



2026

**Proposed Development & Amendments to
permitted residential development under
SHD 318736-23 at Ballykeeran Gardens,
Cornamaddy, Athlone, Co. Westmeath**

**Civil Engineering and Infrastructure
Design Report**





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under SHD 318736-23 at Ballykeeran Gardens, Cornamaddy, Athlone, Co.
Westmeath
Civil Engineering and Infrastructure Design Report**

Document Control Sheet

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Introduction

ORS has been commissioned by Ballymore Station Walk Limited to prepare a Civil Engineering and Infrastructure Design Report assessing the impact on the proposed civil engineering and infrastructure resulting from the proposed phase one amendment to the permitted residential development at Ballykeeran Gardens (Cornamaddy), Athlone, Co. Westmeath.

This report outlines the proposed amendments in consideration with the parent permission and provides commentary on the civil engineering strategy for the proposed amendment. This report should be read in conjunction with all other relevant information prepared by the applicant enclosed with the application documentation.

The development will comprise amendments to the permitted development as per LRD permission reference 318736-23 which comprises 175no. dwellings and 130 apartments, a creche and associated site works. The proposed development incorporates the following amendments:

1. Alteration to the permitted phasing with phase one incorporating a total of 130no. residential units of which there 102no. dwellings and 28no. duplex apartment units, in lieu of 129no. residential units as granted.
2. Phase one incorporating 102no. 2storey dwellings with the dwelling mix comprising 57no. 3bed units and 45no. 4bed units.
3. Phase one incorporating 2no. duplex apartment blocks which comprises 12no. 1bed triplex apartments, 8no. 2bed duplex apartments and 8no. 3bed duplex apartments. (overall units in phase one increasing from 129no. residential units as granted to 130no. residential units).
4. The provision of a Creche.
5. Alterations to the site layout in phase one comprising a reconfiguration of public open spaces, communal spaces and overall site layout along with public lighting, planting and boundary treatments to include boundary walls, railings & fencing.
6. Provision of a revised road layout to serve phase one.
7. All ancillary site development/construction works to facilitate foul, water and service networks for connection to the existing foul, water and ESB networks.
8. Provision of associated site infrastructure works to include for foul, water and storm water infrastructure.
9. Provision of 2no. ESB substations.

A Natura Impact Statement has been prepared and accompanies this application.

Figure 1, below, provides detail of the proposed roads layout.

A World-Class Multidisciplinary Building Consultancy

1 Codes and Standards

The civil engineering works presented in this report and the accompanying drawings have been reviewed in accordance with the following codes of practice and standards:

- “Irish Building Regulations Technical Guidance Documents” Department of the Environment and Local Government
- “Greater Dublin Strategic Drainage Study” published under the National Development Plan
- CIRIA Report “C697 – Sustainable Drainage Systems”
- EPA - Wastewater Treatment Manuals – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels
- EPA – Guidance on the Authorisation of Discharges to Groundwater (EPA, 2011)
- Irish Water - Water Code of Practice
- Irish Water - Wastewater Code of Practice
- Design Manual for Urban Roads and Streets

2 Site Location and Description

2.1 Location

The proposed development site is located northeast to Athlone Town Centre within the townlands of Ballykeeran and Cornamaddy, Athlone, Co. Westmeath. The figure below shows the permitted application boundary (orange) and the subject site of the proposed amendment to this application (red). To the south of the site is the junction between the N55 and Woodville Road. The site is currently open green space with small pockets of residential areas to the north and south of the overall masterplan.

Lands to the south are within the applicant's ownership, but do not form part of this application. The lands outlined in orange to the west form the consented access road are third party lands.

Figure 2.1 below provides an aerial view of the site.

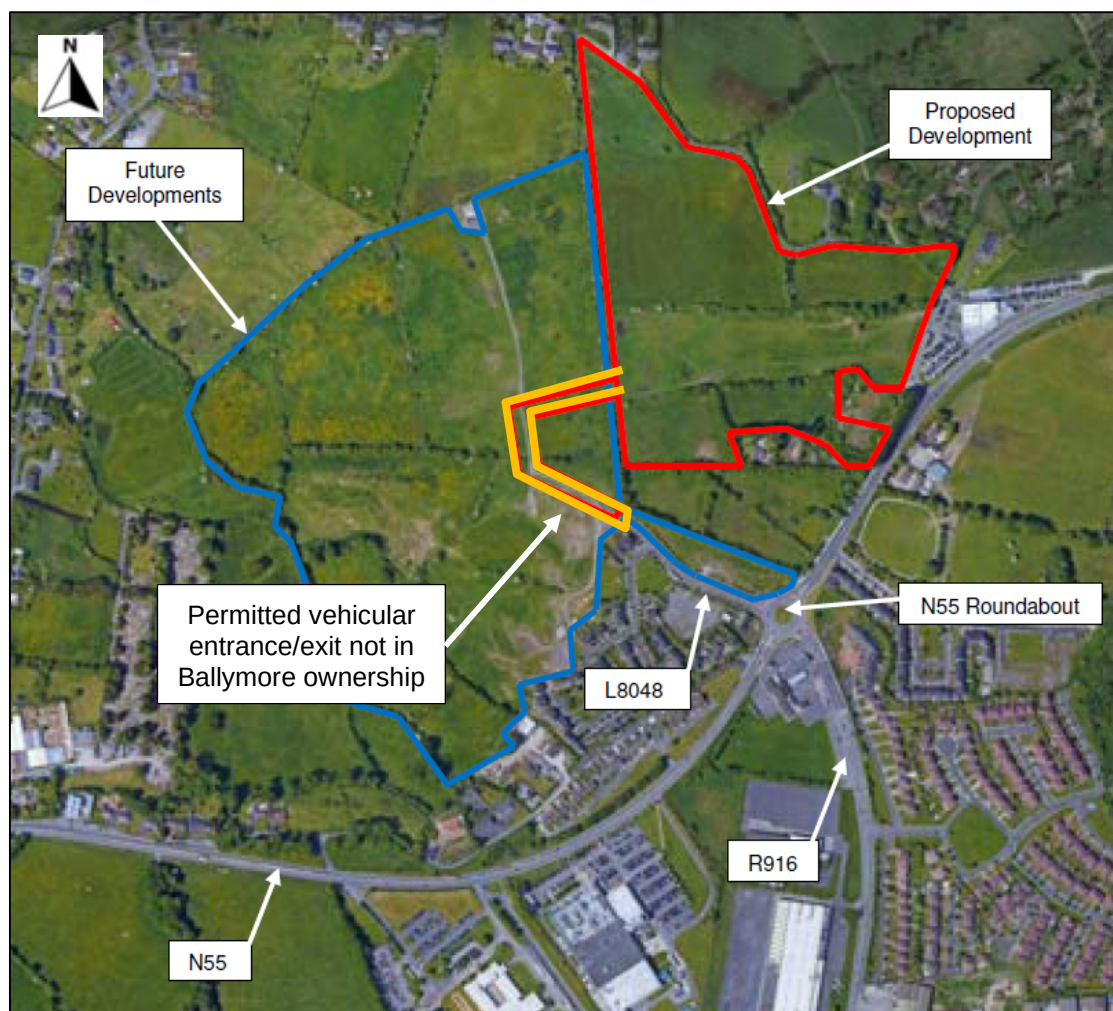


Figure 2.1: Site Location Map – Proposed Site Boundary in Red (Source: Google Maps)

2.2 Existing Civil Infrastructure

2.2.1 Watermain

There are several existing watermain services in the vicinity of the site. A 150mm HDPE main traversing the western edge of the N55 is proposed as the connection point for the parent permission. Also present are 200mm uPVC, 400mm Ductile Iron and 125mm HDPE watermain services.



Figure 2.2 – Extract from Uisce Éireann infrastructure mapping (Source: Uisce Éireann)

2.2.2 Foul Sewerage

Several foul and combined sewers surround the site. The proposed development will utilise the same foul sewer discharge point as the parent permission, connecting to the existing 225 mm concrete sewer located to the north of the site.

The proposal is to use the same existing discharge manhole location as per parent permission.

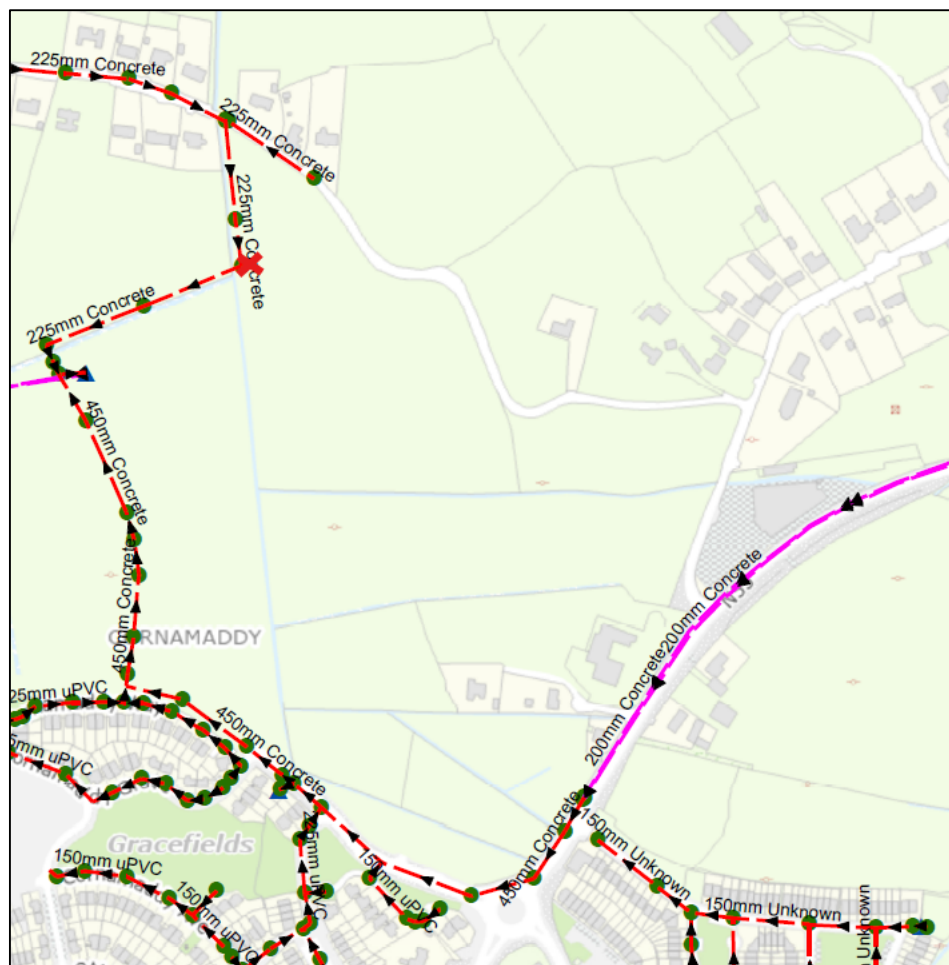


Figure 2.3 – Extract from Uisce Éireann infrastructure mapping (Source: Uisce Eireann)

2.2.3 Surface Water Sewerage

There are existing small-diameter surface water sewers within the vicinity of the site to the south. It is not proposed to connect to this infrastructure, in line with the parent permission. Instead, the proposed surface water network will discharge to the attenuation tank located to the west of the development with outfall into an existing stream as per parent permission.

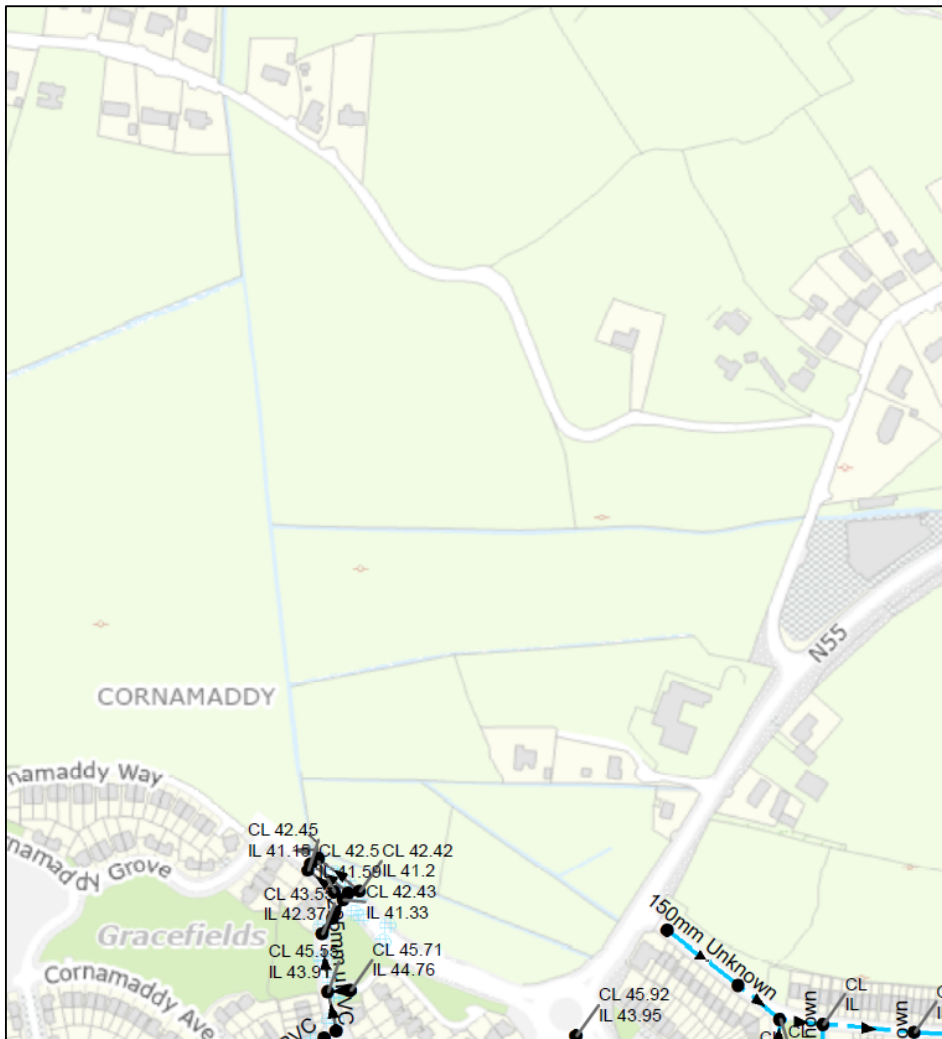


Figure 2.4 – Extract from Uisce Éireann infrastructure mapping for surface water sewers. (Source: Uisce Eireann)

3 Proposed Civil Infrastructure Strategy

3.1 Watermain

The proposed amendment to the parent permission does not seek to amend the connection point detailed as part of the permission. The connection to the existing 150mm HDPE main is retained. The parent permission was awarded confirmation of feasibility under CDS Ref: 200001202 shown in **Appendix A**. There is no increase in proposed unit numbers as part of the amendment and consequently the network capacity can be guaranteed.

The proposed watermain for phase one is designed to operate independently of future phases while allowing for tie-in of future phases at proposed stub locations. Please refer to the drawing 251416-ORS-Z1-00-DR-C-400 & 401 for further information.

3.2 Foul Drainage

The proposed amendment to the parent permission does not seek to amend the connection point detailed as part of the permission. Proposals to facilitate the amendment at phase one follow the parent permission strategy of disposal of foul effluent to the existing foul sewer to the north of the site. The parent permission was awarded confirmation of feasibility under CDS Ref: 200001202. Please refer to the drawing 251416-ORS-Z1-00-DR-C-400 & 401 for further information.

3.3 Surface Water Drainage

The proposed amendment to the parent permission does not seek to amend the discharge point detailed as part of the permission, or to revise the surface water strategy for the parent permission. Proposals to facilitate the amendment at phase 1 follow the parent permission strategy of disposal of surface water to the existing drainage channel at the western boundary of the site.

Surface water sewers are proposed to collect runoff and discharge to the attenuation tank located within the western green space, as detailed in the parent permission. Surface water will then be discharged from the attenuation tank via a flow control device, at a restricted rate, to the adjacent stream.

Surface water discharge will be limited to the rate agreed as part of the parent permission. Please refer to **Appendix B** for Drainage Design calculations for further information.

3.3.1 SUDs Strategy

The proposed surface water drainage strategy will incorporate Sustainable Urban Drainage Systems (SuDS) measures where practical to manage surface water runoff, reduce peak discharge rates, improve water quality, and minimise the impact of the development on the existing drainage network.

The proposed development will be served by a gravity surface water drainage network, which will collect runoff from the proposed impermeable areas including roads and footpaths. Surface water runoff will be conveyed through the proposed drainage network and attenuated within the proposed attenuation tank located within the western green space. Discharge from the attenuation system will be controlled via a flow control device prior to out falling to the existing

stream.

The SuDS measures incorporated within the development will include the use of attenuation storage, flow control measures, landscaped areas and other source control measures where feasible. These measures will assist in reducing surface water runoff rates and volumes, while also providing treatment benefits by reducing pollutant concentrations within stormwater runoff.

All proposed surface water drainage infrastructure will be designed to ensure adequate hydraulic performance and maintain self-cleansing velocities where achievable.

The proposed SuDS strategy and surface water drainage design has been developed to ensure consistency with the approved parent permission and is aligned with the drainage principles and requirements established as part of that permission.

3.3.2 SUDs Features

Permeable paving will be incorporated within the residential parking spaces as a SUDS measure to manage surface water runoff at source. The permeable paving allows rainfall to infiltrate through the surface layers, providing temporary storage and treatment through filtration, sedimentation, adsorption and biodegradation processes before being conveyed to the surface water network. The trafficked road areas will drain via conventional road gullies, which will be separate from the permeable paving areas.

A flow control device will be provided at the outlet of the proposed attenuation tank to restrict discharge to the permitted rate prior to outfall. The flow control chamber will include a 225mm diameter outlet pipe, stock valve for maintenance purposes, and a silt trap to reduce sediment transfer downstream.

The proposed permeable paving and flow control measures provide an effective SUDS solution and are aligned with the parent permission.

3.3.3 Compliance with Sustainable Urban Drainage Systems

The proposed surface water drainage strategy has been designed in accordance with the principles of Sustainable Urban Drainage Systems (SUDS) as outlined within the Greater Dublin Strategic Drainage Study (GDSDS). The SUDS approach aims to minimise the impact of urbanisation by reducing surface water runoff rates and volumes, while providing treatment and protection to the receiving environment.

The key SUDS requirements include:

- Interception storage.
- Treatment storage (not required where interception storage is provided).
- Attenuation storage.
- Long-term storage (not required where growth factors are not applied to Q_{bar}).

For the proposed development, interception storage will be provided through SUDS measures within the site, with attenuation storage provided within the proposed attenuation tank located in the western green space. Surface water discharge will be controlled via a flow control device prior to outfall to the existing stream.

Growth factors will not be applied to the allowable discharge rate for the 100-year storm event;



therefore, long-term storage is not required. The proposed SUDS strategy and surface water drainage design are aligned with the parent permission.

4 Traffic and Transportation.

4.1 Traffic and Transport

A review of the traffic and transport requirements for the proposed Phase 1A amendment was undertaken as part of the pre-planning consultation process with Westmeath County Council. A potential alternative access arrangement was considered; however, this option was not progressed further as part of the current application.

The permitted vehicular entrance is proposed to be retained and will facilitate access for Phase 1 of the development.

The proposed amendment application also allows for a potential future connection to the south, with the required infrastructure and layout provisions incorporated within the design to facilitate this connection as part of the wider development strategy.

4.2 DMURS Engineering Criteria

Guidance will be taken from the Department of Transport, Tourism and Sport document – “Design Manual for Urban Roads and Streets” (DMURS) which is now seen as industry best practice in the development of road design suited to urban areas.

4.2.1 Parking

The proposed parking layout has been designed in accordance with the requirements of DMURS. On-curtilage parking spaces are generally provided perpendicular to the roadway, while off-curtilage parking spaces are generally provided parallel to the roadway.

Where parking is provided adjacent to internal roads, the arrangement has been designed with consideration of DMURS **Figure 4.1**, ensuring sufficient space is provided for vehicle manoeuvring and maintaining safe movement for pedestrians and cyclists. All perpendicular parking spaces have minimum dimensions of 2.4m x 4.85m, whereas parallel parking spaces have a minimum dimension of 2.4m x 6.0m as per Section 4.4.9 of DMURS.

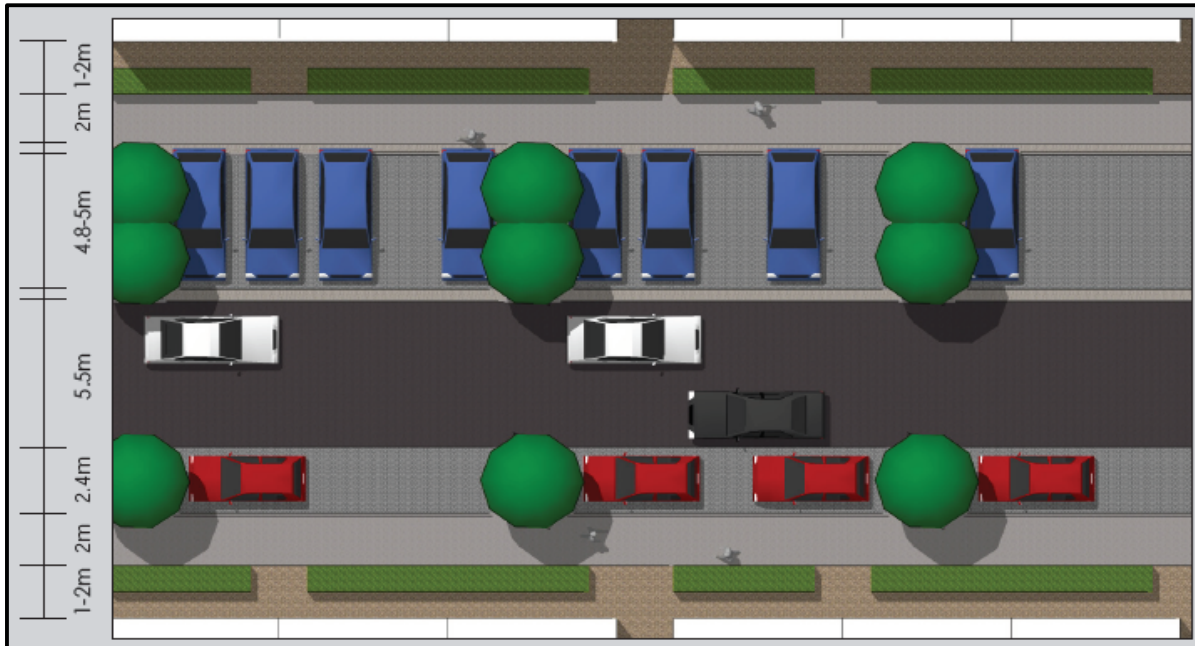


Figure 4.1: Parking Dimensions (Source: DMURS)

The proposed parking arrangement has been designed to minimise conflict between vehicles and other road users while maintaining appropriate visibility and pedestrian connectivity throughout the development. The proposed parking provision is consistent with the requirements of the relevant planning authority and the principles of DMURS.

4.2.2 Corner Radii

The proposed internal road layout has been designed in accordance with the principles of DMURS, including the guidance provided in Section 4.3.3 relating to corner radii.

Appropriate corner radii have been provided throughout the development to accommodate the required vehicle movements while maintaining a safe and pedestrian-friendly environment. The proposed radii have been designed to balance vehicle accessibility with the need to minimise vehicle speeds and maintain pedestrian priority, in line with the objectives of DMURS.

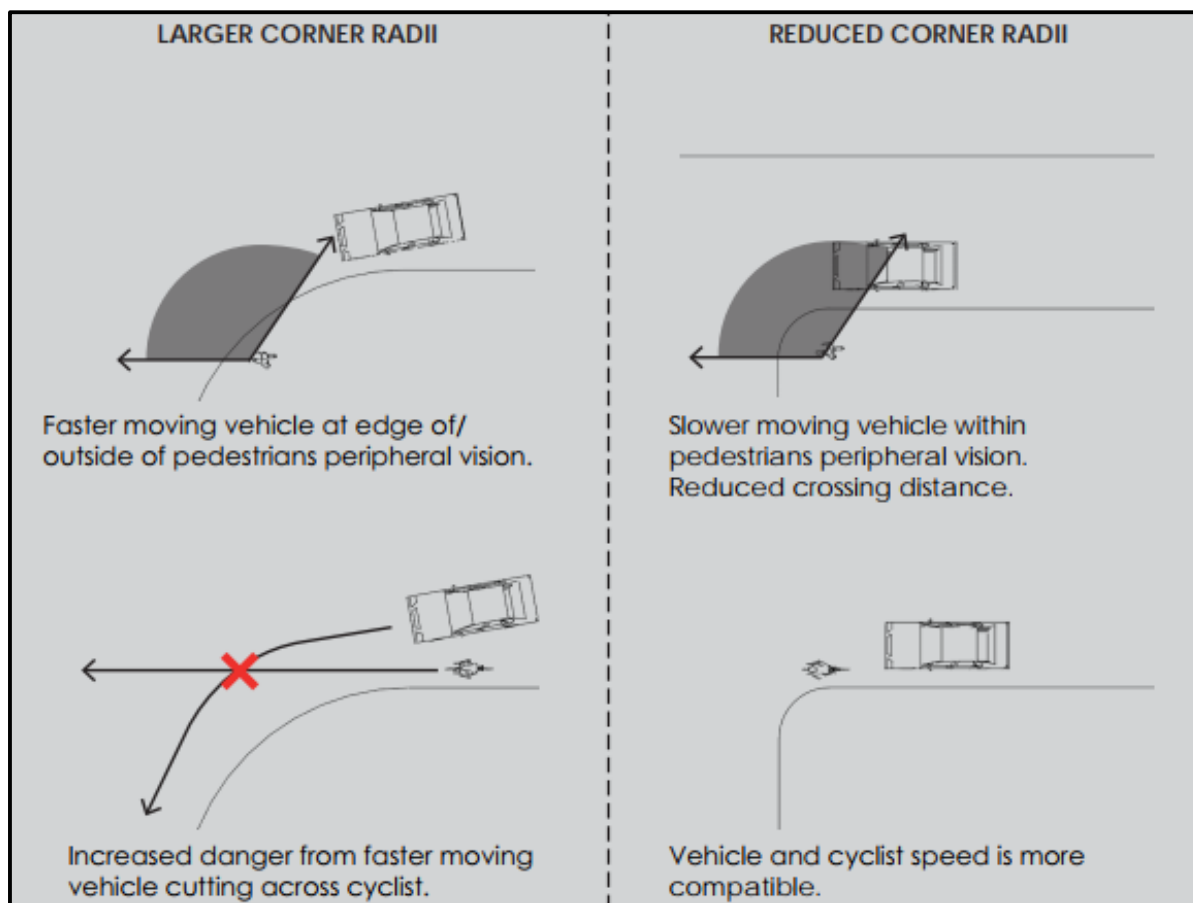


Figure 4.2: Corner Radii (Source: DMURS)

4.2.3 Internal Road Markings

Internal road markings are proposed to be limited to the approach to internal junctions and STOP lines. A STOP sign will be provided at each internal junction where a STOP line is proposed.

4.2.4 Pedestrian Linkages/ Crossing Points

All proposed internal pedestrian pathways will be linked via raised tables, dropped kerbs and tactile paving.

4.2.5 Speed Restraint Measures

The proposed site layout incorporates speed restraint measures to encourage appropriate vehicle speeds within the development and create a safe residential environment. Horizontal and vertical deflections have been incorporated throughout the road layout, including raised home zones and raised table crossings, to naturally reduce vehicle speeds and provide increased priority for pedestrians.

The proposed measures are in accordance with the principles of DMURS, promoting a low-speed environment while maintaining accessibility for all road users.

4.3 Traffic and Transportation Matters

The modest increase in unit numbers under this LRD amendment comprises 6no. additional units. Having regard to the TTA which was prepared for the parent permission we note Junction Analysis was on the basis of the original application incorporating 332no. residential units, which was then reduced via the Further Information process to 305no. residential units.

The proposed LRD amendment now seeking permission therefore falls within the traffic volumes that were originally assessed under the parent permission.

Also having regard to the TRICS database we note that the typical trips generated per residential unit for such a location is 1.34 car movements daily. In this context the proposed 6no. additional residential units will not result in a material increase in traffic volumes above what was assessed under the parent permission.

4.4 Car and Bicycle Parking

The proposed car parking layout has been designed in accordance with the principles of DMURS, providing safe and convenient access for residents and visitors. On-curtilage parking spaces are generally provided perpendicular to the roadway, while off-curtilage parking spaces are generally provided parallel to the roadway. All parking spaces have been designed to provide adequate dimensions and manoeuvring space to allow vehicles to enter and exit safely.

Bicycle parking provision has also been incorporated within the development to encourage sustainable travel and support the use of alternative modes of transport. Bicycle parking spaces will be conveniently located, secure and accessible for residents and visitors in accordance with the relevant planning requirements.

The proposed car and bicycle parking arrangements support the objectives of DMURS by providing a balanced approach to vehicle storage, pedestrian movement and sustainable transport within the development.

4.5 Vehicle Auto-tracking

Autotracking assessments have been undertaken for the proposed development layout to confirm that the internal road network, junctions and parking arrangements can accommodate the required vehicle movements. All turning areas have been checked to ensure sufficient space to allow for refuse and emergency vehicles.

The assessment has considered the movement of refuse vehicles, fire tenders and private cars throughout the development. The results demonstrate that the proposed layout provides adequate space for vehicle manoeuvring and access, while maintaining a safe and efficient internal road environment.

4.6 Road Safety Audit

A Stage 1 Road Safety Audit has been completed on the proposed development layout drawings. The audit reviewed the proposed road layout, access arrangements, pedestrian and cyclist facilities, parking arrangements, and general traffic movements within the development.

The recommendations and observations arising from the Road Safety Audit have been reviewed and incorporated into the proposed design where appropriate. The completed Road Safety Audit report is provided as part of the supporting documentation for the application.

5 Flood Risk

5.1 Flood Analysis

The Floodinfo.ie website was consulted for high-level information on any potential flood risk associated with the site. No indication of any historic or predicted future flood events were identified in the vicinity of the site. Refer to **Figure 5.1** below.

A flood risk assessment was previously undertaken as part of the permitted scheme submission. Having reviewed the proposed amendments, it is considered that the proposed development will not result in any additional flood risk to the permitted development.

The development will present no significant increase in flood risk either within the site or downstream of the site. Surface water runoff will continue to be restricted to greenfield runoff rates through the proposed flow control measures.

No flooding was identified from the Causeway model in relation to the review of the attenuation tanks. Based on the site layout and existing topography, any potential overland flows would be directed away from the proposed buildings and towards the access roads. As the site falls from east to west, with the access road located along the western boundary, any potential surface water accumulation would naturally discharge along the road network based on the proposed site levels. Therefore, no additional flood risk to the permitted scheme is anticipated as a result of the proposed amendments.

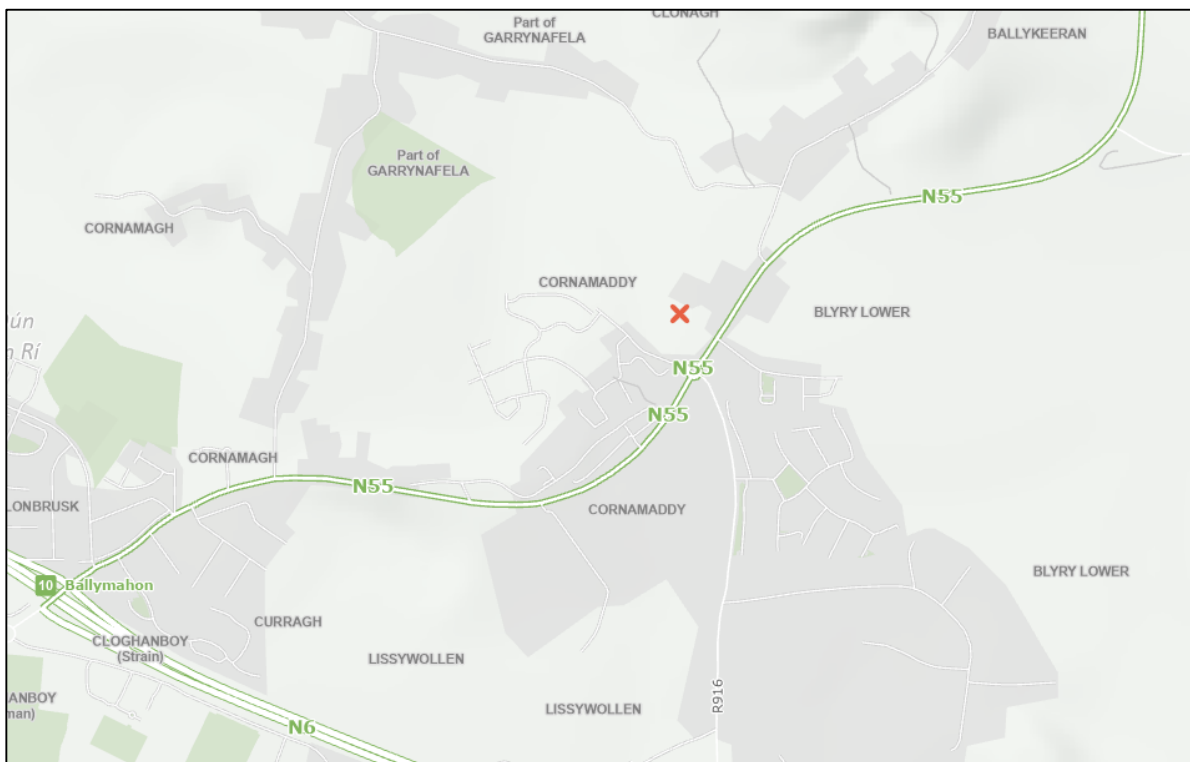


Figure 5.1: Floodinfo Map – approximate site location marked with red X.

5.2 Flood Analysis

A ground investigation was undertaken by Ground Investigations Ireland (GII) to assess the existing ground conditions and inform the proposed development design. The investigation included site-based assessments and testing to establish the ground profile and relevant engineering parameters for the site.

The completed Ground Investigation Report prepared by GII is submitted as part of the planning application documentation and has informed the design and assessment of the proposed development



Appendix A – Uisce Eireann Letter of Consent

Uisce Éireann's Ref: PN26000038374

Planning Ref: Section 247 Pre-Planning meeting with Ballymore Station Walk Ltd for amendments to permitted development

Planning Authority: Westmeath County Council

Issue Date: 26 March 2026

Development Location: Cornamaddy & Ballykeeran, Athlone, Co. Westmeath

Uisce Éireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City

www.water.ie

Development Description: The development will comprise amendments to the permitted development as per Large scale Residential Development (LRD) permission 318736-23 which comprises 175 no. dwellings to include for;

1. Alteration to the permitted phasing with phase 1A comprising 2no. bungalows and 63no. 2storey dwellings, 9no. 1bed duplex apartments and 6no. 2bed duplex apartment units.
2. Alterations to the site layout in phase 1A comprising a revised unit mix and site layout.
3. Provision of a secondary vehicular access to serve phase 1A.
4. Provision of associated site infrastructure works.
5. Amendments to associated site landscaping works.

A Chara,

Uisce Éireann plays a crucial role in supporting housing development in Ireland by investing heavily in water and wastewater infrastructure, essential for new homes, and by streamlining its connections process for developers. Through its Growth and Development Programme and significant funding from the National Development Plan, Uisce Éireann builds capacity in networks to enable construction, partners with developers on pipe-laying, and works to overcome bottlenecks, unlocking thousands of new housing units across the country, aligning with the national Housing for All strategy.

Uisce Éireann (UÉ) welcomes the opportunity to submit an observation response in relation to Ballymore Station Walk Ltd's request for a Section 247 Meeting for a Large-scale Residential Development consisting of amendments to a previously approved development consisting of 175 no. new residential units and all associated ancillary works at Cornamaddy & Ballykeeran, Athlone, Co. Westmeath

Amendments

Given the applicant has already received a Confirmation of Feasibility (COF) letter and received planning permission for the parent permitted development and given the nature of the proposed amendments as well as the applicant having recently submitted a Connection Application

Stiúrthóirí / Directors: Jerry Grant (Cathaoirleach / Chairperson), Niall Gleeson (POF / CEO), Gerard Britchfield, Douglas Millican, Michael Nolan, Patricia King, Eileen Maher, Cathy Mannion, Paul Reid, Michael Walsh.

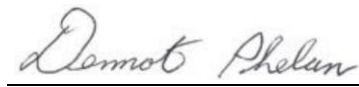
Oifig Chláraithe / Registered Office: Teach Colvill, 24-26 Sráid Thalbóid, Baile Átha Cliath 1, D01 NP86 / Colvill House, 24-26 Talbot Street, Dublin, Ireland D01NP86
Is cuideachta ghníomhaíochta ainmnithe atá faoi theorainn scaireanna é Uisce Éireann / Uisce Éireann is a designated activity company, limited by shares.
Cláraithe in Éirinn Uimh.: 530363 / Registered in Ireland No.: 530363.

(currently being assessed), UÉ can advise that any granting of permission for these proposals will be subject to the standard UÉ Connection agreement conditions.

In addition, applicant should be made aware of the following below advisory notes and addressed where relevant as part of the plan & particulars of their planning application.

Queries relating to the terms and observations above should be directed to planning@water.ie

Yours sincerely,



Dermot Phelan
Connections and Developer Services

Advisory Notes:

In situ public Infrastructure

Uisce Éireann does not permit build over of its assets. Separation distances from public infrastructure, as per Uisce Éireann's Standards Codes and Practices must be achieved. It is the applicant's responsibility to submit a diversion enquiry to Uisce Éireann Diversions Section (diversions@water.ie) prior to construction, where a potential build over of public assets is in question and/or where the applicants proposals cannot achieve separation distances from public infrastructure as per UÉ Standards & Codes of Practice.

Protection of Drinking Water Sources

Protection of drinking water source(s) from potentially adverse impacts is a priority for Uisce Éireann. It is Uisce Éireann's current policy to maintain safe and secure drinking water supplies and ensure that development will not give rise to any deterioration in water quality. Development proposals shall not impact public drinking water sources and/or abstraction point(s). It is also a requirement of the Water Framework Directive that waters used for the abstraction of drinking water are protected to avoid deterioration in quality. Development proposals shall not impact public drinking water sources and/or abstraction point(s).

Statement of Design Acceptance (SODA)

Please note that a SODA is recommended to be in place and submitted at full LRD planning application lodgement stage.

Environmental Impact Assessment Report (EIAR)

If an EIAR is required to be submitted by the applicant, Uisce Éireann is requested to be consulted via an EIAR Scoping letter c. 6 months prior to the completion of the planning application. All scoping letters can be forwarded to our planning administration email address planning@water.ie

Uisce Éireann does not permit surface waters into the public sewer network.



Appendix B – Drainage Design Calculations

**Design Settings**

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	5	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	Scotland and Ireland	Connection Type	Level Soffits
M5-60 (mm)	14.800	Minimum Backdrop Height (m)	0.200
Ratio-R	0.282	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.036	5.00	43.700	1200	606601.599	743208.564	1.425
2	0.054	5.00	43.650	1200	606601.877	743190.647	1.481
3	0.143	5.00	44.200	1200	606591.027	743151.669	2.345
4	0.073	5.00	43.450	1200	606537.863	743184.907	1.425
5	0.074	5.00	43.600	1350	606533.448	743167.550	2.064
6	0.028	5.00	42.610	1200	606502.115	743181.862	1.425
7	0.060	5.00	43.200	1350	606502.115	743167.708	2.249
8	0.055	5.00	42.900	1350	606501.649	743143.347	2.025
9	0.058	5.00	42.900	1350	606494.833	743140.175	2.049
Tank 1			41.800		606293.230	743123.247	2.956
11	0.135	5.00	42.600	1350	606445.342	743142.362	1.902
12	0.111	5.00	44.800	1200	606567.969	743054.775	1.425
13	0.065	5.00	43.100	1200	606500.413	743132.475	1.425
15	0.093	5.00	43.200	1200	606499.603	743076.252	1.931
16	0.075	5.00	43.500	1350	606484.865	743080.369	2.369
17	0.070	5.00	42.500	1350	606421.915	743080.474	1.563
18	0.130	5.00	42.485	1350	606415.837	743086.123	1.574
19	0.057	5.00	42.450	1200	606482.232	743202.499	1.500
20	0.085	5.00	42.350	1200	606415.865	743202.604	1.672
21	0.168	5.00	42.450	1500	606415.837	743145.043	2.308
22	0.076	5.00	42.000	1200	606396.725	743201.251	1.500
23	0.089	5.00	41.500	1200	606348.290	743201.251	1.198
24	0.203	5.00	41.825	1500	606348.271	743140.140	2.073
29	0.032	5.00	40.900	1500	606272.815	743199.795	1.875
30	0.024	5.00	41.930	1500	606291.173	743154.526	2.979
31	0.026	5.00	41.330	1500	606302.375	743145.879	2.400
34	0.043	5.00	41.580	1500	606323.303	743138.581	2.683
35			41.900	1500	606335.828	743129.641	2.428
36			41.800	1500	606271.874	743134.850	2.992
37	0.082	5.00	41.850	1200	606388.399	743046.478	1.500
38	0.055	5.00	41.650	1200	606352.034	743046.491	1.449
39	0.069	5.00	41.650	1200	606346.722	743109.094	1.706
40	0.024	5.00	41.800	1200	606342.684	743120.213	1.905
41	0.054	5.00	41.850	1500	606283.484	743166.205	2.878
42	0.008	5.00	41.800	1500	606316.797	743130.664	2.919

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	1	2	17.919	0.600	42.275	42.169	0.106	169.0	225	5.30	50.0
1.001	2	3	40.460	0.600	42.169	41.930	0.239	169.3	225	5.97	50.0
1.002	3	5	59.729	0.600	41.855	41.611	0.244	244.8	300	6.97	49.2
2.000	4	5	17.910	0.600	42.025	41.919	0.106	169.0	225	5.30	50.0
1.003	5	7	31.333	0.600	41.536	41.439	0.097	323.0	375	7.49	47.7
3.000	6	7	14.154	0.600	41.185	41.101	0.084	168.5	225	5.23	50.0
1.004	7	8	24.365	0.600	40.951	40.875	0.076	320.6	375	7.89	46.6
1.005	8	9	7.518	0.600	40.875	40.851	0.024	313.2	375	8.01	46.3
1.006	9	11	49.539	0.600	40.851	40.698	0.153	323.8	375	8.84	44.3
1.007	11	21	29.627	0.600	40.698	40.606	0.092	322.0	375	9.33	43.2
4.000	12	15	71.660	0.600	43.375	42.953	0.422	169.8	225	6.19	50.0
5.000	13	15	56.229	0.600	41.675	41.344	0.331	169.9	225	5.94	50.0
4.001	15	16	15.302	0.600	41.269	41.206	0.063	242.9	300	6.45	50.0
4.002	16	17	62.950	0.600	41.131	40.937	0.194	324.5	375	7.50	47.7
4.003	17	18	8.298	0.600	40.937	40.911	0.026	319.1	375	7.63	47.3
4.004	18	21	58.920	0.600	40.911	40.729	0.182	323.7	375	8.61	44.8
6.000	19	20	66.367	0.600	40.950	40.678	0.272	244.0	300	6.10	50.0
6.001	20	21	57.561	0.600	40.678	40.442	0.236	243.9	300	7.06	48.9
1.008	21	24	67.744	0.600	40.142	40.026	0.116	584.0	600	10.46	41.0
7.000	22	23	48.435	0.600	40.500	40.302	0.198	244.6	300	5.81	50.0
7.001	23	24	61.111	0.600	40.302	40.052	0.250	244.4	300	6.82	49.6
1.009	24	35	16.281	0.600	39.752	39.547	0.205	79.4	600	10.56	40.8
8.000	37	38	36.365	0.600	40.350	40.201	0.149	244.1	300	5.61	50.0
8.001	38	39	62.828	0.600	40.201	39.944	0.257	244.5	300	6.65	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.002	39.9	4.9	1.200	1.256	0.036	0.0	53	0.685
1.001	1.002	39.8	12.3	1.256	2.045	0.091	0.0	86	0.885
1.002	1.000	70.7	31.1	2.045	1.689	0.234	0.0	139	0.969
2.000	1.003	39.9	9.8	1.200	1.456	0.073	0.0	76	0.834
1.003	1.002	110.7	49.2	1.689	1.386	0.380	0.0	175	0.973
3.000	1.004	39.9	3.9	1.200	1.874	0.028	0.0	47	0.639
1.004	1.006	111.1	59.3	1.874	1.650	0.469	0.0	195	1.022
1.005	1.018	112.4	65.8	1.650	1.674	0.524	0.0	206	1.056
1.006	1.001	110.6	69.9	1.674	1.527	0.582	0.0	216	1.057
1.007	1.004	110.9	84.1	1.527	1.469	0.718	0.0	245	1.100
4.000	1.000	39.8	15.1	1.200	0.022	0.111	0.0	96	0.934
5.000	1.000	39.8	8.8	1.200	1.631	0.065	0.0	72	0.806
4.001	1.004	71.0	36.4	1.631	1.994	0.269	0.0	152	1.010
4.002	1.000	110.5	44.4	1.994	1.188	0.344	0.0	165	0.947
4.003	1.009	111.4	53.0	1.188	1.199	0.413	0.0	182	0.996
4.004	1.001	110.6	66.0	1.199	1.346	0.543	0.0	209	1.044
6.000	1.002	70.8	7.7	1.200	1.372	0.057	0.0	67	0.662
6.001	1.002	70.8	18.7	1.372	1.708	0.141	0.0	105	0.850
1.008	1.000	282.8	174.4	1.708	1.199	1.569	0.0	341	1.050
7.000	1.001	70.7	10.3	1.200	0.898	0.076	0.0	77	0.719
7.001	1.001	70.8	22.2	0.898	1.473	0.165	0.0	115	0.888
1.009	2.734	773.0	214.3	1.473	1.753	1.937	0.0	215	2.354
8.000	1.002	70.8	11.1	1.200	1.149	0.082	0.0	80	0.735
8.001	1.001	70.7	18.5	1.149	1.406	0.136	0.0	104	0.845

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
8.002	39	40	11.830	0.600	39.944	39.895	0.049	241.4	300	6.85	49.5
8.003	40	35	11.657	0.600	39.895	39.847	0.048	242.9	300	7.04	49.0
1.010	35	42	19.058	0.600	39.472	39.443	0.029	657.2	675	10.87	40.2
9.000	29	41	35.244	0.600	39.025	38.972	0.053	665.0	675	5.58	50.0
9.001	41	30	13.983	0.600	38.972	38.951	0.021	665.8	675	5.81	50.0
9.002	30	31	14.151	0.600	38.951	38.930	0.021	673.9	675	6.05	50.0
9.003	31	34	22.164	0.600	38.930	38.897	0.033	671.6	675	6.42	50.0
9.004	34	42	10.247	0.600	38.897	38.881	0.016	640.5	675	6.58	50.0
1.011	42	Tank 1	24.707	0.600	38.881	38.844	0.037	667.7	675	11.28	39.5
1.012	Tank 1	36	24.304	0.600	38.844	38.808	0.036	675.1	675	11.69	38.8

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
8.002	1.007	71.2	27.6	1.406	1.605	0.206	0.0	129	0.944
8.003	1.004	71.0	30.4	1.605	1.753	0.229	0.0	137	0.968
1.010	1.015	363.1	236.3	1.753	1.682	2.167	0.0	398	1.077
9.000	1.009	360.9	4.4	1.200	2.203	0.032	0.0	52	0.353
9.001	1.008	360.7	11.7	2.203	2.304	0.087	0.0	82	0.472
9.002	1.002	358.5	15.0	2.304	1.725	0.111	0.0	93	0.505
9.003	1.003	359.1	18.5	1.725	2.008	0.136	0.0	103	0.537
9.004	1.028	367.8	24.3	2.008	2.244	0.179	0.0	116	0.592
1.011	1.006	360.2	252.2	2.244	2.281	2.354	0.0	418	1.085
1.012	1.001	358.2	247.9	2.281	2.317	2.354	0.0	414	1.076

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	17.919	169.0	225	Circular	43.700	42.275	1.200	43.650	42.169	1.256
1.001	40.460	169.3	225	Circular	43.650	42.169	1.256	44.200	41.930	2.045
1.002	59.729	244.8	300	Circular	44.200	41.855	2.045	43.600	41.611	1.689
2.000	17.910	169.0	225	Circular	43.450	42.025	1.200	43.600	41.919	1.456
1.003	31.333	323.0	375	Circular	43.600	41.536	1.689	43.200	41.439	1.386
3.000	14.154	168.5	225	Circular	42.610	41.185	1.200	43.200	41.101	1.874
1.004	24.365	320.6	375	Circular	43.200	40.951	1.874	42.900	40.875	1.650
1.005	7.518	313.2	375	Circular	42.900	40.875	1.650	42.900	40.851	1.674
1.006	49.539	323.8	375	Circular	42.900	40.851	1.674	42.600	40.698	1.527
1.007	29.627	322.0	375	Circular	42.600	40.698	1.527	42.450	40.606	1.469

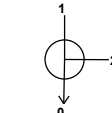
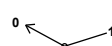
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1200	Manhole	Adoptable	2	1200	Manhole	Adoptable
1.001	2	1200	Manhole	Adoptable	3	1200	Manhole	Adoptable
1.002	3	1200	Manhole	Adoptable	5	1350	Manhole	Adoptable
2.000	4	1200	Manhole	Adoptable	5	1350	Manhole	Adoptable
1.003	5	1350	Manhole	Adoptable	7	1350	Manhole	Adoptable
3.000	6	1200	Manhole	Adoptable	7	1350	Manhole	Adoptable
1.004	7	1350	Manhole	Adoptable	8	1350	Manhole	Adoptable
1.005	8	1350	Manhole	Adoptable	9	1350	Manhole	Adoptable
1.006	9	1350	Manhole	Adoptable	11	1350	Manhole	Adoptable
1.007	11	1350	Manhole	Adoptable	21	1500	Manhole	Adoptable

Pipeline Schedule

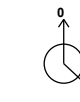
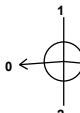
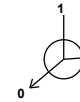
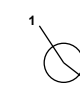
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
4.000	71.660	169.8	225	Circular	44.800	43.375	1.200	43.200	42.953	0.022
5.000	56.229	169.9	225	Circular	43.100	41.675	1.200	43.200	41.344	1.631
4.001	15.302	242.9	300	Circular	43.200	41.269	1.631	43.500	41.206	1.994
4.002	62.950	324.5	375	Circular	43.500	41.131	1.994	42.500	40.937	1.188
4.003	8.298	319.1	375	Circular	42.500	40.937	1.188	42.485	40.911	1.199
4.004	58.920	323.7	375	Circular	42.485	40.911	1.199	42.450	40.729	1.346
6.000	66.367	244.0	300	Circular	42.450	40.950	1.200	42.350	40.678	1.372
6.001	57.561	243.9	300	Circular	42.350	40.678	1.372	42.450	40.442	1.708
1.008	67.744	584.0	600	Circular	42.450	40.142	1.708	41.825	40.026	1.199
7.000	48.435	244.6	300	Circular	42.000	40.500	1.200	41.500	40.302	0.898
7.001	61.111	244.4	300	Circular	41.500	40.302	0.898	41.825	40.052	1.473
1.009	16.281	79.4	600	Circular	41.825	39.752	1.473	41.900	39.547	1.753
8.000	36.365	244.1	300	Circular	41.850	40.350	1.200	41.650	40.201	1.149
8.001	62.828	244.5	300	Circular	41.650	40.201	1.149	41.650	39.944	1.406
8.002	11.830	241.4	300	Circular	41.650	39.944	1.406	41.800	39.895	1.605
8.003	11.657	242.9	300	Circular	41.800	39.895	1.605	41.900	39.847	1.753
1.010	19.058	657.2	675	Circular	41.900	39.472	1.753	41.800	39.443	1.682
9.000	35.244	665.0	675	Circular	40.900	39.025	1.200	41.850	38.972	2.203
9.001	13.983	665.8	675	Circular	41.850	38.972	2.203	41.930	38.951	2.304
9.002	14.151	673.9	675	Circular	41.930	38.951	2.304	41.330	38.930	1.725
9.003	22.164	671.6	675	Circular	41.330	38.930	1.725	41.580	38.897	2.008
9.004	10.247	640.5	675	Circular	41.580	38.897	2.008	41.800	38.881	2.244
1.011	24.707	667.7	675	Circular	41.800	38.881	2.244	41.800	38.844	2.281
1.012	24.304	675.1	675	Circular	41.800	38.844	2.281	41.800	38.808	2.317

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
4.000	12	1200	Manhole	Adoptable	15	1200	Manhole	Adoptable
5.000	13	1200	Manhole	Adoptable	15	1200	Manhole	Adoptable
4.001	15	1200	Manhole	Adoptable	16	1350	Manhole	Adoptable
4.002	16	1350	Manhole	Adoptable	17	1350	Manhole	Adoptable
4.003	17	1350	Manhole	Adoptable	18	1350	Manhole	Adoptable
4.004	18	1350	Manhole	Adoptable	21	1500	Manhole	Adoptable
6.000	19	1200	Manhole	Adoptable	20	1200	Manhole	Adoptable
6.001	20	1200	Manhole	Adoptable	21	1500	Manhole	Adoptable
1.008	21	1500	Manhole	Adoptable	24	1500	Manhole	Adoptable
7.000	22	1200	Manhole	Adoptable	23	1200	Manhole	Adoptable
7.001	23	1200	Manhole	Adoptable	24	1500	Manhole	Adoptable
1.009	24	1500	Manhole	Adoptable	35	1500	Manhole	Adoptable
8.000	37	1200	Manhole	Adoptable	38	1200	Manhole	Adoptable
8.001	38	1200	Manhole	Adoptable	39	1200	Manhole	Adoptable
8.002	39	1200	Manhole	Adoptable	40	1200	Manhole	Adoptable
8.003	40	1200	Manhole	Adoptable	35	1500	Manhole	Adoptable
1.010	35	1500	Manhole	Adoptable	42	1500	Manhole	Adoptable
9.000	29	1500	Manhole	Adoptable	41	1500	Manhole	Adoptable
9.001	41	1500	Manhole	Adoptable	30	1500	Manhole	Adoptable
9.002	30	1500	Manhole	Adoptable	31	1500	Manhole	Adoptable
9.003	31	1500	Manhole	Adoptable	34	1500	Manhole	Adoptable
9.004	34	1500	Manhole	Adoptable	42	1500	Manhole	Adoptable
1.011	42	1500	Manhole	Adoptable	Tank 1		Junction	
1.012	Tank 1		Junction		36	1500	Manhole	Adoptable

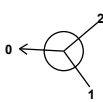
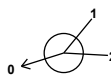
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
1	606601.599	743208.564	43.700	1.425	1200		0	1.000	42.275	225
2	606601.877	743190.647	43.650	1.481	1200		1	1.000	42.169	225
3	606591.027	743151.669	44.200	2.345	1200		0	1.001	42.169	225
							1	1.001	41.930	225
							0	1.002	41.855	300
4	606537.863	743184.907	43.450	1.425	1200		0	2.000	42.025	225
5	606533.448	743167.550	43.600	2.064	1350		1	2.000	41.919	225
							2	1.002	41.611	300
							0	1.003	41.536	375
6	606502.115	743181.862	42.610	1.425	1200		0	3.000	41.185	225
7	606502.115	743167.708	43.200	2.249	1350		1	3.000	41.101	225
							2	1.003	41.439	375
							0	1.004	40.951	375
8	606501.649	743143.347	42.900	2.025	1350		1	1.004	40.875	375
							0	1.005	40.875	375
9	606494.833	743140.175	42.900	2.049	1350		1	1.005	40.851	375
							0	1.006	40.851	375
Tank 1	606293.230	743123.247	41.800	2.956			1	1.011	38.844	675
							0	1.012	38.844	675
11	606445.342	743142.362	42.600	1.902	1350		1	1.006	40.698	375
							0	1.007	40.698	375
12	606567.969	743054.775	44.800	1.425	1200		0	4.000	43.375	225
13	606500.413	743132.475	43.100	1.425	1200		0	5.000	41.675	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
15	606499.603	743076.252	43.200	1.931	1200		1	5.000	41.344	225
							2	4.000	42.953	225
							0	4.001	41.269	300
16	606484.865	743080.369	43.500	2.369	1350		1	4.001	41.206	300
							0	4.002	41.131	375
17	606421.915	743080.474	42.500	1.563	1350		1	4.002	40.937	375
							0	4.003	40.937	375
18	606415.837	743086.123	42.485	1.574	1350		1	4.003	40.911	375
							0	4.004	40.911	375
19	606482.232	743202.499	42.450	1.500	1200					
							0	6.000	40.950	300
20	606415.865	743202.604	42.350	1.672	1200		1	6.000	40.678	300
							0	6.001	40.678	300
21	606415.837	743145.043	42.450	2.308	1500		1	6.001	40.442	300
							2	4.004	40.729	375
							3	1.007	40.606	375
							0	1.008	40.142	600
22	606396.725	743201.251	42.000	1.500	1200					
							0	7.000	40.500	300
23	606348.290	743201.251	41.500	1.198	1200		1	7.000	40.302	300
							0	7.001	40.302	300
24	606348.271	743140.140	41.825	2.073	1500		1	7.001	40.052	300
							2	1.008	40.026	600
							0	1.009	39.752	600
29	606272.815	743199.795	40.900	1.875	1500					
							0	9.000	39.025	675
30	606291.173	743154.526	41.930	2.979	1500		1	9.001	38.951	675
							0	9.002	38.951	675
31	606302.375	743145.879	41.330	2.400	1500		1	9.002	38.930	675
							0	9.003	38.930	675

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
34	606323.303	743138.581	41.580	2.683	1500		1	9.003	38.897	675
							0	9.004	38.897	675
35	606335.828	743129.641	41.900	2.428	1500		1	8.003	39.847	300
							2	1.009	39.547	600
							0	1.010	39.472	675
36	606271.874	743134.850	41.800	2.992	1500		1	1.012	38.808	675
37	606388.399	743046.478	41.850	1.500	1200		0	8.000	40.350	300
38	606352.034	743046.491	41.650	1.449	1200		1	8.000	40.201	300
							0	8.001	40.201	300
39	606346.722	743109.094	41.650	1.706	1200		1	8.001	39.944	300
							0	8.002	39.944	300
40	606342.684	743120.213	41.800	1.905	1200		1	8.002	39.895	300
							0	8.003	39.895	300
41	606283.484	743166.205	41.850	2.878	1500		1	9.000	38.972	675
							0	9.001	38.972	675
42	606316.797	743130.664	41.800	2.919	1500		1	9.004	38.881	675
							2	1.010	39.443	675
							0	1.011	38.881	675

Simulation Settings

Rainfall Methodology	FSR	Skip Steady State	x
FSR Region	England and Wales	Drain Down Time (mins)	240
M5-60 (mm)	14.800	Additional Storage (m³/ha)	20.0
Ratio-R	0.282	Check Discharge Rate(s)	x
Summer CV	0.750	Check Discharge Volume	x
Analysis Speed	Normal		

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440 | 2160

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
30	20	10	0
100	20	10	0

Node 36 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	38.808	Product Number	CTL-SHE-0152-1100-1000-1100
Design Depth (m)	1.000	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	11.0	Min Node Diameter (mm)	1200

Node Tank 1 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	1.0	Invert Level (m)	38.844
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	625.0	0.0	1.600	625.0	0.0	1.601	0.0	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	42.324	0.049	4.2	0.0798	0.0000	OK
15 minute summer	2	11	42.247	0.078	10.3	0.1449	0.0000	OK
15 minute summer	3	11	41.980	0.125	25.6	0.2936	0.0000	OK
15 minute summer	4	10	42.096	0.071	8.3	0.1530	0.0000	OK
15 minute summer	5	11	41.698	0.162	40.9	0.3485	0.0000	OK
15 minute summer	6	10	41.229	0.044	3.2	0.0669	0.0000	OK
15 minute summer	7	11	41.143	0.192	49.7	0.3770	0.0000	OK
15 minute summer	8	12	41.090	0.215	54.8	0.4259	0.0000	OK
15 minute summer	9	12	41.054	0.203	59.7	0.4050	0.0000	OK
600 minute summer	Tank 1	420	39.236	0.392	45.7	232.7533	0.0000	OK
15 minute summer	11	12	40.925	0.227	72.4	0.6483	0.0000	OK
15 minute summer	12	11	43.460	0.085	12.7	0.2281	0.0000	OK
15 minute summer	13	11	41.740	0.065	7.4	0.1318	0.0000	OK
15 minute summer	15	11	41.410	0.141	29.1	0.2956	0.0000	OK
15 minute summer	16	11	41.276	0.145	36.8	0.2990	0.0000	OK
15 minute summer	17	12	41.127	0.190	43.6	0.4421	0.0000	OK
15 minute summer	18	12	41.099	0.188	54.4	0.5793	0.0000	OK
15 minute summer	19	11	41.009	0.059	6.4	0.1114	0.0000	OK
15 minute summer	20	12	40.769	0.091	15.5	0.1953	0.0000	OK
15 minute summer	21	13	40.452	0.310	152.8	0.9999	0.0000	OK
15 minute summer	22	11	40.569	0.069	8.6	0.1472	0.0000	OK
15 minute summer	23	12	40.402	0.100	18.4	0.2620	0.0000	OK
30 minute summer	24	20	39.981	0.229	177.4	0.8521	0.0000	OK
Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	4.1	0.473	0.104	0.1646	
15 minute summer	2	1.001	3	10.0	0.832	0.250	0.4850	
15 minute summer	3	1.002	5	24.7	0.921	0.350	1.6149	
15 minute summer	4	2.000	5	8.1	0.777	0.203	0.1872	
15 minute summer	5	1.003	7	40.1	0.956	0.362	1.3247	
15 minute summer	6	3.000	7	3.1	0.595	0.079	0.0748	
15 minute summer	7	1.004	8	49.0	0.808	0.441	1.4877	
15 minute summer	8	1.005	9	54.5	0.864	0.485	0.4745	
15 minute summer	9	1.006	11	60.3	0.923	0.545	3.2333	
600 minute summer	Tank 1	1.012	36	11.5	0.217	0.032	5.5100	
15 minute summer	11	1.007	21	70.9	1.118	0.640	1.8871	
15 minute summer	12	4.000	15	11.8	0.875	0.297	0.9680	
15 minute summer	13	5.000	15	7.2	0.746	0.180	0.5389	
15 minute summer	15	4.001	16	28.6	0.927	0.403	0.4723	
15 minute summer	16	4.002	17	36.0	0.787	0.326	2.9910	
15 minute summer	17	4.003	18	42.0	0.759	0.377	0.4625	
15 minute summer	18	4.004	21	52.9	1.037	0.478	3.0225	
15 minute summer	19	6.000	20	6.1	0.470	0.087	0.9147	
15 minute summer	20	6.001	21	14.1	0.788	0.199	1.0279	
15 minute summer	21	1.008	24	149.9	1.165	0.530	8.7194	
15 minute summer	22	7.000	23	8.3	0.554	0.118	0.7913	
15 minute summer	23	7.001	24	16.8	0.829	0.238	1.2409	
30 minute summer	24	1.009	35	177.4	1.637	0.229	1.7708	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	29	420	39.236	0.211	0.7	0.4462	0.0000	OK
600 minute summer	30	420	39.236	0.285	1.5	0.5502	0.0000	OK
600 minute summer	31	420	39.236	0.306	1.7	0.6063	0.0000	OK
600 minute summer	34	420	39.236	0.339	2.1	0.7069	0.0000	OK
15 minute summer	35	13	39.811	0.339	199.1	0.5987	0.0000	OK
600 minute summer	36	420	39.236	0.428	11.5	0.7561	0.0000	OK
15 minute summer	37	10	40.422	0.072	9.3	0.1593	0.0000	OK
15 minute summer	38	11	40.293	0.092	15.3	0.1728	0.0000	OK
15 minute summer	39	11	40.068	0.124	22.2	0.2415	0.0000	OK
15 minute summer	40	12	40.023	0.128	23.8	0.1766	0.0000	OK
600 minute summer	41	420	39.236	0.264	1.5	0.5659	0.0000	OK
600 minute summer	42	420	39.236	0.355	46.4	0.6480	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	29	9.000	41	0.5	0.113	0.001	3.9560	420.6
600 minute summer	30	9.002	31	1.3	0.158	0.004	2.1255	
600 minute summer	31	9.003	34	1.4	0.082	0.004	3.7305	
600 minute summer	34	9.004	42	1.8	0.047	0.005	1.8936	
15 minute summer	35	1.010	42	201.4	1.263	0.555	3.0405	
600 minute summer	36	Hydro-Brake®		11.0				
15 minute summer	37	8.000	38	9.1	0.612	0.128	0.5650	
15 minute summer	38	8.001	39	14.7	0.644	0.207	1.4373	
15 minute summer	39	8.002	40	21.3	0.761	0.299	0.3313	
15 minute summer	40	8.003	35	23.8	0.878	0.335	0.3161	
600 minute summer	41	9.001	30	1.1	0.169	0.003	1.9050	
600 minute summer	42	1.011	Tank 1	45.7	0.843	0.127	5.0043	



Results for 30 year +20% CC +10% A Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	42.352	0.077	10.2	0.1296	0.0000	OK
15 minute summer	2	10	42.300	0.131	25.2	0.2535	0.0000	OK
15 minute summer	3	11	42.086	0.231	64.6	0.5706	0.0000	OK
15 minute summer	4	10	42.144	0.119	20.3	0.2673	0.0000	OK
15 minute summer	5	11	41.826	0.290	102.8	0.6440	0.0000	OK
15 minute summer	6	12	41.689	0.504	8.0	0.7924	0.0000	SURCHARGED
15 minute summer	7	12	41.685	0.734	119.9	1.4823	0.0000	SURCHARGED
15 minute summer	8	12	41.572	0.697	129.8	1.4151	0.0000	SURCHARGED
15 minute summer	9	12	41.504	0.653	143.1	1.3411	0.0000	SURCHARGED
960 minute summer	Tank 1	735	40.079	1.235	80.9	733.0587	0.0000	SURCHARGED
15 minute summer	11	12	41.199	0.501	173.0	1.5012	0.0000	SURCHARGED
15 minute summer	12	11	43.522	0.147	31.0	0.4185	0.0000	OK
15 minute summer	13	10	41.779	0.104	18.1	0.2212	0.0000	OK
15 minute summer	15	11	41.527	0.258	71.8	0.5643	0.0000	OK
15 minute summer	16	12	41.418	0.287	91.4	0.6105	0.0000	OK
15 minute summer	17	12	41.325	0.388	105.5	0.9354	0.0000	SURCHARGED
15 minute summer	18	12	41.285	0.374	133.9	1.2134	0.0000	OK
15 minute summer	19	11	41.044	0.094	15.8	0.1835	0.0000	OK
15 minute summer	20	11	40.832	0.154	38.7	0.3449	0.0000	OK
30 minute summer	21	20	40.705	0.563	371.7	1.8941	0.0000	OK
15 minute summer	22	10	40.609	0.109	21.1	0.2452	0.0000	OK
15 minute summer	23	11	40.475	0.173	45.4	0.4782	0.0000	OK
15 minute summer	24	12	40.202	0.450	446.9	1.7638	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	10.1	0.578	0.253	0.3214	
15 minute summer	2	1.001	3	24.9	0.967	0.626	1.0677	
15 minute summer	3	1.002	5	63.4	1.137	0.896	3.3486	
15 minute summer	4	2.000	5	19.9	0.978	0.500	0.3655	
15 minute summer	5	1.003	7	101.3	1.233	0.915	2.5734	
15 minute summer	6	3.000	7	12.8	0.607	0.319	0.5629	
15 minute summer	7	1.004	8	117.8	1.068	1.060	2.6874	
15 minute summer	8	1.005	9	130.4	1.182	1.160	0.8292	
15 minute summer	9	1.006	11	143.4	1.301	1.297	5.4640	
960 minute summer	Tank 1	1.012	36	12.3	0.218	0.034	8.6760	
15 minute summer	11	1.007	21	173.8	1.600	1.568	3.0593	
15 minute summer	12	4.000	15	29.6	1.095	0.743	1.9355	
15 minute summer	13	5.000	15	17.6	0.769	0.443	1.4746	
15 minute summer	15	4.001	16	71.4	1.215	1.006	0.8931	
15 minute summer	16	4.002	17	87.0	0.918	0.788	6.3180	
15 minute summer	17	4.003	18	99.5	0.914	0.893	0.9148	
15 minute summer	18	4.004	21	127.8	1.287	1.156	5.6882	
15 minute summer	19	6.000	20	15.3	0.587	0.216	1.8281	
15 minute summer	20	6.001	21	37.9	0.925	0.534	2.8767	
30 minute summer	21	1.008	24	364.4	1.510	1.289	15.9816	
15 minute summer	22	7.000	23	20.6	0.681	0.291	1.5783	
15 minute summer	23	7.001	24	42.5	1.070	0.600	2.4440	
15 minute summer	24	1.009	35	445.6	1.851	0.576	3.9103	

Results for 30 year +20% CC +10% A Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	29	720	40.083	1.058	2.0	2.2720	0.0000	SURCHARGED
960 minute summer	30	765	40.083	1.132	4.0	2.2023	0.0000	SURCHARGED
960 minute summer	31	720	40.081	1.151	5.8	2.3046	0.0000	SURCHARGED
960 minute summer	34	735	40.081	1.184	6.0	2.5069	0.0000	SURCHARGED
960 minute summer	35	735	40.079	0.607	80.9	1.0726	0.0000	OK
960 minute summer	36	735	40.079	1.271	12.3	2.2451	0.0000	OK
15 minute summer	37	10	40.465	0.115	22.8	0.2680	0.0000	OK
15 minute summer	38	11	40.352	0.151	37.9	0.2964	0.0000	OK
15 minute summer	39	11	40.176	0.232	55.2	0.4702	0.0000	OK
15 minute summer	40	12	40.123	0.228	60.4	0.3207	0.0000	OK
960 minute summer	41	705	40.081	1.109	3.1	2.4188	0.0000	SURCHARGED
960 minute summer	42	750	40.080	1.199	81.6	2.1947	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	29	9.000	41	2.0	0.099	0.006	12.5813	
960 minute summer	30	9.002	31	5.3	0.159	0.015	5.0516	
960 minute summer	31	9.003	34	5.2	0.088	0.014	7.9121	
960 minute summer	34	9.004	42	6.5	0.046	0.018	3.6580	
960 minute summer	35	1.010	42	80.9	0.964	0.223	6.5468	
960 minute summer	36	Hydro-Brake®		12.3				709.2
15 minute summer	37	8.000	38	22.6	0.764	0.320	1.0904	
15 minute summer	38	8.001	39	36.8	0.787	0.520	2.9553	
15 minute summer	39	8.002	40	54.0	0.935	0.758	0.6828	
15 minute summer	40	8.003	35	59.7	1.145	0.841	0.6361	
960 minute summer	41	9.001	30	3.6	0.173	0.010	4.9916	
960 minute summer	42	1.011	Tank 1	80.9	0.962	0.225	8.8199	



Results for 100 year +20% CC +10% A Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	20	42.408	0.133	12.5	0.2257	0.0000	OK
30 minute summer	2	20	42.408	0.238	31.1	0.4615	0.0000	SURCHARGED
30 minute summer	3	19	42.319	0.464	80.0	1.1468	0.0000	SURCHARGED
15 minute summer	4	10	42.164	0.139	25.8	0.3121	0.0000	OK
30 minute summer	5	19	42.105	0.569	120.7	1.2655	0.0000	SURCHARGED
30 minute summer	6	19	41.992	0.807	9.8	1.2671	0.0000	SURCHARGED
30 minute summer	7	19	41.985	1.034	134.0	2.0874	0.0000	SURCHARGED
30 minute summer	8	19	41.837	0.962	150.1	1.9535	0.0000	SURCHARGED
30 minute summer	9	19	41.747	0.896	167.2	1.8416	0.0000	SURCHARGED
960 minute summer	Tank 1	750	40.862	2.018	107.9	950.2969	0.0000	SURCHARGED
30 minute summer	11	19	41.335	0.637	208.6	1.9092	0.0000	SURCHARGED
15 minute summer	12	11	43.554	0.179	39.6	0.5098	0.0000	OK
30 minute summer	13	20	41.849	0.174	22.2	0.3705	0.0000	OK
30 minute summer	15	19	41.798	0.529	89.9	1.1562	0.0000	SURCHARGED
30 minute summer	16	19	41.686	0.555	105.5	1.1815	0.0000	SURCHARGED
30 minute summer	17	19	41.500	0.563	123.5	1.3569	0.0000	SURCHARGED
30 minute summer	18	19	41.437	0.526	163.0	1.7050	0.0000	SURCHARGED
15 minute summer	19	11	41.056	0.106	20.1	0.2082	0.0000	OK
30 minute summer	20	20	40.899	0.221	48.2	0.4963	0.0000	OK
960 minute summer	21	735	40.861	0.719	75.0	2.4216	0.0000	SURCHARGED
960 minute summer	22	735	40.862	0.362	3.6	0.8122	0.0000	SURCHARGED
960 minute summer	23	735	40.863	0.561	7.9	1.5513	0.0000	SURCHARGED
960 minute summer	24	735	40.862	1.110	92.6	4.3522	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	12.6	0.602	0.315	0.5755	
30 minute summer	2	1.001	3	32.3	0.962	0.812	1.6091	
30 minute summer	3	1.002	5	71.2	1.129	1.007	4.2061	
15 minute summer	4	2.000	5	25.3	1.031	0.636	0.4936	
30 minute summer	5	1.003	7	110.3	1.246	0.997	3.4559	
30 minute summer	6	3.000	7	10.5	0.602	0.264	0.5629	
30 minute summer	7	1.004	8	133.4	1.210	1.201	2.6874	
30 minute summer	8	1.005	9	149.8	1.358	1.332	0.8292	
30 minute summer	9	1.006	11	166.8	1.513	1.509	5.4640	
960 minute summer	Tank 1	1.012	36	15.9	0.219	0.044	8.6760	
30 minute summer	11	1.007	21	208.3	1.892	1.879	3.1558	
15 minute summer	12	4.000	15	37.3	1.157	0.938	2.3105	
30 minute summer	13	5.000	15	22.1	0.757	0.555	2.0438	
30 minute summer	15	4.001	16	79.7	1.246	1.123	1.0776	
30 minute summer	16	4.002	17	101.8	0.923	0.922	6.9432	
30 minute summer	17	4.003	18	122.6	1.111	1.100	0.9152	
30 minute summer	18	4.004	21	159.3	1.479	1.441	5.9789	
15 minute summer	19	6.000	20	19.5	0.620	0.275	2.4156	
30 minute summer	20	6.001	21	45.1	0.917	0.637	3.6300	
960 minute summer	21	1.008	24	75.0	0.956	0.265	19.0819	
960 minute summer	22	7.000	23	3.6	0.391	0.051	3.4108	
960 minute summer	23	7.001	24	7.9	0.671	0.112	4.3034	
960 minute summer	24	1.009	35	93.0	1.546	0.120	4.5860	

Results for 100 year +20% CC +10% A Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	29	750	40.865	1.840	3.7	3.9514	0.0000	FLOOD RISK
960 minute summer	30	750	40.863	1.912	5.3	3.7208	0.0000	SURCHARGED
960 minute summer	31	750	40.863	1.933	6.8	3.8692	0.0000	SURCHARGED
960 minute summer	34	735	40.862	1.965	7.7	4.1596	0.0000	SURCHARGED
960 minute summer	35	735	40.862	1.390	103.9	2.4564	0.0000	SURCHARGED
960 minute summer	36	735	40.861	2.053	15.9	3.6284	0.0000	OK
960 minute summer	37	735	40.861	0.511	3.9	1.1890	0.0000	SURCHARGED
960 minute summer	38	735	40.862	0.661	6.5	1.2960	0.0000	SURCHARGED
960 minute summer	39	735	40.861	0.917	9.8	1.8575	0.0000	SURCHARGED
960 minute summer	40	735	40.861	0.966	10.9	1.3597	0.0000	SURCHARGED
960 minute summer	41	735	40.865	1.893	4.4	4.1293	0.0000	SURCHARGED
960 minute summer	42	750	40.861	1.980	108.8	3.6263	0.0000	SURCHARGED
Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	29	9.000	41	2.4	0.099	0.007	12.5813	
960 minute summer	30	9.002	31	5.9	0.158	0.016	5.0516	
960 minute summer	31	9.003	34	5.7	0.071	0.016	7.9121	
960 minute summer	34	9.004	42	6.6	0.042	0.018	3.6580	
960 minute summer	35	1.010	42	102.0	0.988	0.281	6.8033	
960 minute summer	36	Hydro-Brake®		15.5				823.9
960 minute summer	37	8.000	38	3.9	0.453	0.055	2.5608	
960 minute summer	38	8.001	39	6.5	0.520	0.092	4.4243	
960 minute summer	39	8.002	40	9.8	0.635	0.138	0.8331	
960 minute summer	40	8.003	35	10.9	0.712	0.154	0.8209	
960 minute summer	41	9.001	30	4.2	0.173	0.012	4.9916	
960 minute summer	42	1.011	Tank 1	107.9	1.068	0.300	8.8199	

Results for 2 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	42.324	0.049	4.2	0.0798	0.0000	OK
15 minute summer	2	11	42.247	0.078	10.3	0.1449	0.0000	OK
15 minute summer	3	11	41.980	0.125	25.6	0.2936	0.0000	OK
15 minute summer	4	10	42.096	0.071	8.3	0.1530	0.0000	OK
15 minute summer	5	11	41.698	0.162	40.9	0.3485	0.0000	OK
15 minute summer	6	10	41.229	0.044	3.2	0.0669	0.0000	OK
15 minute summer	7	11	41.143	0.192	49.7	0.3770	0.0000	OK
15 minute summer	8	12	41.090	0.215	54.8	0.4259	0.0000	OK
15 minute summer	9	12	41.054	0.203	59.7	0.4050	0.0000	OK
15 minute summer	Tank 1	26	39.009	0.165	214.1	97.9675	0.0000	OK
15 minute summer	11	12	40.925	0.227	72.4	0.6483	0.0000	OK
15 minute summer	12	11	43.460	0.085	12.7	0.2281	0.0000	OK
15 minute summer	13	11	41.740	0.065	7.4	0.1318	0.0000	OK
15 minute summer	15	11	41.410	0.141	29.1	0.2956	0.0000	OK
15 minute summer	16	11	41.276	0.145	36.8	0.2990	0.0000	OK
15 minute summer	17	12	41.127	0.190	43.6	0.4421	0.0000	OK
15 minute summer	18	12	41.099	0.188	54.4	0.5793	0.0000	OK
15 minute summer	19	11	41.009	0.059	6.4	0.1114	0.0000	OK
15 minute summer	20	12	40.769	0.091	15.5	0.1953	0.0000	OK
15 minute summer	21	13	40.452	0.310	152.8	0.9999	0.0000	OK
15 minute summer	22	11	40.569	0.069	8.6	0.1472	0.0000	OK
15 minute summer	23	12	40.402	0.100	18.4	0.2620	0.0000	OK
15 minute summer	24	13	39.980	0.228	176.2	0.8491	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	4.1	0.473	0.104	0.1646	
15 minute summer	2	1.001	3	10.0	0.832	0.250	0.4850	
15 minute summer	3	1.002	5	24.7	0.921	0.350	1.6149	
15 minute summer	4	2.000	5	8.1	0.777	0.203	0.1872	
15 minute summer	5	1.003	7	40.1	0.956	0.362	1.3247	
15 minute summer	6	3.000	7	3.1	0.595	0.079	0.0748	
15 minute summer	7	1.004	8	49.0	0.808	0.441	1.4877	
15 minute summer	8	1.005	9	54.5	0.864	0.485	0.4745	
15 minute summer	9	1.006	11	60.3	0.923	0.545	3.2333	
15 minute summer	Tank 1	1.012	36	13.0	0.394	0.036	1.9032	
15 minute summer	11	1.007	21	70.9	1.118	0.640	1.8871	
15 minute summer	12	4.000	15	11.8	0.875	0.297	0.9680	
15 minute summer	13	5.000	15	7.2	0.746	0.180	0.5389	
15 minute summer	15	4.001	16	28.6	0.927	0.403	0.4723	
15 minute summer	16	4.002	17	36.0	0.787	0.326	2.9910	
15 minute summer	17	4.003	18	42.0	0.759	0.377	0.4625	
15 minute summer	18	4.004	21	52.9	1.037	0.478	3.0225	
15 minute summer	19	6.000	20	6.1	0.470	0.087	0.9147	
15 minute summer	20	6.001	21	14.1	0.788	0.199	1.0279	
15 minute summer	21	1.008	24	149.9	1.165	0.530	8.7194	
15 minute summer	22	7.000	23	8.3	0.554	0.118	0.7913	
15 minute summer	23	7.001	24	16.8	0.829	0.238	1.2409	
15 minute summer	24	1.009	35	177.6	1.635	0.230	1.7697	

Results for 2 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	14	39.203	0.178	14.2	0.3772	0.0000	OK
15 minute summer	30	14	39.196	0.245	21.6	0.4721	0.0000	OK
15 minute summer	31	14	39.193	0.263	27.0	0.5211	0.0000	OK
15 minute summer	34	14	39.190	0.293	30.6	0.6107	0.0000	OK
15 minute summer	35	13	39.811	0.339	199.1	0.5987	0.0000	OK
15 minute summer	36	25	39.010	0.202	13.0	0.3565	0.0000	OK
15 minute summer	37	10	40.422	0.072	9.3	0.1593	0.0000	OK
15 minute summer	38	11	40.293	0.092	15.3	0.1728	0.0000	OK
15 minute summer	39	11	40.068	0.124	22.2	0.2415	0.0000	OK
15 minute summer	40	12	40.023	0.128	23.8	0.1766	0.0000	OK
15 minute summer	41	14	39.199	0.227	20.1	0.4862	0.0000	OK
15 minute summer	42	14	39.189	0.308	201.9	0.5615	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	29	9.000	41	-11.4	0.208	-0.031	3.1808	
15 minute summer	30	9.002	31	-19.4	0.295	-0.054	1.7350	
15 minute summer	31	9.003	34	-24.7	0.274	-0.069	3.0704	
15 minute summer	34	9.004	42	29.6	0.350	0.081	1.5713	
15 minute summer	35	1.010	42	201.4	1.263	0.555	3.0405	
15 minute summer	36	Hydro-Brake®		10.7				95.4
15 minute summer	37	8.000	38	9.1	0.612	0.128	0.5650	
15 minute summer	38	8.001	39	14.7	0.644	0.207	1.4373	
15 minute summer	39	8.002	40	21.3	0.761	0.299	0.3313	
15 minute summer	40	8.003	35	23.8	0.878	0.335	0.3161	
15 minute summer	41	9.001	30	-15.3	0.317	-0.043	1.5508	
15 minute summer	42	1.011	Tank 1	214.1	2.729	0.594	2.2596	

Results for 2 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	18	42.322	0.047	3.9	0.0775	0.0000	OK
30 minute summer	2	18	42.244	0.075	9.7	0.1402	0.0000	OK
30 minute summer	3	19	41.976	0.121	24.5	0.2850	0.0000	OK
30 minute summer	4	18	42.094	0.069	7.7	0.1483	0.0000	OK
30 minute summer	5	19	41.694	0.158	38.5	0.3393	0.0000	OK
30 minute summer	6	18	41.228	0.043	3.0	0.0652	0.0000	OK
30 minute summer	7	19	41.139	0.188	47.4	0.3690	0.0000	OK
30 minute summer	8	19	41.085	0.210	52.7	0.4148	0.0000	OK
30 minute summer	9	19	41.048	0.197	58.0	0.3934	0.0000	OK
30 minute summer	Tank 1	40	39.063	0.219	219.5	129.8984	0.0000	OK
30 minute summer	11	20	40.920	0.222	70.4	0.6336	0.0000	OK
30 minute summer	12	19	43.457	0.082	11.8	0.2210	0.0000	OK
30 minute summer	13	18	41.738	0.063	6.9	0.1277	0.0000	OK
30 minute summer	15	19	41.406	0.137	27.5	0.2862	0.0000	OK
30 minute summer	16	19	41.273	0.142	34.9	0.2930	0.0000	OK
30 minute summer	17	19	41.123	0.186	41.4	0.4313	0.0000	OK
30 minute summer	18	20	41.095	0.184	52.8	0.5667	0.0000	OK
30 minute summer	19	18	41.008	0.058	6.0	0.1087	0.0000	OK
30 minute summer	20	19	40.768	0.090	14.8	0.1931	0.0000	OK
30 minute summer	21	20	40.450	0.308	147.2	0.9921	0.0000	OK
30 minute summer	22	18	40.567	0.067	8.0	0.1435	0.0000	OK
30 minute summer	23	19	40.401	0.099	17.4	0.2584	0.0000	OK
30 minute summer	24	20	39.981	0.229	177.4	0.8521	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	3.9	0.454	0.098	0.1582	
30 minute summer	2	1.001	3	9.3	0.819	0.234	0.4624	
30 minute summer	3	1.002	5	23.8	0.909	0.336	1.5614	
30 minute summer	4	2.000	5	7.7	0.765	0.193	0.1798	
30 minute summer	5	1.003	7	38.7	0.944	0.349	1.2851	
30 minute summer	6	3.000	7	3.0	0.586	0.075	0.0723	
30 minute summer	7	1.004	8	47.4	0.800	0.426	1.4442	
30 minute summer	8	1.005	9	52.4	0.859	0.466	0.4586	
30 minute summer	9	1.006	11	57.3	0.911	0.518	3.1150	
30 minute summer	Tank 1	1.012	36	13.0	0.364	0.036	2.7166	
30 minute summer	11	1.007	21	69.2	1.110	0.624	1.8453	
30 minute summer	12	4.000	15	11.2	0.866	0.283	0.9309	
30 minute summer	13	5.000	15	6.6	0.745	0.166	0.4995	
30 minute summer	15	4.001	16	27.3	0.919	0.385	0.4549	
30 minute summer	16	4.002	17	34.7	0.763	0.314	2.9139	
30 minute summer	17	4.003	18	40.3	0.747	0.362	0.4480	
30 minute summer	18	4.004	21	51.7	1.030	0.467	2.9564	
30 minute summer	19	6.000	20	5.8	0.450	0.082	0.8998	
30 minute summer	20	6.001	21	13.6	0.780	0.193	1.0082	
30 minute summer	21	1.008	24	146.0	1.160	0.516	8.6016	
30 minute summer	22	7.000	23	7.9	0.522	0.112	0.7644	
30 minute summer	23	7.001	24	16.2	0.818	0.229	1.2133	
30 minute summer	24	1.009	35	177.4	1.637	0.229	1.7708	

Results for 2 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	29	21	39.205	0.180	10.4	0.3801	0.0000	OK
30 minute summer	30	21	39.198	0.247	16.0	0.4765	0.0000	OK
30 minute summer	31	21	39.197	0.267	19.0	0.5289	0.0000	OK
30 minute summer	34	21	39.194	0.297	23.8	0.6185	0.0000	OK
30 minute summer	35	20	39.810	0.338	199.6	0.5977	0.0000	OK
30 minute summer	36	41	39.063	0.255	13.0	0.4512	0.0000	OK
30 minute summer	37	18	40.420	0.070	8.7	0.1554	0.0000	OK
30 minute summer	38	19	40.290	0.089	14.5	0.1679	0.0000	OK
30 minute summer	39	19	40.066	0.122	21.1	0.2370	0.0000	OK
30 minute summer	40	19	40.020	0.125	23.0	0.1734	0.0000	OK
30 minute summer	41	21	39.200	0.228	14.0	0.4880	0.0000	OK
30 minute summer	42	21	39.193	0.312	200.0	0.5688	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	29	9.000	41	-6.9	-0.155	-0.019	3.2043	
30 minute summer	30	9.002	31	16.7	0.258	0.046	1.7639	
30 minute summer	31	9.003	34	22.7	0.230	0.063	3.1268	
30 minute summer	34	9.004	42	32.7	0.330	0.089	1.5978	
30 minute summer	35	1.010	42	199.3	1.256	0.549	3.0266	
30 minute summer	36	Hydro-Brake®		10.9				128.6
30 minute summer	37	8.000	38	8.7	0.590	0.122	0.5424	
30 minute summer	38	8.001	39	13.9	0.634	0.197	1.3935	
30 minute summer	39	8.002	40	20.7	0.755	0.290	0.3240	
30 minute summer	40	8.003	35	22.9	0.867	0.323	0.3080	
30 minute summer	41	9.001	30	12.4	0.237	0.035	1.5648	
30 minute summer	42	1.011	Tank 1	219.5	2.612	0.609	2.4858	

Results for 2 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	33	42.317	0.042	3.1	0.0693	0.0000	OK
60 minute summer	2	33	42.236	0.067	7.6	0.1239	0.0000	OK
60 minute summer	3	34	41.962	0.107	19.4	0.2525	0.0000	OK
60 minute summer	4	33	42.086	0.061	6.1	0.1311	0.0000	OK
60 minute summer	5	34	41.676	0.140	30.9	0.3004	0.0000	OK
60 minute summer	6	33	41.223	0.038	2.4	0.0583	0.0000	OK
60 minute summer	7	34	41.114	0.163	38.2	0.3202	0.0000	OK
60 minute summer	8	34	41.058	0.183	42.5	0.3626	0.0000	OK
60 minute summer	9	34	41.023	0.172	46.9	0.3442	0.0000	OK
60 minute summer	Tank 1	67	39.120	0.276	188.9	163.6175	0.0000	OK
60 minute summer	11	35	40.895	0.197	57.3	0.5625	0.0000	OK
60 minute summer	12	34	43.448	0.073	9.3	0.1966	0.0000	OK
60 minute summer	13	33	41.730	0.055	5.4	0.1130	0.0000	OK
60 minute summer	15	33	41.389	0.120	21.9	0.2519	0.0000	OK
60 minute summer	16	34	41.257	0.126	28.0	0.2609	0.0000	OK
60 minute summer	17	34	41.101	0.164	33.4	0.3814	0.0000	OK
60 minute summer	18	35	41.076	0.165	43.1	0.5067	0.0000	OK
60 minute summer	19	33	41.001	0.051	4.7	0.0969	0.0000	OK
60 minute summer	20	34	40.759	0.081	11.7	0.1733	0.0000	OK
60 minute summer	21	35	40.419	0.277	122.3	0.8917	0.0000	OK
60 minute summer	22	33	40.560	0.060	6.3	0.1277	0.0000	OK
60 minute summer	23	34	40.390	0.088	13.7	0.2312	0.0000	OK
60 minute summer	24	35	39.955	0.203	148.5	0.7581	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	3.1	0.423	0.078	0.1338	
60 minute summer	2	1.001	3	7.4	0.769	0.187	0.3915	
60 minute summer	3	1.002	5	19.1	0.855	0.270	1.3318	
60 minute summer	4	2.000	5	6.1	0.718	0.153	0.1519	
60 minute summer	5	1.003	7	31.0	0.888	0.280	1.0953	
60 minute summer	6	3.000	7	2.4	0.550	0.060	0.0616	
60 minute summer	7	1.004	8	38.2	0.768	0.343	1.2113	
60 minute summer	8	1.005	9	42.3	0.823	0.377	0.3869	
60 minute summer	9	1.006	11	46.6	0.866	0.422	2.6675	
60 minute summer	Tank 1	1.012	36	13.1	0.278	0.037	3.6199	
60 minute summer	11	1.007	21	56.8	1.050	0.512	1.6040	
60 minute summer	12	4.000	15	9.0	0.814	0.227	0.7933	
60 minute summer	13	5.000	15	5.2	0.698	0.132	0.4225	
60 minute summer	15	4.001	16	21.8	0.864	0.308	0.3865	
60 minute summer	16	4.002	17	27.9	0.713	0.253	2.4861	
60 minute summer	17	4.003	18	32.8	0.708	0.294	0.3851	
60 minute summer	18	4.004	21	42.5	0.976	0.385	2.5700	
60 minute summer	19	6.000	20	4.6	0.410	0.065	0.7723	
60 minute summer	20	6.001	21	11.1	0.737	0.157	0.8689	
60 minute summer	21	1.008	24	121.3	1.099	0.429	7.5211	
60 minute summer	22	7.000	23	6.3	0.475	0.088	0.6557	
60 minute summer	23	7.001	24	13.2	0.773	0.186	1.0416	
60 minute summer	24	1.009	35	148.4	1.613	0.192	1.5012	

Results for 2 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	29	37	39.173	0.148	7.1	0.3128	0.0000	OK
60 minute summer	30	37	39.171	0.220	12.6	0.4245	0.0000	OK
60 minute summer	31	36	39.171	0.241	14.1	0.4767	0.0000	OK
60 minute summer	34	37	39.169	0.272	24.0	0.5670	0.0000	OK
60 minute summer	35	35	39.779	0.307	166.7	0.5418	0.0000	OK
60 minute summer	36	67	39.120	0.312	13.1	0.5508	0.0000	OK
60 minute summer	37	33	40.412	0.062	6.8	0.1376	0.0000	OK
60 minute summer	38	34	40.280	0.079	11.4	0.1497	0.0000	OK
60 minute summer	39	34	40.051	0.107	16.8	0.2083	0.0000	OK
60 minute summer	40	34	40.006	0.111	18.5	0.1536	0.0000	OK
60 minute summer	41	36	39.175	0.203	8.4	0.4344	0.0000	OK
60 minute summer	42	37	39.163	0.282	174.1	0.5147	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	29	9.000	41	5.1	0.129	0.014	2.5967	163.3
60 minute summer	30	9.002	31	13.4	0.215	0.037	1.5123	
60 minute summer	31	9.003	34	22.7	0.234	0.063	2.7310	
60 minute summer	34	9.004	42	20.8	0.189	0.057	1.4086	
60 minute summer	35	1.010	42	166.2	1.190	0.458	2.6665	
60 minute summer	36	Hydro-Brake®		11.0				
60 minute summer	37	8.000	38	6.8	0.542	0.096	0.4604	
60 minute summer	38	8.001	39	11.1	0.598	0.157	1.1774	
60 minute summer	39	8.002	40	16.6	0.718	0.233	0.2738	
60 minute summer	40	8.003	35	18.5	0.818	0.260	0.2631	
60 minute summer	41	9.001	30	12.0	0.200	0.033	1.3265	
60 minute summer	42	1.011	Tank 1	188.9	2.133	0.524	3.0797	

Results for 2 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	64	42.310	0.035	2.1	0.0573	0.0000	OK
120 minute summer	2	64	42.224	0.055	5.2	0.1028	0.0000	OK
120 minute summer	3	64	41.944	0.089	13.5	0.2089	0.0000	OK
120 minute summer	4	64	42.075	0.050	4.2	0.1081	0.0000	OK
120 minute summer	5	64	41.651	0.115	21.8	0.2480	0.0000	OK
120 minute summer	6	64	41.216	0.031	1.6	0.0477	0.0000	OK
120 minute summer	7	64	41.082	0.131	26.8	0.2573	0.0000	OK
120 minute summer	8	64	41.023	0.148	29.8	0.2929	0.0000	OK
120 minute summer	9	64	40.991	0.140	33.0	0.2790	0.0000	OK
120 minute summer	Tank 1	124	39.172	0.328	125.7	194.7140	0.0000	OK
120 minute summer	11	66	40.860	0.162	40.5	0.4618	0.0000	OK
120 minute summer	12	64	43.436	0.061	6.4	0.1637	0.0000	OK
120 minute summer	13	64	41.722	0.047	3.8	0.0955	0.0000	OK
120 minute summer	15	64	41.369	0.100	15.5	0.2081	0.0000	OK
120 minute summer	16	64	41.236	0.105	19.7	0.2171	0.0000	OK
120 minute summer	17	66	41.071	0.134	23.6	0.3117	0.0000	OK
120 minute summer	18	66	41.048	0.137	30.6	0.4207	0.0000	OK
120 minute summer	19	64	40.994	0.044	3.3	0.0821	0.0000	OK
120 minute summer	20	64	40.746	0.068	8.2	0.1456	0.0000	OK
120 minute summer	21	66	40.374	0.232	87.7	0.7470	0.0000	OK
120 minute summer	22	64	40.550	0.050	4.4	0.1074	0.0000	OK
120 minute summer	23	64	40.376	0.074	9.6	0.1935	0.0000	OK
120 minute summer	24	66	39.919	0.167	107.7	0.6211	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	2.1	0.374	0.053	0.1024	
120 minute summer	2	1.001	3	5.2	0.693	0.130	0.3015	
120 minute summer	3	1.002	5	13.3	0.774	0.188	1.0267	
120 minute summer	4	2.000	5	4.2	0.648	0.105	0.1161	
120 minute summer	5	1.003	7	21.7	0.804	0.196	0.8439	
120 minute summer	6	3.000	7	1.6	0.490	0.040	0.0462	
120 minute summer	7	1.004	8	26.6	0.714	0.240	0.9094	
120 minute summer	8	1.005	9	29.6	0.762	0.264	0.2925	
120 minute summer	9	1.006	11	32.9	0.796	0.297	2.0480	
120 minute summer	Tank 1	1.012	36	12.6	0.236	0.035	4.4711	
120 minute summer	11	1.007	21	40.5	0.955	0.365	1.2554	
120 minute summer	12	4.000	15	6.3	0.737	0.159	0.6146	
120 minute summer	13	5.000	15	3.8	0.634	0.094	0.3331	
120 minute summer	15	4.001	16	15.4	0.787	0.217	0.3000	
120 minute summer	16	4.002	17	19.6	0.649	0.177	1.9032	
120 minute summer	17	4.003	18	23.2	0.650	0.208	0.2973	
120 minute summer	18	4.004	21	30.4	0.891	0.275	2.0144	
120 minute summer	19	6.000	20	3.3	0.365	0.046	0.6057	
120 minute summer	20	6.001	21	7.9	0.672	0.112	0.6785	
120 minute summer	21	1.008	24	87.7	0.997	0.310	5.9670	
120 minute summer	22	7.000	23	4.4	0.422	0.062	0.5135	
120 minute summer	23	7.001	24	9.3	0.703	0.131	0.8099	
120 minute summer	24	1.009	35	107.7	1.575	0.139	1.1141	



Results for 2 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	29	122	39.172	0.147	1.9	0.3110	0.0000	OK
120 minute summer	30	122	39.172	0.221	4.4	0.4265	0.0000	OK
120 minute summer	31	122	39.172	0.242	5.4	0.4793	0.0000	OK
120 minute summer	34	122	39.172	0.275	6.9	0.5731	0.0000	OK
120 minute summer	35	66	39.731	0.259	120.6	0.4573	0.0000	OK
120 minute summer	36	124	39.172	0.364	12.6	0.6428	0.0000	OK
120 minute summer	37	64	40.402	0.052	4.7	0.1150	0.0000	OK
120 minute summer	38	64	40.268	0.067	7.9	0.1256	0.0000	OK
120 minute summer	39	64	40.032	0.088	11.8	0.1705	0.0000	OK
120 minute summer	40	64	39.987	0.092	13.1	0.1266	0.0000	OK
120 minute summer	41	122	39.172	0.200	3.9	0.4287	0.0000	OK
120 minute summer	42	122	39.172	0.291	126.6	0.5308	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	29	9.000	41	1.5	0.125	0.004	2.5666	200.9
120 minute summer	30	9.002	31	4.3	0.187	0.012	1.5308	
120 minute summer	31	9.003	34	5.6	0.096	0.016	2.7851	
120 minute summer	34	9.004	42	7.2	0.106	0.020	1.4524	
120 minute summer	35	1.010	42	120.6	1.082	0.332	2.1280	
120 minute summer	36	Hydro-Brake®		11.0				
120 minute summer	37	8.000	38	4.7	0.481	0.066	0.3586	
120 minute summer	38	8.001	39	7.8	0.546	0.110	0.9024	
120 minute summer	39	8.002	40	11.7	0.661	0.164	0.2088	
120 minute summer	40	8.003	35	13.0	0.746	0.183	0.2028	
120 minute summer	41	9.001	30	3.3	0.183	0.009	1.3273	
120 minute summer	42	1.011	Tank 1	125.7	1.508	0.349	3.9398	

Results for 2 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	96	42.306	0.031	1.6	0.0503	0.0000	OK
180 minute summer	2	96	42.217	0.048	4.0	0.0901	0.0000	OK
180 minute summer	3	96	41.933	0.078	10.4	0.1834	0.0000	OK
180 minute summer	4	96	42.070	0.045	3.3	0.0957	0.0000	OK
180 minute summer	5	96	41.637	0.101	17.0	0.2180	0.0000	OK
180 minute summer	6	96	41.213	0.028	1.3	0.0432	0.0000	OK
180 minute summer	7	96	41.065	0.114	20.9	0.2236	0.0000	OK
180 minute summer	8	96	41.004	0.129	23.4	0.2555	0.0000	OK
180 minute summer	9	96	40.973	0.122	26.0	0.2442	0.0000	OK
180 minute summer	Tank 1	172	39.197	0.353	97.3	209.3130	0.0000	OK
180 minute summer	11	96	40.840	0.142	32.1	0.4047	0.0000	OK
180 minute summer	12	96	43.429	0.054	5.0	0.1450	0.0000	OK
180 minute summer	13	96	41.716	0.041	2.9	0.0840	0.0000	OK
180 minute summer	15	96	41.356	0.087	12.1	0.1822	0.0000	OK
180 minute summer	16	96	41.224	0.093	15.5	0.1926	0.0000	OK
180 minute summer	17	96	41.055	0.118	18.5	0.2729	0.0000	OK
180 minute summer	18	96	41.032	0.121	24.2	0.3713	0.0000	OK
180 minute summer	19	96	40.988	0.038	2.5	0.0721	0.0000	OK
180 minute summer	20	96	40.738	0.060	6.3	0.1292	0.0000	OK
180 minute summer	21	96	40.346	0.204	69.5	0.6581	0.0000	OK
180 minute summer	22	96	40.544	0.044	3.4	0.0949	0.0000	OK
180 minute summer	23	96	40.367	0.065	7.4	0.1714	0.0000	OK
180 minute summer	24	96	39.897	0.145	85.0	0.5417	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	1.6	0.346	0.040	0.0849	
180 minute summer	2	1.001	3	4.0	0.645	0.100	0.2508	
180 minute summer	3	1.002	5	10.4	0.723	0.147	0.8570	
180 minute summer	4	2.000	5	3.3	0.605	0.083	0.0977	
180 minute summer	5	1.003	7	16.9	0.753	0.153	0.7052	
180 minute summer	6	3.000	7	1.3	0.460	0.033	0.0400	
180 minute summer	7	1.004	8	20.9	0.678	0.188	0.7528	
180 minute summer	8	1.005	9	23.4	0.723	0.208	0.2434	
180 minute summer	9	1.006	11	26.0	0.750	0.235	1.7152	
180 minute summer	Tank 1	1.012	36	12.3	0.225	0.034	4.8736	
180 minute summer	11	1.007	21	31.8	0.893	0.287	1.0558	
180 minute summer	12	4.000	15	5.0	0.689	0.125	0.5185	
180 minute summer	13	5.000	15	2.9	0.587	0.073	0.2771	
180 minute summer	15	4.001	16	12.1	0.737	0.170	0.2506	
180 minute summer	16	4.002	17	15.4	0.609	0.140	1.5998	
180 minute summer	17	4.003	18	18.4	0.614	0.165	0.2491	
180 minute summer	18	4.004	21	24.0	0.833	0.217	1.6987	
180 minute summer	19	6.000	20	2.5	0.333	0.035	0.5073	
180 minute summer	20	6.001	21	6.2	0.629	0.088	0.5698	
180 minute summer	21	1.008	24	68.6	0.930	0.243	5.0105	
180 minute summer	22	7.000	23	3.4	0.390	0.048	0.4308	
180 minute summer	23	7.001	24	7.3	0.657	0.104	0.6827	
180 minute summer	24	1.009	35	84.9	1.552	0.110	0.8904	

Results for 2 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	29	172	39.197	0.172	1.5	0.3630	0.0000	OK
180 minute summer	30	172	39.197	0.246	3.3	0.4742	0.0000	OK
180 minute summer	31	172	39.197	0.267	4.1	0.5283	0.0000	OK
180 minute summer	34	172	39.197	0.300	5.3	0.6248	0.0000	OK
180 minute summer	35	96	39.701	0.229	95.1	0.4038	0.0000	OK
180 minute summer	36	172	39.196	0.388	12.3	0.6865	0.0000	OK
180 minute summer	37	96	40.396	0.046	3.7	0.1024	0.0000	OK
180 minute summer	38	96	40.260	0.059	6.1	0.1110	0.0000	OK
180 minute summer	39	96	40.021	0.077	9.2	0.1492	0.0000	OK
180 minute summer	40	96	39.976	0.081	10.3	0.1115	0.0000	OK
180 minute summer	41	172	39.197	0.225	3.0	0.4815	0.0000	OK
180 minute summer	42	172	39.197	0.316	97.7	0.5761	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	29	9.000	41	0.9	0.121	0.003	3.0864	229.5
180 minute summer	30	9.002	31	3.1	0.163	0.009	1.7569	
180 minute summer	31	9.003	34	3.7	0.095	0.010	3.1466	
180 minute summer	34	9.004	42	5.0	0.116	0.014	1.6220	
180 minute summer	35	1.010	42	94.7	1.009	0.261	1.7921	
180 minute summer	36	Hydro-Brake®		11.0				
180 minute summer	37	8.000	38	3.7	0.450	0.052	0.3015	
180 minute summer	38	8.001	39	6.1	0.511	0.086	0.7517	
180 minute summer	39	8.002	40	9.2	0.623	0.129	0.1741	
180 minute summer	40	8.003	35	10.2	0.701	0.144	0.1706	
180 minute summer	41	9.001	30	2.4	0.188	0.007	1.5459	
180 minute summer	42	1.011	Tank 1	97.3	1.168	0.270	4.3500	



Results for 2 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	42.304	0.029	1.4	0.0470	0.0000	OK
240 minute summer	2	124	42.214	0.045	3.5	0.0836	0.0000	OK
240 minute summer	3	124	41.927	0.072	9.0	0.1693	0.0000	OK
240 minute summer	4	124	42.066	0.041	2.8	0.0877	0.0000	OK
240 minute summer	5	124	41.629	0.093	14.5	0.2003	0.0000	OK
240 minute summer	6	124	41.211	0.026	1.1	0.0396	0.0000	OK
240 minute summer	7	124	41.054	0.103	17.7	0.2031	0.0000	OK
240 minute summer	8	124	40.992	0.117	19.8	0.2317	0.0000	OK
240 minute summer	9	128	40.962	0.111	21.9	0.2222	0.0000	OK
240 minute summer	Tank 1	204	39.211	0.367	85.2	218.0525	0.0000	OK
240 minute summer	11	128	40.828	0.130	27.0	0.3699	0.0000	OK
240 minute summer	12	124	43.425	0.050	4.3	0.1332	0.0000	OK
240 minute summer	13	124	41.713	0.038	2.5	0.0775	0.0000	OK
240 minute summer	15	124	41.349	0.080	10.3	0.1669	0.0000	OK
240 minute summer	16	124	41.216	0.085	13.1	0.1765	0.0000	OK
240 minute summer	17	128	41.044	0.107	15.7	0.2473	0.0000	OK
240 minute summer	18	128	41.022	0.110	20.5	0.3402	0.0000	OK
240 minute summer	19	124	40.986	0.036	2.2	0.0674	0.0000	OK
240 minute summer	20	128	40.734	0.056	5.5	0.1195	0.0000	OK
240 minute summer	21	128	40.331	0.189	58.9	0.6089	0.0000	OK
240 minute summer	22	124	40.541	0.041	3.0	0.0888	0.0000	OK
240 minute summer	23	124	40.362	0.060	6.5	0.1579	0.0000	OK
240 minute summer	24	128	39.885	0.133	72.9	0.4971	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	1.4	0.330	0.035	0.0764	
240 minute summer	2	1.001	3	3.4	0.617	0.086	0.2249	
240 minute summer	3	1.002	5	8.8	0.692	0.125	0.7630	
240 minute summer	4	2.000	5	2.8	0.575	0.069	0.0863	
240 minute summer	5	1.003	7	14.3	0.718	0.129	0.6256	
240 minute summer	6	3.000	7	1.1	0.436	0.027	0.0352	
240 minute summer	7	1.004	8	17.6	0.652	0.158	0.6581	
240 minute summer	8	1.005	9	19.6	0.694	0.175	0.2129	
240 minute summer	9	1.006	11	21.9	0.717	0.198	1.5121	
240 minute summer	Tank 1	1.012	36	12.2	0.222	0.034	5.1132	
240 minute summer	11	1.007	21	27.1	0.855	0.244	0.9377	
240 minute summer	12	4.000	15	4.2	0.656	0.106	0.4598	
240 minute summer	13	5.000	15	2.5	0.560	0.062	0.2469	
240 minute summer	15	4.001	16	10.2	0.704	0.144	0.2218	
240 minute summer	16	4.002	17	13.0	0.586	0.117	1.3984	
240 minute summer	17	4.003	18	15.5	0.588	0.139	0.2190	
240 minute summer	18	4.004	21	20.4	0.798	0.185	1.5086	
240 minute summer	19	6.000	20	2.2	0.322	0.031	0.4550	
240 minute summer	20	6.001	21	5.3	0.601	0.075	0.5100	
240 minute summer	21	1.008	24	59.3	0.893	0.210	4.5060	
240 minute summer	22	7.000	23	3.0	0.375	0.042	0.3861	
240 minute summer	23	7.001	24	6.2	0.629	0.088	0.6042	
240 minute summer	24	1.009	35	72.9	1.539	0.094	0.7717	

Results for 2 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	29	204	39.211	0.186	1.3	0.3940	0.0000	OK
240 minute summer	30	204	39.211	0.260	2.9	0.5025	0.0000	OK
240 minute summer	31	204	39.211	0.281	3.4	0.5573	0.0000	OK
240 minute summer	34	204	39.211	0.314	4.4	0.6554	0.0000	OK
240 minute summer	35	128	39.684	0.212	81.6	0.3743	0.0000	OK
240 minute summer	36	204	39.211	0.403	12.2	0.7126	0.0000	OK
240 minute summer	37	124	40.393	0.043	3.2	0.0950	0.0000	OK
240 minute summer	38	124	40.255	0.054	5.3	0.1026	0.0000	OK
240 minute summer	39	124	40.014	0.070	7.9	0.1363	0.0000	OK
240 minute summer	40	128	39.969	0.074	8.6	0.1019	0.0000	OK
240 minute summer	41	204	39.211	0.239	2.7	0.5129	0.0000	OK
240 minute summer	42	204	39.211	0.330	85.8	0.6028	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	29	9.000	41	0.9	0.118	0.002	3.4054	257.8
240 minute summer	30	9.002	31	2.5	0.164	0.007	1.8931	
240 minute summer	31	9.003	34	2.9	0.121	0.008	3.3630	
240 minute summer	34	9.004	42	3.9	0.088	0.011	1.7229	
240 minute summer	35	1.010	42	81.7	0.967	0.225	1.6145	
240 minute summer	36	Hydro-Brake®		11.0				
240 minute summer	37	8.000	38	3.2	0.429	0.045	0.2698	
240 minute summer	38	8.001	39	5.2	0.491	0.073	0.6655	
240 minute summer	39	8.002	40	7.7	0.599	0.109	0.1530	
240 minute summer	40	8.003	35	8.6	0.671	0.122	0.1504	
240 minute summer	41	9.001	30	2.0	0.182	0.006	1.6782	
240 minute summer	42	1.011	Tank 1	85.2	1.064	0.237	4.5941	

Results for 2 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	42.301	0.026	1.1	0.0420	0.0000	OK
360 minute summer	2	184	42.209	0.040	2.8	0.0747	0.0000	OK
360 minute summer	3	184	41.919	0.064	7.1	0.1501	0.0000	OK
360 minute summer	4	184	42.061	0.036	2.2	0.0778	0.0000	OK
360 minute summer	5	184	41.619	0.083	11.4	0.1775	0.0000	OK
360 minute summer	6	184	41.209	0.024	0.9	0.0360	0.0000	OK
360 minute summer	7	184	41.042	0.091	14.1	0.1792	0.0000	OK
360 minute summer	8	184	40.978	0.103	15.7	0.2042	0.0000	OK
360 minute summer	9	184	40.949	0.098	17.4	0.1968	0.0000	OK
360 minute summer	Tank 1	272	39.228	0.384	64.5	227.9881	0.0000	OK
360 minute summer	11	184	40.812	0.114	21.4	0.3243	0.0000	OK
360 minute summer	12	184	43.419	0.044	3.4	0.1183	0.0000	OK
360 minute summer	13	184	41.709	0.034	2.0	0.0691	0.0000	OK
360 minute summer	15	184	41.340	0.071	8.2	0.1479	0.0000	OK
360 minute summer	16	184	41.207	0.076	10.4	0.1572	0.0000	OK
360 minute summer	17	184	41.030	0.093	12.5	0.2168	0.0000	OK
360 minute summer	18	184	41.009	0.098	16.3	0.3002	0.0000	OK
360 minute summer	19	184	40.982	0.032	1.7	0.0596	0.0000	OK
360 minute summer	20	184	40.727	0.049	4.3	0.1058	0.0000	OK
360 minute summer	21	184	40.308	0.166	46.3	0.5336	0.0000	OK
360 minute summer	22	184	40.537	0.037	2.3	0.0782	0.0000	OK
360 minute summer	23	184	40.356	0.054	5.1	0.1405	0.0000	OK
360 minute summer	24	184	39.869	0.117	56.5	0.4343	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	1.1	0.306	0.027	0.0650	
360 minute summer	2	1.001	3	2.7	0.577	0.069	0.1916	
360 minute summer	3	1.002	5	7.0	0.648	0.099	0.6427	
360 minute summer	4	2.000	5	2.2	0.536	0.055	0.0726	
360 minute summer	5	1.003	7	11.3	0.674	0.102	0.5253	
360 minute summer	6	3.000	7	0.9	0.411	0.022	0.0306	
360 minute summer	7	1.004	8	14.0	0.619	0.126	0.5516	
360 minute summer	8	1.005	9	15.6	0.654	0.139	0.1792	
360 minute summer	9	1.006	11	17.2	0.674	0.156	1.2675	
360 minute summer	Tank 1	1.012	36	11.8	0.219	0.033	5.3817	
360 minute summer	11	1.007	21	21.0	0.797	0.190	0.7817	
360 minute summer	12	4.000	15	3.3	0.612	0.083	0.3882	
360 minute summer	13	5.000	15	1.9	0.522	0.049	0.2089	
360 minute summer	15	4.001	16	8.1	0.662	0.114	0.1872	
360 minute summer	16	4.002	17	10.3	0.552	0.093	1.1752	
360 minute summer	17	4.003	18	12.3	0.556	0.110	0.1829	
360 minute summer	18	4.004	21	15.9	0.744	0.144	1.2609	
360 minute summer	19	6.000	20	1.7	0.295	0.024	0.3814	
360 minute summer	20	6.001	21	4.1	0.561	0.058	0.4241	
360 minute summer	21	1.008	24	45.3	0.826	0.160	3.7313	
360 minute summer	22	7.000	23	2.3	0.342	0.032	0.3242	
360 minute summer	23	7.001	24	4.9	0.586	0.069	0.5111	
360 minute summer	24	1.009	35	56.4	1.524	0.073	0.6020	



Results for 2 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	29	272	39.228	0.203	1.0	0.4292	0.0000	OK
360 minute summer	30	272	39.228	0.277	2.1	0.5347	0.0000	OK
360 minute summer	31	272	39.228	0.298	2.3	0.5904	0.0000	OK
360 minute summer	34	272	39.228	0.331	3.0	0.6902	0.0000	OK
360 minute summer	35	184	39.658	0.186	63.1	0.3279	0.0000	OK
360 minute summer	36	272	39.228	0.420	11.8	0.7420	0.0000	OK
360 minute summer	37	184	40.388	0.038	2.5	0.0844	0.0000	OK
360 minute summer	38	184	40.250	0.049	4.2	0.0915	0.0000	OK
360 minute summer	39	184	40.006	0.062	6.2	0.1200	0.0000	OK
360 minute summer	40	184	39.960	0.065	6.8	0.0898	0.0000	OK
360 minute summer	41	272	39.228	0.256	2.2	0.5487	0.0000	OK
360 minute summer	42	272	39.228	0.347	65.2	0.6333	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	29	9.000	41	0.7	0.119	0.002	3.7752	314.0
360 minute summer	30	9.002	31	1.6	0.159	0.004	2.0497	
360 minute summer	31	9.003	34	1.7	0.131	0.005	3.6109	
360 minute summer	34	9.004	42	2.3	0.047	0.006	1.8382	
360 minute summer	35	1.010	42	62.7	0.896	0.173	1.3365	
360 minute summer	36	Hydro-Brake®		11.0				
360 minute summer	37	8.000	38	2.5	0.396	0.035	0.2280	
360 minute summer	38	8.001	39	4.1	0.462	0.058	0.5588	
360 minute summer	39	8.002	40	6.1	0.565	0.086	0.1279	
360 minute summer	40	8.003	35	6.8	0.628	0.095	0.1255	
360 minute summer	41	9.001	30	1.4	0.173	0.004	1.8309	
360 minute summer	42	1.011	Tank 1	64.5	0.973	0.179	4.8715	

Results for 2 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	42.298	0.023	0.9	0.0383	0.0000	OK
480 minute summer	2	248	42.206	0.037	2.3	0.0685	0.0000	OK
480 minute summer	3	248	41.914	0.059	5.9	0.1381	0.0000	OK
480 minute summer	4	248	42.058	0.033	1.8	0.0708	0.0000	OK
480 minute summer	5	248	41.612	0.076	9.6	0.1633	0.0000	OK
480 minute summer	6	248	41.206	0.021	0.7	0.0320	0.0000	OK
480 minute summer	7	248	41.034	0.083	11.8	0.1631	0.0000	OK
480 minute summer	8	248	40.970	0.095	13.2	0.1869	0.0000	OK
480 minute summer	9	248	40.942	0.091	14.7	0.1817	0.0000	OK
480 minute summer	Tank 1	344	39.235	0.391	54.8	232.1003	0.0000	OK
480 minute summer	11	248	40.803	0.105	18.1	0.2992	0.0000	OK
480 minute summer	12	248	43.415	0.040	2.8	0.1088	0.0000	OK
480 minute summer	13	248	41.706	0.031	1.6	0.0629	0.0000	OK
480 minute summer	15	248	41.333	0.064	6.7	0.1339	0.0000	OK
480 minute summer	16	248	41.201	0.070	8.6	0.1441	0.0000	OK
480 minute summer	17	248	41.022	0.085	10.3	0.1967	0.0000	OK
480 minute summer	18	248	41.000	0.089	13.5	0.2754	0.0000	OK
480 minute summer	19	248	40.979	0.029	1.4	0.0548	0.0000	OK
480 minute summer	20	248	40.723	0.045	3.5	0.0974	0.0000	OK
480 minute summer	21	248	40.296	0.154	39.3	0.4955	0.0000	OK
480 minute summer	22	248	40.534	0.034	1.9	0.0720	0.0000	OK
480 minute summer	23	248	40.351	0.049	4.1	0.1287	0.0000	OK
480 minute summer	24	248	39.860	0.108	48.4	0.4012	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	0.9	0.288	0.023	0.0572	
480 minute summer	2	1.001	3	2.3	0.549	0.058	0.1695	
480 minute summer	3	1.002	5	5.9	0.619	0.083	0.5691	
480 minute summer	4	2.000	5	1.8	0.508	0.045	0.0635	
480 minute summer	5	1.003	7	9.6	0.644	0.087	0.4673	
480 minute summer	6	3.000	7	0.7	0.384	0.018	0.0258	
480 minute summer	7	1.004	8	11.8	0.593	0.106	0.4849	
480 minute summer	8	1.005	9	13.2	0.624	0.117	0.1591	
480 minute summer	9	1.006	11	14.7	0.644	0.133	1.1324	
480 minute summer	Tank 1	1.012	36	11.7	0.218	0.033	5.4924	
480 minute summer	11	1.007	21	18.1	0.766	0.163	0.6997	
480 minute summer	12	4.000	15	2.8	0.582	0.070	0.3445	
480 minute summer	13	5.000	15	1.6	0.493	0.040	0.1823	
480 minute summer	15	4.001	16	6.7	0.631	0.094	0.1625	
480 minute summer	16	4.002	17	8.6	0.527	0.078	1.0294	
480 minute summer	17	4.003	18	10.3	0.532	0.092	0.1606	
480 minute summer	18	4.004	21	13.5	0.710	0.122	1.1193	
480 minute summer	19	6.000	20	1.4	0.280	0.020	0.3378	
480 minute summer	20	6.001	21	3.5	0.536	0.049	0.3754	
480 minute summer	21	1.008	24	39.2	0.794	0.139	3.3560	
480 minute summer	22	7.000	23	1.9	0.327	0.027	0.2860	
480 minute summer	23	7.001	24	4.1	0.560	0.058	0.4471	
480 minute summer	24	1.009	35	48.4	1.491	0.063	0.5287	



Results for 2 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	29	344	39.235	0.210	0.8	0.4440	0.0000	OK
480 minute summer	30	344	39.235	0.284	1.7	0.5481	0.0000	OK
480 minute summer	31	344	39.235	0.305	2.0	0.6042	0.0000	OK
480 minute summer	34	344	39.235	0.338	2.5	0.7047	0.0000	OK
480 minute summer	35	248	39.644	0.172	54.1	0.3041	0.0000	OK
480 minute summer	36	344	39.235	0.427	11.7	0.7542	0.0000	OK
480 minute summer	37	248	40.384	0.034	2.0	0.0764	0.0000	OK
480 minute summer	38	248	40.245	0.044	3.4	0.0836	0.0000	OK
480 minute summer	39	248	40.000	0.056	5.1	0.1090	0.0000	OK
480 minute summer	40	248	39.954	0.059	5.7	0.0821	0.0000	OK
480 minute summer	41	344	39.235	0.263	1.8	0.5636	0.0000	OK
480 minute summer	42	344	39.235	0.354	55.5	0.6460	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	29	9.000	41	0.6	0.109	0.002	3.9322	370.2
480 minute summer	30	9.002	31	1.5	0.159	0.004	2.1155	
480 minute summer	31	9.003	34	1.6	0.134	0.005	3.7145	
480 minute summer	34	9.004	42	2.1	0.073	0.006	1.8862	
480 minute summer	35	1.010	42	54.1	0.860	0.149	1.2009	
480 minute summer	36	Hydro-Brake®		11.0				
480 minute summer	37	8.000	38	2.0	0.369	0.028	0.1986	
480 minute summer	38	8.001	39	3.4	0.439	0.048	0.4883	
480 minute summer	39	8.002	40	5.1	0.538	0.072	0.1121	
480 minute summer	40	8.003	35	5.7	0.600	0.080	0.1107	
480 minute summer	41	9.001	30	1.2	0.173	0.003	1.8952	
480 minute summer	42	1.011	Tank 1	54.8	0.914	0.152	4.9863	

Results for 2 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	42.297	0.022	0.8	0.0362	0.0000	OK
600 minute summer	2	315	42.203	0.034	1.9	0.0624	0.0000	OK
600 minute summer	3	315	41.909	0.054	4.9	0.1260	0.0000	OK
600 minute summer	4	315	42.055	0.030	1.5	0.0648	0.0000	OK
600 minute summer	5	315	41.605	0.069	8.0	0.1493	0.0000	OK
600 minute summer	6	315	41.204	0.019	0.6	0.0298	0.0000	OK
600 minute summer	7	315	41.027	0.076	9.9	0.1486	0.0000	OK
600 minute summer	8	315	40.961	0.086	11.1	0.1702	0.0000	OK
600 minute summer	9	315	40.934	0.083	12.3	0.1662	0.0000	OK
600 minute summer	Tank 1	420	39.236	0.392	45.7	232.7533	0.0000	OK
600 minute summer	11	315	40.793	0.095	15.1	0.2726	0.0000	OK
600 minute summer	12	315	43.412	0.037	2.3	0.0988	0.0000	OK
600 minute summer	13	315	41.704	0.029	1.4	0.0590	0.0000	OK
600 minute summer	15	315	41.327	0.058	5.6	0.1222	0.0000	OK
600 minute summer	16	315	41.195	0.064	7.2	0.1322	0.0000	OK
600 minute summer	17	315	41.014	0.077	8.7	0.1792	0.0000	OK
600 minute summer	18	315	40.993	0.082	11.4	0.2532	0.0000	OK
600 minute summer	19	315	40.977	0.027	1.2	0.0510	0.0000	OK
600 minute summer	20	315	40.720	0.042	3.0	0.0905	0.0000	OK
600 minute summer	21	315	40.283	0.141	33.0	0.4552	0.0000	OK
600 minute summer	22	315	40.531	0.031	1.6	0.0663	0.0000	OK
600 minute summer	23	315	40.348	0.046	3.5	0.1192	0.0000	OK
600 minute summer	24	315	39.850	0.098	40.7	0.3664	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	0.8	0.286	0.020	0.0508	
600 minute summer	2	1.001	3	1.9	0.519	0.048	0.1481	
600 minute summer	3	1.002	5	4.9	0.586	0.069	0.4996	
600 minute summer	4	2.000	5	1.5	0.482	0.038	0.0558	
600 minute summer	5	1.003	7	8.0	0.613	0.072	0.4098	
600 minute summer	6	3.000	7	0.6	0.367	0.015	0.0232	
600 minute summer	7	1.004	8	9.9	0.569	0.089	0.4248	
600 minute summer	8	1.005	9	11.1	0.597	0.099	0.1398	
600 minute summer	9	1.006	11	12.3	0.613	0.111	0.9953	
600 minute summer	Tank 1	1.012	36	11.5	0.217	0.032	5.5100	
600 minute summer	11	1.007	21	15.1	0.730	0.136	0.6134	
600 minute summer	12	4.000	15	2.3	0.550	0.058	0.2998	
600 minute summer	13	5.000	15	1.4	0.474	0.035	0.1661	
600 minute summer	15	4.001	16	5.6	0.600	0.079	0.1427	
600 minute summer	16	4.002	17	7.2	0.502	0.065	0.9047	
600 minute summer	17	4.003	18	8.7	0.510	0.078	0.1416	
600 minute summer	18	4.004	21	11.4	0.679	0.103	0.9887	
600 minute summer	19	6.000	20	1.2	0.268	0.017	0.3033	
600 minute summer	20	6.001	21	3.0	0.512	0.042	0.3375	
600 minute summer	21	1.008	24	33.0	0.755	0.117	2.9681	
600 minute summer	22	7.000	23	1.6	0.309	0.023	0.2551	
600 minute summer	23	7.001	24	3.5	0.536	0.049	0.3990	
600 minute summer	24	1.009	35	40.7	1.424	0.053	0.4656	



Results for 2 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	29	420	39.236	0.211	0.7	0.4462	0.0000	OK
600 minute summer	30	420	39.236	0.285	1.5	0.5502	0.0000	OK
600 minute summer	31	420	39.236	0.306	1.7	0.6063	0.0000	OK
600 minute summer	34	420	39.236	0.339	2.1	0.7069	0.0000	OK
600 minute summer	35	315	39.630	0.158	45.5	0.2792	0.0000	OK
600 minute summer	36	420	39.236	0.428	11.5	0.7561	0.0000	OK
600 minute summer	37	315	40.382	0.032	1.7	0.0707	0.0000	OK
600 minute summer	38	315	40.241	0.040	2.8	0.0762	0.0000	OK
600 minute summer	39	315	39.995	0.051	4.3	0.0999	0.0000	OK
600 minute summer	40	315	39.950	0.055	4.8	0.0753	0.0000	OK
600 minute summer	41	420	39.236	0.264	1.5	0.5659	0.0000	OK
600 minute summer	42	420	39.236	0.355	46.4	0.6480	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	29	9.000	41	0.5	0.113	0.001	3.9560	420.6
600 minute summer	30	9.002	31	1.3	0.158	0.004	2.1255	
600 minute summer	31	9.003	34	1.4	0.082	0.004	3.7305	
600 minute summer	34	9.004	42	1.8	0.047	0.005	1.8936	
600 minute summer	35	1.010	42	45.5	0.820	0.125	1.0605	
600 minute summer	36	Hydro-Brake®		11.0				
600 minute summer	37	8.000	38	1.7	0.355	0.024	0.1749	
600 minute summer	38	8.001	39	2.8	0.413	0.040	0.4284	
600 minute summer	39	8.002	40	4.3	0.515	0.060	0.0989	
600 minute summer	40	8.003	35	4.8	0.572	0.068	0.0979	
600 minute summer	41	9.001	30	1.1	0.169	0.003	1.9050	
600 minute summer	42	1.011	Tank 1	45.7	0.843	0.127	5.0043	

**Results for 2 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	42.296	0.021	0.7	0.0340	0.0000	OK
720 minute summer	2	375	42.201	0.032	1.7	0.0591	0.0000	OK
720 minute summer	3	375	41.906	0.051	4.4	0.1196	0.0000	OK
720 minute summer	4	375	42.054	0.029	1.4	0.0626	0.0000	OK
720 minute summer	5	375	41.602	0.066	7.2	0.1418	0.0000	OK
720 minute summer	6	375	41.203	0.018	0.5	0.0274	0.0000	OK
720 minute summer	7	375	41.022	0.071	8.8	0.1399	0.0000	OK
720 minute summer	8	375	40.956	0.081	9.8	0.1594	0.0000	OK
720 minute summer	9	375	40.929	0.078	10.9	0.1565	0.0000	OK
720 minute summer	Tank 1	480	39.233	0.389	41.4	231.0744	0.0000	OK
720 minute summer	11	375	40.788	0.090	13.5	0.2575	0.0000	OK
720 minute summer	12	375	43.410	0.035	2.1	0.0945	0.0000	OK
720 minute summer	13	375	41.702	0.027	1.2	0.0548	0.0000	OK
720 minute summer	15	375	41.325	0.056	5.1	0.1166	0.0000	OK
720 minute summer	16	375	41.192	0.061	6.5	0.1257	0.0000	OK
720 minute summer	17	375	41.010	0.073	7.8	0.1689	0.0000	OK
720 minute summer	18	375	40.989	0.078	10.3	0.2408	0.0000	OK
720 minute summer	19	375	40.976	0.026	1.1	0.0490	0.0000	OK
720 minute summer	20	375	40.718	0.040	2.7	0.0861	0.0000	OK
720 minute summer	21	375	40.276	0.134	29.7	0.4324	0.0000	OK
720 minute summer	22	375	40.529	0.029	1.4	0.0622	0.0000	OK
720 minute summer	23	375	40.345	0.043	3.1	0.1124	0.0000	OK
720 minute summer	24	375	39.845	0.093	36.7	0.3472	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	0.7	0.273	0.018	0.0467	
720 minute summer	2	1.001	3	1.7	0.502	0.043	0.1370	
720 minute summer	3	1.002	5	4.4	0.570	0.062	0.4609	
720 minute summer	4	2.000	5	1.4	0.472	0.035	0.0532	
720 minute summer	5	1.003	7	7.2	0.596	0.065	0.3787	
720 minute summer	6	3.000	7	0.5	0.349	0.013	0.0203	
720 minute summer	7	1.004	8	8.8	0.553	0.079	0.3880	
720 minute summer	8	1.005	9	9.8	0.577	0.087	0.1278	
720 minute summer	9	1.006	11	10.9	0.590	0.099	0.9161	
720 minute summer	Tank 1	1.012	36	11.5	0.217	0.032	5.4651	
720 minute summer	11	1.007	21	13.5	0.706	0.122	0.5665	
720 minute summer	12	4.000	15	2.1	0.536	0.053	0.2809	
720 minute summer	13	5.000	15	1.2	0.452	0.030	0.1492	
720 minute summer	15	4.001	16	5.1	0.584	0.072	0.1337	
720 minute summer	16	4.002	17	6.5	0.491	0.059	0.8356	
720 minute summer	17	4.003	18	7.8	0.494	0.070	0.1310	
720 minute summer	18	4.004	21	10.3	0.661	0.093	0.9198	
720 minute summer	19	6.000	20	1.1	0.263	0.016	0.2830	
720 minute summer	20	6.001	21	2.7	0.497	0.038	0.3129	
720 minute summer	21	1.008	24	29.7	0.731	0.105	2.7590	
720 minute summer	22	7.000	23	1.4	0.295	0.020	0.2336	
720 minute summer	23	7.001	24	3.1	0.517	0.044	0.3666	
720 minute summer	24	1.009	35	36.7	1.385	0.047	0.4317	

Results for 2 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	29	480	39.233	0.208	0.6	0.4402	0.0000	OK
720 minute summer	30	480	39.233	0.282	1.5	0.5447	0.0000	OK
720 minute summer	31	480	39.233	0.303	1.7	0.6007	0.0000	OK
720 minute summer	34	480	39.233	0.336	2.1	0.7011	0.0000	OK
720 minute summer	35	375	39.622	0.150	41.0	0.2655	0.0000	OK
720 minute summer	36	480	39.233	0.425	11.5	0.7512	0.0000	OK
720 minute summer	37	375	40.380	0.030	1.5	0.0666	0.0000	OK
720 minute summer	38	375	40.239	0.038	2.5	0.0721	0.0000	OK
720 minute summer	39	375	39.992	0.048	3.8	0.0936	0.0000	OK
720 minute summer	40	375	39.947	0.052	4.3	0.0712	0.0000	OK
720 minute summer	41	480	39.233	0.261	1.4	0.5599	0.0000	OK
720 minute summer	42	480	39.233	0.352	41.9	0.6429	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	29	9.000	41	0.5	0.106	0.001	3.8923	467.4
720 minute summer	30	9.002	31	1.3	0.159	0.004	2.0989	
720 minute summer	31	9.003	34	1.4	0.082	0.004	3.6886	
720 minute summer	34	9.004	42	1.8	0.044	0.005	1.8742	
720 minute summer	35	1.010	42	41.0	0.794	0.113	0.9867	
720 minute summer	36	Hydro-Brake®		11.0				
720 minute summer	37	8.000	38	1.5	0.341	0.021	0.1611	
720 minute summer	38	8.001	39	2.5	0.402	0.035	0.3924	
720 minute summer	39	8.002	40	3.8	0.496	0.053	0.0906	
720 minute summer	40	8.003	35	4.3	0.557	0.061	0.0900	
720 minute summer	41	9.001	30	1.1	0.169	0.003	1.8790	
720 minute summer	42	1.011	Tank 1	41.4	0.800	0.115	4.9577	

Results for 2 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	42.294	0.019	0.6	0.0317	0.0000	OK
960 minute summer	2	495	42.199	0.030	1.5	0.0557	0.0000	OK
960 minute summer	3	495	41.902	0.047	3.8	0.1114	0.0000	OK
960 minute summer	4	495	42.052	0.027	1.2	0.0581	0.0000	OK
960 minute summer	5	495	41.597	0.061	6.2	0.1318	0.0000	OK
960 minute summer	6	495	41.203	0.018	0.5	0.0274	0.0000	OK
960 minute summer	7	495	41.017	0.066	7.7	0.1306	0.0000	OK
960 minute summer	8	495	40.950	0.075	8.6	0.1487	0.0000	OK
960 minute summer	9	495	40.924	0.073	9.5	0.1463	0.0000	OK
960 minute summer	Tank 1	630	39.223	0.379	35.3	225.2591	0.0000	OK
960 minute summer	11	495	40.782	0.084	11.7	0.2393	0.0000	OK
960 minute summer	12	495	43.408	0.033	1.8	0.0876	0.0000	OK
960 minute summer	13	495	41.700	0.025	1.0	0.0503	0.0000	OK
960 minute summer	15	495	41.320	0.051	4.3	0.1071	0.0000	OK
960 minute summer	16	495	41.187	0.056	5.5	0.1159	0.0000	OK
960 minute summer	17	495	41.003	0.066	6.6	0.1542	0.0000	OK
960 minute summer	18	495	40.983	0.072	8.7	0.2214	0.0000	OK
960 minute summer	19	495	40.974	0.024	0.9	0.0446	0.0000	OK
960 minute summer	20	495	40.715	0.037	2.3	0.0799	0.0000	OK
960 minute summer	21	495	40.266	0.124	25.4	0.4009	0.0000	OK
960 minute summer	22	495	40.527	0.027	1.2	0.0579	0.0000	OK
960 minute summer	23	495	40.342	0.040	2.6	0.1034	0.0000	OK
960 minute summer	24	495	39.838	0.086	31.2	0.3193	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	0.6	0.257	0.015	0.0425	
960 minute summer	2	1.001	3	1.5	0.484	0.038	0.1254	
960 minute summer	3	1.002	5	3.8	0.549	0.054	0.4137	
960 minute summer	4	2.000	5	1.2	0.450	0.030	0.0477	
960 minute summer	5	1.003	7	6.2	0.572	0.056	0.3401	
960 minute summer	6	3.000	7	0.5	0.349	0.013	0.0203	
960 minute summer	7	1.004	8	7.7	0.534	0.069	0.3512	
960 minute summer	8	1.005	9	8.6	0.558	0.076	0.1158	
960 minute summer	9	1.006	11	9.5	0.569	0.086	0.8283	
960 minute summer	Tank 1	1.012	36	11.4	0.217	0.032	5.3080	
960 minute summer	11	1.007	21	11.7	0.681	0.106	0.5091	
960 minute summer	12	4.000	15	1.8	0.511	0.045	0.2522	
960 minute summer	13	5.000	15	1.0	0.428	0.025	0.1313	
960 minute summer	15	4.001	16	4.3	0.560	0.061	0.1176	
960 minute summer	16	4.002	17	5.5	0.471	0.050	0.7368	
960 minute summer	17	4.003	18	6.6	0.474	0.059	0.1155	
960 minute summer	18	4.004	21	8.7	0.627	0.079	0.8173	
960 minute summer	19	6.000	20	0.9	0.242	0.013	0.2516	
960 minute summer	20	6.001	21	2.3	0.477	0.032	0.2774	
960 minute summer	21	1.008	24	25.4	0.700	0.090	2.4661	
960 minute summer	22	7.000	23	1.2	0.284	0.017	0.2076	
960 minute summer	23	7.001	24	2.6	0.492	0.037	0.3228	
960 minute summer	24	1.009	35	31.2	1.323	0.040	0.3839	

Results for 2 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	29	630	39.223	0.198	0.5	0.4195	0.0000	OK
960 minute summer	30	630	39.223	0.272	1.3	0.5258	0.0000	OK
960 minute summer	31	630	39.223	0.293	1.5	0.5813	0.0000	OK
960 minute summer	34	630	39.223	0.326	1.8	0.6806	0.0000	OK
960 minute summer	35	495	39.611	0.139	34.9	0.2454	0.0000	OK
960 minute summer	36	630	39.223	0.415	11.4	0.7339	0.0000	OK
960 minute summer	37	495	40.378	0.028	1.3	0.0623	0.0000	OK
960 minute summer	38	495	40.237	0.036	2.2	0.0679	0.0000	OK
960 minute summer	39	495	39.989	0.045	3.3	0.0871	0.0000	OK
960 minute summer	40	495	39.943	0.048	3.7	0.0661	0.0000	OK
960 minute summer	41	630	39.223	0.251	1.3	0.5388	0.0000	OK
960 minute summer	42	630	39.223	0.342	35.7	0.6250	0.0000	OK
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	29	9.000	41	0.5	0.112	0.001	3.6729	542.6
960 minute summer	30	9.002	31	1.1	0.159	0.003	2.0066	
960 minute summer	31	9.003	34	1.2	0.076	0.003	3.5427	
960 minute summer	34	9.004	42	1.5	0.042	0.004	1.8065	
960 minute summer	35	1.010	42	34.9	0.758	0.096	0.8794	
960 minute summer	36	Hydro-Brake®		11.0				
960 minute summer	37	8.000	38	1.3	0.324	0.018	0.1467	
960 minute summer	38	8.001	39	2.2	0.390	0.031	0.3560	
960 minute summer	39	8.002	40	3.3	0.480	0.046	0.0814	
960 minute summer	40	8.003	35	3.7	0.537	0.052	0.0805	
960 minute summer	41	9.001	30	1.0	0.173	0.003	1.7888	
960 minute summer	42	1.011	Tank 1	35.3	0.760	0.098	4.7954	

Results for 2 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	720	42.291	0.016	0.4	0.0263	0.0000	OK
1440 minute summer	2	750	42.195	0.026	1.1	0.0480	0.0000	OK
1440 minute summer	3	750	41.896	0.041	2.8	0.0961	0.0000	OK
1440 minute summer	4	750	42.049	0.024	0.9	0.0507	0.0000	OK
1440 minute summer	5	750	41.589	0.053	4.6	0.1141	0.0000	OK
1440 minute summer	6	720	41.199	0.014	0.3	0.0218	0.0000	OK
1440 minute summer	7	750	41.007	0.056	5.6	0.1110	0.0000	OK
1440 minute summer	8	750	40.939	0.064	6.3	0.1265	0.0000	OK
1440 minute summer	9	750	40.914	0.063	7.0	0.1260	0.0000	OK
1440 minute summer	Tank 1	900	39.192	0.348	26.7	206.5889	0.0000	OK
1440 minute summer	11	750	40.770	0.072	8.6	0.2052	0.0000	OK
1440 minute summer	12	750	43.403	0.028	1.3	0.0750	0.0000	OK
1440 minute summer	13	750	41.697	0.022	0.8	0.0452	0.0000	OK
1440 minute summer	15	750	41.313	0.044	3.2	0.0925	0.0000	OK
1440 minute summer	16	750	41.180	0.049	4.1	0.1007	0.0000	OK
1440 minute summer	17	750	40.994	0.057	4.9	0.1312	0.0000	OK
1440 minute summer	18	750	40.974	0.062	6.5	0.1924	0.0000	OK
1440 minute summer	19	750	40.971	0.021	0.7	0.0397	0.0000	OK
1440 minute summer	20	750	40.710	0.032	1.7	0.0695	0.0000	OK
1440 minute summer	21	750	40.250	0.108	18.8	0.3477	0.0000	OK
1440 minute summer	22	750	40.524	0.024	0.9	0.0506	0.0000	OK
1440 minute summer	23	750	40.337	0.035	2.0	0.0916	0.0000	OK
1440 minute summer	24	750	39.826	0.074	23.3	0.2755	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	0.4	0.238	0.010	0.0335	
1440 minute summer	2	1.001	3	1.1	0.441	0.028	0.1010	
1440 minute summer	3	1.002	5	2.8	0.501	0.040	0.3340	
1440 minute summer	4	2.000	5	0.9	0.413	0.023	0.0390	
1440 minute summer	5	1.003	7	4.6	0.525	0.042	0.2750	
1440 minute summer	6	3.000	7	0.3	0.307	0.008	0.0138	
1440 minute summer	7	1.004	8	5.6	0.491	0.050	0.2781	
1440 minute summer	8	1.005	9	6.3	0.511	0.056	0.0926	
1440 minute summer	9	1.006	11	7.0	0.521	0.063	0.6666	
1440 minute summer	Tank 1	1.012	36	11.2	0.216	0.031	4.7985	
1440 minute summer	11	1.007	21	8.6	0.623	0.078	0.4090	
1440 minute summer	12	4.000	15	1.3	0.464	0.033	0.2009	
1440 minute summer	13	5.000	15	0.8	0.400	0.020	0.1124	
1440 minute summer	15	4.001	16	3.2	0.516	0.045	0.0949	
1440 minute summer	16	4.002	17	4.1	0.437	0.037	0.5907	
1440 minute summer	17	4.003	18	4.9	0.438	0.044	0.0930	
1440 minute summer	18	4.004	21	6.5	0.581	0.059	0.6596	
1440 minute summer	19	6.000	20	0.7	0.229	0.010	0.2067	
1440 minute summer	20	6.001	21	1.7	0.439	0.024	0.2231	
1440 minute summer	21	1.008	24	18.8	0.642	0.066	1.9923	
1440 minute summer	22	7.000	23	0.9	0.256	0.013	0.1727	
1440 minute summer	23	7.001	24	2.0	0.460	0.028	0.2657	
1440 minute summer	24	1.009	35	23.3	1.219	0.030	0.3113	

Results for 2 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	29	900	39.192	0.167	0.4	0.3531	0.0000	OK
1440 minute summer	30	900	39.192	0.241	1.0	0.4652	0.0000	OK
1440 minute summer	31	900	39.192	0.262	1.1	0.5191	0.0000	OK
1440 minute summer	34	900	39.192	0.295	1.4	0.6152	0.0000	OK
1440 minute summer	35	750	39.593	0.121	26.1	0.2133	0.0000	OK
1440 minute summer	36	900	39.192	0.384	11.2	0.6783	0.0000	OK
1440 minute summer	37	750	40.375	0.025	1.0	0.0551	0.0000	OK
1440 minute summer	38	750	40.233	0.032	1.7	0.0601	0.0000	OK
1440 minute summer	39	750	39.983	0.039	2.5	0.0757	0.0000	OK
1440 minute summer	40	750	39.937	0.042	2.8	0.0576	0.0000	OK
1440 minute summer	41	900	39.192	0.220	0.9	0.4716	0.0000	OK
1440 minute summer	42	900	39.192	0.311	27.0	0.5677	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	29	9.000	41	0.3	0.106	0.001	2.9865	644.7
1440 minute summer	30	9.002	31	0.9	0.158	0.003	1.7141	
1440 minute summer	31	9.003	34	1.0	0.074	0.003	3.0787	
1440 minute summer	34	9.004	42	1.3	0.041	0.004	1.5903	
1440 minute summer	35	1.010	42	26.1	0.700	0.072	0.7131	
1440 minute summer	36	Hydro-Brake®		11.0				
1440 minute summer	37	8.000	38	1.0	0.299	0.014	0.1225	
1440 minute summer	38	8.001	39	1.7	0.365	0.024	0.2930	
1440 minute summer	39	8.002	40	2.5	0.445	0.035	0.0665	
1440 minute summer	40	8.003	35	2.8	0.494	0.039	0.0661	
1440 minute summer	41	9.001	30	0.8	0.171	0.002	1.5043	
1440 minute summer	42	1.011	Tank 1	26.7	0.723	0.074	4.2737	

Results for 2 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2160 minute summer	1	1080	42.289	0.014	0.3	0.0230	0.0000	OK
2160 minute summer	2	1140	42.191	0.022	0.8	0.0412	0.0000	OK
2160 minute summer	3	1140	41.891	0.036	2.1	0.0841	0.0000	OK
2160 minute summer	4	1140	42.046	0.021	0.7	0.0449	0.0000	OK
2160 minute summer	5	1140	41.583	0.047	3.5	0.1003	0.0000	OK
2160 minute summer	6	1140	41.199	0.014	0.3	0.0218	0.0000	OK
2160 minute summer	7	1140	41.001	0.050	4.3	0.0978	0.0000	OK
2160 minute summer	8	1140	40.931	0.056	4.8	0.1099	0.0000	OK
2160 minute summer	9	1140	40.906	0.055	5.3	0.1101	0.0000	OK
2160 minute summer	Tank 1	1320	39.140	0.296	20.2	175.8704	0.0000	OK
2160 minute summer	11	1140	40.761	0.063	6.5	0.1789	0.0000	OK
2160 minute summer	12	1140	43.400	0.025	1.0	0.0663	0.0000	OK
2160 minute summer	13	1140	41.694	0.019	0.6	0.0395	0.0000	OK
2160 minute summer	15	1140	41.307	0.038	2.4	0.0804	0.0000	OK
2160 minute summer	16	1140	41.174	0.043	3.1	0.0883	0.0000	OK
2160 minute summer	17	1140	40.986	0.049	3.7	0.1129	0.0000	OK
2160 minute summer	18	1140	40.965	0.054	4.9	0.1677	0.0000	OK
2160 minute summer	19	1140	40.968	0.018	0.5	0.0340	0.0000	OK
2160 minute summer	20	1140	40.707	0.029	1.3	0.0611	0.0000	OK
2160 minute summer	21	1140	40.237	0.095	14.2	0.3047	0.0000	OK
2160 minute summer	22	1140	40.521	0.021	0.7	0.0452	0.0000	OK
2160 minute summer	23	1140	40.333	0.031	1.5	0.0800	0.0000	OK
2160 minute summer	24	1140	39.816	0.064	17.5	0.2391	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	1	1.000	2	0.3	0.214	0.008	0.0270	
2160 minute summer	2	1.001	3	0.8	0.400	0.020	0.0808	
2160 minute summer	3	1.002	5	2.1	0.466	0.030	0.2692	
2160 minute summer	4	2.000	5	0.7	0.384	0.018	0.0327	
2160 minute summer	5	1.003	7	3.5	0.489	0.032	0.2243	
2160 minute summer	6	3.000	7	0.3	0.307	0.008	0.0138	
2160 minute summer	7	1.004	8	4.3	0.458	0.039	0.2287	
2160 minute summer	8	1.005	9	4.8	0.476	0.043	0.0758	
2160 minute summer	9	1.006	11	5.3	0.481	0.048	0.5474	
2160 minute summer	Tank 1	1.012	36	11.1	0.216	0.031	3.9532	
2160 minute summer	11	1.007	21	6.5	0.580	0.059	0.3324	
2160 minute summer	12	4.000	15	1.0	0.429	0.025	0.1672	
2160 minute summer	13	5.000	15	0.6	0.368	0.015	0.0918	
2160 minute summer	15	4.001	16	2.4	0.479	0.034	0.0767	
2160 minute summer	16	4.002	17	3.1	0.407	0.028	0.4796	
2160 minute summer	17	4.003	18	3.7	0.407	0.033	0.0755	
2160 minute summer	18	4.004	21	4.9	0.534	0.044	0.5413	
2160 minute summer	19	6.000	20	0.5	0.200	0.007	0.1687	
2160 minute summer	20	6.001	21	1.3	0.403	0.018	0.1856	
2160 minute summer	21	1.008	24	14.2	0.591	0.050	1.6335	
2160 minute summer	22	7.000	23	0.7	0.241	0.010	0.1428	
2160 minute summer	23	7.001	24	1.5	0.422	0.021	0.2174	
2160 minute summer	24	1.009	35	17.5	1.124	0.023	0.2536	

Results for 2 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2160 minute summer	29	1320	39.140	0.115	0.3	0.2439	0.0000	OK
2160 minute summer	30	1320	39.140	0.189	0.9	0.3655	0.0000	OK
2160 minute summer	31	1320	39.140	0.210	1.0	0.4168	0.0000	OK
2160 minute summer	34	1320	39.140	0.243	1.2	0.5074	0.0000	OK
2160 minute summer	35	1140	39.577	0.105	19.5	0.1858	0.0000	OK
2160 minute summer	36	1320	39.140	0.332	11.1	0.5868	0.0000	OK
2160 minute summer	37	1140	40.371	0.021	0.7	0.0468	0.0000	OK
2160 minute summer	38	1140	40.228	0.027	1.2	0.0510	0.0000	OK
2160 minute summer	39	1140	39.977	0.033	1.8	0.0644	0.0000	OK
2160 minute summer	40	1140	39.930	0.035	2.0	0.0489	0.0000	OK
2160 minute summer	41	1320	39.140	0.168	0.8	0.3608	0.0000	OK
2160 minute summer	42	1320	39.140	0.259	20.4	0.4734	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	29	9.000	41	0.3	0.099	0.001	1.9348	750.3
2160 minute summer	30	9.002	31	0.8	0.158	0.002	1.2499	
2160 minute summer	31	9.003	34	0.9	0.074	0.002	2.3336	
2160 minute summer	34	9.004	42	1.1	0.040	0.003	1.2400	
2160 minute summer	35	1.010	42	19.5	0.642	0.054	0.5804	
2160 minute summer	36	Hydro-Brake®		11.0				
2160 minute summer	37	8.000	38	0.7	0.266	0.010	0.0959	
2160 minute summer	38	8.001	39	1.2	0.328	0.017	0.2301	
2160 minute summer	39	8.002	40	1.8	0.407	0.025	0.0524	
2160 minute summer	40	8.003	35	2.0	0.456	0.028	0.0511	
2160 minute summer	41	9.001	30	0.7	0.172	0.002	1.0576	
2160 minute summer	42	1.011	Tank 1	20.2	0.565	0.056	3.4199	

Results for 30 year +20% CC +10% A 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	42.352	0.077	10.2	0.1296	0.0000	OK
15 minute summer	2	10	42.300	0.131	25.2	0.2535	0.0000	OK
15 minute summer	3	11	42.086	0.231	64.6	0.5706	0.0000	OK
15 minute summer	4	10	42.144	0.119	20.3	0.2673	0.0000	OK
15 minute summer	5	11	41.826	0.290	102.8	0.6440	0.0000	OK
15 minute summer	6	12	41.689	0.504	8.0	0.7924	0.0000	SURCHARGED
15 minute summer	7	12	41.685	0.734	119.9	1.4823	0.0000	SURCHARGED
15 minute summer	8	12	41.572	0.697	129.8	1.4151	0.0000	SURCHARGED
15 minute summer	9	12	41.504	0.653	143.1	1.3411	0.0000	SURCHARGED
15 minute summer	Tank 1	29	39.246	0.402	597.1	238.9463	0.0000	OK
15 minute summer	11	12	41.199	0.501	173.0	1.5012	0.0000	SURCHARGED
15 minute summer	12	11	43.522	0.147	31.0	0.4185	0.0000	OK
15 minute summer	13	10	41.779	0.104	18.1	0.2212	0.0000	OK
15 minute summer	15	11	41.527	0.258	71.8	0.5643	0.0000	OK
15 minute summer	16	12	41.418	0.287	91.4	0.6105	0.0000	OK
15 minute summer	17	12	41.325	0.388	105.5	0.9354	0.0000	SURCHARGED
15 minute summer	18	12	41.285	0.374	133.9	1.2134	0.0000	OK
15 minute summer	19	11	41.044	0.094	15.8	0.1835	0.0000	OK
15 minute summer	20	11	40.832	0.154	38.7	0.3449	0.0000	OK
15 minute summer	21	12	40.704	0.562	374.0	1.8921	0.0000	OK
15 minute summer	22	10	40.609	0.109	21.1	0.2452	0.0000	OK
15 minute summer	23	11	40.475	0.173	45.4	0.4782	0.0000	OK
15 minute summer	24	12	40.202	0.450	446.9	1.7638	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	10.1	0.578	0.253	0.3214	
15 minute summer	2	1.001	3	24.9	0.967	0.626	1.0677	
15 minute summer	3	1.002	5	63.4	1.137	0.896	3.3486	
15 minute summer	4	2.000	5	19.9	0.978	0.500	0.3655	
15 minute summer	5	1.003	7	101.3	1.233	0.915	2.5734	
15 minute summer	6	3.000	7	12.8	0.607	0.319	0.5629	
15 minute summer	7	1.004	8	117.8	1.068	1.060	2.6874	
15 minute summer	8	1.005	9	130.4	1.182	1.160	0.8292	
15 minute summer	9	1.006	11	143.4	1.301	1.297	5.4640	
15 minute summer	Tank 1	1.012	36	31.3	0.461	0.087	5.7877	
15 minute summer	11	1.007	21	173.8	1.600	1.568	3.0593	
15 minute summer	12	4.000	15	29.6	1.095	0.743	1.9355	
15 minute summer	13	5.000	15	17.6	0.769	0.443	1.4746	
15 minute summer	15	4.001	16	71.4	1.215	1.006	0.8931	
15 minute summer	16	4.002	17	87.0	0.918	0.788	6.3180	
15 minute summer	17	4.003	18	99.5	0.914	0.893	0.9148	
15 minute summer	18	4.004	21	127.8	1.287	1.156	5.6882	
15 minute summer	19	6.000	20	15.3	0.587	0.216	1.8281	
15 minute summer	20	6.001	21	37.9	0.925	0.534	2.8767	
15 minute summer	21	1.008	24	361.1	1.513	1.277	15.9263	
15 minute summer	22	7.000	23	20.6	0.681	0.291	1.5783	
15 minute summer	23	7.001	24	42.5	1.070	0.600	2.4440	
15 minute summer	24	1.009	35	445.6	1.851	0.576	3.9103	

Results for 30 year +20% CC +10% A 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	13	39.431	0.406	26.2	0.8714	0.0000	OK
15 minute summer	30	13	39.418	0.467	54.4	0.9086	0.0000	OK
15 minute summer	31	13	39.423	0.493	65.8	0.9861	0.0000	OK
15 minute summer	34	13	39.417	0.520	72.7	1.1008	0.0000	OK
15 minute summer	35	12	40.053	0.581	503.0	1.0274	0.0000	OK
15 minute summer	36	35	39.264	0.456	31.3	0.8061	0.0000	OK
15 minute summer	37	10	40.465	0.115	22.8	0.2680	0.0000	OK
15 minute summer	38	11	40.352	0.151	37.9	0.2964	0.0000	OK
15 minute summer	39	11	40.176	0.232	55.2	0.4702	0.0000	OK
15 minute summer	40	12	40.123	0.228	60.4	0.3207	0.0000	OK
15 minute summer	41	13	39.421	0.449	51.2	0.9786	0.0000	OK
15 minute summer	42	13	39.421	0.540	507.2	0.9888	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	29	9.000	41	25.3	0.215	0.070	8.3860	159.7
15 minute summer	30	9.002	31	63.2	0.309	0.176	3.8380	
15 minute summer	31	9.003	34	-58.6	-0.330	-0.163	6.3632	
15 minute summer	34	9.004	42	74.1	0.374	0.201	3.0797	
15 minute summer	35	1.010	42	499.8	1.708	1.376	5.5250	
15 minute summer	36	Hydro-Brake®		11.0				
15 minute summer	37	8.000	38	22.6	0.764	0.320	1.0904	
15 minute summer	38	8.001	39	36.8	0.787	0.520	2.9553	
15 minute summer	39	8.002	40	54.0	0.935	0.758	0.6828	
15 minute summer	40	8.003	35	59.7	1.145	0.841	0.6361	
15 minute summer	41	9.001	30	52.9	0.323	0.147	3.6026	
15 minute summer	42	1.011	Tank 1	597.1	3.207	1.658	5.2006	



Results for 30 year +20% CC +10% A 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	18	42.350	0.075	9.7	0.1270	0.0000	OK
30 minute summer	2	18	42.297	0.128	24.1	0.2475	0.0000	OK
30 minute summer	3	18	42.078	0.223	62.2	0.5523	0.0000	OK
30 minute summer	4	18	42.141	0.116	19.3	0.2612	0.0000	OK
30 minute summer	5	19	41.817	0.281	99.5	0.6247	0.0000	OK
30 minute summer	6	19	41.663	0.478	7.6	0.7514	0.0000	SURCHARGED
30 minute summer	7	19	41.663	0.712	118.4	1.4376	0.0000	SURCHARGED
30 minute summer	8	19	41.549	0.674	129.8	1.3684	0.0000	SURCHARGED
30 minute summer	9	19	41.483	0.632	141.5	1.2978	0.0000	SURCHARGED
30 minute summer	Tank 1	41	39.395	0.551	596.1	327.2069	0.0000	OK
30 minute summer	11	19	41.188	0.490	172.0	1.4677	0.0000	SURCHARGED
30 minute summer	12	18	43.518	0.143	29.5	0.4074	0.0000	OK
30 minute summer	13	18	41.777	0.102	17.2	0.2177	0.0000	OK
30 minute summer	15	18	41.518	0.249	70.0	0.5442	0.0000	OK
30 minute summer	16	19	41.405	0.274	88.0	0.5838	0.0000	OK
30 minute summer	17	19	41.313	0.376	102.2	0.9071	0.0000	SURCHARGED
30 minute summer	18	19	41.275	0.364	129.9	1.1798	0.0000	OK
30 minute summer	19	18	41.042	0.092	15.0	0.1804	0.0000	OK
30 minute summer	20	18	40.828	0.150	37.2	0.3371	0.0000	OK
30 minute summer	21	20	40.705	0.563	371.7	1.8941	0.0000	OK
30 minute summer	22	18	40.608	0.108	20.1	0.2416	0.0000	OK
30 minute summer	23	19	40.472	0.170	43.7	0.4694	0.0000	OK
30 minute summer	24	20	40.199	0.447	443.2	1.7528	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	9.7	0.564	0.243	0.3123	
30 minute summer	2	1.001	3	24.3	0.964	0.609	1.0332	
30 minute summer	3	1.002	5	60.5	1.135	0.856	3.1932	
30 minute summer	4	2.000	5	19.3	0.971	0.484	0.3560	
30 minute summer	5	1.003	7	98.5	1.230	0.890	2.5029	
30 minute summer	6	3.000	7	10.8	0.609	0.270	0.5629	
30 minute summer	7	1.004	8	116.5	1.057	1.048	2.6874	
30 minute summer	8	1.005	9	127.5	1.156	1.134	0.8292	
30 minute summer	9	1.006	11	141.2	1.281	1.277	5.4640	
30 minute summer	Tank 1	1.012	36	21.0	0.362	0.059	7.8235	
30 minute summer	11	1.007	21	170.1	1.568	1.534	3.0463	
30 minute summer	12	4.000	15	28.4	1.090	0.714	1.8723	
30 minute summer	13	5.000	15	17.1	0.760	0.430	1.4180	
30 minute summer	15	4.001	16	68.7	1.203	0.968	0.8690	
30 minute summer	16	4.002	17	83.9	0.896	0.760	6.1875	
30 minute summer	17	4.003	18	98.6	0.901	0.886	0.9109	
30 minute summer	18	4.004	21	126.1	1.285	1.141	5.6434	
30 minute summer	19	6.000	20	14.8	0.561	0.209	1.7787	
30 minute summer	20	6.001	21	36.4	0.915	0.514	2.8190	
30 minute summer	21	1.008	24	364.4	1.510	1.289	15.9816	
30 minute summer	22	7.000	23	20.0	0.651	0.283	1.5319	
30 minute summer	23	7.001	24	41.8	1.062	0.591	2.4036	
30 minute summer	24	1.009	35	444.5	1.855	0.575	3.8927	



Results for 30 year +20% CC +10% A 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	29	20	39.425	0.400	16.9	0.8600	0.0000	OK
30 minute summer	30	20	39.426	0.475	45.5	0.9241	0.0000	OK
30 minute summer	31	20	39.417	0.487	73.0	0.9740	0.0000	OK
30 minute summer	34	21	39.421	0.524	66.0	1.1103	0.0000	OK
30 minute summer	35	20	40.052	0.580	498.2	1.0245	0.0000	OK
30 minute summer	36	40	39.400	0.592	21.0	1.0462	0.0000	OK
30 minute summer	37	18	40.462	0.112	21.7	0.2617	0.0000	OK
30 minute summer	38	18	40.349	0.148	36.2	0.2893	0.0000	OK
30 minute summer	39	19	40.170	0.226	53.6	0.4587	0.0000	OK
30 minute summer	40	19	40.118	0.223	58.2	0.3140	0.0000	OK
30 minute summer	41	20	39.424	0.452	44.6	0.9863	0.0000	OK
30 minute summer	42	21	39.412	0.531	565.7	0.9731	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	29	9.000	41	40.4	0.235	0.112	8.3637	162.1
30 minute summer	30	9.002	31	71.0	0.318	0.198	3.8472	
30 minute summer	31	9.003	34	62.7	0.265	0.175	6.1792	
30 minute summer	34	9.004	42	87.6	0.319	0.238	3.0686	
30 minute summer	35	1.010	42	500.4	1.712	1.378	5.5204	
30 minute summer	36	Hydro-Brake®		11.0				
30 minute summer	37	8.000	38	21.7	0.753	0.306	1.0655	
30 minute summer	38	8.001	39	35.3	0.772	0.498	2.8654	
30 minute summer	39	8.002	40	52.4	0.925	0.735	0.6699	
30 minute summer	40	8.003	35	57.5	1.122	0.810	0.6223	
30 minute summer	41	9.001	30	43.6	0.276	0.121	3.6528	
30 minute summer	42	1.011	Tank 1	596.1	3.041	1.655	7.4617	



Results for 30 year +20% CC +10% A 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	33	42.341	0.066	7.7	0.1126	0.0000	OK
60 minute summer	2	33	42.281	0.112	19.1	0.2169	0.0000	OK
60 minute summer	3	34	42.042	0.187	49.1	0.4614	0.0000	OK
60 minute summer	4	33	42.126	0.101	15.3	0.2274	0.0000	OK
60 minute summer	5	34	41.777	0.241	78.5	0.5350	0.0000	OK
60 minute summer	6	35	41.379	0.194	6.0	0.3040	0.0000	OK
60 minute summer	7	35	41.377	0.426	94.6	0.8596	0.0000	SURCHARGED
60 minute summer	8	35	41.306	0.431	102.7	0.8764	0.0000	SURCHARGED
60 minute summer	9	35	41.264	0.413	112.9	0.8495	0.0000	SURCHARGED
60 minute summer	Tank 1	71	39.570	0.726	473.3	431.3282	0.0000	SURCHARGED
60 minute summer	11	35	41.081	0.383	137.2	1.1473	0.0000	SURCHARGED
60 minute summer	12	33	43.499	0.124	23.4	0.3531	0.0000	OK
60 minute summer	13	33	41.765	0.090	13.6	0.1912	0.0000	OK
60 minute summer	15	33	41.481	0.212	55.9	0.4642	0.0000	OK
60 minute summer	16	34	41.348	0.217	70.8	0.4619	0.0000	OK
60 minute summer	17	34	41.249	0.312	84.4	0.7524	0.0000	OK
60 minute summer	18	35	41.216	0.305	109.0	0.9883	0.0000	OK
60 minute summer	19	33	41.032	0.082	11.9	0.1605	0.0000	OK
60 minute summer	20	33	40.812	0.134	29.6	0.3000	0.0000	OK
60 minute summer	21	35	40.625	0.483	304.3	1.6248	0.0000	OK
60 minute summer	22	33	40.595	0.095	15.9	0.2138	0.0000	OK
60 minute summer	23	34	40.451	0.149	34.6	0.4112	0.0000	OK
60 minute summer	24	35	40.140	0.388	371.2	1.5198	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	7.7	0.531	0.193	0.2646	
60 minute summer	2	1.001	3	19.1	0.970	0.478	0.7951	
60 minute summer	3	1.002	5	48.2	1.104	0.682	2.6079	
60 minute summer	4	2.000	5	15.3	0.917	0.384	0.2988	
60 minute summer	5	1.003	7	78.5	1.151	0.709	2.1350	
60 minute summer	6	3.000	7	7.6	0.609	0.189	0.5387	
60 minute summer	7	1.004	8	92.3	0.865	0.831	2.6874	
60 minute summer	8	1.005	9	102.5	0.941	0.911	0.8292	
60 minute summer	9	1.006	11	113.0	1.025	1.022	5.4640	
60 minute summer	Tank 1	1.012	36	17.6	0.289	0.049	8.6760	
60 minute summer	11	1.007	21	137.1	1.341	1.236	2.9085	
60 minute summer	12	4.000	15	22.9	1.038	0.575	1.5820	
60 minute summer	13	5.000	15	13.5	0.746	0.341	1.1278	
60 minute summer	15	4.001	16	55.3	1.125	0.779	0.7515	
60 minute summer	16	4.002	17	70.5	0.860	0.639	5.1649	
60 minute summer	17	4.003	18	83.1	0.858	0.746	0.8041	
60 minute summer	18	4.004	21	107.5	1.251	0.972	5.0358	
60 minute summer	19	6.000	20	11.8	0.519	0.167	1.5238	
60 minute summer	20	6.001	21	29.5	0.896	0.417	2.1206	
60 minute summer	21	1.008	24	302.2	1.432	1.068	14.1859	
60 minute summer	22	7.000	23	15.9	0.600	0.224	1.3012	
60 minute summer	23	7.001	24	33.7	1.002	0.477	2.0584	
60 minute summer	24	1.009	35	371.7	1.790	0.481	3.3749	



Results for 30 year +20% CC +10% A 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	29	72	39.571	0.546	12.8	1.1731	0.0000	OK
60 minute summer	30	70	39.571	0.620	33.7	1.2056	0.0000	OK
60 minute summer	31	69	39.570	0.640	34.7	1.2821	0.0000	OK
60 minute summer	34	70	39.570	0.673	50.5	1.4255	0.0000	OK
60 minute summer	35	35	39.988	0.516	417.5	0.9121	0.0000	OK
60 minute summer	36	71	39.570	0.762	17.6	1.3472	0.0000	OK
60 minute summer	37	33	40.449	0.099	17.2	0.2314	0.0000	OK
60 minute summer	38	33	40.331	0.130	28.7	0.2546	0.0000	OK
60 minute summer	39	34	40.137	0.193	42.8	0.3913	0.0000	OK
60 minute summer	40	34	40.088	0.193	47.1	0.2710	0.0000	OK
60 minute summer	41	69	39.571	0.599	36.5	1.3054	0.0000	OK
60 minute summer	42	69	39.570	0.689	472.3	1.2619	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	29	9.000	41	26.8	0.150	0.074	11.3483	
60 minute summer	30	9.002	31	30.1	0.260	0.084	4.9042	
60 minute summer	31	9.003	34	42.9	0.189	0.120	7.8322	
60 minute summer	34	9.004	42	52.3	0.208	0.142	3.6562	
60 minute summer	35	1.010	42	418.4	1.602	1.152	4.9551	
60 minute summer	36	Hydro-Brake®		11.0				162.7
60 minute summer	37	8.000	38	17.2	0.699	0.243	0.9017	
60 minute summer	38	8.001	39	28.2	0.734	0.398	2.4210	
60 minute summer	39	8.002	40	42.3	0.883	0.594	0.5662	
60 minute summer	40	8.003	35	47.1	1.065	0.664	0.5153	
60 minute summer	41	9.001	30	29.4	0.247	0.081	4.7378	
60 minute summer	42	1.011	Tank 1	473.3	2.360	1.314	8.8199	



Results for 30 year +20% CC +10% A 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	64	42.330	0.055	5.3	0.0932	0.0000	OK
120 minute summer	2	64	42.260	0.091	13.2	0.1753	0.0000	OK
120 minute summer	3	64	42.004	0.149	34.0	0.3684	0.0000	OK
120 minute summer	4	64	42.107	0.082	10.6	0.1847	0.0000	OK
120 minute summer	5	64	41.729	0.193	55.2	0.4300	0.0000	OK
120 minute summer	6	64	41.233	0.048	4.1	0.0760	0.0000	OK
120 minute summer	7	64	41.196	0.245	67.8	0.4946	0.0000	OK
120 minute summer	8	64	41.146	0.271	75.4	0.5503	0.0000	OK
120 minute summer	9	64	41.107	0.256	83.4	0.5259	0.0000	OK
120 minute summer	Tank 1	130	39.766	0.922	307.0	547.5698	0.0000	SURCHARGED
120 minute summer	11	66	40.986	0.288	102.3	0.8621	0.0000	OK
120 minute summer	12	64	43.475	0.100	16.2	0.2861	0.0000	OK
120 minute summer	13	64	41.749	0.074	9.4	0.1573	0.0000	OK
120 minute summer	15	64	41.438	0.169	39.0	0.3701	0.0000	OK
120 minute summer	16	64	41.304	0.173	49.8	0.3676	0.0000	OK
120 minute summer	17	64	41.177	0.240	59.6	0.5782	0.0000	OK
120 minute summer	18	66	41.147	0.236	77.6	0.7658	0.0000	OK
120 minute summer	19	64	41.018	0.068	8.2	0.1335	0.0000	OK
120 minute summer	20	64	40.789	0.111	20.5	0.2485	0.0000	OK
120 minute summer	21	66	40.534	0.392	221.0	1.3195	0.0000	OK
120 minute summer	22	64	40.579	0.079	11.0	0.1772	0.0000	OK
120 minute summer	23	64	40.423	0.121	24.0	0.3352	0.0000	OK
120 minute summer	24	66	40.060	0.308	272.5	1.2093	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	5.3	0.480	0.133	0.2011	
120 minute summer	2	1.001	3	13.2	0.897	0.331	0.5942	
120 minute summer	3	1.002	5	33.8	1.001	0.478	2.0161	
120 minute summer	4	2.000	5	10.6	0.834	0.266	0.2276	
120 minute summer	5	1.003	7	55.0	1.039	0.497	1.6580	
120 minute summer	6	3.000	7	4.1	0.595	0.103	0.1568	
120 minute summer	7	1.004	8	67.4	0.834	0.606	1.9677	
120 minute summer	8	1.005	9	74.9	0.906	0.666	0.6217	
120 minute summer	9	1.006	11	82.6	0.968	0.747	4.2246	
120 minute summer	Tank 1	1.012	36	15.2	0.252	0.042	8.6760	
120 minute summer	11	1.007	21	101.7	1.241	0.917	2.4184	
120 minute summer	12	4.000	15	16.1	0.950	0.405	1.2138	
120 minute summer	13	5.000	15	9.4	0.745	0.236	0.7611	
120 minute summer	15	4.001	16	38.9	1.012	0.547	0.5872	
120 minute summer	16	4.002	17	49.5	0.798	0.448	3.9008	
120 minute summer	17	4.003	18	58.7	0.797	0.527	0.6115	
120 minute summer	18	4.004	21	76.9	1.148	0.695	3.9414	
120 minute summer	19	6.000	20	8.2	0.468	0.116	1.1815	
120 minute summer	20	6.001	21	20.1	0.867	0.284	1.3345	
120 minute summer	21	1.008	24	222.3	1.308	0.786	11.4911	
120 minute summer	22	7.000	23	11.0	0.540	0.155	1.0036	
120 minute summer	23	7.001	24	23.7	0.907	0.334	1.5936	
120 minute summer	24	1.009	35	272.9	1.713	0.353	2.5930	



Results for 30 year +20% CC +10% A 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	29	132	39.766	0.741	4.9	1.5913	0.0000	SURCHARGED
120 minute summer	30	128	39.769	0.818	5.9	1.5926	0.0000	SURCHARGED
120 minute summer	31	124	39.768	0.838	7.7	1.6776	0.0000	SURCHARGED
120 minute summer	34	132	39.767	0.870	8.9	1.8418	0.0000	SURCHARGED
120 minute summer	35	66	39.900	0.428	305.2	0.7571	0.0000	OK
120 minute summer	36	130	39.766	0.958	15.2	1.6931	0.0000	OK
120 minute summer	37	64	40.432	0.082	11.9	0.1914	0.0000	OK
120 minute summer	38	64	40.308	0.107	19.8	0.2096	0.0000	OK
120 minute summer	39	64	40.096	0.152	29.8	0.3086	0.0000	OK
120 minute summer	40	64	40.050	0.155	33.1	0.2179	0.0000	OK
120 minute summer	41	124	39.767	0.795	8.0	1.7335	0.0000	SURCHARGED
120 minute summer	42	130	39.766	0.885	310.6	1.6208	0.0000	SURCHARGED
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	29	9.000	41	-1.5	0.128	-0.004	12.5813	
120 minute summer	30	9.002	31	-3.5	0.228	-0.010	5.0516	
120 minute summer	31	9.003	34	-5.2	0.115	-0.014	7.9121	
120 minute summer	34	9.004	42	-4.7	0.112	-0.013	3.6580	
120 minute summer	35	1.010	42	305.9	1.440	0.843	4.0460	
120 minute summer	36	Hydro-Brake®		11.0				202.0
120 minute summer	37	8.000	38	11.9	0.628	0.168	0.6939	
120 minute summer	38	8.001	39	19.7	0.677	0.279	1.8350	
120 minute summer	39	8.002	40	29.6	0.816	0.416	0.4293	
120 minute summer	40	8.003	35	33.0	0.960	0.464	0.4005	
120 minute summer	41	9.001	30	-3.2	0.224	-0.009	4.9916	
120 minute summer	42	1.011	Tank 1	307.0	1.703	0.853	8.8199	

Results for 30 year +20% CC +10% A 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	96	42.323	0.048	4.1	0.0820	0.0000	OK
180 minute summer	2	96	42.248	0.079	10.2	0.1523	0.0000	OK
180 minute summer	3	96	41.983	0.128	26.2	0.3171	0.0000	OK
180 minute summer	4	96	42.096	0.071	8.1	0.1597	0.0000	OK
180 minute summer	5	96	41.703	0.167	42.6	0.3703	0.0000	OK
180 minute summer	6	92	41.229	0.044	3.2	0.0688	0.0000	OK
180 minute summer	7	96	41.153	0.202	52.5	0.4081	0.0000	OK
180 minute summer	8	96	41.102	0.227	58.6	0.4603	0.0000	OK
180 minute summer	9	96	41.064	0.213	65.1	0.4384	0.0000	OK
180 minute summer	Tank 1	188	39.877	1.033	234.8	613.3335	0.0000	SURCHARGED
180 minute summer	11	96	40.942	0.244	80.2	0.7310	0.0000	OK
180 minute summer	12	96	43.462	0.087	12.5	0.2481	0.0000	OK
180 minute summer	13	96	41.740	0.065	7.3	0.1382	0.0000	OK
180 minute summer	15	96	41.414	0.145	30.2	0.3179	0.0000	OK
180 minute summer	16	96	41.281	0.150	38.6	0.3198	0.0000	OK
180 minute summer	17	96	41.142	0.205	46.4	0.4935	0.0000	OK
180 minute summer	18	96	41.114	0.203	60.7	0.6584	0.0000	OK
180 minute summer	19	96	41.010	0.060	6.3	0.1173	0.0000	OK
180 minute summer	20	96	40.775	0.097	15.8	0.2175	0.0000	OK
180 minute summer	21	96	40.481	0.339	174.9	1.1400	0.0000	OK
180 minute summer	22	96	40.569	0.069	8.5	0.1557	0.0000	OK
180 minute summer	23	96	40.408	0.106	18.5	0.2920	0.0000	OK
180 minute summer	24	96	40.012	0.260	215.1	1.0206	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	4.1	0.449	0.103	0.1667	
180 minute summer	2	1.001	3	10.2	0.838	0.256	0.4926	
180 minute summer	3	1.002	5	26.2	0.934	0.370	1.6754	
180 minute summer	4	2.000	5	8.1	0.777	0.203	0.1868	
180 minute summer	5	1.003	7	42.6	0.968	0.385	1.3787	
180 minute summer	6	3.000	7	3.2	0.583	0.080	0.0865	
180 minute summer	7	1.004	8	52.4	0.806	0.472	1.5857	
180 minute summer	8	1.005	9	58.6	0.873	0.521	0.5049	
180 minute summer	9	1.006	11	65.0	0.925	0.588	3.4819	
180 minute summer	Tank 1	1.012	36	13.9	0.236	0.039	8.6760	
180 minute summer	11	1.007	21	79.9	1.156	0.721	2.0468	
180 minute summer	12	4.000	15	12.5	0.890	0.314	1.0062	
180 minute summer	13	5.000	15	7.3	0.740	0.184	0.5634	
180 minute summer	15	4.001	16	30.2	0.943	0.425	0.4898	
180 minute summer	16	4.002	17	38.6	0.752	0.349	3.2320	
180 minute summer	17	4.003	18	46.2	0.756	0.415	0.5076	
180 minute summer	18	4.004	21	60.5	1.074	0.547	3.3193	
180 minute summer	19	6.000	20	6.3	0.433	0.089	0.9837	
180 minute summer	20	6.001	21	15.7	0.811	0.222	1.1168	
180 minute summer	21	1.008	24	173.9	1.215	0.615	9.6923	
180 minute summer	22	7.000	23	8.5	0.503	0.120	0.8340	
180 minute summer	23	7.001	24	18.5	0.848	0.261	1.3300	
180 minute summer	24	1.009	35	214.9	1.670	0.278	2.0964	

Results for 30 year +20% CC +10% A 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	29	184	39.900	0.875	4.8	1.8793	0.0000	SURCHARGED
180 minute summer	30	184	39.888	0.937	9.9	1.8231	0.0000	SURCHARGED
180 minute summer	31	184	39.882	0.952	11.6	1.9068	0.0000	SURCHARGED
180 minute summer	34	192	39.880	0.983	11.5	2.0807	0.0000	SURCHARGED
180 minute summer	35	188	39.894	0.422	240.6	0.7460	0.0000	OK
180 minute summer	36	188	39.877	1.069	13.9	1.8888	0.0000	OK
180 minute summer	37	96	40.422	0.072	9.1	0.1672	0.0000	OK
180 minute summer	38	96	40.294	0.093	15.2	0.1829	0.0000	OK
180 minute summer	39	96	40.074	0.130	23.0	0.2634	0.0000	OK
180 minute summer	40	96	40.029	0.134	25.7	0.1881	0.0000	OK
180 minute summer	41	184	39.893	0.921	8.0	2.0078	0.0000	SURCHARGED
180 minute summer	42	188	39.880	0.999	241.1	1.8300	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	29	9.000	41	-4.5	0.121	-0.012	12.5813	
180 minute summer	30	9.002	31	-9.7	0.225	-0.027	5.0516	
180 minute summer	31	9.003	34	-11.3	0.119	-0.032	7.9121	
180 minute summer	34	9.004	42	-11.1	0.095	-0.030	3.6580	
180 minute summer	35	1.010	42	240.2	1.331	0.662	4.5816	
180 minute summer	36	Hydro-Brake®		11.3				244.0
180 minute summer	37	8.000	38	9.1	0.581	0.129	0.5744	
180 minute summer	38	8.001	39	15.2	0.637	0.215	1.5050	
180 minute summer	39	8.002	40	23.0	0.771	0.323	0.3525	
180 minute summer	40	8.003	35	25.7	0.895	0.361	0.3342	
180 minute summer	41	9.001	30	-7.4	0.196	-0.021	4.9916	
180 minute summer	42	1.011	Tank 1	234.8	1.535	0.652	8.8199	



Results for 30 year +20% CC +10% A 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	42.320	0.045	3.5	0.0756	0.0000	OK
240 minute summer	2	124	42.241	0.072	8.7	0.1389	0.0000	OK
240 minute summer	3	124	41.972	0.117	22.4	0.2881	0.0000	OK
240 minute summer	4	124	42.090	0.065	7.0	0.1473	0.0000	OK
240 minute summer	5	124	41.688	0.152	36.2	0.3368	0.0000	OK
240 minute summer	6	124	41.226	0.041	2.8	0.0645	0.0000	OK
240 minute summer	7	124	41.131	0.180	44.4	0.3626	0.0000	OK
240 minute summer	8	124	41.077	0.202	49.5	0.4098	0.0000	OK
240 minute summer	9	124	41.040	0.189	54.8	0.3894	0.0000	OK
240 minute summer	Tank 1	248	39.949	1.105	198.0	656.3173	0.0000	SURCHARGED
240 minute summer	11	128	40.916	0.218	67.5	0.6534	0.0000	OK
240 minute summer	12	124	43.455	0.080	10.8	0.2270	0.0000	OK
240 minute summer	13	124	41.735	0.060	6.3	0.1286	0.0000	OK
240 minute summer	15	124	41.401	0.132	25.8	0.2893	0.0000	OK
240 minute summer	16	124	41.268	0.137	32.9	0.2922	0.0000	OK
240 minute summer	17	124	41.120	0.183	39.3	0.4411	0.0000	OK
240 minute summer	18	128	41.094	0.183	51.4	0.5922	0.0000	OK
240 minute summer	19	124	41.006	0.056	5.5	0.1089	0.0000	OK
240 minute summer	20	124	40.767	0.089	13.6	0.1985	0.0000	OK
240 minute summer	21	128	40.449	0.307	146.4	1.0350	0.0000	OK
240 minute summer	22	124	40.564	0.064	7.3	0.1436	0.0000	OK
240 minute summer	23	124	40.398	0.096	15.8	0.2658	0.0000	OK
240 minute summer	24	128	39.984	0.232	181.4	0.9087	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	3.5	0.428	0.087	0.1475	
240 minute summer	2	1.001	3	8.6	0.798	0.215	0.4343	
240 minute summer	3	1.002	5	22.0	0.889	0.311	1.4793	
240 minute summer	4	2.000	5	7.0	0.745	0.174	0.1672	
240 minute summer	5	1.003	7	35.9	0.923	0.324	1.2183	
240 minute summer	6	3.000	7	2.8	0.574	0.070	0.0685	
240 minute summer	7	1.004	8	44.2	0.786	0.398	1.3706	
240 minute summer	8	1.005	9	49.2	0.847	0.438	0.4368	
240 minute summer	9	1.006	11	54.4	0.891	0.492	3.0221	
240 minute summer	Tank 1	1.012	36	13.3	0.227	0.037	8.6760	
240 minute summer	11	1.007	21	67.2	1.101	0.606	1.8078	
240 minute summer	12	4.000	15	10.6	0.850	0.266	0.8922	
240 minute summer	13	5.000	15	6.2	0.731	0.156	0.4761	
240 minute summer	15	4.001	16	25.6	0.901	0.361	0.4352	
240 minute summer	16	4.002	17	32.6	0.728	0.295	2.8283	
240 minute summer	17	4.003	18	38.8	0.728	0.348	0.4418	
240 minute summer	18	4.004	21	50.9	1.026	0.461	2.9257	
240 minute summer	19	6.000	20	5.4	0.417	0.076	0.8730	
240 minute summer	20	6.001	21	13.2	0.773	0.186	0.9836	
240 minute summer	21	1.008	24	147.7	1.162	0.522	8.6223	
240 minute summer	22	7.000	23	7.2	0.479	0.102	0.7367	
240 minute summer	23	7.001	24	15.4	0.806	0.218	1.1704	
240 minute summer	24	1.009	35	181.7	1.644	0.235	2.2863	

Results for 30 year +20% CC +10% A 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	29	244	39.951	0.926	4.1	1.9898	0.0000	SURCHARGED
240 minute summer	30	244	39.956	1.005	4.9	1.9560	0.0000	SURCHARGED
240 minute summer	31	248	39.952	1.022	6.1	2.0470	0.0000	SURCHARGED
240 minute summer	34	248	39.950	1.053	7.6	2.2283	0.0000	SURCHARGED
240 minute summer	35	248	39.949	0.477	203.1	0.8430	0.0000	OK
240 minute summer	36	248	39.949	1.141	13.3	2.0167	0.0000	OK
240 minute summer	37	124	40.417	0.067	7.9	0.1552	0.0000	OK
240 minute summer	38	124	40.287	0.086	13.1	0.1684	0.0000	OK
240 minute summer	39	124	40.061	0.117	19.6	0.2379	0.0000	OK
240 minute summer	40	124	40.016	0.121	21.7	0.1705	0.0000	OK
240 minute summer	41	248	39.951	0.979	6.4	2.1362	0.0000	SURCHARGED
240 minute summer	42	244	39.950	1.069	204.3	1.9567	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	29	9.000	41	1.4	0.121	0.004	12.5813	
240 minute summer	30	9.002	31	3.6	0.212	0.010	5.0516	
240 minute summer	31	9.003	34	5.5	0.110	0.015	7.9121	
240 minute summer	34	9.004	42	6.5	0.110	0.018	3.6580	
240 minute summer	35	1.010	42	203.5	1.266	0.560	5.3067	
240 minute summer	36	Hydro-Brake®		11.7				284.8
240 minute summer	37	8.000	38	7.8	0.557	0.111	0.5138	
240 minute summer	38	8.001	39	12.9	0.616	0.183	1.3249	
240 minute summer	39	8.002	40	19.4	0.743	0.272	0.3087	
240 minute summer	40	8.003	35	21.6	0.853	0.304	0.2945	
240 minute summer	41	9.001	30	4.1	0.196	0.011	4.9916	
240 minute summer	42	1.011	Tank 1	198.0	1.433	0.550	8.8199	



Results for 30 year +20% CC +10% A 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	42.315	0.040	2.8	0.0678	0.0000	OK
360 minute summer	2	184	42.232	0.063	6.9	0.1227	0.0000	OK
360 minute summer	3	184	41.957	0.102	17.6	0.2522	0.0000	OK
360 minute summer	4	184	42.083	0.058	5.5	0.1296	0.0000	OK
360 minute summer	5	184	41.668	0.132	28.3	0.2941	0.0000	OK
360 minute summer	6	184	41.221	0.036	2.2	0.0571	0.0000	OK
360 minute summer	7	184	41.104	0.153	34.7	0.3090	0.0000	OK
360 minute summer	8	184	41.048	0.173	38.7	0.3511	0.0000	OK
360 minute summer	9	184	41.013	0.162	42.8	0.3338	0.0000	OK
360 minute summer	Tank 1	368	40.025	1.181	151.3	701.0623	0.0000	SURCHARGED
360 minute summer	11	184	40.885	0.187	52.7	0.5609	0.0000	OK
360 minute summer	12	184	43.445	0.070	8.4	0.1986	0.0000	OK
360 minute summer	13	184	41.728	0.053	4.9	0.1129	0.0000	OK
360 minute summer	15	184	41.384	0.115	20.0	0.2507	0.0000	OK
360 minute summer	16	184	41.251	0.120	25.6	0.2559	0.0000	OK
360 minute summer	17	184	41.094	0.157	30.7	0.3787	0.0000	OK
360 minute summer	18	184	41.069	0.158	40.0	0.5122	0.0000	OK
360 minute summer	19	184	40.999	0.049	4.3	0.0966	0.0000	OK
360 minute summer	20	184	40.756	0.078	10.6	0.1747	0.0000	OK
360 minute summer	21	184	40.407	0.265	114.2	0.8928	0.0000	OK
360 minute summer	22	184	40.557	0.057	5.7	0.1271	0.0000	OK
360 minute summer	23	184	40.386	0.084	12.3	0.2329	0.0000	OK
360 minute summer	24	360	40.025	0.273	139.6	1.0704	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	2.8	0.405	0.070	0.1247	
360 minute summer	2	1.001	3	6.8	0.748	0.170	0.3659	
360 minute summer	3	1.002	5	17.2	0.831	0.244	1.2392	
360 minute summer	4	2.000	5	5.4	0.696	0.137	0.1402	
360 minute summer	5	1.003	7	28.0	0.862	0.253	1.0179	
360 minute summer	6	3.000	7	2.2	0.535	0.055	0.0576	
360 minute summer	7	1.004	8	34.5	0.751	0.310	1.1189	
360 minute summer	8	1.005	9	38.4	0.807	0.342	0.3583	
360 minute summer	9	1.006	11	42.5	0.844	0.384	2.4935	
360 minute summer	Tank 1	1.012	36	12.4	0.227	0.035	8.6760	
360 minute summer	11	1.007	21	51.9	1.021	0.468	1.5055	
360 minute summer	12	4.000	15	8.2	0.793	0.207	0.7429	
360 minute summer	13	5.000	15	4.8	0.680	0.121	0.3968	
360 minute summer	15	4.001	16	19.9	0.841	0.280	0.3621	
360 minute summer	16	4.002	17	25.4	0.686	0.230	2.3339	
360 minute summer	17	4.003	18	30.2	0.689	0.271	0.3641	
360 minute summer	18	4.004	21	39.3	0.953	0.355	2.4307	
360 minute summer	19	6.000	20	4.2	0.389	0.060	0.7312	
360 minute summer	20	6.001	21	10.3	0.722	0.146	0.8233	
360 minute summer	21	1.008	24	112.3	1.069	0.397	7.1233	
360 minute summer	22	7.000	23	5.6	0.448	0.080	0.6150	
360 minute summer	23	7.001	24	12.0	0.753	0.170	0.9748	
360 minute summer	24	1.009	35	139.3	1.605	0.180	2.9741	



Results for 30 year +20% CC +10% A 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	29	360	40.028	1.003	6.0	2.1546	0.0000	SURCHARGED
360 minute summer	30	368	40.029	1.078	11.3	2.0976	0.0000	SURCHARGED
360 minute summer	31	360	40.027	1.097	13.1	2.1959	0.0000	SURCHARGED
360 minute summer	34	360	40.026	1.129	11.8	2.3896	0.0000	SURCHARGED
360 minute summer	35	360	40.025	0.553	156.0	0.9770	0.0000	OK
360 minute summer	36	368	40.025	1.217	12.4	2.1499	0.0000	OK
360 minute summer	37	184	40.409	0.059	6.2	0.1375	0.0000	OK
360 minute summer	38	184	40.277	0.076	10.2	0.1483	0.0000	OK
360 minute summer	39	184	40.045	0.101	15.3	0.2054	0.0000	OK
360 minute summer	40	360	40.025	0.130	16.9	0.1827	0.0000	OK
360 minute summer	41	360	40.031	1.059	8.7	2.3089	0.0000	SURCHARGED
360 minute summer	42	368	40.024	1.143	155.9	2.0937	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	29	9.000	41	-5.6	0.114	-0.016	12.5813	
360 minute summer	30	9.002	31	-11.0	0.193	-0.031	5.0516	
360 minute summer	31	9.003	34	-12.8	0.112	-0.036	7.9121	
360 minute summer	34	9.004	42	12.2	0.053	0.033	3.6580	
360 minute summer	35	1.010	42	155.3	1.165	0.428	6.0982	
360 minute summer	36	Hydro-Brake®		12.1				361.3
360 minute summer	37	8.000	38	6.1	0.520	0.087	0.4310	
360 minute summer	38	8.001	39	10.1	0.581	0.142	1.0947	
360 minute summer	39	8.002	40	15.1	0.701	0.212	0.2627	
360 minute summer	40	8.003	35	16.8	0.798	0.236	0.4238	
360 minute summer	41	9.001	30	-8.0	0.176	-0.022	4.9916	
360 minute summer	42	1.011	Tank 1	151.3	1.319	0.420	8.8199	



Results for 30 year +20% CC +10% A 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	42.311	0.036	2.2	0.0605	0.0000	OK
480 minute summer	2	248	42.226	0.057	5.5	0.1102	0.0000	OK
480 minute summer	3	248	41.946	0.091	14.1	0.2262	0.0000	OK
480 minute summer	4	248	42.077	0.052	4.4	0.1160	0.0000	OK
480 minute summer	5	248	41.655	0.119	23.0	0.2643	0.0000	OK
480 minute summer	6	248	41.217	0.032	1.7	0.0505	0.0000	OK
480 minute summer	7	248	41.086	0.135	28.3	0.2736	0.0000	OK
480 minute summer	8	248	41.029	0.154	31.6	0.3121	0.0000	OK
480 minute summer	9	248	40.996	0.145	35.1	0.2976	0.0000	OK
480 minute summer	Tank 1	480	40.054	1.210	128.3	718.6904	0.0000	SURCHARGED
480 minute summer	11	248	40.866	0.168	43.3	0.5042	0.0000	OK
480 minute summer	12	248	43.438	0.063	6.7	0.1783	0.0000	OK
480 minute summer	13	248	41.723	0.048	3.9	0.1016	0.0000	OK
480 minute summer	15	248	41.371	0.102	16.2	0.2234	0.0000	OK
480 minute summer	16	248	41.239	0.108	20.7	0.2304	0.0000	OK
480 minute summer	17	248	41.077	0.140	24.9	0.3377	0.0000	OK
480 minute summer	18	248	41.053	0.142	32.7	0.4612	0.0000	OK
480 minute summer	19	248	40.994	0.044	3.4	0.0868	0.0000	OK
480 minute summer	20	248	40.748	0.070	8.5	0.1580	0.0000	OK
480 minute summer	21	248	40.383	0.241	94.6	0.8115	0.0000	OK
480 minute summer	22	248	40.551	0.051	4.6	0.1151	0.0000	OK
480 minute summer	23	248	40.379	0.077	10.0	0.2117	0.0000	OK
480 minute summer	24	480	40.054	0.302	116.8	1.1831	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	2.2	0.376	0.055	0.1067	
480 minute summer	2	1.001	3	5.5	0.706	0.138	0.3152	
480 minute summer	3	1.002	5	14.1	0.787	0.199	1.0702	
480 minute summer	4	2.000	5	4.4	0.656	0.110	0.1201	
480 minute summer	5	1.003	7	23.0	0.819	0.208	0.8808	
480 minute summer	6	3.000	7	1.7	0.498	0.043	0.0483	
480 minute summer	7	1.004	8	28.3	0.723	0.255	0.9543	
480 minute summer	8	1.005	9	31.6	0.774	0.281	0.3071	
480 minute summer	9	1.006	11	35.1	0.806	0.317	2.1575	
480 minute summer	Tank 1	1.012	36	12.2	0.221	0.034	8.6760	
480 minute summer	11	1.007	21	43.3	0.972	0.390	1.3197	
480 minute summer	12	4.000	15	6.7	0.749	0.168	0.6408	
480 minute summer	13	5.000	15	3.9	0.641	0.098	0.3421	
480 minute summer	15	4.001	16	16.2	0.797	0.228	0.3110	
480 minute summer	16	4.002	17	20.7	0.651	0.187	2.0076	
480 minute summer	17	4.003	18	24.9	0.657	0.224	0.3144	
480 minute summer	18	4.004	21	32.7	0.907	0.296	2.1237	
480 minute summer	19	6.000	20	3.4	0.364	0.048	0.6317	
480 minute summer	20	6.001	21	8.5	0.685	0.120	0.7142	
480 minute summer	21	1.008	24	94.6	1.021	0.334	6.2861	
480 minute summer	22	7.000	23	4.6	0.421	0.065	0.5361	
480 minute summer	23	7.001	24	10.0	0.717	0.141	0.8529	
480 minute summer	24	1.009	35	116.8	1.586	0.151	3.2202	

Results for 30 year +20% CC +10% A 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	29	480	40.057	1.032	3.6	2.2177	0.0000	SURCHARGED
480 minute summer	30	464	40.061	1.110	6.1	2.1600	0.0000	SURCHARGED
480 minute summer	31	480	40.057	1.127	4.8	2.2560	0.0000	SURCHARGED
480 minute summer	34	480	40.057	1.160	7.5	2.4555	0.0000	SURCHARGED
480 minute summer	35	472	40.055	0.582	130.6	1.0293	0.0000	OK
480 minute summer	36	480	40.054	1.246	12.2	2.2023	0.0000	OK
480 minute summer	37	248	40.403	0.053	4.9	0.1232	0.0000	OK
480 minute summer	38	248	40.269	0.068	8.2	0.1337	0.0000	OK
480 minute summer	39	472	40.055	0.111	12.4	0.2253	0.0000	OK
480 minute summer	40	480	40.054	0.159	13.8	0.2241	0.0000	OK
480 minute summer	41	448	40.059	1.087	4.0	2.3712	0.0000	SURCHARGED
480 minute summer	42	472	40.054	1.173	131.0	2.1476	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	29	9.000	41	2.2	0.114	0.006	12.5813	
480 minute summer	30	9.002	31	4.0	0.186	0.011	5.0516	
480 minute summer	31	9.003	34	5.9	0.092	0.017	7.9121	
480 minute summer	34	9.004	42	5.3	0.050	0.014	3.6580	
480 minute summer	35	1.010	42	130.5	1.108	0.360	6.3604	
480 minute summer	36	Hydro-Brake®		12.2				435.2
480 minute summer	37	8.000	38	4.9	0.484	0.069	0.3704	
480 minute summer	38	8.001	39	8.2	0.550	0.116	0.9409	
480 minute summer	39	8.002	40	12.4	0.671	0.174	0.3648	
480 minute summer	40	8.003	35	13.8	0.759	0.194	0.5233	
480 minute summer	41	9.001	30	5.3	0.173	0.015	4.9916	
480 minute summer	42	1.011	Tank 1	128.3	1.208	0.356	8.8199	



Results for 30 year +20% CC +10% A 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	42.307	0.032	1.8	0.0549	0.0000	OK
600 minute summer	2	315	42.220	0.051	4.5	0.0995	0.0000	OK
600 minute summer	3	315	41.938	0.083	11.6	0.2043	0.0000	OK
600 minute summer	4	315	42.072	0.047	3.6	0.1047	0.0000	OK
600 minute summer	5	315	41.643	0.107	18.9	0.2383	0.0000	OK
600 minute summer	6	315	41.214	0.029	1.4	0.0459	0.0000	OK
600 minute summer	7	315	41.072	0.121	23.3	0.2441	0.0000	OK
600 minute summer	8	315	41.013	0.138	26.1	0.2793	0.0000	OK
600 minute summer	9	315	40.981	0.130	29.0	0.2669	0.0000	OK
600 minute summer	Tank 1	540	40.066	1.222	107.3	725.6761	0.0000	SURCHARGED
600 minute summer	11	315	40.849	0.151	35.7	0.4524	0.0000	OK
600 minute summer	12	315	43.432	0.057	5.5	0.1612	0.0000	OK
600 minute summer	13	315	41.718	0.043	3.2	0.0921	0.0000	OK
600 minute summer	15	315	41.361	0.092	13.3	0.2008	0.0000	OK
600 minute summer	16	315	41.229	0.098	17.0	0.2084	0.0000	OK
600 minute summer	17	315	41.062	0.125	20.5	0.3017	0.0000	OK
600 minute summer	18	315	41.039	0.128	27.0	0.4159	0.0000	OK
600 minute summer	19	315	40.990	0.040	2.8	0.0791	0.0000	OK
600 minute summer	20	315	40.742	0.064	7.0	0.1433	0.0000	OK
600 minute summer	21	315	40.360	0.218	78.1	0.7335	0.0000	OK
600 minute summer	22	315	40.547	0.047	3.8	0.1049	0.0000	OK
600 minute summer	23	315	40.371	0.069	8.2	0.1914	0.0000	OK
600 minute summer	24	540	40.067	0.315	96.4	1.2349	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	1.8	0.355	0.045	0.0924	
600 minute summer	2	1.001	3	4.5	0.667	0.113	0.2730	
600 minute summer	3	1.002	5	11.6	0.746	0.164	0.9294	
600 minute summer	4	2.000	5	3.6	0.620	0.090	0.1040	
600 minute summer	5	1.003	7	18.9	0.775	0.171	0.7645	
600 minute summer	6	3.000	7	1.4	0.471	0.035	0.0421	
600 minute summer	7	1.004	8	23.3	0.693	0.210	0.8193	
600 minute summer	8	1.005	9	26.1	0.741	0.232	0.2647	
600 minute summer	9	1.006	11	29.0	0.771	0.262	1.8655	
600 minute summer	Tank 1	1.012	36	12.2	0.220	0.034	8.6760	
600 minute summer	11	1.007	21	35.7	0.922	0.322	1.1473	
600 minute summer	12	4.000	15	5.5	0.708	0.138	0.5564	
600 minute summer	13	5.000	15	3.2	0.605	0.080	0.2974	
600 minute summer	15	4.001	16	13.3	0.757	0.187	0.2690	
600 minute summer	16	4.002	17	17.0	0.620	0.154	1.7314	
600 minute summer	17	4.003	18	20.5	0.627	0.184	0.2714	
600 minute summer	18	4.004	21	27.0	0.861	0.244	1.8493	
600 minute summer	19	6.000	20	2.8	0.343	0.040	0.5503	
600 minute summer	20	6.001	21	7.0	0.649	0.099	0.6205	
600 minute summer	21	1.008	24	78.1	0.967	0.276	5.4853	
600 minute summer	22	7.000	23	3.8	0.400	0.054	0.4660	
600 minute summer	23	7.001	24	8.2	0.678	0.116	0.7393	
600 minute summer	24	1.009	35	96.4	1.564	0.125	3.3271	

Results for 30 year +20% CC +10% A 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	29	540	40.071	1.046	7.9	2.2459	0.0000	SURCHARGED
600 minute summer	30	555	40.073	1.122	16.7	2.1828	0.0000	SURCHARGED
600 minute summer	31	540	40.071	1.141	18.6	2.2842	0.0000	SURCHARGED
600 minute summer	34	540	40.069	1.172	15.4	2.4818	0.0000	SURCHARGED
600 minute summer	35	555	40.066	0.594	107.9	1.0498	0.0000	OK
600 minute summer	36	540	40.066	1.258	12.2	2.2231	0.0000	OK
600 minute summer	37	315	40.399	0.049	4.1	0.1129	0.0000	OK
600 minute summer	38	315	40.263	0.062	6.8	0.1218	0.0000	OK
600 minute summer	39	540	40.066	0.122	10.3	0.2477	0.0000	OK
600 minute summer	40	540	40.067	0.172	11.5	0.2414	0.0000	OK
600 minute summer	41	540	40.070	1.098	13.2	2.3945	0.0000	SURCHARGED
600 minute summer	42	555	40.066	1.185	108.3	2.1690	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	29	9.000	41	-7.3	0.106	-0.020	12.5813	
600 minute summer	30	9.002	31	-16.2	0.154	-0.045	5.0516	
600 minute summer	31	9.003	34	-18.1	0.070	-0.051	7.9121	
600 minute summer	34	9.004	42	-14.6	0.047	-0.040	3.6580	
600 minute summer	35	1.010	42	107.9	1.048	0.297	6.4528	
600 minute summer	36	Hydro-Brake®		12.3				503.3
600 minute summer	37	8.000	38	4.1	0.461	0.058	0.3253	
600 minute summer	38	8.001	39	6.8	0.525	0.096	0.9148	
600 minute summer	39	8.002	40	10.3	0.641	0.145	0.4060	
600 minute summer	40	8.003	35	11.5	0.722	0.162	0.5636	
600 minute summer	41	9.001	30	-12.2	0.173	-0.034	4.9916	
600 minute summer	42	1.011	Tank 1	107.3	1.114	0.298	8.8199	



Results for 30 year +20% CC +10% A 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	42.306	0.031	1.6	0.0519	0.0000	OK
720 minute summer	2	375	42.217	0.048	4.0	0.0937	0.0000	OK
720 minute summer	3	375	41.933	0.078	10.4	0.1931	0.0000	OK
720 minute summer	4	375	42.069	0.044	3.2	0.0986	0.0000	OK
720 minute summer	5	375	41.637	0.101	16.9	0.2249	0.0000	OK
720 minute summer	6	375	41.213	0.028	1.3	0.0443	0.0000	OK
720 minute summer	7	375	41.065	0.114	20.9	0.2294	0.0000	OK
720 minute summer	8	375	41.004	0.129	23.4	0.2624	0.0000	OK
720 minute summer	9	375	40.973	0.122	26.0	0.2511	0.0000	OK
720 minute summer	Tank 1	600	40.073	1.229	96.8	729.7195	0.0000	SURCHARGED
720 minute summer	11	375	40.840	0.142	32.1	0.4265	0.0000	OK
720 minute summer	12	375	43.429	0.054	5.0	0.1536	0.0000	OK
720 minute summer	13	375	41.716	0.041	2.9	0.0878	0.0000	OK
720 minute summer	15	375	41.356	0.087	12.1	0.1908	0.0000	OK
720 minute summer	16	375	41.224	0.093	15.5	0.1990	0.0000	OK
720 minute summer	17	375	41.055	0.118	18.6	0.2851	0.0000	OK
720 minute summer	18	375	41.032	0.121	24.4	0.3941	0.0000	OK
720 minute summer	19	375	40.988	0.038	2.5	0.0750	0.0000	OK
720 minute summer	20	375	40.739	0.061	6.3	0.1360	0.0000	OK
720 minute summer	21	375	40.348	0.206	70.3	0.6947	0.0000	OK
720 minute summer	22	375	40.544	0.044	3.4	0.0994	0.0000	OK
720 minute summer	23	375	40.368	0.066	7.4	0.1818	0.0000	OK
720 minute summer	24	600	40.073	0.321	86.8	1.2607	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	1.6	0.343	0.040	0.0850	
720 minute summer	2	1.001	3	4.0	0.645	0.100	0.2509	
720 minute summer	3	1.002	5	10.4	0.724	0.147	0.8585	
720 minute summer	4	2.000	5	3.2	0.600	0.080	0.0956	
720 minute summer	5	1.003	7	16.9	0.753	0.153	0.7036	
720 minute summer	6	3.000	7	1.3	0.460	0.033	0.0400	
720 minute summer	7	1.004	8	20.9	0.678	0.188	0.7521	
720 minute summer	8	1.005	9	23.4	0.723	0.208	0.2432	
720 minute summer	9	1.006	11	26.0	0.750	0.235	1.7198	
720 minute summer	Tank 1	1.012	36	12.3	0.218	0.034	8.6760	
720 minute summer	11	1.007	21	32.1	0.896	0.289	1.0620	
720 minute summer	12	4.000	15	5.0	0.689	0.126	0.5197	
720 minute summer	13	5.000	15	2.9	0.588	0.073	0.2775	
720 minute summer	15	4.001	16	12.1	0.738	0.170	0.2511	
720 minute summer	16	4.002	17	15.5	0.608	0.140	1.6094	
720 minute summer	17	4.003	18	18.6	0.614	0.167	0.2515	
720 minute summer	18	4.004	21	24.4	0.837	0.221	1.7178	
720 minute summer	19	6.000	20	2.5	0.331	0.035	0.5100	
720 minute summer	20	6.001	21	6.3	0.631	0.089	0.5745	
720 minute summer	21	1.008	24	70.3	0.938	0.249	5.0885	
720 minute summer	22	7.000	23	3.4	0.386	0.048	0.4321	
720 minute summer	23	7.001	24	7.4	0.659	0.105	0.6863	
720 minute summer	24	1.009	35	86.8	1.555	0.112	3.3825	



Results for 30 year +20% CC +10% A 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	29	600	40.077	1.052	1.8	2.2605	0.0000	SURCHARGED
720 minute summer	30	600	40.082	1.131	5.6	2.2001	0.0000	SURCHARGED
720 minute summer	31	630	40.077	1.147	6.1	2.2970	0.0000	SURCHARGED
720 minute summer	34	585	40.075	1.178	8.8	2.4937	0.0000	SURCHARGED
720 minute summer	35	600	40.073	0.601	97.1	1.0619	0.0000	OK
720 minute summer	36	600	40.073	1.265	12.3	2.2352	0.0000	OK
720 minute summer	37	375	40.396	0.046	3.7	0.1075	0.0000	OK
720 minute summer	38	375	40.260	0.059	6.1	0.1155	0.0000	OK
720 minute summer	39	600	40.073	0.129	9.2	0.2610	0.0000	OK
720 minute summer	40	600	40.073	0.178	10.3	0.2506	0.0000	OK
720 minute summer	41	585	40.076	1.104	4.0	2.4076	0.0000	SURCHARGED
720 minute summer	42	600	40.073	1.192	97.7	2.1829	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	29	9.000	41	2.3	0.112	0.006	12.5813	
720 minute summer	30	9.002	31	5.1	0.158	0.014	5.0516	
720 minute summer	31	9.003	34	7.2	0.073	0.020	7.9121	
720 minute summer	34	9.004	42	8.1	0.042	0.022	3.6580	
720 minute summer	35	1.010	42	97.1	1.017	0.267	6.5001	
720 minute summer	36	Hydro-Brake®		12.3				573.0
720 minute summer	37	8.000	38	3.7	0.449	0.052	0.3017	
720 minute summer	38	8.001	39	6.1	0.511	0.086	0.9758	
720 minute summer	39	8.002	40	9.2	0.623	0.129	0.4288	
720 minute summer	40	8.003	35	10.3	0.702	0.145	0.5856	
720 minute summer	41	9.001	30	4.9	0.173	0.014	4.9916	
720 minute summer	42	1.011	Tank 1	96.8	1.051	0.269	8.8199	

Results for 30 year +20% CC +10% A 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	42.304	0.029	1.4	0.0487	0.0000	OK
960 minute summer	2	495	42.214	0.045	3.4	0.0864	0.0000	OK
960 minute summer	3	495	41.926	0.071	8.7	0.1764	0.0000	OK
960 minute summer	4	495	42.065	0.040	2.7	0.0907	0.0000	OK
960 minute summer	5	495	41.629	0.093	14.2	0.2057	0.0000	OK
960 minute summer	6	495	41.211	0.026	1.1	0.0409	0.0000	OK
960 minute summer	7	495	41.054	0.103	17.5	0.2076	0.0000	OK
960 minute summer	8	495	40.992	0.117	19.6	0.2377	0.0000	OK
960 minute summer	9	495	40.962	0.111	21.8	0.2282	0.0000	OK
960 minute summer	Tank 1	735	40.079	1.235	80.9	733.0587	0.0000	SURCHARGED
960 minute summer	11	495	40.827	0.129	26.9	0.3875	0.0000	OK
960 minute summer	12	495	43.424	0.049	4.1	0.1390	0.0000	OK
960 minute summer	13	495	41.713	0.038	2.4	0.0800	0.0000	OK
960 minute summer	15	495	41.348	0.079	10.0	0.1725	0.0000	OK
960 minute summer	16	495	41.216	0.085	12.8	0.1807	0.0000	OK
960 minute summer	17	495	41.043	0.106	15.4	0.2559	0.0000	OK
960 minute summer	18	495	41.021	0.110	20.2	0.3568	0.0000	OK
960 minute summer	19	495	40.985	0.035	2.1	0.0690	0.0000	OK
960 minute summer	20	495	40.734	0.056	5.3	0.1249	0.0000	OK
960 minute summer	21	495	40.330	0.188	58.7	0.6335	0.0000	OK
960 minute summer	22	495	40.540	0.040	2.8	0.0905	0.0000	OK
960 minute summer	23	495	40.362	0.060	6.1	0.1652	0.0000	OK
960 minute summer	24	750	40.079	0.327	72.4	1.2838	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	1.4	0.334	0.035	0.0762	
960 minute summer	2	1.001	3	3.4	0.616	0.085	0.2235	
960 minute summer	3	1.002	5	8.7	0.689	0.123	0.7540	
960 minute summer	4	2.000	5	2.7	0.571	0.068	0.0847	
960 minute summer	5	1.003	7	14.2	0.717	0.128	0.6209	
960 minute summer	6	3.000	7	1.1	0.438	0.028	0.0355	
960 minute summer	7	1.004	8	17.5	0.651	0.157	0.6553	
960 minute summer	8	1.005	9	19.6	0.693	0.174	0.2127	
960 minute summer	9	1.006	11	21.8	0.717	0.197	1.5085	
960 minute summer	Tank 1	1.012	36	12.3	0.218	0.034	8.6760	
960 minute summer	11	1.007	21	26.9	0.853	0.243	0.9346	
960 minute summer	12	4.000	15	4.1	0.652	0.103	0.4510	
960 minute summer	13	5.000	15	2.4	0.556	0.060	0.2427	
960 minute summer	15	4.001	16	10.0	0.701	0.141	0.2183	
960 minute summer	16	4.002	17	12.8	0.580	0.116	1.3931	
960 minute summer	17	4.003	18	15.4	0.587	0.138	0.2178	
960 minute summer	18	4.004	21	20.2	0.795	0.183	1.4985	
960 minute summer	19	6.000	20	2.1	0.314	0.030	0.4514	
960 minute summer	20	6.001	21	5.3	0.600	0.075	0.5086	
960 minute summer	21	1.008	24	58.7	0.891	0.208	4.4765	
960 minute summer	22	7.000	23	2.8	0.364	0.040	0.3770	
960 minute summer	23	7.001	24	6.1	0.626	0.086	0.5960	
960 minute summer	24	1.009	35	72.4	1.540	0.094	3.4288	

Results for 30 year +20% CC +10% A 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	29	720	40.083	1.058	2.0	2.2720	0.0000	SURCHARGED
960 minute summer	30	765	40.083	1.132	4.0	2.2023	0.0000	SURCHARGED
960 minute summer	31	720	40.081	1.151	5.8	2.3046	0.0000	SURCHARGED
960 minute summer	34	735	40.081	1.184	6.0	2.5069	0.0000	SURCHARGED
960 minute summer	35	735	40.079	0.607	80.9	1.0726	0.0000	OK
960 minute summer	36	735	40.079	1.271	12.3	2.2451	0.0000	OK
960 minute summer	37	495	40.392	0.042	3.0	0.0971	0.0000	OK
960 minute summer	38	495	40.255	0.053	5.0	0.1049	0.0000	OK
960 minute summer	39	720	40.079	0.135	7.6	0.2731	0.0000	OK
960 minute summer	40	765	40.079	0.184	8.5	0.2586	0.0000	OK
960 minute summer	41	705	40.081	1.109	3.1	2.4188	0.0000	SURCHARGED
960 minute summer	42	750	40.080	1.199	81.6	2.1947	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	29	9.000	41	2.0	0.099	0.006	12.5813	
960 minute summer	30	9.002	31	5.3	0.159	0.015	5.0516	
960 minute summer	31	9.003	34	5.2	0.088	0.014	7.9121	
960 minute summer	34	9.004	42	6.5	0.046	0.018	3.6580	
960 minute summer	35	1.010	42	80.9	0.964	0.223	6.5468	
960 minute summer	36	Hydro-Brake®		12.3				709.2
960 minute summer	37	8.000	38	3.0	0.419	0.042	0.2617	
960 minute summer	38	8.001	39	5.0	0.484	0.071	1.0330	
960 minute summer	39	8.002	40	7.6	0.595	0.107	0.4474	
960 minute summer	40	8.003	35	8.5	0.667	0.120	0.6033	
960 minute summer	41	9.001	30	3.6	0.173	0.010	4.9916	
960 minute summer	42	1.011	Tank 1	80.9	0.962	0.225	8.8199	



Results for 30 year +20% CC +10% A 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	42.300	0.025	1.0	0.0416	0.0000	OK
1440 minute summer	2	750	42.207	0.038	2.5	0.0742	0.0000	OK
1440 minute summer	3	750	41.916	0.061	6.4	0.1512	0.0000	OK
1440 minute summer	4	750	42.060	0.035	2.0	0.0781	0.0000	OK
1440 minute summer	5	750	41.615	0.079	10.4	0.1757	0.0000	OK
1440 minute summer	6	750	41.207	0.022	0.8	0.0350	0.0000	OK
1440 minute summer	7	750	41.038	0.087	12.9	0.1758	0.0000	OK
1440 minute summer	8	750	40.974	0.099	14.4	0.2011	0.0000	OK
1440 minute summer	9	750	40.946	0.095	16.0	0.1950	0.0000	OK
1440 minute summer	Tank 1	1020	40.060	1.216	60.6	721.8088	0.0000	SURCHARGED
1440 minute summer	11	750	40.808	0.110	19.7	0.3285	0.0000	OK
1440 minute summer	12	750	43.417	0.042	3.1	0.1210	0.0000	OK
1440 minute summer	13	750	41.708	0.033	1.8	0.0695	0.0000	OK
1440 minute summer	15	750	41.337	0.068	7.5	0.1485	0.0000	OK
1440 minute summer	16	750	41.205	0.074	9.6	0.1568	0.0000	OK
1440 minute summer	17	750	41.027	0.090	11.5	0.2173	0.0000	OK
1440 minute summer	18	750	41.006	0.095	15.1	0.3074	0.0000	OK
1440 minute summer	19	750	40.981	0.031	1.6	0.0607	0.0000	OK
1440 minute summer	20	750	40.726	0.048	3.9	0.1076	0.0000	OK
1440 minute summer	21	750	40.303	0.161	43.3	0.5437	0.0000	OK
1440 minute summer	22	750	40.535	0.035	2.1	0.0790	0.0000	OK
1440 minute summer	23	750	40.354	0.052	4.6	0.1439	0.0000	OK
1440 minute summer	24	990	40.059	0.307	53.5	1.2048	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	1.0	0.298	0.025	0.0609	
1440 minute summer	2	1.001	3	2.5	0.562	0.063	0.1799	
1440 minute summer	3	1.002	5	6.4	0.634	0.091	0.6033	
1440 minute summer	4	2.000	5	2.0	0.524	0.050	0.0684	
1440 minute summer	5	1.003	7	10.4	0.659	0.094	0.4946	
1440 minute summer	6	3.000	7	0.8	0.399	0.020	0.0284	
1440 minute summer	7	1.004	8	12.9	0.607	0.116	0.5185	
1440 minute summer	8	1.005	9	14.4	0.639	0.128	0.1694	
1440 minute summer	9	1.006	11	16.0	0.659	0.145	1.2045	
1440 minute summer	Tank 1	1.012	36	12.2	0.217	0.034	8.6760	
1440 minute summer	11	1.007	21	19.7	0.783	0.178	0.7454	
1440 minute summer	12	4.000	15	3.1	0.600	0.078	0.3702	
1440 minute summer	13	5.000	15	1.8	0.511	0.045	0.1981	
1440 minute summer	15	4.001	16	7.5	0.649	0.106	0.1770	
1440 minute summer	16	4.002	17	9.6	0.542	0.087	1.1188	
1440 minute summer	17	4.003	18	11.5	0.546	0.103	0.1748	
1440 minute summer	18	4.004	21	15.1	0.734	0.137	1.2130	
1440 minute summer	19	6.000	20	1.6	0.294	0.023	0.3671	
1440 minute summer	20	6.001	21	3.9	0.553	0.055	0.4060	
1440 minute summer	21	1.008	24	43.3	0.815	0.153	3.6076	
1440 minute summer	22	7.000	23	2.1	0.333	0.030	0.3089	
1440 minute summer	23	7.001	24	4.6	0.577	0.065	0.4873	
1440 minute summer	24	1.009	35	53.5	1.520	0.069	3.2647	

Results for 30 year +20% CC +10% A 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	29	990	40.063	1.038	1.2	2.2290	0.0000	SURCHARGED
1440 minute summer	30	1020	40.064	1.113	10.4	2.1651	0.0000	SURCHARGED
1440 minute summer	31	990	40.064	1.134	12.7	2.2708	0.0000	SURCHARGED
1440 minute summer	34	1020	40.061	1.164	13.1	2.4647	0.0000	SURCHARGED
1440 minute summer	35	1020	40.059	0.587	59.8	1.0368	0.0000	OK
1440 minute summer	36	1020	40.060	1.252	12.2	2.2116	0.0000	OK
1440 minute summer	37	750	40.386	0.036	2.2	0.0838	0.0000	OK
1440 minute summer	38	750	40.247	0.046	3.7	0.0905	0.0000	OK
1440 minute summer	39	1020	40.060	0.116	5.6	0.2354	0.0000	OK
1440 minute summer	40	990	40.059	0.164	6.3	0.2304	0.0000	OK
1440 minute summer	41	990	40.063	1.091	7.0	2.3795	0.0000	SURCHARGED
1440 minute summer	42	1020	40.060	1.179	60.9	2.1585	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)	
1440 minute summer	29	9.000	41	6.3	0.099	0.017	12.5813	949.6	
1440 minute summer	30	9.002	31	12.4	0.159	0.034	5.0516		
1440 minute summer	31	9.003	34	12.6	0.076	0.035	7.9121		
1440 minute summer	34	9.004	42	10.3	0.043	0.028	3.6580		
1440 minute summer	35	1.010	42	59.8	0.884	0.165	6.3964		
1440 minute summer	36	Hydro-Brake®		12.2					
1440 minute summer	37	8.000	38	2.2	0.381	0.031	0.2112		
1440 minute summer	38	8.001	39	3.7	0.448	0.052	0.8596		
1440 minute summer	39	8.002	40	5.6	0.550	0.079	0.3815		
1440 minute summer	40	8.003	35	6.3	0.617	0.089	0.5396		
1440 minute summer	41	9.001	30	10.1	0.171	0.028	4.9916		
1440 minute summer	42	1.011	Tank 1	60.6	0.878	0.168	8.8199		

Results for 30 year +20% CC +10% A 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2160 minute summer	1	1140	42.296	0.021	0.7	0.0351	0.0000	OK
2160 minute summer	2	1140	42.202	0.033	1.8	0.0632	0.0000	OK
2160 minute summer	3	1140	41.908	0.053	4.7	0.1300	0.0000	OK
2160 minute summer	4	1140	42.055	0.030	1.5	0.0678	0.0000	OK
2160 minute summer	5	1140	41.604	0.068	7.7	0.1514	0.0000	OK
2160 minute summer	6	1140	41.204	0.019	0.6	0.0306	0.0000	OK
2160 minute summer	7	1140	41.025	0.074	9.5	0.1494	0.0000	OK
2160 minute summer	8	1140	40.959	0.084	10.6	0.1708	0.0000	OK
2160 minute summer	9	1140	40.932	0.081	11.8	0.1674	0.0000	OK
2160 minute summer	Tank 1	1440	40.008	1.164	44.7	691.3759	0.0000	SURCHARGED
2160 minute summer	11	1140	40.792	0.094	14.5	0.2803	0.0000	OK
2160 minute summer	12	1140	43.411	0.036	2.2	0.1022	0.0000	OK
2160 minute summer	13	1140	41.703	0.028	1.3	0.0594	0.0000	OK
2160 minute summer	15	1140	41.326	0.057	5.4	0.1255	0.0000	OK
2160 minute summer	16	1140	41.194	0.063	6.9	0.1334	0.0000	OK
2160 minute summer	17	1140	41.012	0.075	8.3	0.1813	0.0000	OK
2160 minute summer	18	1140	40.991	0.080	10.9	0.2609	0.0000	OK
2160 minute summer	19	1140	40.976	0.026	1.1	0.0509	0.0000	OK
2160 minute summer	20	1140	40.719	0.041	2.8	0.0917	0.0000	OK
2160 minute summer	21	1140	40.280	0.138	31.6	0.4657	0.0000	OK
2160 minute summer	22	1140	40.530	0.030	1.5	0.0673	0.0000	OK
2160 minute summer	23	1140	40.346	0.044	3.3	0.1224	0.0000	OK
2160 minute summer	24	1440	40.009	0.257	39.0	1.0076	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	1	1.000	2	0.7	0.266	0.018	0.0480	
2160 minute summer	2	1.001	3	1.8	0.511	0.045	0.1426	
2160 minute summer	3	1.002	5	4.7	0.580	0.066	0.4842	
2160 minute summer	4	2.000	5	1.5	0.482	0.038	0.0558	
2160 minute summer	5	1.003	7	7.7	0.607	0.070	0.3982	
2160 minute summer	6	3.000	7	0.6	0.367	0.015	0.0232	
2160 minute summer	7	1.004	8	9.5	0.563	0.085	0.4112	
2160 minute summer	8	1.005	9	10.6	0.589	0.094	0.1354	
2160 minute summer	9	1.006	11	11.8	0.606	0.107	0.9665	
2160 minute summer	Tank 1	1.012	36	12.0	0.216	0.033	8.6760	
2160 minute summer	11	1.007	21	14.5	0.721	0.131	0.5959	
2160 minute summer	12	4.000	15	2.2	0.543	0.055	0.2904	
2160 minute summer	13	5.000	15	1.3	0.463	0.033	0.1578	
2160 minute summer	15	4.001	16	5.4	0.594	0.076	0.1391	
2160 minute summer	16	4.002	17	6.9	0.498	0.062	0.8744	
2160 minute summer	17	4.003	18	8.3	0.503	0.075	0.1369	
2160 minute summer	18	4.004	21	10.9	0.671	0.099	0.9574	
2160 minute summer	19	6.000	20	1.1	0.258	0.016	0.2877	
2160 minute summer	20	6.001	21	2.8	0.501	0.040	0.3217	
2160 minute summer	21	1.008	24	31.6	0.746	0.112	2.8801	
2160 minute summer	22	7.000	23	1.5	0.301	0.021	0.2445	
2160 minute summer	23	7.001	24	3.3	0.527	0.047	0.3829	
2160 minute summer	24	1.009	35	56.3	1.408	0.073	2.8301	

Results for 30 year +20% CC +10% A 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2160 minute summer	29	1440	40.009	0.984	0.7	2.1141	0.0000	SURCHARGED
2160 minute summer	30	1440	40.008	1.057	14.8	2.0577	0.0000	SURCHARGED
2160 minute summer	31	1440	40.008	1.078	17.4	2.1585	0.0000	SURCHARGED
2160 minute summer	34	1440	40.008	1.111	19.8	2.3519	0.0000	SURCHARGED
2160 minute summer	35	1440	40.008	0.536	59.2	0.9475	0.0000	OK
2160 minute summer	36	1440	40.008	1.200	12.0	2.1211	0.0000	OK
2160 minute summer	37	1140	40.381	0.031	1.6	0.0721	0.0000	OK
2160 minute summer	38	1140	40.241	0.040	2.7	0.0778	0.0000	OK
2160 minute summer	39	1440	40.009	0.065	4.1	0.1310	0.0000	OK
2160 minute summer	40	1440	40.009	0.114	4.6	0.1599	0.0000	OK
2160 minute summer	41	1440	40.008	1.036	9.0	2.2602	0.0000	SURCHARGED
2160 minute summer	42	1440	40.008	1.127	44.8	2.0633	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	29	9.000	41	8.3	0.099	0.023	12.5813	
2160 minute summer	30	9.002	31	17.1	0.159	0.048	5.0516	
2160 minute summer	31	9.003	34	19.3	0.077	0.054	7.9121	
2160 minute summer	34	9.004	42	20.7	0.058	0.056	3.6580	
2160 minute summer	35	1.010	42	43.6	0.809	0.120	5.9376	
2160 minute summer	36	Hydro-Brake®		12.0				1259.5
2160 minute summer	37	8.000	38	1.6	0.345	0.023	0.1693	
2160 minute summer	38	8.001	39	2.7	0.410	0.038	0.4184	
2160 minute summer	39	8.002	40	4.1	0.508	0.058	0.2104	
2160 minute summer	40	8.003	35	4.6	0.566	0.065	0.3673	
2160 minute summer	41	9.001	30	14.5	0.172	0.040	4.9916	
2160 minute summer	42	1.011	Tank 1	44.7	0.640	0.124	8.8199	

Results for 100 year +20% CC +10% A 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	12	42.387	0.112	13.0	0.1905	0.0000	OK
15 minute summer	2	12	42.389	0.220	32.2	0.4262	0.0000	OK
15 minute summer	3	12	42.310	0.455	82.8	1.1250	0.0000	SURCHARGED
15 minute summer	4	10	42.164	0.139	25.8	0.3121	0.0000	OK
15 minute summer	5	12	42.093	0.557	127.4	1.2392	0.0000	SURCHARGED
15 minute summer	6	12	41.992	0.807	11.0	1.2671	0.0000	SURCHARGED
15 minute summer	7	12	41.983	1.032	146.4	2.0829	0.0000	SURCHARGED
15 minute summer	8	12	41.833	0.958	149.4	1.9448	0.0000	SURCHARGED
15 minute summer	9	12	41.742	0.891	166.6	1.8300	0.0000	SURCHARGED
15 minute summer	Tank 1	29	39.358	0.514	787.5	304.9272	0.0000	OK
15 minute summer	11	12	41.327	0.629	208.0	1.8843	0.0000	SURCHARGED
15 minute summer	12	11	43.554	0.179	39.6	0.5098	0.0000	OK
15 minute summer	13	12	41.842	0.167	23.1	0.3563	0.0000	OK
15 minute summer	15	12	41.789	0.520	90.6	1.1383	0.0000	SURCHARGED
15 minute summer	16	12	41.678	0.547	112.0	1.1642	0.0000	SURCHARGED
15 minute summer	17	12	41.497	0.560	123.4	1.3491	0.0000	SURCHARGED
15 minute summer	18	12	41.435	0.524	163.8	1.7005	0.0000	SURCHARGED
15 minute summer	19	11	41.056	0.106	20.1	0.2082	0.0000	OK
15 minute summer	20	12	40.886	0.208	49.4	0.4673	0.0000	OK
15 minute summer	21	12	40.838	0.696	455.4	2.3445	0.0000	SURCHARGED
15 minute summer	22	10	40.625	0.125	26.9	0.2801	0.0000	OK
15 minute summer	23	11	40.507	0.205	58.0	0.5677	0.0000	OK
15 minute summer	24	12	40.374	0.622	563.5	2.4382	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	12.9	0.606	0.323	0.5318	
15 minute summer	2	1.001	3	31.9	0.968	0.800	1.6041	
15 minute summer	3	1.002	5	75.6	1.128	1.070	4.2061	
15 minute summer	4	2.000	5	25.3	1.031	0.636	0.4936	
15 minute summer	5	1.003	7	119.5	1.233	1.079	3.4559	
15 minute summer	6	3.000	7	11.6	0.629	0.291	0.5629	
15 minute summer	7	1.004	8	134.0	1.215	1.205	2.6874	
15 minute summer	8	1.005	9	150.4	1.364	1.337	0.8292	
15 minute summer	9	1.006	11	167.7	1.520	1.516	5.4640	
15 minute summer	Tank 1	1.012	36	35.3	0.485	0.099	7.4436	
15 minute summer	11	1.007	21	207.1	1.881	1.867	3.1528	
15 minute summer	12	4.000	15	37.3	1.157	0.938	2.3105	
15 minute summer	13	5.000	15	22.5	0.794	0.566	2.0077	
15 minute summer	15	4.001	16	85.4	1.242	1.203	1.0776	
15 minute summer	16	4.002	17	100.9	0.930	0.913	6.9432	
15 minute summer	17	4.003	18	121.3	1.100	1.089	0.9152	
15 minute summer	18	4.004	21	160.5	1.488	1.451	5.9883	
15 minute summer	19	6.000	20	19.5	0.620	0.275	2.4156	
15 minute summer	20	6.001	21	45.7	0.951	0.645	3.5297	
15 minute summer	21	1.008	24	453.6	1.674	1.604	17.0832	
15 minute summer	22	7.000	23	26.3	0.717	0.371	1.9120	
15 minute summer	23	7.001	24	57.2	1.091	0.808	3.5971	
15 minute summer	24	1.009	35	565.4	2.007	0.731	4.5860	

Results for 100 year +20% CC +10% A 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	13	39.515	0.490	34.1	1.0522	0.0000	OK
15 minute summer	30	13	39.504	0.553	87.8	1.0769	0.0000	OK
15 minute summer	31	13	39.494	0.564	89.0	1.1294	0.0000	OK
15 minute summer	34	13	39.492	0.595	115.9	1.2597	0.0000	OK
15 minute summer	35	12	40.168	0.696	634.3	1.2296	0.0000	SURCHARGED
15 minute summer	36	24	39.381	0.573	35.3	1.0117	0.0000	OK
15 minute summer	37	10	40.483	0.133	29.0	0.3088	0.0000	OK
15 minute summer	38	11	40.377	0.176	48.2	0.3448	0.0000	OK
15 minute summer	39	12	40.296	0.352	70.5	0.7136	0.0000	SURCHARGED
15 minute summer	40	12	40.239	0.344	72.8	0.4833	0.0000	SURCHARGED
15 minute summer	41	12	39.494	0.522	51.5	1.1384	0.0000	OK
15 minute summer	42	13	39.534	0.653	686.8	1.1951	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	29	9.000	41	-23.1	-0.244	-0.064	10.1076	
15 minute summer	30	9.002	31	87.0	0.336	0.243	4.4695	
15 minute summer	31	9.003	34	111.3	0.369	0.310	7.2218	
15 minute summer	34	9.004	42	88.0	-0.338	0.239	3.5165	
15 minute summer	35	1.010	42	634.6	1.889	1.748	6.1465	
15 minute summer	36	Hydro-Brake®		11.0				157.5
15 minute summer	37	8.000	38	28.8	0.805	0.407	1.3104	
15 minute summer	38	8.001	39	47.0	0.819	0.665	3.5605	
15 minute summer	39	8.002	40	64.7	0.975	0.909	0.8331	
15 minute summer	40	8.003	35	70.9	1.193	0.999	0.8209	
15 minute summer	41	9.001	30	85.9	0.353	0.238	4.2593	
15 minute summer	42	1.011	Tank 1	787.5	3.871	2.187	6.9682	

Results for 100 year +20% CC +10% A 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	20	42.408	0.133	12.5	0.2257	0.0000	OK
30 minute summer	2	20	42.408	0.238	31.1	0.4615	0.0000	SURCHARGED
30 minute summer	3	19	42.319	0.464	80.0	1.1468	0.0000	SURCHARGED
30 minute summer	4	18	42.162	0.137	24.9	0.3072	0.0000	OK
30 minute summer	5	19	42.105	0.569	120.7	1.2655	0.0000	SURCHARGED
30 minute summer	6	19	41.992	0.807	9.8	1.2671	0.0000	SURCHARGED
30 minute summer	7	19	41.985	1.034	134.0	2.0874	0.0000	SURCHARGED
30 minute summer	8	19	41.837	0.962	150.1	1.9535	0.0000	SURCHARGED
30 minute summer	9	19	41.747	0.896	167.2	1.8416	0.0000	SURCHARGED
30 minute summer	Tank 1	42	39.566	0.722	763.3	428.7061	0.0000	SURCHARGED
30 minute summer	11	19	41.335	0.637	208.6	1.9092	0.0000	SURCHARGED
30 minute summer	12	18	43.550	0.175	38.2	0.4974	0.0000	OK
30 minute summer	13	20	41.849	0.174	22.2	0.3705	0.0000	OK
30 minute summer	15	19	41.798	0.529	89.9	1.1562	0.0000	SURCHARGED
30 minute summer	16	19	41.686	0.555	105.5	1.1815	0.0000	SURCHARGED
30 minute summer	17	19	41.500	0.563	123.5	1.3569	0.0000	SURCHARGED
30 minute summer	18	19	41.437	0.526	163.0	1.7050	0.0000	SURCHARGED
30 minute summer	19	18	41.055	0.105	19.4	0.2067	0.0000	OK
30 minute summer	20	20	40.899	0.221	48.2	0.4963	0.0000	OK
30 minute summer	21	19	40.841	0.699	453.6	2.3545	0.0000	SURCHARGED
30 minute summer	22	18	40.624	0.124	26.0	0.2779	0.0000	OK
30 minute summer	23	18	40.504	0.202	56.5	0.5591	0.0000	OK
30 minute summer	24	19	40.369	0.617	570.3	2.4185	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	12.6	0.602	0.315	0.5755	
30 minute summer	2	1.001	3	32.3	0.962	0.812	1.6091	
30 minute summer	3	1.002	5	71.2	1.129	1.007	4.2061	
30 minute summer	4	2.000	5	24.9	1.030	0.625	0.5258	
30 minute summer	5	1.003	7	110.3	1.246	0.997	3.4559	
30 minute summer	6	3.000	7	10.5	0.602	0.264	0.5629	
30 minute summer	7	1.004	8	133.4	1.210	1.201	2.6874	
30 minute summer	8	1.005	9	149.8	1.358	1.332	0.8292	
30 minute summer	9	1.006	11	166.8	1.513	1.509	5.4640	
30 minute summer	Tank 1	1.012	36	26.7	0.367	0.074	8.6760	
30 minute summer	11	1.007	21	208.3	1.892	1.879	3.1558	
30 minute summer	12	4.000	15	36.5	1.155	0.919	2.2652	
30 minute summer	13	5.000	15	22.1	0.757	0.555	2.0438	
30 minute summer	15	4.001	16	79.7	1.246	1.123	1.0776	
30 minute summer	16	4.002	17	101.8	0.923	0.922	6.9432	
30 minute summer	17	4.003	18	122.6	1.111	1.100	0.9152	
30 minute summer	18	4.004	21	159.3	1.479	1.441	5.9789	
30 minute summer	19	6.000	20	19.2	0.594	0.271	2.4882	
30 minute summer	20	6.001	21	45.1	0.917	0.637	3.6300	
30 minute summer	21	1.008	24	451.6	1.668	1.597	17.0643	
30 minute summer	22	7.000	23	25.9	0.687	0.366	1.8878	
30 minute summer	23	7.001	24	55.4	1.074	0.783	3.6428	
30 minute summer	24	1.009	35	560.2	1.989	0.725	4.5860	

Results for 100 year +20% CC +10% A 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	29	43	39.567	0.542	18.8	1.1639	0.0000	OK
30 minute summer	30	43	39.567	0.616	65.6	1.1985	0.0000	OK
30 minute summer	31	43	39.567	0.637	87.0	1.2749	0.0000	OK
30 minute summer	34	43	39.567	0.670	96.8	1.4173	0.0000	OK
30 minute summer	35	19	40.161	0.689	629.6	1.2175	0.0000	SURCHARGED
30 minute summer	36	42	39.566	0.758	26.7	1.3394	0.0000	OK
30 minute summer	37	18	40.480	0.130	28.0	0.3016	0.0000	OK
30 minute summer	38	18	40.374	0.173	46.8	0.3393	0.0000	OK
30 minute summer	39	19	40.295	0.351	69.6	0.7110	0.0000	SURCHARGED
30 minute summer	40	19	40.234	0.339	71.8	0.4768	0.0000	SURCHARGED
30 minute summer	41	43	39.567	0.595	57.4	1.2975	0.0000	OK
30 minute summer	42	43	39.566	0.685	717.3	1.2548	0.0000	SURCHARGED
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	29	9.000	41	43.9	0.171	0.122	11.2815	
30 minute summer	30	9.002	31	80.6	0.300	0.225	4.8868	
30 minute summer	31	9.003	34	86.1	0.282	0.240	7.8186	
30 minute summer	34	9.004	42	87.3	0.277	0.237	3.6556	
30 minute summer	35	1.010	42	628.0	1.882	1.730	6.1338	
30 minute summer	36	Hydro-Brake®		11.0				149.2
30 minute summer	37	8.000	38	28.1	0.796	0.397	1.2951	
30 minute summer	38	8.001	39	45.8	0.809	0.647	3.5163	
30 minute summer	39	8.002	40	63.6	0.957	0.893	0.8331	
30 minute summer	40	8.003	35	69.5	1.167	0.979	0.8209	
30 minute summer	41	9.001	30	61.2	0.294	0.170	4.7177	
30 minute summer	42	1.011	Tank 1	763.3	3.251	2.119	8.8199	



Results for 100 year +20% CC +10% A 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.85%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	33	42.351	0.076	10.0	0.1290	0.0000	OK
60 minute summer	2	33	42.298	0.129	24.9	0.2503	0.0000	OK
60 minute summer	3	33	42.086	0.231	64.3	0.5721	0.0000	OK
60 minute summer	4	33	42.143	0.118	19.9	0.2661	0.0000	OK
60 minute summer	5	35	41.844	0.308	103.7	0.6858	0.0000	OK
60 minute summer	6	34	41.754	0.569	7.8	0.8944	0.0000	SURCHARGED
60 minute summer	7	35	41.748	0.797	125.4	1.6099	0.0000	SURCHARGED
60 minute summer	8	34	41.628	0.753	134.2	1.5304	0.0000	SURCHARGED
60 minute summer	9	34	41.557	0.706	148.3	1.4516	0.0000	SURCHARGED
60 minute summer	Tank 1	71	39.818	0.974	555.3	578.1837	0.0000	SURCHARGED
60 minute summer	11	34	41.232	0.534	183.2	1.6010	0.0000	SURCHARGED
60 minute summer	12	33	43.523	0.148	30.5	0.4214	0.0000	OK
60 minute summer	13	33	41.779	0.104	17.8	0.2222	0.0000	OK
60 minute summer	15	35	41.549	0.280	73.0	0.6117	0.0000	OK
60 minute summer	16	35	41.474	0.343	92.2	0.7300	0.0000	OK
60 minute summer	17	34	41.353	0.416	103.9	1.0030	0.0000	SURCHARGED
60 minute summer	18	34	41.310	0.399	135.7	1.2938	0.0000	SURCHARGED
60 minute summer	19	33	41.044	0.094	15.5	0.1840	0.0000	OK
60 minute summer	20	33	40.832	0.154	38.6	0.3446	0.0000	OK
60 minute summer	21	35	40.751	0.609	398.7	2.0499	0.0000	SURCHARGED
60 minute summer	22	33	40.610	0.110	20.8	0.2463	0.0000	OK
60 minute summer	23	34	40.477	0.175	45.2	0.4855	0.0000	OK
60 minute summer	24	35	40.238	0.486	485.6	1.9069	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	10.0	0.566	0.251	0.3174	
60 minute summer	2	1.001	3	25.0	0.967	0.628	1.0738	
60 minute summer	3	1.002	5	63.6	1.130	0.899	3.4708	
60 minute summer	4	2.000	5	19.9	0.978	0.499	0.3644	
60 minute summer	5	1.003	7	102.6	1.203	0.926	3.0438	
60 minute summer	6	3.000	7	9.4	0.595	0.234	0.5629	
60 minute summer	7	1.004	8	121.3	1.100	1.091	2.6874	
60 minute summer	8	1.005	9	134.8	1.222	1.199	0.8292	
60 minute summer	9	1.006	11	148.9	1.350	1.347	5.4640	
60 minute summer	Tank 1	1.012	36	19.8	0.302	0.055	8.6760	
60 minute summer	11	1.007	21	182.9	1.674	1.649	3.0894	
60 minute summer	12	4.000	15	29.9	1.100	0.751	1.9489	
60 minute summer	13	5.000	15	17.7	0.745	0.446	1.5381	
60 minute summer	15	4.001	16	71.6	1.195	1.009	1.0312	
60 minute summer	16	4.002	17	86.4	0.875	0.782	6.7979	
60 minute summer	17	4.003	18	102.4	0.928	0.919	0.9152	
60 minute summer	18	4.004	21	134.3	1.294	1.214	5.7557	
60 minute summer	19	6.000	20	15.4	0.562	0.217	1.8295	
60 minute summer	20	6.001	21	37.8	0.908	0.533	3.0706	
60 minute summer	21	1.008	24	394.5	1.544	1.395	16.5318	
60 minute summer	22	7.000	23	20.7	0.639	0.293	1.5974	
60 minute summer	23	7.001	24	44.6	1.068	0.631	2.6694	
60 minute summer	24	1.009	35	487.0	1.895	0.630	4.1723	

Results for 100 year +20% CC +10% A 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.85%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	29	71	39.818	0.793	16.4	1.7032	0.0000	SURCHARGED
60 minute summer	30	69	39.821	0.870	50.2	1.6933	0.0000	SURCHARGED
60 minute summer	31	71	39.821	0.891	46.4	1.7832	0.0000	SURCHARGED
60 minute summer	34	69	39.818	0.921	53.7	1.9499	0.0000	SURCHARGED
60 minute summer	35	35	40.089	0.617	545.2	1.0903	0.0000	OK
60 minute summer	36	71	39.818	1.010	19.8	1.7842	0.0000	OK
60 minute summer	37	33	40.464	0.114	22.4	0.2662	0.0000	OK
60 minute summer	38	33	40.352	0.151	37.4	0.2969	0.0000	OK
60 minute summer	39	34	40.187	0.243	55.9	0.4928	0.0000	OK
60 minute summer	40	35	40.144	0.249	60.3	0.3506	0.0000	OK
60 minute summer	41	73	39.820	0.848	31.3	1.8489	0.0000	SURCHARGED
60 minute summer	42	70	39.818	0.937	548.6	1.7158	0.0000	SURCHARGED
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	29	9.000	41	12.4	0.154	0.034	12.5813	
60 minute summer	30	9.002	31	39.4	0.276	0.110	5.0516	
60 minute summer	31	9.003	34	42.0	0.165	0.117	7.9121	
60 minute summer	34	9.004	42	40.8	0.157	0.111	3.6580	
60 minute summer	35	1.010	42	546.6	1.773	1.506	5.7946	
60 minute summer	36	Hydro-Brake®		11.0				176.5
60 minute summer	37	8.000	38	22.4	0.749	0.316	1.0967	
60 minute summer	38	8.001	39	36.8	0.771	0.521	3.0361	
60 minute summer	39	8.002	40	54.0	0.922	0.758	0.7299	
60 minute summer	40	8.003	35	59.6	1.122	0.840	0.7196	
60 minute summer	41	9.001	30	43.6	0.263	0.121	4.9916	
60 minute summer	42	1.011	Tank 1	555.3	2.349	1.542	8.8199	

Results for 100 year +20% CC +10% A 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	64	42.338	0.063	7.0	0.1073	0.0000	OK
120 minute summer	2	64	42.275	0.106	17.4	0.2054	0.0000	OK
120 minute summer	3	64	42.032	0.177	44.7	0.4380	0.0000	OK
120 minute summer	4	64	42.121	0.096	13.9	0.2152	0.0000	OK
120 minute summer	5	64	41.765	0.229	72.6	0.5088	0.0000	OK
120 minute summer	6	66	41.289	0.104	5.4	0.1636	0.0000	OK
120 minute summer	7	66	41.287	0.336	88.5	0.6791	0.0000	OK
120 minute summer	8	66	41.236	0.361	97.7	0.7339	0.0000	OK
120 minute summer	9	66	41.200	0.349	107.8	0.7172	0.0000	OK
120 minute summer	Tank 1	128	40.088	1.244	396.8	738.5573	0.0000	SURCHARGED
120 minute summer	11	66	41.060	0.362	131.9	1.0855	0.0000	OK
120 minute summer	12	64	43.493	0.118	21.3	0.3364	0.0000	OK
120 minute summer	13	64	41.760	0.085	12.4	0.1822	0.0000	OK
120 minute summer	15	64	41.471	0.202	51.3	0.4409	0.0000	OK
120 minute summer	16	64	41.334	0.203	65.5	0.4326	0.0000	OK
120 minute summer	17	64	41.232	0.295	78.5	0.7105	0.0000	OK
120 minute summer	18	66	41.200	0.289	102.1	0.9361	0.0000	OK
120 minute summer	19	64	41.028	0.078	10.8	0.1534	0.0000	OK
120 minute summer	20	64	40.805	0.127	27.0	0.2845	0.0000	OK
120 minute summer	21	66	40.609	0.467	289.0	1.5722	0.0000	OK
120 minute summer	22	64	40.591	0.091	14.5	0.2041	0.0000	OK
120 minute summer	23	64	40.444	0.142	31.5	0.3925	0.0000	OK
120 minute summer	24	66	40.127	0.375	355.5	1.4706	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	7.0	0.516	0.176	0.2469	
120 minute summer	2	1.001	3	17.4	0.963	0.436	0.7301	
120 minute summer	3	1.002	5	44.5	1.079	0.629	2.4612	
120 minute summer	4	2.000	5	13.9	0.895	0.349	0.2781	
120 minute summer	5	1.003	7	72.3	1.123	0.653	2.0183	
120 minute summer	6	3.000	7	5.4	0.586	0.136	0.3760	
120 minute summer	7	1.004	8	87.1	0.849	0.784	2.5976	
120 minute summer	8	1.005	9	96.8	0.925	0.861	0.8116	
120 minute summer	9	1.006	11	107.5	0.994	0.972	5.3509	
120 minute summer	Tank 1	1.012	36	15.7	0.261	0.044	8.6760	
120 minute summer	11	1.007	21	131.7	1.332	1.187	2.8638	
120 minute summer	12	4.000	15	21.2	1.018	0.533	1.4920	
120 minute summer	13	5.000	15	12.4	0.741	0.312	1.0352	
120 minute summer	15	4.001	16	51.1	1.097	0.720	0.7125	
120 minute summer	16	4.002	17	65.2	0.841	0.590	4.8430	
120 minute summer	17	4.003	18	77.3	0.842	0.694	0.7626	
120 minute summer	18	4.004	21	101.0	1.233	0.913	4.8094	
120 minute summer	19	6.000	20	10.8	0.507	0.152	1.4237	
120 minute summer	20	6.001	21	27.0	0.883	0.382	1.9470	
120 minute summer	21	1.008	24	289.6	1.415	1.024	13.7737	
120 minute summer	22	7.000	23	14.5	0.579	0.205	1.2306	
120 minute summer	23	7.001	24	31.1	0.979	0.440	1.9432	
120 minute summer	24	1.009	35	355.9	1.781	0.460	3.4918	



Results for 100 year +20% CC +10% A 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	29	124	40.095	1.070	9.4	2.2980	0.0000	SURCHARGED
120 minute summer	30	124	40.095	1.144	10.6	2.2268	0.0000	SURCHARGED
120 minute summer	31	128	40.088	1.158	11.0	2.3179	0.0000	SURCHARGED
120 minute summer	34	124	40.091	1.194	15.0	2.5267	0.0000	SURCHARGED
120 minute summer	35	128	40.087	0.615	398.3	1.0869	0.0000	OK
120 minute summer	36	128	40.088	1.280	15.7	2.2615	0.0000	OK
120 minute summer	37	64	40.445	0.095	15.6	0.2200	0.0000	OK
120 minute summer	38	64	40.325	0.124	26.0	0.2430	0.0000	OK
120 minute summer	39	64	40.127	0.183	39.2	0.3701	0.0000	OK
120 minute summer	40	130	40.088	0.193	43.5	0.2718	0.0000	OK
120 minute summer	41	124	40.092	1.120	14.0	2.4424	0.0000	SURCHARGED
120 minute summer	42	130	40.087	1.206	401.1	2.2082	0.0000	SURCHARGED
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	29	9.000	41	-4.5	0.134	-0.013	12.5813	
120 minute summer	30	9.002	31	8.5	0.244	0.024	5.0516	
120 minute summer	31	9.003	34	10.3	0.142	0.029	7.9121	
120 minute summer	34	9.004	42	13.8	0.123	0.038	3.6580	
120 minute summer	35	1.010	42	399.2	1.576	1.099	6.6003	
120 minute summer	36	Hydro-Brake®		12.3				232.0
120 minute summer	37	8.000	38	15.6	0.677	0.220	0.8450	
120 minute summer	38	8.001	39	25.9	0.716	0.366	2.2736	
120 minute summer	39	8.002	40	38.9	0.866	0.547	0.5319	
120 minute summer	40	8.003	35	43.4	1.039	0.612	0.6312	
120 minute summer	41	9.001	30	6.8	0.239	0.019	4.9916	
120 minute summer	42	1.011	Tank 1	396.8	1.860	1.102	8.8199	

Results for 100 year +20% CC +10% A 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	96	42.331	0.056	5.4	0.0941	0.0000	OK
180 minute summer	2	96	42.260	0.091	13.4	0.1770	0.0000	OK
180 minute summer	3	96	42.006	0.151	34.5	0.3727	0.0000	OK
180 minute summer	4	96	42.108	0.083	10.7	0.1857	0.0000	OK
180 minute summer	5	96	41.732	0.196	56.2	0.4351	0.0000	OK
180 minute summer	6	96	41.234	0.049	4.2	0.0769	0.0000	OK
180 minute summer	7	96	41.203	0.252	69.3	0.5078	0.0000	OK
180 minute summer	8	96	41.154	0.279	77.3	0.5658	0.0000	OK
180 minute summer	9	96	41.115	0.264	85.8	0.5423	0.0000	OK
180 minute summer	Tank 1	188	40.239	1.395	315.7	828.3604	0.0000	SURCHARGED
180 minute summer	11	96	40.994	0.296	105.7	0.8869	0.0000	OK
180 minute summer	12	96	43.476	0.101	16.4	0.2889	0.0000	OK
180 minute summer	13	96	41.750	0.075	9.6	0.1591	0.0000	OK
180 minute summer	15	96	41.440	0.171	39.7	0.3748	0.0000	OK
180 minute summer	16	96	41.306	0.175	50.8	0.3728	0.0000	OK
180 minute summer	17	96	41.183	0.246	61.1	0.5942	0.0000	OK
180 minute summer	18	96	41.154	0.243	80.0	0.7868	0.0000	OK
180 minute summer	19	96	41.019	0.069	8.3	0.1345	0.0000	OK
180 minute summer	20	96	40.791	0.113	20.8	0.2524	0.0000	OK
180 minute summer	21	96	40.542	0.400	230.4	1.3475	0.0000	OK
180 minute summer	22	96	40.580	0.080	11.2	0.1789	0.0000	OK
180 minute summer	23	96	40.425	0.123	24.3	0.3395	0.0000	OK
180 minute summer	24	188	40.238	0.486	283.4	1.9058	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	5.4	0.483	0.135	0.2037	
180 minute summer	2	1.001	3	13.4	0.901	0.336	0.6018	
180 minute summer	3	1.002	5	34.5	1.007	0.488	2.0461	
180 minute summer	4	2.000	5	10.7	0.837	0.268	0.2291	
180 minute summer	5	1.003	7	56.2	1.046	0.507	1.6827	
180 minute summer	6	3.000	7	4.2	0.577	0.105	0.1679	
180 minute summer	7	1.004	8	69.2	0.833	0.623	2.0269	
180 minute summer	8	1.005	9	77.2	0.905	0.687	0.6416	
180 minute summer	9	1.006	11	85.7	0.971	0.775	4.3643	
180 minute summer	Tank 1	1.012	36	13.8	0.249	0.039	8.6760	
180 minute summer	11	1.007	21	105.3	1.252	0.949	2.4790	
180 minute summer	12	4.000	15	16.4	0.955	0.412	1.2297	
180 minute summer	13	5.000	15	9.6	0.734	0.241	0.7793	
180 minute summer	15	4.001	16	39.7	1.019	0.559	0.5959	
180 minute summer	16	4.002	17	50.8	0.796	0.459	4.0040	
180 minute summer	17	4.003	18	60.9	0.800	0.547	0.6313	
180 minute summer	18	4.004	21	79.6	1.157	0.720	4.0518	
180 minute summer	19	6.000	20	8.3	0.467	0.117	1.2023	
180 minute summer	20	6.001	21	20.7	0.876	0.293	1.3633	
180 minute summer	21	1.008	24	229.1	1.318	0.810	11.7500	
180 minute summer	22	7.000	23	11.2	0.541	0.158	1.0195	
180 minute summer	23	7.001	24	24.3	0.914	0.343	1.6219	
180 minute summer	24	1.009	35	283.1	1.721	0.366	4.2833	

Results for 100 year +20% CC +10% A 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	29	188	40.240	1.215	6.7	2.6089	0.0000	SURCHARGED
180 minute summer	30	188	40.241	1.290	10.6	2.5112	0.0000	SURCHARGED
180 minute summer	31	188	40.239	1.309	12.5	2.6203	0.0000	SURCHARGED
180 minute summer	34	192	40.239	1.342	16.6	2.8414	0.0000	SURCHARGED
180 minute summer	35	188	40.239	0.767	316.9	1.3558	0.0000	SURCHARGED
180 minute summer	36	188	40.239	1.431	13.8	2.5287	0.0000	OK
180 minute summer	37	96	40.433	0.083	12.0	0.1922	0.0000	OK
180 minute summer	38	96	40.309	0.108	20.1	0.2117	0.0000	OK
180 minute summer	39	188	40.238	0.294	30.3	0.5965	0.0000	OK
180 minute summer	40	188	40.239	0.344	33.8	0.4836	0.0000	SURCHARGED
180 minute summer	41	188	40.239	1.267	10.1	2.7628	0.0000	SURCHARGED
180 minute summer	42	196	40.238	1.357	317.4	2.4839	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	29	9.000	41	3.3	0.128	0.009	12.5813	
180 minute summer	30	9.002	31	9.9	0.220	0.028	5.0516	
180 minute summer	31	9.003	34	11.8	0.127	0.033	7.9121	
180 minute summer	34	9.004	42	15.5	0.065	0.042	3.6580	
180 minute summer	35	1.010	42	316.2	1.454	0.871	6.8033	
180 minute summer	36	Hydro-Brake®		13.0				279.8
180 minute summer	37	8.000	38	12.0	0.628	0.169	0.7013	
180 minute summer	38	8.001	39	20.1	0.679	0.284	2.3544	
180 minute summer	39	8.002	40	30.3	0.820	0.425	0.8312	
180 minute summer	40	8.003	35	33.8	0.966	0.476	0.8209	
180 minute summer	41	9.001	30	8.1	0.219	0.022	4.9916	
180 minute summer	42	1.011	Tank 1	315.7	1.677	0.877	8.8199	



Results for 100 year +20% CC +10% A 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	42.326	0.051	4.6	0.0866	0.0000	OK
240 minute summer	2	124	42.252	0.083	11.5	0.1613	0.0000	OK
240 minute summer	3	124	41.991	0.136	29.5	0.3372	0.0000	OK
240 minute summer	4	124	42.101	0.076	9.2	0.1705	0.0000	OK
240 minute summer	5	124	41.713	0.177	47.7	0.3939	0.0000	OK
240 minute summer	6	124	41.230	0.045	3.6	0.0711	0.0000	OK
240 minute summer	7	124	41.169	0.218	58.4	0.4398	0.0000	OK
240 minute summer	8	124	41.118	0.243	65.1	0.4930	0.0000	OK
240 minute summer	9	124	41.080	0.229	72.1	0.4697	0.0000	OK
240 minute summer	Tank 1	248	40.333	1.489	280.5	883.8293	0.0000	SURCHARGED
240 minute summer	11	128	40.958	0.260	88.6	0.7801	0.0000	OK
240 minute summer	12	124	43.467	0.092	14.1	0.2629	0.0000	OK
240 minute summer	13	124	41.743	0.068	8.2	0.1459	0.0000	OK
240 minute summer	15	124	41.424	0.155	33.8	0.3381	0.0000	OK
240 minute summer	16	124	41.290	0.159	43.0	0.3382	0.0000	OK
240 minute summer	17	124	41.155	0.218	51.6	0.5253	0.0000	OK
240 minute summer	18	128	41.126	0.215	67.4	0.6989	0.0000	OK
240 minute summer	19	124	41.013	0.063	7.2	0.1244	0.0000	OK
240 minute summer	20	124	40.781	0.103	17.9	0.2299	0.0000	OK
240 minute summer	21	128	40.502	0.360	192.4	1.2132	0.0000	OK
240 minute summer	22	124	40.574	0.074	9.6	0.1648	0.0000	OK
240 minute summer	23	124	40.413	0.111	20.8	0.3085	0.0000	OK
240 minute summer	24	248	40.332	0.580	238.2	2.2748	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	4.6	0.460	0.115	0.1803	
240 minute summer	2	1.001	3	11.3	0.861	0.284	0.5316	
240 minute summer	3	1.002	5	29.0	0.959	0.411	1.8088	
240 minute summer	4	2.000	5	9.1	0.801	0.229	0.2042	
240 minute summer	5	1.003	7	47.3	0.996	0.427	1.4873	
240 minute summer	6	3.000	7	3.6	0.578	0.090	0.1114	
240 minute summer	7	1.004	8	58.1	0.818	0.522	1.7278	
240 minute summer	8	1.005	9	64.7	0.887	0.575	0.5479	
240 minute summer	9	1.006	11	71.4	0.941	0.646	3.7572	
240 minute summer	Tank 1	1.012	36	13.4	0.243	0.038	8.6760	
240 minute summer	11	1.007	21	88.3	1.191	0.797	2.1938	
240 minute summer	12	4.000	15	13.8	0.913	0.348	1.0858	
240 minute summer	13	5.000	15	8.1	0.738	0.204	0.6395	
240 minute summer	15	4.001	16	33.4	0.970	0.471	0.5275	
240 minute summer	16	4.002	17	42.7	0.771	0.386	3.4867	
240 minute summer	17	4.003	18	50.9	0.772	0.457	0.5469	
240 minute summer	18	4.004	21	66.8	1.105	0.604	3.5603	
240 minute summer	19	6.000	20	7.1	0.448	0.100	1.0650	
240 minute summer	20	6.001	21	17.4	0.833	0.246	1.2023	
240 minute summer	21	1.008	24	194.0	1.257	0.686	10.4481	
240 minute summer	22	7.000	23	9.5	0.516	0.135	0.9005	
240 minute summer	23	7.001	24	20.3	0.870	0.288	2.2103	
240 minute summer	24	1.009	35	238.5	1.688	0.309	4.5635	

Results for 100 year +20% CC +10% A 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	29	244	40.336	1.311	5.7	2.8168	0.0000	SURCHARGED
240 minute summer	30	244	40.335	1.384	9.6	2.6932	0.0000	SURCHARGED
240 minute summer	31	244	40.336	1.406	11.4	2.8149	0.0000	SURCHARGED
240 minute summer	34	244	40.333	1.436	15.1	3.0404	0.0000	SURCHARGED
240 minute summer	35	244	40.332	0.860	266.4	1.5203	0.0000	SURCHARGED
240 minute summer	36	248	40.332	1.524	13.4	2.6938	0.0000	OK
240 minute summer	37	124	40.427	0.077	10.4	0.1782	0.0000	OK
240 minute summer	38	248	40.332	0.131	17.2	0.2574	0.0000	OK
240 minute summer	39	244	40.332	0.388	25.8	0.7857	0.0000	SURCHARGED
240 minute summer	40	248	40.333	0.438	28.5	0.6156	0.0000	SURCHARGED
240 minute summer	41	244	40.337	1.365	8.4	2.9762	0.0000	SURCHARGED
240 minute summer	42	244	40.333	1.452	281.4	2.6579	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	29	9.000	41	2.4	0.121	0.007	12.5813	
240 minute summer	30	9.002	31	8.8	0.230	0.025	5.0516	
240 minute summer	31	9.003	34	10.7	0.117	0.030	7.9121	
240 minute summer	34	9.004	42	14.3	0.094	0.039	3.6580	
240 minute summer	35	1.010	42	267.1	1.377	0.736	6.8033	
240 minute summer	36	Hydro-Brake®		13.4				325.8
240 minute summer	37	8.000	38	10.3	0.603	0.146	0.6252	
240 minute summer	38	8.001	39	17.0	0.655	0.240	3.1436	
240 minute summer	39	8.002	40	25.5	0.790	0.358	0.8331	
240 minute summer	40	8.003	35	28.3	0.919	0.399	0.8209	
240 minute summer	41	9.001	30	7.1	0.200	0.020	4.9916	
240 minute summer	42	1.011	Tank 1	280.5	1.550	0.779	8.8199	

Results for 100 year +20% CC +10% A 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	42.320	0.045	3.6	0.0767	0.0000	OK
360 minute summer	2	184	42.242	0.073	8.9	0.1405	0.0000	OK
360 minute summer	3	184	41.973	0.118	22.8	0.2914	0.0000	OK
360 minute summer	4	184	42.091	0.066	7.2	0.1494	0.0000	OK
360 minute summer	5	184	41.689	0.153	36.9	0.3405	0.0000	OK
360 minute summer	6	184	41.226	0.041	2.8	0.0645	0.0000	OK
360 minute summer	7	184	41.133	0.182	45.2	0.3671	0.0000	OK
360 minute summer	8	184	41.079	0.204	50.5	0.4150	0.0000	OK
360 minute summer	9	184	41.043	0.192	55.9	0.3943	0.0000	OK
360 minute summer	Tank 1	368	40.432	1.588	211.8	942.8284	0.0000	SURCHARGED
360 minute summer	11	184	40.918	0.220	68.8	0.6597	0.0000	OK
360 minute summer	12	184	43.456	0.080	11.0	0.2292	0.0000	OK
360 minute summer	13	184	41.736	0.061	6.4	0.1296	0.0000	OK
360 minute summer	15	184	41.403	0.134	26.2	0.2923	0.0000	OK
360 minute summer	16	184	41.270	0.139	33.5	0.2949	0.0000	OK
360 minute summer	17	184	41.122	0.185	40.1	0.4466	0.0000	OK
360 minute summer	18	184	41.095	0.184	52.3	0.5984	0.0000	OK
360 minute summer	19	184	41.006	0.056	5.6	0.1099	0.0000	OK
360 minute summer	20	184	40.767	0.089	13.8	0.2004	0.0000	OK
360 minute summer	21	184	40.450	0.308	149.4	1.0370	0.0000	OK
360 minute summer	22	184	40.565	0.065	7.5	0.1455	0.0000	OK
360 minute summer	23	360	40.433	0.131	16.2	0.3615	0.0000	OK
360 minute summer	24	360	40.432	0.680	183.0	2.6678	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	3.6	0.433	0.090	0.1499	
360 minute summer	2	1.001	3	8.7	0.803	0.219	0.4408	
360 minute summer	3	1.002	5	22.5	0.894	0.318	1.5012	
360 minute summer	4	2.000	5	7.1	0.750	0.179	0.1705	
360 minute summer	5	1.003	7	36.6	0.928	0.330	1.2356	
360 minute summer	6	3.000	7	2.8	0.574	0.070	0.0685	
360 minute summer	7	1.004	8	45.0	0.788	0.405	1.3924	
360 minute summer	8	1.005	9	50.2	0.850	0.446	0.4438	
360 minute summer	9	1.006	11	55.4	0.894	0.501	3.0698	
360 minute summer	Tank 1	1.012	36	13.8	0.227	0.039	8.6760	
360 minute summer	11	1.007	21	67.9	1.102	0.612	1.8248	
360 minute summer	12	4.000	15	10.8	0.854	0.271	0.9038	
360 minute summer	13	5.000	15	6.3	0.734	0.158	0.4811	
360 minute summer	15	4.001	16	26.1	0.906	0.368	0.4410	
360 minute summer	16	4.002	17	33.2	0.729	0.301	2.8696	
360 minute summer	17	4.003	18	39.5	0.731	0.355	0.4487	
360 minute summer	18	4.004	21	51.5	1.026	0.465	2.9565	
360 minute summer	19	6.000	20	5.5	0.420	0.078	0.8845	
360 minute summer	20	6.001	21	13.4	0.776	0.190	0.9969	
360 minute summer	21	1.008	24	147.1	1.157	0.520	11.4329	
360 minute summer	22	7.000	23	7.4	0.483	0.105	0.7599	
360 minute summer	23	7.001	24	15.8	0.812	0.224	3.0513	
360 minute summer	24	1.009	35	182.6	1.642	0.236	4.5860	

Results for 100 year +20% CC +10% A 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	29	360	40.434	1.409	3.6	3.0263	0.0000	SURCHARGED
360 minute summer	30	360	40.436	1.485	8.7	2.8889	0.0000	SURCHARGED
360 minute summer	31	360	40.435	1.505	10.4	3.0137	0.0000	SURCHARGED
360 minute summer	34	360	40.432	1.535	13.5	3.2506	0.0000	SURCHARGED
360 minute summer	35	360	40.432	0.960	204.7	1.6972	0.0000	SURCHARGED
360 minute summer	36	368	40.432	1.624	13.8	2.8694	0.0000	OK
360 minute summer	37	360	40.432	0.082	8.1	0.1904	0.0000	OK
360 minute summer	38	360	40.432	0.231	13.4	0.4527	0.0000	OK
360 minute summer	39	360	40.432	0.488	20.1	0.9879	0.0000	SURCHARGED
360 minute summer	40	368	40.433	0.538	22.3	0.7571	0.0000	SURCHARGED
360 minute summer	41	360	40.434	1.462	7.1	3.1878	0.0000	SURCHARGED
360 minute summer	42	368	40.434	1.553	212.4	2.8444	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	29	9.000	41	2.5	0.108	0.007	12.5813	
360 minute summer	30	9.002	31	8.2	0.213	0.023	5.0516	
360 minute summer	31	9.003	34	9.9	0.106	0.028	7.9121	
360 minute summer	34	9.004	42	13.3	0.056	0.036	3.6580	
360 minute summer	35	1.010	42	203.9	1.265	0.562	6.8033	
360 minute summer	36	Hydro-Brake®		13.8				411.6
360 minute summer	37	8.000	38	8.0	0.561	0.113	1.3412	
360 minute summer	38	8.001	39	13.2	0.619	0.187	4.0410	
360 minute summer	39	8.002	40	19.9	0.746	0.279	0.8331	
360 minute summer	40	8.003	35	22.1	0.859	0.312	0.8209	
360 minute summer	41	9.001	30	6.6	0.189	0.018	4.9916	
360 minute summer	42	1.011	Tank 1	211.8	1.415	0.588	8.8199	

Results for 100 year +20% CC +10% A 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	42.316	0.041	2.9	0.0692	0.0000	OK
480 minute summer	2	248	42.234	0.065	7.1	0.1257	0.0000	OK
480 minute summer	3	248	41.960	0.105	18.3	0.2599	0.0000	OK
480 minute summer	4	248	42.084	0.059	5.7	0.1326	0.0000	OK
480 minute summer	5	248	41.673	0.137	29.8	0.3036	0.0000	OK
480 minute summer	6	248	41.222	0.037	2.2	0.0573	0.0000	OK
480 minute summer	7	248	41.110	0.159	36.7	0.3210	0.0000	OK
480 minute summer	8	248	41.055	0.180	41.0	0.3651	0.0000	OK
480 minute summer	9	248	41.020	0.169	45.5	0.3474	0.0000	OK
480 minute summer	Tank 1	480	40.649	1.805	178.1	950.2969	0.0000	SURCHARGED
480 minute summer	11	248	40.894	0.196	56.1	0.5862	0.0000	OK
480 minute summer	12	248	43.447	0.072	8.7	0.2043	0.0000	OK
480 minute summer	13	248	41.730	0.055	5.1	0.1164	0.0000	OK
480 minute summer	15	248	41.387	0.118	21.1	0.2587	0.0000	OK
480 minute summer	16	248	41.255	0.124	27.0	0.2644	0.0000	OK
480 minute summer	17	248	41.101	0.164	32.4	0.3952	0.0000	OK
480 minute summer	18	248	41.076	0.165	42.5	0.5339	0.0000	OK
480 minute summer	19	248	41.000	0.050	4.4	0.0984	0.0000	OK
480 minute summer	20	248	40.758	0.080	11.0	0.1802	0.0000	OK
480 minute summer	21	480	40.650	0.508	122.7	1.7114	0.0000	OK
480 minute summer	22	480	40.651	0.151	5.9	0.3388	0.0000	OK
480 minute summer	23	480	40.651	0.349	12.9	0.9662	0.0000	SURCHARGED
480 minute summer	24	480	40.649	0.897	151.5	3.5176	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	2.9	0.410	0.073	0.1288	
480 minute summer	2	1.001	3	7.1	0.759	0.178	0.3787	
480 minute summer	3	1.002	5	18.3	0.846	0.259	1.2926	
480 minute summer	4	2.000	5	5.7	0.705	0.143	0.1447	
480 minute summer	5	1.003	7	29.8	0.878	0.269	1.0634	
480 minute summer	6	3.000	7	2.2	0.537	0.055	0.0580	
480 minute summer	7	1.004	8	36.7	0.760	0.330	1.1770	
480 minute summer	8	1.005	9	41.0	0.817	0.365	0.3772	
480 minute summer	9	1.006	11	45.5	0.857	0.411	2.6323	
480 minute summer	Tank 1	1.012	36	15.0	0.231	0.042	8.6760	
480 minute summer	11	1.007	21	56.1	1.046	0.506	1.5897	
480 minute summer	12	4.000	15	8.7	0.806	0.219	0.7736	
480 minute summer	13	5.000	15	5.1	0.692	0.128	0.4143	
480 minute summer	15	4.001	16	21.1	0.856	0.297	0.3774	
480 minute summer	16	4.002	17	27.0	0.693	0.244	2.4577	
480 minute summer	17	4.003	18	32.4	0.698	0.291	0.3849	
480 minute summer	18	4.004	21	42.5	0.975	0.384	2.5693	
480 minute summer	19	6.000	20	4.4	0.391	0.062	0.7596	
480 minute summer	20	6.001	21	11.0	0.735	0.155	1.5817	
480 minute summer	21	1.008	24	122.7	1.100	0.434	18.1632	
480 minute summer	22	7.000	23	5.9	0.452	0.083	2.5668	
480 minute summer	23	7.001	24	12.9	0.769	0.182	4.3034	
480 minute summer	24	1.009	35	151.3	1.610	0.196	4.5860	

Results for 100 year +20% CC +10% A 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	29	480	40.651	1.626	3.0	3.4919	0.0000	FLOOD RISK
480 minute summer	30	480	40.654	1.703	7.7	3.3149	0.0000	SURCHARGED
480 minute summer	31	480	40.649	1.719	9.1	3.4421	0.0000	SURCHARGED
480 minute summer	34	480	40.648	1.751	11.8	3.7076	0.0000	SURCHARGED
480 minute summer	35	480	40.649	1.177	169.3	2.0804	0.0000	SURCHARGED
480 minute summer	36	480	40.648	1.840	15.0	3.2508	0.0000	OK
480 minute summer	37	480	40.650	0.300	6.4	0.6973	0.0000	OK
480 minute summer	38	480	40.650	0.449	10.7	0.8810	0.0000	SURCHARGED
480 minute summer	39	480	40.650	0.706	16.1	1.4298	0.0000	SURCHARGED
480 minute summer	40	480	40.649	0.754	18.0	1.0611	0.0000	SURCHARGED
480 minute summer	41	480	40.650	1.678	6.3	3.6596	0.0000	SURCHARGED
480 minute summer	42	480	40.650	1.769	179.6	3.2387	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	29	9.000	41	2.1	0.114	0.006	12.5813	
480 minute summer	30	9.002	31	7.1	0.198	0.020	5.0516	
480 minute summer	31	9.003	34	8.5	0.113	0.024	7.9121	
480 minute summer	34	9.004	42	11.1	0.052	0.030	3.6580	
480 minute summer	35	1.010	42	167.9	1.178	0.462	6.8033	
480 minute summer	36	Hydro-Brake®		14.7				498.1
480 minute summer	37	8.000	38	6.4	0.524	0.090	2.5597	
480 minute summer	38	8.001	39	10.7	0.588	0.151	4.4243	
480 minute summer	39	8.002	40	16.1	0.711	0.226	0.8331	
480 minute summer	40	8.003	35	18.0	0.814	0.254	0.8209	
480 minute summer	41	9.001	30	5.8	0.176	0.016	4.9916	
480 minute summer	42	1.011	Tank 1	178.1	1.330	0.494	8.8199	

Results for 100 year +20% CC +10% A 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	42.312	0.037	2.4	0.0631	0.0000	OK
600 minute summer	2	315	42.228	0.059	5.9	0.1142	0.0000	OK
600 minute summer	3	315	41.950	0.095	15.1	0.2345	0.0000	OK
600 minute summer	4	315	42.078	0.053	4.7	0.1200	0.0000	OK
600 minute summer	5	315	41.659	0.123	24.6	0.2739	0.0000	OK
600 minute summer	6	315	41.218	0.033	1.8	0.0519	0.0000	OK
600 minute summer	7	315	41.092	0.141	30.3	0.2851	0.0000	OK
600 minute summer	8	315	41.035	0.160	33.9	0.3253	0.0000	OK
600 minute summer	9	315	41.002	0.151	37.6	0.3098	0.0000	OK
600 minute summer	Tank 1	555	40.775	1.931	146.7	950.2969	0.0000	SURCHARGED
600 minute summer	11	315	40.873	0.175	46.3	0.5239	0.0000	OK
600 minute summer	12	315	43.440	0.065	7.2	0.1851	0.0000	OK
600 minute summer	13	315	41.725	0.050	4.2	0.1055	0.0000	OK
600 minute summer	15	315	41.375	0.106	17.4	0.2324	0.0000	OK
600 minute summer	16	315	41.243	0.112	22.2	0.2388	0.0000	OK
600 minute summer	17	315	41.083	0.146	26.7	0.3521	0.0000	OK
600 minute summer	18	315	41.059	0.148	35.1	0.4796	0.0000	OK
600 minute summer	19	315	40.996	0.046	3.6	0.0893	0.0000	OK
600 minute summer	20	555	40.776	0.098	9.1	0.2189	0.0000	OK
600 minute summer	21	555	40.775	0.633	101.3	2.1313	0.0000	SURCHARGED
600 minute summer	22	555	40.776	0.276	4.9	0.6178	0.0000	OK
600 minute summer	23	570	40.776	0.474	10.6	1.3118	0.0000	SURCHARGED
600 minute summer	24	570	40.776	1.024	125.0	4.0154	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	2.4	0.388	0.060	0.1126	
600 minute summer	2	1.001	3	5.9	0.720	0.148	0.3315	
600 minute summer	3	1.002	5	15.1	0.802	0.214	1.1253	
600 minute summer	4	2.000	5	4.7	0.669	0.118	0.1259	
600 minute summer	5	1.003	7	24.6	0.833	0.222	0.9257	
600 minute summer	6	3.000	7	1.8	0.507	0.045	0.0503	
600 minute summer	7	1.004	8	30.3	0.732	0.273	1.0085	
600 minute summer	8	1.005	9	33.9	0.786	0.301	0.3243	
600 minute summer	9	1.006	11	37.6	0.820	0.340	2.2721	
600 minute summer	Tank 1	1.012	36	16.0	0.225	0.045	8.6760	
600 minute summer	11	1.007	21	46.3	0.991	0.418	1.3843	
600 minute summer	12	4.000	15	7.2	0.765	0.181	0.6746	
600 minute summer	13	5.000	15	4.2	0.655	0.106	0.3605	
600 minute summer	15	4.001	16	17.4	0.813	0.245	0.3277	
600 minute summer	16	4.002	17	22.2	0.661	0.201	2.1188	
600 minute summer	17	4.003	18	26.7	0.667	0.240	0.3320	
600 minute summer	18	4.004	21	35.1	0.925	0.317	2.2360	
600 minute summer	19	6.000	20	3.6	0.367	0.051	0.7075	
600 minute summer	20	6.001	21	9.1	0.699	0.128	2.5983	
600 minute summer	21	1.008	24	101.3	1.041	0.358	19.0819	
600 minute summer	22	7.000	23	4.9	0.430	0.069	3.3463	
600 minute summer	23	7.001	24	10.6	0.728	0.150	4.3034	
600 minute summer	24	1.009	35	125.3	1.589	0.162	4.5860	



Results for 100 year +20% CC +10% A 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	29	555	40.776	1.751	2.4	3.7618	0.0000	FLOOD RISK
600 minute summer	30	570	40.777	1.826	5.5	3.5532	0.0000	SURCHARGED
600 minute summer	31	555	40.778	1.848	6.9	3.7000	0.0000	SURCHARGED
600 minute summer	34	570	40.777	1.880	9.5	3.9794	0.0000	SURCHARGED
600 minute summer	35	570	40.775	1.303	140.1	2.3030	0.0000	SURCHARGED
600 minute summer	36	555	40.776	1.968	16.0	3.4781	0.0000	OK
600 minute summer	37	555	40.778	0.428	5.3	0.9953	0.0000	SURCHARGED
600 minute summer	38	570	40.776	0.575	8.8	1.1266	0.0000	SURCHARGED
600 minute summer	39	570	40.775	0.831	13.3	1.6842	0.0000	SURCHARGED
600 minute summer	40	570	40.776	0.881	14.8	1.2389	0.0000	SURCHARGED
600 minute summer	41	555	40.776	1.804	4.5	3.9341	0.0000	SURCHARGED
600 minute summer	42	555	40.776	1.895	147.2	3.4700	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	29	9.000	41	1.6	0.112	0.005	12.5813	
600 minute summer	30	9.002	31	5.2	0.138	0.015	5.0516	
600 minute summer	31	9.003	34	6.7	0.069	0.019	7.9121	
600 minute summer	34	9.004	42	9.5	0.053	0.026	3.6580	
600 minute summer	35	1.010	42	137.3	1.116	0.378	6.8033	
600 minute summer	36	Hydro-Brake®		15.1				582.1
600 minute summer	37	8.000	38	5.3	0.497	0.075	2.5608	
600 minute summer	38	8.001	39	8.8	0.560	0.124	4.4243	
600 minute summer	39	8.002	40	13.3	0.682	0.187	0.8331	
600 minute summer	40	8.003	35	14.8	0.773	0.208	0.8209	
600 minute summer	41	9.001	30	3.9	0.174	0.011	4.9916	
600 minute summer	42	1.011	Tank 1	146.7	1.244	0.407	8.8199	

Results for 100 year +20% CC +10% A 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	42.310	0.035	2.1	0.0591	0.0000	OK
720 minute summer	2	375	42.224	0.055	5.2	0.1071	0.0000	OK
720 minute summer	3	375	41.944	0.089	13.5	0.2211	0.0000	OK
720 minute summer	4	375	42.075	0.050	4.2	0.1132	0.0000	OK
720 minute summer	5	375	41.652	0.116	22.0	0.2581	0.0000	OK
720 minute summer	6	375	41.216	0.031	1.6	0.0490	0.0000	OK
720 minute summer	7	375	41.083	0.132	27.1	0.2666	0.0000	OK
720 minute summer	8	375	41.025	0.150	30.3	0.3046	0.0000	OK
720 minute summer	9	375	40.992	0.141	33.7	0.2907	0.0000	OK
720 minute summer	Tank 1	615	40.843	1.999	130.4	950.2969	0.0000	SURCHARGED
720 minute summer	11	375	40.862	0.164	41.5	0.4922	0.0000	OK
720 minute summer	12	375	43.436	0.061	6.4	0.1742	0.0000	OK
720 minute summer	13	375	41.721	0.046	3.7	0.0990	0.0000	OK
720 minute summer	15	375	41.369	0.100	15.5	0.2181	0.0000	OK
720 minute summer	16	375	41.237	0.106	19.8	0.2252	0.0000	OK
720 minute summer	17	375	41.073	0.136	23.8	0.3290	0.0000	OK
720 minute summer	18	375	41.050	0.139	31.3	0.4503	0.0000	OK
720 minute summer	19	375	40.994	0.044	3.3	0.0856	0.0000	OK
720 minute summer	20	615	40.846	0.168	8.2	0.3758	0.0000	OK
720 minute summer	21	615	40.846	0.704	90.7	2.3715	0.0000	SURCHARGED
720 minute summer	22	615	40.844	0.344	4.4	0.7705	0.0000	SURCHARGED
720 minute summer	23	615	40.844	0.542	9.5	1.5003	0.0000	SURCHARGED
720 minute summer	24	615	40.845	1.093	111.9	4.2885	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	2.1	0.372	0.053	0.1027	
720 minute summer	2	1.001	3	5.2	0.695	0.131	0.3028	
720 minute summer	3	1.002	5	13.5	0.778	0.191	1.0366	
720 minute summer	4	2.000	5	4.2	0.648	0.105	0.1161	
720 minute summer	5	1.003	7	22.0	0.809	0.199	0.8528	
720 minute summer	6	3.000	7	1.6	0.490	0.040	0.0462	
720 minute summer	7	1.004	8	27.1	0.716	0.244	0.9227	
720 minute summer	8	1.005	9	30.3	0.766	0.269	0.2975	
720 minute summer	9	1.006	11	33.7	0.799	0.305	2.0904	
720 minute summer	Tank 1	1.012	36	15.9	0.220	0.044	8.6760	
720 minute summer	11	1.007	21	41.5	0.961	0.374	1.6934	
720 minute summer	12	4.000	15	6.4	0.740	0.161	0.6201	
720 minute summer	13	5.000	15	3.7	0.631	0.093	0.3295	
720 minute summer	15	4.001	16	15.5	0.788	0.218	0.3010	
720 minute summer	16	4.002	17	19.8	0.644	0.179	1.9410	
720 minute summer	17	4.003	18	23.8	0.650	0.214	0.3039	
720 minute summer	18	4.004	21	31.3	0.897	0.283	2.0569	
720 minute summer	19	6.000	20	3.3	0.361	0.047	1.3906	
720 minute summer	20	6.001	21	8.2	0.678	0.116	3.1907	
720 minute summer	21	1.008	24	90.7	1.008	0.321	19.0819	
720 minute summer	22	7.000	23	4.4	0.417	0.062	3.4108	
720 minute summer	23	7.001	24	9.5	0.707	0.134	4.3034	
720 minute summer	24	1.009	35	112.2	1.576	0.145	4.5860	



Results for 100 year +20% CC +10% A 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	29	615	40.844	1.819	2.0	3.9078	0.0000	FLOOD RISK
720 minute summer	30	615	40.845	1.894	5.6	3.6858	0.0000	SURCHARGED
720 minute summer	31	615	40.846	1.916	6.8	3.8349	0.0000	SURCHARGED
720 minute summer	34	615	40.847	1.950	8.8	4.1287	0.0000	SURCHARGED
720 minute summer	35	615	40.844	1.372	125.5	2.4250	0.0000	SURCHARGED
720 minute summer	36	615	40.845	2.037	15.9	3.5994	0.0000	OK
720 minute summer	37	615	40.843	0.493	4.7	1.1481	0.0000	SURCHARGED
720 minute summer	38	615	40.845	0.644	7.9	1.2622	0.0000	SURCHARGED
720 minute summer	39	615	40.845	0.901	11.9	1.8260	0.0000	SURCHARGED
720 minute summer	40	615	40.845	0.950	13.3	1.3373	0.0000	SURCHARGED
720 minute summer	41	630	40.845	1.873	4.6	4.0841	0.0000	SURCHARGED
720 minute summer	42	615	40.842	1.961	132.5	3.5915	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	29	9.000	41	1.6	0.109	0.005	12.5813	
720 minute summer	30	9.002	31	5.3	0.162	0.015	5.0516	
720 minute summer	31	9.003	34	6.3	0.064	0.018	7.9121	
720 minute summer	34	9.004	42	8.4	0.045	0.023	3.6580	
720 minute summer	35	1.010	42	123.6	1.082	0.340	6.8033	
720 minute summer	36	Hydro-Brake®		15.4				667.2
720 minute summer	37	8.000	38	4.7	0.477	0.066	2.5608	
720 minute summer	38	8.001	39	7.9	0.546	0.112	4.4243	
720 minute summer	39	8.002	40	11.9	0.663	0.167	0.8331	
720 minute summer	40	8.003	35	13.3	0.751	0.187	0.8209	
720 minute summer	41	9.001	30	4.2	0.173	0.012	4.9916	
720 minute summer	42	1.011	Tank 1	130.4	1.187	0.362	8.8199	



Results for 100 year +20% CC +10% A 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	42.307	0.032	1.7	0.0534	0.0000	OK
960 minute summer	2	495	42.219	0.050	4.3	0.0972	0.0000	OK
960 minute summer	3	495	41.936	0.081	11.1	0.1996	0.0000	OK
960 minute summer	4	495	42.071	0.046	3.5	0.1032	0.0000	OK
960 minute summer	5	495	41.641	0.105	18.2	0.2337	0.0000	OK
960 minute summer	6	495	41.214	0.029	1.4	0.0459	0.0000	OK
960 minute summer	7	495	41.070	0.119	22.5	0.2393	0.0000	OK
960 minute summer	8	495	41.009	0.134	25.1	0.2731	0.0000	OK
960 minute summer	9	495	40.978	0.127	27.9	0.2611	0.0000	OK
960 minute summer	Tank 1	750	40.862	2.018	107.9	950.2969	0.0000	SURCHARGED
960 minute summer	11	750	40.862	0.164	34.4	0.4924	0.0000	OK
960 minute summer	12	495	43.431	0.056	5.3	0.1582	0.0000	OK
960 minute summer	13	495	41.718	0.043	3.1	0.0907	0.0000	OK
960 minute summer	15	495	41.359	0.090	12.8	0.1967	0.0000	OK
960 minute summer	16	495	41.227	0.096	16.4	0.2047	0.0000	OK
960 minute summer	17	495	41.059	0.122	19.7	0.2948	0.0000	OK
960 minute summer	18	495	41.036	0.125	25.9	0.4068	0.0000	OK
960 minute summer	19	495	40.990	0.040	2.7	0.0778	0.0000	OK
960 minute summer	20	735	40.862	0.184	6.7	0.4122	0.0000	OK
960 minute summer	21	735	40.861	0.719	75.0	2.4216	0.0000	SURCHARGED
960 minute summer	22	735	40.862	0.362	3.6	0.8122	0.0000	SURCHARGED
960 minute summer	23	735	40.863	0.561	7.9	1.5513	0.0000	SURCHARGED
960 minute summer	24	735	40.862	1.110	92.6	4.3522	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	1.7	0.347	0.043	0.0892	
960 minute summer	2	1.001	3	4.3	0.659	0.108	0.2642	
960 minute summer	3	1.002	5	11.1	0.736	0.157	0.9009	
960 minute summer	4	2.000	5	3.5	0.615	0.088	0.1019	
960 minute summer	5	1.003	7	18.2	0.768	0.164	0.7434	
960 minute summer	6	3.000	7	1.4	0.471	0.035	0.0421	
960 minute summer	7	1.004	8	22.5	0.689	0.202	0.7958	
960 minute summer	8	1.005	9	25.1	0.735	0.223	0.2568	
960 minute summer	9	1.006	11	27.9	0.763	0.252	1.8128	
960 minute summer	Tank 1	1.012	36	15.9	0.219	0.044	8.6760	
960 minute summer	11	1.007	21	34.4	0.913	0.310	1.8666	
960 minute summer	12	4.000	15	5.3	0.701	0.133	0.5419	
960 minute summer	13	5.000	15	3.1	0.599	0.078	0.2908	
960 minute summer	15	4.001	16	12.8	0.749	0.180	0.2616	
960 minute summer	16	4.002	17	16.4	0.616	0.148	1.6814	
960 minute summer	17	4.003	18	19.7	0.622	0.177	0.2630	
960 minute summer	18	4.004	21	25.9	0.850	0.234	1.7953	
960 minute summer	19	6.000	20	2.7	0.340	0.038	1.5497	
960 minute summer	20	6.001	21	6.7	0.642	0.095	3.3287	
960 minute summer	21	1.008	24	75.0	0.956	0.265	19.0819	
960 minute summer	22	7.000	23	3.6	0.391	0.051	3.4108	
960 minute summer	23	7.001	24	7.9	0.671	0.112	4.3034	
960 minute summer	24	1.009	35	93.0	1.546	0.120	4.5860	

Results for 100 year +20% CC +10% A 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	29	750	40.865	1.840	3.7	3.9514	0.0000	FLOOD RISK
960 minute summer	30	750	40.863	1.912	5.3	3.7208	0.0000	SURCHARGED
960 minute summer	31	750	40.863	1.933	6.8	3.8692	0.0000	SURCHARGED
960 minute summer	34	735	40.862	1.965	7.7	4.1596	0.0000	SURCHARGED
960 minute summer	35	735	40.862	1.390	103.9	2.4564	0.0000	SURCHARGED
960 minute summer	36	735	40.861	2.053	15.9	3.6284	0.0000	OK
960 minute summer	37	735	40.861	0.511	3.9	1.1890	0.0000	SURCHARGED
960 minute summer	38	735	40.862	0.661	6.5	1.2960	0.0000	SURCHARGED
960 minute summer	39	735	40.861	0.917	9.8	1.8575	0.0000	SURCHARGED
960 minute summer	40	735	40.861	0.966	10.9	1.3597	0.0000	SURCHARGED
960 minute summer	41	735	40.865	1.893	4.4	4.1293	0.0000	SURCHARGED
960 minute summer	42	750	40.861	1.980	108.8	3.6263	0.0000	SURCHARGED
Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	29	9.000	41	2.4	0.099	0.007	12.5813	
960 minute summer	30	9.002	31	5.9	0.158	0.016	5.0516	
960 minute summer	31	9.003	34	5.7	0.071	0.016	7.9121	
960 minute summer	34	9.004	42	6.6	0.042	0.018	3.6580	
960 minute summer	35	1.010	42	102.0	0.988	0.281	6.8033	
960 minute summer	36	Hydro-Brake®		15.5				823.9
960 minute summer	37	8.000	38	3.9	0.453	0.055	2.5608	
960 minute summer	38	8.001	39	6.5	0.520	0.092	4.4243	
960 minute summer	39	8.002	40	9.8	0.635	0.138	0.8331	
960 minute summer	40	8.003	35	10.9	0.712	0.154	0.8209	
960 minute summer	41	9.001	30	4.2	0.173	0.012	4.9916	
960 minute summer	42	1.011	Tank 1	107.9	1.068	0.300	8.8199	

Results for 100 year +20% CC +10% A 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.0

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	42.303	0.028	1.3	0.0470	0.0000	OK
1440 minute summer	2	750	42.212	0.043	3.2	0.0838	0.0000	OK
1440 minute summer	3	750	41.924	0.069	8.2	0.1711	0.0000	OK
1440 minute summer	4	750	42.064	0.039	2.5	0.0872	0.0000	OK
1440 minute summer	5	750	41.625	0.089	13.3	0.1989	0.0000	OK
1440 minute summer	6	750	41.210	0.025	1.0	0.0391	0.0000	OK
1440 minute summer	7	750	41.050	0.099	16.4	0.2003	0.0000	OK
1440 minute summer	8	750	40.988	0.113	18.3	0.2288	0.0000	OK
1440 minute summer	9	750	40.958	0.107	20.3	0.2200	0.0000	OK
1440 minute summer	Tank 1	1020	40.657	1.813	79.8	950.2969	0.0000	SURCHARGED
1440 minute summer	11	750	40.822	0.124	25.0	0.3726	0.0000	OK
1440 minute summer	12	750	43.423	0.048	3.9	0.1355	0.0000	OK
1440 minute summer	13	750	41.712	0.037	2.3	0.0783	0.0000	OK
1440 minute summer	15	750	41.345	0.076	9.4	0.1670	0.0000	OK
1440 minute summer	16	750	41.213	0.082	12.0	0.1750	0.0000	OK
1440 minute summer	17	750	41.039	0.102	14.4	0.2464	0.0000	OK
1440 minute summer	18	750	41.017	0.106	18.9	0.3447	0.0000	OK
1440 minute summer	19	750	40.984	0.034	2.0	0.0675	0.0000	OK
1440 minute summer	20	750	40.732	0.054	5.0	0.1214	0.0000	OK
1440 minute summer	21	1020	40.656	0.514	54.8	1.7294	0.0000	OK
1440 minute summer	22	1020	40.657	0.157	2.7	0.3524	0.0000	OK
1440 minute summer	23	1020	40.656	0.354	5.8	0.9802	0.0000	SURCHARGED
1440 minute summer	24	1020	40.656	0.904	67.7	3.5451	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	1.3	0.325	0.033	0.0728	
1440 minute summer	2	1.001	3	3.2	0.605	0.080	0.2142	
1440 minute summer	3	1.002	5	8.2	0.678	0.116	0.7229	
1440 minute summer	4	2.000	5	2.5	0.558	0.063	0.0802	
1440 minute summer	5	1.003	7	13.3	0.704	0.120	0.5925	
1440 minute summer	6	3.000	7	1.0	0.426	0.025	0.0332	
1440 minute summer	7	1.004	8	16.4	0.643	0.148	0.6223	
1440 minute summer	8	1.005	9	18.3	0.682	0.163	0.2019	
1440 minute summer	9	1.006	11	20.3	0.704	0.184	1.4310	
1440 minute summer	Tank 1	1.012	36	15.3	0.218	0.043	8.6760	
1440 minute summer	11	1.007	21	25.0	0.836	0.225	0.8860	
1440 minute summer	12	4.000	15	3.9	0.642	0.098	0.4353	
1440 minute summer	13	5.000	15	2.3	0.549	0.058	0.2355	
1440 minute summer	15	4.001	16	9.4	0.690	0.132	0.2084	
1440 minute summer	16	4.002	17	12.0	0.572	0.109	1.3251	
1440 minute summer	17	4.003	18	14.4	0.577	0.129	0.2070	
1440 minute summer	18	4.004	21	18.9	0.780	0.171	1.4283	
1440 minute summer	19	6.000	20	2.0	0.310	0.028	0.4341	
1440 minute summer	20	6.001	21	5.0	0.589	0.071	1.6188	
1440 minute summer	21	1.008	24	54.8	0.874	0.194	18.2410	
1440 minute summer	22	7.000	23	2.7	0.362	0.038	2.6109	
1440 minute summer	23	7.001	24	5.8	0.616	0.082	4.3034	
1440 minute summer	24	1.009	35	67.7	1.522	0.088	4.5860	

Results for 100 year +20% CC +10% A 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.0

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	29	1020	40.660	1.635	5.6	3.5112	0.0000	FLOOD RISK
1440 minute summer	30	1020	40.662	1.711	7.2	3.3291	0.0000	SURCHARGED
1440 minute summer	31	1020	40.656	1.726	6.7	3.4561	0.0000	SURCHARGED
1440 minute summer	34	1020	40.658	1.761	5.4	3.7286	0.0000	SURCHARGED
1440 minute summer	35	1020	40.656	1.184	75.7	2.0927	0.0000	SURCHARGED
1440 minute summer	36	1020	40.658	1.850	15.3	3.2683	0.0000	OK
1440 minute summer	37	1020	40.655	0.305	2.9	0.7094	0.0000	SURCHARGED
1440 minute summer	38	1020	40.656	0.455	4.8	0.8917	0.0000	SURCHARGED
1440 minute summer	39	1020	40.656	0.712	7.2	1.4423	0.0000	SURCHARGED
1440 minute summer	40	1020	40.656	0.761	8.0	1.0713	0.0000	SURCHARGED
1440 minute summer	41	1020	40.656	1.684	7.6	3.6732	0.0000	SURCHARGED
1440 minute summer	42	1020	40.656	1.775	79.4	3.2498	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	29	9.000	41	-4.7	0.099	-0.013	12.5813	
1440 minute summer	30	9.002	31	-6.3	0.159	-0.018	5.0516	
1440 minute summer	31	9.003	34	-5.8	0.077	-0.016	7.9121	
1440 minute summer	34	9.004	42	5.4	0.043	0.015	3.6580	
1440 minute summer	35	1.010	42	73.6	0.892	0.203	6.8033	
1440 minute summer	36	Hydro-Brake®		14.7				1093.9
1440 minute summer	37	8.000	38	2.9	0.416	0.041	2.5608	
1440 minute summer	38	8.001	39	4.8	0.481	0.068	4.4243	
1440 minute summer	39	8.002	40	7.2	0.589	0.101	0.8331	
1440 minute summer	40	8.003	35	8.0	0.655	0.113	0.8209	
1440 minute summer	41	9.001	30	-6.0	0.171	-0.017	4.9916	
1440 minute summer	42	1.011	Tank 1	79.8	0.927	0.222	8.8199	

Results for 100 year +20% CC +10% A 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.0

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2160 minute summer	1	1140	42.298	0.023	0.9	0.0395	0.0000	OK
2160 minute summer	2	1140	42.206	0.037	2.3	0.0712	0.0000	OK
2160 minute summer	3	1140	41.914	0.059	5.9	0.1452	0.0000	OK
2160 minute summer	4	1140	42.058	0.033	1.8	0.0741	0.0000	OK
2160 minute summer	5	1140	41.612	0.076	9.6	0.1688	0.0000	OK
2160 minute summer	6	1140	41.206	0.021	0.7	0.0329	0.0000	OK
2160 minute summer	7	1140	41.034	0.083	11.8	0.1675	0.0000	OK
2160 minute summer	8	1140	40.970	0.095	13.2	0.1920	0.0000	OK
2160 minute summer	9	1140	40.942	0.091	14.7	0.1869	0.0000	OK
2160 minute summer	Tank 1	1500	40.421	1.577	58.4	936.5785	0.0000	SURCHARGED
2160 minute summer	11	1140	40.803	0.105	18.1	0.3142	0.0000	OK
2160 minute summer	12	1140	43.415	0.040	2.8	0.1151	0.0000	OK
2160 minute summer	13	1140	41.706	0.031	1.6	0.0657	0.0000	OK
2160 minute summer	15	1140	41.333	0.064	6.7	0.1401	0.0000	OK
2160 minute summer	16	1140	41.201	0.070	8.6	0.1485	0.0000	OK
2160 minute summer	17	1140	41.022	0.085	10.4	0.2055	0.0000	OK
2160 minute summer	18	1140	41.001	0.090	13.7	0.2926	0.0000	OK
2160 minute summer	19	1140	40.979	0.029	1.4	0.0570	0.0000	OK
2160 minute summer	20	1140	40.724	0.046	3.5	0.1021	0.0000	OK
2160 minute summer	21	1500	40.422	0.280	39.5	0.9435	0.0000	OK
2160 minute summer	22	1140	40.534	0.034	1.9	0.0754	0.0000	OK
2160 minute summer	23	1500	40.422	0.120	4.1	0.3318	0.0000	OK
2160 minute summer	24	1500	40.422	0.670	48.7	2.6282	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	1	1.000	2	0.9	0.287	0.023	0.0572	
2160 minute summer	2	1.001	3	2.3	0.549	0.058	0.1695	
2160 minute summer	3	1.002	5	5.9	0.619	0.083	0.5692	
2160 minute summer	4	2.000	5	1.8	0.508	0.045	0.0635	
2160 minute summer	5	1.003	7	9.6	0.644	0.087	0.4674	
2160 minute summer	6	3.000	7	0.7	0.384	0.018	0.0258	
2160 minute summer	7	1.004	8	11.8	0.593	0.106	0.4850	
2160 minute summer	8	1.005	9	13.2	0.624	0.117	0.1591	
2160 minute summer	9	1.006	11	14.7	0.644	0.133	1.1329	
2160 minute summer	Tank 1	1.012	36	13.8	0.216	0.038	8.6760	
2160 minute summer	11	1.007	21	18.1	0.766	0.163	0.7001	
2160 minute summer	12	4.000	15	2.8	0.582	0.070	0.3445	
2160 minute summer	13	5.000	15	1.6	0.493	0.040	0.1823	
2160 minute summer	15	4.001	16	6.7	0.631	0.094	0.1626	
2160 minute summer	16	4.002	17	8.6	0.524	0.078	1.0350	
2160 minute summer	17	4.003	18	10.4	0.532	0.093	0.1623	
2160 minute summer	18	4.004	21	13.7	0.713	0.124	1.1322	
2160 minute summer	19	6.000	20	1.4	0.279	0.020	0.3380	
2160 minute summer	20	6.001	21	3.5	0.536	0.049	0.3757	
2160 minute summer	21	1.008	24	39.5	0.796	0.140	11.0556	
2160 minute summer	22	7.000	23	1.9	0.325	0.027	0.6720	
2160 minute summer	23	7.001	24	4.1	0.560	0.058	2.9546	
2160 minute summer	24	1.009	35	48.7	1.488	0.063	4.5860	

Results for 100 year +20% CC +10% A 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.0

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2160 minute summer	29	1500	40.422	1.397	1.0	3.0004	0.0000	SURCHARGED
2160 minute summer	30	1440	40.422	1.471	4.8	2.8630	0.0000	SURCHARGED
2160 minute summer	31	1500	40.423	1.493	3.2	2.9888	0.0000	SURCHARGED
2160 minute summer	34	1500	40.421	1.524	4.5	3.2257	0.0000	SURCHARGED
2160 minute summer	35	1500	40.421	0.949	54.6	1.6771	0.0000	SURCHARGED
2160 minute summer	36	1500	40.421	1.613	13.8	2.8508	0.0000	OK
2160 minute summer	37	1500	40.425	0.075	2.1	0.1757	0.0000	OK
2160 minute summer	38	1500	40.424	0.223	3.5	0.4379	0.0000	OK
2160 minute summer	39	1500	40.421	0.477	5.3	0.9662	0.0000	SURCHARGED
2160 minute summer	40	1500	40.422	0.527	5.9	0.7418	0.0000	SURCHARGED
2160 minute summer	41	1500	40.424	1.452	1.7	3.1659	0.0000	SURCHARGED
2160 minute summer	42	1500	40.423	1.542	55.6	2.8234	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	29	9.000	41	0.7	0.099	0.002	12.5813	
2160 minute summer	30	9.002	31	2.7	0.159	0.008	5.0516	
2160 minute summer	31	9.003	34	3.8	0.078	0.011	7.9121	
2160 minute summer	34	9.004	42	4.4	0.044	0.012	3.6580	
2160 minute summer	35	1.010	42	53.8	0.859	0.148	6.8033	
2160 minute summer	36	Hydro-Brake®		13.8				1457.6
2160 minute summer	37	8.000	38	2.1	0.377	0.030	1.2754	
2160 minute summer	38	8.001	39	3.5	0.441	0.049	3.9799	
2160 minute summer	39	8.002	40	5.3	0.545	0.074	0.8331	
2160 minute summer	40	8.003	35	5.9	0.606	0.083	0.8209	
2160 minute summer	41	9.001	30	4.4	0.158	0.012	4.9916	
2160 minute summer	42	1.011	Tank 1	58.4	0.656	0.162	8.8199	



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