the Brown Podzolic and Grey-Brown Podzolic great soil groups. The soils are classified as Group AB under the SCS Hydrologic Soils Group Classification.

Excerpts from the *Soil Survey of Simcoe County* and *Agricultural Information Atlas* has been provided in **Appendix A**. The following **Figure 2** and **Table 2** shows the existing soil conditions for the development and the surrounding neighbourhood and approximate Soil Type Distribution.

Table 2 – Soil Type Distribution

Soil Type	Soil Name	SCS Group	Total Area (ha)	Percentage Area (%)
Tis	Tioga Loamy Sand	Group A	3.84	67.0
Vasl	Vasey sandy loam	Group AB	1.90	33.0



Figure 2 – Site Soils Identification

2.1.2. Existing Drainage Conditions

The subject lands consist of approximately 5.74 hectares (ha) of land which is predominately vegetated with forest type land cover. The property is mostly undeveloped and contains an abandoned residential building and garage on 1029 Brebeuf Road and a currently occupied residence on 1017 Brebeuf Road, both with gravel driveways. The lands topography generally ranges in elevation from 233.7 m to 220.0 m at an approximate gradient of 2.5% to 4%.

There are no existing stormwater management facilities on the subject lands and all flows are released southwards to an existing low-lying area adjacent to Brebeuf Road. The existing drainage conditions are shown in the *Pre-Development Stormwater Management Plan*, **Drawing SWM-1** in **Appendix D**.

2.1.3. Proposed Drainage Conditions

Development of the site will consist of a Ready-mix Concrete Plant. Grading of the site will direct most stormwater runoff eastwards to the Team Aggregate quarry through overland and sheet flow. No Low Impact Developments (LIDs) have been proposed onsite as stormwater runoff will be infiltrated into the ground in the neighboring quarry.

2.2. Hydrology

2.2.1. OTTHYMO Model

The development was hydraulically modeled using the latest version of the Visual OTTHYMO (VO6) computer program by Smart City Water (SCW) Inc. OTTHYMO is a GIS-based hydrologic and hydraulic modelling software capable of performing both event-based and continuous rainfall simulations for Stormwater Management Facility and Low Impact Development design, Water Quality Modelling, Water Balance and Erosion Threshold calculations, respectively. Furthermore, the OTTHYMO model developed for the subject lands utilizes the Green-Ampt Method for determining infiltration losses, which allows for the direct incorporation of field-tested infiltration rates, providing a higher level of accuracy to reflect field conditions. Representative Infiltration rates will be obtained in the detailed design phase of the project through Guelph Permeameter testing and coded into the OTTHYMO modeling. The model input parameters (e.g. catchment area, flow lengths, proposed imperviousness) have been carefully selected to reflect the proposed *Site Plan* design and can be found in **Appendix B**.

2.2.2. Design Storms & Climatology

In accordance with the *Town of Midland Engineering Development Design Standards* the following events have been modeled:

- 4-hour Chicago rainfall distribution for the 2, 5, 10, 25, 50 and 100-year storm events,
- 6-hour SCS Type II rainfall distribution for the 2, 5, 10, 25, 50 and 100-year storm events,
- 12-hour SCS Type II rainfall distribution for the 2, 5, 10, 25, 50 and 100-year storm events,
- 24-hour SCS Type II rainfall distributions for the 2, 5, 10, 25, 50 and 100-year storm events;
- 25 mm 4-hour Chicago Water Quality rainfall event, and
- Timmins Regional Storm Event.

2.2.3. Modeling Approach and Rationale

The pre-and-post development condition models have been run under a range of discrete storm simulations. The pre-development model evaluated is listed below:

- *Pre-Dev-PF*: Pre-Development Peak Flow model, including a simulation for the 25mm water quality event, Timmins Regional Storm Event and 2, 5, 10, 25, 50 and 100-year storms.

The post-development model evaluated is listed below:

- *Post-Dev-PF*: Post-Development Peak Flow model including a simulation for the 25mm water quality event, Timmins Regional Storm Event, and 2, 5, 10, 25, 50 and 100-year storms.

Pre- and post-development model parameters were determined by the existing and proposed grading and a detailed land-use breakdown for each subcatchment. Geometric parameters such as a catchment area, total impervious, directly connected impervious, width, slope, flow lengths, curve numbers, initial abstractions, depression storage, time to peak, pervious / impervious roughness coefficients and infiltration parameters were assigned. Underlying soil data was incorporated based on soil textural class and infiltration rate.

2.2.4. Discretization

Model discretization for the *Pre-Dev-PF* and *Post-Dev-PF* models, developed under the approach described previously, is summarized herein. Corresponding OTHYMO model input parameters are provided in **Appendix B**.

Pre-Development Modeling

The *Pre-Development Stormwater Management Plan* illustrates the pre-development drainage conditions (**Drawing SWM-1**, provided in **Appendix D**). The following **Figure 3** shows the *Pre-Dev-PF* OTTHYMO model schematic.

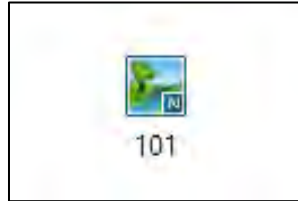


Figure 3 – *Pre-Dev-PF* OTTHYMO Model Schematic

The OTTHYMO model for the subject lands includes one catchment.

- Catchment 101 is approximately 9.80 ha in size and represents internal developable and external areas draining southwards through the development site towards the low-lying area adjacent to Brebeuf Road. This catchment mostly consists of vegetated areas of both trees and brush with some grassed areas.

Post-Development Peak Flow Modeling

The *Post-Development Stormwater Management Plan* illustrates the post-development drainage conditions (**Drawing SWM-2**, provided in **Appendix D**). **Figure 4** below shows the model schematic.

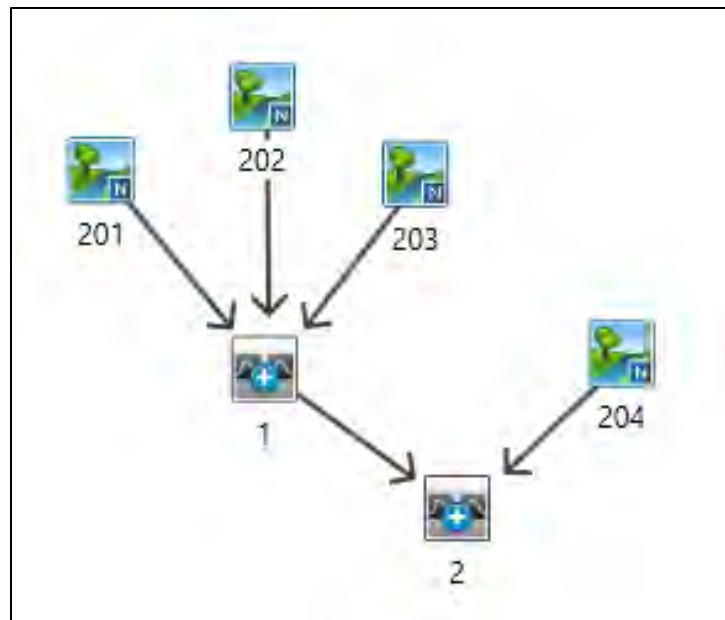


Figure 4 – Post-Dev-PF OTTHYMO Model Schematic

The OTTHYMO model for the subject lands includes one catchment.

- Catchment 201 is approximately 2.61 ha in size and represents internal and external areas that flow directly into the existing quarry. This catchment is mostly vegetated with trees and brush and some grassed areas. A small portion of this catchment will be re-graded for the construction of the 3m high berm. In the pre-development scenario this area drained through the site towards the low-lying area adjacent to Brebeuf Road.
- Catchment 202 is approximately 5.22 ha in size and represents internal and external areas that flow into the development site. Stormwater from this catchment collects internally and sheet flows towards the existing quarry. This catchment area consists of vegetated sloped areas and a gravel Concrete Ready Mix operation area. The ready mix concrete plant is located within this subcatchment. In the pre-development scenario this area drained towards Brebeuf Road.
- Catchment 203 is approximately 1.03 ha in size and represents external areas within the existing quarry. In the pre-development scenario this area drained through the site towards the low-lying area adjacent to Brebeuf Road. This area is mostly vegetated with trees or shrubs and limited grassed areas. In the post-development scenario, this area will be

stripped and re-graded ahead of construction. Catchment 203 will mostly consist of gravel.

- Catchment 204 is approximately 0.94 ha in size and represents internal and external areas of the site that ultimately continue to drain southwards to Brebeuf Road. Portions of this catchment will be re-graded for the construction of the 3m high berm.

This provides for a total catchment area of approximately 9.80 ha, of which 0.94 ha continues to drain southwards to the low-lying area adjacent to Brebeuf Road, and 8.86 ha are newly directed towards the existing quarry.

2.3. Stormwater Quantity Control

A summary of the Water Quantity Control Design criteria is summarized below in **Table 3**.

Table 3 – Stormwater Management Quantity Control Design Criteria

1017 & 1029 Brebeuf Road – Stormwater Management Design Criteria		
Category	Sub-Category	Target
Quantity Control	Peak Flow Control	Control post-development peak flows to pre-development levels. <i>(ToM, MECP)</i>
	Minor-Major System Conveyance	Major System to convey 100-year event <i>(ToM)</i>
	Regulatory Storm Conveyance	Convey the Regional Event to a sufficient outlet <i>(ToM)</i>

2.3.1. Peak Flow Control

In the post-development condition stormwater runoff from the minor (5-year) and major (>5-year) events will be directed eastwards to the quarry and southwards to the existing Brebeuf Road water course via overland flow. Originally in the Pre-Development Scenario all stormwater was draining southwards to the existing Brebeuf Road side ditch. Stormwater drainage will be directed to the existing quarry by sheet flow where it will disperse along the quarries low lying areas and ultimately be infiltrated. The following **Table 4 & Table 5** summarizes the anticipated overall pre and post development discharge.

Table 4 – Hydrologic Model Results: Pre-Development

Storm Peak Event Flow (m ³ /s)							
Storm Distribution	Area (ha)	Return Period (years)					
		2	5	10	25	50	100
Pre-Dev-PF Condition Peak Flows (NasHyd 101) Westwards flow							
25mm 4-Hr CHI Water Quality Event	9.80	0.007					
CHI 4-Hr Storm Distribution	9.80	0.017	0.035	0.050	0.072	0.092	0.113
SCS 6-Hr Storm Distribution	9.80	0.021	0.044	0.062	0.091	0.114	0.139
SCS 12-Hr Storm Distribution	9.80	0.032	0.061	0.085	0.120	0.152	0.183
SCS 24-Hr Storm Distribution	9.80	0.042	0.082	0.113	0.156	0.196	0.231
Timmins Storm	9.80	0.293					

Table 5 – Hydrologic Model Results: Post-Development Combined

Storm Peak Event Flow (m ³ /s)							
Storm Distribution	Area (ha)	Return Period (years)					
		2	5	10	25	50	100
Post-Dev-PF Condition Peak Flows (AddHyd 2) Combined Flow							
25mm 4-Hr CHI Water Quality Event	9.80	0.024					
CHI 4-Hr Storm Distribution	9.80	0.050	0.093	0.128	0.177	0.221	0.265
SCS 6-Hr Storm Distribution	9.80	0.061	0.113	0.154	0.215	0.263	0.314
SCS 12-Hr Storm Distribution	9.80	0.084	0.149	0.201	0.273	0.337	0.396
SCS 24-Hr Storm Distribution	9.80	0.106	0.192	0.256	0.342	0.419	0.485
Timmins Storm	9.80	0.533					

The overall post development results can further be broken down based on flow direction. The following **Table 6** outlines the anticipated post-development flows to the existing quarry and the Brebeuf Road ditch.

Table 6 – Hydraulic Model Results: Post-Development Separated

Storm Peak Event Flow (m³/s)							
Storm Distribution	Area (ha)	Return Period (years)					
		2	5	10	25	50	100
Post-Dev-PF Condition Peak Flows (AddHyd 1) Flow to quarry							
25mm 4-Hr CHI Water Quality Event	8.86	0.022					
CHI 4-Hr Storm Distribution	8.86	0.046	0.084	0.115	0.159	0.199	0.238
SCS 6-Hr Storm Distribution	8.86	0.055	0.103	0.140	0.194	0.237	0.283
SCS 12-Hr Storm Distribution	8.86	0.076	0.135	0.181	0.246	0.302	0.356
SCS 24-Hr Storm Distribution	8.86	0.095	0.173	0.229	0.305	0.374	0.432
Timmins Storm*	8.86	0.482					
Post-Dev-PF Condition Peak Flows (NasHyd 204) Flow to Brebeuf Road Ditch							
25mm 4-Hr CHI Water Quality Event	0.94	0.003					
CHI 4-Hr Storm Distribution	0.94	0.006	0.010	0.014	0.020	0.025	0.030
SCS 6-Hr Storm Distribution	0.94	0.007	0.013	0.018	0.025	0.031	0.037
SCS 12-Hr Storm Distribution	0.94	0.010	0.018	0.024	0.033	0.040	0.048
SCS 24-Hr Storm Distribution	0.94	0.013	0.023	0.031	0.042	0.051	0.060
Timmins Storm	0.94	0.050					

All flows entering the quarry will be dispersed along the quarry bottom and ultimately infiltrated. In addition, the following **Table 7** summarizes the expected peak flow from catchment 202 exclusively. These peak flow results have been used to size the boundary ditches at the toe of the 2H:1V sloping.

Table 7 - Hydraulic Model Results: Post-Development NasHyd 202

Storm Peak Event Flow (m³/s)							
Storm Distribution	Area (ha)	Return Period (years)					
		2	5	10	25	50	100
Post-Dev-PF Condition Peak Flows (NasHyd 202)							
25mm 4-Hr CHI Water Quality Event	5.22	0.016					
CHI 4-Hr Storm Distribution	5.22	0.033	0.060	0.081	0.111	0.138	0.164
SCS 6-Hr Storm Distribution	5.22	0.039	0.072	0.097	0.135	0.164	0.195
SCS 12-Hr Storm Distribution	5.22	0.054	0.095	0.126	0.170	0.209	0.244
SCS 24-Hr Storm Distribution	5.22	0.067	0.121	0.159	0.211	0.257	0.296
Timmins Storm	5.22	0.310					

2.3.2. Minor-Major System conveyance

All stormwater is proposed to be conveyed overland by site grading. As such, there is no proposed minor storm system. The major system has been appropriately sized to convey the Timmins Regional Event in its entirety from catchment 202 eastwards to the existing quarry. If a blockage was to occur, site grading has been completed to safely direct flows to the same drainage channel without causing flooding to the concrete mixing plant. Supporting conveyance calculations have been provided in **Appendix B** for reference. It is important to note that the peak flow will be conveyed between both the northern and southern channels. The conveyance channels in tandem will provide significantly more flow conveyance capacity than what is required in the governing Timmins Regional Event. All external stormwater will be diverted by the proposed 3.0m high berm around the project site, this berm is proposed to match into the existing grade.

2.4. Stormwater Quality Control

As per the Town and MOE requirements, *Enhanced* (Level 1) stormwater quality control is required for the subject lands.

As previously mentioned, stormwater runoff is discharged from the site in two directions. Stormwater flowing south flows to the existing ditch within the Brebeuf Road right-of-way. Stormwater flowing eastwards sheet flows to the existing quarry where it is dispersed across the quarry bottom and ultimately infiltrated. It is assumed that all infiltrated flows receive a 100% total suspended solids removal efficiency therefore meeting an Enhanced level of Quality Control.

2.5. Water Balance

The primary objective of water balance targets is to capture and manage annual rainfall on the development site to preserve pre-development hydrogeology (water balance) through a combination of infiltration, evapotranspiration, landscaping, rainwater reuse and/or other low impact development practices.

A water balance has been completed by Harden Environmental Services Ltd. and is detailed in their *Hydrogeological Assessment*, dated August 9, 2024. The purpose of this water balance was to estimate an infiltration post development scenario and compare to the pre-development condition.

The infiltration and runoff volumes as calculated in the Harden Environmental *Hydrogeological Assessment* are presented **Table 8** below. Supporting calculations from Harden Environmental are provided in **Appendix A**.

Table 8 – Summary of Water Balance Calculations by Harden Environmental

Water Balance Runoff & Infiltration Volumes			
	Pre-Development	Post-Development (without mitigation)	Difference
Impervious Area Runoff Volume (m ³ /a)	2,477	1,592	-885
Pervious Area Runoff Volume (m ³ /a)	10,638	14,979	+4,341
Total Runoff Volume (m ³ /a)	13,115	16,571	+3,456
Total Infiltration Volume from Pervious Surfaces (m ³ /a)	36,826	41,557	+4,731

The results summarized in the above **Table 8** indicate that there is an increase in total runoff volume and an increase in infiltration volume from pre to post development without the consideration of LID facilities. A total increase of **4,731 m³/a** of rainwater is infiltrated in the post development scenario. In summary, the proposed stormwater management plan has successfully achieved the maintenance of the pre-development water balance target in the post development condition.

2.6. Erosion and Sediment Control

During construction, the majority of the developments natural features will be removed, and the topsoil stripped within the development area. The exposed surface will be susceptible to erosion, increasing the potential for sediment runoff. To minimize local and downstream impacts from erosion and sedimentation the following measures have been recommended:

- Excess earth and topsoil is to be stockpiled and used for berm construction around the perimeter of the site (north, south, and west sides) or removed from site. Stockpiles and berms shall be seeded or covered with erosion control if left for periods of greater than 30 days.
- Temporary sediment control fencing should be erected around the north, west, and south perimeter of all grading activities.

- Construction during drier months should be monitored for wind-borne transport of sediments. At the direction of the engineer, the contractor may be directed to water down exposed earth areas with an aqueous solution of calcium chloride.
- All disturbed areas not under immediate construction for 30 days, or not intended for building activities within a 3-month time period, should be stabilized with seeding.
- A weekly monitoring program to ensure all ESC measures are in place and not damaged by vandalism or a significant storm event.

The erosion and sediment control plan for the development is shown on **Drawings ESC-1 through ESC-3** and the corresponding details are provided on **Drawing ESC-4**. Through proper implementation of the detailed erosion and sediment control measures, off-site impacts are expected to be minimized during the construction phase of the project.

In summary, the proposed erosion and sediment control plan has undertaken a best-efforts approach to achieve the erosion and sediment control targets for the subject lands.

3. Sanitary Servicing

3.1. Overview

A single septic holding tank (7,080 Liters / 1870 Gallons) and leaching bed system will be installed on-site to treat the proposed Concrete Mixing Plant wastewater effluent. The septic system will be connected to the Concrete Mixing Plant via a sanitary sewer service lead (125 mm diameter). This type of system is regulated under Parts 7 and 8 of the Ontario Building Code (OBC).

3.2. Sanitary Flows

The septic system design has been based on client specifications and the *1029 & 1017 Brebeuf Road, Site Plan* prepared by TJCG, dated July 11th, 2024. A copy of the *Site Plan* has been attached in **Appendix A** for reference.

Email correspondence with the client indicates that the Floor plan will include a 200 sq ft dispatch office, 175 sq ft sales office, approximately 200 sq ft driver lunch/locker room, approximately 100sq ft utility room, a 1,250 sq ft area for the ready-mix plant, and a 3-piece washroom estimated to be 115 sq ft in size. Using the available information the estimated sanitary flows were calculated for three possible scenarios to determine the potential peak flow rates generated by the development. Peak sanitary flow rates were estimated based on the number of employees, available space and number of fixtures. The estimated peak flows have been summarized in **Table 9** and detailed calculations have been attached in **Appendix C**.

Table 9 – Sanitary Flows

Design Scenario	Building Code Reference	Design Standard	Flow (L/day)
Office Occupancy	Table 8.2.1.3.B – 15. (a)	75 L/day / employee / 8 hour shift	300
Factory Use - No Shower	Table 8.2.1.3.B –10. (a)	75 L/day / employee / 8 hour shift	750
Total			1,050
Office Floor Area	Table 8.2.1.3.B – 15. (b)	75 L/day / 9.3 m ²	367
Warehouse Use	Table 8.2.1.3.B – 26. (a)	950 L/day / water closet	950
Total			1,317
Fixture Units (4 fixtures)	Table 7.4.9.3	2,360 L/day*	2,360
Total			2,360

*2,360 L/day is assumed based on there being less than 260 fixture units in the proposed building per OBC 7.4.10.5. – 1. (a)

Based on **Table 9** the estimated maximum daily peak flow will be **2,360 L/day** and the estimated minimum peak flow will be **1,050 L/day**.

3.3. Septic System Design and Layout

The systems design consists of a sanitary sewer lead (draining by gravity) from the building to a minimum 7,080 liter holding tank (3 times the daily flow rate per OBC 8.2.2.3.(1)(b)) and a Class 4 leaching bed system (filter bed). The filter bed will contain a 275mm thick layer of septic stone over a 750 mm thick layer of filter sand. Additional filter sand will extend past the filter bed contact area to serve as the loading area.

The septic design excludes the need for a balancing tank and/or dosing chamber (pump). Generally, systems without pumps and treatment units require less long-term maintenance. If unforeseen circumstances arise during the construction works (poor soils, high ground water) and as a result the system requires a pump (or any treatment devise) the design should be review for a potential reduction to the mantle and loading area based on the pump cycles reduced peak flow rate.

The septic system location and grading design is illustrated on the Site Grading Plan (DWG No. SG-1) attached in **Appendix D**.

4. Water Servicing

The proposed site will be serviced by a private drilled well. The well must be sized to meet the buildings sanitary occupant loading demands (2,360 liters per day, 1.64 liters per minute). The private well location has been illustrated on the Site Grading Plan, drawing **SG-1**, attached in **Appendix D**.

The water supply for the Ready-Mix Concrete Mixing Plant will be obtained from the semi-confined unconsolidated sand and gravel aquifer. This is a regionally extensive aquifer that is the source of water for Heritage Drive Municipal Wells 7A & 7B as well as local private wells. The aquifer is found at an approximate elevation of 170m AMSL and is approximately 20 meters thick. Water consumption by the ready mix plant is not expected to exceed 50,000 liters per day and thus does not require a Permit to Take Water.

Harden Environmental Services has conducted a preliminary test of the aquifer near the proposed ready mix plant in which a pumping well 300 meters from the plant was tested for yield. A six hour test was performed at a rate of 92 L/min and resulted in an estimated water surface drawdown of 2m. Approximately 33,000 Liters were removed, this aquifer is shown to produce over 120,000 liters per day. The cyclical water taken during the day will produce a minimal impact on the neighboring wells. Refer to Harden Environmental Services, *Hydrogeological Assessment*, dated August 9, 2024, for further details.

The development is considered a low hazard building due to the lack of combustible materials present onsite. It is our understanding that the Chief Building Official has the authority to wave onsite water fire flow requirements on low hazard buildings. As such onsite water storage for fire protection has not been included in the facility design.

5. Grading

In the pre-development scenario, the site drains surface runoff through the site and ultimately discharges to a swale in the southernmost section of the site which outlets to the Brebeuf Road ditch. In the post-development scenario, external stormwater will be directed southwards around the perimeter of the site by constructing a 3m high, 3m wide flat top berm with 3H:1V (max.) sideslopes. This will allow the external stormwater to be re-directed where grading permits and discharged to the existing Brebeuf Road ditch. Stormwater internal to the site will sheet flow eastwards towards the existing Team Aggregate quarry where it will ultimately be dispersed across the quarry bottom and infiltrated into the ground.

In addition to re-directing the external drainage around the site, the development's proposed grading design has been based on the following parameters and constraints:

- The building's finished floor has been set above the high-groundwater level;
- Runoff is directed away from the building; and,
- The building's finished floor elevation has been set to allow the sanitary sewer lead to drain by gravity to the holding tank.

The development elevations and grades are illustrated on the **Site Grading Plan (DWG No. SG-1)** attached in **Appendix D**.

6. Traffic

Tatham Engineering has prepared a *Transportation Impact Study* dated August 6, 2024 in support of the proposed development. That report identifies the following:

The existing ready-mix concrete plant located on County Road 93 generates, on average, 60 truck trips (inbound + outbound) per day during the months of May and June. On their busiest day of 2023, the site generated 140 truck trips, whereas the next busiest day generated 104 truck trips. The proposed ready mix plant located on Brebeuf Road will replace the existing plant on County Road 93. In this respect, the proposed ready-mix plant will not be adding any new trips to the overall road network as the operations are being relocated to the proposed concrete mixing plant. In addition, the new ready-mix plant is proposed adjacent to the aggregate pit that is the primary supplier of aggregate material to the plant. An internal connection between the proposed ready-mix plant and the existing aggregate pit will allow for a direct supply of aggregate material to the plant. In this respect, nearly all aggregate delivery trips which currently use the existing road network to supply the ready-mix plant on County Road 93 will be removed from the road network. As such, the new ready-mix plant on Brebeuf Road will result in a net reduction in truck traffic on the adjacent road network.

The Town's 2019 Multi-Modal Transportation Master Plan recommends traffic signals at the intersection of Highway 12 with Beamish Road/Hanson Road as a medium term improvement. The 1017-1029 Brebeuf Road *Transportation Impact Study (TIS)*, completed in support of the proposed ready-mix concrete plant and submitted under separate cover, confirms that traffic signals are required at this intersection under future background conditions (i.e. without the subject development). The TIS further identifies the need for improvements at the intersection of Highway 12 with Highway 93, which are required to accommodate the anticipated trip generation associated with the Hanson residential development. Regardless of the improvements required to accommodate the future background traffic volumes on the study area road network, it is noted that the subject development does not contribute to the future operational issues of the road network. The relocation of the ready-mix plant will improve the future operations of the road network by eliminating unnecessary aggregate delivery trips from the road network.

Overall, the relocation of the ready-mix plant from County Road 93 to Brebeuf Road will ultimately result in a net reduction in traffic on the municipal road system given the removal of now redundant aggregate delivery trips which will now occur through the internal connection between

the subject site and the adjacent aggregate pit. No improvements to the road network are required to support the proposed development.

7. Secondary Utilities

Electrical utilities will be extended from Brebeuf Road to the Concrete Mixing Plant by both overhead and underground wires. EME Engineering Inc. has prepared a Site Servicing Plan and Site Photometric Plans outlining the proposed design and connection points. Refer to drawings **E-101 & E-102** in **Appendix A** for additional details.

8. Conclusions

This Functional Servicing & Stormwater Management Report summarizes the demands proposed by the latest *Site Plan* in support of the development's Official Plan Amendment, Zoning By-Law Amendment and Site Plan Control Application. This report, read in conjunction with the civil engineering drawings, outlines the proposed infrastructure required to service the Concrete Mixing Plant for water, wastewater and stormwater management. This report has recommended the proposed development can be adequately serviced based on the following:

- Stormwater from the development will be directed eastwards to the existing Team Aggregate quarry and southwards to the existing Brebeuf Road ditch,
- Installation of an on-site private septic system and leaching bed,
- The existing aquifer has the capability to provide the proposed development with the necessary potable water demands. The proposed development will be serviced by a new privately owned drilled well.
- Utility services will be extended from the overhead power lines in Brebeuf Road to the concrete mixing plant via proposed overhead and underground services.

It is recommended that this report and the accompanying civil engineering drawings be accepted as demonstrating a functional servicing approach in support of the Official Plan Amendment, Zoning By-Law Amendment and Site Plan Control application approvals.

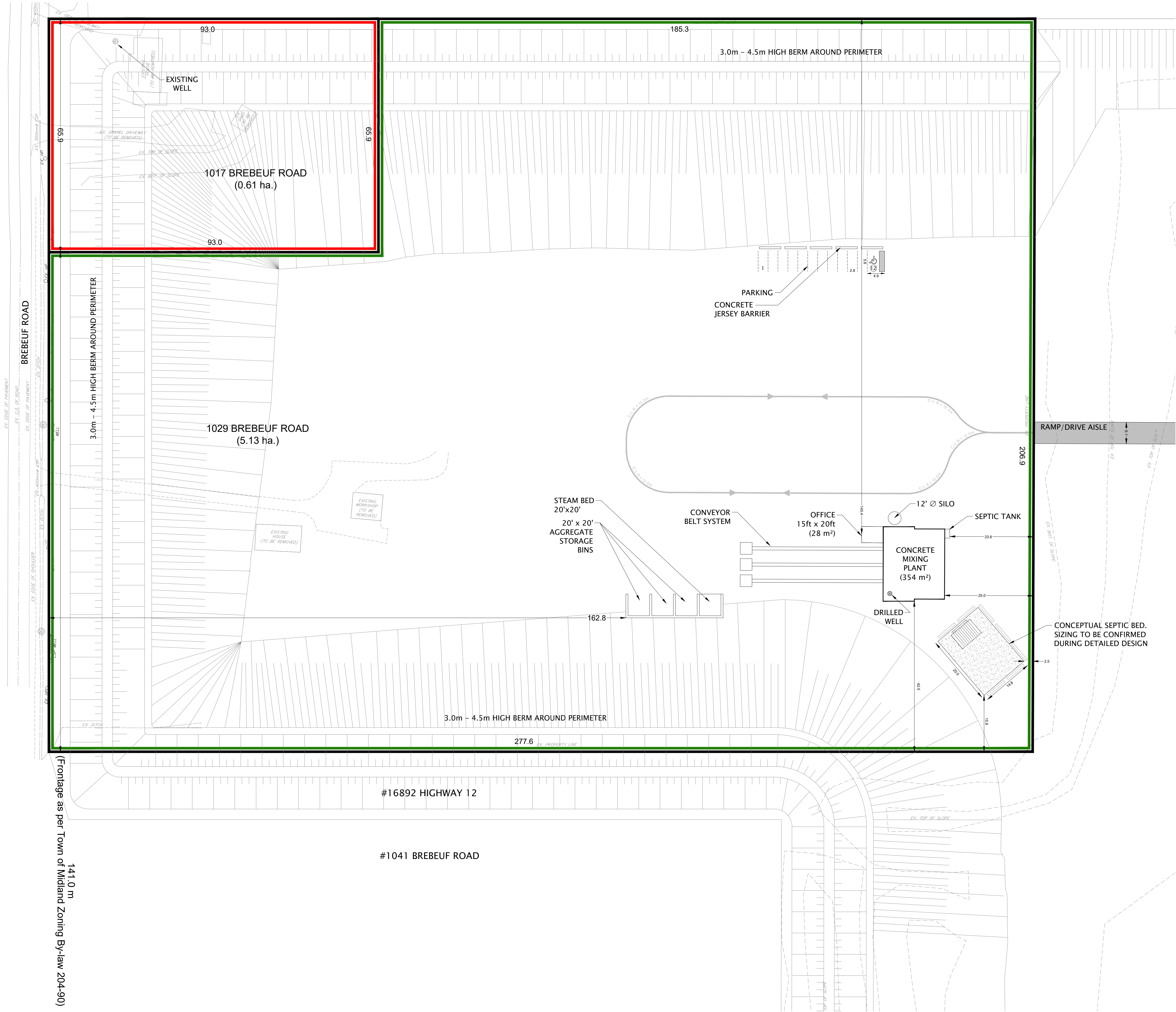
All of which is respectfully submitted,

The Jones Consulting Group Ltd.

Appendix A

Planning and External Reference Information

- *Site Plan, 1029 & 1017 Brebeuf Road, The Jones Consulting Group Ltd., July 11th, 2024,*
- Town of Midland Official Plan
 - o Schedule A – Growth Areas
 - o Schedule B – Urban Structure
 - o Schedule C – Land Use
 - o Schedule G – Source Protection
- Town of Midland Zoning Map
- Soil Classification Information
 - o Excerpt from the Ontario Department of Agriculture, *Soil Map of Simcoe County, Report No. 29*, dated 1962,
- Agricultural Information Atlas Soil Mapping
- Water Balance Assessment
 - o Excerpt from Harden Environmental Services, *Hydrogeological Assessment*, dated August 9, 2024,
- EME Engineering Inc.,
 - o E-001 Electrical Specifications
 - o E-002 Symbols and Abbreviations
 - o E-101 Site Servicing Plan
 - o E-201 Site Photometric Plan
 - o E-301 Site Details



Site Plan
1029 & 1017 Brebeuf Road
Town of Midland, County of Simcoe
2024

SITE PLAN STATISTICS

1017 Brebeuf Road - 0.61 ha.	
1029 Brebeuf Road - 5.13 ha.	
Total Land Holdings (Site Plan Area) - 5.74 ha.	

Proposed Industrial Zone (M2)		
Lot Area - (Minimum)	REQUIRED 2.0 ha.	PROPOSED 5.13 ha.
Lot Frontage - (Minimum)	60.0 m	141.0 m
Lot Coverage - (Maximum)	60 % / 3.078 ha.	0.01 % / 0.03 ha.
Required Yards:		
Front Yard (Minimum)	7.5 m	162.8 m
Rear Yard (Minimum)	8.8 m	23.6 m
Interior Side Yard (Minimum)	6.0 m	40.4 m
Maximum Building Height		
• Concrete Mixing Plant	11.0 m	14.3 m*
• Silo	11.0 m	20.33 m*

Parking Calculations:
1 for each 40 m² of GFA

Ready Mix (Industrial) (241.5m²)/(140m²)	7	12 Spaces**
Total Spaces	7	12 Spaces**

Barrier Free Parking Calculation
1 Space Required where there are between 11 and 100 parking spaces in accordance with the following ratio, rounding up to the nearest whole number.

Barrier Free Spaces	1 Spaces	1 Space
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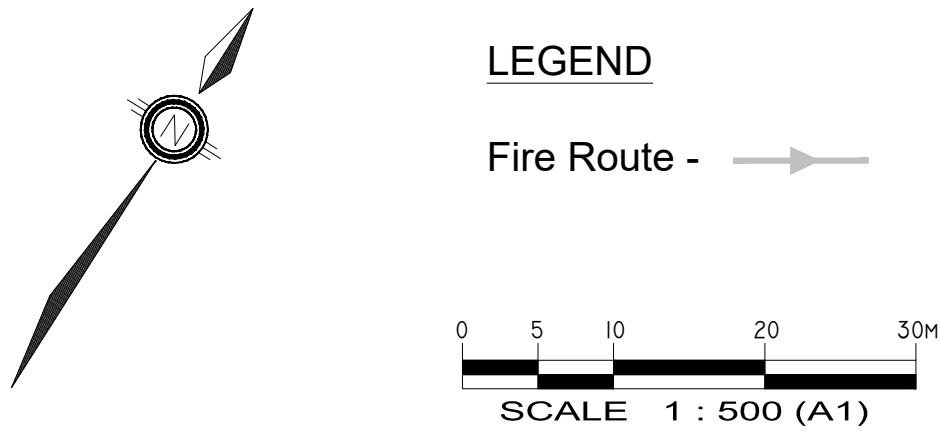
**Breakdown of 12 Provided Spaces:

- 11 Typical Spaces (2.8m x 5.8m each)
- 1 Barrier Free Space (3.4m x 5.8m (plus 1.5m aisle each))

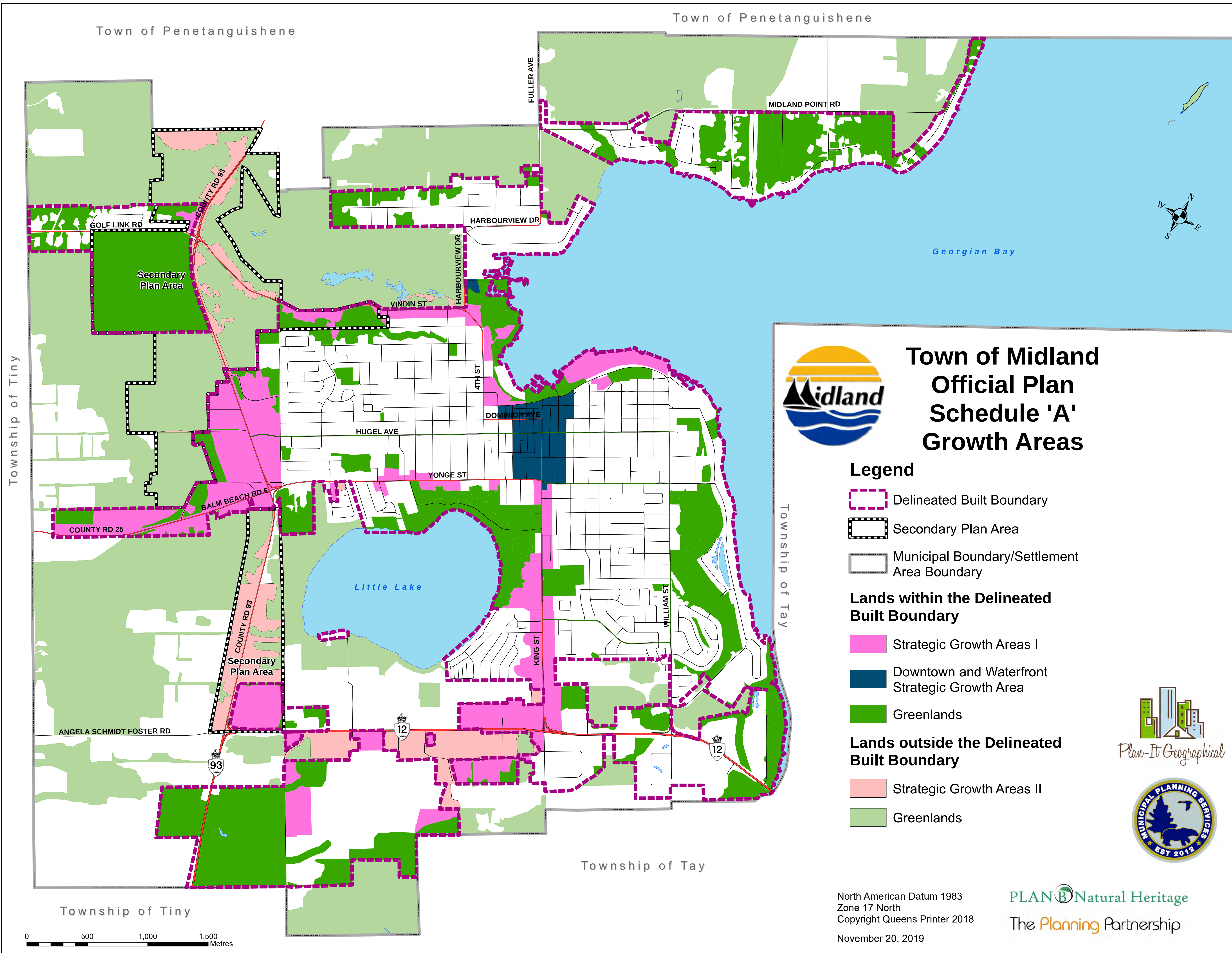
12 Spaces

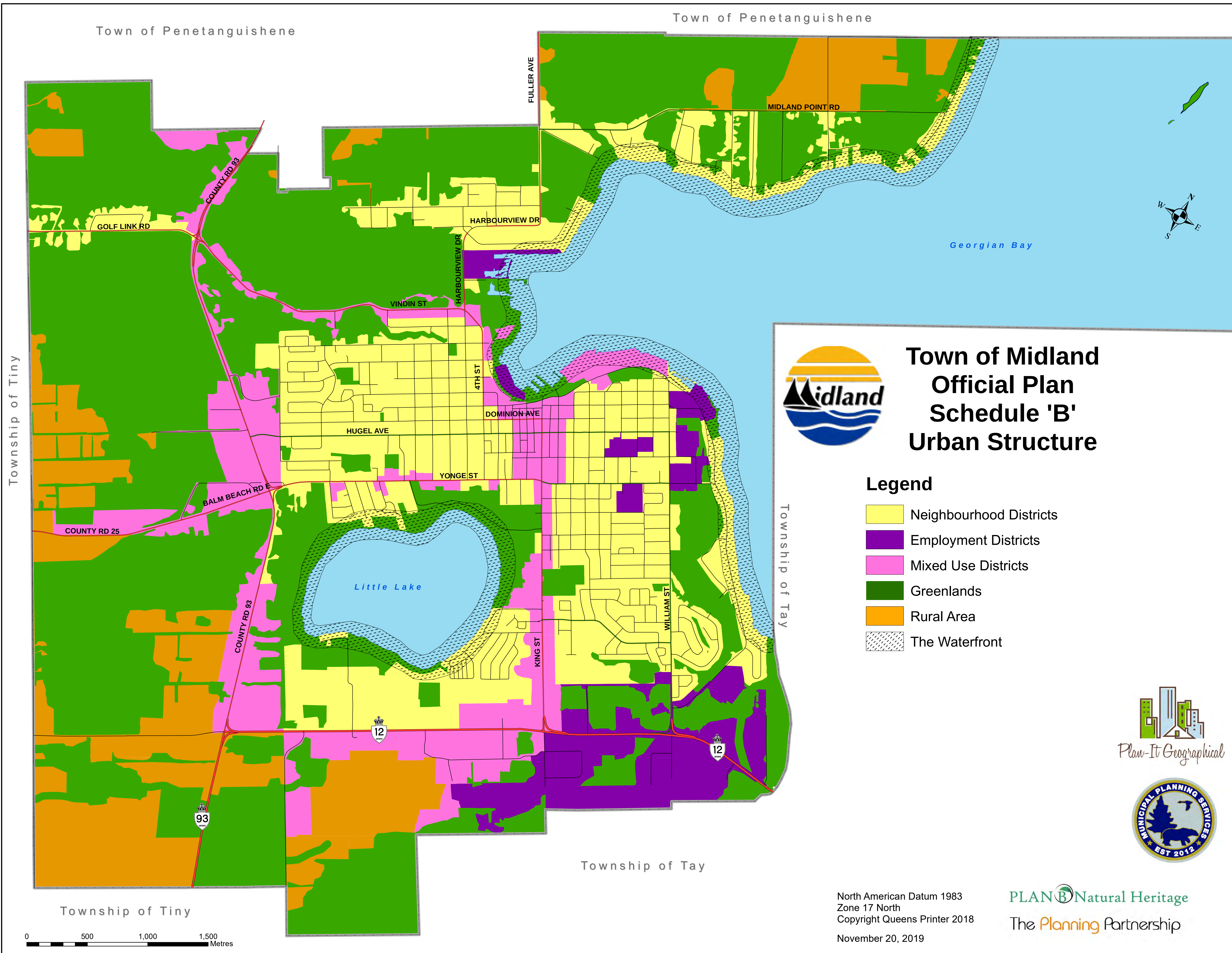
No Loading Spaces Required - < 500 m² Building Area

* Denotes that a zoning by-law amendment is required



Date Issued:	JULY 11, 2024	Project No.:	SAR-23058
Checked By:	RD & AH	Drawing Name:	
Drawn By:	m.c.r.		SAR-23058-PSP-11.dwg





Town of Penetanguishene

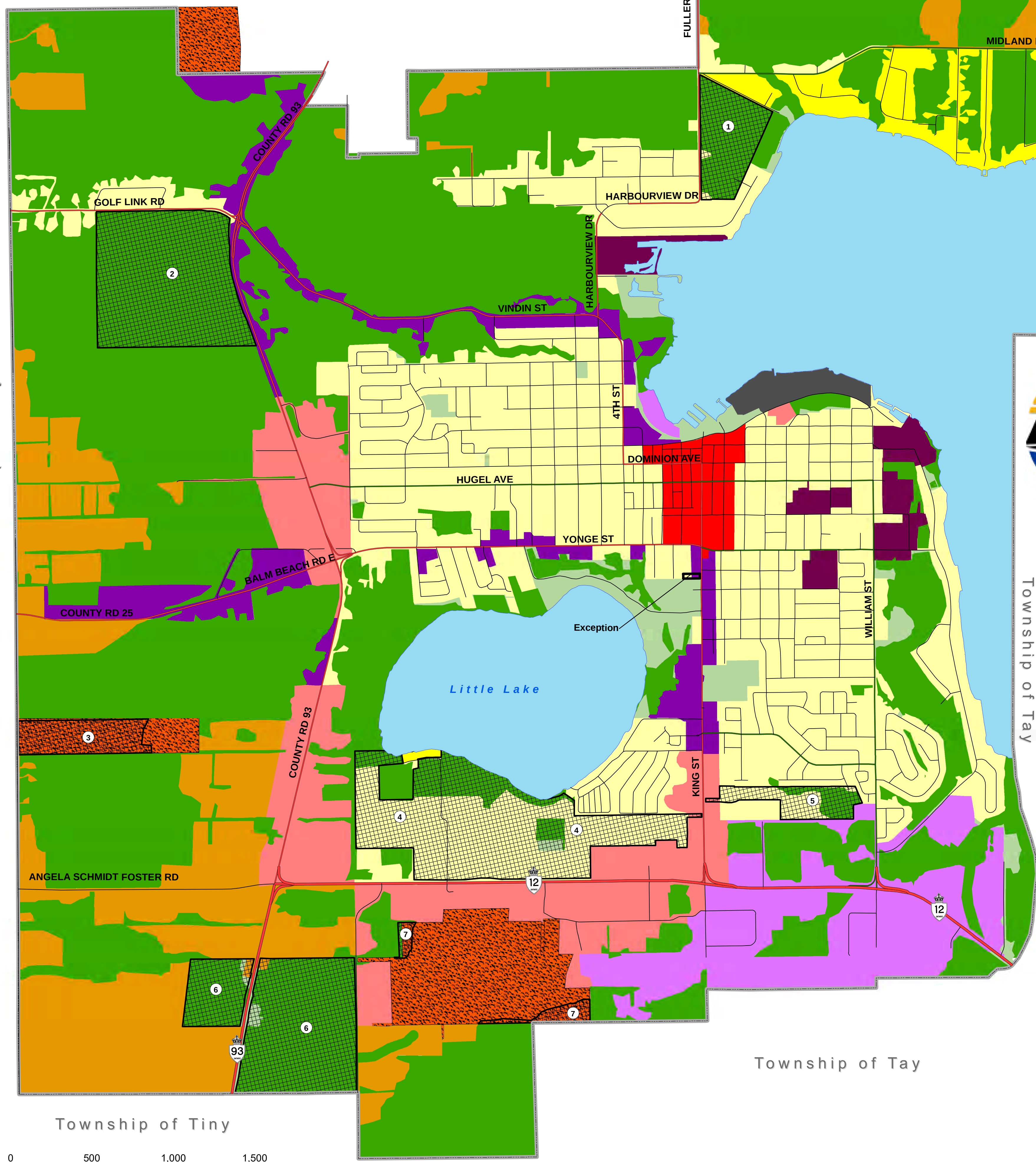
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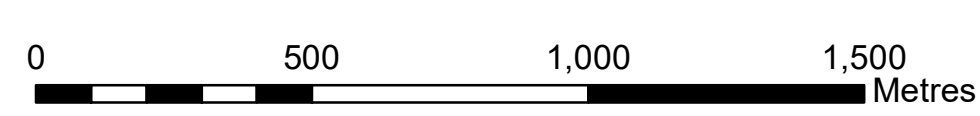


Town of Midland Official Plan Schedule 'C' Land Use

Legend

- Neighbourhood Residential
- Shoreline Residential
- Downtown
- Mixed Use Corridor
- Commercial Corridor
- Employment Area
- Employment Land
- Rural
- Natural Heritage
- Open Space
- Aggregate Extraction Area
- Schedule 'C1'
- Existing Development Approvals

Note: Specific policies pertaining to existing development approvals are outlined in Section 7.21



North American Datum 1983
Zone 17 North
Copyright Queens Printer 2018
November 20, 2019

PLAN B Natural Heritage
The Planning Partnership

Town of Midland - Zoning Map



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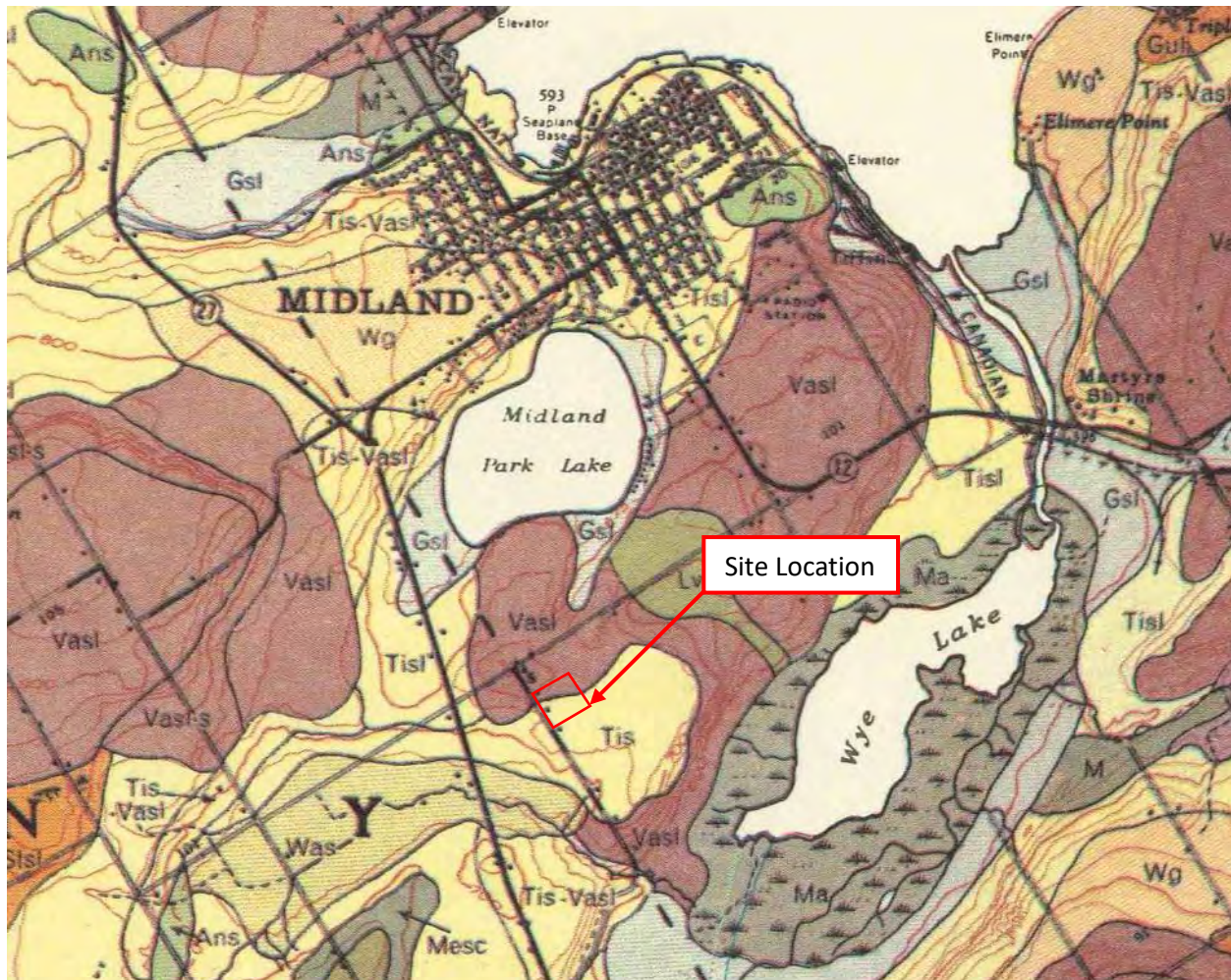
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Jul. 29, 2024

Ontario – North Sheet – Soil Survey Report No. 29



SERIES	TIOGA	ALLISTON	GRANBY	VASEY
TYPE, SYMBOL, ACREAGE	loamy sand Tis 75,500 sandy loam Tisl 44,500 fine sandy loam Tif 17,900 loamy sand — stony phase Tis-b 5,800 loamy sand — eroded phase Tis-e 1,300 loamy sand — steep phase Tis-s 8,500	sandy loam Ans 63,500 fine sandy loam Anf 1,200 sandy loam — stony phase Ans-b 1,200	sandy loam Gsl 17,900 fine sandy loam Gf 4,500 sandy loam — stony phase Gsl-b 300	sandy loam Vasl 71,700 sandy loam — steep phase Vasl-s 17,500 sandy loam — stony phase Vast-b 13,400
COLOUR				
SOIL MATERIALS	Grey, calcareous outwash sand.			Light grey, calcareous and non-calcareous, sandy loam till.
DRAINAGE	Good.	Imperfect.	Poor.	Good.
TOPOGRAPHY	Smooth, gently to irregular, steeply sloping.	Smooth, very gently sloping.	Level.	Smooth, moderately to steeply sloping.
SURFACE STONINESS	Stonefree to moderately stony.		Stonefree.	Moderately to very stony.
SURFACE REACTION	Medium acid.		Slightly acid.	Slightly to medium acid.
GREAT SOIL GROUP	Podzol.		Dark Grey Gleisolic.	Brown Podzolic and Grey-Brown Podzolic.

Agricultural Information Atlas - Soil Map



Legend

-  Assessment Parcel
-  Soil Name Label

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) shall not be liable in any way for the use or any information on this map. of, or reliance upon, this map.

Table H-1: Summary of Catchment Component Values

Existing Conditions and Post-Development

Component	PRE-DEVELOPMENT				POST-DEVELOPMENT									
	CATCHMENT 101				CATCHMENT 201		CATCHMENT 202			CATCHMENT 203		CATCHMENT 204		
	Woodland	Pasture	Gravel	Impervious	Woodland	Pasture	Pasture	Gravel	Impervious	Pasture	Gravel	Woodland	Pasture	Impervious
Area (ha)	7.23	2.30	0.13	0.15	1.84	0.77	2.89	2.27	0.06	0.51	0.52	0.09	0.74	0.11
Topography*	Rolling (2.5%)	Rolling (2.5%)	Rolling (2.5%)	Rolling (2.5%)	Rolling (3.1%)	Rolling (3.1%)	Flat (0.5%)	Flat (0.5%)	Flat (0.5%)	Rolling (2.0%)	Rolling (2.0%)	Rolling (5.7%)	Rolling (5.7%)	Rolling (5.7%)
	0.20	0.20	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.20	0.20	0.20	0.20	0.20
Soil*	Open Sandy Loam	Open Sandy Loam	Packed Gravel	Impervious	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam	Open Sandy Loam
	0.40	0.40	0.00	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Cover*	Woodland	Cultivated Land	n/a	n/a	Woodland	Cultivated Land	Cultivated Land	n/a	n/a	Cultivated Land	n/a	Woodland	Cultivated Land	n/a
	0.20	0.10	0.00	0.00	0.20	0.10	0.10	0.00	0.00	0.10	0.00	0.20	0.10	0.00
Total (Infiltration Factor)	0.80	0.70	0.20	0.20	0.80	0.70	0.80	0.70	0.70	0.70	0.60	0.80	0.70	0.60
Vegetation**	Mature Forests	Pasture and Shrubs	No vegetation	No vegetation	Mature Forests	Pasture and Shrubs	Pasture and Shrubs	No vegetation	No vegetation	Pasture and Shrubs	No vegetation	Mature Forests	Pasture and Shrubs	No vegetation
Soils**	Fine Sandy Loam	Fine Sandy Loam	Packed Gravel	Impervious	Fine Sandy Loam	Fine Sandy Loam	Fine Sandy Loam	Gravel (Pit Floor)	Impervious	Fine Sandy Loam	Gravel (Pit Floor)	Fine Sandy Loam	Fine Sandy Loam	Impervious
Soil Moisture Storage (mm)**	300	150	0	0	300	150	150	50	0	150	50	300	150	0

* MOE SWMPDM. 2003. Table 3.1 "Infiltration Factors" values.

** MOE SWMPDM. 2003. Table 3.1 "Water Holding Capacity" values.



Table H-2: Water Balance Components (Wooded Areas, Rolling Topography, Open Sandy Loam Soils)

Pre-Development Catchment 101; Post-Development Catchments 201 and 204													
Based on Thornthwaite's Soil Moisture Balance Approach with a Soil Moisture Storage of 300mm and Infiltration Factor of 0.80													
Climate data from Midland WPCP Climate Station (1981 - 2010)													
POTENTIAL EVAPOTRANSPIRATION CALCULATIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Average Temperature (Degree C) ¹	-8.5	-6.4	-2	5.8	12.2	18.1	20.8	19.9	15.9	9.3	3.2	-3.1	7.1
Precipitation (P) ¹	110	70	66	65	93	90	73	78	99	90	104	104	1041
Heat index: $i = (t/5)^{1.514}$	0.00	0.00	0	1.25	3.86	7.01	8.66	8.10	5.76	2.56	0.51	0.00	37.7
Adjusting Factor for U (Latitude 45 N)	0.8	0.81	1.02	1.13	1.28	1.29	1.31	1.21	1.04	0.94	0.79	0.75	
Unadjusted Daily Potential Evapotranspiration U (mm)	0	0	0	26	58	89	103	98	77	43	13	0	
Adjusted Potential Evapotranspiration PET (mm)	0	0	0	29	74	114	135	119	80	40	11	0	602
P - PET	110	70	66	36	19	-25	-62	-41	19	50	93	104	439
APWL	0	0	0	0	0	-25	-87	-128	0	0	0	0	
Soil Moisture Storage max 300 mm	410	370	366	300	300	279	231	204	223	273	300	404	
Soil Moisture Deficit max 300 mm	0	0	0	0	0	25	62	41	0	0	0	0	
Change in Soil Moisture Storage	0	0	0	0	0	0	0	0	0	0	0		
Actual Evapotranspiration (AET) (mm)	0	0	0	29	74	90	73	78	80	40	11	0	474
Surplus Water (P-AET) (mm) - for infiltration or runoff	110	70	66	36	19	0	0	0	0	0	93	104	498
Potential Infiltration (based on MOE methodology*; independent of temperature)	88	56	53	29	15	0	0	0	0	0	74	84	398
Potential Direct Surface Water Runoff (independent of temperature)	22	14	13	7	4	0	0	0	0	0	19	21	100
IMPERVIOUS COMPONENTS - WATER SURPLUS (RUNOFF AND EVAPORATION)													
Precipitation (P) (mm)	110	70	66	65	93	90	73	78	99	90	104	104	1041
Potential Evaporation (PE); Assume 15% (mm)	16	10	10	10	14	13	11	12	15	14	16	16	156
Potential Surface Water Runoff (P-PE) (mm)	93	59	56	55	79	76	62	66	84	77	88	89	885

*Assume January storage is 100% of Soil Moisture Storage + Surplus (Snowpack)

Soil Moisture Storage ³ - mature forests in fine sandy loam soils 300 mm

MOE SWM infiltration calculations ⁴

topography - rolling land 0.2
soils - open sandy loam 0.4
cover - woodland 0.2
Infiltration factor 0.8

Latitude of site (or climate station) 45 ° N

Notes:

1. Environment Canada Climate Normals (Midland WPCP Climate Station 1981-2010)
2. Lorente, J.M. 1961. Pg. 206 "Adjusting Factors for U".
3. MOE SWMPDM. 2003. Table 3.1 "Water Holding Capacity" values.
4. MOE SWMPDM. 2003. Table 3.1 "Infiltration Factors" values.



Table H-3: Water Balance Components (Pasture Areas, Rolling Topography, Open Sandy Loam Soils)

Pre-Development Catchment 101; Post-Development Catchments 201, 203 and 204 Based on Thornthwaite's Soil Moisture Balance Approach with a Soil Moisture Storage of 150mm and Infiltration Factor of 0.70 Climate data from Midland WPCP Climate Station (1981 - 2010)													
POTENTIAL EVAPOTRANSPIRATION CALCULATIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Average Temperature (Degree C) ¹	-8.5	-6.4	-2	5.8	12.2	18.1	20.8	19.9	15.9	9.3	3.2	-3.1	7.1
Precipitation (P) ¹	110	70	66	65	93	90	73	78	99	90	104	104	1041
Heat index: $i = (t/5)^{1.514}$	0.00	0.00	0	1.25	3.86	7.01	8.66	8.10	5.76	2.56	0.51	0.00	37.7
Adjusting Factor for U (Latitude 45 N)	0.8	0.81	1.02	1.13	1.28	1.29	1.31	1.21	1.04	0.94	0.79	0.75	
Unadjusted Daily Potential Evapotranspiration U (mm)	0	0	0	26	58	89	103	98	77	43	13	0	
Adjusted Potential Evapotranspiration PET (mm)	0	0	0	29	74	114	135	119	80	40	11	0	602
P - PET	110	70	66	36	19	-25	-62	-41	19	50	93	104	439
APWL	0	0	0	0	0	-25	-87	-128	0	0	0	0	
Soil Moisture Storage max 150 mm	260	220	216	150	150	127	82	61	80	130	150	254	
Soil Moisture Deficit max 150 mm	0	0	0	0	0	25	17	21	0	0	0	0	
Change in Soil Moisture Storage	0	0	0	0	0	0	-45	-20	19	0	0		
Actual Evapotranspiration (AET) (mm)	0	0	0	29	74	90	118	98	80	40	11	0	539
Surplus Water (P-AET) (mm) - for infiltration or runoff	110	70	66	36	19	0	0	0	0	0	93	104	498
Potential Infiltration (based on MOE methodology*; independent of temperature)	77	49	46	25	13	0	0	0	0	0	65	73	349
Potential Direct Surface Water Runoff (independent of temperature)	33	21	20	11	6	0	0	0	0	0	28	31	149
IMPERVIOUS COMPONENTS - WATER SURPLUS (RUNOFF AND EVAPORATION)													
Precipitation (P) (mm)	110	70	66	65	93	90	73	78	99	90	104	104	1041
Potential Evaporation (PE); Assume 15% (mm)	16	10	10	10	14	13	11	12	15	14	16	16	156
Potential Surface Water Runoff (P-PE) (mm)	93	59	56	55	79	76	62	66	84	77	88	89	885

*Assume January storage is 100% of Soil Moisture Storage + Surplus (Snowpack)

Soil Moisture Storage ³ - pasture and shrubs in fine sandy loam soils 150 mm

MOE SWM infiltration calculations ⁴

topography - rolling land 0.2
 soils - open sandy loam 0.4
 cover - cultivated land 0.1
Infiltration factor 0.7

Latitude of site (or climate station) 45 ° N

Notes:

1. Environment Canada Climate Normals (Midland WPCP Climate Station 1981-2010)
2. Lorente, J.M. 1961. Pg. 206 "Adjusting Factors for U".
3. MOE SWMPDM. 2003. Table 3.1 "Water Holding Capacity" values.
4. MOE SWMPDM. 2003. Table 3.1 "Infiltration Factors" values.



Table H-4: Water Balance Components (Pasture Areas, Flat Topography, Open Sandy Loam Soils)

Post-Development Catchment 202													
Based on Thornthwaite's Soil Moisture Balance Approach with a Soil Moisture Storage of 150mm and Infiltration Factor of 0.80													
Climate data from Midland WPCP Climate Station (1981 - 2010)													
POTENTIAL EVAPOTRANSPIRATION CALCULATIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Average Temperature (Degree C) ¹	-8.5	-6.4	-2	5.8	12.2	18.1	20.8	19.9	15.9	9.3	3.2	-3.1	7.1
Precipitation (P) ¹	110	70	66	65	93	90	73	78	99	90	104	104	1041
Heat index: $i = (t/5)^{1.514}$	0.00	0.00	0	1.25	3.86	7.01	8.66	8.10	5.76	2.56	0.51	0.00	37.7
Adjusting Factor for U (Latitude 45 N)	0.8	0.81	1.02	1.13	1.28	1.29	1.31	1.21	1.04	0.94	0.79	0.75	
Unadjusted Daily Potential Evapotranspiration U (mm)	0	0	0	26	58	89	103	98	77	43	13	0	
Adjusted Potential Evapotranspiration PET (mm)	0	0	0	29	74	114	135	119	80	40	11	0	602
P - PET	110	70	66	36	19	-25	-62	-41	19	50	93	104	439
APWL	0	0	0	0	0	-25	-87	-128	0	0	0	0	
Soil Moisture Storage max 150 mm	260	220	216	150	150	127	82	61	80	130	150	254	
Soil Moisture Deficit max 150 mm	0	0	0	0	0	25	17	21	0	0	0	0	
Change in Soil Moisture Storage	0	0	0	0	0	0	-45	-20	19	0	0		
Actual Evapotranspiration (AET) (mm)	0	0	0	29	74	90	118	98	80	40	11	0	539
Surplus Water (P-AET) (mm) - for infiltration or runoff	110	70	66	36	19	0	0	0	0	0	93	104	498
Potential Infiltration (based on MOE methodology*; independent of temperature)	88	56	53	29	15	0	0	0	0	0	74	84	398
Potential Direct Surface Water Runoff (independent of temperature)	22	14	13	7	4	0	0	0	0	0	19	21	100
IMPERVIOUS COMPONENTS - WATER SURPLUS (RUNOFF AND EVAPORATION)													
Precipitation (P) (mm)	110	70	66	65	93	90	73	78	99	90	104	104	1041
Potential Evaporation (PE); Assume 15% (mm)	16	10	10	10	14	13	11	12	15	14	16	16	156
Potential Surface Water Runoff (P-PE) (mm)	93	59	56	55	79	76	62	66	84	77	88	89	885

*Assume January storage is 100% of Soil Moisture Storage + Surplus (Snowpack)

Soil Moisture Storage ³ - pasture and shrubs in fine sandy loam soils 150 mm

MOE SWM infiltration calculations ⁴

topography - flat land 0.3
soils - open sandy loam 0.4
cover - cultivated land 0.1
Infiltration factor 0.8

Latitude of site (or climate station) 45 ° N

Notes:

1. Environment Canada Climate Normals (Midland WPCP Climate Station 1981-2010)
2. Lorente, J.M. 1961. Pg. 206 "Adjusting Factors for U".
3. MOE SWMPDM. 2003. Table 3.1 "Water Holding Capacity" values.
4. MOE SWMPDM. 2003. Table 3.1 "Infiltration Factors" values.



Table H-5: Water Balance Components (Pit Floor Gravel, Flat Topography, Open Sandy Loam Soils)

Post-Development Catchment 202 (Gravel Areas) Based on Thornthwaite's Soil Moisture Balance Approach with a Soil Moisture Storage of 50mm and Infiltration Factor of 0.70 Climate data from Midland WPCP Climate Station (1981 - 2010)													
POTENTIAL EVAPOTRANSPIRATION CALCULATIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Average Temperature (Degree C) ¹	-8.5	-6.4	-2	5.8	12.2	18.1	20.8	19.9	15.9	9.3	3.2	-3.1	7.1
Precipitation (P) ¹	110	70	66	65	93	90	73	78	99	90	104	104	1041
Heat index: $i = (t/5)^{1.514}$	0.00	0.00	0	1.25	3.86	7.01	8.66	8.10	5.76	2.56	0.51	0.00	37.7
Adjusting Factor for U (Latitude 45 N)	0.8	0.81	1.02	1.13	1.28	1.29	1.31	1.21	1.04	0.94	0.79	0.75	
Unadjusted Daily Potential Evapotranspiration U (mm)	0	0	0	26	58	89	103	98	77	43	13	0	
Adjusted Potential Evapotranspiration PET (mm)**	0	0	0	14	37	57	68	59	40	20	5	0	301
P - PET	110	70	66	51	56	32	5	18	59	70	98	104	740
APWL	0	0	0	0	0	0	0	0	0	0	0	0	
Soil Moisture Storage max 50 mm	160	120	116	50	50	50	50	50	50	50	50	154	
Soil Moisture Deficit max 50 mm	0	0	0	0	0	0	0	0	0	0	0	0	
Change in Soil Moisture Storage	0	0	0	-66	0	0	0	0	0	0	0	0	
Actual Evapotranspiration (AET) (mm)	0	0	0	14	37	57	68	59	40	20	5	0	301
Surplus Water (P-AET) (mm) - for infiltration or runoff	110	70	66	116	56	32	5	18	59	70	98	104	805
Potential Infiltration (based on MOE methodology*; independent of temperature)	77	49	46	81	39	23	4	13	41	49	69	73	564
Potential Direct Surface Water Runoff (independent of temperature)	33	21	20	35	17	10	2	6	18	21	29	31	242
IMPERVIOUS COMPONENTS - WATER SURPLUS (RUNOFF AND EVAPORATION)													
Precipitation (P) (mm)	110	70	66	65	93	90	73	78	99	90	104	104	1041
Potential Evaporation (PE); Assume 15% (mm)	16	10	10	10	14	13	11	12	15	14	16	16	156
Potential Surface Water Runoff (P-PE) (mm)	93	59	56	55	79	76	62	66	84	77	88	89	885

*Assume January storage is 100% of Soil Moisture Storage + Surplus (Snowpack)

** Assume PET at 50% of normal within bare soil areas

Soil Moisture Storage ³ - sand and gravel pit floor, no vegetation 50 mm

MOE SWM infiltration calculations ⁴

topography - flat land 0.3
soils - open sandy loam 0.4
cover - none 0
Infiltration factor 0.7

Latitude of site (or climate station) 45 ° N

Notes:

1. Environment Canada Climate Normals (Midland WPCP Climate Station 1981-2010)

2. Lorente, J.M. 1961. Pg. 206 "Adjusting Factors for U".

3. MOE SWMPDM. 2003. Table 3.1 "Water Holding Capacity" values.

4. MOE SWMPDM. 2003. Table 3.1 "Infiltration Factors" values.



Table H-6: Water Balance Components (Pit Floor Gravel, Rolling Topography, Open Sandy Loam Soils)

Post-Development Catchment 203 (Gravel Areas) Based on Thornthwaite's Soil Moisture Balance Approach with a Soil Moisture Storage of 50mm and Infiltration Factor of 0.60 Climate data from Midland WPCP Climate Station (1981 - 2010)													
POTENTIAL EVAPOTRANSPIRATION CALCULATIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Average Temperature (Degree C) ¹	-8.5	-6.4	-2	5.8	12.2	18.1	20.8	19.9	15.9	9.3	3.2	-3.1	7.1
Precipitation (P) ¹	110	70	66	65	93	90	73	78	99	90	104	104	1041
Heat index: $i = (t/5)^{1.514}$	0.00	0.00	0	1.25	3.86	7.01	8.66	8.10	5.76	2.56	0.51	0.00	37.7
Adjusting Factor for U (Latitude 45 N)	0.8	0.81	1.02	1.13	1.28	1.29	1.31	1.21	1.04	0.94	0.79	0.75	
Unadjusted Daily Potential Evapotranspiration U (mm)	0	0	0	26	58	89	103	98	77	43	13	0	
Adjusted Potential Evapotranspiration PET (mm) **	0	0	0	14	37	57	68	59	40	20	5	0	301
P - PET	110	70	66	51	56	32	5	18	59	70	98	104	740
APWL	0	0	0	0	0	0	0	0	0	0	0	0	
Soil Moisture Storage max 50 mm	160	120	116	50	50	50	50	50	50	50	50	154	
Soil Moisture Deficit max 50 mm	0	0	0	0	0	0	0	0	0	0	0	0	
Change in Soil Moisture Storage	0	0	0	-66	0	0	0	0	0	0	0	0	
Actual Evapotranspiration (AET) (mm)	0	0	0	14	37	57	68	59	40	20	5	0	301
Surplus Water (P-AET) (mm) - for infiltration or runoff	110	70	66	116	56	32	5	18	59	70	98	104	805
Potential Infiltration (based on MOE methodology*; independent of temperature)	66	42	39	70	34	19	3	11	35	42	59	63	483
Potential Direct Surface Water Runoff (independent of temperature)	44	28	26	47	22	13	2	7	24	28	39	42	322
IMPERVIOUS COMPONENTS - WATER SURPLUS (RUNOFF AND EVAPORATION)													
Precipitation (P) (mm)	110	70	66	65	93	90	73	78	99	90	104	104	1041
Potential Evaporation (PE); Assume 15% (mm)	16	10	10	10	14	13	11	12	15	14	16	16	156
Potential Surface Water Runoff (P-PE) (mm)	93	59	56	55	79	76	62	66	84	77	88	89	885

*Assume January storage is 100% of Soil Moisture Storage + Surplus (Snowpack)

** Assume PET at 50% of normal within bare soil areas



Soil Moisture Storage ³ - sand and gravel pit floor, no vegetation 50 mm

MOE SWM infiltration calculations ⁴

topography - rolling land 0.2
soils - open sandy loam 0.4
cover - none 0
Infiltration factor 0.6

Latitude of site (or climate station) 45 ° N

Notes:

1. Environment Canada Climate Normals (Midland WPCP Climate Station 1981-2010)

2. Lorente, J.M. 1961. Pg. 206 "Adjusting Factors for U".

3. MOE SWMPDM. 2003. Table 3.1 "Water Holding Capacity" values.

4. MOE SWMPDM. 2003. Table 3.1 "Infiltration Factors" values.

TABLE H-7: Water Balance													
Existing Conditions and Post-Development (without Mitigation)													
Catchment Area	Land Type	Approx. Land Area* (m ²)	Estimated Impervious Fraction for Land Use	Estimated Impervious Area (m ²)	Runoff from Impervious Area** (m/a)	Runoff Volume from Impervious Area (m ³ /a)	Estimated Pervious Area (m ²)	Runoff from Pervious Area** (m/a)	Runoff Volume from Pervious Area (m ³ /a)	Infiltration from Pervious Area** (m/a)	Infiltration Volume from Pervious Area (m ³ /a)	Total Runoff Volume (m ³ /a)	Total Infiltration Volume (m ³ /a)
Existing Land Use													
CATCHMENT 101	Woodland	72,300	0.00	0	0.885	0	72,300	0.100	7,202	0.398	28,807	7,202	28,807
	Pasture	23,000	0.00	0	0.885	0	23,000	0.149	3,437	0.349	8,019	3,437	8,019
	Packed Gravel (Driveway)	1,300	1.00	1,300	0.885	1,150	0	0.149	0	0.349	0	1,150	0
	Impervious	1,500	1.00	1,500	0.885	1,327	0	0.149	0	0.349	0	1,327	0
TOTAL PRE-DEVELOPMENT		98,100		2,800		2,477	95,300		10,638		36,826	13,115	36,826
Post-Development Land Use													
CATCHMENT 201	Woodland	18,400	0.00	0	0.885	0	18,400	0.100	1,833	0.398	7,331	1,833	7,331
	Pasture	7,700	0.00	0	0.885	0	7,700	0.149	1,150	0.349	2,684	1,150	2,684
CATCHMENT 202	Pasture	28,900	0.00	0	0.885	0	28,900	0.100	2,879	0.398	11,515	2,879	11,515
	Gravel (Pit Floor)	22,700	0.00	0	0.885	0	22,700	0.242	5,484	0.564	12,797	5,484	12,797
	Impervious	600	1.00	600	0.885	531	0	0.242	0	0.564	0	531	0
CATCHMENT 203	Pasture	5,100	0.00	0	0.885	0	5,100	0.149	762	0.349	1,778	762	1,778
	Gravel (Pit Floor)	5,200	0.00	0	0.885	0	5,200	0.322	1,675	0.483	2,513	1,675	2,513
CATCHMENT 204	Woodland	900	0.00	0	0.885	0	900	0.100	90	0.398	359	90	359
	Pasture	7,400	0.00	0	0.885	0	7,400	0.149	1,106	0.349	2,580	1,106	2,580
	Impervious	1,200	1.00	1,200	0.885	1,061	0	0.149	0	0.349	0	1,061	0
TOTAL POST-DEVELOPMENT		98,100		1,800		1,592	96,300		14,979		41,557	16,571	41,557
% Change from Pre to Post												26%	13%
Effect of development (with no mitigation)												26% increase in runoff	13% increase in infiltration

* data provided by The Jones Consulting Group Ltd.

** figures from Tables H-2 to H-6

To balance pre- to post-,
the infiltration target (m³/a)= **-4,731**

ELECTRICAL SYMBOLS

POWER	
SYMBOL	DESCRIPTION
	125V-15A, 1Ø-3W GROUNDED DUPLEX RECEPTACLE, WALL MOUNTED UNLESS NOTED
	125V-15A, 1Ø-3W GFCI GROUNDED DUPLEX RECEPTACLE, WALL MOUNTED UNLESS NOTED
	125V-15A, 1Ø-3W GROUNDED DUPLEX RECEPTACLE C/W 2 USB CONNECTION, WALL MOUNTED UNLESS NOTED
	125V-15A, 1Ø-3W WEATHER PROOF GROUNDED DUPLEX RECEPTACLE, WALL MOUNTED UNLESS NOTED
	125V-15A, 1Ø-3W GROUNDED DUPLEX RECEPTACLE, CEILING MOUNTED UNLESS NOTED
	125V-15A, 1Ø-3W GROUNDED DUPLEX RECEPTACLE ON DED. CCT. WALL MOUNTED UNLESS NOTED
	125V-15A, 1Ø-3W GROUNDED DUPLEX RECEPTACLE, MOUNTED ABOVE COUNTER FOR GENERAL POWER CONNECTION.
	125V-15A, 2P-3W GROUNDED SPLIT WIRED RECEPTACLE, WALL MOUNTED UNLESS NOTED
	125V-15A, 1Ø-3W GROUNDED QUAD RECEPTACLE IN COMMON BOX, WALL MOUNTED UNLESS NOTED
	125V-15, 2P-3W DOUBLE DUPLEX SPLIT WIRE GROUNDED QUAD RECEPTACLE IN COMMON BOX, WALL MOUNTED UNLESS NOTED
	125V-15A 1Ø-3W GROUNDED DUPLEX RECEPTACLE MOUNTED IN FLUSH FLOOR BOX UNLESS NOTED
	12ØV-15A 1Ø-3W GROUNDED QUAD RECEPTACLE MOUNTED IN FLUSH FLOOR BOX UNLESS NOTED
	25ØV-2ØA 2P-3W GROUNDED RECEPTACLE, WALL MOUNTED UNLESS NOTED
	25ØV-3ØA 2P-3W GROUNDED RECEPTACLE, WALL MOUNTED UNLESS NOTED (RANGE OR DRYER RCPT IN RESIDENTIAL APPLICATIONS)
	25ØV-4ØA 2P-3W GROUNDED RECEPTACLE, WALL MOUNTED UNLESS NOTED
	125V-15A 1Ø-3W GROUNDED DUPLEX RECEPTACLE C/W DATA/PHONE COMBO MOUNTED IN FLUSH FLOOR BOX UON
	DATA OUTLET C/W 3/4" C HOME RUN TO ACCESSIBLE CEILING SPACE
	TELEPHONE WALL OUTLET C/W 3/4" C HOME RUN TO ACCESSIBLE CEILING SPACE
	COMBINATION DATA & TELEPHONE OUTLET - WALL MOUNTED C/W 3/4" C HOME RUN TO ACCESSIBLE CEILING SPACE. MAXIMUM 4 DROPS PER WALL BOX. IF MORE THAN 4, CONTRACTOR TO PROVIDE MULTI-GANG BOX AND CORRESPONDING FACEPLATE TO ACCOMMODATE AS REQUIRED
	HARDWIRED CONNECTION
	TV DATA OUTLET
	PUSH BUTTON
	CALL FOR HELP INDICATOR LIGHT
	CONTROL SWITCH, MOTOR RATED
	CONTROL SWITCH, MANUAL-OFF-AUTO
	POWER PANEL, FLUSH MOUNTED
	TELECOM PANEL, FLUSH MOUNTED
	POWER PANEL SURFACE MOUNTED
	DISTRIBUTION BOARD
	DISCONNECT, NON-FUSED
	DISCONNECT, FUSED
	SWITCH, NON-FUSED
	SWITCH, FUSED
	CIRCUIT BREAKER
	TRANSFORMER
	POWER METER
	MOTOR WITH HORSEPOWER INDICATED
	JUNCTION BOX
	CONDUIT RUN TO PANEL
	GROUNDING
	HEAT TRACE WITH GROUND FAULT PROTECTION APPLIED TO PIPING, VALVES, ETC
	CONDUIT RUN CONCEALED OR EXPOSED
	CONDUIT RUN UNDERGROUND OR UNDERFLOOR
	J-HOOKS INSTALLED AT 3' REGULAR INTERVALS (UON) ABOVE ACCESSIBLE CEILING SPACE ON WALL OR CEILING

FIRE ALARM	
SYMBOL	DESCRIPTION
	MANUAL PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	SMOKE ALARM
	SMOKE / CO COMBINATION DETECTOR
	CARBON MONOXIDE DETECTOR
	DUCT - TYPE SMOKE DETECTOR
	REMOTE SAMPLING - TYPE SMOKE DETECTOR
	HORN & STROBE COMBINATION DEVICE - WALL MOUNTED
	HORN & STROBE COMBINATION DEVICE - CEILING MOUNTED
	STROBE ONLY DEVICE - CEILING MOUNTED
	HORN ONLY DEVICE
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL C/W GRAPHIC
	CARD READER
	SIGNAL SILENCE
	FAULT ISOLATION MODULE
	END OF LINE DEVICE
	STAIRWELL SPEAKER
	SPEAKER
	FIREMAN'S PHONE
	FIRE ALARM RELAY
	ADDRESSABLE MODULE
	ADDRESSABLE MONITOR MODULE
	ADDRESSABLE CONTROL MODULE
	CONTROL RELAY
	WATER-FLOW SWITCH
	SPRINKLER PRESSURE SWITCH
	SUPERVISED VALVE
	EXHAUST DAMPER
	AUTOMATIC TRANSFER SWITCH
	JUNCTION BOX
	DATA COMMUNICATION LINK STYLE C
	BEAM SMOKE DETECTOR
	BELL

SECURITY	
SYMBOL	DESCRIPTION
	ELECTRONIC STRIKE
	CARD READER
	DOOR CONTACT
	OVERHEAD DOOR CONTACT
	SECURITY KEYPAD
	EXIT/ENTRANCE BUTTON (COMBO PUSH/WAVE TO INTIATE)
	MAGNETIC LOCK
	DUAL TECHNOLOGY MOTION DETECTOR
	SECURITY CAMERA
	INTERCOM

LIGHTING	
SYMBOL	DESCRIPTION
	SINGLE POLE, SINGLE THROW TOGGLE SWITCH (3' DENOTES 3-WAY, 4' DENOTES 4-WAY, 'PL' DENOTES PILOT LIGHT, 'LV' DENOTES LOW VOLTAGE, 'K' DENOTES KEY OPERATED) 12Ø OR 347V AS APPLICABLE.
	GANGED SWITCHES
	TOGGLE SWITCH WITH OCCUPANCY SENSOR, WALL MOUNTED
	TOGGLE SWITCH WITH DIMMING
	TOGGLE SWITCH TIMER
	OCCUPANCY SENSOR CEILING MTD
	RECESSED ROUND FIXTURE
	WALL MOUNTED FIXTURE / WALLPACK
	LOW-BAY FIXTURE
	PENDANT CYLINDER FIXTURE
	SHOWER FIXTURE
	CORRIDOR SURFACE FIXTURE
	LINEAR SURFACE WALL FIXTURE
	1' x 4' RECESSED CEILING FIXTURE
	2' x 2' RECESSED CEILING FIXTURE
	2' x 4' RECESSED CEILING FIXTURE
	4' SURFACE LINEAR STRIP FIXTURE
	1' x 4' HIGH-BAY FIXTURE
	LINEAR TRACK LIGHTING FIXTURE
	SINGLE HEAD LIGHTING STANDARD
	DOUBLE HEAD LIGHTING STANDARD

- NOTES:
1. SHADED FIXTURES ARE CONNECTED TO EMERGENCY CIRCUIT
2. REFER TO LIGHTING FIXTURES SCHEDULE & SPECIFICATIONS
3. SHADED FIXTURES WITH THE SUFFIX 'N' INDICATE FIXTURES CONNECTED TO UN-SWITCHED EMERGENCY CIRCUIT (NIGHT LIGHTS)
4. HALF SHADING INDICATES NL OR EM

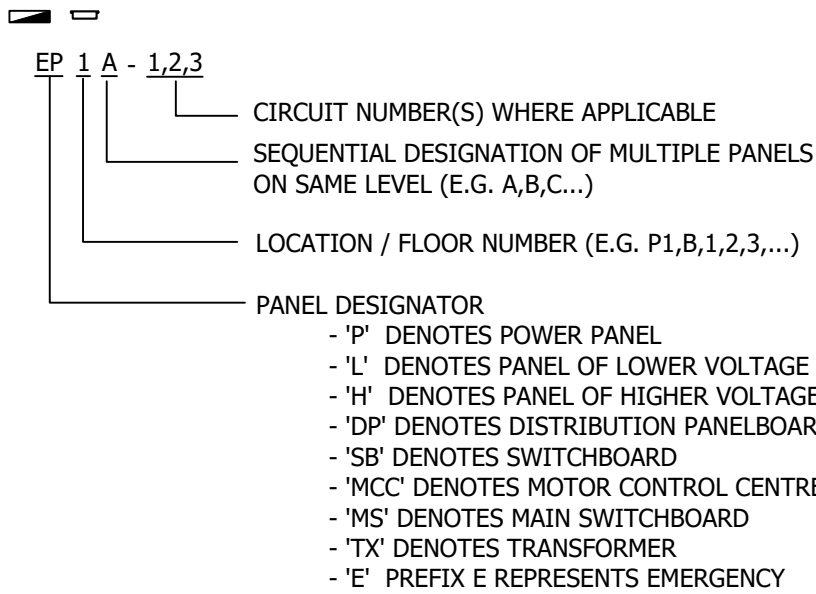
LIFE SAFETY	
SYMBOL	DESCRIPTION
	EMERGENCY LIGHTING BATTERY UNIT C/W UNIT MOUNTED QUARTZ HEADS
	EMERGENCY SURFACE MOUNTED DOUBLE HEAD LED REMOTE HEAD
	EMERGENCY SURFACE MOUNTED SINGLE HEAD LED REMOTE HEAD
	PICTOGRAM EXIT SIGN C/W TWO EMERGENCY BATTERY HEADS AND BATTERY UNIT
	SUSPENDED CEILING MOUNTED PICTOGRAM GREEN RUNNING MAN EXIT LIGHT, ARROW(S) INDICATE DIRECTION C/W BATTERY UNIT. PROVIDE REQUIRED CONDUIT LENGTH TO SUIT SITE CONDITIONS
	WALL MOUNTED PICTOGRAM GREEN RUNNING MAN EXIT LIGHT, ARROW(S) INDICATE DIRECTION C/W BATTERY UNIT. PROVIDE REQUIRED CONDUIT LENGTH TO SUIT SITE CONDITIONS

ABBREVIATIONS

SYMBOL	DESCRIPTION	ER	EXISTING TO REMAIN	KVA	KILOVOLT AMPERE	ODS	OVERHEAD DISTRIBUTION SYSTEM	T	TRANSFORMER
A	AMPERE	ES	ENERGY SAVER	KVAR	KILOVOLT AMPERE REACTIVE	OH	OVERHEAD	TB	TERMINAL BLOCK
AAF	ABOVE ACCESS FLOOR	ESA	ELECTRICAL SAFETY AUTHORITY	KW	KILOWATT	OHd	OVERHEAD DOOR	TC	TIME CLOCK
AF	AMPS FUSED	EST	ESTIMATED	KWH	KILOWATT-HOUR	OL	OVERLOAD	TCC	TEMPERATURE CONTROL CONTACTOR
AS	AMPS SWITCH	EP	ELECTRIC PANEL	LED	LIGHT EMITTING DIODE	P	POLE	TD	TIME DELAY
AFF	ABOVE FINISHED FLOOR	EPO	EMERGENCY POWER OFF	LF	LINEAR FOOT	PB	PUSH BUTTON	TFF	TOP OF FINISHED FLOOR
AFG	ABOVE FINISHED GRADE	EWC	ELECTRIC WATER COOLER	LLD	LAMP LUMEN DEPRECIATION	PC	PHOTOCELL	THD	TOTAL HARMONIC DISTORTION
AIC	AMP INTERRUPTING CAPACITY	EWB	ELECTRIC WATER HEATER	LM	LUMEN	PD	PROTECTIVE DEVICE	TL	TWIST LOCK
ALT	ALTERNATE	EXP	EXPOSED	LO	LOCKOUT	PDO	POWER DOOR OPERATOR	TR	TAMPER RESISTANT
AT	AMPERE TRIP	EXR	EXISTING TO REMAIN	LP	LIGHTING PANEL	PH / Ø	PHASE	TS	TRIGGER START
ATS	AUTOMATIC TRANSFER SWITCH	EXRL	EXISTING TO BE RELOCATED	LT	LIGHTING PANEL	PIV	POST INDICATOR VALVE	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
AWG	AMERICAN WIRE GAUGE	EXT	EXTERIOR	LV	LOW VOLTAGE	PKG	PACKAGE	TYP	TYPICAL
BAT	BATTERY	EX	EXISTING	MA	MILLIAMPERE	PL	PILOT LIGHT	UC	UNDER COUNTER
BD	BOARD	FA	FIRE ALARM	MAG STR	MAGNETIC STARTER	PM	PEDESTAL MOUNTED	UHF	ULTRA HIGH FREQUENCY
BFG	BELOW FINISHED GRADE	F	FLOOR MOUNTED	MCA	MINIMUM CIRCUIT AMPS	PNL	PANEL	UNFIN	UNFINISHED
BR	BRANCH	FAAP	FIRE ALARM ANNUNCIATOR PANEL	MCB	MAIN CIRCUIT BREAKER	PSI	POUNDS PER SQUARE INCH	UTIL	UTILITY
BRKR	BREAKER	FACP	FIRE ALARM CONTROL PANEL	MTD	MOTOR CIRCUIT BREAKER	PT	POTENTIAL TRANSFORMER	UTP	UNSHIELDED TWISTED PAIR
C/C	CENTER TO CENETER	FD	FUSED DISCONNECT	MCC	MOTOR CONTROL CENTER	PWR	POWER	UVR	UNDERVOLTAGE RELAY (RELEASE)
CAB	CABINET	FDR	FEEDER	MCCB	MOLDED CASE CIRCUIT BREAKER	PVC	POLYVINYL CHLORIDE	UON	UNLESS OTHERWISE NOTED
CAP	CAPACITY	FIXT	FIXTURE	MCM	THOUSAND CIRCULAR MILS	QC	QUALITY CONTROL	V	VOLT
CB	CIRCUIT BREAKER	FLA	FULL LOAD AMPS	MCP	MOTOR CIRCUIT PROTECTOR	QTY	QUANTITY	VA	VOLT AMPERES
CCTV	CLOSED CIRCUIT TELEVISION	FLUOR	FLUORESCENT	MCS	MOTOR CIRCUIT SWITCH	R	RESISTANCE	VAR	VOLT-AMPERES REACTIVE
CF	CUBIC FEET	FM	FREQUENCY MODULATION	MDF	MAIN DISTRIBUTION FRAME	RCPT	RECEPTACLE	VAV	VARIABLE AIR VOLUME
CKT	CIRCUIT	FPM	FEET PER MINUTE	MDP	MAIN DISTRIBUTION PANELBOARD	RCS	RELAY CONTROL STATION	VFD	VARIABLE FREQUENCY DRIVE
CLG	CEILING	FR	FIRE RATING	MH	MOUNTING HEIGHT	RECIRC	RECIRCULATING	VHF	VERU HIGH FREQUENCY
CL	CONTROL PANEL	FVR	FULL VOLTAGE NON-REVERSING	MHZ	MEGAHERTZ	REQD	REQUIRED	VHO	VERY HIGH OUTPUT
CT	CURRENT TRANSFORMER	GA	GAUGE	MOCP	MAXIMUM OVERCURRENT PROTECTION	RE	EXISTING IN RELOCATED	VP	VAPOUR PROOF
CU	COPPER	GAL	GALLON	MTD	MOUNTED	RLA	RUNNING LOAD AMPS	VT	VAPOURTIGHT
CU FT	CUBIC FOOT	GEN	GENERATOR	MVA	MEGAVOLT AMPERES	RP	RAINPROOF	W	WATT
DB	DOOR BELL	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	MVAR	MEGAVOLT AMPERES REACTIVE	RPM	REVOLUTIONS PER MINUTE	WAP	WIRELESS ACCESS POINT
DC	DIRECT CURRENT	GFI	GROUND FAULT INTERRUPTER	MW	MEGAWATT	RPVC	RIGID PVC	WG	WIRE GUARD
DDC	DIRECT DIGITAL CONTROL	GFP	GROUND FAULT PROTECTOR	N/A	NOT APPLICABLE	RR	RESTROOM	WM	"WIRE MOLD" (SURFACE RACEWAY)
DISC	DISCONNECT	H	GROUND	NC	NON-AUTOMATIC	R&P	REMOVE & REPLACE	WO	WELDER OUTLET
DP	DUSTPROOF	HSKPG	HOUSEKEEPING	NEC	NATIONALLY CLOSED	RT	RAINTIGHT	WP	WEATHERPROOF
DDPT	DOUBLE POLE, DOUBLE THROW	HIC	HIGH INTERRUPTING CAPACITY	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	SCHED	SCHEDULE	WT	WEATHER TIGHT
DPST	DOUBLE POLE, SINGLE THROW	HOA	HAND-OFF-AUTOMATIC	NFSD	NON-FUSED	SCR	SHORT CIRCUIT RATING	XHD	EXTRA HEAVY DUTY
DX	DIRECT EXPANSION	HT	HEAT TRACE	NFD	NON-FUSED DISCONNECT	SD	SERVICE DROP	XFER	TRANSFER
EBBR	ELECTRIC BASEBOARD RADIATION	HV	HIGH VOLTAGE	NIC	NOT IN CONTRACT	SE	SERVICE ENTRANCE		
EC	EMPTY CONDUIT	HZ	HERTZ	NL	NON-METALLIC SHEATHED CABLE	SP	SINGLE POLE		
ED	EXISTING TO BE DEMOLISHED	IAF	IN ACCESS FLOOR	NO	NORMALLY OPEN	SPD	SURGE PROTECTIVE DEVICE		
EGC	EQUIPMENT GROUNDING CONDUCTOR	IC	INTERRUPTING CAPACITY	NTS	NOT TO SCALE	SPDT	SINGLE POLE, DOUBLE THROW		
EIPS	EXTERIOR INSULATION FINISH SYSTEM	IG	ISOLATED GROUND	OESC	ONTARIO ELECTRICAL SAFETY CODE	SPKR	SPEAKER		
ELEV	ELEVATOR	J	JOULE	OC	OVERCURRENT	SPST	SINGLE POLE, SINGLE THROW		
EM	EMERGENCY	JB	JUNCTION BOX	OCPD	OVERCURRENT PROTECTION DEVICE	SQ FT	SQUARE FOOT		
EMS	ENERGY MANAGEMENT SYSTEM	KCMIL	THOUSAND CIRCULAR MILS	OD	OUTSIDE DIAMETER	SQ IN	SQUARE INCH		
EMT	ELECTRICAL METALLIC TUBING	KHZ	KILOHERTZ			SR	SURFACE RACEWAY		
ENCL	ENCLOSURE	KP	KEYPAD			STR	STARTER		
EOR	ENGINEER ON RECORD	KV	KILOVOLT			SV	SOLENOID VALVE		
EPRF	EXPLOSION PROOF					SW	SWITCH		
EQUIP	EQUIPMENT					SWBRD	SWITCHBOARD		
						SYN	SYNTHETIC		

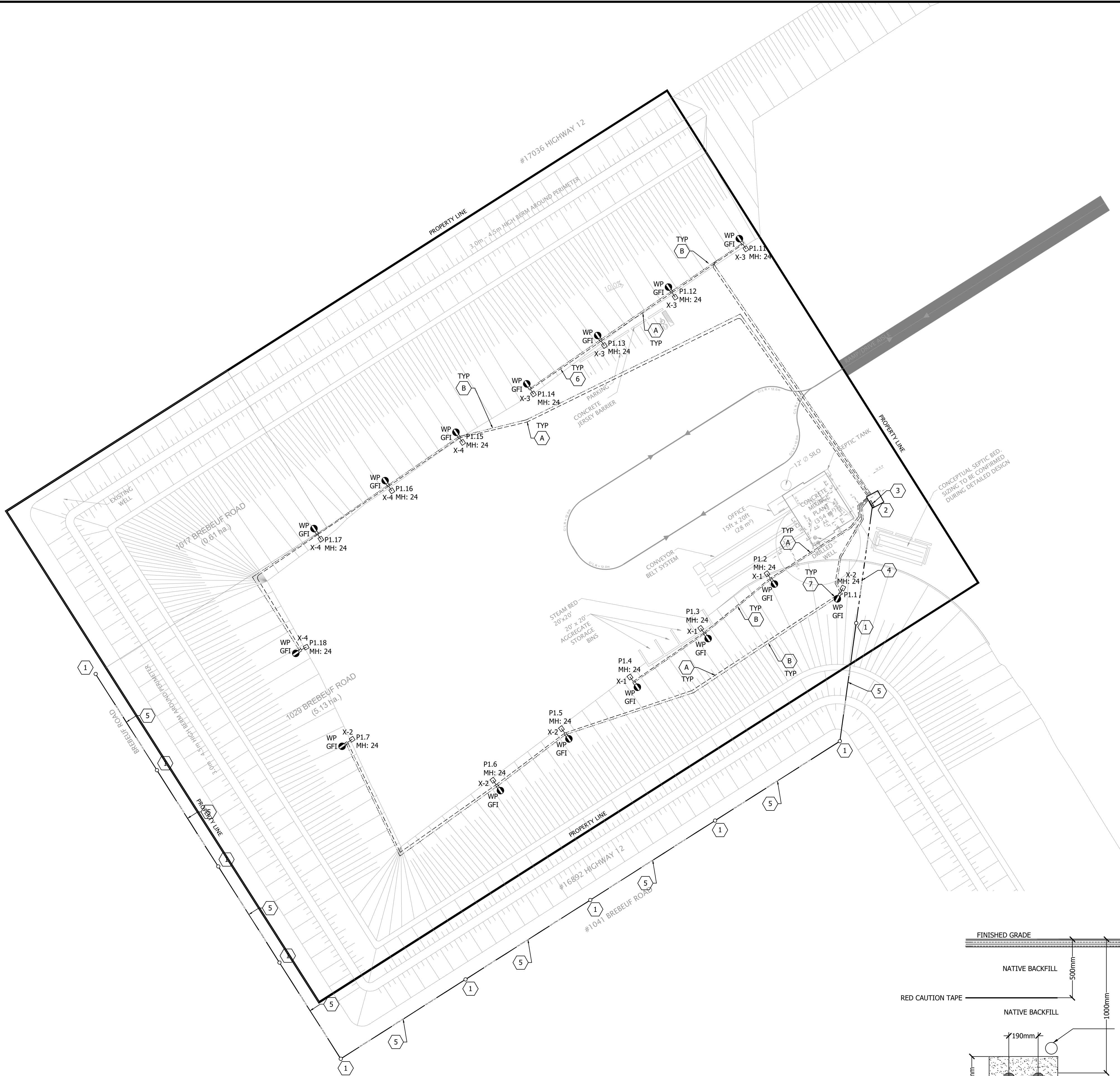
PANEL AND CIRCUIT ABBREVIATION DESIGNATION

TYPICAL PANEL NOMENCLATURE DESCRIPTION ARE AS FOLLOWS:

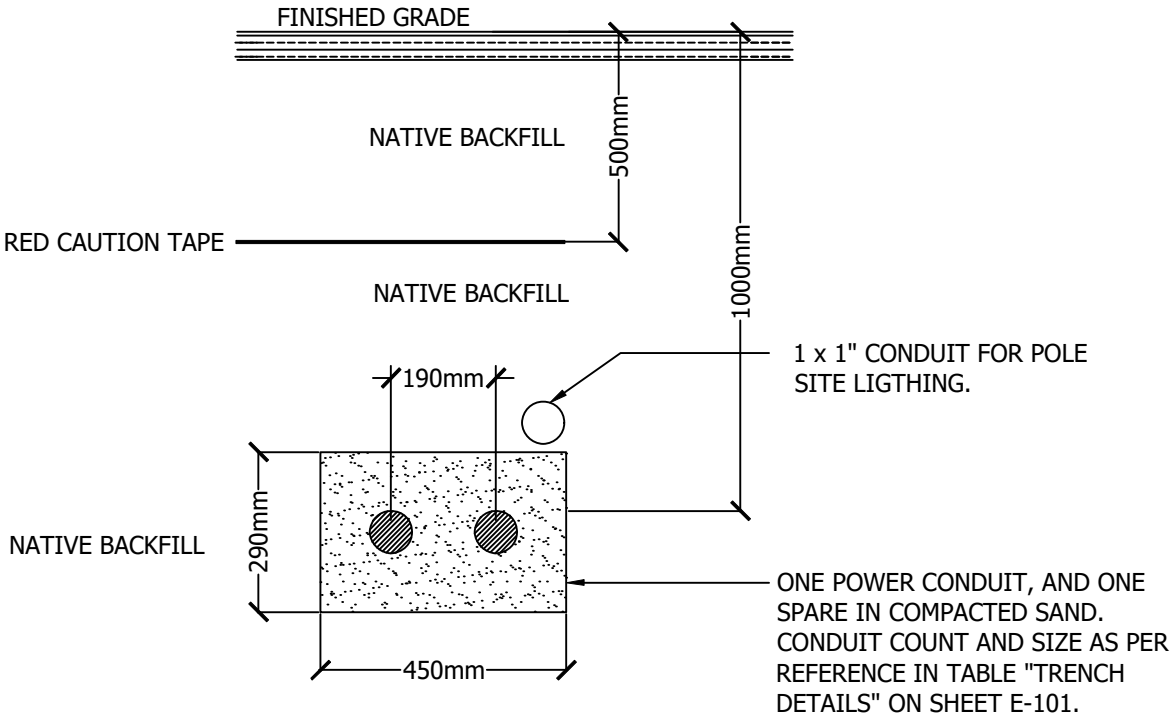


NOTE

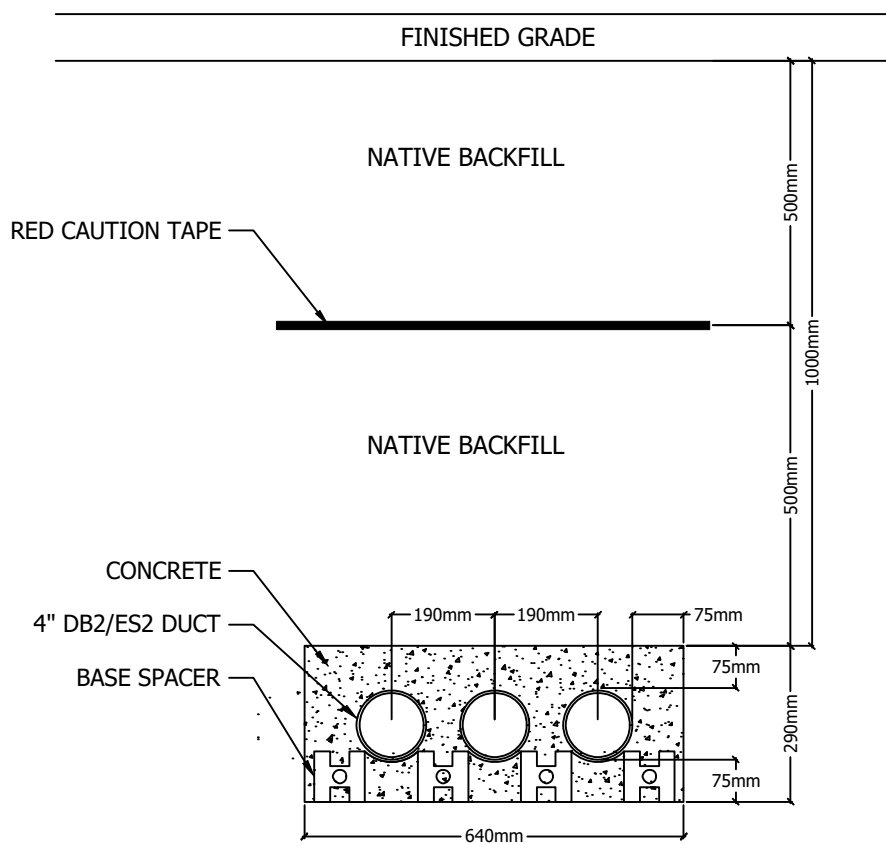
SOME SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY NOT BE APPLICABLE TO THIS PROJECT



1 SITE SERVICING PLAN
SCALE: 1:750



2 TRENCH DUCT DETAIL
SCALE: NTS



3 PRIMARY TRENCH DUCT DETAIL
Scale: NTS

TRENCH DETAILS	
A	FEEDERS FROM NEW PANEL TO LIGHTING AS FOLLOWS: 1 X 2" PVC (ONE 20A CIRCUIT FOR LIGHTING.) SEE TRENCH DETAIL 1/E-301. CONDUITS BURIED AT 1000mm DEEP.
B	FEEDERS FROM NEW PANEL TO BLOCK HEATERS AS FOLLOWS: 1 X 2" PVC (ONE 20A CIRCUIT FOR BLOCK HEATERS) SEE TRENCH DETAIL 1/E-301. CONDUITS BURIED AT 1000MM DEEP. REFER TO FEEDER SCHEDULE ON THIS PAGE.
TRENCHING DETAILS - GENERAL NOTES	
ADDITIONAL NOTES: - CONTRACTOR SHALL ENSURE THAT ALL WORK MEETS WITH ESA APPROVAL AND SHALL CALL FOR ESA AND EME ENGINEER'S REVIEW PRIOR TO COVERING OF TRENCH. - CONDUCTOR SIZES IN TABLE ABOVE TAKE INTO CONSIDERATION VOLTAGE DROP AND ALSO MULTIPLE CIRCUITS IN SINGLE CONDUIT. - LIGHTING WILL BE ADDED FROM EAST TO WEST AS THE LOT ENVELOPE IS EXCAVATED. COORDINATE WITH CLIENT FOR LIGHTS TO BE INSTALLED NOW AND LIGHTS TO BE INSTALLED IN FUTURE. PROVIDE EMPTY CONDUITS AND PROVISIONS FOR FUTURE LIGHTS AS REQUIRED.	

FEEDER SCHEDULE FOR POLE RECEPTACLES						
POLE	TOT LEN	BRKR	VOLTS	LOAD	WIRE	VD
P1.1	121 FT	20A	120	12.5A	8 AWG	1.82%
P1.2	153 FT	20A	120	12.5A	8 AWG	2.30%
P1.3	253 FT	20A	120	12.5A	6 AWG	2.45%
P1.4	353 FT	20A	120	12.5A	4 AWG	2.19%
P1.5	484 FT	20A	120	12.5A	3 AWG	2.43%
P1.6	585 FT	20A	120	12.5A	2 AWG	2.37%
P1.7	864 FT	20A	120	12.5A	1 AWG	2.86%
P1.11	366 FT	20A	120	12.5A	4 AWG	2.27%
P1.12	466 FT	20A	120	12.5A	4 AWG	2.89%
P1.13	566 FT	20A	120	12.5A	3 AWG	2.84%
P1.14	666 FT	20A	120	12.5A	2 AWG	2.69%
P1.15	611 FT	20A	120	12.5A	2 AWG	2.47%
P1.16	711 FT	20A	120	12.5A	2 AWG	2.88%
P1.17	811 FT	20A	120	12.5A	1 AWG	2.68%
P1.18	998 FT	20A	120	12.5A	1/0 AWG	2.68%

LIGHTING FEEDER SCHEDULE						
CIRCUIT	TOT LEN	BRKR	VOLTS	LOAD	WIRE	VD
X-1	354 FT	20A	120	10A	6 AWG	2.74%
X-2	864 FT	20A	120	10A	2 AWG	2.80%
X-3	627 FT	20A	120	10A	3 AWG	2.52%
X-4	998 FT	20A	120	10A	1 AWG	2.64%

DRAWING KEYNOTES	
1	PROPOSED HYDRO POLE. EXACT QUANTITIES AND LOCATIONS WILL BE PROVIDED BY NEWMARKET-TAY POWER DISTRIBUTION
2	POWER SHACK. LOCATION OF ELECTRICAL DISTRIBUTION EQUIPMENT.
3	SWITCHGEAR WITH METERING AND DISTRIBUTION COMPARTMENTS.
4	UNDERGROUND SECONDARY SERVICE FEEDER TO POWER SHACK. SEE DETAIL 3/E-101.
5	OVERHEAD CONDUCTOR SIZE, CONDUIT SIZE, CONDUIT CONFIGURATION TO BE CONFIRMED BY UTILITY.
6	UNDERGROUND LV FEEDER FOR LIGHT STANDARDS AND POWER. SEE DETAIL 2/E-101.
7	PROVIDE RECEPTACLE FOR POLE MOUNTED BLOCK HEATERS. CONFIRM SPECIFICATION AND MOUNTING HEIGHT OF RECEPTACLE WITH CLIENT.

AUG 09/2024	-	RE-ISSUED FOR SPA	JK
JUL 11/2024	-	ISSUED FOR SPA	JK
DATE	NO.	DESCRIPTION	BY

REVISIONS			
CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING WITH WORK.			
THIS DRAWING IS THE PROPERTY OF THE ENGINEER AND MUST BE RETURNED UPON COMPLETION OF THE WORK. REPRODUCTION OF THIS DRAWING IS FORBIDDEN WITHOUT THE ENGINEER'S WRITTEN CONSENT.			
DRAWINGS ARE PREPARED FOR PRINTING ON ARCH D PAPER (24"x36"). DRAWINGS ARE NOT TO BE SCALED.			



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67 HIGH STREET
BARRIE, ON L4N 1W5

PROJECT:
1017 & 1029 BREBEUF ROAD
1017 & 1019 BREBEUF ROAD
MIDLAND, ON
L4R 4K4

DRAWING TITLE:
SITE SERVICING PLAN

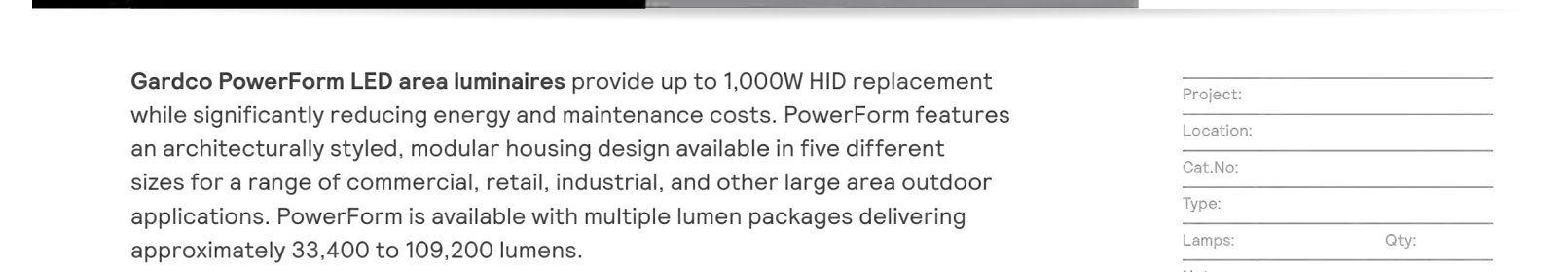
DRAWN BY: JK	CHECKED BY: CL	SCALE: 1:750
DATE: JUL/2024	PROJECT NUMBER: 24-6476	DRAWING NUMBER: E-101



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Area	Illuminance	Fc	1.45	12.0	0.0	N.A.	N.A.
Spill Light	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.

AUG 09/2024	-	RE-ISSUED FOR SPA		JK
JUL 11/2024	-	ISSUED FOR SPA		JK
DATE	NO.	DESCRIPTION		BY

EME Engineering Inc.		
90 WINGES ROAD, SUITE 201 VAUGHAN, ON L4L 6A9	67 HIGH STREET BARRIE, ON L4N 1W5	info@EMEeng.com
PROJECT:		
1017 & 1029 BREBEUF ROAD 1017 & 1019 BREBEUF ROAD MIDLAND, ON L4R 4K4		
DRAWING TITLE:		
SITE PHOTOMETRIC PLAN		
DRAWN BY: JK	CHECKED BY: CL	SCALE: 1:750
DATE: JUL/2024	PROJECT NUMBER: 24-6476	DRAWING NUMBER: E-201



PFAS_PowerForm_area 04/24 page 1 of 7



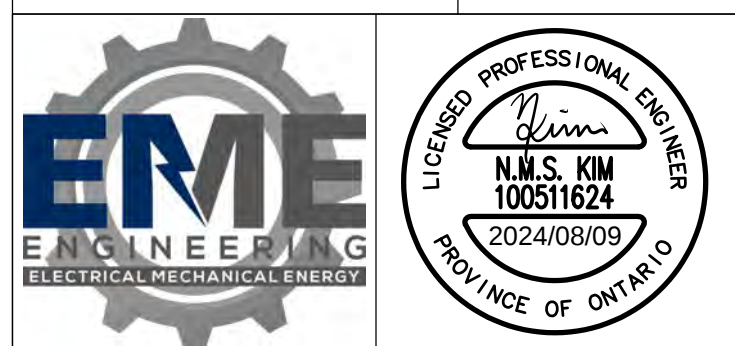
MARK VOID ALL PRINTS DATED
PREVIOUS TO FINAL DATE ABOVE

REVISIONS

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PROJECT:

1017 & 1029 BREBEUF ROAD
1017 & 1019 BREBEUF ROAD
MIDLAND, ON
L4R 4K4

DRAWING TITLE:

SITE DETAILS

DRAWN BY: JK	CHECKED BY: CL	SCALE: NTS
DATE: JUL/2024	PROJECT NUMBER: 24-6476	DRAWING NUMBER: E-301

Appendix B

Stormwater Servicing Information & Modeling

- OTTHYMO Model Input Parameters
- Overland Flow Conveyance Capacity
- OTTHYMO Model Schematics
 - o Pre-Dev-PF
 - o Post-Dev-PF
- OTTHYMO Detailed Outputs
 - o Pre-Dev-PF – 25mm 4hr CHI WQE
 - o Pre-Dev-PF – 100yr24hrSCS
 - o Pre-Dev-PF – Timmins
 - o Post-Dev-PF – 25mm 4hr CHI WQE
 - o Post-Dev-PF – 100yr24HrSCS
 - o Post-Dev-PF – Timmins
- OTTHYMO Node Detail Outputs
 - o Pre-Dev-PF NasHyd 101 Summary
 - o Post-Dev-PF AddHyd 1 Summary
 - o Post-Dev-PF AddHyd 2 Summary
 - o Post-Dev-PF NasHyd 202 Summary
- Digital Modeling Files

Pre-Development Catchment Area

Weighted Curve Number Calculator

Input:

Catchment ID	101		
Hydrologic Soil Group	A & AB		
Soil Texture	Tioga Loamy Sand (Tis) & Vasey Sandy Loam (VasI)	Weighted Curve Number	Weighted Runoff 'C'
Wetland(ha)/CN	0.00	N/A	N/A
Woods(ha)/CN	7.23	33.2	0.08
Pasture/Lawn Area(ha)/CN	2.30	44.1	0.10
Cultivated(ha)/CN	0.00	N/A	N/A
Gravel (ha)/CN	0.13	77.7	0.40
Impervious Area(ha)/CN	0.15	98.0	0.95

Calculated:

Area	9.81
Average CN	37
Average Pervious CN	36
Average Runoff 'C'	0.10

Initial Abstraction Calculator

Input:

Wetland	16	mm
Woods	10	mm
Pasture/Lawns	5	mm
Cultivated	7	mm
Impervious Areas	2	mm

Calculated:

Total Average IA	8.64	mm
Average Pervious IA	8.74	mm

*Curve Numbers, Runoff Coefficients and Initial Abstraction numbers were determined based on the MTO Drainage Management Manual Dated 1997. Weighted Curve Numbers and Weighted Rational Coefficients are determined from the weighted average of the area and Curve Number or Rational Coefficient in a given soil type, i.e. Type A, B, C or D.

Time of Concentration Calculator

Input:

Catchment Max El.	237.00	m
Catchment Min. El.	220.00	m
Catchment Flow Length	668	m

Calculated:

Catchment Ave. Slope	2.5	%
Imperviousness	1%	
Directly Connected Imperviousness	0%	

Calculated:

RATIONAL COEFFICIENT

5YR Rational 'C'	0.10
------------------	------

Calculated:

MTO DRAINAGE MANUAL

25YR Rational 'C'	0.11
50YR Rational 'C'	0.12
100YR Rational 'C'	0.13

Calculated:

AIRPORT METHOD (Runoff Coef <0.4)

Time of Concentration	61.78	min
Time of Concentration	1.03	hr
Time to Peak	0.69	hr

$$T_c = 3.26 * (1.1 - C) * L^{0.5} * S^{-0.33}$$

Calculated:

BRANSBY-WILLIAMS METHOD (Runoff Coef >=0.4)

Time of Concentration	25.14	min
Time of Concentration	0.42	hr
Time to Peak	0.28	hr

$$T_c = 0.057 * L * S^{-0.2} * A^{-0.1}$$

Use:

Time of Concentration	1.03	hr
Time to Peak	0.69	hr

Pre-Development Catchment Area

Pre-Development Catchment 101

	Areas	CN	CN*A	Rational "C"	C*A
Wetlands "A"	0	50	0	0.05	0
Woods "A"	32971	25	824275	0.08	2637.68
Pasture/Lawn "A"	12337	39	481143	0.10	1233.7
Cultivated "A"	0	51	0	0.22	0
Gravel "A"	885	76	67260	0.40	354
Impervious "A" (Connected)	427	98	41846	0.95	405.65
Impervious "A" (Dis-Connected)	157	98	15386	0.95	149.15
Total Area "A"	46777				
Weighted coefficients "A"		30.56866		0.102191	
Wetlands "AB"	0	50	0	0.05	0
Woods "AB"	39365	40	1574600	0.08	3149.2
Pasture/Lawn "AB"	10633	50	531650	0.10	1063.3
Cultivated "AB"	0	59	0	0.22	0
Gravel "AB"	451	81	36531	0.40	180.4
Impervious "AB" (Connected)	663	98	64974	0.95	629.85
Impervious "AB" (Dis-Connected)	210	98	20580	0.95	199.5
Total Area "AB"	51322				
Weighted coefficients "AB"		43.41871		0.101755	
Wetlands "B"	0	50	0	0.05	0
Woods "B"	0	55	0	0.25	0
Pasture/Lawn "B"	0	61	0	0.28	0
Cultivated "B"	0	67	0	0.35	0
Gravel "B"	0	85	0	0.50	0
Impervious "B" (Connected)	0	98	0	0.95	0
Impervious "B" (Dis-Connected)	0	98	0	0.95	0
Total Area "B"	0				
Weighted coefficients "B"			0		0
Wetlands "C"	0	50	0	0.05	0
Woods "C"	0	70	0	0.35	0
Pasture/Lawn "C"	0	74	0	0.40	0
Cultivated "C"	0	76	0	0.55	0
Gravel "C"	0	89	0	0.60	0
Impervious "C" (Connected)	0	98	0	0.95	0
Impervious "C" (Dis-Connected)	0	98	0	0.95	0
Total Area "C"	0				
Weighted coefficients "C"			0		0
Totals:	98099	Weighted CN	37.29136	Weighted "C"	0.101963
Mannings Gravel =	0.40				
Mannings Woods =	0.40		Average Pervious Mannings=		0.35
Mannings Lawn =	0.19				

Post-Development Catchment Area

Weighted Curve Number Calculator

Input:

Catchment ID	201		
Hydrologic Soil Group	AB		
Soil Texture	Vasey Sandy Loam (Vasl)	Weighted Curve Number	Weighted Runoff 'C'
Wetland(ha)/CN	0.00	N/A	N/A
Woods(ha)/CN	1.84	40.0	0.08
Pasture/Lawn Area(ha)/CN	0.77	50.0	0.10
Cultivated(ha)/CN	0.00	N/A	N/A
Gravel (ha)/CN	0.00	N/A	N/A
Impervious Area(ha)/CN	0.00	N/A	N/A

Calculated:

Area	2.61
Average CN	43
Average Pervious CN	43
Average Runoff 'C'	0.09

Initial Abstraction Calculator

Input:

Wetland	16	mm
Woods	10	mm
Pasture/Lawns	5	mm
Cultivated	7	mm
Impervious Areas	2	mm

Calculated:

Total Average IA	8.52	mm
Average Pervious IA	8.52	mm

*Curve Numbers, Runoff Coefficients and Initial Abstraction numbers were determined based on the MTO Drainage Management Manual Dated 1997. Weighted Curve Numbers and Weighted Rational Coefficients are determined from the weighted average of the area and Curve Number or Rational Coefficient in a given soil type, i.e. Type A, B, C or D.

Time of Concentration Calculator

Input:

Catchment Max El.	236.00	m
Catchment Min. El.	226.79	m
Catchment Flow Length	296.92	m

Calculated:

Catchment Ave. Slope	3.1	%
Imperviousness	0%	
Directly Connected Imperviousness	0%	

Calculated:

RATIONAL COEFFICIENT

5YR Rational 'C'	0.09
------------------	------

Calculated:

MTO DRAINAGE MANUAL

25YR Rational 'C'	0.09
50YR Rational 'C'	0.10
100YR Rational 'C'	0.11

Calculated:

AIRPORT METHOD (Runoff Coef <0.4)

Time of Concentration	39.21	min
Time of Concentration	0.65	hr
Time to Peak	0.44	hr

$$T_c = 3.26 * (1.1 - C) * L^{0.5} * S^{-0.33}$$

Calculated:

BRANSBY-WILLIAMS METHOD (Runoff Coef >=0.4)

Time of Concentration	12.26	min
Time of Concentration	0.20	hr
Time to Peak	0.14	hr

$$T_c = 0.057 * L * S^{-0.2} * A^{-0.1}$$

Use:

Time of Concentration	0.65	hr
Time to Peak	0.44	hr

Post-Development Catchment Area

Post-Development Catchment 201

	Areas	CN	CN*A	Rational "C"	C*A
Wetlands "A"	0	50	0	0.05	0
Woods "A"	0	25	0	0.08	0
Pasture/Lawn "A"	0	39	0	0.10	0
Cultivated "A"	0	51	0	0.22	0
Gravel "A"	0	76	0	0.40	0
Impervious "A" (Connected)	0	98	0	0.95	0
Impervious "A" (Dis-Connected)	0	98	0	0.95	0
Total Area "A"	0				
Weighted coefficients "A"			0		0
Wetlands "AB"	0	50	0	0.05	0
Woods "AB"	18417	40	736680	0.08	1473.36
Pasture/Lawn "AB"	7707	50	385350	0.10	770.7
Cultivated "AB"	0	59	0	0.22	0
Gravel "AB"	0	81	0	0.40	0
Impervious "AB" (Connected)	0	98	0	0.95	0
Impervious "AB" (Dis-Connected)	0	98	0	0.95	0
Total Area "AB"	26124				
Weighted coefficients "AB"			42.95016		0.0859
Wetlands "B"	0	50	0	0.05	0
Woods "B"	0	55	0	0.25	0
Pasture/Lawn "B"	0	61	0	0.28	0
Cultivated "B"	0	67	0	0.35	0
Gravel "B"	0	85	0	0.50	0
Impervious "B" (Connected)	0	98	0	0.95	0
Impervious "B" (Dis-Connected)	0	98	0	0.95	0
Total Area "B"	0				
Weighted coefficients "B"			0		0
Wetlands "C"	0	50	0	0.05	0
Woods "C"	0	70	0	0.35	0
Pasture/Lawn "C"	0	74	0	0.40	0
Cultivated "C"	0	76	0	0.55	0
Gravel "C"	0	89	0	0.60	0
Impervious "C" (Connected)	0	98	0	0.95	0
Impervious "C" (Dis-Connected)	0	98	0	0.95	0
Total Area "C"	0				
Weighted coefficients "C"			0		0
Totals:	26124	Weighted CN	42.95016	Weighted "C"	0.0859
Mannings Gravel =	0.40				
Mannings Woods =	0.40		Average Pervious Mannings=		0.34
Mannings Lawn =	0.19				

Post-Development Catchment Area

Weighted Curve Number Calculator

Input:

Catchment ID	202		
Hydrologic Soil Group	A & AB		
Soil Texture	Tioga Loamy Sand (Tis) & Vasey Sandy Loam (VasI)	Weighted Curve Number	Weighted Runoff 'C'
Wetland(ha)/CN	0.00	N/A	N/A
Woods(ha)/CN	0.00	N/A	N/A
Pasture/Lawn Area(ha)/CN	2.89	43.5	0.10
Cultivated(ha)/CN	0.00	N/A	N/A
Gravel (ha)/CN	2.27	76.6	0.40
Impervious Area(ha)/CN	0.06	98.0	0.95

Calculated:

Area	5.22
Average CN	59
Average Pervious CN	58
Average Runoff 'C'	0.24

Initial Abstraction Calculator

Input:

Wetland	16	mm
Woods	10	mm
Pasture/Lawns	5	mm
Cultivated	7	mm
Impervious Areas	2	mm

Calculated:

Total Average IA	4.96	mm
Average Pervious IA	5.00	mm

*Curve Numbers, Runoff Coefficients and Initial Abstraction numbers were determined based on the MTO Drainage Management Manual Dated 1997. Weighted Curve Numbers and Weighted Rational Coefficients are determined from the weighted average of the area and Curve Number or Rational Coefficient in a given soil type, i.e. Type A, B, C or D.

Time of Concentration Calculator

Input:

Catchment Max El.	210.20	m
Catchment Min. El.	209.00	m
Catchment Flow Length	220	m

Calculated:

Catchment Ave. Slope	0.5	%
Imperviousness	1%	
Directly Connected Imperviousness	0%	

Calculated:

RATIONAL COEFFICIENT

5YR Rational 'C'	0.24
------------------	------

Calculated:

MTO DRAINAGE MANUAL

25YR Rational 'C'	0.26
50YR Rational 'C'	0.29
100YR Rational 'C'	0.30

Calculated:

AIRPORT METHOD (Runoff Coef <0.4)

Time of Concentration	50.75	min
Time of Concentration	0.85	hr
Time to Peak	0.56	hr

$$T_c = 3.26 * (1.1 - C) * L^{0.5} * S^{-0.33}$$

Calculated:

BRANSBY-WILLIAMS METHOD (Runoff Coef >=0.4)

Time of Concentration	12.00	min
Time of Concentration	0.20	hr
Time to Peak	0.13	hr

$$T_c = 0.057 * L * S^{-0.2} * A^{-0.1}$$

Use:

Time of Concentration	0.85	hr
Time to Peak	0.56	hr

Post-Development Catchment Area

Post-Development Catchment 202

	Areas	CN	CN*A	Rational "C"	C*A
Wetlands "A"	0	50	0	0.05	0
Woods "A"	0	25	0	0.08	0
Pasture/Lawn "A"	17106	39	667134	0.10	1710.6
Cultivated "A"	0	51	0	0.22	0
Gravel "A"	19925	76	1514300	0.40	7970
Impervious "A" (Connected)	0	98	0	0.95	0
Impervious "A" (Dis-Connected)	619	98	60662	0.95	588.05
Total Area "A"	37650				
Weighted coefficients "A"		59.55102			0.27274
Wetlands "AB"	0	50	0	0.05	0
Woods "AB"	0	40	0	0.08	0
Pasture/Lawn "AB"	11804	50	590200	0.10	1180.4
Cultivated "AB"	0	59	0	0.22	0
Gravel "AB"	2759	81	223479	0.40	1103.6
Impervious "AB" (Connected)	0	98	0	0.95	0
Impervious "AB" (Dis-Connected)	18	98	1764	0.95	17.1
Total Area "AB"	14581				
Weighted coefficients "AB"		55.92504			0.157815
Wetlands "B"	0	50	0	0.05	0
Woods "B"	0	55	0	0.25	0
Pasture/Lawn "B"	0	61	0	0.28	0
Cultivated "B"	0	67	0	0.35	0
Gravel "B"	0	85	0	0.50	0
Impervious "B" (Connected)	0	98	0	0.95	0
Impervious "B" (Dis-Connected)	0	98	0	0.95	0
Total Area "B"	0				
Weighted coefficients "B"			0		0
Wetlands "C"	0	50	0	0.05	0
Woods "C"	0	70	0	0.35	0
Pasture/Lawn "C"	0	74	0	0.40	0
Cultivated "C"	0	76	0	0.55	0
Gravel "C"	0	89	0	0.60	0
Impervious "C" (Connected)	0	98	0	0.95	0
Impervious "C" (Dis-Connected)	0	98	0	0.95	0
Total Area "C"	0				
Weighted coefficients "C"			0		0
Totals:	52231	Weighted CN	58.53878	Weighted "C"	0.240657
Mannings Gravel =	0.40				
Mannings Woods =	0.40		Average Pervious Mannings=		0.28
Mannings Lawn =	0.19				

Post-Development Catchment Area

Weighted Curve Number Calculator

Input:

Catchment ID	203		
Hydrologic Soil Group	A & AB		
Soil Texture	Tioga Loamy Sand (Tis) & Vasey Sandy Loam (VasI)	Weighted Curve Number	Weighted Runoff 'C'
Wetland(ha)/CN	0.00	N/A	N/A
Woods(ha)/CN	0.00	N/A	N/A
Pasture/Lawn Area(ha)/CN	0.51	48.5	0.10
Cultivated(ha)/CN	0.00	N/A	N/A
Gravel (ha)/CN	0.52	78.9	0.40
Impervious Area(ha)/CN	0.00	N/A	N/A

Calculated:

Area	1.03
Average CN	64
Average Pervious CN	64
Average Runoff 'C'	0.25

Initial Abstraction Calculator

Input:

Wetland	16	mm
Woods	10	mm
Pasture/Lawns	5	mm
Cultivated	7	mm
Impervious Areas	2	mm

Calculated:

Total Average IA	5.00	mm
Average Pervious IA	5.00	mm

*Curve Numbers, Runoff Coefficients and Initial Abstraction numbers were determined based on the MTO Drainage Management Manual Dated 1997. Weighted Curve Numbers and Weighted Rational Coefficients are determined from the weighted average of the area and Curve Number or Rational Coefficient in a given soil type, i.e. Type A, B, C or D.

Time of Concentration Calculator

Input:

Catchment Max El.	Varies	m
Catchment Min. El.	Varies	m
Catchment Flow Length	28	m

Calculated:

Catchment Ave. Slope	2.0	%
Imperviousness	0%	
Directly Connected Imperviousness	0%	

Calculated:

RATIONAL COEFFICIENT

5YR Rational 'C'	0.25
------------------	------

Calculated:

MTO DRAINAGE MANUAL

25YR Rational 'C'	0.28
50YR Rational 'C'	0.30
100YR Rational 'C'	0.31

Calculated:

AIRPORT METHOD (Runoff Coef <0.4)

Time of Concentration	11.66	min
Time of Concentration	0.19	hr
Time to Peak	0.13	hr

$$T_c = 3.26 * (1.1 - C) * L^{0.5} * S^{-0.33}$$

Calculated:

BRANSBY-WILLIAMS METHOD (Runoff Coef >=0.4)

Time of Concentration	1.39	min
Time of Concentration	0.02	hr
Time to Peak	0.02	hr

$$T_c = 0.057 * L * S^{-0.2} * A^{-0.1}$$

Use:

Time of Concentration	0.19	hr
Time to Peak	0.13	hr

Post-Development Catchment Area

Post-Development Catchment 203

	Areas	CN	CN*A	Rational "C"	C*A
Wetlands "A"	0	50	0	0.05	0
Woods "A"	0	25	0	0.08	0
Pasture/Lawn "A"	690	39	26910	0.10	69
Cultivated "A"	0	51	0	0.22	0
Gravel "A"	2139	76	162564	0.40	855.6
Impervious "A" (Connected)	0	98	0	0.95	0
Impervious "A" (Dis-Connected)	0	98	0	0.95	0
Total Area "A"	2829				
Weighted coefficients "A"		66.97561		0.326829	
Wetlands "AB"	0	50	0	0.05	0
Woods "AB"	0	40	0	0.08	0
Pasture/Lawn "AB"	4421	50	221050	0.10	442.1
Cultivated "AB"	0	59	0	0.22	0
Gravel "AB"	3016	81	244296	0.40	1206.4
Impervious "AB" (Connected)	0	98	0	0.95	0
Impervious "AB" (Dis-Connected)	0	98	0	0.95	0
Total Area "AB"	7437				
Weighted coefficients "AB"		62.57174		0.221662	
Wetlands "B"	0	50	0	0.05	0
Woods "B"	0	55	0	0.25	0
Pasture/Lawn "B"	0	61	0	0.28	0
Cultivated "B"	0	67	0	0.35	0
Gravel "B"	0	85	0	0.50	0
Impervious "B" (Connected)	0	98	0	0.95	0
Impervious "B" (Dis-Connected)	0	98	0	0.95	0
Total Area "B"	0				
Weighted coefficients "B"			0		0
Wetlands "C"	0	50	0	0.05	0
Woods "C"	0	70	0	0.35	0
Pasture/Lawn "C"	0	74	0	0.40	0
Cultivated "C"	0	76	0	0.55	0
Gravel "C"	0	89	0	0.60	0
Impervious "C" (Connected)	0	98	0	0.95	0
Impervious "C" (Dis-Connected)	0	98	0	0.95	0
Total Area "C"	0				
Weighted coefficients "C"			0		0
Totals:	10266	Weighted CN	63.78531	Weighted "C"	0.250643
Mannings Gravel =	0.40				
Mannings Woods =	0.40		Average Pervious Mannings=		0.30
Mannings Lawn =	0.19				

Post-Development Catchment Area

Weighted Curve Number Calculator

Input:

Catchment ID	204		
Hydrologic Soil Group	A & AB		
Soil Texture	Tioga Loamy Sand (Tis) & Vasey Sandy Loam (Vasl)	Weighted Curve Number	Weighted Runoff 'C'
Wetland(ha)/CN	0.00	N/A	N/A
Woods(ha)/CN	0.09	40.0	0.08
Pasture/Lawn Area(ha)/CN	0.74	41.3	0.10
Cultivated(ha)/CN	0.00	N/A	N/A
Gravel (ha)/CN	0.00	N/A	N/A
Impervious Area(ha)/CN	0.11	98.0	0.95

Calculated:

Area	0.94
Average CN	48
Average Pervious CN	41
Average Runoff 'C'	0.20

Initial Abstraction Calculator

Input:

Wetland	16	mm
Woods	10	mm
Pasture/Lawns	5	mm
Cultivated	7	mm
Impervious Areas	2	mm

Calculated:

Total Average IA	5.13	mm
Average Pervious IA	5.54	mm

*Curve Numbers, Runoff Coefficients and Initial Abstraction numbers were determined based on the MTO Drainage Management Manual Dated 1997. Weighted Curve Numbers and Weighted Rational Coefficients are determined from the weighted average of the area and Curve Number or Rational Coefficient in a given soil type, i.e. Type A, B, C or D.

Time of Concentration Calculator

Input:

Catchment Max El.	236.00	m
Catchment Min. El.	220.10	m
Catchment Flow Length	280	m

Calculated:

Catchment Ave. Slope	5.7	%
Imperviousness	12%	
Directly Connected Imperviousness	0%	

Calculated:

RATIONAL COEFFICIENT

5YR Rational 'C'	0.20
------------------	------

Calculated:

MTO DRAINAGE MANUAL

25YR Rational 'C'	0.22
50YR Rational 'C'	0.24
100YR Rational 'C'	0.25

Calculated:

AIRPORT METHOD (Runoff Coef <0.4)

Time of Concentration	27.77	min
Time of Concentration	0.46	hr
Time to Peak	0.31	hr

$$T_c = 3.26 * (1.1 - C) * L^{0.5} * S^{-0.33}$$

Calculated:

BRANSBY-WILLIAMS METHOD (Runoff Coef >=0.4)

Time of Concentration	11.35	min
Time of Concentration	0.19	hr
Time to Peak	0.13	hr

$$T_c = 0.057 * L * S^{-0.2} * A^{-0.1}$$

Use:

Time of Concentration	0.46	hr
Time to Peak	0.31	hr

Post-Development Catchment Area

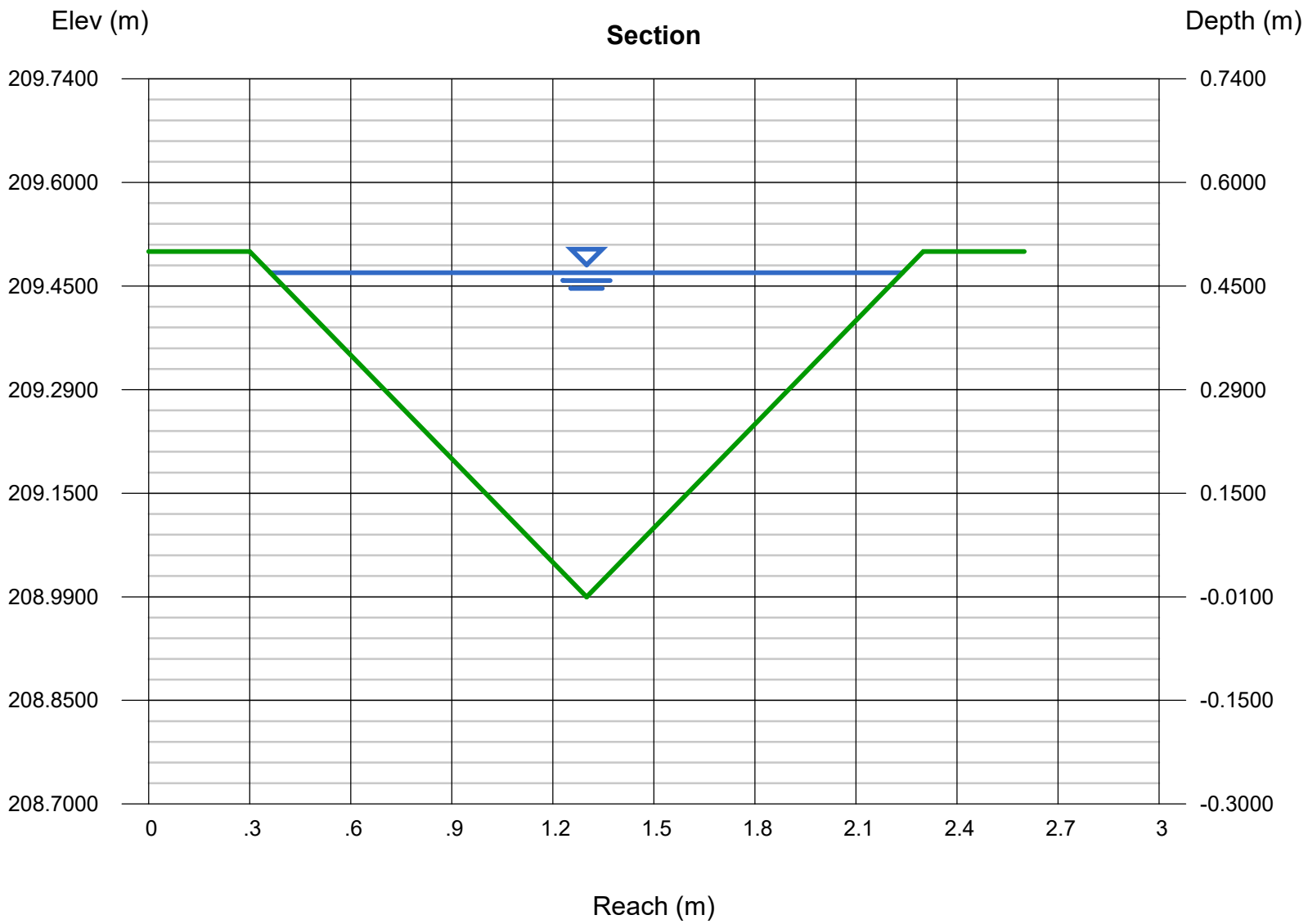
Post-Development Catchment 204

	Areas	CN	CN*A	Rational "C"	C*A
Wetlands "A"	0	50	0	0.05	0
Woods "A"	0	25	0	0.08	0
Pasture/Lawn "A"	5871	39	228969	0.10	587.1
Cultivated "A"	0	51	0	0.22	0
Gravel "A"	0	76	0	0.40	0
Impervious "A" (Connected)	427	98	41846	0.95	405.65
Impervious "A" (Dis-Connected)	0	98	0	0.95	0
Total Area "A"	6298				
Weighted coefficients "A"		43.00016			0.157629
Wetlands "AB"	0	50	0	0.05	0
Woods "AB"	892	40	35680	0.08	71.36
Pasture/Lawn "AB"	1525	50	76250	0.10	152.5
Cultivated "AB"	0	59	0	0.22	0
Gravel "AB"	0	81	0	0.40	0
Impervious "AB" (Connected)	664	98	65072	0.95	630.8
Impervious "AB" (Dis-Connected)	0	98	0	0.95	0
Total Area "AB"	3081				
Weighted coefficients "AB"		57.44953			0.277397
Wetlands "B"	0	50	0	0.05	0
Woods "B"	0	55	0	0.25	0
Pasture/Lawn "B"	0	61	0	0.28	0
Cultivated "B"	0	67	0	0.35	0
Gravel "B"	0	85	0	0.50	0
Impervious "B" (Connected)	0	98	0	0.95	0
Impervious "B" (Dis-Connected)	0	98	0	0.95	0
Total Area "B"	0				
Weighted coefficients "B"			0		0
Wetlands "C"	0	50	0	0.05	0
Woods "C"	0	70	0	0.35	0
Pasture/Lawn "C"	0	74	0	0.40	0
Cultivated "C"	0	76	0	0.55	0
Gravel "C"	0	89	0	0.60	0
Impervious "C" (Connected)	0	98	0	0.95	0
Impervious "C" (Dis-Connected)	0	98	0	0.95	0
Total Area "C"	0				
Weighted coefficients "C"			0		0
Totals:	9379	Weighted CN	47.74677	Weighted "C"	0.196973
Mannings Gravel =	0.40				
Mannings Woods =	0.40		Average Pervious Mannings=		0.21
Mannings Lawn =	0.19				

Channel Report

SAR-23058 North and South Boundary Ditch Flow Capacity

Triangular		Highlighted	
Side Slopes (z:1)	= 2.0000, 2.0000	Depth (m)	= 0.4694
Total Depth (m)	= 0.5000	Q (cms)	= 0.3100
		Area (sqm)	= 0.4407
Invert Elev (m)	= 209.0000	Velocity (m/s)	= 0.7035
Slope (%)	= 0.5000	Wetted Perim (m)	= 2.0992
N-Value	= 0.035	Crit Depth, Yc (m)	= 0.3475
		Top Width (m)	= 1.8776
		EGL (m)	= 0.4946
Calculations			
Compute by:	Known Q		
Known Q (cms)	= 0.3100		



Pre-Dev-PF OTTHYMO Schematic



SAR-23058 - Pre-Development OTTHYMO Detail Outputs

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V V I SSSSS U U A L (v 6.2.2015)

V V I SS U U A A L

V V I SS U U AAAAA L

V V I SS U U A A L

VV I SSSSS UUUUU A A LLLLL

OOO TTTT TTTT H H Y Y M M OOO TM

O O T T H H Y Y MM MM O O

O O T T H H Y Y M M O O

OOO T T H H Y M M OOO

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat

Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5

\3125fb1d-679a-4570-ba71-719dfceb268e\526b5cb2-5ae8-4e6f-8f77-a46121d805de\sce

Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5

\3125fb1d-679a-4570-ba71-719dfceb268e\526b5cb2-5ae8-4e6f-8f77-a46121d805de\sce

DATE: 07-28-2024 TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 100Yr 24Hr SCS **

READ STORM	Filename: C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\432e1e82
Ptotal=122.40 mm	Comments: 100Yr 24Hr SCS

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	6.08	2.20	12.17	17.63	18.25	2.20
0.08	1.35	6.17	2.20	12.25	17.63	18.33	2.20
0.17	1.35	6.25	2.20	12.33	17.63	18.42	2.20
0.25	1.35	6.33	2.20	12.42	17.63	18.50	2.20
0.33	1.35	6.42	2.20	12.50	17.63	18.58	2.20
0.42	1.35	6.50	2.20	12.58	9.06	18.67	2.20
0.50	1.35	6.58	2.20	12.67	9.06	18.75	2.20
0.58	1.35	6.67	2.20	12.75	9.06	18.83	2.20
0.67	1.35	6.75	2.20	12.83	9.06	18.92	2.20
0.75	1.35	6.83	2.20	12.92	9.06	19.00	2.20
0.83	1.35	6.92	2.20	13.00	9.06	19.08	2.20
0.92	1.35	7.00	2.20	13.08	6.61	19.17	2.20

1.00	1.35	7.08	2.69	13.17	6.61	19.25	2.20
1.08	1.35	7.17	2.69	13.25	6.61	19.33	2.20
1.17	1.35	7.25	2.69	13.33	6.61	19.42	2.20
1.25	1.35	7.33	2.69	13.42	6.61	19.50	2.20
1.33	1.35	7.42	2.69	13.50	6.61	19.58	2.20
1.42	1.35	7.50	2.69	13.58	5.14	19.67	2.20
1.50	1.35	7.58	2.69	13.67	5.14	19.75	2.20
1.58	1.35	7.67	2.69	13.75	5.14	19.83	2.20
1.67	1.35	7.75	2.69	13.83	5.14	19.92	2.20
1.75	1.35	7.83	2.69	13.92	5.14	20.00	2.20
1.83	1.35	7.92	2.69	14.00	5.14	20.08	1.47
1.92	1.35	8.00	2.69	14.08	3.67	20.17	1.47
2.00	1.35	8.08	3.18	14.17	3.67	20.25	1.47
2.08	1.59	8.17	3.18	14.25	3.67	20.33	1.47
2.17	1.59	8.25	3.18	14.33	3.67	20.42	1.47
2.25	1.59	8.33	3.18	14.42	3.67	20.50	1.47
2.33	1.59	8.42	3.18	14.50	3.67	20.58	1.47
2.42	1.59	8.50	3.18	14.58	3.67	20.67	1.47
2.50	1.59	8.58	3.43	14.67	3.67	20.75	1.47
2.58	1.59	8.67	3.43	14.75	3.67	20.83	1.47
2.67	1.59	8.75	3.43	14.83	3.67	20.92	1.47
2.75	1.59	8.83	3.43	14.92	3.67	21.00	1.47
2.83	1.59	8.92	3.43	15.00	3.67	21.08	1.47
2.92	1.59	9.00	3.43	15.08	3.67	21.17	1.47
3.00	1.59	9.08	3.92	15.17	3.67	21.25	1.47
3.08	1.59	9.17	3.92	15.25	3.67	21.33	1.47
3.17	1.59	9.25	3.92	15.33	3.67	21.42	1.47
3.25	1.59	9.33	3.92	15.42	3.67	21.50	1.47
3.33	1.59	9.42	3.92	15.50	3.67	21.58	1.47
3.42	1.59	9.50	3.92	15.58	3.67	21.67	1.47
3.50	1.59	9.58	4.41	15.67	3.67	21.75	1.47
3.58	1.59	9.67	4.41	15.75	3.67	21.83	1.47
3.67	1.59	9.75	4.41	15.83	3.67	21.92	1.47
3.75	1.59	9.83	4.41	15.92	3.67	22.00	1.47
3.83	1.59	9.92	4.41	16.00	3.67	22.08	1.47
3.92	1.59	10.00	4.41	16.08	2.20	22.17	1.47
4.00	1.59	10.08	5.63	16.17	2.20	22.25	1.47
4.08	1.96	10.17	5.63	16.25	2.20	22.33	1.47
4.17	1.96	10.25	5.63	16.33	2.20	22.42	1.47
4.25	1.96	10.33	5.63	16.42	2.20	22.50	1.47
4.33	1.96	10.42	5.63	16.50	2.20	22.58	1.47
4.42	1.96	10.50	5.63	16.58	2.20	22.67	1.47
4.50	1.96	10.58	7.59	16.67	2.20	22.75	1.47
4.58	1.96	10.67	7.59	16.75	2.20	22.83	1.47
4.67	1.96	10.75	7.59	16.83	2.20	22.92	1.47
4.75	1.96	10.83	7.59	16.92	2.20	23.00	1.47
4.83	1.96	10.92	7.59	17.00	2.20	23.08	1.47
4.92	1.96	11.00	7.59	17.08	2.20	23.17	1.47
5.00	1.96	11.08	11.75	17.17	2.20	23.25	1.47
5.08	1.96	11.17	11.75	17.25	2.20	23.33	1.47
5.17	1.96	11.25	11.75	17.33	2.20	23.42	1.47
5.25	1.96	11.33	11.75	17.42	2.20	23.50	1.47
5.33	1.96	11.42	11.75	17.50	2.20	23.58	1.47
5.42	1.96	11.50	11.75	17.58	2.20	23.67	1.47
5.50	1.96	11.58	36.23	17.67	2.20	23.75	1.47
5.58	1.96	11.67	36.23	17.75	2.20	23.83	1.47
5.67	1.96	11.75	36.23	17.83	2.20	23.92	1.47
5.75	1.96	11.83	149.82	17.92	2.20	24.00	1.47
5.83	1.96	11.92	149.82	18.00	2.20		
5.92	1.96	12.00	149.82	18.08	2.20		
6.00	1.96	12.08	17.63	18.17	2.20		

SAR-23058 - Pre-Development OTTHYMO Detail Outputs

CALIB	Area (ha)=	9.80	Curve Number (CN)=	37.0
NASHYD (0101)	Ia (mm)=	8.64	# of Linear Res.(N)=	3.00
ID= 1 DT= 1.0 min	U.H. Tp(hrs)=	0.69		

NOTE: RAINFALL WAS TRANSFORMED TO 1.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.017	0.00	6.050	1.96	12.083	149.82	18.12	2.20
0.033	0.00	6.067	1.96	12.100	17.73	18.13	2.20
0.050	0.00	6.083	1.96	12.117	17.63	18.15	2.20
0.067	0.00	6.100	2.20	12.133	17.63	18.17	2.20
0.083	0.00	6.117	2.20	12.150	17.63	18.18	2.20
0.100	1.35	6.133	2.20	12.167	17.63	18.20	2.20
0.117	1.35	6.150	2.20	12.183	17.63	18.22	2.20
0.133	1.35	6.167	2.20	12.200	17.63	18.23	2.20
0.150	1.35	6.183	2.20	12.217	17.63	18.25	2.20
0.167	1.35	6.200	2.20	12.233	17.63	18.27	2.20
0.183	1.35	6.217	2.20	12.250	17.63	18.28	2.20
0.200	1.35	6.233	2.20	12.267	17.63	18.30	2.20
0.217	1.35	6.250	2.20	12.283	17.63	18.32	2.20
0.233	1.35	6.267	2.20	12.300	17.63	18.33	2.20
0.250	1.35	6.283	2.20	12.317	17.63	18.35	2.20
0.267	1.35	6.300	2.20	12.333	17.63	18.37	2.20
0.283	1.35	6.317	2.20	12.350	17.63	18.38	2.20
0.300	1.35	6.333	2.20	12.367	17.63	18.40	2.20
0.317	1.35	6.350	2.20	12.383	17.63	18.42	2.20
0.333	1.35	6.367	2.20	12.400	17.63	18.43	2.20
0.350	1.35	6.383	2.20	12.417	17.63	18.45	2.20
0.367	1.35	6.400	2.20	12.433	17.63	18.47	2.20
0.383	1.35	6.417	2.20	12.450	17.63	18.48	2.20
0.400	1.35	6.433	2.20	12.467	17.63	18.50	2.20
0.417	1.35	6.450	2.20	12.483	17.63	18.52	2.20
0.433	1.35	6.467	2.20	12.500	17.63	18.53	2.20
0.450	1.35	6.483	2.20	12.517	17.63	18.55	2.20
0.467	1.35	6.500	2.20	12.533	17.63	18.57	2.20
0.483	1.35	6.517	2.20	12.550	17.63	18.58	2.20
0.500	1.35	6.533	2.20	12.567	17.63	18.60	2.20
0.517	1.35	6.550	2.20	12.583	17.63	18.62	2.20
0.533	1.35	6.567	2.20	12.600	9.06	18.63	2.20
0.550	1.35	6.583	2.20	12.617	9.06	18.65	2.20
0.567	1.35	6.600	2.20	12.633	9.06	18.67	2.20
0.583	1.35	6.617	2.20	12.650	9.06	18.68	2.20
0.600	1.35	6.633	2.20	12.667	9.06	18.70	2.20
0.617	1.35	6.650	2.20	12.683	9.06	18.72	2.20
0.633	1.35	6.667	2.20	12.700	9.06	18.73	2.20
0.650	1.35	6.683	2.20	12.717	9.06	18.75	2.20
0.667	1.35	6.700	2.20	12.733	9.06	18.77	2.20
0.683	1.35	6.717	2.20	12.750	9.06	18.78	2.20
0.700	1.35	6.733	2.20	12.767	9.06	18.80	2.20
0.717	1.35	6.750	2.20	12.783	9.06	18.82	2.20
0.733	1.35	6.767	2.20	12.800	9.06	18.83	2.20
0.750	1.35	6.783	2.20	12.817	9.06	18.85	2.20
0.767	1.35	6.800	2.20	12.833	9.06	18.87	2.20
0.783	1.35	6.817	2.20	12.850	9.06	18.88	2.20
0.800	1.35	6.833	2.20	12.867	9.06	18.90	2.20
0.817	1.35	6.850	2.20	12.883	9.06	18.92	2.20
0.833	1.35	6.867	2.20	12.900	9.06	18.93	2.20
0.850	1.35	6.883	2.20	12.917	9.06	18.95	2.20
0.867	1.35	6.900	2.20	12.933	9.06	18.97	2.20

0.883	1.35	6.917	2.20	12.950	9.06	18.98	2.20
0.900	1.35	6.933	2.20	12.967	9.06	19.00	2.20
0.917	1.35	6.950	2.20	12.983	9.06	19.02	2.20
0.933	1.35	6.967	2.20	13.000	9.06	19.03	2.20
0.950	1.35	6.983	2.20	13.017	9.06	19.05	2.20
0.967	1.35	7.000	2.20	13.033	9.06	19.07	2.20
0.983	1.35	7.017	2.20	13.050	9.06	19.08	2.20
1.000	1.35	7.033	2.20	13.067	9.06	19.10	2.20
1.017	1.35	7.050	2.20	13.083	9.06	19.12	2.20
1.033	1.35	7.067	2.20	13.100	6.61	19.13	2.20
1.050	1.35	7.083	2.20	13.117	6.61	19.15	2.20
1.067	1.35	7.100	2.69	13.133	6.61	19.17	2.20
1.083	1.35	7.117	2.69	13.150	6.61	19.18	2.20
1.100	1.35	7.133	2.69	13.167	6.61	19.20	2.20
1.117	1.35	7.150	2.69	13.183	6.61	19.22	2.20
1.133	1.35	7.167	2.69	13.200	6.61	19.23	2.20
1.150	1.35	7.183	2.69	13.217	6.61	19.25	2.20
1.167	1.35	7.200	2.69	13.233	6.61	19.27	2.20
1.183	1.35	7.217	2.69	13.250	6.61	19.28	2.20
1.200	1.35	7.233	2.69	13.267	6.61	19.30	2.20
1.217	1.35	7.250	2.69	13.283	6.61	19.32	2.20
1.233	1.35	7.267	2.69	13.300	6.61	19.33	2.20
1.250	1.35	7.283	2.69	13.317	6.61	19.35	2.20
1.267	1.35	7.300	2.69	13.333	6.61	19.37	2.20
1.283	1.35	7.317	2.69	13.350	6.61	19.38	2.20
1.300	1.35	7.333	2.69	13.367	6.61	19.40	2.20
1.317	1.35	7.350	2.69	13.383	6.61	19.42	2.20
1.333	1.35	7.367	2.69	13.400	6.61	19.43	2.20
1.350	1.35	7.383	2.69	13.417	6.61	19.45	2.20
1.367	1.35	7.400	2.69	13.433	6.61	19.47	2.20
1.383	1.35	7.417	2.69	13.450	6.61	19.48	2.20
1.400	1.35	7.433	2.69	13.467	6.61	19.50	2.20
1.417	1.35	7.450	2.69	13.483	6.61	19.52	2.20
1.433	1.35	7.467	2.69	13.500	6.61	19.53	2.20
1.450	1.35	7.483	2.69	13.517	6.61	19.55	2.20
1.467	1.35	7.500	2.69	13.533	6.61	19.57	2.20
1.483	1.35	7.517	2.69	13.550	6.61	19.58	2.20
1.500	1.35	7.533	2.69	13.567	6.61	19.60	2.20
1.517	1.35	7.550	2.69	13.583	6.61	19.62	2.20
1.533	1.35	7.567	2.69	13.600	5.14	19.63	2.20
1.550	1.35	7.583	2.69	13.617	5.14	19.65	2.20
1.567	1.35	7.600	2.69	13.633	5.14	19.67	2.20
1.583	1.35	7.617	2.69	13.650	5.14	19.68	2.20
1.600	1.35	7.633	2.69	13.667	5.14	19.70	2.20
1.617	1.35	7.650	2.69	13.683	5.14	19.72	2.20
1.633	1.35	7.667	2.69	13.700	5.14	19.73	2.20
1.650	1.35	7.683	2.69	13.717	5.14	19.75	2.20
1.667	1.35	7.700	2.69	13.733	5.14	19.77	2.20
1.683	1.35	7.717	2.69	13.750	5.14	19.78	2.20
1.700	1.35	7.733	2.69	13.767	5.14	19.80	2.20
1.717	1.35	7.750	2.69	13.783	5.14	19.82	2.20
1.733	1.35	7.767	2.69	13.800	5.14	19.83	2.20
1.750	1.35	7.783	2.69	13.817	5.14	19.85	2.20
1.767	1.35	7.800	2.69	13.833	5.14	19.87	2.20
1.783	1.35	7.817	2.69	13.850	5.14	19.88	2.20
1.800	1.35	7.833	2.69	13.867	5.14	19.90	2.20
1.817	1.35	7.850	2.69	13.883	5.14	19.92	2.20
1.833	1.35	7.867	2.69	13.900	5.14	19.93	2.20
1.850	1.35	7.883	2.69	13.917	5.14	19.95	2.20
1.867	1.35	7.900	2.69	13.933	5.14	19.97	2.20
1.883	1.35	7.917	2.69	13.950	5.14	19.98	2.20
1.900	1.35	7.933	2.69	13.967	5.14	20.00	2.20
1.917	1.35	7.950	2.69	13.983	5.14	20.02	2.20
1.933	1.35	7.967	2.69	14.000	5.14	20.03	2.20

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1.950	1.35	7.983	2.69	14.017	5.14	20.05	2.20
1.967	1.35	8.000	2.69	14.033	5.14	20.07	2.20
1.983	1.35	8.017	2.69	14.050	5.14	20.08	2.20
2.000	1.35	8.033	2.69	14.067	5.14	20.10	1.47
2.017	1.35	8.050	2.69	14.083	5.14	20.12	1.47
2.033	1.35	8.067	2.69	14.100	3.68	20.13	1.47
2.050	1.35	8.083	2.69	14.117	3.67	20.15	1.47
2.067	1.35	8.100	3.18	14.133	3.67	20.17	1.47
2.083	1.35	8.117	3.18	14.150	3.67	20.18	1.47
2.100	1.59	8.133	3.18	14.167	3.67	20.20	1.47
2.117	1.59	8.150	3.18	14.183	3.67	20.22	1.47
2.133	1.59	8.167	3.18	14.200	3.67	20.23	1.47
2.150	1.59	8.183	3.18	14.217	3.67	20.25	1.47
2.167	1.59	8.200	3.18	14.233	3.67	20.27	1.47
2.183	1.59	8.217	3.18	14.250	3.67	20.28	1.47
2.200	1.59	8.233	3.18	14.267	3.67	20.30	1.47
2.217	1.59	8.250	3.18	14.283	3.67	20.32	1.47
2.233	1.59	8.267	3.18	14.300	3.67	20.33	1.47
2.250	1.59	8.283	3.18	14.317	3.67	20.35	1.47
2.267	1.59	8.300	3.18	14.333	3.67	20.37	1.47
2.283	1.59	8.317	3.18	14.350	3.67	20.38	1.47
2.300	1.59	8.333	3.18	14.367	3.67	20.40	1.47
2.317	1.59	8.350	3.18	14.383	3.67	20.42	1.47
2.333	1.59	8.367	3.18	14.400	3.67	20.43	1.47
2.350	1.59	8.383	3.18	14.417	3.67	20.45	1.47
2.367	1.59	8.400	3.18	14.433	3.67	20.47	1.47
2.383	1.59	8.417	3.18	14.450	3.67	20.48	1.47
2.400	1.59	8.433	3.18	14.467	3.67	20.50	1.47
2.417	1.59	8.450	3.18	14.483	3.67	20.52	1.47
2.433	1.59	8.467	3.18	14.500	3.67	20.53	1.47
2.450	1.59	8.483	3.18	14.517	3.67	20.55	1.47
2.467	1.59	8.500	3.18	14.533	3.67	20.57	1.47
2.483	1.59	8.517	3.18	14.550	3.67	20.58	1.47
2.500	1.59	8.533	3.18	14.567	3.67	20.60	1.47
2.517	1.59	8.550	3.18	14.583	3.67	20.62	1.47
2.533	1.59	8.567	3.18	14.600	3.67	20.63	1.47
2.550	1.59	8.583	3.18	14.617	3.67	20.65	1.47
2.567	1.59	8.600	3.43	14.633	3.67	20.67	1.47
2.583	1.59	8.617	3.43	14.650	3.67	20.68	1.47
2.600	1.59	8.633	3.43	14.667	3.67	20.70	1.47
2.617	1.59	8.650	3.43	14.683	3.67	20.72	1.47
2.633	1.59	8.667	3.43	14.700	3.67	20.73	1.47
2.650	1.59	8.683	3.43	14.717	3.67	20.75	1.47
2.667	1.59	8.700	3.43	14.733	3.67	20.77	1.47
2.683	1.59	8.717	3.43	14.750	3.67	20.78	1.47
2.700	1.59	8.733	3.43	14.767	3.67	20.80	1.47
2.717	1.59	8.750	3.43	14.783	3.67	20.82	1.47
2.733	1.59	8.767	3.43	14.800	3.67	20.83	1.47
2.750	1.59	8.783	3.43	14.817	3.67	20.85	1.47
2.767	1.59	8.800	3.43	14.833	3.67	20.87	1.47
2.783	1.59	8.817	3.43	14.850	3.67	20.88	1.47
2.800	1.59	8.833	3.43	14.867	3.67	20.90	1.47
2.817	1.59	8.850	3.43	14.883	3.67	20.92	1.47
2.833	1.59	8.867	3.43	14.900	3.67	20.93	1.47
2.850	1.59	8.883	3.43	14.917	3.67	20.95	1.47
2.867	1.59	8.900	3.43	14.933	3.67	20.97	1.47
2.883	1.59	8.917	3.43	14.950	3.67	20.98	1.47
2.900	1.59	8.933	3.43	14.967	3.67	21.00	1.47
2.917	1.59	8.950	3.43	14.983	3.67	21.02	1.47
2.933	1.59	8.967	3.43	15.000	3.67	21.03	1.47
2.950	1.59	8.983	3.43	15.017	3.67	21.05	1.47
2.967	1.59	9.000	3.43	15.033	3.67	21.07	1.47
2.983	1.59	9.017	3.43	15.050	3.67	21.08	1.47
3.000	1.59	9.033	3.43	15.067	3.67	21.10	1.47

3.017	1.59	9.050	3.43	15.083	3.67	21.12	1.47
3.033	1.59	9.067	3.43	15.100	3.67	21.13	1.47
3.050	1.59	9.083	3.43	15.117	3.67	21.15	1.47
3.067	1.59	9.100	3.92	15.133	3.67	21.17	1.47
3.083	1.59	9.117	3.92	15.150	3.67	21.18	1.47
3.100	1.59	9.133	3.92	15.167	3.67	21.20	1.47
3.117	1.59	9.150	3.92	15.183	3.67	21.22	1.47
3.133	1.59	9.167	3.92	15.200	3.67	21.23	1.47
3.150	1.59	9.183	3.92	15.217	3.67	21.25	1.47
3.167	1.59	9.200	3.92	15.233	3.67	21.27	1.47
3.183	1.59	9.217	3.92	15.250	3.67	21.28	1.47
3.200	1.59	9.233	3.92	15.267	3.67	21.30	1.47
3.217	1.59	9.250	3.92	15.283	3.67	21.32	1.47
3.233	1.59	9.267	3.92	15.300	3.67	21.33	1.47
3.250	1.59	9.283	3.92	15.317	3.67	21.35	1.47
3.267	1.59	9.300	3.92	15.333	3.67	21.37	1.47
3.283	1.59	9.317	3.92	15.350	3.67	21.38	1.47
3.300	1.59	9.333	3.92	15.367	3.67	21.40	1.47
3.317	1.59	9.350	3.92	15.383	3.67	21.42	1.47
3.333	1.59	9.367	3.92	15.400	3.67	21.43	1.47
3.350	1.59	9.383	3.92	15.417	3.67	21.45	1.47
3.367	1.59	9.400	3.92	15.433	3.67	21.47	1.47
3.383	1.59	9.417	3.92	15.450	3.67	21.48	1.47
3.400	1.59	9.433	3.92	15.467	3.67	21.50	1.47
3.417	1.59	9.450	3.92	15.483	3.67	21.52	1.47
3.433	1.59	9.467	3.92	15.500	3.67	21.53	1.47
3.450	1.59	9.483	3.92	15.517	3.67	21.55	1.47
3.467	1.59	9.500	3.92	15.533	3.67	21.57	1.47
3.483	1.59	9.517	3.92	15.550	3.67	21.58	1.47
3.500	1.59	9.533	3.92	15.567	3.67	21.60	1.47
3.517	1.59	9.550	3.92	15.583	3.67	21.62	1.47
3.533	1.59	9.567	3.92	15.600	3.67	21.63	1.47
3.550	1.59	9.583	3.92	15.617	3.67	21.65	1.47
3.567	1.59	9.600	4.41	15.633	3.67	21.67	1.47
3.583	1.59	9.617	4.41	15.650	3.67	21.68	1.47
3.600	1.59	9.633	4.41	15.667	3.67	21.70	1.47
3.617	1.59	9.650	4.41	15.683	3.67	21.72	1.47
3.633	1.59	9.667	4.41	15.700	3.67	21.73	1.47
3.650	1.59	9.683	4.41	15.717	3.67	21.75	1.47
3.667	1.59	9.700	4.41	15.733	3.67	21.77	1.47
3.683	1.59	9.717	4.41	15.750	3.67	21.78	1.47
3.700	1.59	9.733	4.41	15.767	3.67	21.80	1.47
3.717	1.59	9.750	4.41	15.783	3.67	21.82	1.47
3.733	1.59	9.767	4.41	15.800	3.67	21.83	1.47
3.750	1.59	9.783	4.41	15.817	3.67	21.85	1.47
3.767	1.59	9.800	4.41	15.833	3.67	21.87	1.47
3.783	1.59	9.817	4.41	15.850	3.67	21.88	1.47
3.800	1.59	9.833	4.41	15.867	3.67	21.90	1.47
3.817	1.59	9.850	4.41	15.883	3.67	21.92	1.47
3.833	1.59	9.867	4.41	15.900	3.67	21.93	1.47
3.850	1.59	9.883	4.41	15.917	3.67	21.95	1.47
3.867	1.59	9.900	4.41	15.933	3.67	21.97	1.47
3.883	1.59	9.917	4.41	15.950	3.67	21.98	1.47
3.900	1.59	9.933	4.41	15.967	3.67	22.00	1.47
3.917	1.59	9.950	4.41	15.983	3.67	22.02	1.47
3.933	1.59	9.967	4.41	16.000	3.67	22.03	1.47
3.950	1.59	9.983	4.41	16.017	3.67	22.05	1.47
3.967	1.59	10.000	4.41	16.033	3.67	22.07	1.47
3.983	1.59	10.017	4.41	16.050	3.67	22.08	1.47
4.000	1.59	10.033	4.41	16.067	3.67	22.10	1.47
4.017	1.59	10.050	4.41	16.083	3.67	22.12	1.47
4.033	1.59	10.067	4.41	16.100	2.21	22.13	1.47
4.050	1.59	10.083	4.41	16.117	2.20	22.15	1.47
4.067	1.59	10.100	5.63	16.133	2.20	22.17	1.47

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4.083	1.59	10.117	5.63	16.150	2.20	22.18	1.47
4.100	1.96	10.133	5.63	16.167	2.20	22.20	1.47
4.117	1.96	10.150	5.63	16.183	2.20	22.22	1.47
4.133	1.96	10.167	5.63	16.200	2.20	22.23	1.47
4.150	1.96	10.183	5.63	16.217	2.20	22.25	1.47
4.167	1.96	10.200	5.63	16.233	2.20	22.27	1.47
4.183	1.96	10.217	5.63	16.250	2.20	22.28	1.47
4.200	1.96	10.233	5.63	16.267	2.20	22.30	1.47
4.217	1.96	10.250	5.63	16.283	2.20	22.32	1.47
4.233	1.96	10.267	5.63	16.300	2.20	22.33	1.47
4.250	1.96	10.283	5.63	16.317	2.20	22.35	1.47
4.267	1.96	10.300	5.63	16.333	2.20	22.37	1.47
4.283	1.96	10.317	5.63	16.350	2.20	22.38	1.47
4.300	1.96	10.333	5.63	16.367	2.20	22.40	1.47
4.317	1.96	10.350	5.63	16.383	2.20	22.42	1.47
4.333	1.96	10.367	5.63	16.400	2.20	22.43	1.47
4.350	1.96	10.383	5.63	16.417	2.20	22.45	1.47
4.367	1.96	10.400	5.63	16.433	2.20	22.47	1.47
4.383	1.96	10.417	5.63	16.450	2.20	22.48	1.47
4.400	1.96	10.433	5.63	16.467	2.20	22.50	1.47
4.417	1.96	10.450	5.63	16.483	2.20	22.52	1.47
4.433	1.96	10.467	5.63	16.500	2.20	22.53	1.47
4.450	1.96	10.483	5.63	16.517	2.20	22.55	1.47
4.467	1.96	10.500	5.63	16.533	2.20	22.57	1.47
4.483	1.96	10.517	5.63	16.550	2.20	22.58	1.47
4.500	1.96	10.533	5.63	16.567	2.20	22.60	1.47
4.517	1.96	10.550	5.63	16.583	2.20	22.62	1.47
4.533	1.96	10.567	5.63	16.600	2.20	22.63	1.47
4.550	1.96	10.583	5.63	16.617	2.20	22.65	1.47
4.567	1.96	10.600	7.59	16.633	2.20	22.67	1.47
4.583	1.96	10.617	7.59	16.650	2.20	22.68	1.47
4.600	1.96	10.633	7.59	16.667	2.20	22.70	1.47
4.617	1.96	10.650	7.59	16.683	2.20	22.72	1.47
4.633	1.96	10.667	7.59	16.700	2.20	22.73	1.47
4.650	1.96	10.683	7.59	16.717	2.20	22.75	1.47
4.667	1.96	10.700	7.59	16.733	2.20	22.77	1.47
4.683	1.96	10.717	7.59	16.750	2.20	22.78	1.47
4.700	1.96	10.733	7.59	16.767	2.20	22.80	1.47
4.717	1.96	10.750	7.59	16.783	2.20	22.82	1.47
4.733	1.96	10.767	7.59	16.800	2.20	22.83	1.47
4.750	1.96	10.783	7.59	16.817	2.20	22.85	1.47
4.767	1.96	10.800	7.59	16.833	2.20	22.87	1.47
4.783	1.96	10.817	7.59	16.850	2.20	22.88	1.47
4.800	1.96	10.833	7.59	16.867	2.20	22.90	1.47
4.817	1.96	10.850	7.59	16.883	2.20	22.92	1.47
4.833	1.96	10.867	7.59	16.900	2.20	22.93	1.47
4.850	1.96	10.883	7.59	16.917	2.20	22.95	1.47
4.867	1.96	10.900	7.59	16.933	2.20	22.97	1.47
4.883	1.96	10.917	7.59	16.950	2.20	22.98	1.47
4.900	1.96	10.933	7.59	16.967	2.20	23.00	1.47
4.917	1.96	10.950	7.59	16.983	2.20	23.02	1.47
4.933	1.96	10.967	7.59	17.000	2.20	23.03	1.47
4.950	1.96	10.983	7.59	17.017	2.20	23.05	1.47
4.967	1.96	11.000	7.59	17.033	2.20	23.07	1.47
4.983	1.96	11.017	7.59	17.050	2.20	23.08	1.47
5.000	1.96	11.033	7.59	17.067	2.20	23.10	1.47
5.017	1.96	11.050	7.59	17.083	2.20	23.12	1.47
5.033	1.96	11.067	7.59	17.100	2.20	23.13	1.47
5.050	1.96	11.083	7.59	17.117	2.20	23.15	1.47
5.067	1.96	11.100	11.75	17.133	2.20	23.17	1.47
5.083	1.96	11.117	11.75	17.150	2.20	23.18	1.47
5.100	1.96	11.133	11.75	17.167	2.20	23.20	1.47
5.117	1.96	11.150	11.75	17.183	2.20	23.22	1.47
5.133	1.96	11.167	11.75	17.200	2.20	23.23	1.47

5.150	1.96	11.183	11.75	17.217	2.20	23.25	1.47
5.167	1.96	11.200	11.75	17.233	2.20	23.27	1.47
5.183	1.96	11.217	11.75	17.250	2.20	23.28	1.47
5.200	1.96	11.233	11.75	17.267	2.20	23.30	1.47
5.217	1.96	11.250	11.75	17.283	2.20	23.32	1.47
5.233	1.96	11.267	11.75	17.300	2.20	23.33	1.47
5.250	1.96	11.283	11.75	17.317	2.20	23.35	1.47
5.267	1.96	11.300	11.75	17.333	2.20	23.37	1.47
5.283	1.96	11.317	11.75	17.350	2.20	23.38	1.47
5.300	1.96	11.333	11.75	17.367	2.20	23.40	1.47
5.317	1.96	11.350	11.75	17.383	2.20	23.42	1.47
5.333	1.96	11.367	11.75	17.400	2.20	23.43	1.47
5.350	1.96	11.383	11.75	17.417	2.20	23.45	1.47
5.367	1.96	11.400	11.75	17.433	2.20	23.47	1.47
5.383	1.96	11.417	11.75	17.450	2.20	23.48	1.47
5.400	1.96	11.433	11.75	17.467	2.20	23.50	1.47
5.417	1.96	11.450	11.75	17.483	2.20	23.52	1.47
5.433	1.96	11.467	11.75	17.500	2.20	23.53	1.47
5.450	1.96	11.483	11.75	17.517	2.20	23.55	1.47
5.467	1.96	11.500	11.75	17.533	2.20	23.57	1.47
5.483	1.96	11.517	11.75	17.550	2.20	23.58	1.47
5.500	1.96	11.533	11.75	17.567	2.20	23.60	1.47
5.517	1.96	11.550	11.75	17.583	2.20	23.62	1.47
5.533	1.96	11.567	11.75	17.600	2.20	23.63	1.47
5.550	1.96	11.583	11.75	17.617	2.20	23.65	1.47
5.567	1.96	11.600	36.22	17.633	2.20	23.67	1.47
5.583	1.96	11.617	36.23	17.650	2.20	23.68	1.47
5.600	1.96	11.633	36.23	17.667	2.20	23.70	1.47
5.617	1.96	11.650	36.23	17.683	2.20	23.72	1.47
5.633	1.96	11.667	36.23	17.700	2.20	23.73	1.47
5.650	1.96	11.683	36.23	17.717	2.20	23.75	1.47
5.667	1.96	11.700	36.23	17.733	2.20	23.77	1.47
5.683	1.96	11.717	36.23	17.750	2.20	23.78	1.47
5.700	1.96	11.733	36.23	17.767	2.20	23.80	1.47
5.717	1.96	11.750	36.23	17.783	2.20	23.82	1.47
5.733	1.96	11.767	36.23	17.800	2.20	23.83	1.47
5.750	1.96	11.783	36.23	17.817	2.20	23.85	1.47
5.767	1.96	11.800	36.23	17.833	2.20	23.87	1.47
5.783	1.96	11.817	36.23	17.850	2.20	23.88	1.47
5.800	1.96	11.833	36.23	17.867	2.20	23.90	1.47
5.817	1.96	11.850	149.75	17.883	2.20	23.92	1.47
5.833	1.96	11.867	149.82	17.900	2.20	23.93	1.47
5.850	1.96	11.883	149.82	17.917	2.20	23.95	1.47
5.867	1.96	11.900	149.82	17.933	2.20	23.97	1.47
5.883	1.96	11.917	149.82	17.950	2.20	23.98	1.47
5.900	1.96	11.933	149.82	17.967	2.20	24.00	1.47
5.917	1.96	11.950	149.82	17.983	2.20	24.02	1.47
5.933	1.96	11.967	149.82	18.000	2.20	24.03	1.47
5.950	1.96	11.983	149.82	18.017	2.20	24.05	1.47
5.967	1.96	12.000	149.82	18.033	2.20	24.07	1.47
5.983	1.96	12.017	149.82	18.050	2.20	24.08	1.47
6.000	1.96	12.033	149.82	18.067	2.20		
6.017	1.96	12.050	149.82	18.083	2.20		
6.033	1.96	12.067	149.82	18.100	2.20		

Unit Hyd Qpeak (cms)= 0.542

PEAK FLOW (cms)= 0.231 (i)
TIME TO PEAK (hrs)= 12.767
RUNOFF VOLUME (mm)= 17.866
TOTAL RAINFALL (mm)= 122.401
RUNOFF COEFFICIENT = 0.146

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

SAR-23058 - Pre-Development OTTHYMO Detail Outputs

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V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\12ced673-8091-4fd6-9c39-6fb2a5eddbc6\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
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DATE: 07-28-2024 TIME: 08:19:23

USER:

COMMENTS: _____

** SIMULATION : 25mm 4Hr CHI **

CHICAGO STORM IDF curve parameters: A= 598.150
Ptotal= 25.00 mm B= 6.750
C= 0.828
used in: INTENSITY = A / (t + B)^C
Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	1.41	1.00	13.71	2.00	3.64	3.00	1.70
0.17	1.64	1.17	57.99	2.17	3.04	3.17	1.57
0.33	1.96	1.33	18.26	2.33	2.62	3.33	1.46
0.50	2.46	1.50	9.19	2.50	2.30	3.50	1.36
0.67	3.34	1.67	6.09	2.67	2.06	3.67	1.28
0.83	5.31	1.83	4.55	2.83	1.86	3.83	1.21

CALIB (0101)
NASHYD (0101)
ID= 1 DT= 1.0 min
Area (ha)= 9.80
Ia (mm)= 8.64
U.H. Tp(hrs)= 0.69
Curve Number (CN)= 37.0
of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 1.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.017	1.41	1.017	13.71	2.017	3.64	3.02	1.70
0.033	1.41	1.033	13.71	2.033	3.64	3.03	1.70
0.050	1.41	1.050	13.71	2.050	3.64	3.05	1.70
0.067	1.41	1.067	13.71	2.067	3.64	3.07	1.70
0.083	1.41	1.083	13.71	2.083	3.64	3.08	1.70
0.100	1.41	1.100	13.71	2.100	3.64	3.10	1.70
0.117	1.41	1.117	13.71	2.117	3.64	3.12	1.70
0.133	1.41	1.133	13.71	2.133	3.64	3.13	1.70
0.150	1.41	1.150	13.71	2.150	3.64	3.15	1.70
0.167	1.41	1.167	13.71	2.167	3.64	3.17	1.70
0.183	1.64	1.183	57.99	2.183	3.04	3.18	1.57
0.200	1.64	1.200	57.99	2.200	3.04	3.20	1.57
0.217	1.64	1.217	57.99	2.217	3.04	3.22	1.57
0.233	1.64	1.233	57.99	2.233	3.04	3.23	1.57
0.250	1.64	1.250	57.99	2.250	3.04	3.25	1.57
0.267	1.64	1.267	57.99	2.267	3.04	3.27	1.57
0.283	1.64	1.283	57.99	2.283	3.04	3.28	1.57
0.300	1.64	1.300	57.99	2.300	3.04	3.30	1.57
0.317	1.64	1.317	57.99	2.317	3.04	3.32	1.57
0.333	1.64	1.333	57.99	2.333	3.04	3.33	1.57
0.350	1.96	1.350	18.26	2.350	2.62	3.35	1.46
0.367	1.96	1.367	18.26	2.367	2.62	3.37	1.46
0.383	1.96	1.383	18.26	2.383	2.62	3.38	1.46
0.400	1.96	1.400	18.26	2.400	2.62	3.40	1.46
0.417	1.96	1.417	18.26	2.417	2.62	3.42	1.46
0.433	1.96	1.433	18.26	2.433	2.62	3.43	1.46
0.450	1.96	1.450	18.26	2.450	2.62	3.45	1.46
0.467	1.96	1.467	18.26	2.467	2.62	3.47	1.46
0.483	1.96	1.483	18.26	2.483	2.62	3.48	1.46
0.500	1.96	1.500	18.26	2.500	2.62	3.50	1.46
0.517	2.46	1.517	9.19	2.517	2.30	3.52	1.36
0.533	2.46	1.533	9.19	2.533	2.30	3.53	1.36
0.550	2.46	1.550	9.19	2.550	2.30	3.55	1.36
0.567	2.46	1.567	9.19	2.567	2.30	3.57	1.36
0.583	2.46	1.583	9.19	2.583	2.30	3.58	1.36
0.600	2.46	1.600	9.19	2.600	2.30	3.60	1.36
0.617	2.46	1.617	9.19	2.617	2.30	3.62	1.36
0.633	2.46	1.633	9.19	2.633	2.30	3.63	1.36
0.650	2.46	1.650	9.19	2.650	2.30	3.65	1.36
0.667	2.46	1.667	9.19	2.667	2.30	3.67	1.36
0.683	3.34	1.683	6.09	2.683	2.06	3.68	1.28
0.700	3.34	1.700	6.09	2.700	2.06	3.70	1.28
0.717	3.34	1.717	6.09	2.717	2.06	3.72	1.28
0.733	3.34	1.733	6.09	2.733	2.06	3.73	1.28
0.750	3.34	1.750	6.09	2.750	2.06	3.75	1.28
0.767	3.34	1.767	6.09	2.767	2.06	3.77	1.28
0.783	3.34	1.783	6.09	2.783	2.06	3.78	1.28
0.800	3.34	1.800	6.09	2.800	2.06	3.80	1.28
0.817	3.34	1.817	6.09	2.817	2.06	3.82	1.28
0.833	3.34	1.833	6.09	2.833	2.06	3.83	1.28

SAR-23058 - Pre-Development OTTHYMO Detail Outputs

0.850	5.31	1.850	4.55	2.850	1.86	3.85	1.21
0.867	5.31	1.867	4.55	2.867	1.86	3.87	1.21
0.883	5.31	1.883	4.55	2.883	1.86	3.88	1.21
0.900	5.31	1.900	4.55	2.900	1.86	3.90	1.21
0.917	5.31	1.917	4.55	2.917	1.86	3.92	1.21
0.933	5.31	1.933	4.55	2.933	1.86	3.93	1.21
0.950	5.31	1.950	4.55	2.950	1.86	3.95	1.21
0.967	5.31	1.967	4.55	2.967	1.86	3.97	1.21
0.983	5.31	1.983	4.55	2.983	1.86	3.98	1.21
1.000	5.31	2.000	4.55	3.000	1.86	4.00	1.21

Unit Hyd Qpeak (cms)= 0.542

PEAK FLOW (cms)= 0.007 (i)
TIME TO PEAK (hrs)= 2.450
RUNOFF VOLUME (mm)= 0.596
TOTAL RAINFALL (mm)= 25.000
RUNOFF COEFFICIENT = 0.024

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

FINISH

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V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y M M O O
O O T T H H Y Y M M O O
OOO T T H H Y Y M M OOO

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
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\3125fb1d-679a-4570-ba71-719dfceb268e\404cb88f-8ae2-407a-88b9-cb7e9b55cc9c\sce

DATE: 07-28-2024 TIME: 08:19:23

USER:

COMMENTS: _____

** SIMULATION : Timmins **

READ STORM
Ptotal=193.00 mm
Filename: C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\9abc7c04
Comments: Timmins

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	15.44	3.00	1.93	6.00	44.39	9.00	11.58
1.00	19.30	4.00	5.79	7.00	19.30	10.00	13.51
2.00	11.58	5.00	19.30	8.00	23.16	11.00	7.72

CALIB
NASHYD (0101)
ID= 1 DT= 1.0 min
Area (ha)= 9.80
Ia (mm)= 8.64
U.H. Tp(hrs)= 0.69
Curve Number (CN)= 37.0
of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 1.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.017	15.44	3.017	1.93	6.017	44.39	9.02	11.58
0.033	15.44	3.033	1.93	6.033	44.39	9.03	11.58
0.050	15.44	3.050	1.93	6.050	44.39	9.05	11.58
0.067	15.44	3.067	1.93	6.067	44.39	9.07	11.58
0.083	15.44	3.083	1.93	6.083	44.39	9.08	11.58
0.100	15.44	3.100	1.93	6.100	44.39	9.10	11.58
0.117	15.44	3.117	1.93	6.117	44.39	9.12	11.58
0.133	15.44	3.133	1.93	6.133	44.39	9.13	11.58
0.150	15.44	3.150	1.93	6.150	44.39	9.15	11.58
0.167	15.44	3.167	1.93	6.167	44.39	9.17	11.58
0.183	15.44	3.183	1.93	6.183	44.39	9.18	11.58
0.200	15.44	3.200	1.93	6.200	44.39	9.20	11.58
0.217	15.44	3.217	1.93	6.217	44.39	9.22	11.58
0.233	15.44	3.233	1.93	6.233	44.39	9.23	11.58
0.250	15.44	3.250	1.93	6.250	44.39	9.25	11.58
0.267	15.44	3.267	1.93	6.267	44.39	9.27	11.58
0.283	15.44	3.283	1.93	6.283	44.39	9.28	11.58
0.300	15.44	3.300	1.93	6.300	44.39	9.30	11.58
0.317	15.44	3.317	1.93	6.317	44.39	9.32	11.58
0.333	15.44	3.333	1.93	6.333	44.39	9.33	11.58
0.350	15.44	3.350	1.93	6.350	44.39	9.35	11.58
0.367	15.44	3.367	1.93	6.367	44.39	9.37	11.58
0.383	15.44	3.383	1.93	6.383	44.39	9.38	11.58
0.400	15.44	3.400	1.93	6.400	44.39	9.40	11.58
0.417	15.44	3.417	1.93	6.417	44.39	9.42	11.58
0.433	15.44	3.433	1.93	6.433	44.39	9.43	11.58
0.450	15.44	3.450	1.93	6.450	44.39	9.45	11.58
0.467	15.44	3.467	1.93	6.467	44.39	9.47	11.58
0.483	15.44	3.483	1.93	6.483	44.39	9.48	11.58
0.500	15.44	3.500	1.93	6.500	44.39	9.50	11.58
0.517	15.44	3.517	1.93	6.517	44.39	9.52	11.58

SAR-23058 - Pre-Development OTTHYMO Detail Outputs

0.533	15.44	3.533	1.93	6.533	44.39	9.53	11.58	1.600	19.30	4.600	5.79	7.600	19.30	10.60	13.51
0.550	15.44	3.550	1.93	6.550	44.39	9.55	11.58	1.617	19.30	4.617	5.79	7.617	19.30	10.62	13.51
0.567	15.44	3.567	1.93	6.567	44.39	9.57	11.58	1.633	19.30	4.633	5.79	7.633	19.30	10.63	13.51
0.583	15.44	3.583	1.93	6.583	44.39	9.58	11.58	1.650	19.30	4.650	5.79	7.650	19.30	10.65	13.51
0.600	15.44	3.600	1.93	6.600	44.39	9.60	11.58	1.667	19.30	4.667	5.79	7.667	19.30	10.67	13.51
0.617	15.44	3.617	1.93	6.617	44.39	9.62	11.58	1.683	19.30	4.683	5.79	7.683	19.30	10.68	13.51
0.633	15.44	3.633	1.93	6.633	44.39	9.63	11.58	1.700	19.30	4.700	5.79	7.700	19.30	10.70	13.51
0.650	15.44	3.650	1.93	6.650	44.39	9.65	11.58	1.717	19.30	4.717	5.79	7.717	19.30	10.72	13.51
0.667	15.44	3.667	1.93	6.667	44.39	9.67	11.58	1.733	19.30	4.733	5.79	7.733	19.30	10.73	13.51
0.683	15.44	3.683	1.93	6.683	44.39	9.68	11.58	1.750	19.30	4.750	5.79	7.750	19.30	10.75	13.51
0.700	15.44	3.700	1.93	6.700	44.39	9.70	11.58	1.767	19.30	4.767	5.79	7.767	19.30	10.77	13.51
0.717	15.44	3.717	1.93	6.717	44.39	9.72	11.58	1.783	19.30	4.783	5.79	7.783	19.30	10.78	13.51
0.733	15.44	3.733	1.93	6.733	44.39	9.73	11.58	1.800	19.30	4.800	5.79	7.800	19.30	10.80	13.51
0.750	15.44	3.750	1.93	6.750	44.39	9.75	11.58	1.817	19.30	4.817	5.79	7.817	19.30	10.82	13.51
0.767	15.44	3.767	1.93	6.767	44.39	9.77	11.58	1.833	19.30	4.833	5.79	7.833	19.30	10.83	13.51
0.783	15.44	3.783	1.93	6.783	44.39	9.78	11.58	1.850	19.30	4.850	5.79	7.850	19.30	10.85	13.51
0.800	15.44	3.800	1.93	6.800	44.39	9.80	11.58	1.867	19.30	4.867	5.79	7.867	19.30	10.87	13.51
0.817	15.44	3.817	1.93	6.817	44.39	9.82	11.58	1.883	19.30	4.883	5.79	7.883	19.30	10.88	13.51
0.833	15.44	3.833	1.93	6.833	44.39	9.83	11.58	1.900	19.30	4.900	5.79	7.900	19.30	10.90	13.51
0.850	15.44	3.850	1.93	6.850	44.39	9.85	11.58	1.917	19.30	4.917	5.79	7.917	19.30	10.92	13.51
0.867	15.44	3.867	1.93	6.867	44.39	9.87	11.58	1.933	19.30	4.933	5.79	7.933	19.30	10.93	13.51
0.883	15.44	3.883	1.93	6.883	44.39	9.88	11.58	1.950	19.30	4.950	5.79	7.950	19.30	10.95	13.51
0.900	15.44	3.900	1.93	6.900	44.39	9.90	11.58	1.967	19.30	4.967	5.79	7.967	19.30	10.97	13.51
0.917	15.44	3.917	1.93	6.917	44.39	9.92	11.58	1.983	19.30	4.983	5.79	7.983	19.30	10.98	13.51
0.933	15.44	3.933	1.93	6.933	44.39	9.93	11.58	2.000	19.30	5.000	5.80	8.000	19.31	11.00	13.51
0.950	15.44	3.950	1.93	6.950	44.39	9.95	11.58	2.017	11.58	5.017	19.30	8.017	23.16	11.02	7.72
0.967	15.44	3.967	1.93	6.967	44.39	9.97	11.58	2.033	11.58	5.033	19.30	8.033	23.16	11.03	7.72
0.983	15.44	3.983	1.93	6.983	44.39	9.98	11.58	2.050	11.58	5.050	19.30	8.050	23.16	11.05	7.72
1.000	15.44	4.000	1.93	7.000	44.34	10.00	11.58	2.067	11.58	5.067	19.30	8.067	23.16	11.07	7.72
1.017	19.30	4.017	5.79	7.017	19.30	10.02	13.51	2.083	11.58	5.083	19.30	8.083	23.16	11.08	7.72
1.033	19.30	4.033	5.79	7.033	19.30	10.03	13.51	2.100	11.58	5.100	19.30	8.100	23.16	11.10	7.72
1.050	19.30	4.050	5.79	7.050	19.30	10.05	13.51	2.117	11.58	5.117	19.30	8.117	23.16	11.12	7.72
1.067	19.30	4.067	5.79	7.067	19.30	10.07	13.51	2.133	11.58	5.133	19.30	8.133	23.16	11.13	7.72
1.083	19.30	4.083	5.79	7.083	19.30	10.08	13.51	2.150	11.58	5.150	19.30	8.150	23.16	11.15	7.72
1.100	19.30	4.100	5.79	7.100	19.30	10.10	13.51	2.167	11.58	5.167	19.30	8.167	23.16	11.17	7.72
1.117	19.30	4.117	5.79	7.117	19.30	10.12	13.51	2.183	11.58	5.183	19.30	8.183	23.16	11.18	7.72
1.133	19.30	4.133	5.79	7.133	19.30	10.13	13.51	2.200	11.58	5.200	19.30	8.200	23.16	11.20	7.72
1.150	19.30	4.150	5.79	7.150	19.30	10.15	13.51	2.217	11.58	5.217	19.30	8.217	23.16	11.22	7.72
1.167	19.30	4.167	5.79	7.167	19.30	10.17	13.51	2.233	11.58	5.233	19.30	8.233	23.16	11.23	7.72
1.183	19.30	4.183	5.79	7.183	19.30	10.18	13.51	2.250	11.58	5.250	19.30	8.250	23.16	11.25	7.72
1.200	19.30	4.200	5.79	7.200	19.30	10.20	13.51	2.267	11.58	5.267	19.30	8.267	23.16	11.27	7.72
1.217	19.30	4.217	5.79	7.217	19.30	10.22	13.51	2.283	11.58	5.283	19.30	8.283	23.16	11.28	7.72
1.233	19.30	4.233	5.79	7.233	19.30	10.23	13.51	2.300	11.58	5.300	19.30	8.300	23.16	11.30	7.72
1.250	19.30	4.250	5.79	7.250	19.30	10.25	13.51	2.317	11.58	5.317	19.30	8.317	23.16	11.32	7.72
1.267	19.30	4.267	5.79	7.267	19.30	10.27	13.51	2.333	11.58	5.333	19.30	8.333	23.16	11.33	7.72
1.283	19.30	4.283	5.79	7.283	19.30	10.28	13.51	2.350	11.58	5.350	19.30	8.350	23.16	11.35	7.72
1.300	19.30	4.300	5.79	7.300	19.30	10.30	13.51	2.367	11.58	5.367	19.30	8.367	23.16	11.37	7.72
1.317	19.30	4.317	5.79	7.317	19.30	10.32	13.51	2.383	11.58	5.383	19.30	8.383	23.16	11.38	7.72
1.333	19.30	4.333	5.79	7.333	19.30	10.33	13.51	2.400	11.58	5.400	19.30	8.400	23.16	11.40	7.72
1.350	19.30	4.350	5.79	7.350	19.30	10.35	13.51	2.417	11.58	5.417	19.30	8.417	23.16	11.42	7.72
1.367	19.30	4.367	5.79	7.367	19.30	10.37	13.51	2.433	11.58	5.433	19.30	8.433	23.16	11.43	7.72
1.383	19.30	4.383	5.79	7.383	19.30	10.38	13.51	2.450	11.58	5.450	19.30	8.450	23.16	11.45	7.72
1.400	19.30	4.400	5.79	7.400	19.30	10.40	13.51	2.467	11.58	5.467	19.30	8.467	23.16	11.47	7.72
1.417	19.30	4.417	5.79	7.417	19.30	10.42	13.51	2.483	11.58	5.483	19.30	8.483	23.16	11.48	7.72
1.433	19.30	4.433	5.79	7.433	19.30	10.43	13.51	2.500	11.58	5.500	19.30	8.500	23.16	11.50	7.72
1.450	19.30	4.450	5.79	7.450	19.30	10.45	13.51	2.517	11.58	5.517	19.30	8.517	23.16	11.52	7.72
1.467	19.30	4.467	5.79	7.467	19.30	10.47	13.51	2.533	11.58	5.533	19.30	8.533	23.16	11.53	7.72
1.483	19.30	4.483	5.79	7.483	19.30	10.48	13.51	2.550	11.58	5.550	19.30	8.550	23.16	11.55	7.72
1.500	19.30	4.500	5.79	7.500	19.30	10.50	13.51	2.567	11.58	5.567	19.30	8.567	23.16	11.57	7.72
1.517	19.30	4.517	5.79	7.517	19.30	10.52	13.51	2.583	11.58	5.583	19.30	8.583	23.16	11.58	7.72
1.533	19.30	4.533	5.79	7.533	19.30	10.53	13.51	2.600	11.58	5.600	19.30	8.600	23.16	11.60	7.72
1.550	19.30	4.550	5.79	7.550	19.30	10.55	13.51	2.617	11.58	5.617	19.30	8.617	23.16	11.62	7.72
1.567	19.30	4.567	5.79	7.567	19.30	10.57	13.51	2.633	11.58	5.633	19.30	8.633	23.16	11.63	7.72
1.583	19.30	4.583	5.79	7.583	19.30	10.58	13.51	2.650	11.58	5.650	19.30	8.650	23.16	11.65	7.72

SAR-23058 - Pre-Development OTTHYMO Detail Outputs

2.667	11.58	5.667	19.30	8.667	23.16	11.67	7.72
2.683	11.58	5.683	19.30	8.683	23.16	11.68	7.72
2.700	11.58	5.700	19.30	8.700	23.16	11.70	7.72
2.717	11.58	5.717	19.30	8.717	23.16	11.72	7.72
2.733	11.58	5.733	19.30	8.733	23.16	11.73	7.72
2.750	11.58	5.750	19.30	8.750	23.16	11.75	7.72
2.767	11.58	5.767	19.30	8.767	23.16	11.77	7.72
2.783	11.58	5.783	19.30	8.783	23.16	11.78	7.72
2.800	11.58	5.800	19.30	8.800	23.16	11.80	7.72
2.817	11.58	5.817	19.30	8.817	23.16	11.82	7.72
2.833	11.58	5.833	19.30	8.833	23.16	11.83	7.72
2.850	11.58	5.850	19.30	8.850	23.16	11.85	7.72
2.867	11.58	5.867	19.30	8.867	23.16	11.87	7.72
2.883	11.58	5.883	19.30	8.883	23.16	11.88	7.72
2.900	11.58	5.900	19.30	8.900	23.16	11.90	7.72
2.917	11.58	5.917	19.30	8.917	23.16	11.92	7.72
2.933	11.58	5.933	19.30	8.933	23.16	11.93	7.72
2.950	11.58	5.950	19.30	8.950	23.16	11.95	7.72
2.967	11.58	5.967	19.30	8.967	23.16	11.97	7.72
2.983	11.58	5.983	19.30	8.983	23.16	11.98	7.72
3.000	11.58	6.000	19.34	9.000	23.14	12.00	7.72

Unit Hyd Qpeak (cms)= 0.542

PEAK FLOW (cms)= 0.293 (i)
TIME TO PEAK (hrs)= 7.450
RUNOFF VOLUME (mm)= 55.100
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.285

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

SAR-23058 - Pre-Dev-PF - NasHyd 101 Summary Outputs

=====

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A A  L
V  V  I  SS    U  U  AAAAA  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

(v 6.2.2015)

```
000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\2bc37cb3-d390-4c31-b383-89c423df0f4c\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\2bc37cb3-d390-4c31-b383-89c423df0f4c\sce

DATE: 07-28-2024

TIME: 08:19:21

USER:

COMMENTS: _____

** SIMULATION : 100Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
		min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 99.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\78ea709b-ac8f-4a01-accb-96

remark: 100Yr 12Hr SCS

*

** CALIB NASHYD	0101	1	1.0	9.80	0.18	6.78	15.81	0.16	0.000
[CN=37.0									
[N = 3.0:Tp 0.69]									

*

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A A  L
V  V  I  SS    U  U  AAAAA  L
V  V  I  SS    U  U  A  A  L
```

(v 6.2.2015)

VV I SSSSS UUUUU A A LLLLL

```
000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\526b5cb2-5ae8-4e6f-8f77-a46121d805de\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\526b5cb2-5ae8-4e6f-8f77-a46121d805de\sce

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 100Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
		min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

*

** CALIB NASHYD	0101	1	1.0	9.80	0.23	12.77	17.87	0.15	0.000
[CN=37.0									
[N = 3.0:Tp 0.69]									

*

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A A  L
V  V  I  SS    U  U  AAAAA  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

(v 6.2.2015)

```
000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000
```

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
3125fb1d-679a-4570-ba71-719dfceb268e\1c6b3a54-40e1-4f0e-9745-dd5ae3a23b98\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
3125fb1d-679a-4570-ba71-719dfceb268e\1c6b3a54-40e1-4f0e-9745-dd5ae3a23b98\sce

DATE: 07-28-2024 TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 100Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	---	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

CHIC STORM 5.0
[Ptot= 71.77 mm]

*
** CALIB NASHYD 0101 1 1.0 9.80 0.11 2.28 8.04 0.11 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]
*

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
3125fb1d-679a-4570-ba71-719dfceb268e\d08fb1c2-5c68-48ab-8511-df1f30d2ecfd\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
3125fb1d-679a-4570-ba71-719dfceb268e\d08fb1c2-5c68-48ab-8511-df1f30d2ecfd\sce

DATE: 07-28-2024

TIME: 08:19:21

USER:

COMMENTS: _____

** SIMULATION : 100Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	---	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0
[Ptot= 81.00 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS

*
** CALIB NASHYD 0101 1 1.0 9.80 0.14 3.82 10.37 0.13 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]
*

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
3125fb1d-679a-4570-ba71-719dfceb268e\b2a7f397-5239-456c-963e-dc956d9d5544\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
3125fb1d-679a-4570-ba71-719dfceb268e\b2a7f397-5239-456c-963e-dc956d9d5544\sce

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

SAR-23058 - Pre-Dev-PF - NasHyd 101 Summary Outputs

** SIMULATION : 10Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' '	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	--------	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0101 1 1.0 9.80 0.09 6.80 7.53 0.11 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]

*

V	V	I	SSSSS	U	U	A	L		(v 6.2.2015)
V	V	I	SS	U	U	A A	L		
V	V	I	SS	U	U	AAAAA	L		
V	V	I	SS	U	U	A A	L		
VV	I	SSSSS	UUUUU	A	A	LLLLL			

000	TTTTT	TTTTT	H	H	Y	Y	M	M	000	TM
O O	T	T	H	H	Y Y	MM MM	O O			
O O	T	T	H	H	Y	M M	O O			
000	T	T	H	H	Y	M M	000			

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\226ee872-ce9d-4793-bbd9-50365491171c\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\226ee872-ce9d-4793-bbd9-50365491171c\sce

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 10Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' '	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	--------	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 86.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\4c444d8e-042c-42bb-9b9f-fa

remark: 10Yr 24Hr SCS

*

** CALIB NASHYD 0101 1 1.0 9.80 0.11 12.77 8.77 0.10 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]

*

V	V	I	SSSSS	U	U	A	L		(v 6.2.2015)
V	V	I	SS	U	U	A A	L		
V	V	I	SS	U	U	AAAAA	L		
V	V	I	SS	U	U	A A	L		
VV	I	SSSSS	UUUUU	A	A	LLLLL			

000	TTTTT	TTTTT	H	H	Y	Y	M	M	000	TM
O O	T	T	H	H	Y Y	MM MM	O O			
O O	T	T	H	H	Y	M M	O O			
000	T	T	H	H	Y	M M	000			

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\637a2d21-63e2-4b65-85ae-569bcdecfc64\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\637a2d21-63e2-4b65-85ae-569bcdecfc64\sce

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 10Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	' '	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	--------	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

CHIC STORM 5.0

[Ptot= 50.59 mm]

*

** CALIB NASHYD 0101 1 1.0 9.80 0.05 2.33 3.71 0.07 0.000
[CN=37.0]

```
*
[ N = 3.0:Tp 0.69]
=====
=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\05f8022-98ab-4b24-ac81-2d243ebd7e8c\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\05f8022-98ab-4b24-ac81-2d243ebd7e8c\sce

DATE: 07-28-2024 TIME: 08:19:21

USER:

COMMENTS:

*****
** SIMULATION : 10Yr 6Hr SCS **
*****

W/E COMMAND HYD ID DT AREA ' Qpeak Tpeak R.V. R.C. Qbase
min ha ' cms hrs mm cms

START @ 0.00 hrs
-----
READ STORM 5.0
[ Ptot= 56.40 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\71e73834-d9b0-4c7d-bb2c-52
remark: 10Yr 6Hr SCS
*
** CALIB NASHYD 0101 1 1.0 9.80 0.06 3.85 4.75 0.08 0.000
[CN=37.0]
[ N = 3.0:Tp 0.69]
*
=====
=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
```

```
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\12ced673-8091-4fd6-9c39-6fb2a5eddbc6\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\12ced673-8091-4fd6-9c39-6fb2a5eddbc6\sce

DATE: 07-28-2024 TIME: 08:19:23

USER:

COMMENTS:

*****
** SIMULATION : 25mm 4Hr CHI **
*****

W/E COMMAND HYD ID DT AREA ' Qpeak Tpeak R.V. R.C. Qbase
min ha ' cms hrs mm cms

START @ 0.00 hrs
-----
CHIC STORM 10.0
[ Ptot= 25.00 mm ]
*
** CALIB NASHYD 0101 1 1.0 9.80 0.01 2.45 0.60 0.02 0.000
[CN=37.0]
[ N = 3.0:Tp 0.69]
*
FINISH

=====
=====
=====
=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
```

O O T T H H Y M M O O
000 T T H H Y M M 000
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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\0b0fcd8e-5f92-464e-8e51-833c1af59d73\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\0b0fcd8e-5f92-464e-8e51-833c1af59d73\sce

DATE: 07-28-2024 TIME: 08:19:21

USER:

COMMENTS: _____

** SIMULATION : 25Yr 12Hr SCS **

W/E	COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs									

READ STORM 5.0									
[Ptot= 81.60 mm]									
fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\3e64cffc-f179-49f6-b52e-7e									
remark: 25Yr 12Hr SCS									
* ** CALIB NASHYD 0101 1 1.0 9.80 0.12 6.78 10.53 0.13 0.000									
[CN=37.0]									
[N = 3.0:Tp 0.69]									
*									
=====									
=====									

V	V	I	SSSS	U	U	A	L		(v 6.2.2015)
V	V	I	SS	U	U	A A	L		
V	V	I	SS	U	U	AAAAA	L		
V	V	I	SS	U	U	A A	L		
VV	I	SSSS	UUUUU	A	A	LLLLL			

000	TTTTT	TTTTT	H	H	Y	Y	M	M	000	TM
O	O	T	T	H	H	Y Y	MM	MM	O	O
O	O	T	T	H	H	Y	M	M	O	O
000	T	T	H	H	Y		M	M	000	

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\9cad85c6-f0a8-418d-8012-104d59179cad\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\9cad85c6-f0a8-418d-8012-104d59179cad\sce

DATE: 07-28-2024 TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 25Yr 24Hr SCS **

W/E	COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs									

READ STORM 5.0									
[Ptot=100.80 mm]									
fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-ed1213ff5857\4beb1330-abaf-451e-881c-30									
remark: 25Yr 24Hr SCS									
* ** CALIB NASHYD 0101 1 1.0 9.80 0.16 12.77 12.09 0.12 0.000									
[CN=37.0]									
[N = 3.0:Tp 0.69]									
*									
=====									
=====									

V	V	I	SSSS	U	U	A	L		(v 6.2.2015)
V	V	I	SS	U	U	A A	L		
V	V	I	SS	U	U	AAAAA	L		
V	V	I	SS	U	U	A A	L		
VV	I	SSSS	UUUUU	A	A	LLLLL			

000	TTTTT	TTTTT	H	H	Y	Y	M	M	000	TM
O	O	T	T	H	H	Y Y	MM	MM	O	O
O	O	T	T	H	H	Y	M	M	O	O
000	T	T	H	H	Y		M	M	000	

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\2ce7d993-5707-4fe4-9625-7b3d495bc6c8\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\2ce7d993-5707-4fe4-9625-7b3d495bc6c8\sce

SAR-23058 - Pre-Dev-PF - NasHyd 101 Summary Outputs

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 25Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	---	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

CHIC STORM
[Ptot= 59.08 mm]

* ** CALIB NASHYD 0101 1 1.0 9.80 0.07 2.30 5.27 0.09 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]
*

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b045aee3-2935-4482-badf-dfe63f1c6363\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b045aee3-2935-4482-badf-dfe63f1c6363\sce

DATE: 07-28-2024

TIME: 08:19:21

USER:

COMMENTS: _____

** SIMULATION : 25Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	---	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 66.60 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\4815043b-d29d-4bf5-b776-01
remark: 25Yr 6Hr SCS

* ** CALIB NASHYD 0101 1 1.0 9.80 0.09 3.83 6.85 0.10 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]
*

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b045aee3-2935-4482-badf-dfe63f1c6363\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b045aee3-2935-4482-badf-dfe63f1c6363\sce

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 2Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	---	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

SAR-23058 - Pre-Dev-PF - NasHyd 101 Summary Outputs

```
[ Ptot= 45.60 mm ]
fname      : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS
```

```
*
** CALIB NASHYD      0101  1  1.0    9.80    0.03  6.83    2.91 0.06    0.000
[CN=37.0              ]
[ N = 3.0:Tp 0.69]
*
=====
=====
```

```
V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV     I  SSSSS  UUUUU  A  A  LLLLL
```

```
   OOO  TTTT  TTTT  H  H  Y  Y  M  M  OOO  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
   OOO  T  T  H  H  Y  Y  M  M  OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\c977a327-6ed1-4cb5-b7b8-b16e16700550\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\c977a327-6ed1-4cb5-b7b8-b16e16700550\sce
```

DATE: 07-28-2024 TIME: 08:19:22

USER:

COMMENTS: _____

```
*****
** SIMULATION : 2Yr 24Hr SCS **
*****
```

W/E COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
		min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 55.20 mm]

```
fname      : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\636f660d-efd5-4859-a7a7-9a
remark: 2Yr 24Hr SCS
```

```
*
** CALIB NASHYD      0101  1  1.0    9.80    0.04 12.80    3.25 0.06    0.000
[CN=37.0              ]
[ N = 3.0:Tp 0.69]
```

*

```
V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV     I  SSSSS  UUUUU  A  A  LLLLL
```

```
   OOO  TTTT  TTTT  H  H  Y  Y  M  M  OOO  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
   OOO  T  T  H  H  Y  Y  M  M  OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d1d6a4d7-748e-4f07-815c-56da0f2877f2\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d1d6a4d7-748e-4f07-815c-56da0f2877f2\sce
```

DATE: 07-28-2024

TIME: 08:19:23

USER:

COMMENTS: _____

```
*****
** SIMULATION : 2Yr 4Hr CHI **
*****
```

W/E COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
		min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

CHIC STORM 5.0

[Ptot= 33.76 mm]

*

```
** CALIB NASHYD      0101  1  1.0    9.80    0.02  2.40    1.38 0.04    0.000
[CN=37.0              ]
[ N = 3.0:Tp 0.69]
```

*

```
V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV     I  SSSSS  UUUUU  A  A  LLLLL
```

SAR-23058 - Pre-Dev-PF - NasHyd 101 Summary Outputs

```
      000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
      O   O   T       T   H   H   Y   Y   MM MM   O   O
      O   O   T       T   H   H   Y   M   M   O   O
      000   T       T   H   H   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6d553e82-4690-47f8-b686-b08cc1b5ac40\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6d553e82-4690-47f8-b686-b08cc1b5ac40\sce

DATE: 07-28-2024 TIME: 08:19:21

USER:

COMMENTS: _____

** SIMULATION : 2Yr 6Hr SCS **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 36.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\3d9243d4-15db-439a-b937-c5

remark: 2Yr 6Hr SCS

*
** CALIB NASHYD 0101 1 1.0 9.80 0.02 3.90 1.70 0.05 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]
*
=====

V	V	I	SSSS	U	U	A	L				
V	V	I	SS	U	U	A A	L				
V	V	I	SS	U	U	AAAAA	L				
V	V	I	SS	U	U	A A	L				
VV	I	SSSS	UUUUU	A	A	LLLLL					

(v 6.2.2015)

```
      000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
      O   O   T       T   H   H   Y   Y   MM MM   O   O
      O   O   T       T   H   H   Y   M   M   O   O
      000   T       T   H   H   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\55ad73c7-d4bb-4652-a2e6-e8d9c3da3973\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\55ad73c7-d4bb-4652-a2e6-e8d9c3da3973\sce

DATE: 07-28-2024

TIME: 08:19:21

USER:

COMMENTS: _____

** SIMULATION : 50Yr 12Hr SCS **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 91.20 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\bc1082f4-5cd7-425b-86bf-5c

remark: 50Yr 12Hr SCS

*
** CALIB NASHYD 0101 1 1.0 9.80 0.15 6.78 13.23 0.15 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]
*
=====

V	V	I	SSSS	U	U	A	L				
V	V	I	SS	U	U	A A	L				
V	V	I	SS	U	U	AAAAA	L				
V	V	I	SS	U	U	A A	L				
VV	I	SSSS	UUUUU	A	A	LLLLL					

(v 6.2.2015)

```
      000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
      O   O   T       T   H   H   Y   Y   MM MM   O   O
      O   O   T       T   H   H   Y   M   M   O   O
      000   T       T   H   H   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\f66f9b39-8bb9-4682-a6b0-b5238821137e\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5

SAR-23058 - Pre-Dev-PF - NasHyd 101 Summary Outputs

\3125fb1d-679a-4570-ba71-719dfceb268e\f66f9b39-8bb9-4682-a6b0-b5238821137e\sce

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

** SIMULATION : 50Yr 24Hr SCS **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	READ STORM				5.0						
	[Ptot=112.80 mm]										
	fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-										
	ed1213ff5857\ffaa7571-96ce-46da-9f02-a1										
	remark: 50Yr 24Hr SCS										
*											
**	CALIB NASHYD	0101	1	1.0	9.80		0.20	12.77	15.18	0.13	0.000
	[CN=37.0]										
	[N = 3.0:Tp 0.69]										
*											

=====

COMMENTS: _____

** SIMULATION : 50Yr 4Hr CHI **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	CHIC STORM				5.0						
	[Ptot= 65.66 mm]										
*											
**	CALIB NASHYD	0101	1	1.0	9.80		0.09	2.30	6.64	0.10	0.000
	[CN=37.0]										
	[N = 3.0:Tp 0.69]										
*											

=====

V	V	I	SSSSS	U	U	A	L					(v 6.2.2015)
V	V	I	SS	U	U	A	A	L				
V	V	I	SS	U	U	AAAAA	L					
V	V	I	SS	U	U	A	A	L				
VV		I	SSSSS	UUUUU	A	A	LLLLL					

000	TTTTT	TTTTT	H	H	Y	Y	M	M	000	TM	
O	O	T	T	H	H	Y	Y	MM	MM	O	O
O	O	T	T	H	H	Y	M	M	O	O	
000	T	T	H	H	Y	M	M	O	O		

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\0923432b-219f-4496-b1e5-b3767339e30c\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\0923432b-219f-4496-b1e5-b3767339e30c\sce

DATE: 07-28-2024

TIME: 08:19:21

USER:

COMMENTS: _____

** SIMULATION : 50Yr 6Hr SCS **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

SAR-23058 - Pre-Dev-PF - NasHyd 101 Summary Outputs

```
-----
READ STORM                    5.0
[ Ptot= 73.80 mm ]
fname      : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\6b1b93e2-fde6-4d0f-9dea-21
remark: 50Yr 6Hr SCS
*
** CALIB NASHYD              0101 1 1.0   9.80   0.11  3.83   8.53 0.12   0.000
[CN=37.0 ]
[ N = 3.0:Tp 0.69]
```

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

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

(v 6.2.2015)

```
000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8ac5312-8bb1-42aa-b3ad-6bd8b8598628\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8ac5312-8bb1-42aa-b3ad-6bd8b8598628\sce
```

DATE: 07-28-2024 TIME: 08:19:22

USER:

COMMENTS: _____

```
*****
** SIMULATION : 5Yr 12Hr SCS **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	' cms	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	----------	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

```
-----
READ STORM                    5.0
[ Ptot= 60.00 mm ]
fname      : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\c1186f33-5b80-4f09-8161-13
remark: 5Yr 12Hr SCS
*
```

```
** CALIB NASHYD              0101 1 1.0   9.80   0.06  6.80   5.45 0.09   0.000
```

```
[CN=37.0 ]
[ N = 3.0:Tp 0.69]
```

*

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

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

(v 6.2.2015)

```
000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\29912128-045b-4412-9b57-24c43ec80c9d\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\29912128-045b-4412-9b57-24c43ec80c9d\sce
```

DATE: 07-28-2024

TIME: 08:19:22

USER:

COMMENTS: _____

```
*****
** SIMULATION : 5Yr 24Hr SCS **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	' cms	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	----------	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

```
-----
READ STORM                    5.0
[ Ptot= 74.40 mm ]
fname      : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\78b5d581-9d7c-4244-9fc3-96
remark: 5Yr 24Hr SCS
*
```

```
** CALIB NASHYD              0101 1 1.0   9.80   0.08 12.78   6.37 0.09   0.000
[CN=37.0 ]
[ N = 3.0:Tp 0.69]
```

*

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

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

(v 6.2.2015)

```
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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```

***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\67b0ca63-71b1-47aa-b9b5-d63783cd1f38\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\67b0ca63-71b1-47aa-b9b5-d63783cd1f38\sce
```

DATE: 07-28-2024 TIME: 08:19:22

USER: _____

COMMENTS: _____

```
*****
** SIMULATION : 5Yr 4Hr CHI **
*****

W/E COMMAND          HYD ID  DT      AREA  '  Qpeak Tpeak  R.V. R.C.  Qbase
                        min      ha    '   cms  hrs   mm   cms

START @ 0.00 hrs
-----
CHIC STORM              5.0
[ Ptot= 44.07 mm ]
*
** CALIB NASHYD          0101  1  1.0    9.80    0.04  2.35    2.68 0.06    0.000
[CN=37.0 ]
[ N = 3.0:Tp 0.69]
*
=====
=====
```

```
V V I SSSS U U A A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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```

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***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\c255cca1-5fe3-4881-af36-e6dec14c4b18\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\c255cca1-5fe3-4881-af36-e6dec14c4b18\sce
```

DATE: 07-28-2024 TIME: 08:19:21

USER: _____

COMMENTS: _____

```
*****
** SIMULATION : 5Yr 6Hr SCS **
*****

W/E COMMAND          HYD ID  DT      AREA  '  Qpeak Tpeak  R.V. R.C.  Qbase
                        min      ha    '   cms  hrs   mm   cms

START @ 0.00 hrs
-----
READ STORM              5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD          0101  1  1.0    9.80    0.04  3.87    3.38 0.07    0.000
[CN=37.0 ]
[ N = 3.0:Tp 0.69]
*
=====
=====
```

```
V V I SSSS U U A A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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```

***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
```

\3125fb1d-679a-4570-ba71-719dfceb268e\404cb88f-8ae2-407a-88b9-cb7e9b55cc9c\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\404cb88f-8ae2-407a-88b9-cb7e9b55cc9c\sce

DATE: 07-28-2024 TIME: 08:19:23

USER:

COMMENTS: _____

** SIMULATION : Timmins **

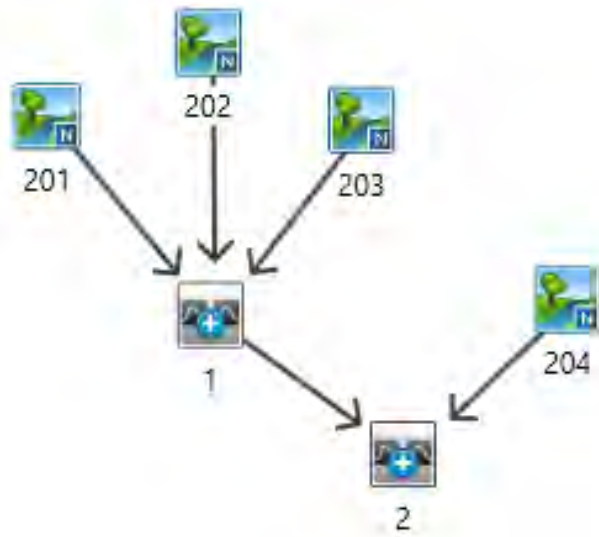
W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-------------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 60.0
[Ptot=193.00 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\3a061f75-9732-4a43-bd68-
ed1213ff5857\9abc7c04-e81e-4a93-b69b-73
remark: Timmins

*
** CALIB NASHYD 0101 1 1.0 9.80 0.29 7.45 55.10 0.29 0.000
[CN=37.0]
[N = 3.0:Tp 0.69]
*

Post-Dev-PF OTTHYMO Schematic



SAR-23058 - Post-Development OTTHYMO Detailed Outputs

```
=====
=====
V   V   I   SSSSS U   U   A   L   (v 6.2.2015)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV      I   SSSSS UUUUU A   A   LLLLL

   OOO   TTTT   TTTT   H   H   Y   Y   M   M   OOO   TM
O   O   T   T   H   H   Y   Y   MM  MM  O   O
O   O   T   T   H   H   Y   Y   M   M   O   O
   OOO   T   T   H   H   Y   M   M   OOO

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```

***** D E T A I L E D O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce
```

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

```
*****
** SIMULATION : 100Yr 24Hr SCS **
*****
```

READ STORM	Filename: C:\Users\mgallant\AppData\Local\Temp\
Ptotal=122.40 mm	e151c979-d7a0-4ec4-9470-90f2c3c758b0\432e1e82
	Comments: 100Yr 24Hr SCS

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	0.00	6.08	2.20	12.17	17.63	18.25	2.20
0.08	1.35	6.17	2.20	12.25	17.63	18.33	2.20
0.17	1.35	6.25	2.20	12.33	17.63	18.42	2.20
0.25	1.35	6.33	2.20	12.42	17.63	18.50	2.20
0.33	1.35	6.42	2.20	12.50	17.63	18.58	2.20
0.42	1.35	6.50	2.20	12.58	9.06	18.67	2.20
0.50	1.35	6.58	2.20	12.67	9.06	18.75	2.20
0.58	1.35	6.67	2.20	12.75	9.06	18.83	2.20
0.67	1.35	6.75	2.20	12.83	9.06	18.92	2.20
0.75	1.35	6.83	2.20	12.92	9.06	19.00	2.20
0.83	1.35	6.92	2.20	13.00	9.06	19.08	2.20
0.92	1.35	7.00	2.20	13.08	6.61	19.17	2.20

1.00	1.35	7.08	2.69	13.17	6.61	19.25	2.20
1.08	1.35	7.17	2.69	13.25	6.61	19.33	2.20
1.17	1.35	7.25	2.69	13.33	6.61	19.42	2.20
1.25	1.35	7.33	2.69	13.42	6.61	19.50	2.20
1.33	1.35	7.42	2.69	13.50	6.61	19.58	2.20
1.42	1.35	7.50	2.69	13.58	5.14	19.67	2.20
1.50	1.35	7.58	2.69	13.67	5.14	19.75	2.20
1.58	1.35	7.67	2.69	13.75	5.14	19.83	2.20
1.67	1.35	7.75	2.69	13.83	5.14	19.92	2.20
1.75	1.35	7.83	2.69	13.92	5.14	20.00	2.20
1.83	1.35	7.92	2.69	14.00	5.14	20.08	1.47
1.92	1.35	8.00	2.69	14.08	3.67	20.17	1.47
2.00	1.35	8.08	3.18	14.17	3.67	20.25	1.47
2.08	1.59	8.17	3.18	14.25	3.67	20.33	1.47
2.17	1.59	8.25	3.18	14.33	3.67	20.42	1.47
2.25	1.59	8.33	3.18	14.42	3.67	20.50	1.47
2.33	1.59	8.42	3.18	14.50	3.67	20.58	1.47
2.42	1.59	8.50	3.18	14.58	3.67	20.67	1.47
2.50	1.59	8.58	3.43	14.67	3.67	20.75	1.47
2.58	1.59	8.67	3.43	14.75	3.67	20.83	1.47
2.67	1.59	8.75	3.43	14.83	3.67	20.92	1.47
2.75	1.59	8.83	3.43	14.92	3.67	21.00	1.47
2.83	1.59	8.92	3.43	15.00	3.67	21.08	1.47
2.92	1.59	9.00	3.43	15.08	3.67	21.17	1.47
3.00	1.59	9.08	3.92	15.17	3.67	21.25	1.47
3.08	1.59	9.17	3.92	15.25	3.67	21.33	1.47
3.17	1.59	9.25	3.92	15.33	3.67	21.42	1.47
3.25	1.59	9.33	3.92	15.42	3.67	21.50	1.47
3.33	1.59	9.42	3.92	15.50	3.67	21.58	1.47
3.42	1.59	9.50	3.92	15.58	3.67	21.67	1.47
3.50	1.59	9.58	4.41	15.67	3.67	21.75	1.47
3.58	1.59	9.67	4.41	15.75	3.67	21.83	1.47
3.67	1.59	9.75	4.41	15.83	3.67	21.92	1.47
3.75	1.59	9.83	4.41	15.92	3.67	22.00	1.47
3.83	1.59	9.92	4.41	16.00	3.67	22.08	1.47
3.92	1.59	10.00	4.41	16.08	2.20	22.17	1.47
4.00	1.59	10.08	5.63	16.17	2.20	22.25	1.47
4.08	1.96	10.17	5.63	16.25	2.20	22.33	1.47
4.17	1.96	10.25	5.63	16.33	2.20	22.42	1.47
4.25	1.96	10.33	5.63	16.42	2.20	22.50	1.47
4.33	1.96	10.42	5.63	16.50	2.20	22.58	1.47
4.42	1.96	10.50	5.63	16.58	2.20	22.67	1.47
4.50	1.96	10.58	7.59	16.67	2.20	22.75	1.47
4.58	1.96	10.67	7.59	16.75	2.20	22.83	1.47
4.67	1.96	10.75	7.59	16.83	2.20	22.92	1.47
4.75	1.96	10.83	7.59	16.92	2.20	23.00	1.47
4.83	1.96	10.92	7.59	17.00	2.20	23.08	1.47
4.92	1.96	11.00	7.59	17.08	2.20	23.17	1.47
5.00	1.96	11.08	11.75	17.17	2.20	23.25	1.47
5.08	1.96	11.17	11.75	17.25	2.20	23.33	1.47
5.17	1.96	11.25	11.75	17.33	2.20	23.42	1.47
5.25	1.96	11.33	11.75	17.42	2.20	23.50	1.47
5.33	1.96	11.42	11.75	17.50	2.20	23.58	1.47
5.42	1.96	11.50	11.75	17.58	2.20	23.67	1.47
5.50	1.96	11.58	36.23	17.67	2.20	23.75	1.47
5.58	1.96	11.67	36.23	17.75	2.20	23.83	1.47
5.67	1.96	11.75	36.23	17.83	2.20	23.92	1.47
5.75	1.96	11.83	149.82	17.92	2.20	24.00	1.47
5.83	1.96	11.92	149.82	18.00	2.20		
5.92	1.96	12.00	149.82	18.08	2.20		
6.00	1.96	12.08	17.63	18.17	2.20		

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```
-----
| CALIB
| NASHYD ( 0201) | Area (ha)= 2.61 Curve Number (CN)= 43.0
| ID= 1 DT= 5.0 min | Ia (mm)= 8.52 # of Linear Res.(N)= 3.00
| U.H. Tp(hrs)= 0.44
-----
```

Unit Hyd Qpeak (cms)= 0.227

```
PEAK FLOW (cms)= 0.105 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 28.780
TOTAL RAINFALL (mm)= 122.400
RUNOFF COEFFICIENT = 0.235
```

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

```
-----
| CALIB
| NASHYD ( 0202) | Area (ha)= 5.22 Curve Number (CN)= 59.0
| ID= 1 DT= 5.0 min | Ia (mm)= 4.96 # of Linear Res.(N)= 3.00
| U.H. Tp(hrs)= 0.56
-----
```

Unit Hyd Qpeak (cms)= 0.356

```
PEAK FLOW (cms)= 0.296 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 46.919
TOTAL RAINFALL (mm)= 122.400
RUNOFF COEFFICIENT = 0.383
```

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

```
-----
| CALIB
| NASHYD ( 0203) | Area (ha)= 1.03 Curve Number (CN)= 64.0
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
| U.H. Tp(hrs)= 0.13
-----
```

Unit Hyd Qpeak (cms)= 0.302

```
PEAK FLOW (cms)= 0.179 (i)
TIME TO PEAK (hrs)= 12.083
RUNOFF VOLUME (mm)= 52.430
TOTAL RAINFALL (mm)= 122.400
RUNOFF COEFFICIENT = 0.428
```

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

```
-----
| ADD HYD ( 0001) |
| 1 + 2 = 3 |
-----
ID1= 1 ( 0201): AREA (ha) QPEAK (cms) TPEAK (hrs) R.V. (mm)
+ ID2= 2 ( 0202): 2.61 0.105 12.42 28.78
=====
ID = 3 ( 0001): 5.22 0.296 12.58 46.92
=====
ID = 3 ( 0001): 7.84 0.397 12.50 40.87
=====
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0001) |
| 3 + 2 = 1 |
-----
ID1= 3 ( 0001): AREA (ha) QPEAK (cms) TPEAK (hrs) R.V. (mm)
+ ID2= 2 ( 0203): 7.84 0.397 12.50 40.87
=====
ID = 1 ( 0001): 1.03 0.179 12.08 52.43
=====
ID = 1 ( 0001): 8.86 0.432 12.42 42.21
=====
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| CALIB
| NASHYD ( 0204) | Area (ha)= 0.94 Curve Number (CN)= 48.0
| ID= 1 DT= 5.0 min | Ia (mm)= 5.13 # of Linear Res.(N)= 3.00
| U.H. Tp(hrs)= 0.31
-----
```

Unit Hyd Qpeak (cms)= 0.116

```
PEAK FLOW (cms)= 0.060 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 35.031
TOTAL RAINFALL (mm)= 122.400
RUNOFF COEFFICIENT = 0.286
```

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

```
-----
| ADD HYD ( 0002) |
| 1 + 2 = 3 |
-----
ID1= 1 ( 0001): AREA (ha) QPEAK (cms) TPEAK (hrs) R.V. (mm)
+ ID2= 2 ( 0204): 8.86 0.432 12.42 42.21
=====
ID = 3 ( 0002): 0.94 0.060 12.25 35.03
=====
ID = 3 ( 0002): 9.80 0.485 12.42 41.52
=====
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
=====
V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
```

```
000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000
```

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\vojn.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce

SAR-23058 - Post-Development OTTHYMO Detailed Outputs

Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce

DATE: 07-28-2024

TIME: 08:21:38

USER:

COMMENTS: _____

** SIMULATION : 25mm 4Hr CHI **

CHICAGO STORM
Ptotal= 25.00 mm

IDF curve parameters: A= 598.150
B= 6.750
C= 0.828
used in: INTENSITY = $A / (t + B)^C$
Duration of storm = 4.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	1.41	1.00	13.71	2.00	3.64	3.00	1.70
0.17	1.64	1.17	57.99	2.17	3.04	3.17	1.57
0.33	1.96	1.33	18.26	2.33	2.62	3.33	1.46
0.50	2.46	1.50	9.19	2.50	2.30	3.50	1.36
0.67	3.34	1.67	6.09	2.67	2.06	3.67	1.28
0.83	5.31	1.83	4.55	2.83	1.86	3.83	1.21

CALIB
NASHYD (0201)
ID= 1 DT= 5.0 min

Area (ha)= 2.61 Curve Number (CN)= 43.0
Ia (mm)= 8.52 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.44

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	1.41	1.083	13.71	2.083	3.64	3.08	1.70
0.167	1.41	1.167	13.71	2.167	3.64	3.17	1.70
0.250	1.64	1.250	57.99	2.250	3.04	3.25	1.57
0.333	1.64	1.333	57.99	2.333	3.04	3.33	1.57
0.417	1.96	1.417	18.26	2.417	2.62	3.42	1.46
0.500	1.96	1.500	18.26	2.500	2.62	3.50	1.46
0.583	2.46	1.583	9.19	2.583	2.30	3.58	1.36
0.667	2.46	1.667	9.19	2.667	2.30	3.67	1.36
0.750	3.34	1.750	6.09	2.750	2.06	3.75	1.28
0.833	3.34	1.833	6.09	2.833	2.06	3.83	1.28
0.917	5.31	1.917	4.55	2.917	1.86	3.92	1.21
1.000	5.31	2.000	4.55	3.000	1.86	4.00	1.21

Unit Hyd Qpeak (cms)= 0.227

PEAK FLOW (cms)= 0.003 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 0.769
TOTAL RAINFALL (mm)= 25.000
RUNOFF COEFFICIENT = 0.031

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

CALIB
NASHYD (0202)
ID= 1 DT= 5.0 min

Area (ha)= 5.22 Curve Number (CN)= 59.0
Ia (mm)= 4.96 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.56

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	1.41	1.083	13.71	2.083	3.64	3.08	1.70
0.167	1.41	1.167	13.71	2.167	3.64	3.17	1.70
0.250	1.64	1.250	57.99	2.250	3.04	3.25	1.57
0.333	1.64	1.333	57.99	2.333	3.04	3.33	1.57
0.417	1.96	1.417	18.26	2.417	2.62	3.42	1.46
0.500	1.96	1.500	18.26	2.500	2.62	3.50	1.46
0.583	2.46	1.583	9.19	2.583	2.30	3.58	1.36
0.667	2.46	1.667	9.19	2.667	2.30	3.67	1.36
0.750	3.34	1.750	6.09	2.750	2.06	3.75	1.28
0.833	3.34	1.833	6.09	2.833	2.06	3.83	1.28
0.917	5.31	1.917	4.55	2.917	1.86	3.92	1.21
1.000	5.31	2.000	4.55	3.000	1.86	4.00	1.21

Unit Hyd Qpeak (cms)= 0.356

PEAK FLOW (cms)= 0.016 (i)
TIME TO PEAK (hrs)= 2.083
RUNOFF VOLUME (mm)= 2.043
TOTAL RAINFALL (mm)= 25.000
RUNOFF COEFFICIENT = 0.082

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

CALIB
NASHYD (0203)
ID= 1 DT= 5.0 min

Area (ha)= 1.03 Curve Number (CN)= 64.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.13

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	1.41	1.083	13.71	2.083	3.64	3.08	1.70
0.167	1.41	1.167	13.71	2.167	3.64	3.17	1.70
0.250	1.64	1.250	57.99	2.250	3.04	3.25	1.57
0.333	1.64	1.333	57.99	2.333	3.04	3.33	1.57

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0.417	1.96	1.417	18.26	2.417	2.62	3.42	1.46
0.500	1.96	1.500	18.26	2.500	2.62	3.50	1.46
0.583	2.46	1.583	9.19	2.583	2.30	3.58	1.36
0.667	2.46	1.667	9.19	2.667	2.30	3.67	1.36
0.750	3.34	1.750	6.09	2.750	2.06	3.75	1.28
0.833	3.34	1.833	6.09	2.833	2.06	3.83	1.28
0.917	5.31	1.917	4.55	2.917	1.86	3.92	1.21
1.000	5.31	2.000	4.55	3.000	1.86	4.00	1.21

Unit Hyd Qpeak (cms)= 0.302

PEAK FLOW (cms)= 0.008 (i)
TIME TO PEAK (hrs)= 1.500
RUNOFF VOLUME (mm)= 2.431
TOTAL RAINFALL (mm)= 25.000
RUNOFF COEFFICIENT = 0.097

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

ADD HYD (0001)				
1 + 2 = 3				
ID1= 1 (0201):	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
+ ID2= 2 (0202):	2.61	0.003	2.00	0.77
	5.22	0.016	2.08	2.04
ID = 3 (0001):	7.84	0.019	2.08	1.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0001)				
3 + 2 = 1				
ID1= 3 (0001):	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
+ ID2= 2 (0203):	7.84	0.019	2.08	1.62
	1.03	0.008	1.50	2.43
ID = 1 (0001):	8.86	0.022	2.00	1.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (0204)	Area (ha)=	0.94	Curve Number (CN)= 48.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.13	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.31	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	1.41	1.083	13.71	2.083	3.64	3.08	1.70
0.167	1.41	1.167	13.71	2.167	3.64	3.17	1.70
0.250	1.64	1.250	57.99	2.250	3.04	3.25	1.57
0.333	1.64	1.333	57.99	2.333	3.04	3.33	1.57
0.417	1.96	1.417	18.26	2.417	2.62	3.42	1.46
0.500	1.96	1.500	18.26	2.500	2.62	3.50	1.46
0.583	2.46	1.583	9.19	2.583	2.30	3.58	1.36
0.667	2.46	1.667	9.19	2.667	2.30	3.67	1.36

0.750	3.34	1.750	6.09	2.750	2.06	3.75	1.28
0.833	3.34	1.833	6.09	2.833	2.06	3.83	1.28
0.917	5.31	1.917	4.55	2.917	1.86	3.92	1.21
1.000	5.31	2.000	4.55	3.000	1.86	4.00	1.21

Unit Hyd Qpeak (cms)= 0.116

PEAK FLOW (cms)= 0.003 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 1.337
TOTAL RAINFALL (mm)= 25.000
RUNOFF COEFFICIENT = 0.053

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

ADD HYD (0002)				
1 + 2 = 3				
ID1= 1 (0001):	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
+ ID2= 2 (0204):	8.86	0.022	2.00	1.71
	0.94	0.003	1.75	1.34
ID = 3 (0002):	9.80	0.024	2.00	1.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
OOO T T H H Y Y M M OOO

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\5693b3a-a20b-451b-9840-a9767b2e4492\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\5693b3a-a20b-451b-9840-a9767b2e4492\sce

DATE: 07-28-2024

TIME: 08:21:36

USER:

SAR-23058 - Post-Development OTTHYMO Detailed Outputs

COMMENTS: _____

** SIMULATION : Timmins **

READ STORM	Filename: C:\Users\mgallant\AppData\Local\Temp\ei51c979-d7a0-4ec4-9470-90f2c3c758b0\9abc7c04
Ptotal=193.00 mm	Comments: Timmins

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.00	15.44	3.00	1.93	6.00	44.39	9.00	11.58
1.00	19.30	4.00	5.79	7.00	19.30	10.00	13.51
2.00	11.58	5.00	19.30	8.00	23.16	11.00	7.72

CALIB	Area (ha)= 2.61	Curve Number (CN)= 43.0
NASHYD (0201)	Ia (mm)= 8.52	# of Linear Res.(N)= 3.00
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.44	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	15.44	3.083	1.93	6.083	44.39	9.08	11.58
0.167	15.44	3.167	1.93	6.167	44.39	9.17	11.58
0.250	15.44	3.250	1.93	6.250	44.39	9.25	11.58
0.333	15.44	3.333	1.93	6.333	44.39	9.33	11.58
0.417	15.44	3.417	1.93	6.417	44.39	9.42	11.58
0.500	15.44	3.500	1.93	6.500	44.39	9.50	11.58
0.583	15.44	3.583	1.93	6.583	44.39	9.58	11.58
0.667	15.44	3.667	1.93	6.667	44.39	9.67	11.58
0.750	15.44	3.750	1.93	6.750	44.39	9.75	11.58
0.833	15.44	3.833	1.93	6.833	44.39	9.83	11.58
0.917	15.44	3.917	1.93	6.917	44.39	9.92	11.58
1.000	15.44	4.000	1.93	7.000	44.39	10.00	11.58
1.083	19.30	4.083	5.79	7.083	19.30	10.08	13.51
1.167	19.30	4.167	5.79	7.167	19.30	10.17	13.51
1.250	19.30	4.250	5.79	7.250	19.30	10.25	13.51
1.333	19.30	4.333	5.79	7.333	19.30	10.33	13.51
1.417	19.30	4.417	5.79	7.417	19.30	10.42	13.51
1.500	19.30	4.500	5.79	7.500	19.30	10.50	13.51
1.583	19.30	4.583	5.79	7.583	19.30	10.58	13.51
1.667	19.30	4.667	5.79	7.667	19.30	10.67	13.51
1.750	19.30	4.750	5.79	7.750	19.30	10.75	13.51
1.833	19.30	4.833	5.79	7.833	19.30	10.83	13.51
1.917	19.30	4.917	5.79	7.917	19.30	10.92	13.51
2.000	19.30	5.000	5.79	8.000	19.30	11.00	13.51
2.083	11.58	5.083	19.30	8.083	23.16	11.08	7.72

2.167	11.58	5.167	19.30	8.167	23.16	11.17	7.72
2.250	11.58	5.250	19.30	8.250	23.16	11.25	7.72
2.333	11.58	5.333	19.30	8.333	23.16	11.33	7.72
2.417	11.58	5.417	19.30	8.417	23.16	11.42	7.72
2.500	11.58	5.500	19.30	8.500	23.16	11.50	7.72
2.583	11.58	5.583	19.30	8.583	23.16	11.58	7.72
2.667	11.58	5.667	19.30	8.667	23.16	11.67	7.72
2.750	11.58	5.750	19.30	8.750	23.16	11.75	7.72
2.833	11.58	5.833	19.30	8.833	23.16	11.83	7.72
2.917	11.58	5.917	19.30	8.917	23.16	11.92	7.72
3.000	11.58	6.000	19.30	9.000	23.16	12.00	7.72

Unit Hyd Qpeak (cms)= 0.227

PEAK FLOW	(cms)= 0.111 (i)
TIME TO PEAK	(hrs)= 7.167
RUNOFF VOLUME	(mm)= 65.294
TOTAL RAINFALL	(mm)= 193.000
RUNOFF COEFFICIENT	= 0.338

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

CALIB	Area (ha)= 5.22	Curve Number (CN)= 59.0
NASHYD (0202)	Ia (mm)= 4.96	# of Linear Res.(N)= 3.00
ID= 1 DT= 5.0 min	U.H. Tp(hrs)= 0.56	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	15.44	3.083	1.93	6.083	44.39	9.08	11.58
0.167	15.44	3.167	1.93	6.167	44.39	9.17	11.58
0.250	15.44	3.250	1.93	6.250	44.39	9.25	11.58
0.333	15.44	3.333	1.93	6.333	44.39	9.33	11.58
0.417	15.44	3.417	1.93	6.417	44.39	9.42	11.58
0.500	15.44	3.500	1.93	6.500	44.39	9.50	11.58
0.583	15.44	3.583	1.93	6.583	44.39	9.58	11.58
0.667	15.44	3.667	1.93	6.667	44.39	9.67	11.58
0.750	15.44	3.750	1.93	6.750	44.39	9.75	11.58
0.833	15.44	3.833	1.93	6.833	44.39	9.83	11.58
0.917	15.44	3.917	1.93	6.917	44.39	9.92	11.58
1.000	15.44	4.000	1.93	7.000	44.39	10.00	11.58
1.083	19.30	4.083	5.79	7.083	19.30	10.08	13.51
1.167	19.30	4.167	5.79	7.167	19.30	10.17	13.51
1.250	19.30	4.250	5.79	7.250	19.30	10.25	13.51
1.333	19.30	4.333	5.79	7.333	19.30	10.33	13.51
1.417	19.30	4.417	5.79	7.417	19.30	10.42	13.51
1.500	19.30	4.500	5.79	7.500	19.30	10.50	13.51
1.583	19.30	4.583	5.79	7.583	19.30	10.58	13.51
1.667	19.30	4.667	5.79	7.667	19.30	10.67	13.51
1.750	19.30	4.750	5.79	7.750	19.30	10.75	13.51
1.833	19.30	4.833	5.79	7.833	19.30	10.83	13.51
1.917	19.30	4.917	5.79	7.917	19.30	10.92	13.51
2.000	19.30	5.000	5.79	8.000	19.30	11.00	13.51
2.083	11.58	5.083	19.30	8.083	23.16	11.08	7.72
2.167	11.58	5.167	19.30	8.167	23.16	11.17	7.72
2.250	11.58	5.250	19.30	8.250	23.16	11.25	7.72
2.333	11.58	5.333	19.30	8.333	23.16	11.33	7.72
2.417	11.58	5.417	19.30	8.417	23.16	11.42	7.72

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2.500	11.58	5.500	19.30	8.500	23.16	11.50	7.72
2.583	11.58	5.583	19.30	8.583	23.16	11.58	7.72
2.667	11.58	5.667	19.30	8.667	23.16	11.67	7.72
2.750	11.58	5.750	19.30	8.750	23.16	11.75	7.72
2.833	11.58	5.833	19.30	8.833	23.16	11.83	7.72
2.917	11.58	5.917	19.30	8.917	23.16	11.92	7.72
3.000	11.58	6.000	19.30	9.000	23.16	12.00	7.72

Unit Hyd Qpeak (cms)= 0.356

PEAK FLOW (cms)= 0.310 (i)
 TIME TO PEAK (hrs)= 7.250
 RUNOFF VOLUME (mm)= 96.991
 TOTAL RAINFALL (mm)= 193.000
 RUNOFF COEFFICIENT = 0.503

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

CALIB							
NASHYD (0203)	Area (ha)=	1.03	Curve Number (CN)=	64.0			
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)=	3.00			
	U.H. Tp(hrs)=	0.13					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	15.44	3.083	1.93	6.083	44.39	9.08	11.58
0.167	15.44	3.167	1.93	6.167	44.39	9.17	11.58
0.250	15.44	3.250	1.93	6.250	44.39	9.25	11.58
0.333	15.44	3.333	1.93	6.333	44.39	9.33	11.58
0.417	15.44	3.417	1.93	6.417	44.39	9.42	11.58
0.500	15.44	3.500	1.93	6.500	44.39	9.50	11.58
0.583	15.44	3.583	1.93	6.583	44.39	9.58	11.58
0.667	15.44	3.667	1.93	6.667	44.39	9.67	11.58
0.750	15.44	3.750	1.93	6.750	44.39	9.75	11.58
0.833	15.44	3.833	1.93	6.833	44.39	9.83	11.58
0.917	15.44	3.917	1.93	6.917	44.39	9.92	11.58
1.000	15.44	4.000	1.93	7.000	44.39	10.00	11.58
1.083	19.30	4.083	5.79	7.083	19.30	10.08	13.51
1.167	19.30	4.167	5.79	7.167	19.30	10.17	13.51
1.250	19.30	4.250	5.79	7.250	19.30	10.25	13.51
1.333	19.30	4.333	5.79	7.333	19.30	10.33	13.51
1.417	19.30	4.417	5.79	7.417	19.30	10.42	13.51
1.500	19.30	4.500	5.79	7.500	19.30	10.50	13.51
1.583	19.30	4.583	5.79	7.583	19.30	10.58	13.51
1.667	19.30	4.667	5.79	7.667	19.30	10.67	13.51
1.750	19.30	4.750	5.79	7.750	19.30	10.75	13.51
1.833	19.30	4.833	5.79	7.833	19.30	10.83	13.51
1.917	19.30	4.917	5.79	7.917	19.30	10.92	13.51
2.000	19.30	5.000	5.79	8.000	19.30	11.00	13.51
2.083	11.58	5.083	19.30	8.083	23.16	11.08	7.72
2.167	11.58	5.167	19.30	8.167	23.16	11.17	7.72
2.250	11.58	5.250	19.30	8.250	23.16	11.25	7.72
2.333	11.58	5.333	19.30	8.333	23.16	11.33	7.72
2.417	11.58	5.417	19.30	8.417	23.16	11.42	7.72
2.500	11.58	5.500	19.30	8.500	23.16	11.50	7.72
2.583	11.58	5.583	19.30	8.583	23.16	11.58	7.72
2.667	11.58	5.667	19.30	8.667	23.16	11.67	7.72
2.750	11.58	5.750	19.30	8.750	23.16	11.75	7.72

2.833	11.58	5.833	19.30	8.833	23.16	11.83	7.72
2.917	11.58	5.917	19.30	8.917	23.16	11.92	7.72
3.000	11.58	6.000	19.30	9.000	23.16	12.00	7.72

Unit Hyd Qpeak (cms)= 0.302

PEAK FLOW (cms)= 0.084 (i)
 TIME TO PEAK (hrs)= 7.000
 RUNOFF VOLUME (mm)= 105.761
 TOTAL RAINFALL (mm)= 193.000
 RUNOFF COEFFICIENT = 0.548

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

----- ADD HYD (0001) -----					
1 + 2 = 3					
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0201):	2.61	0.111	7.17	65.29	
+ ID2= 2 (0202):	5.22	0.310	7.25	96.99	
=====					
ID = 3 (0001):	7.84	0.419	7.17	86.42	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

----- ADD HYD (0001) -----					
3 + 2 = 1					
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0001):	7.84	0.419	7.17	86.42	
+ ID2= 2 (0203):	1.03	0.084	7.00	105.76	
=====					
ID = 1 (0001):	8.86	0.482	7.08	88.66	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB							
NASHYD (0204)	Area (ha)=	0.94	Curve Number (CN)=	48.0			
ID= 1 DT= 5.0 min	Ia (mm)=	5.13	# of Linear Res.(N)=	3.00			
	U.H. Tp(hrs)=	0.31					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	15.44	3.083	1.93	6.083	44.39	9.08	11.58
0.167	15.44	3.167	1.93	6.167	44.39	9.17	11.58
0.250	15.44	3.250	1.93	6.250	44.39	9.25	11.58
0.333	15.44	3.333	1.93	6.333	44.39	9.33	11.58
0.417	15.44	3.417	1.93	6.417	44.39	9.42	11.58
0.500	15.44	3.500	1.93	6.500	44.39	9.50	11.58
0.583	15.44	3.583	1.93	6.583	44.39	9.58	11.58
0.667	15.44	3.667	1.93	6.667	44.39	9.67	11.58
0.750	15.44	3.750	1.93	6.750	44.39	9.75	11.58
0.833	15.44	3.833	1.93	6.833	44.39	9.83	11.58
0.917	15.44	3.917	1.93	6.917	44.39	9.92	11.58
1.000	15.44	4.000	1.93	7.000	44.39	10.00	11.58
1.083	19.30	4.083	5.79	7.083	19.30	10.08	13.51

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1.167	19.30	4.167	5.79	7.167	19.30	10.17	13.51
1.250	19.30	4.250	5.79	7.250	19.30	10.25	13.51
1.333	19.30	4.333	5.79	7.333	19.30	10.33	13.51
1.417	19.30	4.417	5.79	7.417	19.30	10.42	13.51
1.500	19.30	4.500	5.79	7.500	19.30	10.50	13.51
1.583	19.30	4.583	5.79	7.583	19.30	10.58	13.51
1.667	19.30	4.667	5.79	7.667	19.30	10.67	13.51
1.750	19.30	4.750	5.79	7.750	19.30	10.75	13.51
1.833	19.30	4.833	5.79	7.833	19.30	10.83	13.51
1.917	19.30	4.917	5.79	7.917	19.30	10.92	13.51
2.000	19.30	5.000	5.79	8.000	19.30	11.00	13.51
2.083	11.58	5.083	19.30	8.083	23.16	11.08	7.72
2.167	11.58	5.167	19.30	8.167	23.16	11.17	7.72
2.250	11.58	5.250	19.30	8.250	23.16	11.25	7.72
2.333	11.58	5.333	19.30	8.333	23.16	11.33	7.72
2.417	11.58	5.417	19.30	8.417	23.16	11.42	7.72
2.500	11.58	5.500	19.30	8.500	23.16	11.50	7.72
2.583	11.58	5.583	19.30	8.583	23.16	11.58	7.72
2.667	11.58	5.667	19.30	8.667	23.16	11.67	7.72
2.750	11.58	5.750	19.30	8.750	23.16	11.75	7.72
2.833	11.58	5.833	19.30	8.833	23.16	11.83	7.72
2.917	11.58	5.917	19.30	8.917	23.16	11.92	7.72
3.000	11.58	6.000	19.30	9.000	23.16	12.00	7.72

Unit Hyd Qpeak (cms)= 0.116

PEAK FLOW (cms)= 0.050 (i)
 TIME TO PEAK (hrs)= 7.083
 RUNOFF VOLUME (mm)= 76.198
 TOTAL RAINFALL (mm)= 193.000
 RUNOFF COEFFICIENT = 0.395

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

ADD HYD (0002)				
1 + 2 = 3				

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0001):	8.86	0.482	7.08	88.66
+ ID2= 2 (0204):	0.94	0.050	7.08	76.20
=====				
ID = 3 (0002):	9.80	0.533	7.08	87.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```

=====
=====
V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV      I   SSSSS UUUUU A   A   LLLLL

    000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
    O   O   T   T   H   H   Y   Y   MM MM   O   O
    O   O   T   T   H   H   Y   Y   M   M   O   O
    000   T   T   H   H   Y   Y   M   M   000

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```

***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\24fb9953-f4fa-4857-a72d-546448702ef6\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\24fb9953-f4fa-4857-a72d-546448702ef6\sce

```

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

```

*****
** SIMULATION : 100Yr 12Hr SCS **
*****

```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak ' cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	-------------------	--------------	------------	------	--------------

START @ 0.00 hrs

```

-----
READ STORM           5.0
[ Ptot= 99.60 mm ]
fname                : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0201  1  5.0    2.61    0.08    6.42    19.39  0.19    0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]

```

```

*
READ STORM           5.0
[ Ptot= 99.60 mm ]
fname                : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0202  1  5.0    5.22    0.24    6.58    33.03  0.33    0.000
[CN=59.0]

```

[N = 3.0:Tp 0.56]

```

*
READ STORM           5.0
[ Ptot= 99.60 mm ]
fname                : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0203  1  5.0    1.03    0.14    6.08    37.31  0.37    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]

```

```

*
ADD [ 0201+ 0202]    0001  3  5.0    7.84    0.32    6.50    28.48  n/a    0.000

```

```

*
ADD [ 0001+ 0203]    0001  1  5.0    8.86    0.36    6.50    29.51  n/a    0.000

```

```

*
READ STORM           5.0
[ Ptot= 99.60 mm ]
fname                : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0204  1  5.0    0.94    0.05    6.25    24.14  0.24    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]

```

```

*
ADD [ 0001+ 0204]    0002  3  5.0    9.80    0.40    6.42    28.99  n/a    0.000

```

```

=====
=====

```

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV      I   SSSSS UUUUU A   A   LLLLL

```

```

    000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
    O   O   T   T   H   H   Y   Y   MM MM   O   O
    O   O   T   T   H   H   Y   Y   M   M   O   O
    000   T   T   H   H   Y   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce

```

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

** SIMULATION : 100Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.10 12.42 28.78 0.24 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.30 12.58 46.92 0.38 0.000
[CN=59.0]
[N = 3.0:Tp 0.56]

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.18 12.08 52.43 0.43 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.40 12.50 40.87 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.43 12.42 42.21 n/a 0.000

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.06 12.25 35.03 0.29 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.48 12.42 41.52 n/a 0.000

=====

V	V	I	SSSSS	U	U	A	L
V	V	I	SS	U	U	A A	L
V	V	I	SS	U	U	AAAAA	L
V	V	I	SS	U	U	A A	L

(v 6.2.2015)

VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM

O O T T H H Y Y MM MM O O

O O T T H H Y M M O O

000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voindat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6363cb1d-5b6e-41ad-9e51-bf4d586409a5\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6363cb1d-5b6e-41ad-9e51-bf4d586409a5\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 100Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

CHIC STORM 5.0

[Ptot= 71.77 mm]

* ** CALIB NASHYD 0201 1 5.0 2.61 0.05 1.92 10.00 0.14 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

CHIC STORM 5.0

[Ptot= 71.77 mm]

* ** CALIB NASHYD 0202 1 5.0 5.22 0.16 2.08 18.34 0.26 0.000
[CN=59.0]
[N = 3.0:Tp 0.56]

CHIC STORM 5.0

[Ptot= 71.77 mm]

* ** CALIB NASHYD 0203 1 5.0 1.03 0.09 1.50 21.05 0.29 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.21 2.00 15.56 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.24 1.92 16.20 n/a 0.000

* CHIC STORM 5.0

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```

* [ Ptot= 71.77 mm ]
** CALIB NASHYD          0204  1  5.0    0.94    0.03  1.75  12.99 0.18    0.000
  [CN=48.0                ]
  [ N = 3.0:Tp 0.31]
*
* ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.26  1.92  15.89 n/a    0.000
*
=====
=====

V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV   I  SSSSS  UUUUU  A  A  LLLLL

      000  TTTTT  TTTTT  H  H  Y  Y  M  M  000  TM
      0  0  T  T  H  H  Y  Y  MM MM 0  0
      0  0  T  T  H  H  Y  M  M  0  0
      000  T  T  H  H  Y  M  M  000

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```

***** SUMMARY OUTPUT *****

```
Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6e0cbf6c-1e04-4814-92fb-1adc141b2e21\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6e0cbf6c-1e04-4814-92fb-1adc141b2e21\sce
```

TIME: 08:21:35

USER:

COMMENTS:

```
*****
** SIMULATION : 100Yr 6Hr SCS                               **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

```

READ STORM                      5.0
[ Ptot= 81.00 mm ]
fname :                          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS
*
** CALIB NASHYD                 0201 1 5.0    2.61    0.06  3.42 12.84 0.16    0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]
*
```

```

READ STORM                      5.0
[ Ptot= 81.00 mm ]
fname      : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS

```

```
** CALIB NASHYD      0202  1  5.0      5.22      0.20  3.58  22.89 0.28   0.000
  [CN=59.0]
  [ N = 3.0:Tp 0.56]
```

```

READ STORM                      5.0
[ Ptot= 81.00 mm ]
fname                          : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS

```

```
** CALIB NASHYD      0203  1  5.0    1.03    0.12  3.08  26.13 0.32   0.000
  [CN=64.0]
  [ N = 3.0:TD 0.13]
```

ADD	[	0201+	0202]	0001	3	5.0	7.84	0.26	3.58	19.54	n/a	0.000
-----	---	-------	-------	------	---	-----	------	------	------	-------	-----	-------

ADD	[	0001+	0203]	0001	1	5.0	8.86	0.28	3.50	20.30	n/a	0.000
-----	---	-------	-------	------	---	-----	------	------	------	-------	-----	-------

```

READ STORM                      5.0
[ Ptot= 81.00 mm ]
fname      : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS

```

```
** CALIB NASHYD      0204  1  5.0      0.94      0.04  3.25  16.39  0.20      0.000
  [CN=48.0]
  [ N = 3.0;TD 0.31]
```

ADD	[	0001+	0204]	0002	3	5.0	9.80	0.31	3.50	19.93	n/a	0.000
-----	---	-------	-------	------	---	-----	------	------	------	-------	-----	-------

=====

=====

V	V	I	SSSSS	U	U	A	L
V	V	I	SS	U	U	A A	L
V	V	I	SS	U	U	AAAAA	L
V	V	I	SS	U	U	A A	L
VV		I	SSSSS	UUUUU	A	A	LLLLL

000	TTTT	TTTT	H	H	Y	Y	M	M	000	TM
0 0	T	T	H	H	Y	Y	MM	MM	0 0	
0 0	T	T	H	H	Y		M	M	0 0	
000	T	T	H	H	Y		M	M	000	

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***** SUMMARY OUTPUT *****

```
Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename:  C:\Users\mgallant\AppData\Local\Civica\WH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d63f9485-clb1-4596-8ddb-92e07e44f0ba\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\WH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d63f9485-clb1-4596-8ddb-92e07e44f0ba\sce
```

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 10Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	---	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.04 6.42 9.38 0.13 0.000

[CN=43.0]

[N = 3.0:Tp 0.44]

* READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.13 6.58 17.33 0.25 0.000

[CN=59.0]

[N = 3.0:Tp 0.56]

* READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.08 6.08 19.91 0.29 0.000

[CN=64.0]

[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.16 6.58 14.68 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.18 6.50 15.28 n/a 0.000

* READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.02 6.25 12.23 0.18 0.000

[CN=48.0]

[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.20 6.42 14.99 n/a 0.000

*

=====

V	V	I	SSSS	U	U	A	L		(v 6.2.2015)
V	V	I	SS	U	U	A A	L		
V	V	I	SS	U	U	AAAA	L		
V	V	I	SS	U	U	A A	L		
VV		I	SSSS	UUUU	A	A	LLLL		

000	TTTT	TTTT	H	H	Y	Y	M	M	000	TM
O	O	T	T	H	H	Y Y	MM	MM	O	O
O	O	T	T	H	H	Y	M	M	O	O
000	T	T	H	H	Y		M	M	000	

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\505bb0ec-08ab-4108-858f-827df9289884\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\505bb0ec-08ab-4108-858f-827df9289884\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 10Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	---	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 86.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa

remark: 10Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.05 12.42 14.63 0.17 0.000

[CN=43.0]

[N = 3.0:Tp 0.44]

* READ STORM 5.0

[Ptot= 86.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa

remark: 10Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.16 12.58 25.71 0.30 0.000

[CN=59.0]

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
* [ N = 3.0:Tp 0.56]
* READ STORM 5.0
* [ Ptot= 86.40 mm ]
* fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa
* remark: 10Yr 24Hr SCS
** CALIB NASHYD 0203 1 5.0 1.03 0.10 12.08 29.25 0.34 0.000
* [CN=64.0]
* [ N = 3.0:Tp 0.13]
* ADD [ 0201+ 0202] 0001 3 5.0 7.84 0.21 12.50 22.02 n/a 0.000
* ADD [ 0001+ 0203] 0001 1 5.0 8.86 0.23 12.50 22.85 n/a 0.000
* READ STORM 5.0
* [ Ptot= 86.40 mm ]
* fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa
* remark: 10Yr 24Hr SCS
** CALIB NASHYD 0204 1 5.0 0.94 0.03 12.25 18.52 0.21 0.000
* [CN=48.0]
* [ N = 3.0:Tp 0.31]
* ADD [ 0001+ 0204] 0002 3 5.0 9.80 0.26 12.42 22.44 n/a 0.000
=====
=====
```

```
V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
```

```
OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
```

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***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d3636861-7960-4613-aaa9-73d0c687ebe2\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d3636861-7960-4613-aaa9-73d0c687ebe2\sce
```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : 10Yr 4Hr CHI **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0201	1	5.0	2.61	0.02	1.92	4.67 0.09	0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0202	1	5.0	5.22	0.08	2.08	9.37 0.19	0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0203	1	5.0	1.03	0.04	1.50	10.92 0.22	0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
ADD [0201+ 0202]	0001	3	5.0	7.84	0.10	2.00	7.81 n/a	0.000
ADD [0001+ 0203]	0001	1	5.0	8.86	0.11	2.00	8.17 n/a	0.000
CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0204	1	5.0	0.94	0.01	1.75	6.44 0.13	0.000
[CN=48.0]								
[N = 3.0:Tp 0.31]								
ADD [0001+ 0204]	0002	3	5.0	9.80	0.13	1.92	8.00 n/a	0.000

=====

```
V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
```

```
OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
```

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***** SUMMARY OUTPUT *****

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8df4a1db-c3d3-4198-933d-e6e47f26025d\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8df4a1db-c3d3-4198-933d-e6e47f26025d\sce

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

** SIMULATION : 10Yr 6Hr SCS **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\	e151c979-					
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
**	CALIB NASHYD	0201	1	5.0	2.61	0.03	3.50	5.96	0.11	0.000	
	[CN=43.0										
	[N = 3.0:Tp 0.44]										
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\	e151c979-					
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
*											
**	CALIB NASHYD	0202	1	5.0	5.22	0.10	3.58	11.61	0.21	0.000	
	[CN=59.0										
	[N = 3.0:Tp 0.56]										
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\	e151c979-					
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
*											
**	CALIB NASHYD	0203	1	5.0	1.03	0.06	3.08	13.46	0.24	0.000	
	[CN=64.0										
	[N = 3.0:Tp 0.13]										
*											
*	ADD [0201+ 0202]	0001	3	5.0	7.84	0.13	3.58	9.72	n/a	0.000	
*											
*	ADD [0001+ 0203]	0001	1	5.0	8.86	0.14	3.58	10.16	n/a	0.000	
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\	e151c979-					
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										

remark: 10Yr 6Hr SCS

*
** CALIB NASHYD 0204 1 5.0 0.94 0.02 3.25 8.05 0.14 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
*
ADD [0001+ 0204] 0002 3 5.0 9.80 0.15 3.50 9.96 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce

DATE: 07-28-2024

TIME: 08:21:38

USER:

COMMENTS: _____

** SIMULATION : 25mm 4Hr CHI **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	CHIC STORM			10.0							
	[Ptot= 25.00 mm]										
*											
**	CALIB NASHYD	0201	1	5.0	2.61	0.00	2.00	0.77	0.03	0.000	
	[CN=43.0										
	[N = 3.0:Tp 0.44]										
*											
	CHIC STORM			10.0							
	[Ptot= 25.00 mm]										
*											

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
** CALIB NASHYD      0202  1  5.0    5.22    0.02  2.08    2.04 0.08    0.000
[CN=59.0]
[ N = 3.0:Tp 0.56]
*
CHIC STORM          10.0
[ Ptot= 25.00 mm ]
*
** CALIB NASHYD      0203  1  5.0    1.03    0.01  1.50    2.43 0.10    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.02  2.08    1.62 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.02  2.00    1.71 n/a    0.000
*
CHIC STORM          10.0
[ Ptot= 25.00 mm ]
*
** CALIB NASHYD      0204  1  5.0    0.94    0.00  1.75    1.34 0.05    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.02  2.00    1.68 n/a    0.000
*
FINISH
```

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

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A A L
V   V   I   SS   U   U   A A A A L
V   V   I   SS   U   U   A   A L
VV      I   SSSSS UUUUU A   A LLLLL
```

```

OOO  TTTT  TTTT  H   H   Y   Y   M   M   OOO  TM
O   O   T   T   H   H   Y   Y   MM MM O   O
O   O   T   T   H   H   Y   Y   M   M   O   O
OOO  T   T   H   H   Y   Y   M   M   OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\7c1cef2b-bd53-4182-a34f-10eb87fd72c7\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\7c1cef2b-bd53-4182-a34f-10eb87fd72c7\sce
```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```
*****
** SIMULATION : 25Yr 12Hr SCS
*****
```

```
W/E COMMAND          HYD ID  DT      AREA  ' Qpeak Tpeak  R.V. R.C.  Qbase
                      min      ha      cms  hrs  mm      cms

START @ 0.00 hrs
-----
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0201  1  5.0    2.61    0.05  6.42  13.03 0.16    0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0202  1  5.0    5.22    0.17  6.58  23.20 0.28    0.000
[CN=59.0]
[ N = 3.0:Tp 0.56]
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.10  6.08  26.47 0.32    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.22  6.50  19.81 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.25  6.50  20.58 n/a    0.000
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.03  6.25  16.62 0.20    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.27  6.42  20.20 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A L
V   V   I   SS   U   U   A A A A L
```

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\351e6f3e-3615-4d31-bc18-eb16c0a2fea9\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\351e6f3e-3615-4d31-bc18-eb16c0a2fea9\sce

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

** SIMULATION : 25Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0
[Ptot=100.80 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30
remark: 25Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.07 12.42 19.85 0.20 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

* READ STORM 5.0
[Ptot=100.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30
remark: 25Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.21 12.58 33.73 0.33 0.000
[CN=59.0]
[N = 3.0:Tp 0.56]

* READ STORM 5.0
[Ptot=100.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30
remark: 25Yr 24Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.13 12.08 38.07 0.38 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.28 12.50 29.10 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.31 12.50 30.14 n/a 0.000

* READ STORM 5.0
[Ptot=100.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30
remark: 25Yr 24Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.04 12.25 24.67 0.24 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.34 12.42 29.61 n/a 0.000

=====

```
V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL
```

```
000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\bc2c651f-cc6f-4d90-a650-0d2fa63f6ed7\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\bc2c651f-cc6f-4d90-a650-0d2fa63f6ed7\sce

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 25Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	--------------	--------------	------------	------	--------------

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
START @ 0.00 hrs
-----
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0201 1 5.0   2.61   0.03  1.92   6.60 0.11   0.000
   [CN=43.0          ]
   [ N = 3.0:Tp 0.44]

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0202 1 5.0   5.22   0.11  2.08  12.70 0.21   0.000
   [CN=59.0          ]
   [ N = 3.0:Tp 0.56]

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0203 1 5.0   1.03   0.06  1.50  14.70 0.25   0.000
   [CN=64.0          ]
   [ N = 3.0:Tp 0.13]

*
ADD [ 0201+ 0202] 0001 3 5.0   7.84   0.14  2.00  10.67 n/a   0.000

*
ADD [ 0001+ 0203] 0001 1 5.0   8.86   0.16  1.92  11.13 n/a   0.000

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0204 1 5.0   0.94   0.02  1.75   8.84 0.15   0.000
   [CN=48.0          ]
   [ N = 3.0:Tp 0.31]

*
ADD [ 0001+ 0204] 0002 3 5.0   9.80   0.18  1.92  10.92 n/a   0.000

=====
=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

    OOO  TTTT  TTTT  H  H  Y  Y  M  M  OOO  TM
    O  O  T  T  T  H  H  Y  Y  M  M  O  O
    O  O  T  T  H  H  Y  Y  M  M  OOO

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***** S U M M A R Y   O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\8846a490-773a-4b85-be3f-fed4d9693c5f\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\8846a490-773a-4b85-be3f-fed4d9693c5f\sce
```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```
*****
** SIMULATION : 25Yr 6Hr SCS          **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM 5.0								
[Ptot= 66.60 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01								
remark: 25Yr 6Hr SCS								
* CALIB NASHYD 0201 1 5.0 2.61 0.04 3.50 8.54 0.13 0.000								
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM 5.0								
[Ptot= 66.60 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01								
remark: 25Yr 6Hr SCS								
* CALIB NASHYD 0202 1 5.0 5.22 0.14 3.58 15.95 0.24 0.000								
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM 5.0								
[Ptot= 66.60 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01								
remark: 25Yr 6Hr SCS								
* CALIB NASHYD 0203 1 5.0 1.03 0.08 3.08 18.37 0.28 0.000								
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202] 0001 3 5.0 7.84 0.18 3.58 13.48 n/a 0.000								
* ADD [0001+ 0203] 0001 1 5.0 8.86 0.19 3.58 14.05 n/a 0.000								
* READ STORM 5.0								
[Ptot= 66.60 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01								
remark: 25Yr 6Hr SCS								
* CALIB NASHYD 0204 1 5.0 0.94 0.03 3.25 11.22 0.17 0.000								
[CN=48.0]								
[N = 3.0:Tp 0.31]								
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.21 3.50 13.78 n/a 0.000								

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

*

=====

=====

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV    I   SSSSS UUUUU A   A  LLLLL

```

```

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y   Y   MM  MM  O   O
O   O   T   T   H   H   Y   Y   M   M  O   O
000  T   T   H   H   Y   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\15abb3e-2ce9-4d35-9ceb-b65719b02f77\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\15abb3e-2ce9-4d35-9ceb-b65719b02f77\sce

```

DATE: 07-28-2024

TIME: 08:21:38

USER:

COMMENTS: _____

```

*****
** SIMULATION : 2Yr 12Hr SCS **
*****

```

W/E	COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
			min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0
[Ptot= 45.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

```

* ** CALIB NASHYD 0201 1 5.0 2.61 0.01 6.50 3.68 0.08 0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44 ]

```

```

* READ STORM 5.0
[ Ptot= 45.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

```

```

* ** CALIB NASHYD 0202 1 5.0 5.22 0.05 6.58 7.61 0.17 0.000

```

```

[CN=59.0 ]
[ N = 3.0:Tp 0.56 ]

```

*

READ STORM 5.0

[Ptot= 45.60 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

*

```

** CALIB NASHYD 0203 1 5.0 1.03 0.03 6.08 8.89 0.20 0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13 ]

```

*

ADD [0201+ 0202] 0001 3 5.0 7.84 0.07 6.58 6.30 n/a 0.000

*

ADD [0001+ 0203] 0001 1 5.0 8.86 0.08 6.58 6.60 n/a 0.000

*

READ STORM 5.0
[Ptot= 45.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

*

```

** CALIB NASHYD 0204 1 5.0 0.94 0.01 6.25 5.19 0.11 0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31 ]

```

*

ADD [0001+ 0204] 0002 3 5.0 9.80 0.08 6.50 6.46 n/a 0.000

*

=====

=====

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV    I   SSSSS UUUUU A   A  LLLLL

```

```

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y   Y   MM  MM  O   O
O   O   T   T   H   H   Y   Y   M   M  O   O
000  T   T   H   H   Y   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4b6b46fa-d782-4d81-a638-17b9a591e739\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4b6b46fa-d782-4d81-a638-17b9a591e739\sce

```

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

 ** SIMULATION : 2Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :								
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0201	1	5.0	2.61	0.02	12.42	5.68	0.10 0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :								
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0202	1	5.0	5.22	0.07	12.58	11.13	0.20 0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :								
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0203	1	5.0	1.03	0.04	12.08	12.92	0.23 0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.09	12.50	9.31	n/a 0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.09	12.50	9.73	n/a 0.000
* READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :								
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0204	1	5.0	0.94	0.01	12.25	7.70	0.14 0.000
[CN=48.0]								
[N = 3.0:Tp 0.31]								
* ADD [0001+ 0204]	0002	3	5.0	9.80	0.11	12.42	9.54	n/a 0.000

=====

V V I SSSSS U U A L
 V V I SS U U A A L
 V V I SS U U AAAAA L

(v 6.2.2015)

V V I SS U U A A L
 V V I SSSSS UUUUU A A LLLLL
 000 TTTT TTTT H H Y Y M M 000 TM
 O O T T H H Y Y MM MM O O
 O O T T H H Y M M O O
 000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
 Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
 \3125fb1d-679a-4570-ba71-719dfceb268e\d99beaae-df84-4e62-9f1c-cffaeca4adfe\sce
 Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
 \3125fb1d-679a-4570-ba71-719dfceb268e\d99beaae-df84-4e62-9f1c-cffaeca4adfe\sce

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

 ** SIMULATION : 2Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

CHIC STORM	5.0							
[Ptot= 33.76 mm]								
* ** CALIB NASHYD	0201	1	5.0	2.61	0.01	2.00	1.76	0.05 0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* CHIC STORM	5.0							
[Ptot= 33.76 mm]								
* ** CALIB NASHYD	0202	1	5.0	5.22	0.03	2.08	4.04	0.12 0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* CHIC STORM	5.0							
[Ptot= 33.76 mm]								
* ** CALIB NASHYD	0203	1	5.0	1.03	0.02	1.50	4.77	0.14 0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.04	2.08	3.28	n/a 0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.05	2.00	3.45	n/a 0.000

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
CHIC STORM          5.0
[ Ptot= 33.76 mm ]
*
** CALIB NASHYD      0204  1  5.0    0.94    0.01  1.75   2.70 0.08   0.000
[CN=48.0             ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.05  2.00   3.38 n/a   0.000
=====
=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000

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***** S U M M A R Y   O U T P U T   *****

Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\e4a14275-c7a6-45e9-ba36-4fa7747658b2\sce
Summary filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\e4a14275-c7a6-45e9-ba36-4fa7747658b2\sce

DATE: 07-25-2024          TIME: 08:21:37

USER:

COMMENTS: _____

*****
** SIMULATION : 2Yr 6Hr SCS          **
*****

W/E COMMAND          HYD ID    DT      AREA  '  Qpeak Tpeak   R.V.  R.C.   Qbase
                    min      ha      cms  hrs   mm

START @ 0.00 hrs
-----
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0201  1  5.0    2.61    0.01  3.50   2.16 0.06   0.000
[CN=43.0             ]
[ N = 3.0:Tp 0.44]
```

```
*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0202  1  5.0    5.22    0.04  3.67   4.81 0.13   0.000
[CN=59.0             ]
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.02  3.08   5.67 0.15   0.000
[CN=64.0             ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.05  3.58   3.93 n/a   0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.06  3.58   4.13 n/a   0.000
*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.01  3.33   3.23 0.09   0.000
[CN=48.0             ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.06  3.58   4.04 n/a   0.000
*
=====
=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000

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***** S U M M A R Y   O U T P U T   *****

Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\87a2ed7f-0563-4a73-856d-9960cbf84b8e\sce
Summary filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\87a2ed7f-0563-4a73-856d-9960cbf84b8e\sce
```

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

** SIMULATION : 50Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	---	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 91.20 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.07 6.42 16.30 0.18 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

* READ STORM 5.0
[Ptot= 91.20 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.21 6.58 28.30 0.31 0.000
[CN=59.0]
[N = 3.0:Tp 0.56]

* READ STORM 5.0
[Ptot= 91.20 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.12 6.08 32.12 0.35 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.28 6.50 24.30 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.30 6.50 25.21 n/a 0.000

* READ STORM 5.0
[Ptot= 91.20 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.04 6.25 20.50 0.22 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.34 6.42 24.76 n/a 0.000

*

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\96943dab-bf37-471e-ad69-df9e8a7fb28c\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\96943dab-bf37-471e-ad69-df9e8a7fb28c\sce

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

** SIMULATION : 50Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	---	--------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot=112.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.09 12.42 24.66 0.22 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

* READ STORM 5.0
[Ptot=112.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.26 12.58 40.90 0.36 0.000

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
[CN=59.0
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot=112.80 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.16 12.08  45.90 0.41    0.000
[CN=64.0
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.34 12.50  35.48 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.37 12.50  36.69 n/a    0.000
*
READ STORM          5.0
[ Ptot=112.80 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.05 12.25  30.27 0.27    0.000
[CN=48.0
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.42 12.42  36.07 n/a    0.000
*
=====
=====
```

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A A  L
V  V  I  SS    U  U  A A A A  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

```
OOO  TTTT  TTTT  H  H  Y  Y  M  M  OOO  TM
O  O  T  T  H  H  Y  Y  MM  MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
OOO  T  T  H  H  Y  Y  M  M  OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\WH5
\3125fb1d-679a-4570-ba71-719dfceb268e\84afb8d-5b3c-4644-a638-3fd50943e21e\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\WH5
\3125fb1d-679a-4570-ba71-719dfceb268e\84afb8d-5b3c-4644-a638-3fd50943e21e\sce
```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : 50Yr 4Hr CHI
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=43.0 [N = 3.0:Tp 0.44]	0201	1	5.0	2.61	0.04	1.92	8.29 0.13	0.000
* CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=59.0 [N = 3.0:Tp 0.56]	0202	1	5.0	5.22	0.14	2.08	15.53 0.24	0.000
* CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=64.0 [N = 3.0:Tp 0.13]	0203	1	5.0	1.03	0.07	1.50	17.90 0.27	0.000
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.18	2.00	13.12 n/a	0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.20	1.92	13.67 n/a	0.000
* CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=48.0 [N = 3.0:Tp 0.31]	0204	1	5.0	0.94	0.03	1.75	10.91 0.17	0.000
* ADD [0001+ 0204]	0002	3	5.0	9.80	0.22	1.92	13.41 n/a	0.000
=====								
=====								

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A A  L
V  V  I  SS    U  U  A A A A  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

```
OOO  TTTT  TTTT  H  H  Y  Y  M  M  OOO  TM
O  O  T  T  H  H  Y  Y  MM  MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
OOO  T  T  H  H  Y  Y  M  M  OOO
```

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SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\62dcedbf-736e-41b9-a854-f60fd1a7b756\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\62dcedbf-736e-41b9-a854-f60fd1a7b756\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 50Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak ' cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	-------------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 73.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21
remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.05 3.50 10.60 0.14 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

READ STORM 5.0

[Ptot= 73.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21
remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.16 3.58 19.31 0.26 0.000
[CN=59.0]
[N = 3.0:Tp 0.56]

READ STORM 5.0

[Ptot= 73.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21
remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.10 3.08 22.14 0.30 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]

ADD [0201+ 0202] 0001 3 5.0 7.84 0.21 3.58 16.41 n/a 0.000

ADD [0001+ 0203] 0001 1 5.0 8.86 0.24 3.58 17.07 n/a 0.000

READ STORM 5.0

[Ptot= 73.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21
remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.03 3.25 13.71 0.19 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.26 3.50 16.75 n/a 0.000

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\04529730-01fd-496e-af8d-a15e74809ffa\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\04529730-01fd-496e-af8d-a15e74809ffa\sce

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

** SIMULATION : 5Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak ' cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	-------------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 60.00 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
remark: 5Yr 12Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.03 6.42 6.83 0.11 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0202 1 5.0    5.22    0.09  6.58 13.08 0.22    0.000
  [CN=59.0]
  [ N = 3.0:Tp 0.56]
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0203 1 5.0    1.03    0.06  6.08 15.14 0.25    0.000
  [CN=64.0]
  [ N = 3.0:Tp 0.13]
*
  ADD [ 0201+ 0202] 0001 3 5.0    7.84    0.12  6.58 11.00 n/a    0.000
*
  ADD [ 0001+ 0203] 0001 1 5.0    8.86    0.13  6.50 11.48 n/a    0.000
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0204 1 5.0    0.94    0.02  6.25  9.12 0.15    0.000
  [CN=48.0]
  [ N = 3.0:Tp 0.31]
*
  ADD [ 0001+ 0204] 0002 3 5.0    9.80    0.15  6.42 11.25 n/a    0.000
*
=====
=====
```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : 5Yr 24Hr SCS          **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0201 1 5.0 2.61 0.04 12.42 10.78 0.14 0.000								
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0202 1 5.0 5.22 0.12 12.58 19.60 0.26 0.000								
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0203 1 5.0 1.03 0.08 12.08 22.46 0.30 0.000								
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202] 0001 3 5.0 7.84 0.16 12.50 16.66 n/a 0.000								
* ADD [0001+ 0203] 0001 1 5.0 8.86 0.17 12.50 17.33 n/a 0.000								
* READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0204 1 5.0 0.94 0.02 12.25 13.93 0.19 0.000								
[CN=48.0]								
[N = 3.0:Tp 0.31]								
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.19 12.42 17.01 n/a 0.000								

```

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
```

```

OOO  TTTT  TTTT  H   H   Y   Y   M   M   OOO  TM
O   O   T   T   H   H   Y   Y   MM  MM  O   O
O   O   T   T   H   H   Y   Y   M   M   O   O
OOO    T   T   H   H   Y   Y   M   M   OOO
```

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***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\43834c3-372b-4d8d-bdb1-a1641ealf668\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\43834c3-372b-4d8d-bdb1-a1641ealf668\sce
```

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

*

=====

```
V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV      I   SSSSS UUUUU A   A  LLLLL
```

```
000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
O   O   T   T   H   H   Y Y   MM MM   O   O
O   O   T   T   H   H   Y   M   M   O   O
000   T   T   H   H   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b8f4811c-0eaa-4e60-988f-aebb2cf3975a\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b8f4811c-0eaa-4e60-988f-aebb2cf3975a\sce

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 5Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

CHIC STORM
[Ptot= 44.07 mm]

*

** CALIB NASHYD [CN=43.0 [N = 3.0:Tp 0.44]	0201	1	5.0	2.61	0.02	1.92	3.40	0.08	0.000
---	------	---	-----	------	------	------	------	------	-------

*

CHIC STORM
[Ptot= 44.07 mm]

*

** CALIB NASHYD [CN=59.0 [N = 3.0:Tp 0.56]	0202	1	5.0	5.22	0.06	2.08	7.09	0.16	0.000
---	------	---	-----	------	------	------	------	------	-------

*

CHIC STORM
[Ptot= 44.07 mm]

*

** CALIB NASHYD [CN=64.0 [N = 3.0:Tp 0.13]	0203	1	5.0	1.03	0.03	1.50	8.31	0.19	0.000
---	------	---	-----	------	------	------	------	------	-------

*

ADD [0201+ 0202]	0001	3	5.0	7.84	0.08	2.08	5.86	n/a	0.000
-------------------	------	---	-----	------	------	------	------	-----	-------

*

ADD [0001+ 0203]	0001	1	5.0	8.86	0.08	2.00	6.14	n/a	0.000
-------------------	------	---	-----	------	------	------	------	-----	-------

*

CHIC STORM
[Ptot= 44.07 mm]

*

** CALIB NASHYD [CN=48.0 [N = 3.0:Tp 0.31]	0204	1	5.0	0.94	0.01	1.75	4.83	0.11	0.000
---	------	---	-----	------	------	------	------	------	-------

*

ADD [0001+ 0204]	0002	3	5.0	9.80	0.09	1.92	6.02	n/a	0.000
-------------------	------	---	-----	------	------	------	------	-----	-------

*

=====

```
V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV      I   SSSSS UUUUU A   A  LLLLL
```

```
000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
O   O   T   T   H   H   Y Y   MM MM   O   O
O   O   T   T   H   H   Y   M   M   O   O
000   T   T   H   H   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4e204295-fcbc-4a90-ace4-454c20ef06a8\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4e204295-fcbc-4a90-ace4-454c20ef06a8\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 5Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM
5.0

SAR-23058 - Post-Dev-PF - AddHyd 1 Summary Outputs

```
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0201  1  5.0    2.61    0.02  3.50    4.26 0.09    0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44]
*
READ STORM      5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0202  1  5.0    5.22    0.07  3.58    8.65 0.18    0.000
[CN=59.0 ]
[ N = 3.0:Tp 0.56]
*
READ STORM      5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.04  3.08   10.09 0.21    0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.09  3.58    7.19 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.10  3.58    7.52 n/a    0.000
*
READ STORM      5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.01  3.25    5.93 0.12    0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.11  3.50    7.37 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A A L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
O O O TTTTT TTTT H H Y Y M M O O O TM
O O T T T H H Y Y M M O O
O O T T H H Y M M O O
```

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***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\A5693b3a-a20b-451b-9840-a9767b2e4492\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\A5693b3a-a20b-451b-9840-a9767b2e4492\sce
```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```
*****
** SIMULATION : Timmins **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								
READ STORM 60.0								
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
** CALIB NASHYD	0201	1	5.0	2.61	0.11	7.17	65.29 0.34	0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
READ STORM 60.0								
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
** CALIB NASHYD	0202	1	5.0	5.22	0.31	7.25	96.99 0.50	0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
READ STORM 60.0								
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
** CALIB NASHYD	0203	1	5.0	1.03	0.08	7.00	105.76 0.55	0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
ADD [0201+ 0202]	0001	3	5.0	7.84	0.42	7.17	86.42 n/a	0.000
ADD [0001+ 0203]	0001	1	5.0	8.86	0.48	7.08	88.66 n/a	0.000
READ STORM 60.0								
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								

d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73
remark: Timmins
*
** CALIB NASHYD 0204 1 5.0 0.94 0.05 7.08 76.20 0.39 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
*
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.53 7.08 87.47 n/a 0.000
*

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
=====
=====
V   V   I   SSSSS U   U   A   L   (v 6.2.2015)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV      I   SSSSS UUUUU A   A   LLLLL

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y   Y   MM MM  O   O
O   O   T   T   H   H   Y   Y   M   M  O   O
000  T   T   H   H   Y   Y   M   M   000

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```

***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\24fb9953-f4fa-4857-a72d-546448702ef6\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\24fb9953-f4fa-4857-a72d-546448702ef6\sce
```

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

```
*****
** SIMULATION : 100Yr 12Hr SCS **
*****
```

W/E COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
		min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

```
-----
READ STORM 5.0
[ Ptot= 99.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS
```

```
* ** CALIB NASHYD 0201 1 5.0 2.61 0.08 6.42 19.39 0.19 0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44]
```

```
* READ STORM 5.0
[ Ptot= 99.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS
```

```
* ** CALIB NASHYD 0202 1 5.0 5.22 0.24 6.58 33.03 0.33 0.000
[CN=59.0 ]
```

[N = 3.0:Tp 0.56]

```
* READ STORM 5.0
[ Ptot= 99.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS
```

```
* ** CALIB NASHYD 0203 1 5.0 1.03 0.14 6.08 37.31 0.37 0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13]
```

```
* ADD [ 0201+ 0202] 0001 3 5.0 7.84 0.32 6.50 28.48 n/a 0.000
```

```
* ADD [ 0001+ 0203] 0001 1 5.0 8.86 0.36 6.50 29.51 n/a 0.000
```

```
* READ STORM 5.0
[ Ptot= 99.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS
```

```
* ** CALIB NASHYD 0204 1 5.0 0.94 0.05 6.25 24.14 0.24 0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31]
```

```
* ADD [ 0001+ 0204] 0002 3 5.0 9.80 0.40 6.42 28.99 n/a 0.000
```

=====

```
V   V   I   SSSSS U   U   A   L   (v 6.2.2015)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV      I   SSSSS UUUUU A   A   LLLLL
```

```
000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y   Y   MM MM  O   O
O   O   T   T   H   H   Y   Y   M   M  O   O
000  T   T   H   H   Y   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce
```

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

** SIMULATION : 100Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.10 12.42 28.78 0.24 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.30 12.58 46.92 0.38 0.000
[CN=59.0]
[N = 3.0:Tp 0.56]

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.18 12.08 52.43 0.43 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.40 12.50 40.87 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.43 12.42 42.21 n/a 0.000

READ STORM 5.0

[Ptot=122.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee

remark: 100Yr 24Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.06 12.25 35.03 0.29 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.48 12.42 41.52 n/a 0.000

(v 6.2.2015)

V	V	I	SSSSS	U	U	A	L
V	V	I	SS	U	U	A A	L
V	V	I	SS	U	U	AAAAA	L
V	V	I	SS	U	U	A A	L

VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM

O O T T H H Y Y MM MM O O

O O T T H H Y M M O O

000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6363cb1d-5b6e-41ad-9e51-bf4d586409a5\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6363cb1d-5b6e-41ad-9e51-bf4d586409a5\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 100Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

CHIC STORM 5.0

[Ptot= 71.77 mm]

* ** CALIB NASHYD 0201 1 5.0 2.61 0.05 1.92 10.00 0.14 0.000
[CN=43.0]
[N = 3.0:Tp 0.44]

* CHIC STORM 5.0

[Ptot= 71.77 mm]

* ** CALIB NASHYD 0202 1 5.0 5.22 0.16 2.08 18.34 0.26 0.000
[CN=59.0]
[N = 3.0:Tp 0.56]

* CHIC STORM 5.0

[Ptot= 71.77 mm]

* ** CALIB NASHYD 0203 1 5.0 1.03 0.09 1.50 21.05 0.29 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.21 2.00 15.56 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.24 1.92 16.20 n/a 0.000

* CHIC STORM 5.0

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
[ Ptot= 71.77 mm ]
** CALIB NASHYD          0204  1  5.0    0.94    0.03  1.75  12.99 0.18    0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.26  1.92  15.89 n/a    0.000
=====
=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000

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***** S U M M A R Y   O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6e0cbf6c-1e04-4814-92fb-1adc141b2e21\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6e0cbf6c-1e04-4814-92fb-1adc141b2e21\sce

DATE: 07-28-2024          TIME: 08:21:35

USER:

COMMENTS: _____

*****
** SIMULATION : 100Yr 6Hr SCS **
*****

W/E COMMAND          HYD ID  DT      AREA  '  Qpeak  Tpeak  R.V.  R.C.  Qbase
                    min      ha      cms  cms  hrs  mm

START @ 0.00 hrs
-----
READ STORM          5.0
[ Ptot= 81.00 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS
*
** CALIB NASHYD          0201  1  5.0    2.61    0.06  3.42  12.84 0.16    0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44]
*
```

```
READ STORM          5.0
[ Ptot= 81.00 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS
*
** CALIB NASHYD          0202  1  5.0    5.22    0.20  3.58  22.89 0.28    0.000
[CN=59.0 ]
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot= 81.00 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS
*
** CALIB NASHYD          0203  1  5.0    1.03    0.12  3.08  26.13 0.32    0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.26  3.58  19.54 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.28  3.50  20.30 n/a    0.000
*
READ STORM          5.0
[ Ptot= 81.00 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS
*
** CALIB NASHYD          0204  1  5.0    0.94    0.04  3.25  16.39 0.20    0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.31  3.50  19.93 n/a    0.000
=====
=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000

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***** S U M M A R Y   O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d63f9485-c1b1-4596-8ddb-92e07e44f0ba\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d63f9485-c1b1-4596-8ddb-92e07e44f0ba\sce
```

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 10Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	---	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.04 6.42 9.38 0.13 0.000

[CN=43.0]

[N = 3.0:Tp 0.44]

* READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.13 6.58 17.33 0.25 0.000

[CN=59.0]

[N = 3.0:Tp 0.56]

* READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.08 6.08 19.91 0.29 0.000

[CN=64.0]

[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.16 6.58 14.68 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.18 6.50 15.28 n/a 0.000

* READ STORM 5.0

[Ptot= 69.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d

remark: 10Yr 12Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.02 6.25 12.23 0.18 0.000

[CN=48.0]

[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.20 6.42 14.99 n/a 0.000

*

=====

V	V	I	SSSS	U	U	A	L	(v 6.2.2015)
V	V	I	SS	U	U	A A	L	
V	V	I	SS	U	U	AAAAA	L	
V	V	I	SS	U	U	A A	L	
VV	I	SSSS	UUUUU	A	A	LLLLL		

000	TTTT	TTTT	H	H	Y	Y	M	M	000	TM
O	O	T	T	H	H	Y Y	MM	MM	O	O
O	O	T	T	H	H	Y	M	M	O	O
000	T	T	H	H	Y		M	M	000	

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\505bb0ec-08ab-4108-858f-827df9289884\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\505bb0ec-08ab-4108-858f-827df9289884\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 10Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	---	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 86.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa

remark: 10Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.05 12.42 14.63 0.17 0.000

[CN=43.0]

[N = 3.0:Tp 0.44]

* READ STORM 5.0

[Ptot= 86.40 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa

remark: 10Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.16 12.58 25.71 0.30 0.000

[CN=59.0]

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
* [ N = 3.0:Tp 0.56]
* READ STORM 5.0
  [ Ptot= 86.40 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa
  remark: 10Yr 24Hr SCS
* ** CALIB NASHYD 0203 1 5.0 1.03 0.10 12.08 29.25 0.34 0.000
  [CN=64.0]
  [ N = 3.0:Tp 0.13]
* ADD [ 0201+ 0202] 0001 3 5.0 7.84 0.21 12.50 22.02 n/a 0.000
* ADD [ 0001+ 0203] 0001 1 5.0 8.86 0.23 12.50 22.85 n/a 0.000
* READ STORM 5.0
  [ Ptot= 86.40 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa
  remark: 10Yr 24Hr SCS
* ** CALIB NASHYD 0204 1 5.0 0.94 0.03 12.25 18.52 0.21 0.000
  [CN=48.0]
  [ N = 3.0:Tp 0.31]
* ADD [ 0001+ 0204] 0002 3 5.0 9.80 0.26 12.42 22.44 n/a 0.000
=====
=====
```

```
V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
```

```
OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
```

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***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d3636861-7960-4613-aaa9-73d0c687ebe2\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d3636861-7960-4613-aaa9-73d0c687ebe2\sce
```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : 10Yr 4Hr CHI **
*****
```

```
W/E COMMAND HYD ID DT min AREA ha Qpeak cms Tpeak hrs R.V. mm R.C. Qbase cms

START @ 0.00 hrs
-----
CHIC STORM 5.0
[ Ptot= 50.59 mm ]
* ** CALIB NASHYD 0201 1 5.0 2.61 0.02 1.92 4.67 0.09 0.000
  [CN=43.0]
  [ N = 3.0:Tp 0.44]
* CHIC STORM 5.0
  [ Ptot= 50.59 mm ]
* ** CALIB NASHYD 0202 1 5.0 5.22 0.08 2.08 9.37 0.19 0.000
  [CN=59.0]
  [ N = 3.0:Tp 0.56]
* CHIC STORM 5.0
  [ Ptot= 50.59 mm ]
* ** CALIB NASHYD 0203 1 5.0 1.03 0.04 1.50 10.92 0.22 0.000
  [CN=64.0]
  [ N = 3.0:Tp 0.13]
* ADD [ 0201+ 0202] 0001 3 5.0 7.84 0.10 2.00 7.81 n/a 0.000
* ADD [ 0001+ 0203] 0001 1 5.0 8.86 0.11 2.00 8.17 n/a 0.000
* CHIC STORM 5.0
  [ Ptot= 50.59 mm ]
* ** CALIB NASHYD 0204 1 5.0 0.94 0.01 1.75 6.44 0.13 0.000
  [CN=48.0]
  [ N = 3.0:Tp 0.31]
* ADD [ 0001+ 0204] 0002 3 5.0 9.80 0.13 1.92 8.00 n/a 0.000
=====
=====
```

```
V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
```

```
OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
```

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***** SUMMARY OUTPUT *****

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8df4a1db-c3d3-4198-933d-e6e47f26025d\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8df4a1db-c3d3-4198-933d-e6e47f26025d\sce

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

** SIMULATION : 10Yr 6Hr SCS **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\e151c979-						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
**	CALIB NASHYD	0201	1	5.0	2.61	0.03	3.50	5.96	0.11	0.000	
	[CN=43.0										
	[N = 3.0:Tp 0.44]										
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\e151c979-						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
*											
**	CALIB NASHYD	0202	1	5.0	5.22	0.10	3.58	11.61	0.21	0.000	
	[CN=59.0										
	[N = 3.0:Tp 0.56]										
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\e151c979-						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
*											
**	CALIB NASHYD	0203	1	5.0	1.03	0.06	3.08	13.46	0.24	0.000	
	[CN=64.0										
	[N = 3.0:Tp 0.13]										
*											
*	ADD [0201+ 0202]	0001	3	5.0	7.84	0.13	3.58	9.72	n/a	0.000	
*											
*	ADD [0001+ 0203]	0001	1	5.0	8.86	0.14	3.58	10.16	n/a	0.000	
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\e151c979-						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										

remark: 10Yr 6Hr SCS

*
** CALIB NASHYD 0204 1 5.0 0.94 0.02 3.25 8.05 0.14 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
*
ADD [0001+ 0204] 0002 3 5.0 9.80 0.15 3.50 9.96 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce

DATE: 07-28-2024

TIME: 08:21:38

USER:

COMMENTS: _____

** SIMULATION : 25mm 4Hr CHI **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	CHIC STORM			10.0							
	[Ptot= 25.00 mm]										
*											
**	CALIB NASHYD	0201	1	5.0	2.61	0.00	2.00	0.77	0.03	0.000	
	[CN=43.0										
	[N = 3.0:Tp 0.44]										
*											
	CHIC STORM			10.0							
	[Ptot= 25.00 mm]										
*											

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
** CALIB NASHYD      0202  1  5.0    5.22    0.02  2.08    2.04 0.08    0.000
[CN=59.0]
[ N = 3.0:Tp 0.56]
*
CHIC STORM          10.0
[ Ptot= 25.00 mm ]
*
** CALIB NASHYD      0203  1  5.0    1.03    0.01  1.50    2.43 0.10    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.02  2.08    1.62 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.02  2.00    1.71 n/a    0.000
*
CHIC STORM          10.0
[ Ptot= 25.00 mm ]
*
** CALIB NASHYD      0204  1  5.0    0.94    0.00  1.75    1.34 0.05    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.02  2.00    1.68 n/a    0.000
*
FINISH
```

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

```

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
```

```

OOO  TTTT  TTTT  H   H   Y   Y   M   M   OOO  TM
O   O   T   T   H   H   Y   Y   MM MM  O   O
O   O   T   T   H   H   Y   Y   M   M   O   O
OOO    T   T   H   H   Y   Y   M   M   OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\7c1cef2b-bd53-4182-a34f-10eb87fd72c7\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\7c1cef2b-bd53-4182-a34f-10eb87fd72c7\sce
```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```
*****
** SIMULATION : 25Yr 12Hr SCS
*****
```

```
W/E COMMAND          HYD ID   DT      AREA   '  Qpeak Tpeak   R.V.  R.C.   Qbase
                      min      ha      cms   hrs   mm      cms

START @ 0.00 hrs
-----
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname                   : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD          0201  1  5.0    2.61    0.05  6.42  13.03 0.16    0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname                   : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD          0202  1  5.0    5.22    0.17  6.58  23.20 0.28    0.000
[CN=59.0]
[ N = 3.0:Tp 0.56]
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname                   : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD          0203  1  5.0    1.03    0.10  6.08  26.47 0.32    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.22  6.50  19.81 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.25  6.50  20.58 n/a    0.000
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname                   : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD          0204  1  5.0    0.94    0.03  6.25  16.62 0.20    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.27  6.42  20.20 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A A  L
V   V   I   SS    U   U   AAAAA L
```

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000
```

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\351e6f3e-3615-4d31-bc18-eb16c0a2fea9\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\351e6f3e-3615-4d31-bc18-eb16c0a2fea9\sce

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

** SIMULATION : 25Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak ' cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM [Ptot=100.80 mm] fname : C:\Users\mgallant\AppData\Local\Temp\e151c979- d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30 remark: 25Yr 24Hr SCS	5.0							
* ** CALIB NASHYD [CN=43.0] [N = 3.0:Tp 0.44]	0201	1	5.0	2.61	0.07	12.42	19.85	0.20 0.000
* READ STORM [Ptot=100.80 mm] fname : C:\Users\mgallant\AppData\Local\Temp\e151c979- d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30 remark: 25Yr 24Hr SCS	5.0							
* ** CALIB NASHYD [CN=59.0] [N = 3.0:Tp 0.56]	0202	1	5.0	5.22	0.21	12.58	33.73	0.33 0.000
* READ STORM [Ptot=100.80 mm] fname : C:\Users\mgallant\AppData\Local\Temp\e151c979- d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30 remark: 25Yr 24Hr SCS	5.0							

```
* ** CALIB NASHYD 0203 1 5.0 1.03 0.13 12.08 38.07 0.38 0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
* ADD [ 0201+ 0202] 0001 3 5.0 7.84 0.28 12.50 29.10 n/a 0.000
* ADD [ 0001+ 0203] 0001 1 5.0 8.86 0.31 12.50 30.14 n/a 0.000
* READ STORM 5.0
[ Ptot=100.80 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30
remark: 25Yr 24Hr SCS
* ** CALIB NASHYD 0204 1 5.0 0.94 0.04 12.25 24.67 0.24 0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
* ADD [ 0001+ 0204] 0002 3 5.0 9.80 0.34 12.42 29.61 n/a 0.000
*
=====
=====
```

```
V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL
```

```
000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000
```

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\bc2c651f-cc6f-4d90-a650-0d2fa63f6ed7\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\bc2c651f-cc6f-4d90-a650-0d2fa63f6ed7\sce

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 25Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak ' cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	-------------------	--------------	------------	------	--------------

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
START @ 0.00 hrs
-----
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0201 1 5.0   2.61   0.03  1.92   6.60 0.11   0.000
   [CN=43.0          ]
   [ N = 3.0:Tp 0.44]

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0202 1 5.0   5.22   0.11  2.08  12.70 0.21   0.000
   [CN=59.0          ]
   [ N = 3.0:Tp 0.56]

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0203 1 5.0   1.03   0.06  1.50  14.70 0.25   0.000
   [CN=64.0          ]
   [ N = 3.0:Tp 0.13]

*
ADD [ 0201+ 0202] 0001 3 5.0   7.84   0.14  2.00  10.67 n/a   0.000

*
ADD [ 0001+ 0203] 0001 1 5.0   8.86   0.16  1.92  11.13 n/a   0.000

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0204 1 5.0   0.94   0.02  1.75   8.84 0.15   0.000
   [CN=48.0          ]
   [ N = 3.0:Tp 0.31]

*
ADD [ 0001+ 0204] 0002 3 5.0   9.80   0.18  1.92  10.92 n/a   0.000

=====
=====

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   T   H   H   Y   Y   M   M   O   O
O   O   T   T   H   H   Y   M   M   O   O
000  T   T   H   H   Y   M   M   000

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***** S U M M A R Y   O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\8846a490-773a-4b85-be3f-fed4d9693c5f\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\8846a490-773a-4b85-be3f-fed4d9693c5f\sce
```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```
*****
** SIMULATION : 25Yr 6Hr SCS
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms	
START @ 0.00 hrs									

READ STORM			5.0						
[Ptot= 66.60 mm]									
fname :								C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01	
remark: 25Yr 6Hr SCS									
* CALIB NASHYD	0201	1	5.0	2.61	0.04	3.50	8.54	0.13	0.000
[CN=43.0									
[N = 3.0:Tp 0.44]									
* READ STORM			5.0						
[Ptot= 66.60 mm]									
fname :									C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01
remark: 25Yr 6Hr SCS									
* CALIB NASHYD	0202	1	5.0	5.22	0.14	3.58	15.95	0.24	0.000
[CN=59.0									
[N = 3.0:Tp 0.56]									
* READ STORM			5.0						
[Ptot= 66.60 mm]									
fname :									C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01
remark: 25Yr 6Hr SCS									
* CALIB NASHYD	0203	1	5.0	1.03	0.08	3.08	18.37	0.28	0.000
[CN=64.0									
[N = 3.0:Tp 0.13]									
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.18	3.58	13.48	n/a	0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.19	3.58	14.05	n/a	0.000
* READ STORM			5.0						
[Ptot= 66.60 mm]									
fname :									C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01
remark: 25Yr 6Hr SCS									
* CALIB NASHYD	0204	1	5.0	0.94	0.03	3.25	11.22	0.17	0.000
[CN=48.0									
[N = 3.0:Tp 0.31]									
* ADD [0001+ 0204]	0002	3	5.0	9.80	0.21	3.50	13.78	n/a	0.000

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

*

=====

=====

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV      I   SSSSS UUUUU A   A  LLLLL

```

```

000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
O   O   T   T   H   H   Y Y   MM MM   O   O
O   O   T   T   H   H   Y   M   M   O   O
000   T   T   H   H   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\15abb3e-2ce9-4d35-9ceb-b65719b02f77\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\15abb3e-2ce9-4d35-9ceb-b65719b02f77\sce

```

DATE: 07-28-2024

TIME: 08:21:38

USER:

COMMENTS: _____

```

*****
** SIMULATION : 2Yr 12Hr SCS
*****

```

W/E	COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
			min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 45.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4

remark: 2Yr 12Hr SCS

```

** CALIB NASHYD      0201  1  5.0    2.61    0.01  6.50   3.68 0.08   0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]

```

```

READ STORM      5.0
[ Ptot= 45.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

```

```

** CALIB NASHYD      0202  1  5.0    5.22    0.05  6.58   7.61 0.17   0.000

```

```

[CN=59.0]
[ N = 3.0:Tp 0.56]

```

```

* READ STORM      5.0
[ Ptot= 45.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

```

```

** CALIB NASHYD      0203  1  5.0    1.03    0.03  6.08   8.89 0.20   0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]

```

```

* ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.07  6.58   6.30 n/a   0.000

```

```

* ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.08  6.58   6.60 n/a   0.000

```

```

READ STORM      5.0
[ Ptot= 45.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

```

```

** CALIB NASHYD      0204  1  5.0    0.94    0.01  6.25   5.19 0.11   0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]

```

```

* ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.08  6.50   6.46 n/a   0.000

```

=====

=====

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV      I   SSSSS UUUUU A   A  LLLLL

```

```

000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
O   O   T   T   H   H   Y Y   MM MM   O   O
O   O   T   T   H   H   Y   M   M   O   O
000   T   T   H   H   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\4b6b46fa-d782-4d81-a638-17b9a591e739\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\4b6b46fa-d782-4d81-a638-17b9a591e739\sce

```

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

** SIMULATION : 2Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-					
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0201	1	5.0	2.61	0.02	12.42	5.68	0.10 0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-					
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0202	1	5.0	5.22	0.07	12.58	11.13	0.20 0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-					
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0203	1	5.0	1.03	0.04	12.08	12.92	0.23 0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.09	12.50	9.31	n/a 0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.09	12.50	9.73	n/a 0.000
* READ STORM	5.0							
[Ptot= 55.20 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-					
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a								
remark: 2Yr 24Hr SCS								
** CALIB NASHYD	0204	1	5.0	0.94	0.01	12.25	7.70	0.14 0.000
[CN=48.0]								
[N = 3.0:Tp 0.31]								
* ADD [0001+ 0204]	0002	3	5.0	9.80	0.11	12.42	9.54	n/a 0.000
=====								
=====								

V	V	I	SSSSS	U	U	A	L	
V	V	I	SS	U	U	A A	L	
V	V	I	SS	U	U	AAAAA	L	

(v 6.2.2015)

V	V	I	SS	U	U	A	A	L
VV		I	SSSSS	UUUUU		A	A	LLLLL
000	TTTT	TTTT	H	H	Y	Y	M	M
O O	T	T	H	H	Y	Y	MM	MM
O O	T	T	H	H	Y		M	M
000	T	T	H	H	Y		M	M

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d99beaae-df84-4e62-9f1c-cffaeca4adfe\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d99beaae-df84-4e62-9f1c-cffaeca4adfe\sce

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 2Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

CHIC STORM	5.0							
[Ptot= 33.76 mm]								
* ** CALIB NASHYD	0201	1	5.0	2.61	0.01	2.00	1.76	0.05 0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* CHIC STORM	5.0							
[Ptot= 33.76 mm]								
* ** CALIB NASHYD	0202	1	5.0	5.22	0.03	2.08	4.04	0.12 0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* CHIC STORM	5.0							
[Ptot= 33.76 mm]								
* ** CALIB NASHYD	0203	1	5.0	1.03	0.02	1.50	4.77	0.14 0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.04	2.08	3.28	n/a 0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.05	2.00	3.45	n/a 0.000

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
CHIC STORM          5.0
[ Ptot= 33.76 mm ]

*
** CALIB NASHYD      0204  1  5.0    0.94    0.01  1.75    2.70 0.08    0.000
[CN=48.0             ]
[ N = 3.0:Tp 0.31]

*
* ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.05  2.00    3.38 n/a    0.000

=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV   I  SSSSS  UUUUU  A  A  LLLLL

    000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
    O  O  T    T    H  H  Y  Y  MM MM  O  O
    O  O  T    T    H  H  Y    M  M  O  O
    000  T    T    H  H  Y    M  M  000

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***** S U M M A R Y   O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\e4a14275-c7a6-45e9-ba36-4fa7747658b2\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\e4a14275-c7a6-45e9-ba36-4fa7747658b2\sce

DATE: 07-25-2024          TIME: 08:21:37

USER:

COMMENTS: _____

*****
** SIMULATION : 2Yr 6Hr SCS **
*****

W/E COMMAND          HYD ID  DT      AREA  '  Qpeak Tpeak  R.V. R.C.  Qbase
                     min      ha      cms  hrs   mm

START @ 0.00 hrs
-----
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS

*
** CALIB NASHYD      0201  1  5.0    2.61    0.01  3.50    2.16 0.06    0.000
[CN=43.0             ]
[ N = 3.0:Tp 0.44]

=====
```

```
*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS

*
** CALIB NASHYD      0202  1  5.0    5.22    0.04  3.67    4.81 0.13    0.000
[CN=59.0             ]
[ N = 3.0:Tp 0.56]

*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS

*
** CALIB NASHYD      0203  1  5.0    1.03    0.02  3.08    5.67 0.15    0.000
[CN=64.0             ]
[ N = 3.0:Tp 0.13]

*
* ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.05  3.58    3.93 n/a    0.000

*
* ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.06  3.58    4.13 n/a    0.000

*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS

*
** CALIB NASHYD      0204  1  5.0    0.94    0.01  3.33    3.23 0.09    0.000
[CN=48.0             ]
[ N = 3.0:Tp 0.31]

*
* ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.06  3.58    4.04 n/a    0.000

=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV   I  SSSSS  UUUUU  A  A  LLLLL

    000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
    O  O  T    T    H  H  Y  Y  MM MM  O  O
    O  O  T    T    H  H  Y    M  M  O  O
    000  T    T    H  H  Y    M  M  000

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***** S U M M A R Y   O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\87a2ed7f-0563-4a73-856d-9960cbf84b8e\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\87a2ed7f-0563-4a73-856d-9960cbf84b8e\sce
```

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

 ** SIMULATION : 50Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.07 6.42 16.30 0.18 0.000
 [CN=43.0]
 [N = 3.0:Tp 0.44]

* READ STORM 5.0
 [Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.21 6.58 28.30 0.31 0.000
 [CN=59.0]
 [N = 3.0:Tp 0.56]

* READ STORM 5.0
 [Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.12 6.08 32.12 0.35 0.000
 [CN=64.0]
 [N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.28 6.50 24.30 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.30 6.50 25.21 n/a 0.000

* READ STORM 5.0
 [Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.04 6.25 20.50 0.22 0.000
 [CN=48.0]
 [N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.34 6.42 24.76 n/a 0.000

*

V V I SSSSS U U A L (v 6.2.2015)
 V V I SS U U A A L
 V V I SS U U A A A A L
 V V I SS U U A A L
 VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
 O O T T H H Y Y MM MM O O
 O O T T H H Y Y M M O O
 000 T T H H Y Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\vo1n.dat
 Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
 \3125fb1d-679a-4570-ba71-719dfceb268e\96943dab-bf37-471e-ad69-df9e8a7fb28c\sce
 Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
 \3125fb1d-679a-4570-ba71-719dfceb268e\96943dab-bf37-471e-ad69-df9e8a7fb28c\sce

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

 ** SIMULATION : 50Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot=112.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
 remark: 50Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.09 12.42 24.66 0.22 0.000
 [CN=43.0]
 [N = 3.0:Tp 0.44]

* READ STORM 5.0
 [Ptot=112.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
 remark: 50Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.26 12.58 40.90 0.36 0.000

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
[CN=59.0
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot=112.80 mm ]
fname                : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.16 12.08  45.90 0.41    0.000
[CN=64.0
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.34 12.50  35.48 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.37 12.50  36.69 n/a    0.000
*
READ STORM          5.0
[ Ptot=112.80 mm ]
fname                : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.05 12.25  30.27 0.27    0.000
[CN=48.0
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.42 12.42  36.07 n/a    0.000
*
=====
=====
```

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A A  L
V  V  I  SS    U  U  A A A A  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

```
OOO  TTTT  TTTT  H  H  Y  Y  M  M  OOO  TM
O  O  T  T  H  H  Y  Y  MM  MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
OOO  T  T  H  H  Y  Y  M  M  OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\84afb8d-5b3c-4644-a638-3fd50943e21e\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\84afb8d-5b3c-4644-a638-3fd50943e21e\sce
```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : 50Yr 4Hr CHI
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=43.0 [N = 3.0:Tp 0.44]	0201	1	5.0	2.61	0.04	1.92	8.29 0.13	0.000
* CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=59.0 [N = 3.0:Tp 0.56]	0202	1	5.0	5.22	0.14	2.08	15.53 0.24	0.000
* CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=64.0 [N = 3.0:Tp 0.13]	0203	1	5.0	1.03	0.07	1.50	17.90 0.27	0.000
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.18	2.00	13.12 n/a	0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.20	1.92	13.67 n/a	0.000
* CHIC STORM [Ptot= 65.66 mm]		5.0						
* ** CALIB NASHYD [CN=48.0 [N = 3.0:Tp 0.31]	0204	1	5.0	0.94	0.03	1.75	10.91 0.17	0.000
* ADD [0001+ 0204]	0002	3	5.0	9.80	0.22	1.92	13.41 n/a	0.000
=====								
=====								

```
V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A A  L
V  V  I  SS    U  U  A A A A  L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL
```

```
OOO  TTTT  TTTT  H  H  Y  Y  M  M  OOO  TM
O  O  T  T  H  H  Y  Y  MM  MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
OOO  T  T  H  H  Y  Y  M  M  OOO
```

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SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
 Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
 \3125fb1d-679a-4570-ba71-719dfceb268e\62dcedbf-736e-41b9-a854-f60fd1a7b756\sce
 Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
 \3125fb1d-679a-4570-ba71-719dfceb268e\62dcedbf-736e-41b9-a854-f60fd1a7b756\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

 ** SIMULATION : 50Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	-------------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 73.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21

remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.05 3.50 10.60 0.14 0.000
 [CN=43.0]
 [N = 3.0:Tp 0.44]
 *

READ STORM 5.0

[Ptot= 73.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21

remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.16 3.58 19.31 0.26 0.000
 [CN=59.0]
 [N = 3.0:Tp 0.56]
 *

READ STORM 5.0

[Ptot= 73.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21

remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.10 3.08 22.14 0.30 0.000
 [CN=64.0]
 [N = 3.0:Tp 0.13]
 *

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.21 3.58 16.41 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.24 3.58 17.07 n/a 0.000

* READ STORM 5.0

[Ptot= 73.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-

d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21

remark: 50Yr 6Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.03 3.25 13.71 0.19 0.000
 [CN=48.0]
 [N = 3.0:Tp 0.31]
 *

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.26 3.50 16.75 n/a 0.000
 *

V V I SSSSS U U A L (v 6.2.2015)
 V V I SS U U A A L
 V V I SS U U AAAAA L
 V V I SS U U A A L
 VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
 O O T T H H Y Y MM MM O O
 O O T T H H Y M M O O
 000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
 Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
 \3125fb1d-679a-4570-ba71-719dfceb268e\04529730-01fd-496e-af8d-a15e74809ffa\sce
 Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
 \3125fb1d-679a-4570-ba71-719dfceb268e\04529730-01fd-496e-af8d-a15e74809ffa\sce

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

 ** SIMULATION : 5Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	-----------	------------	-------------------	--------------	------------	------	--------------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 60.00 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13

remark: 5Yr 12Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.03 6.42 6.83 0.11 0.000
 [CN=43.0]
 [N = 3.0:Tp 0.44]
 *

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0202 1 5.0    5.22    0.09  6.58 13.08 0.22    0.000
  [CN=59.0]
  [ N = 3.0:Tp 0.56]
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0203 1 5.0    1.03    0.06  6.08 15.14 0.25    0.000
  [CN=64.0]
  [ N = 3.0:Tp 0.13]
*
  ADD [ 0201+ 0202] 0001 3 5.0    7.84    0.12  6.58 11.00 n/a    0.000
*
  ADD [ 0001+ 0203] 0001 1 5.0    8.86    0.13  6.50 11.48 n/a    0.000
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0204 1 5.0    0.94    0.02  6.25  9.12 0.15    0.000
  [CN=48.0]
  [ N = 3.0:Tp 0.31]
*
  ADD [ 0001+ 0204] 0002 3 5.0    9.80    0.15  6.42 11.25 n/a    0.000
*
=====
=====
```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : 5Yr 24Hr SCS          **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0201 1 5.0 2.61 0.04 12.42 10.78 0.14 0.000								
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0202 1 5.0 5.22 0.12 12.58 19.60 0.26 0.000								
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0203 1 5.0 1.03 0.08 12.08 22.46 0.30 0.000								
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202] 0001 3 5.0 7.84 0.16 12.50 16.66 n/a 0.000								
* ADD [0001+ 0203] 0001 1 5.0 8.86 0.17 12.50 17.33 n/a 0.000								
* READ STORM 5.0								
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
* ** CALIB NASHYD 0204 1 5.0 0.94 0.02 12.25 13.93 0.19 0.000								
[CN=48.0]								
[N = 3.0:Tp 0.31]								
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.19 12.42 17.01 n/a 0.000								

```

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A A L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
```

```

OOO  TTTT  TTTT  H   H   Y   Y   M   M   OOO  TM
O   O   T   T   H   H   Y   Y   MM  MM  O   O
O   O   T   T   H   H   Y   Y   M   M   O   O
OOO    T   T   H   H   Y   Y   M   M   OOO
```

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***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\43834c3-372b-4d8d-bdb1-a1641ealf668\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\43834c3-372b-4d8d-bdb1-a1641ealf668\sce
```

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

*

=====

```
V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
```

```
    000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y Y   MM MM  O   O
O   O   T   T   H   H   Y   M   M  O   O
    000  T   T   H   H   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b8f4811c-0eaa-4e60-988f-aebb2cf3975a\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\b8f4811c-0eaa-4e60-988f-aebb2cf3975a\sce

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 5Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

CHIC STORM
[Ptot= 44.07 mm]

*

** CALIB NASHYD [CN=43.0 [N = 3.0:Tp 0.44]	0201	1	5.0	2.61	0.02	1.92	3.40	0.08	0.000
---	------	---	-----	------	------	------	------	------	-------

*

CHIC STORM
[Ptot= 44.07 mm]

*

** CALIB NASHYD [CN=59.0 [N = 3.0:Tp 0.56]	0202	1	5.0	5.22	0.06	2.08	7.09	0.16	0.000
---	------	---	-----	------	------	------	------	------	-------

*

CHIC STORM
[Ptot= 44.07 mm]

*

```
** CALIB NASHYD           0203  1  5.0    1.03    0.03    1.50    8.31 0.19    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
```

*

ADD [0201+ 0202]	0001	3	5.0	7.84	0.08	2.08	5.86	n/a	0.000
-------------------	------	---	-----	------	------	------	------	-----	-------

*

ADD [0001+ 0203]	0001	1	5.0	8.86	0.08	2.00	6.14	n/a	0.000
-------------------	------	---	-----	------	------	------	------	-----	-------

*

CHIC STORM
[Ptot= 44.07 mm]

*

```
** CALIB NASHYD           0204  1  5.0    0.94    0.01    1.75    4.83 0.11    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
```

*

ADD [0001+ 0204]	0002	3	5.0	9.80	0.09	1.92	6.02	n/a	0.000
-------------------	------	---	-----	------	------	------	------	-----	-------

*

=====

```
V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
```

```
    000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y Y   MM MM  O   O
O   O   T   T   H   H   Y   M   M  O   O
    000  T   T   H   H   Y   M   M   000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4e204295-fcbc-4a90-ace4-454c20ef06a8\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4e204295-fcbc-4a90-ace4-454c20ef06a8\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 5Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM
5.0

SAR-23058 - Post-Dev-PF - AddHyd 2 Summary Outputs

```
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0201  1  5.0    2.61    0.02  3.50    4.26 0.09    0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44]
*
READ STORM          5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0202  1  5.0    5.22    0.07  3.58    8.65 0.18    0.000
[CN=59.0 ]
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.04  3.08   10.09 0.21    0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.09  3.58    7.19 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.10  3.58    7.52 n/a    0.000
*
READ STORM          5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.01  3.25    5.93 0.12    0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.11  3.50    7.37 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
O O      TTTT  TTTT  H   H   Y   Y  M   M   O O O  TM
O O      T    T    H   H   Y   Y  M M  M  O   O
O O      T    T    H   H   Y   Y  M   M   O O O
O O      T    T    H   H   Y   Y  M   M   O O O
```

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***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\5693b3a-a20b-451b-9840-a9767b2e4492\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\5693b3a-a20b-451b-9840-a9767b2e4492\sce
```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```
*****
** SIMULATION : Timmins **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM			60.0					
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
** CALIB NASHYD	0201	1	5.0	2.61	0.11	7.17	65.29 0.34	0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM			60.0					
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
** CALIB NASHYD	0202	1	5.0	5.22	0.31	7.25	96.99 0.50	0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM			60.0					
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
** CALIB NASHYD	0203	1	5.0	1.03	0.08	7.00	105.76 0.55	0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.42	7.17	86.42 n/a	0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.48	7.08	88.66 n/a	0.000
* READ STORM			60.0					
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								

d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73
remark: Timmins
*
** CALIB NASHYD 0204 1 5.0 0.94 0.05 7.08 76.20 0.39 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
*
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.53 7.08 87.47 n/a 0.000
*

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```

=====
=====
V   V   I   SSSSS U   U   A   L   (v 6.2.2015)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV      I   SSSSS UUUUU A   A   LLLLL

    000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
    O   O   T   T   H   H   Y   Y   MM MM   O   O
    O   O   T   T   H   H   Y   Y   M   M   O   O
    000   T   T   H   H   Y   Y   M   M   000

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```

***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\24fb9953-f4fa-4857-a72d-546448702ef6\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\24fb9953-f4fa-4857-a72d-546448702ef6\sce

```

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

```

*****
** SIMULATION : 100Yr 12Hr SCS **
*****

```

W/E COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
		min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

```

-----
READ STORM          5.0
[ Ptot= 99.60 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0201  1  5.0    2.61    0.08    6.42    19.39  0.19    0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]

```

```

*
READ STORM          5.0
[ Ptot= 99.60 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0202  1  5.0    5.22    0.24    6.58    33.03  0.33    0.000
[CN=59.0]

```

[N = 3.0:Tp 0.56]

```

*
READ STORM          5.0
[ Ptot= 99.60 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0203  1  5.0    1.03    0.14    6.08    37.31  0.37    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]

```

```

*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.32    6.50    28.48  n/a    0.000

```

```

*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.36    6.50    29.51  n/a    0.000

```

```

*
READ STORM          5.0
[ Ptot= 99.60 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\78ea709b-ac8f-4a01-accb-96
remark: 100Yr 12Hr SCS

```

```

** CALIB NASHYD      0204  1  5.0    0.94    0.05    6.25    24.14  0.24    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]

```

```

*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.40    6.42    28.99  n/a    0.000

```

```

=====
=====

```

```

V   V   I   SSSSS U   U   A   L   (v 6.2.2015)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV      I   SSSSS UUUUU A   A   LLLLL

```

```

    000   TTTT   TTTT   H   H   Y   Y   M   M   000   TM
    O   O   T   T   H   H   Y   Y   MM MM   O   O
    O   O   T   T   H   H   Y   Y   M   M   O   O
    000   T   T   H   H   Y   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\1b6fad99-bdc8-48d0-9266-12a73a7363cc\sce

```

DATE: 07-28-2024

TIME: 08:21:34

USER:

COMMENTS: _____

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```
*****
** SIMULATION : 100Yr 24Hr SCS **
*****

W/E COMMAND          HYD ID  DT    AREA  ' Qpeak Tpeak  R.V. R.C.  Qbase
                      min      ha   '  cms   hrs   mm   mm   cms

START @ 0.00 hrs
-----
READ STORM          5.0
[ Ptot=122.40 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee
remark: 100Yr 24Hr SCS
*
** CALIB NASHYD      0201  1  5.0    2.61   0.10 12.42 28.78 0.24   0.000
[CN=43.0            ]
[ N = 3.0:Tp 0.44]
*
READ STORM          5.0
[ Ptot=122.40 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee
remark: 100Yr 24Hr SCS
*
** CALIB NASHYD      0202  1  5.0    5.22   0.30 12.58 46.92 0.38   0.000
[CN=59.0            ]
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot=122.40 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee
remark: 100Yr 24Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03   0.18 12.08 52.43 0.43   0.000
[CN=64.0            ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84   0.40 12.50 40.87 n/a   0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86   0.43 12.42 42.21 n/a   0.000
*
READ STORM          5.0
[ Ptot=122.40 mm ]
fname              : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\432e1e82-dd74-49b1-bccd-ee
remark: 100Yr 24Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94   0.06 12.25 35.03 0.29   0.000
[CN=48.0            ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80   0.48 12.42 41.52 n/a   0.000
*
=====
=====

V  V  I  SSSSS  U  U  A  A  L
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L

(v 6.2.2015)
```

```

VV  I  SSSSS  UUUUU  A  A  LLLLL
000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  Y  M  M  000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6363cb1d-5b6e-41ad-9e51-bf4d586409a5\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6363cb1d-5b6e-41ad-9e51-bf4d586409a5\sce

DATE: 07-28-2024 TIME: 08:21:35

USER:

COMMENTS: _____

*****
** SIMULATION : 100Yr 4Hr CHI **
*****

W/E COMMAND          HYD ID  DT    AREA  ' Qpeak Tpeak  R.V. R.C.  Qbase
                      min      ha   '  cms   hrs   mm   mm   cms

START @ 0.00 hrs
-----
CHIC STORM          5.0
[ Ptot= 71.77 mm ]
*
** CALIB NASHYD      0201  1  5.0    2.61   0.05 1.92 10.00 0.14   0.000
[CN=43.0            ]
[ N = 3.0:Tp 0.44]
*
CHIC STORM          5.0
[ Ptot= 71.77 mm ]
*
** CALIB NASHYD      0202  1  5.0    5.22   0.16 2.08 18.34 0.26   0.000
[CN=59.0            ]
[ N = 3.0:Tp 0.56]
*
CHIC STORM          5.0
[ Ptot= 71.77 mm ]
*
** CALIB NASHYD      0203  1  5.0    1.03   0.09 1.50 21.05 0.29   0.000
[CN=64.0            ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84   0.21 2.00 15.56 n/a   0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86   0.24 1.92 16.20 n/a   0.000
*
CHIC STORM          5.0
```

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```

*      [ Ptot= 71.77 mm ]
** CALIB NASHYD          0204  1  5.0    0.94    0.03  1.75  12.99  0.18    0.000
   [CN=48.0              ]
   [ N = 3.0:Tp 0.31]
*
*      ADD [ 0001+ 0204]  0002  3  5.0    9.80    0.26  1.92  15.89  n/a    0.000
=====
=====
V      V      I      SSSSS  U      U      A      L
V      V      I      SS     U      U      A A     L
      V      V      I      SS     U      U      AAAAA L
      V      V      I      SS     U      U      A      A L
      VV       I      SSSSS  UUUUU  A      A      LLLLL
                                (v 6.2.2015)
      000      TTTTT  TTTTT  H      H      Y      Y      M      M      000      TM
      O      O      T      T      H      H      Y      Y      MM  MM  O      O
      O      O      T      T      H      H      Y      Y      M      M      O      O
      000      T      T      H      H      Y      Y      M      M      000
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```

***** SUMMARY OUTPUT *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\WH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6e0cbf6c-1e04-4814-92fb-1adc141b2e21\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\WH5
\3125fb1d-679a-4570-ba71-719dfceb268e\6e0cbf6c-1e04-4814-92fb-1adc141b2e21\sce
```

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

```
*****
** SIMULATION : 100Yr 6Hr SCS                               **
*****
```

W/E COMMAND	HYD ID	DT	AREA	Qpeak	Tpeak	R.V.	R.C.	Qbase
		min	ha	cms	hrs	mm		cms

START @ 0.00 hrs

```

READ STORM                      5.0
[ Ptot= 81.00 mm ]
fname      :                  C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS
*
** CALIB NASHYD                0201  1  5.0    2.61    0.06  3.42  12.84  0.16    0.000
   [CN=43.0]
   [ N = 3.0:Tp 0.44]
*
```

```

READ STORM          5.0
[ Ptot= 81.00 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS

```

```

** CALIB NASHYD      0202  1  5.0      5.22      0.20  3.58  22.89 0.28      0.000
   [CN=59.0]
   [ N = 3.0:Tp 0.56]

```

```

READ STORM          5.0
[ Ptot= 81.00 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS

```

```

** CALIB NASHYD      0203  1  5.0      1.03      0.12  3.08  26.13 0.32   0.000
  [CN=64.0]
  [ N = 3.0:Tp 0.13]

```

ADD	[	0201+	0202]	0001	3	5.0	7.84	0.26	3.58	19.54	n/a	0.000
-----	---	-------	-------	------	---	-----	------	------	------	-------	-----	-------

ADD	[	0001+	0203]	0001	1	5.0	8.86	0.28	3.50	20.30	n/a	0.000
-----	---	-------	-------	------	---	-----	------	------	------	-------	-----	-------

```

READ STORM          5.0
[ Ptot= 81.00 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\7818c190-a919-47f9-8559-41
remark: 100Yr 6Hr SCS

```

```

** CALIB NASHYD      0204  1  5.0    0.94    0.04  3.25  16.39 0.20    0.000
  [CN=48.0]
  [ N = 3.0:Tp 0.31]

```

ADD	[	0001+	0204]	0002	3	5.0	9.80	0.31	3.50	19.93	n/a	0.000
-----	---	-------	-------	------	---	-----	------	------	------	-------	-----	-------

V	V	I	SSSSS	U	U	A	L	(v 6.2.2015)
V	V	I	SS	U	U	A A	L	
V	V	I	SS	U	U	AAAAA	L	
V	V	I	SS	U	U	A A	L	
VV		I	SSSSS	UUUUU	A	A	LLLLL	

000	TTTT	TTTT	H	H	Y	Y	M	M	000	TM
0 0	T	T	H	H	Y Y		MM	MM	0 0	
0 0	T	T	H	H	Y		M	M	0 0	
000	T	T	H	H	Y		M	M	000	

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***** SUMMARY OUTPUT *****

```

Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\vo.in.dat
Output filename:      C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d63f9485-c1b1-4596-8ddb-92e07e44f0ba\sce
Summary filename:     C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d63f9485-c1b1-4596-8ddb-92e07e44f0ba\sce

```

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 10Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM	5.0							
[Ptot= 69.60 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d							
remark: 10Yr 12Hr SCS								
** CALIB NASHYD	0201	1	5.0	2.61	0.04	6.42	9.38 0.13	0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
*								
READ STORM	5.0							
[Ptot= 69.60 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d							
remark: 10Yr 12Hr SCS								
** CALIB NASHYD	0202	1	5.0	5.22	0.13	6.58	17.33 0.25	0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
*								
READ STORM	5.0							
[Ptot= 69.60 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d							
remark: 10Yr 12Hr SCS								
** CALIB NASHYD	0203	1	5.0	1.03	0.08	6.08	19.91 0.29	0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
*								
ADD [0201+ 0202]	0001	3	5.0	7.84	0.16	6.58	14.68 n/a	0.000
*								
ADD [0001+ 0203]	0001	1	5.0	8.86	0.18	6.50	15.28 n/a	0.000
*								
READ STORM	5.0							
[Ptot= 69.60 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\6f301182-5a8a-484e-8ed4-9d							
remark: 10Yr 12Hr SCS								
** CALIB NASHYD	0204	1	5.0	0.94	0.02	6.25	12.23 0.18	0.000
[CN=48.0]								
[N = 3.0:Tp 0.31]								
*								
ADD [0001+ 0204]	0002	3	5.0	9.80	0.20	6.42	14.99 n/a	0.000
*								

=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\505bb0ec-08ab-4108-858f-827df9289884\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\505bb0ec-08ab-4108-858f-827df9289884\sce

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 10Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	'	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs									

READ STORM			5.0						
[Ptot= 86.40 mm]									
fname :					C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa				
remark: 10Yr 24Hr SCS									
*									
** CALIB NASHYD	0201	1	5.0	2.61	0.05	12.42	14.63	0.17	0.000
[CN=43.0]									
[N = 3.0:Tp 0.44]									
*									
READ STORM			5.0						
[Ptot= 86.40 mm]									
fname :					C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa				
remark: 10Yr 24Hr SCS									
*									
** CALIB NASHYD	0202	1	5.0	5.22	0.16	12.58	25.71	0.30	0.000
[CN=59.0]									

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```
* [ N = 3.0:Tp 0.56]
* READ STORM 5.0
  [ Ptot= 86.40 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa
  remark: 10Yr 24Hr SCS
* ** CALIB NASHYD 0203 1 5.0 1.03 0.10 12.08 29.25 0.34 0.000
  [CN=64.0]
  [ N = 3.0:Tp 0.13]
* ADD [ 0201+ 0202] 0001 3 5.0 7.84 0.21 12.50 22.02 n/a 0.000
* ADD [ 0001+ 0203] 0001 1 5.0 8.86 0.23 12.50 22.85 n/a 0.000
* READ STORM 5.0
  [ Ptot= 86.40 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\4c444d8e-042c-42bb-9b9f-fa
  remark: 10Yr 24Hr SCS
* ** CALIB NASHYD 0204 1 5.0 0.94 0.03 12.25 18.52 0.21 0.000
  [CN=48.0]
  [ N = 3.0:Tp 0.31]
* ADD [ 0001+ 0204] 0002 3 5.0 9.80 0.26 12.42 22.44 n/a 0.000
=====
=====
```

```
V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
```

```
OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d3636861-7960-4613-aaa9-73d0c687ebe2\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d3636861-7960-4613-aaa9-73d0c687ebe2\sce
```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : 10Yr 4Hr CHI **
*****
```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0201	1	5.0	2.61	1.92	4.67	0.09	0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0202	1	5.0	5.22	2.08	9.37	0.19	0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0203	1	5.0	1.03	1.50	10.92	0.22	0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
ADD [0201+ 0202]	0001	3	5.0	7.84	2.00	7.81	n/a	0.000
ADD [0001+ 0203]	0001	1	5.0	8.86	2.00	8.17	n/a	0.000
CHIC STORM			5.0					
[Ptot= 50.59 mm]								
** CALIB NASHYD	0204	1	5.0	0.94	1.75	6.44	0.13	0.000
[CN=48.0]								
[N = 3.0:Tp 0.31]								
ADD [0001+ 0204]	0002	3	5.0	9.80	1.92	8.00	n/a	0.000

=====

=====

```
V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
```

```
OOO TTTT TTTT H H Y Y M M OOO TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
```

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***** S U M M A R Y O U T P U T *****

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8df4a1db-c3d3-4198-933d-e6e47f26025d\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\8df4a1db-c3d3-4198-933d-e6e47f26025d\sce

DATE: 07-28-2024 TIME: 08:21:36
USER:

COMMENTS: _____

** SIMULATION : 10Yr 6Hr SCS **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
*											
**	CALIB NASHYD	0201	1	5.0	2.61	0.03	3.50	5.96	0.11	0.000	
	[CN=43.0										
	[N = 3.0:Tp 0.44]										
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
*											
**	CALIB NASHYD	0202	1	5.0	5.22	0.10	3.58	11.61	0.21	0.000	
	[CN=59.0										
	[N = 3.0:Tp 0.56]										
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										
	remark: 10Yr 6Hr SCS										
*											
**	CALIB NASHYD	0203	1	5.0	1.03	0.06	3.08	13.46	0.24	0.000	
	[CN=64.0										
	[N = 3.0:Tp 0.13]										
*											
	ADD [0201+ 0202]	0001	3	5.0	7.84	0.13	3.58	9.72	n/a	0.000	
*											
	ADD [0001+ 0203]	0001	1	5.0	8.86	0.14	3.58	10.16	n/a	0.000	
*											
	READ STORM			5.0							
	[Ptot= 56.40 mm]										
	fname :				C:\Users\mgallant\AppData\Local\Temp\						
	d7a0-4ec4-9470-90f2c3c758b0\71e73834-d9b0-4c7d-bb2c-52										

remark: 10Yr 6Hr SCS
*
** CALIB NASHYD 0204 1 5.0 0.94 0.02 3.25 8.05 0.14 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
*
ADD [0001+ 0204] 0002 3 5.0 9.80 0.15 3.50 9.96 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUUU A A LLLLL
000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000
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***** S U M M A R Y O U T P U T *****
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\07e292a7-383c-47ad-8b8a-cd4246310280\sce

DATE: 07-28-2024 TIME: 08:21:38
USER:

COMMENTS: _____

** SIMULATION : 25mm 4Hr CHI **

W/E	COMMAND	HYD	ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
				min	ha		cms	hrs	mm		cms
	START @ 0.00 hrs										

	CHIC STORM			10.0							
	[Ptot= 25.00 mm]										
*											
**	CALIB NASHYD	0201	1	5.0	2.61	0.00	2.00	0.77	0.03	0.000	
	[CN=43.0										
	[N = 3.0:Tp 0.44]										
*											
	CHIC STORM			10.0							
	[Ptot= 25.00 mm]										
*											

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```
** CALIB NASHYD      0202  1  5.0    5.22    0.02  2.08    2.04 0.08    0.000
[CN=59.0]
[ N = 3.0:Tp 0.56]
*
CHIC STORM          10.0
[ Ptot= 25.00 mm ]
*
** CALIB NASHYD      0203  1  5.0    1.03    0.01  1.50    2.43 0.10    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.02  2.08    1.62 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.02  2.00    1.71 n/a    0.000
*
CHIC STORM          10.0
[ Ptot= 25.00 mm ]
*
** CALIB NASHYD      0204  1  5.0    0.94    0.00  1.75    1.34 0.05    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.02  2.00    1.68 n/a    0.000
*
FINISH
```

=====

=====

=====

=====

```

V   V   I   SSSSS  U   U   A   L
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A L
V   V   I   SS    U   U   A  A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL

      000  TTTT  TTTT  H   H  Y   Y  M   M  000  TM
      O   O   T   T   T   H   H  Y   Y  MM  MM  O   O
      O   O   T   T   H   H   Y   M   M  O   O
      000  T   T   H   H   Y   M   M  000

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```

***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\7c1cef2b-bd53-4182-a34f-10eb87fd72c7\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\7c1cef2b-bd53-4182-a34f-10eb87fd72c7\sce
```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```
*****
** SIMULATION : 25Yr 12Hr SCS
*****

W/E COMMAND          HYD ID  DT      AREA  '  Qpeak Tpeak  R.V.  R.C.  Qbase
                      min      ha      cms  hrs   mm      cms

START @ 0.00 hrs
-----
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0201  1  5.0    2.61    0.05  6.42  13.03 0.16    0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0202  1  5.0    5.22    0.17  6.58  23.20 0.28    0.000
[CN=59.0]
[ N = 3.0:Tp 0.56]
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.10  6.08  26.47 0.32    0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.22  6.50  19.81 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.25  6.50  20.58 n/a    0.000
*
READ STORM              5.0
[ Ptot= 81.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3e64cffc-f179-49f6-b52e-7e
remark: 25Yr 12Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.03  6.25  16.62 0.20    0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.27  6.42  20.20 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A L

(v 6.2.2015)
```

V V I SS U U A A L
VV I SSSS UUUU A A LLLLL
000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\351e6f3e-3615-4d31-bc18-eb16c0a2fea9\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\351e6f3e-3615-4d31-bc18-eb16c0a2fea9\sce

DATE: 07-28-2024 TIME: 08:21:34

USER:

COMMENTS: _____

** SIMULATION : 25Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								
READ STORM [Ptot=100.80 mm] fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30 remark: 25Yr 24Hr SCS	5.0							
* ** CALIB NASHYD [CN=43.0] [N = 3.0:Tp 0.44]	0201	1	5.0	2.61	0.07	12.42	19.85	0.20 0.000
* READ STORM [Ptot=100.80 mm] fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30 remark: 25Yr 24Hr SCS	5.0							
* ** CALIB NASHYD [CN=59.0] [N = 3.0:Tp 0.56]	0202	1	5.0	5.22	0.21	12.58	33.73	0.33 0.000
* READ STORM [Ptot=100.80 mm] fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30 remark: 25Yr 24Hr SCS	5.0							

* ** CALIB NASHYD 0203 1 5.0 1.03 0.13 12.08 38.07 0.38 0.000
[CN=64.0]
[N = 3.0:Tp 0.13]
* ADD [0201+ 0202] 0001 3 5.0 7.84 0.28 12.50 29.10 n/a 0.000
* ADD [0001+ 0203] 0001 1 5.0 8.86 0.31 12.50 30.14 n/a 0.000
* READ STORM 5.0
[Ptot=100.80 mm]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4beb1330-abaf-451e-881c-30
remark: 25Yr 24Hr SCS
* ** CALIB NASHYD 0204 1 5.0 0.94 0.04 12.25 24.67 0.24 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.34 12.42 29.61 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\bc2c651f-cc6f-4d90-a650-0d2fa63f6ed7\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\bc2c651f-cc6f-4d90-a650-0d2fa63f6ed7\sce

DATE: 07-28-2024 TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 25Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-----------	-----------	---------	------	-----------

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```

START @ 0.00 hrs
-----
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0201 1 5.0   2.61   0.03  1.92   6.60 0.11   0.000
   [CN=43.0          ]
   [ N = 3.0:Tp 0.44]

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0202 1 5.0   5.22   0.11  2.08  12.70 0.21   0.000
   [CN=59.0          ]
   [ N = 3.0:Tp 0.56]

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0203 1 5.0   1.03   0.06  1.50  14.70 0.25   0.000
   [CN=64.0          ]
   [ N = 3.0:Tp 0.13]

*
ADD [ 0201+ 0202] 0001 3 5.0   7.84   0.14  2.00  10.67 n/a   0.000

*
ADD [ 0001+ 0203] 0001 1 5.0   8.86   0.16  1.92  11.13 n/a   0.000

*
CHIC STORM          5.0
[ Ptot= 59.08 mm ]

*
** CALIB NASHYD      0204 1 5.0   0.94   0.02  1.75   8.84 0.15   0.000
   [CN=48.0          ]
   [ N = 3.0:Tp 0.31]

*
ADD [ 0001+ 0204] 0002 3 5.0   9.80   0.18  1.92  10.92 n/a   0.000

=====
=====

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL

OOO  TTTT  TTTT  H   H   Y   Y   M   M   OOO  TM
O   O   T   T   T   H   H   Y   Y   M   M   O   O
O   O   T   T   H   H   Y   Y   M   M   O   O
OOO  T   T   H   H   Y   Y   M   M   OOO

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***** S U M M A R Y   O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\8846a490-773a-4b85-be3f-fed4d9693c5f\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\8846a490-773a-4b85-be3f-fed4d9693c5f\sce

```

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

```

*****
** SIMULATION : 25Yr 6Hr SCS
*****

```

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM			5.0					
[Ptot= 66.60 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01					
remark: 25Yr 6Hr SCS								
** CALIB NASHYD	0201	1	5.0	2.61	0.04	3.50	8.54	0.13
[CN=43.0]								
[N = 3.0:Tp 0.44]								
READ STORM			5.0					
[Ptot= 66.60 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01					
remark: 25Yr 6Hr SCS								
** CALIB NASHYD	0202	1	5.0	5.22	0.14	3.58	15.95	0.24
[CN=59.0]								
[N = 3.0:Tp 0.56]								
READ STORM			5.0					
[Ptot= 66.60 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01					
remark: 25Yr 6Hr SCS								
** CALIB NASHYD	0203	1	5.0	1.03	0.08	3.08	18.37	0.28
[CN=64.0]								
[N = 3.0:Tp 0.13]								
ADD [0201+ 0202]	0001	3	5.0	7.84	0.18	3.58	13.48	n/a
ADD [0001+ 0203]	0001	1	5.0	8.86	0.19	3.58	14.05	n/a
READ STORM			5.0					
[Ptot= 66.60 mm]								
fname :			C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\4815043b-d29d-4bf5-b776-01					
remark: 25Yr 6Hr SCS								
** CALIB NASHYD	0204	1	5.0	0.94	0.03	3.25	11.22	0.17
[CN=48.0]								
[N = 3.0:Tp 0.31]								
ADD [0001+ 0204]	0002	3	5.0	9.80	0.21	3.50	13.78	n/a

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

*

=====

=====

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV      I   SSSSS UUUUU A   A  LLLLL

```

```

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y Y   MM MM  O   O
O   O   T   T   H   H   Y   M   M  O   O
000  T   T   H   H   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\NH5
\3125fb1d-679a-4570-ba71-719dfceb268e\15abb3e-2ce9-4d35-9ceb-b65719b02f77\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\NH5
\3125fb1d-679a-4570-ba71-719dfceb268e\15abb3e-2ce9-4d35-9ceb-b65719b02f77\sce

```

DATE: 07-28-2024

TIME: 08:21:38

USER:

COMMENTS: _____

```

*****
** SIMULATION : 2Yr 12Hr SCS **
*****

```

W/E	COMMAND	HYD ID	DT	AREA	'	Qpeak	Tpeak	R.V.	R.C.	Qbase
			min	ha		cms	hrs	mm		cms

START @ 0.00 hrs

READ STORM 5.0
[Ptot= 45.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

```

** CALIB NASHYD 0201 1 5.0 2.61 0.01 6.50 3.68 0.08 0.000
[CN=43.0]
[ N = 3.0:Tp 0.44]

```

```

* READ STORM 5.0
[ Ptot= 45.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

```

```

** CALIB NASHYD 0202 1 5.0 5.22 0.05 6.58 7.61 0.17 0.000

```

```

[CN=59.0]
[ N = 3.0:Tp 0.56]

```

*

READ STORM 5.0
[Ptot= 45.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

*

```

** CALIB NASHYD 0203 1 5.0 1.03 0.03 6.08 8.89 0.20 0.000
[CN=64.0]
[ N = 3.0:Tp 0.13]

```

*

ADD [0201+ 0202] 0001 3 5.0 7.84 0.07 6.58 6.30 n/a 0.000

*

ADD [0001+ 0203] 0001 1 5.0 8.86 0.08 6.58 6.60 n/a 0.000

*

READ STORM 5.0
[Ptot= 45.60 mm]

fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-d7a0-4ec4-9470-90f2c3c758b0\7bbf8568-f820-4ab6-87cc-c4
remark: 2Yr 12Hr SCS

*

```

** CALIB NASHYD 0204 1 5.0 0.94 0.01 6.25 5.19 0.11 0.000
[CN=48.0]
[ N = 3.0:Tp 0.31]

```

*

ADD [0001+ 0204] 0002 3 5.0 9.80 0.08 6.50 6.46 n/a 0.000

*

=====

=====

```

V   V   I   SSSSS U   U   A   L           (v 6.2.2015)
V   V   I   SS   U   U   A A  L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A  L
VV      I   SSSSS UUUUU A   A  LLLLL

```

```

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y Y   MM MM  O   O
O   O   T   T   H   H   Y   M   M  O   O
000  T   T   H   H   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\NH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4b6b46fa-d782-4d81-a638-17b9a591e739\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\NH5
\3125fb1d-679a-4570-ba71-719dfceb268e\4b6b46fa-d782-4d81-a638-17b9a591e739\sce

```

DATE: 07-28-2024

TIME: 08:21:35

USER:

COMMENTS: _____

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```
*****
** SIMULATION : 2Yr 24Hr SCS **
*****

W/E COMMAND          HYD ID  DT      AREA  ' Qpeak Tpeak  R.V. R.C.  Qbase
                      min      ha  '   cms   hrs   mm          cms

START @ 0.00 hrs
-----
READ STORM              5.0
[ Ptot= 55.20 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a
remark: 2Yr 24Hr SCS
*
** CALIB NASHYD          0201  1  5.0    2.61    0.02 12.42    5.68 0.10    0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44 ]
*
READ STORM              5.0
[ Ptot= 55.20 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a
remark: 2Yr 24Hr SCS
*
** CALIB NASHYD          0202  1  5.0    5.22    0.07 12.58   11.13 0.20    0.000
[CN=59.0 ]
[ N = 3.0:Tp 0.56 ]
*
READ STORM              5.0
[ Ptot= 55.20 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a
remark: 2Yr 24Hr SCS
*
** CALIB NASHYD          0203  1  5.0    1.03    0.04 12.08   12.92 0.23    0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13 ]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.09 12.50    9.31 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.09 12.50    9.73 n/a    0.000
*
READ STORM              5.0
[ Ptot= 55.20 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\636f660d-efd5-4859-a7a7-9a
remark: 2Yr 24Hr SCS
*
** CALIB NASHYD          0204  1  5.0    0.94    0.01 12.25    7.70 0.14    0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31 ]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.11 12.42    9.54 n/a    0.000
=====
=====

V  V  I  SSSSS  U  U  A  L
V  V  I  SS    U  U  A  L
V  V  I  SS    U  U  AAAA L

(v 6.2.2015)
```

```
V  V  I  SS  U  U  A  A  L
VV  I  SSSS UUUUU A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  T  H  H  Y  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d99beaae-df84-4e62-9f1c-cffaeca4adfe\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\d99beaae-df84-4e62-9f1c-cffaeca4adfe\sce

DATE: 07-28-2024 TIME: 08:21:37
USER:

COMMENTS:

*****
** SIMULATION : 2Yr 4Hr CHI **
*****

W/E COMMAND          HYD ID  DT      AREA  ' Qpeak Tpeak  R.V. R.C.  Qbase
                      min      ha  '   cms   hrs   mm          cms

START @ 0.00 hrs
-----
CHIC STORM              5.0
[ Ptot= 33.76 mm ]
*
** CALIB NASHYD          0201  1  5.0    2.61    0.01 2.00    1.76 0.05    0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44 ]
*
CHIC STORM              5.0
[ Ptot= 33.76 mm ]
*
** CALIB NASHYD          0202  1  5.0    5.22    0.03 2.08    4.04 0.12    0.000
[CN=59.0 ]
[ N = 3.0:Tp 0.56 ]
*
CHIC STORM              5.0
[ Ptot= 33.76 mm ]
*
** CALIB NASHYD          0203  1  5.0    1.03    0.02 1.50    4.77 0.14    0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13 ]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.04 2.08    3.28 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.05 2.00    3.45 n/a    0.000
*
```

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```
CHIC STORM          5.0
[ Ptot= 33.76 mm ]
*
** CALIB NASHYD      0204 1 5.0    0.94    0.01 1.75    2.70 0.08    0.000
[CN=48.0             ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002 3 5.0    9.80    0.05 2.00    3.38 n/a    0.000
=====
=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

    000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
    O  O  T  T  H  H  Y  Y  MM MM  O  O
    O  O  T  T  H  H  Y  Y  M  M  O  O
    000  T  T  H  H  Y  Y  M  M  000

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***** S U M M A R Y   O U T P U T   *****

Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output  filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\e4a14275-c7a6-45e9-ba36-4fa7747658b2\sce
Summary filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\e4a14275-c7a6-45e9-ba36-4fa7747658b2\sce

DATE: 07-28-2024          TIME: 08:21:37

USER:

COMMENTS: _____

*****
** SIMULATION : 2Yr 6Hr SCS          **
*****

W/E COMMAND          HYD ID    DT      AREA  '  Qpeak Tpeak    R.V.  R.C.    Qbase
                    min      ha      cms  hrs    mm

START @ 0.00 hrs
-----
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0201 1 5.0    2.61    0.01 3.50    2.16 0.06    0.000
[CN=43.0             ]
[ N = 3.0:Tp 0.44]
```

```
*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0202 1 5.0    5.22    0.04 3.67    4.81 0.13    0.000
[CN=59.0             ]
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0203 1 5.0    1.03    0.02 3.08    5.67 0.15    0.000
[CN=64.0             ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001 3 5.0    7.84    0.05 3.58    3.93 n/a    0.000
*
ADD [ 0001+ 0203] 0001 1 5.0    8.86    0.06 3.58    4.13 n/a    0.000
*
READ STORM          5.0
[ Ptot= 36.60 mm ]
fname              :          C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\3d9243d4-15db-439a-b937-c5
remark: 2Yr 6Hr SCS
*
** CALIB NASHYD      0204 1 5.0    0.94    0.01 3.33    3.23 0.09    0.000
[CN=48.0             ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002 3 5.0    9.80    0.06 3.58    4.04 n/a    0.000
*
=====
=====

V  V  I  SSSSS  U  U  A  L          (v 6.2.2015)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

    000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
    O  O  T  T  H  H  Y  Y  MM MM  O  O
    O  O  T  T  H  H  Y  Y  M  M  O  O
    000  T  T  H  H  Y  Y  M  M  000

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***** S U M M A R Y   O U T P U T   *****

Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output  filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\87a2ed7f-0563-4a73-856d-9960cbf84b8e\sce
Summary filename:  C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\87a2ed7f-0563-4a73-856d-9960cbf84b8e\sce
```

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

 ** SIMULATION : 50Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-------------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.07 6.42 16.30 0.18 0.000
 [CN=43.0]
 [N = 3.0:Tp 0.44]

* READ STORM 5.0
 [Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.21 6.58 28.30 0.31 0.000
 [CN=59.0]
 [N = 3.0:Tp 0.56]

* READ STORM 5.0
 [Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0203 1 5.0 1.03 0.12 6.08 32.12 0.35 0.000
 [CN=64.0]
 [N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.28 6.50 24.30 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.30 6.50 25.21 n/a 0.000

* READ STORM 5.0
 [Ptot= 91.20 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\bc1082f4-5cd7-425b-86bf-5c
 remark: 50Yr 12Hr SCS

* ** CALIB NASHYD 0204 1 5.0 0.94 0.04 6.25 20.50 0.22 0.000
 [CN=48.0]
 [N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.34 6.42 24.76 n/a 0.000

*

V V I SSSSS U U A L (v 6.2.2015)
 V V I SS U U A A L
 V V I SS U U A A A A L
 V V I SS U U A A L
 VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
 O O T T H H Y Y MM MM O O
 O O T T H H Y Y M M O O
 000 T T H H Y Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\vo2\vo1n.dat
 Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
 \3125fb1d-679a-4570-ba71-719dfceb268e\96943dab-bf37-471e-ad69-df9e8a7fb28c\sce
 Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
 \3125fb1d-679a-4570-ba71-719dfceb268e\96943dab-bf37-471e-ad69-df9e8a7fb28c\sce

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

 ** SIMULATION : 50Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
-------------	--------	--------	---------	-------------	-----------	---------	------	-----------

START @ 0.00 hrs

READ STORM 5.0

[Ptot=112.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
 remark: 50Yr 24Hr SCS

* ** CALIB NASHYD 0201 1 5.0 2.61 0.09 12.42 24.66 0.22 0.000
 [CN=43.0]
 [N = 3.0:Tp 0.44]

* READ STORM 5.0
 [Ptot=112.80 mm]
 fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
 d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
 remark: 50Yr 24Hr SCS

* ** CALIB NASHYD 0202 1 5.0 5.22 0.26 12.58 40.90 0.36 0.000

```
[CN=59.0
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot=112.80 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.16 12.08  45.90 0.41    0.000
[CN=64.0
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.34 12.50  35.48 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.37 12.50  36.69 n/a    0.000
*
READ STORM          5.0
[ Ptot=112.80 mm ]
fname               : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\ffaa7571-96ce-46da-9f02-a1
remark: 50Yr 24Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.05 12.25  30.27 0.27    0.000
[CN=48.0
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.42 12.42  36.07 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A A L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL

      000  TTTT  TTTT  H   H   Y   Y  M   M  000  TM
      O   O   T   T   H   H   Y   Y  MM MM  O   O
      O   O   T   T   H   H   Y   Y  M   M  O   O
      000  T   T   H   H   Y   Y  M   M  000

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```

***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\84afb8d-5b3c-4644-a638-3fd50943e21e\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\VH5
\3125fb1d-679a-4570-ba71-719dfceb268e\84afb8d-5b3c-4644-a638-3fd50943e21e\sce

DATE: 07-28-2024          TIME: 08:21:37

USER:

COMMENTS: _____
```

```
*****
** SIMULATION : 50Yr 4Hr CHI **
*****

W/E COMMAND          HYD ID  DT   AREA  '  Qpeak  Tpeak  R.V.  R.C.  Qbase
                      min     ha   cms   hrs   mm      cms

START @ 0.00 hrs
-----
CHIC STORM          5.0
[ Ptot= 65.66 mm ]
*
** CALIB NASHYD      0201  1  5.0    2.61    0.04  1.92   8.29 0.13   0.000
[CN=43.0
[ N = 3.0:Tp 0.44]
*
CHIC STORM          5.0
[ Ptot= 65.66 mm ]
*
** CALIB NASHYD      0202  1  5.0    5.22    0.14  2.08  15.53 0.24   0.000
[CN=59.0
[ N = 3.0:Tp 0.56]
*
CHIC STORM          5.0
[ Ptot= 65.66 mm ]
*
** CALIB NASHYD      0203  1  5.0    1.03    0.07  1.50  17.90 0.27   0.000
[CN=64.0
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.18  2.00  13.12 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.20  1.92  13.67 n/a    0.000
*
CHIC STORM          5.0
[ Ptot= 65.66 mm ]
*
** CALIB NASHYD      0204  1  5.0    0.94    0.03  1.75  10.91 0.17   0.000
[CN=48.0
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.22  1.92  13.41 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A A L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL

      000  TTTT  TTTT  H   H   Y   Y  M   M  000  TM
      O   O   T   T   H   H   Y   Y  MM MM  O   O
      O   O   T   T   H   H   Y   Y  M   M  O   O
      000  T   T   H   H   Y   Y  M   M  000

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```

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\62dcedbf-736e-41b9-a854-f60fd1a7b756\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\62dcedbf-736e-41b9-a854-f60fd1a7b756\sce

DATE: 07-28-2024 TIME: 08:21:35

USER:

COMMENTS: _____

** SIMULATION : 50Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								
----- READ STORM	5.0							
[Ptot= 73.80 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-							
d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21								
remark: 50Yr 6Hr SCS								
* ** CALIB NASHYD	0201	1	5.0	2.61	0.05	3.50	10.60	0.14 0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM	5.0							
[Ptot= 73.80 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-							
d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21								
remark: 50Yr 6Hr SCS								
* ** CALIB NASHYD	0202	1	5.0	5.22	0.16	3.58	19.31	0.26 0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM	5.0							
[Ptot= 73.80 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-							
d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21								
remark: 50Yr 6Hr SCS								
* ** CALIB NASHYD	0203	1	5.0	1.03	0.10	3.08	22.14	0.30 0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.21	3.58	16.41	n/a 0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.24	3.58	17.07	n/a 0.000
* READ STORM	5.0							
[Ptot= 73.80 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-							

d7a0-4ec4-9470-90f2c3c758b0\6b1b93e2-fde6-4d0f-9dea-21
remark: 50Yr 6Hr SCS
* ** CALIB NASHYD 0204 1 5.0 0.94 0.03 3.25 13.71 0.19 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.26 3.50 16.75 n/a 0.000
*
=====

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\04529730-01fd-496e-af8d-a15e74809ffa\sce
Summary filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\04529730-01fd-496e-af8d-a15e74809ffa\sce

DATE: 07-28-2024 TIME: 08:21:34

USER:

COMMENTS: _____

** SIMULATION : 5Yr 12Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								
----- READ STORM	5.0							
[Ptot= 60.00 mm]								
fname :	C:\Users\mgallant\AppData\Local\Temp\e151c979-							
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13								
remark: 5Yr 12Hr SCS								
* ** CALIB NASHYD	0201	1	5.0	2.61	0.03	6.42	6.83	0.11 0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

```
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0202 1 5.0    5.22    0.09  6.58 13.08 0.22    0.000
  [CN=59.0]
  [ N = 3.0:Tp 0.56]
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0203 1 5.0    1.03    0.06  6.08 15.14 0.25    0.000
  [CN=64.0]
  [ N = 3.0:Tp 0.13]
*
  ADD [ 0201+ 0202] 0001 3 5.0    7.84    0.12  6.58 11.00 n/a    0.000
*
  ADD [ 0001+ 0203] 0001 1 5.0    8.86    0.13  6.50 11.48 n/a    0.000
*
  READ STORM                    5.0
  [ Ptot= 60.00 mm ]
  fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\c1186f33-5b80-4f09-8161-13
  remark: 5Yr 12Hr SCS
*
** CALIB NASHYD                0204 1 5.0    0.94    0.02  6.25  9.12 0.15    0.000
  [CN=48.0]
  [ N = 3.0:Tp 0.31]
*
  ADD [ 0001+ 0204] 0002 3 5.0    9.80    0.15  6.42 11.25 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A A L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
```

```

OOO  TTTT  TTTT  H   H   Y   Y   M   M   OOO  TM
O   O   T   T   H   H   Y   Y   M M  O   O
O   O   T   T   H   H   Y   Y   M   M   O   O
OOO    T   T   H   H   Y   Y   M   M   OOO
```

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***** S U M M A R Y O U T P U T *****

```
Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\vh5
\3125fb1d-679a-4570-ba71-719dfceb268e\43834c3-372b-4d8d-bdb1-a1641ealf668\sce
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```

DATE: 07-28-2024

TIME: 08:21:37

USER:

COMMENTS: _____

** SIMULATION : 5Yr 24Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM	5.0							
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
** CALIB NASHYD	0201 1	5.0	2.61	0.04	12.42	10.78	0.14	0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
READ STORM	5.0							
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
** CALIB NASHYD	0202 1	5.0	5.22	0.12	12.58	19.60	0.26	0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
READ STORM	5.0							
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
** CALIB NASHYD	0203 1	5.0	1.03	0.08	12.08	22.46	0.30	0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
ADD [0201+ 0202]	0001 3	5.0	7.84	0.16	12.50	16.66	n/a	0.000
ADD [0001+ 0203]	0001 1	5.0	8.86	0.17	12.50	17.33	n/a	0.000
READ STORM	5.0							
[Ptot= 74.40 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\78b5d581-9d7c-4244-9fc3-96								
remark: 5Yr 24Hr SCS								
** CALIB NASHYD	0204 1	5.0	0.94	0.02	12.25	13.93	0.19	0.000
[CN=48.0]								
[N = 3.0:Tp 0.31]								
ADD [0001+ 0204]	0002 3	5.0	9.80	0.19	12.42	17.01	n/a	0.000

SAR-23058 - Post-Dev-PF - NasHyd 202 Summary Outputs

*
=====

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
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DATE: 07-28-2024 TIME: 08:21:37

USER:

COMMENTS:

** SIMULATION : 5Yr 4Hr CHI **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								
CHIC STORM [Ptot= 44.07 mm]	5.0							
** CALIB NASHYD [CN=43.0 [N = 3.0:Tp 0.44]	0201	1 5.0	2.61	0.02	1.92	3.40	0.08	0.000
CHIC STORM [Ptot= 44.07 mm]	5.0							
** CALIB NASHYD [CN=59.0 [N = 3.0:Tp 0.56]	0202	1 5.0	5.22	0.06	2.08	7.09	0.16	0.000
CHIC STORM [Ptot= 44.07 mm]	5.0							

** CALIB NASHYD 0203 1 5.0 1.03 0.03 1.50 8.31 0.19 0.000
[CN=64.0
[N = 3.0:Tp 0.13]

* ADD [0201+ 0202] 0001 3 5.0 7.84 0.08 2.08 5.86 n/a 0.000

* ADD [0001+ 0203] 0001 1 5.0 8.86 0.08 2.00 6.14 n/a 0.000

CHIC STORM 5.0
[Ptot= 44.07 mm]

** CALIB NASHYD 0204 1 5.0 0.94 0.01 1.75 4.83 0.11 0.000
[CN=48.0
[N = 3.0:Tp 0.31]

* ADD [0001+ 0204] 0002 3 5.0 9.80 0.09 1.92 6.02 n/a 0.000

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
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Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
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DATE: 07-28-2024 TIME: 08:21:35

USER:

COMMENTS:

** SIMULATION : 5Yr 6Hr SCS **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								
READ STORM	5.0							

```
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0201  1  5.0    2.61    0.02  3.50    4.26 0.09    0.000
[CN=43.0 ]
[ N = 3.0:Tp 0.44]
*
READ STORM          5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0202  1  5.0    5.22    0.07  3.58    8.65 0.18    0.000
[CN=59.0 ]
[ N = 3.0:Tp 0.56]
*
READ STORM          5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0203  1  5.0    1.03    0.04  3.08   10.09 0.21    0.000
[CN=64.0 ]
[ N = 3.0:Tp 0.13]
*
ADD [ 0201+ 0202] 0001  3  5.0    7.84    0.09  3.58    7.19 n/a    0.000
*
ADD [ 0001+ 0203] 0001  1  5.0    8.86    0.10  3.58    7.52 n/a    0.000
*
READ STORM          5.0
[ Ptot= 48.60 mm ]
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-
d7a0-4ec4-9470-90f2c3c758b0\1fc213a4-fb90-4e73-8609-39
remark: 5Yr 6Hr SCS
*
** CALIB NASHYD      0204  1  5.0    0.94    0.01  3.25    5.93 0.12    0.000
[CN=48.0 ]
[ N = 3.0:Tp 0.31]
*
ADD [ 0001+ 0204] 0002  3  5.0    9.80    0.11  3.50    7.37 n/a    0.000
*
=====
=====
```

```

V   V   I   SSSSS  U   U   A   L           (v 6.2.2015)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A  L
VV      I   SSSSS  UUUUU  A   A  LLLLL
O O      TTTTT  TTTT   H   H   Y   Y  M   M   OOO   TM
O O      T      T      H   H   Y   Y  MM  MM   O   O
O O      T      T      H   H   Y   Y  M   M   O   O
O O      T      T      H   H   Y   Y  M   M   OOO
```

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voim.dat
Output filename: C:\Users\mgallant\AppData\Local\Civica\XH5
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Summary filename: C:\Users\mgallant\AppData\Local\Civica\XH5
\3125fb1d-679a-4570-ba71-719dfceb268e\5693b3a-a20b-451b-9840-a9767b2e4492\sce

DATE: 07-28-2024

TIME: 08:21:36

USER:

COMMENTS: _____

** SIMULATION : Timmins **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								

READ STORM		60.0						
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
* ** CALIB NASHYD	0201	1	5.0	2.61	0.11	7.17	65.29 0.34	0.000
[CN=43.0]								
[N = 3.0:Tp 0.44]								
* READ STORM		60.0						
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
* ** CALIB NASHYD	0202	1	5.0	5.22	0.31	7.25	96.99 0.50	0.000
[CN=59.0]								
[N = 3.0:Tp 0.56]								
* READ STORM		60.0						
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								
d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73								
remark: Timmins								
* ** CALIB NASHYD	0203	1	5.0	1.03	0.08	7.00	105.76 0.55	0.000
[CN=64.0]								
[N = 3.0:Tp 0.13]								
* ADD [0201+ 0202]	0001	3	5.0	7.84	0.42	7.17	86.42 n/a	0.000
* ADD [0001+ 0203]	0001	1	5.0	8.86	0.48	7.08	88.66 n/a	0.000
* READ STORM		60.0						
[Ptot=193.00 mm]								
fname : C:\Users\mgallant\AppData\Local\Temp\e151c979-								

d7a0-4ec4-9470-90f2c3c758b0\9abc7c04-e81e-4a93-b69b-73
remark: Timmins
*
** CALIB NASHYD 0204 1 5.0 0.94 0.05 7.08 76.20 0.39 0.000
[CN=48.0]
[N = 3.0:Tp 0.31]
*
* ADD [0001+ 0204] 0002 3 5.0 9.80 0.53 7.08 87.47 n/a 0.000
*

Appendix C

Sanitary & Water Servicing Information

- Fixture Count and Occupancy Flow Calculations
- Onsite Wastewater Treatment Design

1029 Brebeuf Road
Septic System Design

Client:
Project : 1029 Brebeuf Road
Jones File No.: SAR-23058
Subject: Fixture Count and Occupancy Flow Calculations



Use	Location	Type	Area (sq.m)	Number of Employees	Number of Fixtures	Fixture Units (Per OBC 7.6.3.2.)
Office Building	Dispatch Office	Office	18.58	2		
	Sales Office	Office	16.26	2		
	Washroom	Office	10.68	0		
Sub-Total			45.52	4		
Factory	Ready-Mix Plant	Factory	116.13	10		
Sub-Total			116.13	10		
Washroom	Washroom	Lavatory greater than 8.3 L/min			1	1
	Washroom	Sink, bar			1	1
	Washroom	shower head, >9.5L/min / head			1	2
Sub-Total					3	4
Totals			161.7		3	4
Based on Office Use (75 L/day employee per 8 hour shift - OBC Table 8.2.1.3.B line 15a)			300	L/d		2,360
Based on Factory Use no shower (75 L/day employee per 8 hour shift - OBC Table 8.2.1.3.B line 10a)			750	L/d		
Total			1,050	L/d		
Based on Office Use (75 L/day / 9.3 sq.m - OBC Table 8.2.1.3.B line 15b)			367	L/d		
Based on Warehouse Use per Water Closet (950 L/day/water closet - OBC Table 8.2.1.3.B line 26a)			950	L/d		
Total			1,317	L/d		

L/d based on fixture units conversion to L/d, 7.4.10.5. (1) (a) (less than 260 fixtures use 2,360 L/d)

<u>ONSITE WASTEWATER TREATMENT DESIGN</u>			
Sizing for Class 2, 4, & 5 Systems under the 2017 OBC			
Client: The Sarjeant Co. Ltd.	Designer: MG		
Project: 1029 Brebeuf, Midland	Checked By: DR	Installer:	
PART 1 - GENERAL INFORMATION			
Design is being prepared for a: ☒ New Sewage System ☐ Repairs to Existing System ☐ Addition/Renovations ☐ Lot Suitability ☐ Other			
The proposed System will be: ☐ Class 2 - Leaching Pit ☐ Class 3 - Cess Pool ☒ Class 4 - Leaching Bed System ☐ Class 5 - Holding Tank			
If system is Class 4, it will be: ☒ Septic Tank or ☐ Treatment Unit Specify Level (II, III, or IV) _____ Treatment Unit			
Constructed with a leaching bed as a: ☐ Absorption Trench or ☒ Filter Bed or ☐ Shallow Buried Trench			
Water Supply is: ☐ Existing or ☒ Proposed			
Source of Water Supply: ☐ Municipal/Communal ☒ Drilled Well ☐ Dug/Bored Well ☐ Sandpoint Well ☐ Lake, River, Stream ☐ Other			
Additional Notes: 			
PART 2 - SITE SOIL PROFILE & PERCOLATION RATE			
The Percolation Rate (T) is measured in minutes/centimetre (min/cm), and measures the rate at which the water drains into the soil. Provide a T-time for the site.			
Soil Type	Clean Medium - Coarse Sand (A)	Silty Gravely Sands (B)	Silty Sandys Sandy Silts (B)
T (min/cm)	1 3 6	8 10	16 20
			29 33
			38 44
			50+
Test Holes should be dug to a depth of at least 1.8m, or to bedrock, or to groundwater table, whichever is the shallowest, and should be located within the leaching bed (a minimum of 2 holes), where the percolation time of the site is taken as the greater of the two test hole 'T' values. For Percolation Test procedure, see Tab 2.			
Test Hole No. 1		Test Hole No. 2	
Rock/GWT	Depth (m)	Rock/GWT	Depth (m)
	0.00		0.00
	0.25		0.25
	0.50		0.50
	0.75		0.75
	1.00		1.00
	1.25		1.25
	1.50		1.50
	1.80		1.80
Soil Type		Soil Type	
T		T	
TBC		TBC	
Depth of Ex. Soil (m): or Depth to Rock/Impervious Soil (m): or Depth to GWT (m):			
Controlling Percolation Rate 'T' (min/cm): Assumed 'T' time to be confirmed by geotechnical engineer			
Note: If proposed system is Class 4 and T > 15 min/cm, leaching bed fill is required but cannot have a 'T' less than 75% of the 'T' of the controlling soil unless: a) the distance from the bottom of the absorption trench to the underlying soil is not less than 900mm b) where the distance from the bottom of the absorption trench to the underlying soil is less than 900mm, the 'T' time of the least permeable soil will be used to calculate the length of the required distribution pipe under Article 8.7.3.1., Length of Distribution Pipe			

ONSITE WASTEWATER TREATMENT DESIGN Sizing for Class 2, 4, & 5 Systems under the 2017 OBC																																																																																			
Client: The Sarjeant Co. Ltd. Project: 1029 Brebeuf, Midland Designer: MG Checked By: DR Installer:																																																																																			
PART 3 - DAILY SEWAGE FLOW																																																																																			
The dwelling to be serviced has the following: (include roughed-in plumbing and any proposed additions)																																																																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Description</th> <th rowspan="2"># of Units per Fixture</th> <th colspan="2">Dwelling #1</th> </tr> <tr> <th># of Fixtures</th> <th>Unit Count</th> </tr> </thead> <tbody> <tr><td>Bathroom Group - 2pc</td><td>5.5</td><td></td><td>0</td></tr> <tr><td>Bathroom Group - 3pc</td><td>6</td><td></td><td>0</td></tr> <tr><td>Bathroom Group - 4pc</td><td>7.5</td><td></td><td>0</td></tr> <tr><td>Toilet</td><td>4</td><td></td><td>0</td></tr> <tr><td>Washbasin</td><td>1.5</td><td></td><td>0</td></tr> <tr><td>Bathtub/Shower</td><td>1.5</td><td></td><td>0</td></tr> <tr><td>Bidet</td><td>1.5</td><td></td><td>0</td></tr> <tr><td>Kitchen Sink</td><td>1.5</td><td></td><td>0</td></tr> <tr><td>Washing Machine</td><td>1.5</td><td></td><td>0</td></tr> <tr><td>Laundry Tub</td><td>1.5</td><td></td><td>0</td></tr> <tr><td>Dishwasher</td><td>1.5</td><td></td><td>0</td></tr> <tr><td>Other</td><td></td><td></td><td>0</td></tr> <tr> <td colspan="2" style="text-align: right;">TOTAL FIXTURE UNITS</td> <td></td> <td>0</td> </tr> </tbody> </table>				Description	# of Units per Fixture	Dwelling #1		# of Fixtures	Unit Count	Bathroom Group - 2pc	5.5		0	Bathroom Group - 3pc	6		0	Bathroom Group - 4pc	7.5		0	Toilet	4		0	Washbasin	1.5		0	Bathtub/Shower	1.5		0	Bidet	1.5		0	Kitchen Sink	1.5		0	Washing Machine	1.5		0	Laundry Tub	1.5		0	Dishwasher	1.5		0	Other			0	TOTAL FIXTURE UNITS			0	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th># of Bedrooms</th> <th>Hyd. Load (L/d)</th> </tr> </thead> <tbody> <tr><td>1</td><td>750</td></tr> <tr><td>2</td><td>1100</td></tr> <tr><td>3</td><td>1600</td></tr> <tr><td>4</td><td>2000</td></tr> <tr><td>5</td><td>2500</td></tr> </tbody> </table> <table style="width: 100%;"> <tr> <td>Existing # of Bedrooms:</td> <td style="border: 1px solid black; text-align: center;">0</td> </tr> <tr> <td>Proposed # of Bedrooms:</td> <td style="border: 1px solid black; text-align: center;">0</td> </tr> <tr> <td>Ex. Additional Bedrooms (> 5):</td> <td style="border: 1px solid black; text-align: center;">0</td> </tr> <tr> <td>Prop. Additional Bedrooms (> 5):</td> <td style="border: 1px solid black; text-align: center;">0</td> </tr> </table> If more than 5 bedrooms, put 5 in existing and add additional bedrooms under additional flow for each bedroom over 5.		# of Bedrooms	Hyd. Load (L/d)	1	750	2	1100	3	1600	4	2000	5	2500	Existing # of Bedrooms:	0	Proposed # of Bedrooms:	0	Ex. Additional Bedrooms (> 5):	0	Prop. Additional Bedrooms (> 5):	0
Description	# of Units per Fixture	Dwelling #1																																																																																	
		# of Fixtures	Unit Count																																																																																
Bathroom Group - 2pc	5.5		0																																																																																
Bathroom Group - 3pc	6		0																																																																																
Bathroom Group - 4pc	7.5		0																																																																																
Toilet	4		0																																																																																
Washbasin	1.5		0																																																																																
Bathtub/Shower	1.5		0																																																																																
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1	750																																																																																		
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4	2000																																																																																		
5	2500																																																																																		
Existing # of Bedrooms:	0																																																																																		
Proposed # of Bedrooms:	0																																																																																		
Ex. Additional Bedrooms (> 5):	0																																																																																		
Prop. Additional Bedrooms (> 5):	0																																																																																		
BASE HYDRAULIC LOAD (L/d): #N/A L/d				Existing Finished Floor Area (excluding Basement) (sq.ft): Proposed Finished Floor Area (excluding Basement) (sq.ft): Total Finished Floor Area (excluding Basement) (sq.ft): Total Finished Floor Area (m²): 0 sq.ft. sq.ft. 0.00 sq.ft. 0.00 m²																																																																															
Additional Hydraulic Load for:																																																																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Description</th> <th>Units</th> <th>Q (L/d)</th> <th>Additional Flow</th> </tr> </thead> <tbody> <tr> <td>a) Each Bedroom Over 5:</td> <td>0</td> <td>500</td> <td></td> </tr> <tr> <td>b) Additional Square Footage as:</td> <td></td> <td></td> <td></td> </tr> <tr> <td> i) each 10 m² over 200 m² up to 400 m²:</td> <td>0</td> <td>100</td> <td></td> </tr> <tr> <td> ii) each 10 m² over 400 m² up to 600 m²:</td> <td>0</td> <td>75</td> <td></td> </tr> <tr> <td> iii) each 10 m² over 600 m²:</td> <td>0</td> <td>50</td> <td></td> </tr> <tr> <td>c) each fixture unit over 20 fixture units:</td> <td>0</td> <td>50</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: right;">TOTAL ADDITIONAL HYDRAULIC LOAD:</td> <td></td> <td>0</td> </tr> </tbody> </table>				Description	Units	Q (L/d)	Additional Flow	a) Each Bedroom Over 5:	0	500		b) Additional Square Footage as:				i) each 10 m ² over 200 m ² up to 400 m ² :	0	100		ii) each 10 m ² over 400 m ² up to 600 m ² :	0	75		iii) each 10 m ² over 600 m ² :	0	50		c) each fixture unit over 20 fixture units:	0	50		TOTAL ADDITIONAL HYDRAULIC LOAD:			0																																																
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TOTAL ADDITIONAL HYDRAULIC LOAD:			0																																																																																
TOTAL AVERAGE DAILY FLOW (Q): 2,360 L/d				Based on OBC Table 8.2.1.3.B for office use - see accompanying table for breakdown																																																																															
MIN. REQUIRED TANK SIZE: 7,080 L				(Larger of 3 x Q and 3600L) PROPOSED TANK SIZE: 7,080 L Based on OBC 8.2.2.3.(1)(b)																																																																															

ONSITE WASTEWATER TREATMENT DESIGN Sizing for Class 2, 4, & 5 Systems under the 2017 OBC			
Client: The Sarjeant Co. Ltd.	Designer: MG		
Project: 1029 Brebeuf, Midland	Checked By: DR	Installer:	

PART 4A - ABSORPTION TRENCH DESIGN

Is 'T' greater than 15 min/cm? : Y

Treatment Unit is: X Septic Tank Level II, III or IV Treatment Unit

If 'Y', consider raised bed design, if 'N', continue with conventional system

MINIMUM LENGTH OF PIPE

$$L = \frac{Q \times T}{200}$$

$$L = \frac{59,000}{200}$$

L = 295 m

Notes:

- The total Length of distribution pipe shall not be less than 40.0m
- 'T' is the controlling soil percolation time
- Maximum Length of Run of Distribution Pipe = 30.0m
- Spaced not less than 1.6m apart
- Trenches are not less than 500mm and not more than 1000mm wide
- Trenches are not less than 600mm and not more than 900mm deep from FG
- Located so that the bottom of the absorption trench is not less than 900mm above the GWT rock, or soil with a 'T' > 50
- Sloped between 0.3% and 0.5%
- Stone later extending not less than 50mm above the distribution pipe and not less than 150mm below the distribution pipe
- Pipe size a minimum of 75mm dia.
- Loading Area = unsaturated soil in area of bed and mantle a minimum of 250mm deep
- Minimum Total Length of Pipe = 40.0m

MINIMUM LENGTH OF PIPE (Treatment Unit)

$$L = \frac{Q \times T}{300}$$

$$L = \frac{0}{300}$$

L = 0 m

LOADING AREA REQUIREMENTS

If less than 250mm of useable soil is available on-site or T > 15 min/cm, fill material will need to be imported to construct the mantle or contact area as described below:

Percolation Time 'T' of soil (min/cm)	Loading Rate (L/m ² /d)
1 < T ≤ 20	10
20 < T ≤ 35	8
35 < T ≤ 50	6
T > 50	4

LOADING AREA REQUIRED

$$A = \frac{Q}{\text{Table 8.7.4.1 Value}}$$

$$A = \frac{2,360}{8}$$

A = 295 m²

SYSTEM LAYOUT

30.0	Proposed Length of Run (m)
10	# of Runs
N	Distribution Box (Y/N)
Y	Distribution Header (Y/N)

Bed Length	31.0 m
Bed Width	17 m
Bed Area	527.0 m ²

Designer Note: If bed is raised, extended bed fill 15.0m beyond external distribution pipe in direction of horizontal flow

DESIGN SUMMARY

Dug into Existing Soil:	m	Raised:	m	FG of Bed:	m
# of Runs of Tile:		Length of Runs:	m	Height Above ex. Soils	m

ONSITE WASTEWATER TREATMENT DESIGN Sizing for Class 2, 4, & 5 Systems under the 2017 OBC				
Client: The Sarjeant Co. Ltd.	Designer: MG			
Project: 1029 Brebeuf, Midland	Checked By: DR	Installer:		
PART 4B - FILTER BED DESIGN				
Is 'T' greater than 15 min/cm? Y Treatment Unit is: X Septic Tank Level II, III or IV Treatment Unit If 'Y', consider raised bed design, if 'N', continue with conventional system				
MINIMUM FILTER MEDIUM SURFACE AREA: IF Q ≤ 3000 L/d $A = \frac{Q}{75}$ $A = \frac{2360}{75}$ A = 31.5 sq.m IF Q > 3000 L/d $A = \frac{Q}{50}$ $A = \frac{0}{50}$ A = 0 sq.m A = 0 sq.m *must use three (3) filter medium beds FOR TREATMENT UNIT $A = \frac{Q}{100}$ $A = \frac{0}{100}$ A = 0 sq.m Designer Note: The effective surface area of the filter medium shall be not less than 10 sq.m and not greater than 50 sq.m				
MINIMUM FILTER MEDIUM BASE SURFACE AREA: $A = \frac{Q \times T}{850}$ $A = \frac{59,000}{850}$ A = 69.4 m² MINIMUM LOADING AREA REQUIRED: $A = \frac{Q}{\text{Table 8.7.4.1 Value}}$ $A = \frac{2,360}{8}$ A = 295 m² Designer Note: Unsaturated Suitable Soil minimum 250mm thick in the area of the filter bed and mantle to treat effluent				
SYSTEM LAYOUT Filter Bed Loading Area: 31.5 sq.m Filter Bed Length: 5.0 m Filter Bed Width: 6.3 m Mantle Loading Area: 295.0 m Mantle Length: 20.0 m Mantle Width: 14.8 m Is imported fill needed: Y Overall Dim. 5.0 m 7.0 m 295.0 m Used 20.0 m 14.8 m Notes: - Distribution Piping shall be equally spaced - 'T' is the controlling soil percolation time - Maximum Length of Distribution Pipe = 30.0m - Spaced not more than 1.2m apart - Septic Stone not less than 600mm and not more than 900mm deep from FG - Filter Sand not less than 750mm deep below Septic Stone - Filter Sand for Mantle a minimum 250mm deep over Required Loading Area (if necc.) - Located so that the bottom of the septic stone layer is not less than 900mm above the GWT rock, or soil with a 'T' > 50 - Sloped between 0.3% and 0.5% - Stone later extending not less than 50mm above the distribution pipe and not less than 150mm below the distribution pipe - Pipe size a minimum of 75mm dia. - Loading Area = unsaturated soil in area of bed and mantle a minimum of 250mm deep				
DESIGN SUMMARY Dug into Existing Soil: m Surface Area (Filter) sq.m Raised: m Base Area (Filter) sq.m FG of Bed: m Height Above ex. Soils m				

Appendix D

Engineering Submission Drawings

- | | |
|---------|---|
| • Title | Title Page |
| • SG-1 | Site Grading Plan |
| • SS-1 | Site Servicing Plan |
| • ESC-1 | Erosion and Sediment Control Plan Phase 1 Interim |
| • ESC-2 | Erosion and Sediment Control Plan Phase 2 Interim |
| • ESC-3 | Erosion and Sediment Control Plan Phase 3 Ultimate |
| • ESC-4 | Erosion and Sediment Control Plan Notes and Details |
| • SWM-1 | Pre-Development Stormwater Management Plan |
| • SWM-2 | Post-Development Stormwater Management Plan |

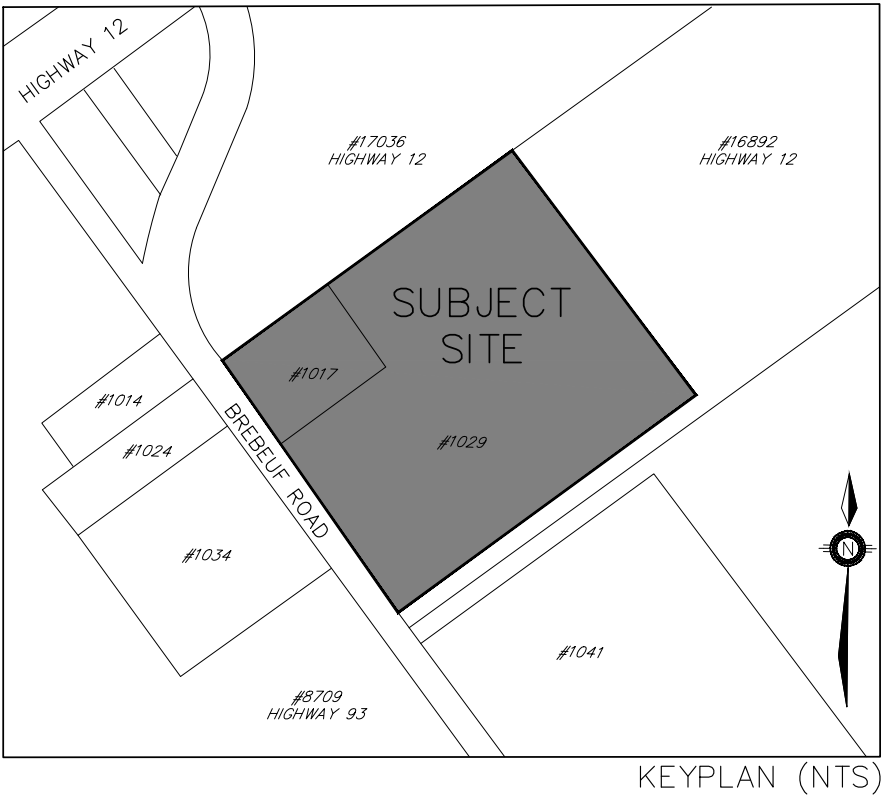
1017 & 1029 BREBEUF ROAD CONCRETE MIXING PLANT TOWN OF MIDLAND, ONTARIO

THE JONES CONSULTING GROUP LTD. DRAWING LIST

SG-1	SITE GRADING PLAN
SS-1	SITE SERVICING PLAN
ESC-1	EROSION AND SEDIMENT CONTROL PLAN PHASE 1 INTERIM
ESC-2	EROSION AND SEDIMENT CONTROL PLAN PHASE 2 INTERIM
ESC-3	EROSION AND SEDIMENT CONTROL PLAN PHASE 3 ULTIMATE
ESC-4	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
SWM-1	PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN
SWM-2	POST-DEVELOPMENT STORMWATER MANAGEMENT PLAN

EME ENGINEERING INC. DRAWING LIST

E-001	ELECTRICAL SPECIFICATIONS
E-002	SYMBOLS AND ABBREVIATIONS
E-101	SITE SERVICING PLAN
E-201	SITE PHOTOMETRIC PLAN
E-301	SITE DETAILS



KEYPLAN (NTS)

MUNICIPALITY:

TOWN OF MIDLAND
575 DOMINION AVENUE
MIDLAND, ON L4R 1R2
PH. 705.526.4275

CLIENT:

THE SARJEANT Co. LTD.
15 SARJEANT DRIVE
BARRIE, ONTARIO L4N 4V9

CONSULTANT:



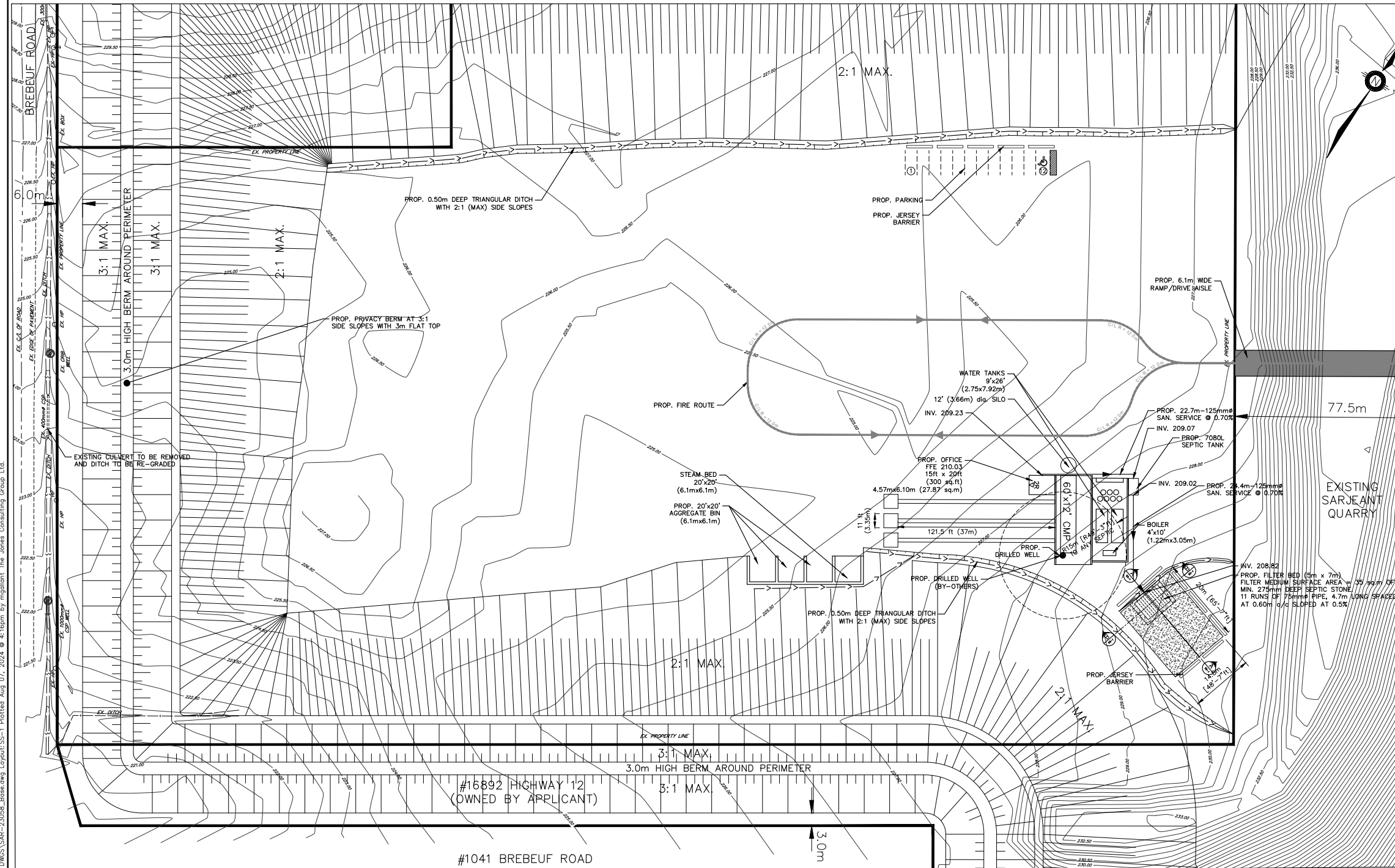
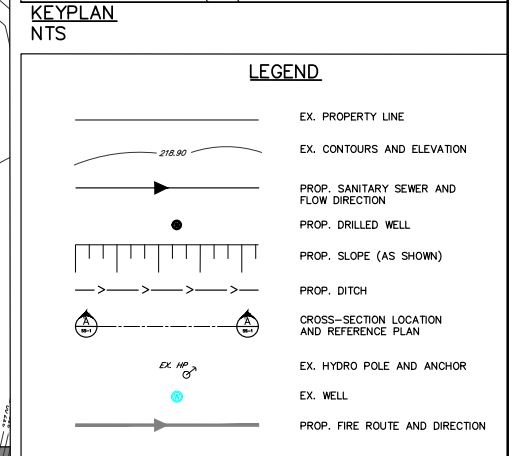
229 Mapleview Dr. E, Unit 1
Barrie, ON L4N 0W5
P. 705.734.2538
F. 705.734.1968

PROP. FILTER BED, c/w 275mm DEEP SEPTIC STONE, 11 RUNS OF 75mm ϕ PIPE, 4.7m LONG SPACED AT 0.60m O/C SLOPED AT 0.5%
 BOTTOM OF FILTER BED AT 208.64m
 UTILIZE LOADING AREA FILL MATERIAL T-TIME OF 10 min/cm OVER FILTER BED TO UNDERSIDE OF TOPSOIL
 PROP. SURFACE 150mm THICK TOPSOIL AND SOD 0.9%
 PROP. JERSEY BARRIER
 SAN. INV. 208.82
 750mm FILTER SAND T-TIME OF 4-8 min/cm
 5m FILTER BED
 15m MANTLE
 20m LOADING AREA
 NATIVE GROUND
 PROPOSED 250mm THICK LEACHING BED FILL MATERIAL T-TIME OF 10 min/cm EXISTING GROUND TO SCARIFIED
 SCALE 1:250

Diagram illustrating the cross-section of a proposed sanitary landfill cell, showing various layers and dimensions:

- PROPOSED SURFACE 150mm THICK TOPSOIL AND SOD
- PROPOSED FILTER BED, c/w 275mm DEEP SEPTIC STONE, 11 RUNS OF 75mm Ø PIPE, 4.7m LONG SPACED AT 0.60m O/C SLOPED AT 0.5% BOTTOM OF FILTER BED AT 208.64m
- PROPOSED JERSEY BARRIER
- UTILIZE LOADING AREA FILL MATERIAL T-TIME OF 10 min/cy OVER FILTER BED TO UNDERSIDE OF TOPSOIL
- 750mm FILTER SAND
- T-TIME OF 4-8 min/cy
- EXISTING GROUND TO SCARIFIED
- 14.8m FILTER MANTLE
- 7m FILTER BED
- NATIVE GROUND
- 0.25m
- 209.19
- 209.69
- 209.53
- 209.48
- 209.43
- PROPOSED DITCH
- PROPOSED 0.50m DEEP TRIANGULAR DITCH WITH 2:1 (MAX) SIDE SLOPES

SCALE 1:250



BENCHMARK:				
001971U523				
MIDLAND -- HIGHWAY NO. 12 BRIDGE OVER WYE RIVER, 4.5km SOUTHEAST OF POST OFFICE AND IMMEDIATELY WEST OF MARTIN'S SHRINE; TABLET IN SOUTHWEST OUTSIDE FACE OF COPING, 1.28m BELOW TOP OF CONCRETE END POST AND 34cm NORTHWEST OF SOUTHEAST END.	3	OPA, ZBLA & SPA SUBMISSION	AUG. 2024	MG
	2	ISSUED FOR PRE-CONSULTATION	DEC. 2023	DR
VERT. ORDER: FIRST ORDER ELEVATION: 182.460m	1	ISSUED TO CLIENT	OCT. 2023	DR
	NO.	REVISIONS	DATE	INITIAL

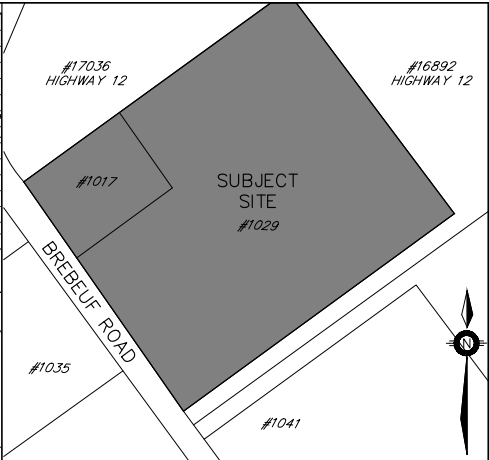
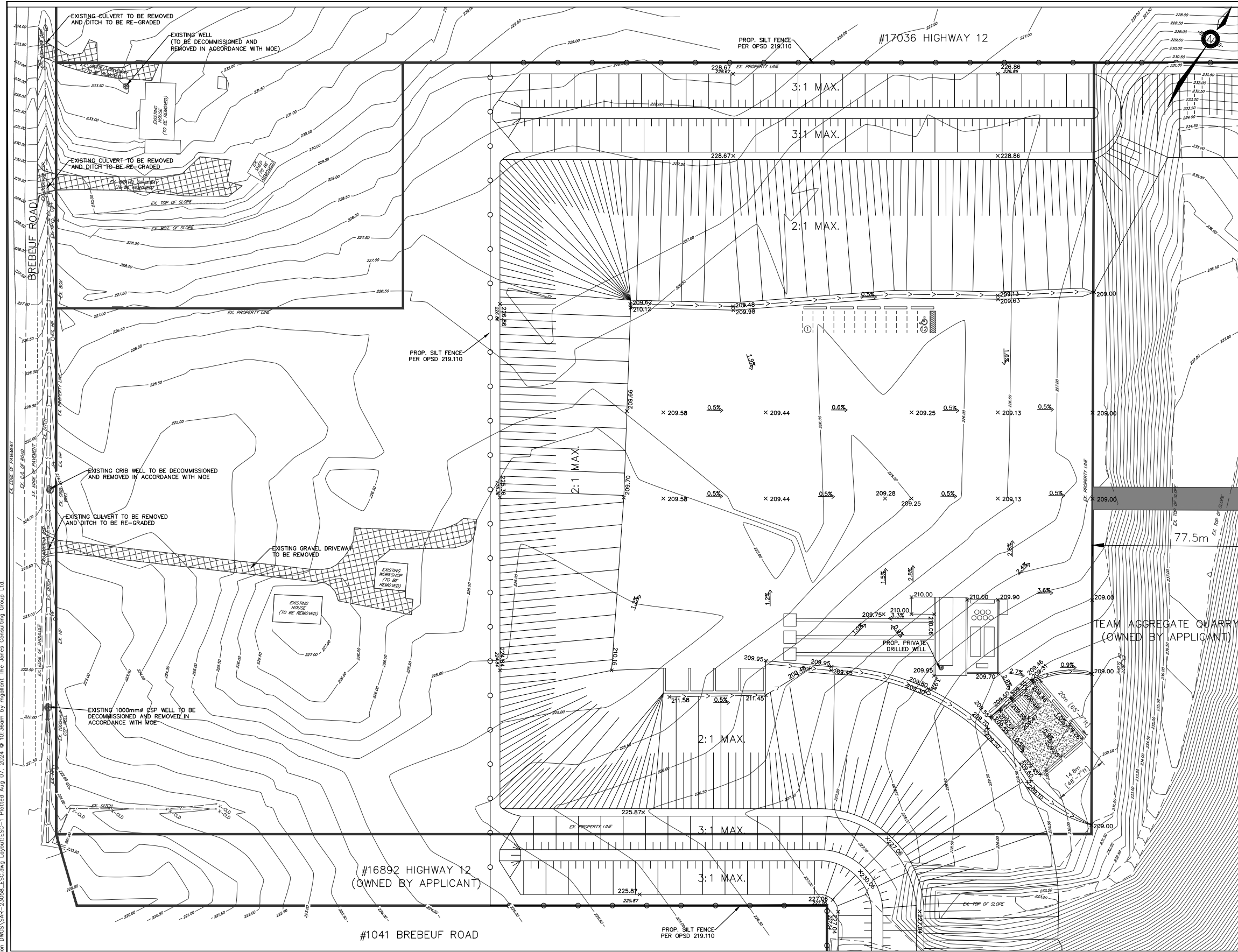


SITE SERVICING PLAN



222 Mapleview Dr., Unit 1
Barrie, ON L4M 8W5
P. 705.734.2638
F. 705.734.1056

DESIGN	DR	SCALE: 1:500	DATE JULY 2024
DRAWN	KS	PROJECT SAR-23058	DWG. NO SS-1
CHECKED	DR		



KEYPLAN NTS	
LEGEND	
	EX. PROPERTY LINE
	EX. CONTOURS AND ELEVATION
	PROP. SLOPE (AS SHOWN)
	PROP. SILT FENCE PER OPSD 219.110
	PROP. ELEVATION
	EX. ELEVATION
	PROP. GRADIENT AND FLOW DIRECTION
	AREA TO BE REMOVED
	EX. HYDRO POLE AND ANCHOR
	EX. WELL

G:\eng_3D\SAR-23058\Production DWG\SAR-23058_ESC.dwg Layout:ESC-1 Plotted Aug 07, 2024 @ 10:36am by mpallan The Jones Consulting Group Ltd.

BENCHMARK:
0011971U523
MIDLAND - HIGHWAY NO. 12 BRIDGE OVER WYE RIVER,
4.5km SOUTHEAST OF POST OFFICE AND IMMEDIATELY WEST
OF MARTYRS SHRINE, TABLET IN SOUTHWEST OUTSIDE FACE
OF COPING, 1.28m BELOW TOP OF CONCRETE END POST
AND 34cm NORTHWEST OF SOUTHEAST END.
VERT. ORDER: FIRST ORDER
ELEVATION: 182.460m

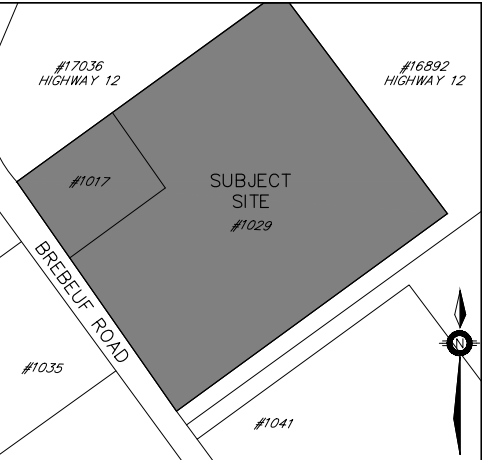
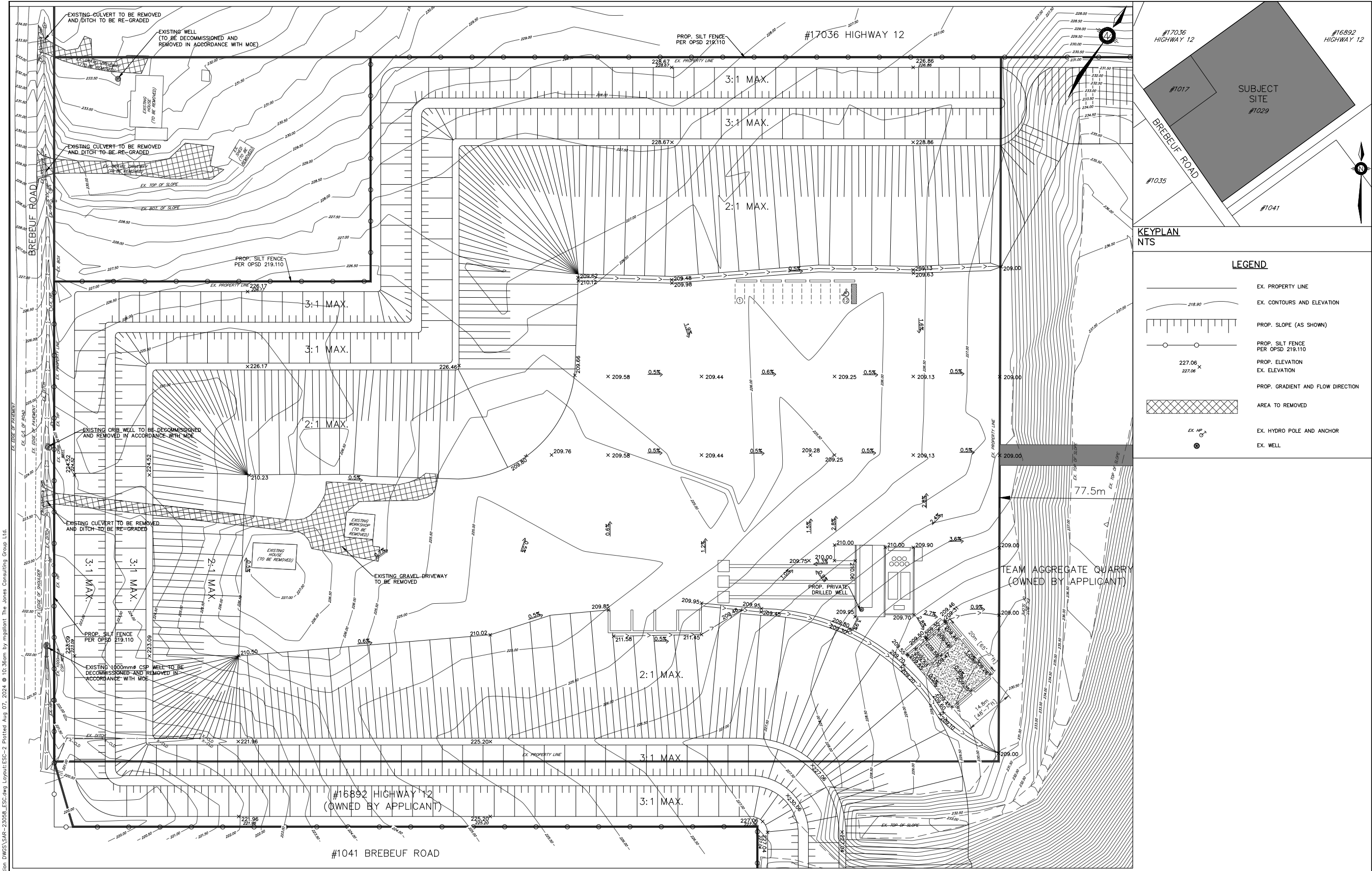
NO.	REVISIONS	DATE	INITIAL
1	OPA, ZBLA & SPA SUBMISSION	AUG. 2024	MG



1017 & 1029 BREBEUF ROAD
TOWN OF MIDLAND
EROSION AND SEDIMENT
CONTROL PLAN
PHASE 1 INTERIM



DESIGN DR	SCALE: 1:500	DATE JULY 2024
DRAWN KS	PROJECT SAR-23058	DWG. NO. ESC-1
CHECKED DR		



LEGEND	
	EX. PROPERTY LINE
	EX. CONTOURS AND ELEVATION
	PROP. SLOPE (AS SHOWN)
	PROP. SILT FENCE PER OPSD 219.110
	PROP. ELEVATION
	EX. ELEVATION
	PROP. GRADIENT AND FLOW DIRECTION
	AREA TO BE REMOVED
	EX. HYDRO POLE AND ANCHOR
	EX. WELL

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BENCHMARK:
0011971U523
MIDLAND - HIGHWAY NO. 12 BRIDGE OVER WYE RIVER,
4.5km SOUTHEAST OF POST OFFICE AND IMMEDIATELY WEST
OF MARTYRS SHRINE, TABLET IN SOUTHWEST OUTSIDE FACE
OF COPING, 1.28m BELOW TOP OF CONCRETE END POST
AND 34cm NORTHWEST OF SOUTHEAST END.
VERT. ORDER: FIRST ORDER
ELEVATION: 182.460m

NO.	REVISIONS	DATE	INITIAL
1	OPA, ZBLA & SPA SUBMISSION	JUL. 2024	MG



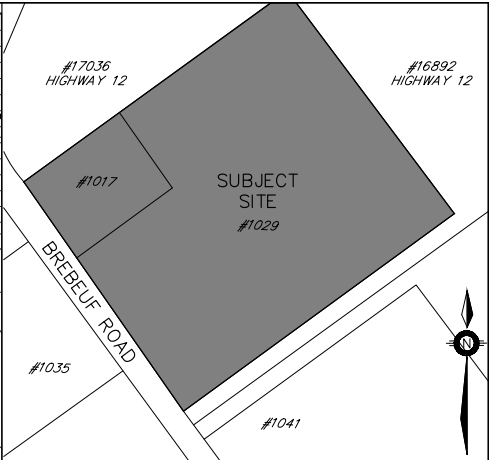
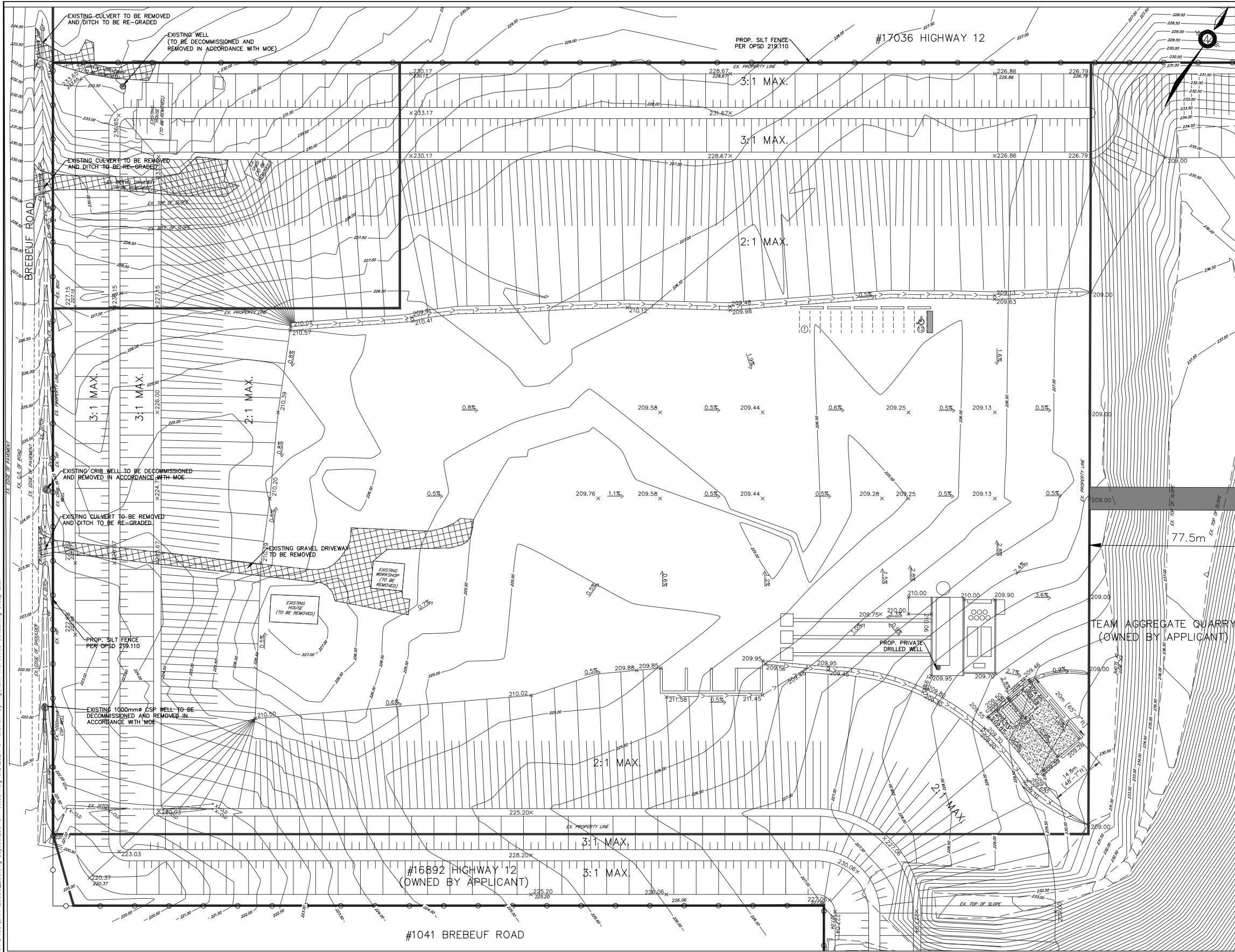
1017 & 1029 BREBEUF ROAD
TOWN OF MIDLAND

EROSION AND SEDIMENT
CONTROL PLAN
PHASE 2 INTERIM



228 Wellington Dr. E. Unit 1
Brampton, ON L6M 0H5
P. 795.734.3553
F. 795.734.1050

DESIGN DR	SCALE: 1:500	DATE JULY 2024
DRAWN KS	PROJECT SAR-23058	DWG. NO. ESC-2
CHECKED DR		



LEGEND	
	EX. PROPERTY LINE
	EX. CONTOURS AND ELEVATION
	PROP. SLOPE (AS SHOWN)
	PROP. SILT FENCE PER OPSD 219.110
	PROP. ELEVATION
	EX. ELEVATION
	PROP. GRADIENT AND FLOW DIRECTION
	AREA TO BE REMOVED
	EX. HYDRO POLE AND ANCHOR
	EX. WELL

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BENCHMARK:
0011971U523
MIDLAND - HIGHWAY NO. 12 BRIDGE OVER WYE RIVER,
4.5km SOUTHEAST OF POST OFFICE AND IMMEDIATELY WEST
OF MARTYRS SHRINE, TABLET IN SOUTHWEST OUTSIDE FACE
OF COPING, 1.28m BELOW TOP OF CONCRETE END POST
AND 34cm NORTHWEST OF SOUTHEAST END.
VERT. ORDER: FIRST ORDER
ELEVATION: 182.460m

NO.	REVISIONS	DATE	INITIAL
1	OPA, ZBLA & SPA SUBMISSION	JUL. 2024	MG



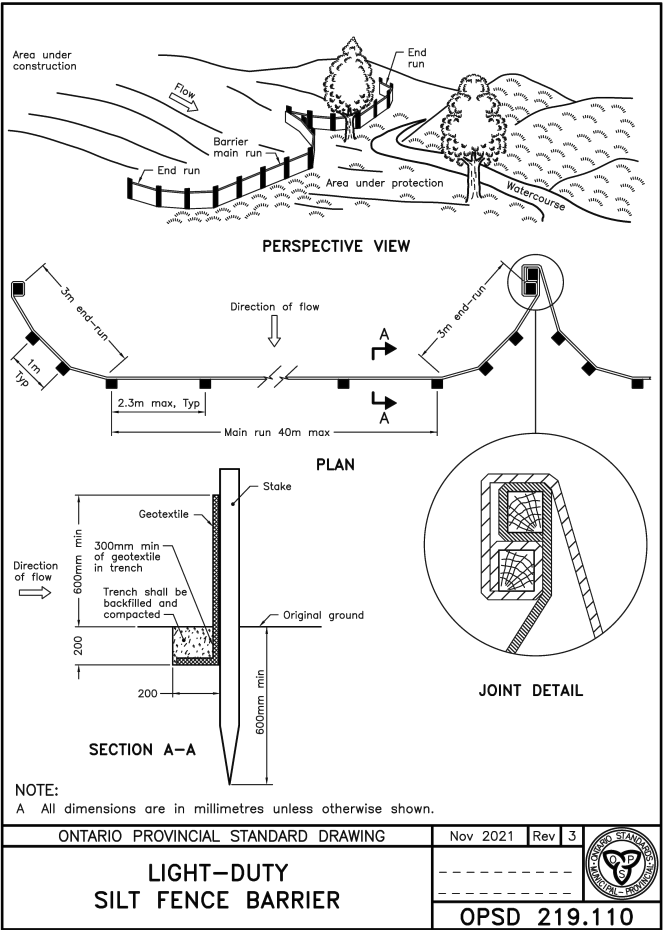
1017 & 1029 BREBEUF ROAD
TOWN OF MIDLAND

EROSION AND SEDIMENT
CONTROL PLAN
PHASE 3 ULTIMATE



288 Wellington Dr. E. Unit 1
Burlington, ON L7R 4B8
P. 795.734.3553
F. 795.734.1956

DESIGN DR	SCALE: 1:500	DATE JULY 2024
DRAWN KS	PROJECT SAR-23058	DWG. NO. ESC-3
CHECKED DR		



EROSION CONTROL NOTES

1. THE ACCOMPANYING PLANS SET OUT THE MEASURES THAT WILL BE TAKEN BY THE DEVELOPER AND ITS CONTRACTORS TO CONTROL DOWNSTREAM SEDIMENT TO THE LOWEST LEVEL PRACTICALLY ACHIEVABLE. THE CONDITIONS AND TECHNIQUES SET OUT ARE TO BE FOLLOWED UNLESS APPROVED OTHERWISE BY THE CONTRACT ADMINISTRATOR, CONSERVATION AUTHORITY AND/OR MUNICIPALITY.
2. ALL TEMPORARY SILT CONTROL AND EROSION PROTECTION DEVICES (I.E. SILT FENCING, DRAINAGE SWALES, ROCK CHECK DAMS, SEDIMENT BASIN(S), GRAVEL ACCESS PAD, ETC.) SHALL BE CONSTRUCTED PRIOR TO COMMENCEMENT OF SITE WORKS AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE CITY ENGINEERING DEPARTMENT.
3. ALL SEDIMENTATION CONTROL MEASURES ARE TO BE INSPECTED REGULARLY (MINIMUM WEEKLY), AS WELL AS AFTER EVERY RAINFALL EVENT AND ANY DAMAGED SILT CONTROL AND EROSION PROTECTION DEVICES SHALL BE PROMPTLY REPAIRED OR REPLACED BY THE CONTRACTOR.
4. THE CONTRACTOR MUST USE MATERIALS, CONSTRUCTION PRACTICES, AND MITIGATION TECHNIQUES IN ORDER TO PREVENT THE UNAUTHORIZED HARMFUL ALTERATION, DISRUPTION OR DESTRUCTION OF VEGETATION OR THE IMPAIRMENT OF WATER QUALITY.
5. THE CONTRACTOR SHALL BE PREPARED FOR UNEXPECTED CONDITIONS AND ACCORDINGLY HAVE STOCKPILED MATERIALS ON SITE FOR NECESSARY REPAIRS AS A RESULT OF FAILED OR INADEQUATE CONTROL MEASURES.
6. AREAS WITHOUT STABLE GROUND COVER SHALL BE PROTECTED WITH SILTATION CONTROL FENCING, STRAW MULCH, ETC, AND MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BECOME ESTABLISHED IN THE SUBSEQUENT GROWING SEASON.
7. ALL EXPOSED SOIL MUST BE GRADED TO A STABLE SLOPE AND TREATED AS QUICKLY AS POSSIBLE TO PREVENT EROSION AND SEDIMENT FROM LEAVING THE SITE. ALL AREA STRIPPED OF VEGETATIVE COVER FOR LONGER THAN 30 DAYS SHALL BE TOPSOILED AND SEEDED AT THE DIRECTION OF THE ENGINEER.
8. ALL SITE DRAINAGE TO BE DIRECTED TO THE TEMPORARY SEDIMENT BASINS AND OTHER CHECK DAMS VIA SHEET DRAINAGE, BERMS OR SWALES (AS NECESSARY) TO FACILITATE THE COMPLETION OF GRADING WORKS. THE CONTRACTOR SHALL CONSTRUCT ANY ADDITIONAL SWALES OR BERMS THAT MAY BE NECESSARY TO DIRECT RUN-OFF IN A CONTROLLED MANNER OF SUITABLE QUALITY.
9. ALL CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE SITE FROM PROPOSED CONSTRUCTION ACCESS VIA THE GRAVEL ACCESS PAD.
10. ANY DEWATERING WASTE SHALL BE DISCHARGED TO A VEGETATED AREA AT LEAST 30m FROM ANY WATERCOURSE AND FILTERED. FILTERING METHODS MUST BE APPROVED BY THE SITE INSPECTOR.
11. TECHNIQUES FOR EROSION AND SEDIMENT CONTROLS ARE TO ADHERE TO ACCEPTED ENGINEERING PRACTICE AND MUNICIPAL, CONSERVATION AUTHORITY AND ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS. THE CONTRACTOR SHALL OBTAIN A CURRENT COPY AND BECOME FAMILIAR WITH OPSS 805; CONSTRUCTION SPECIFICATION FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, AS WELL AS APPLICABLE MUNICIPAL STANDARDS AND/OR APPROVAL AGENCY STANDARDS.
12. THE CONTRACTOR MAY CONSIDER ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES, SUCH MEASURES MUST BE PRESENTED IN WRITING FOR APPROVAL BY THE CONTRACT ADMINISTRATOR AND MUST BE APPROVED IN WRITING BY THE APPLICABLE APPROVAL AGENCIES.
13. SEDIMENT CONTROL FENCE TO USE GEOTEXTILE WITH WEAVE DENSITY OF 270R TERRAFIX OR EQUIVALENT.
14. CHECK DAMS ARE TO BE USED IN ANY TEMPORARY DRAINAGE SWALES REQUIRED DURING THE CONSTRUCTION PERIOD.
15. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED AND SHALL BE DETERMINED BY THE ENGINEER OR THE TOWN OF MIDLAND.
16. ROCK CHECK DAMS ARE TO BE CLEANED OF ALL ACCUMULATED SEDIMENT AS SOON AS SEDIMENT HAS ACCUMULATED TO A DEPTH GREATER THAN 50% OF ALL UPSTREAM CHECK DAMS.
17. MATERIALS TO REPAIR DAMAGED ESC MEASURES MUST BE KEPT ON-SITE AT ALL TIMES.
18. ESC STRATEGIES ON THESE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO PREVENT SEDIMENT RELEASES. FAILED ESC MEASURES MUST BE REPAIRED IMMEDIATELY.
19. SERVICING OF CONSTRUCTION EQUIPMENT ON SITE IS PROHIBITED.
20. THE CONTRACTOR MUST CLEAN ADJACENT ROADS ON A REGULAR BASIS. THE ROAD SHALL BE, AT A MINIMUM SCRAPPED DAILY AND FLUSHED (IF NECESSARY).
21. DUST CONTROL TO BE REVIEWED DAILY. WATER TRUCK OR CALCIUM CHLORIDE IS TO BE PROVIDED ON-SITE AND HAUL ROADS/WORKING AREAS ARE TO BE TREATED AS REQUIRED TO ENSURE THAT DUST IS CONTROLLED ON-SITE.

CONSTRUCTION SEQUENCE

THE FOLLOWING CONSTRUCTION SEQUENCE IS PROVIDED FOR CONTRACTOR GUIDANCE:

1. CONSTRUCT ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INCLUDING SILT FENCE, TREE PRESERVATION FENCE, CHECK DAMS, SWALES/BERMS, ETC.
2. STRIPPING AND REMOVAL OF TOPSOIL AND HARD SURFACES OFF-SITE.
3. PROCEED WITH EARTH EXCAVATION AND PRE-GRADING. PROCEED WITH SEEDING OF RESTORATION OF ALL DISTURBED AREAS AS DIRECTED BY ENGINEER. ALL AREAS STRIPPED OF VEGETATIVE COVER FOR LONGER THAN 15 DAYS SHALL BE HYDROSEED AT THE DIRECTION OF THE ENGINEER. HYDROSEED WITH FIBRETAC AT 100KG/HA. HYDROSEED MIXTURE OF 48% ANNUAL RYE GRASS, 48% FALL RYE, 4% RED CLOVER WILL NEED TO BE APPLIED TO EXPOSED AREAS FOLLOWING TOPSOIL STRIPPING.
4. PROCEED WITH SITE WORKS I.E. SITE SERVICING AND SURFACE WORKS INSTALLATIONS.
2. RESTORATION OF DISTURBED AREAS.
3. REMOVAL OF SEDIMENT AND EROSION CONTROLS.

****NOTE**** SILTATION AND EROSION CONTROL MEASURES ARE TO BE MONITORED AND MAINTAINED THROUGHOUT CONSTRUCTION AND NECESSARY REPAIRS TO BE PROMPTLY COMPLETED AS REQUIRED.

CONTINGENCY PLAN

IF UNFORESEEN EVENTS CAUSE THE STRATEGIES SET OUT IN THIS PLAN TO BE INSUFFICIENT OR INAPPROPRIATE TO MEET THE OBJECTIVE, THE CONTRACTOR IS EXPECTED TO RESPOND IN A TIMELY MANNER WITH ALL REASONABLE MEASURES CONSISTENT WITH SAFETY, TO PREVENT, COUNTERACT OR REMEDY DOWNSTREAM SEDIMENTATION AND EROSION.

IF A SPILL OCCURS IT SHALL BE REPORTED TO THE MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS SPILLS ACTION CENTRE AT 1-800-268-6060.

IF APPROVAL AGENCIES DETERMINE THAT LONG TERM DAMAGE TO THE NATURAL ENVIRONMENT HAS OCCURRED DUE TO FAILURE OF THIS PLAN TO CONTROL SEDIMENTS, A RESTORATION PLAN WILL BE DEVELOPED BY THE CONTRACTOR IN CONSULTATION WITH AND APPROVAL FROM THE APPROPRIATE AGENCIES FOR IMPLEMENTATION BY THE CONTRACTOR.

G:\Eng_3D\SAR-2305B\Production DWGS\SAR-2305B_ESC.dwg Layout:ESC-4 Plotted Aug 07, 2024 @ 10:38am by mgallant The Jones Consulting Group Ltd.

BENCHMARK:
0011971U523
MIDLAND - HIGHWAY NO. 12 BRIDGE OVER WYE RIVER,
4.5km SOUTHEAST OF POST OFFICE AND IMMEDIATELY WEST
OF MARTYRS SHRINE, TABLET IN SOUTHWEST OUTSIDE FACE
OF COPING, 1.28m BELOW TOP OF CONCRETE END POST
AND 34cm NORTHWEST OF SOUTHEAST END.
VERT. ORDER: FIRST ORDER
ELEVATION: 182.460m

1	OPA, ZBLA & SPA SUBMISSION	AUG. 2024	MG	
NO.	REVISIONS	DATE	INITIAL	



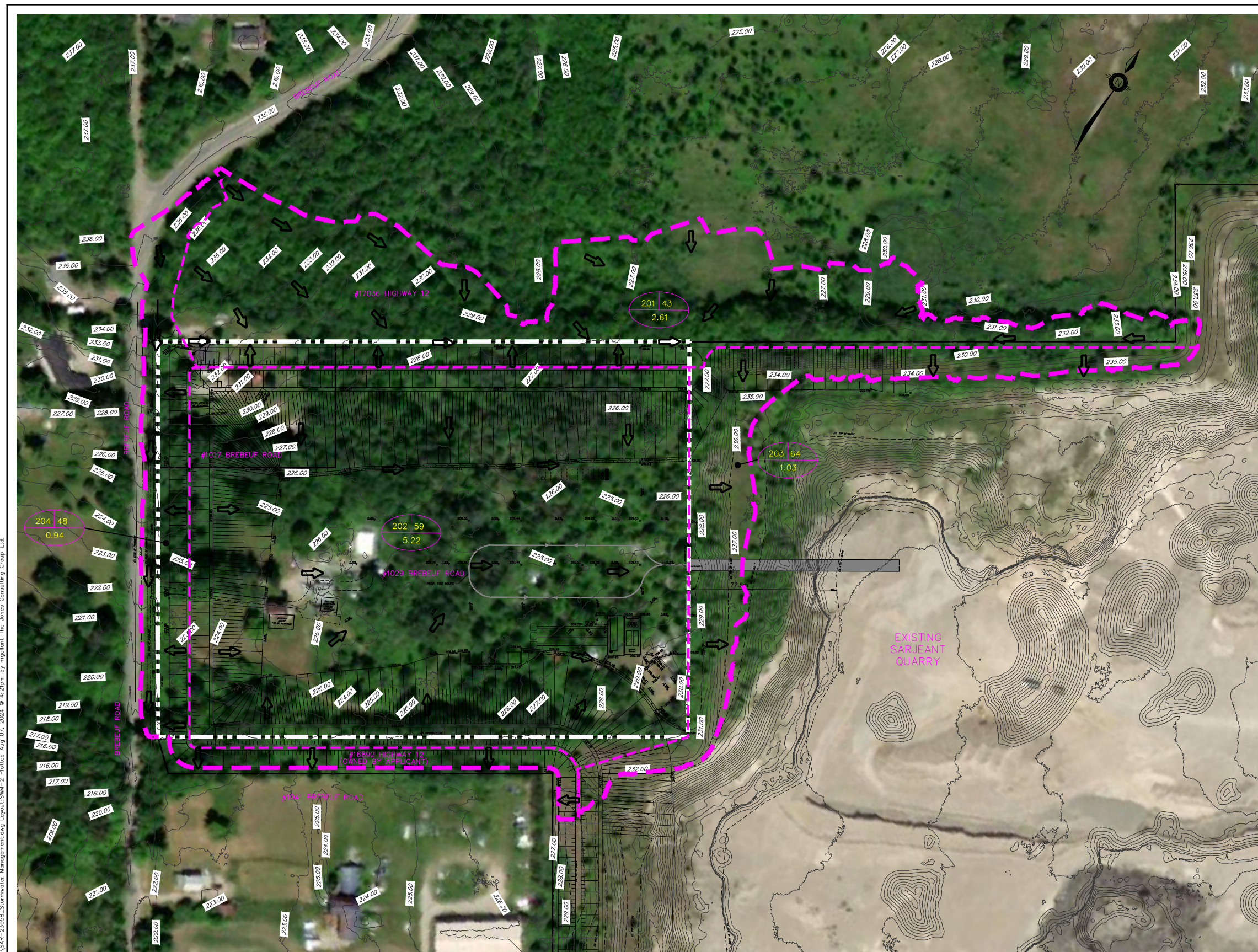
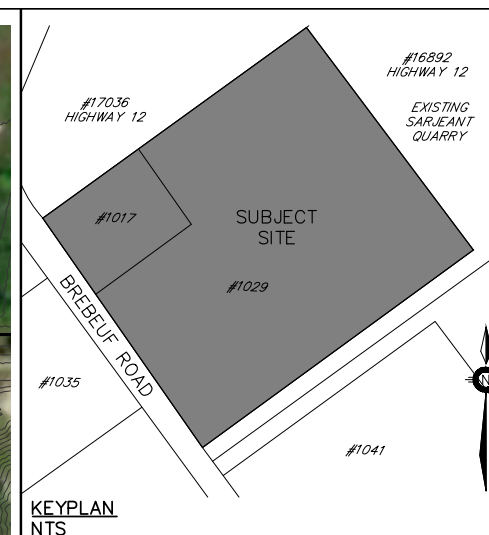
1017 & 1029 BREBEUF ROAD
TOWN OF MIDLAND

EROSION AND SEDIMENT
CONTROL PLAN NOTES AND DETAILS



228 Wellington Dr. E. Unit 1
Burlington, ON L7R 0B6
P. 795.734.2552
F. 795.734.1060

DESIGN	DR	SCALE: 1:500	DATE	JULY 2024
DRAWN	KS	PROJECT	DWG. NO	
CHECKED	DR	SAR-2305B	ESC-4	



CG 16197-30 (Scale: 1:2000) (Printed)	BENCHMARK: 001971U523 MIDLAND — HIGHWAY NO. 12 BRIDGE OVER WYE RIVER, 4.5km SOUTHEAST OF POST OFFICE AND IMMEDIATELY WEST OF MARTYRS SHRINE, TABLET IN SOUTHWEST OUTSIDE FACE OF COPING, 1.28m BELOW TOP OF CONCRETE END POST AND 34cm NORTHWEST OF SOUTHEAST END. VERT. ORDER: FIRST ORDER ELEVATION: 182.460m CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENSE — ONTARIO						LICENSED PROFESSIONAL ENGINEER  M.D. GALLANT 100535706 2024-08-07 PROVINCE OF ONTARIO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</
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