

Royal Berkshire Hospital, ICS ER Project

RBH-DD-XX-XX-RP-D-0002-S4-01

Proposed Drainage Strategy

Fourth Issue

Version 2.0

[15/07/24]

Document prepared on behalf of Royal Berkshire NHS Foundation Trust



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1.0 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

MDA Wirral Ltd have been appointed by Royal Berkshire NHS Foundation Trust (the 'Client') to prepare a drainage strategy for the proposed development of demolition of existing temporary two storey Medical Block and construction of new two storey Inpatient and Outpatient Urology Building.

The proposed site plan is included in Appendix A.

1.2 SCOPE OF THE REPORT

The drainage strategy will consider all the relevant published code and guidance, including Reading Borough Local Plan (adopted November 2019), Reading Borough Council (RBC) Local Flood Risk Management Strategy, Ciria SuDS manual C753, Department for Environment, Food and Rural Affairs Sustainable Drainage Systems: Non-statutory technical standards for sustainable drainage systems, and Drainage and waste disposal: Approved Document H.

1.3 LIMITATIONS OF THIS REPORT

This report has been prepared by MDA Wirral Ltd on behalf of Royal Berkshire NHS Foundation Trust in connection with the scope of the report, as described in Section 1.1 above and taking into account the particular instructions and requirements set out in the fee proposal, and the Client's acceptance. It is not intended for and should not be relied on by any third party and no responsibility is undertaken to any third party.

MDA Wirral Ltd accepts no duty or responsibility (including in negligence) to any party other than Royal Berkshire NHS Foundation and disclaims all liability of any nature whatsoever to any such party in respect of this report.

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2.0 SITE DESCRIPTION

2.1 EXISTING SITE

The site is located on the existing Royal Berkshire Hospital site, north of the Addington Road, Reading. The nearest postcode is RG1 5HD and grid reference is E: 472586, N:172555.

The existing building to be demolished covers a total area of approximately 0.076 hectares and is classed as a brownfield site. The site location is shown in Figure 2-1.

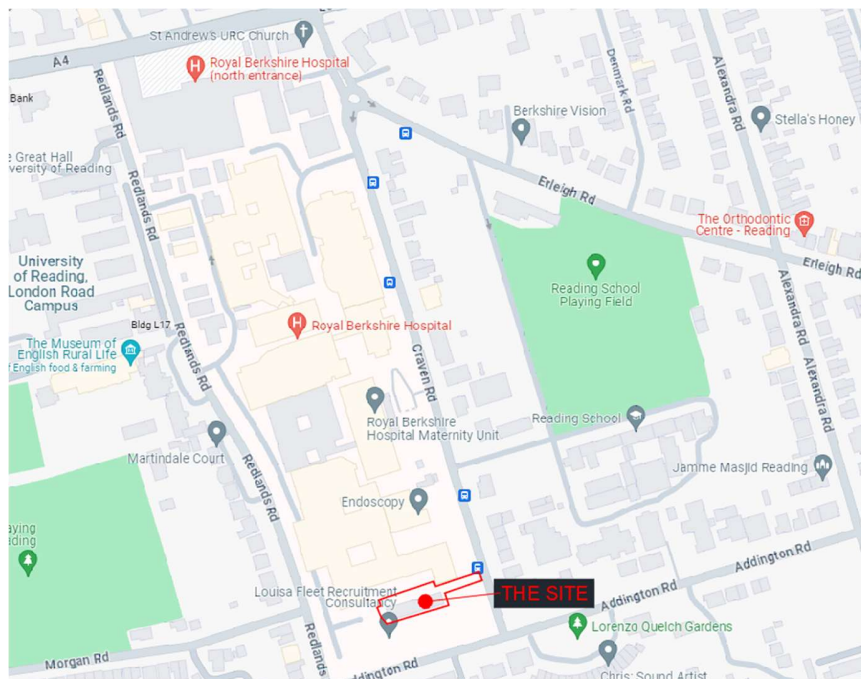


Figure 2-1: Site Location

The site is surrounded by an existing car park on the west, south, and east sides, with a landscaped area to the north. Access to the site is available through the car park entrances from Addington Road to the south and Craven Road to the northeast.

2.2 SITE TOPOGRAPHY

A topographic survey was conducted by Rigour Survey on 15 November 2019.

This survey indicates that the site generally falls from south to north, with levels ranging from 51.58 mAOD to approximation 51.00 m AOD. Notably, the car park and footpath situated to the south of the site slopes towards the site, with its highest elevation recorded at 53.08 m AOD. An existing drainage channel has been installed to prevent surface water from entering the building.

The topographic survey is included as Appendix B.

2.3 EXISTING SITE SURFACE WATER DRAINAGE

In accordance with utility survey drawing received from Rigour Survey (Appendix C), the roof area of the current modular building drains into a 150mm private surface water drainage system. This system directs the water westward to a manhole situated in the car park. The ultimate discharge point for this surface water is unknown and requires a further drainage survey to determine. However, it is likely that this system will discharge into the Thames Water public surface water system, which is located along Craven Road to the west of the development.

2.4 EXISTING SURFACE WATER DISCHARGE RATE

Causeway Flow hydraulic modelling has been carried out to assess the existing surface water discharge rate, with results summarised in below table and Appendix D.

Table 2-1: Existing Site Surface Water Discharge Rate

Storm Event	Discharge rate (l/s)
1 in 1 year	24.2
1 in 30 year	51.0
1 in 100 year	51.2

3.0 PROPOSED SURFACE WATER DRAINAGE STRATEGY

3.1 PROPOSED DRAINAGE DISCHARGE HIERARCHY

Surface water discharge hierarchy has been considered in accordance with Ciria C753 guidelines, as outlined below:

- Used as a resource, where appropriate.
- Infiltration to the maximum extent that is practical.
- Discharge to surface waters.
- Discharge to surface water sewer.
- Discharge to combined sewer (last resort).

3.1.1 Used as a resource (rainwater harvesting)

Since there is no demand for utilising recycled rainwater, rainwater harvesting has been discounted.

3.1.2 Disposing surface water via infiltration

Ground investigation (Appendix E) revealed that the site primarily consists of clay strata. Consequently, it has been determined that discharging surface water via infiltration is not viable.

3.1.3 Discharge to watercourse

The nearest watercourse River Kennet is located approximately 850m north of the site. Discharging to this watercourse would necessitate crossing multiple parcels of third-party land. The discharge method is therefore discounted.

3.1.4 Discharge to surface water

As mentioned above, surface water runoff from the existing site is being served by an existing private surface water drainage system. The intention is to discharge surface water runoff from the proposed development into this existing system.

3.1.5 Discharge to combined sewer

Not applicable. Higher discharge hierarchy is met.

3.2 PROPOSED SURFACE WATER DISCHARGE RATE

The maximum allowable discharge rate is assessed in accordance with Sustainable drainage systems: non-statutory technical standards (Defra) standard S3:

For developments which were previously developed, the peak runoff rate from the development to any drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event must be as close as reasonably practicable to the greenfield runoff rate from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment for that event.

In addition, a planning consultation was carried out with Thames Water with the below proposed discharge rate for consideration:

Table 3-1: Proposed Development Surface Water Discharge Rate Accepted by Thames Water

Storm Event	Discharge rate (l/s)
1 in 1 year	8.0
1 in 30 year	13.7
1 in 100 year + 40% cc	26.1

The received correspondence (Appendix F) confirmed that Thames Water has no objection to the above proposed discharge rate.

It should be noted that as the invert levels do not allow a connection to the existing Thames Water Sewer to be made via gravity, a packaged pumping station is proposed, at the exit from the attenuation tank. This pumping station will contain 2 number Hippo 150T pumps. One pump will be set at a rate of 8 l/s, with the other one on standby for any failure of the main pump. Although a discharge rate of 26.1 l/s has been agreed with Thames Water for a 1 in 100 year storm, the discharge will be limited to 8 l/s for all storms by the pumping station and the rate of 8 l/s has been used to calculate the attenuation required.

3.3 SUSTAINABLE URBAN DRAINAGE SYSTEMS

3.3.1 Sustainable drainage developed in line with the ideals of sustainable development is collectively referred to as Sustainable Drainage Systems (SuDS). At a particular site, these systems are designed to manage both the environmental risks resulting from the urban runoff and to contribute, wherever possible, to environmental enhancement. Therefore, SuDS objectives are to minimise the impacts from the development on the quantity and quality of the runoff and maximise amenity and biodiversity opportunities (CIRIA C753, 2015).

3.3.2 SuDS help to mimic the natural flow of water ensuring that both the quantity and quality of the surface water is dealt with before feeding it into the drainage network. SuDS features usually come with added maintenance, however the benefits they reap are considered to outweigh this. The selection of the most appropriate SuDS features should consider constraints, requirements and maintenance of the site. It should be remembered that Local Planning Authorities expect SuDS to be investigated on construction projects. The implementation of SuDS features can assist in achieving the drainage requirements set out in the National Planning Policy Framework.

3.3.3 Landscape-based SuDS approach has been considered. However, the only available landscape area is located to the north of the proposed building, situated on a lower-level slope. This area is deemed unsuitable for SuDS primarily because a gravity drainage system cannot be facilitated.

3.4 PROPOSED DRAINAGE STRATEGY

3.4.1 The proposed development will rely mainly on an underground drainage system, featuring pipes, manholes, and an underground storage tank. Due to the shallow depth of the outfall connection, the system will require pumping, rather than a gravity-based solution.

3.4.2 It is proposed to discharge surface water to an existing private surface water manhole on site, subject to drainage survey to confirm the exact location, condition and connectivity between this private system and Thames Water public surface water located along the Craven Road.

3.4.3 The final discharge rate will be controlled by the proposed pumping station, maintaining a flow of 8 l/s for all storm return periods, up to a 1 in 100-year event plus a 40% climate change allowance.

3.4.4 As previously mentioned, a landscape-based SuDS solution is considered unsuitable for this development. However, an oil interceptor will be installed to treat surface water runoff from the car parking area before it is discharged into the downstream receiving system.

3.4.5 The proposed drainage layout is included in Appendix G. Causeway Flow hydraulic modelling has been conducted to assess the system hydraulic capacity, with the result included in Appendix H confirms that no flooding will occur up to a 1 in 100-year event plus a 40% climate change allowance. The surface water catchment plan associated with Causeway Flow model is also included in Appendix H.

4.0 PROPOSED FOUL SEWER DRAINAGE

The received utility survey (Appendix C) confirmed that a Thames Water public foul sewer system is located along Craven Road, which is considered to be the suitable outfall for the development.

The foul peak flow is estimated to be 3.2 l/s in accordance with BS EN 12056-2 (Appendix I). This estimate is provisional and may be adjusted as the design progresses.

It is proposed to discharge the foul sewer to the Thames Water foul public sewer at an unrestricted rate. In accordance with the planning consultation correspondence received (Appendix F), Thames Water confirmed no objection to the foul drainage strategy.

5.0 MANAGEMENT AND MAINTENANCE

All proposed drainage systems will remain private. The property owner, or an appointed maintenance company will maintain the drainage infrastructure as part of a site-wide management and maintenance schedule in line with below maintenance requirements as minimum:

Item	Maintenance	Frequency per year
Linear Drainage Channel	- Removal of silt accumulation from mud bucket. - Gratings checked for operation/damage – replaced if required.	2
Foul Water Manholes	- Manholes covers checked for operation/damage – seating's re-greased or replaced as required. - Check for blockages and or damage to invert channel/inlets – jetting pipe runs if blocked, any damage to be repaired. - All access ladders & other associated ironworks to be checked for corrosion & fixings to be checked for deterioration. To be repaired or - replaced dependant of extent of damage.	1
Surface Water Manholes, Flow Controls	- As Above - All catch pits/Vortex Separators to have silt/solid accumulation removed & base jetted clean.	1
Pumping Stations	- Check pump exterior for any leaks. - Clean pump and nearby region to remove any debris. - Check for foaming or oil discolouration. - Check pump and motor for any vibration damage - Inspect impeller for erosion and replace if needed	Quarterly or as required

Table 2 - Below-ground Drainage Maintenance Plan

Table 3 - Attenuation storage tank maintenance requirement (extracted from C753 SuDS manual)

TABLE 21.3 Operation and maintenance requirements for attenuation storage tanks		
Maintenance schedule	Required action	Typical frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually
	Remove sediment from pre-treatment structures and/or internal forebays	Annually, or as required
Remedial actions	Repair/rehabilitate inlets, outlet, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tank for sediment build-up and remove if necessary	Every 5 years or as required

6.0 CONCLUSIONS

6.1.1 The proposed building will have separate drainage systems for surface water and foul wastewater.

6.1.2 It has been determined that implementing a landscape-based SuDS solution is not feasible for this development. The primary reasons for this conclusion are the limited availability of soft landscape areas and the constraints posed by site levels.

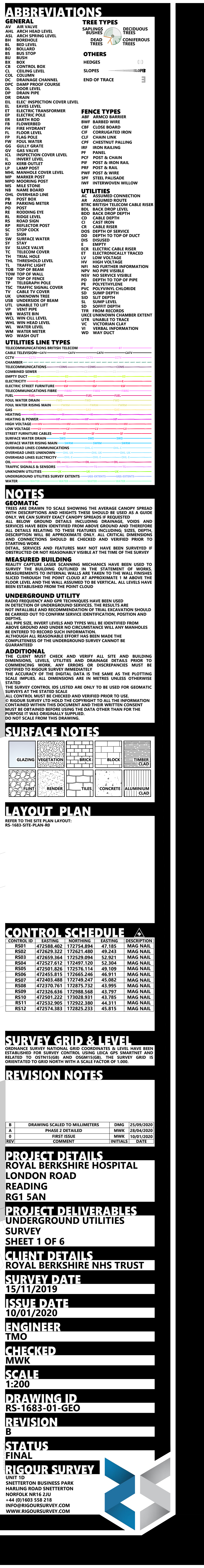
6.1.3 Surface water runoffs from the development will be collected via rainwater pipes and channel drains, and subsequently attenuated via an underground attenuation tank. It will be pumped out at a rate of 8 l/s, accommodating storm events up to a 1 in 100-year + a 40% climate change allowance.

6.1.4 All proposed drainage systems will remain private and to be maintained by the property owner or an appointed maintenance company.

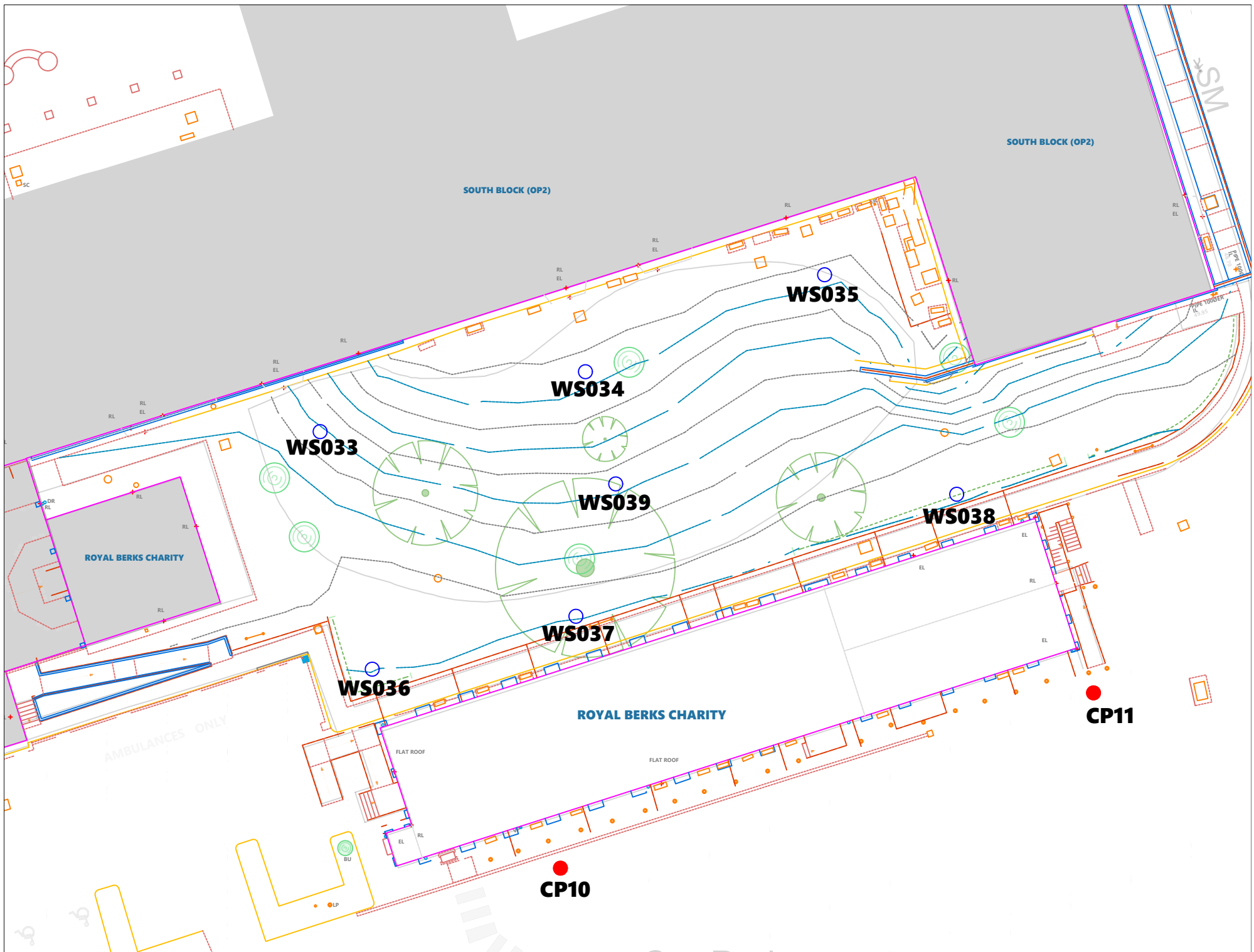
APPENDIX A – PROPOSED SITE LAYOUT

APPENDIX B – SITE TOPOGRAPHY

APPENDIX C – UTILITY SURVEY



APPENDIX D – BOREHOLE TESTING RESULTS



 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP010
Machine : Dando D150 Method : Cable Percussion		Casing Diameter 200mm cased to 10.00m 150mm cased to 18.00m		Ground Level (mOD) 51.65		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472579.13 E 172544.21 N		Dates 26/10/2023-31/10/2023		Project Contractor TFGI		Sheet 1/4	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
							Service Clearance Pit		
1.50-1.95	SPT N=7	1.50	DRY	1,1/2,1,2,2	50.65	1.00	Soft becoming firm brown sandy CLAY with occasional angular fine to medium flint gravel. TAPLOW GRAVEL MEMBER		
2.50-2.95	SPT N=16	1.50	DRY	1,2/3,4,5,4		(4.00)			
3.50-3.95	SPT N=12	3.00	DRY	1,3/3,4,3,2					
4.50-4.95	SPT N=7	3.00	DRY	1,1/1,1,2,3			becoming soft		
5.50-5.95	SPT N=11	4.50	DRY	1,2/2,3,3,3	46.65	5.00	Loose becoming medium dense brown slightly gravelly clayey SAND. Gravel is angular fine to medium flint. TAPLOW GRAVEL MEMBER		
						(2.20)			
7.00-7.45	SPT N=6	7.00	DRY	1,0/1,0,1,4	44.45	7.20	200mm band of soft brown gravelly slightly sandy CLAY - gravel is angular to sub-angular fine to coarse flint		
							Loose becoming very dense brown SAND. Sand is predominantly medium to coarse. TAPLOW GRAVEL MEMBER		
8.50-8.95	SPT N=8	8.50	DRY	2,2/1,2,3,2					
10.00-10.45	SPT N=50	10.00	9.35	26/10/2023:8.82m 27/10/2023:8.90m 2,6/8,12,18,12					
Remarks Vacuum excavated service clearance pit by others from GL - 1.00m. Borehole cased to 18.00m. Water added from 9.00 - 9.50m and 10.00 - 13.00m to assist boring. Groundwater was encountered at 14.00m. Standpipe installed upon completion - see separate sheet for details. DD15 - SPT Hammer Energy Ratio: 66%								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.CP010	



Site

Royal Berkshire Hospital, London Road, Reading,
Berkshire. RG1 5AN.Borehole
Number

CP010

Machine : Dando D150

Method : Cable Percussion

Casing Diameter

200mm cased to 10.00m
150mm cased to 18.00m

Ground Level (mOD)

51.65

Client

Royal Berkshire NHS Foundation Trust

Job
Number

TFGI/1418/23

Location

472579.13 E 172544.21 N

Dates

26/10/2023-
31/10/2023

Project Contractor

TFGI

Sheet

2/4

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
11.50-11.95	SPT N=50	11.50	WA	2,4/8,10,16,16		(5.80)			
13.00-13.45	SPT N=34	13.00	WA	3,3/5,7,10,12	38.65	13.00	Very stiff grey CLAY locally slightly sandy with occasional orange oxidation marks. LAMBETH GROUP		
				Water strike(1) at 14.00m, rose to 13.86m in 20 mins.		(1.50)	becoming thinly interbedded dark grey, green and brown sandy CLAY with rare sub-angular medium flint		▼1 ▽1
16.00-16.45	SPT N=11	14.50	DRY	2,2/4,3,2,2 Water strike(2) at 16.10m, rose to 15.64m in 20 mins.	37.15	14.50	Recovered as: Structureless CHALK comprising uncompact cream with occasional orange staining. Locally small pockets of very soft brown silty clay noted. SEAFORD AND NEWHAVEN CHALK FORMATION		▼2 ▽2
17.50-17.95	SPT N=22	17.50	16.52	27/10/2023:16.10m 30/10/2023:15.48m 4,6/6,6,4,6					

Remarks

Scale
(approx)

1:50

Logged
By

CW

Figure No.

TFGI/1418/23.CP010

TFGI TERRA FIRMA Ground Investigation Ltd						Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP010	
Machine : Dando D150 Method : Cable Percussion		Casing Diameter 200mm cased to 10.00m 150mm cased to 18.00m		Ground Level (mOD) 51.65		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472579.13 E 172544.21 N		Dates 26/10/2023-31/10/2023		Project Contractor TFGI		Sheet 3/4	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
20.50-20.95	SPT N=27	18.00	16.45	4,4/3,6,9,9			CHALK becoming orangish cream silty GRAVEL and rare COBBLES - clasts are weak to moderately weak low to high density angular to sub-angular with light orange laminae - requent medium to coarse gravel sized fragments of angular flint noted		
22.00-22.45	SPT N=43	18.00	16.00	9,6/8,8,13,14		(15.95)			
25.00-25.45	SPT N=28	18.00	15.95	3,4/6,6,7,9					
26.50-26.95	SPT N=56	18.00	15.85	4,5/8,10,22,16					
28.00-28.45	SPT N=49	18.00	15.65	30/10/2023:15.65m 31/10/2023:15.45m 19,6/9,10,14,16 31/10/2023:15.90m					
Remarks								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.CP010	

TFGI TERRA FIRMA Ground Investigation Ltd						Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP010		
Machine : Dando D150 Method : Cable Percussion		Casing Diameter 200mm cased to 10.00m 150mm cased to 18.00m			Ground Level (mOD) 51.65		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472579.13 E 172544.21 N			Dates 26/10/2023-31/10/2023		Project Contractor TFGI		Sheet 4/4	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
30.00-30.45	SPT N=32	18.00	15.90	6,7/8,7,8,9	21.20	30.45	Complete at 30.45m			

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP001
Boring Method Cable Percussion Borehole Dando 2000		Casing Diameter 200mm to 6.00m 150mm to 14.00m		Ground Level (mOD) 44.60		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472405.436 E 172815.383 N		Dates 31/05/2023- 05/06/2023		Project Contractor TFGI		Sheet 1/2	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50-1.00	B1				44.40 44.25	(0.20) (0.20) (0.15) (0.38)	MADE GROUND: Type 1 Backfill MADE GROUND: Hardcore Sub-Base comprising brick, broken concrete and flint.		
1.00-1.45 1.00-1.45	SPT(C) N=8 B2		DRY	1,1/2,2,2,2		(1.15)	MADE GROUND: Reworked brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse sub-angular to sub-rounded flint, rare brick and rare ash.		
1.50-2.00	B3				43.10	1.50	Medium dense becoming dense dark to light brown to grey slightly gravelly very clayey SAND interbedded with bands of firm becoming stiff dark brown CLAY. Gravel is fine to coarse sub-angular to sub-rounded flint. TAPLOW GRAVEL MEMBER		
2.00-2.45	B4			31/05/2023:DRY					
2.00-2.45 2.50-3.00	SPT(C) N=14 B5	2.00	DRY	01/06/2023:DRY 2,4/4,5,2,3					
3.00-3.45 3.00-3.45	SPT(C) N=27 B6	2.80	DRY	1,2/3,6,8,10		(2.80)	becoming slightly clayey gravelly SAND		
3.50-4.00	B7								
4.00-4.45 4.00-4.45	SPT(C) N=34 B8	4.00	2.50	4,6/8,8,8,10	40.30	4.30	Dense dark brown slightly clayey sandy GRAVEL. Gravel is fine to coarse sub-angular to sub-rounded flint and occasional sandstone. Rare flint cobbles noted up to 100mm diameter. TAPLOW GRAVEL MEMBER		
4.50-5.00	B9								
5.00-5.45 5.50-5.80	SPT(C) N=42 B10	5.00	DRY	01/06/2023:DRY 02/06/2023:DRY 4,6/8,8,10,16		(1.50)			
5.90-6.00 6.00-6.45 6.00-6.45	D11 SPT N=10 D12	6.00	DRY	1,1/1,2,3,4	38.80	5.80 (0.80)	Soft to firm mottled dark brown to grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to well-rounded flint. LAMBETH GROUP		
7.00-7.45 7.00-7.45	SPT N=10 B13	6.10	DRY	1,1/2,3,2,3	38.00	6.60	Recovered as: Clean white slightly gravelly CHALK. Gravel is fine to coarse angular to sub-rounded flint and chalk lithorelics. SEAFORD AND NEWHAVEN CHALK FORMATION		
8.50-8.95 8.50-8.95	SPT N=3 B14	8.50	8.70	2,2/1,0,1,1 Water strike(1) at 8.70m.					
10.00-10.45	SPT N=24	10.00	1.00	1,2/4,4,6,10					
Remarks Hand dug inspection pit from GL - 1.20m. Borehole cased to 14.00m Water was added from 3.50m - 5.80m and 6.60m - 14.50m to assist boring. Groundwater was encountered at 8.70m. Difficult to advance borehole beyond 11.00m - chiselling and bailing techniques employed to advance borehole. Standpipe installed upon completion - see separate sheet for details. SPT006 - Hammer Energy Ratio: 76.87%								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.CP001	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP001
Boring Method Cable Percussion Borehole Dando 2000		Casing Diameter 200mm to 6.00m 150mm to 14.00m		Ground Level (mOD) 44.60		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472405.436 E 172815.383 N		Dates 31/05/2023- 05/06/2023		Project Contractor TFGI		Sheet 2/2	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.45	B15					(8.17)	becoming slightly cobbly gravelly CHALK majority of chalk matrix not recovered		
11.50-11.79 11.50-11.95	SPT(C) 50/140 B16	11.00	5.50	10,8/15,35 02/06/2023:8.00m 05/06/2023:8.55m			becoming very gravelly CHALK - gravel is fine to coarse sub-angular to sub-rounded chalk lithorelics and flint large quantity of flint noted (possible flint boulder)		
13.00-13.37 13.00-13.45	SPT(C) 50/220 B17	13.00	11.10	4,10/15,16,19					
14.50-14.77	SPT(C) 100/120	14.00	9.48	11,14/45,55	29.83	14.77	Complete at 14.77m		
Remarks								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.CP001	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP011
Boring Method Dando 150 Cable Percussion		Casing Diameter 200mm to 10.50m 150mm to 23.50m		Ground Level (mOD) 51.36		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472611.039 E 172554.605 N		Dates 16/10/2023-20/10/2023		Project Contractor TFGI		Sheet 1/4	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.20-1.65 1.20	SPT N=0 D1	1.20	DRY	1,0/0,0,0,0	50.16	(1.20) 1.20	Service Clearance Pit Very loose becoming loose dark brown clayey SAND with rare angular fine flint gravel. TAPLOW GRAVEL MEMBER		
2.00-2.45 2.00	SPT N=10 D2	2.00	DRY	1,3/3,2,2,3		(2.30)			
2.50-3.00	B3								
3.00-3.45 3.50	SPT N=4 B4	3.00	DRY	16/10/2023:DRY 17/10/2023:DRY 2,2/1,1,1,1	47.86	3.50	Soft to firm becoming firm brown gravelly sandy CLAY. Gravel is sub-angular to rounded fine to medium flint gravel. TAPLOW GRAVEL MEMBER		
4.00-4.45 4.00	SPT N=8 D5	4.00	DRY	1,1/2,1,2,3					
5.00	D6								
6.00-6.50	B7								
6.50-6.95	SPT N=8	6.00	DRY	1,1/1,2,3,2					
7.00-7.50	B8					(7.50)			
8.00	D9								
8.50-9.00	B10						becoming loose brown gravelly clayey SAND		
9.50-9.95	SPT N=8	9.00	DRY	1,2/2,2,2,2					
Remarks Vacuum excavated service clearance pit by others from GL - 1.20m. Borehole cased to 23.50m. Water added from 10.50 - 12.00m to assist boring. Groundwater was encountered at 16.00m. Standpipe installed upon completion - see separate sheet for details. DD15 - SPT Hammer Energy Ratio: 66%								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.CP011	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP011
Boring Method Dando 150 Cable Percussion		Casing Diameter 200mm to 10.50m 150mm to 23.50m		Ground Level (mOD) 51.36		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472611.039 E 172554.605 N		Dates 16/10/2023- 20/10/2023		Project Contractor TFGI		Sheet 2/4	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.35	B11						becoming firm grey and orangish brown CLAY with frequent black oxidation spots		
10.50-10.95 10.50	SPT N=12 D12	10.50	DRY	1,2/2,3,4,3					
11.00-11.50	B13				40.36	11.00	Light brown SAND and GRAVEL. Gravel is angular to sub-rounded fine to coarse flint. TAPLOW GRAVEL MEMBER		
						(1.00)			
12.00-12.45 12.00-12.50	SPT(C) N=15 B14	12.00	10.50	1,2/3,3,4,5	39.36	12.00	Firm to stiff red mottled grey slightly sandy CLAY. LAMBETH GROUP		
				17/10/2023:10.82m 18/10/2023:11.31m		(1.50)			
13.00-13.50	B15								
13.50-13.95 13.50	SPT N=12 D16	13.50	DAMP	1,2/2,3,3,4	37.86	13.50	Light brown SAND. Sand is predominantly medium to coarse. LAMBETH GROUP		
14.50	D17					(2.50)			
15.00-15.45 15.00	SPT N=21 D18	15.00	DRY	2,3/5,5,5,6					▼1
16.00-16.50	B19			Water strike(1) at 16.00m, rose to 15.37m in 20 mins, not sealed. 3,4/4,5,6,7	35.36	16.00	Very stiff thinly laminated grey and orange CLAY. LAMBETH GROUP		▽1
16.00-16.45 16.50	SPT N=22 D20	16.50	DRY			(1.50)			
17.00-17.50	B21								
17.50-18.00	B22				33.86	17.50	Recovered as: Structureless CHALK comprising cream slightly sandy silty GRAVEL. Gravel is angular fine composed of chalk and occasional angular fine to coarse flint. SEAFORD AND NEWHAVEN CHALK FORMATION becoming silty - gravels absent		
18.00-18.45 18.00	SPT N=14 D23	18.00	17.90	2,3/4,3,3,4					
19.50-19.95 19.50	SPT N=21 D24	19.30	16.35	3,5/6,4,5,6					
Remarks								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.CP011	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP011
Boring Method Dando 150 Cable Percussion		Casing Diameter 200mm to 10.50m 150mm to 23.50m		Ground Level (mOD) 51.36		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472611.039 E 172554.605 N		Dates 16/10/2023- 20/10/2023		Project Contractor TFGI		Sheet 3/4	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
21.00-21.45 21.00	SPT N=38 D25	20.50	17.10	6,3/3,5,8,22			becoming cream mottled orange slightly gravelly slightly sandy SILT - gravel is angular to sub-angular fine to coarse chalk lithorelics - chalk gravel is very weak low density cream and orange with occasional black specks		
22.50	D26			18/10/2023:17.35m					
22.50-22.95	SPT N=31	20.50	15.46	19/10/2023:15.46m 12,7/7,8,7,9					
24.00-24.45 24.00	SPT N=46 D27	20.50	15.61	8,10/9,9,11,17		(12.85)			
24.50-25.50	B28								
25.50-25.95 25.50	SPT N=31 D29	23.50	16.18	5,7/7,9,8,7					
27.00-27.45 27.00 27.00-28.50	SPT N=27 D30 B31	23.50	16.35	5,5/5,6,7,9			rare flint cobbles observed locally gravels becoming absent		
28.50-28.95 28.50	SPT N=43 D32	23.50	15.82	6,7/7,8,14,14					
29.00-30.00	B33			19/10/2023:16.21m			becoming slightly gravelly		
Remarks							Scale (approx) 1:50	Logged By CW	Figure No. TFGI/1418/23.CP011

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number CP011
Boring Method Dando 150 Cable Percussion		Casing Diameter 200mm to 10.50m 150mm to 23.50m		Ground Level (mOD) 51.36		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472611.039 E 172554.605 N		Dates 16/10/2023- 20/10/2023		Project Contractor TFGI		Sheet 4/4	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
30.00-30.35 30.00	SPT 25*/50 N=33 D34	23.50	16.21	20,5/,12,9,12	21.01	30.35	Complete at 30.35m		
Remarks Scale (approx) 1:50 Logged By CW Figure No. TFGI/1418/23.CP011									

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS033
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 143mm cased to 5.00m		Ground Level (mOD) 50.79		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472566.902 E 172560.188 N		Dates 20/09/2023		Project Contractor TFGI		Sheet 1/1	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00-2.00	SPT(C) N=13 B1		DRY	2,2/3,3,3,4	49.79	1.00	Service Clearance Pit		
2.00-2.45 2.00-3.00	SPT(C) N=11 B2	2.00	DRY	2,4/3,2,3,3		(3.24)	Medium dense orangish brown SAND and GRAVEL. Gravel is angular to rounded fine to coarse flint. Sand is fine to coarse. TAPLOW GRAVEL MEMBER		
3.00-3.45 3.00-4.00	SPT(C) N=13 B3	3.00	DRY	2,3/3,4,3,3			150mm band of orangish brown fine to coarse SAND		
4.00-4.45 4.00-4.18 4.30-4.45	SPT(C) N=34 D4 D5	4.00	DRY	2,6/7,7,8,12	46.55	4.24	240mm band of yellowish brown medium to coarse SAND becoming dense		
4.72-5.00	B6				46.07	4.72	Very stiff light brown and light grey sandy silty CLAY with rare pockets of orangish brown sand. Occasional pockets of reddish brown silt noted. TAPLOW GRAVEL MEMBER		
5.00-5.37	SPT 100/220	5.00	DRY	7,12/22,38,40	45.42	5.37	Orangish brown sandy clayey GRAVEL. Gravel is angular to rounded fine to coarse flint. Sand is fine to coarse. TAPLOW GRAVEL MEMBER		
							Complete at 5.37m		
Remarks Vacuum excavated service clearance pit by others from GL - 1.00m Borehole cased to 5.00m. Groundwater was not encountered. SPT Refused at 5.37m - position aborted by Engineer. Borehole backfilled with bentonite granules and pellets upon completion. DT1 - Hammer Energy Ratio: 62% - blow count not corrected for energy ratio.								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.WS033	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS034
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 143mm cased to 6.00m		Ground Level (mOD) 46.27		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472583.79 E 172581.201 N		Dates 12/09/2023- 13/09/2023		Project Contractor TFGI		Sheet 1/1	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00-1.70	SPT(C) N=20 B1		DRY	3,4/5,6,4,5	45.27	1.00	Service Clearance Pit		
1.72-1.85 2.00-2.45 2.20-3.00	D2 SPT(C) N=9 B3	2.00	DRY	2,3/2,3,2,2			Medium dense becoming very dense orangish brown SAND and GRAVEL. Gravel is angular to rounded fine to coarse flint. Sand is fine to coarse. TAPLOW GRAVEL MEMBER		
3.00-3.45 3.00-4.00	SPT(C) N=14 B4	3.00	DRY	2,3/4,3,3,4		(4.40)	280mm band of light brown slightly gravelly fine to coarse SAND - gravel is sub-rounded to angular flint		
4.00-4.45 4.30-5.00	SPT(C) N=10 B5	4.00	DRY	3,3/2,4,2,2					
5.00-5.45 5.00-5.20 5.40-6.00	SPT(C) N=85 D6 B7	5.00	DRY	3,6/13,13,20,39	40.87	5.40	Very dense light brown slightly gravelly fine to coarse SAND. Gravel is sub-rounded to angular fine to coarse flint. TAPLOW GRAVEL MEMBER		
6.00-6.34	SPT 100/190	6.00	DRY	12/09/2023: DRY 13/09/2023: DRY 10,17/30,32,38	39.93	(0.94) 6.34	Complete at 6.34m		
Remarks Vacuum excavated service clearance pit by others from GL - 1.00m Borehole cased to 6.00m. Groundwater was not encountered. SPT Refused at 6.34m - position aborted by Engineer. Borehole backfilled with bentonite granules and pellets upon completion. DT1 - Hammer Energy Ratio: 62% - blow count not corrected for energy ratio.								Scale (approx) 1:50	Logged By
								Figure No. TFGI/1418/23.WS034	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS035
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 143mm cased to 6.00m		Ground Level (mOD) 46.55		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472596.713 E 172584.894 N		Dates 19/09/2023		Project Contractor TFGI		Sheet 1/1	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00-1.20 1.20-2.00	SPT(C) N=22 D1 B2		DRY	2,2/5,5,5,7	45.55 45.30	(1.00) 1.00 (0.25) 1.25	Service Clearance Pit Firm to stiff dark orangish brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to rounded fine to medium flint. TAPLOW GRAVEL MEMBER Medium dense dark orangish brown SAND and GRAVEL. Gravel is angular to rounded fine to coarse flint. TAPLOW GRAVEL MEMBER		
2.00-2.45 2.00-3.00	SPT(C) N=12 B3	2.00	DRY	2,3/2,3,3,4					
3.00-3.45 3.30-4.50	SPT(C) N=9 B4	3.00	DRY	3,3/3,2,2,2		(3.85)			
4.00-4.45	SPT(C) N=9	4.00	DRY	2,3/2,3,2,2					
4.70-5.10 5.00-5.45 5.20-5.80	B5 SPT(C) N=10 B6	5.00	DRY	2,2/2,2,3,3	41.45	5.10 (0.70)	becoming dark orangish brown slightly gravelly SAND - gravel is angular to sub angular fine to medium flint Soft to firm reddish brown very gravelly slightly sandy CLAY. Gravel is angular to rounded fine to coarse flint. TAPLOW GRAVEL MEMBER		
6.00-6.31 6.00-6.30 6.30-6.80	SPT(C) 100/155 D7 D8	6.00	DRY	7,19/35,60,5	40.75 40.55	5.80 (0.20) 6.00	Soft to firm becoming very stiff orange and red and light grey sandy slightly gravelly CLAY. Gravel is rounded fine to coarse of flint. LAMBETH GROUP		
6.80-7.00 7.00-7.32	D9 SPT 100/165	6.00	DRY	7,17/30,45,25	39.55	(1.00) 7.00	Very dense orange clayey SAND. Sand is fine to medium. LAMBETH GROUP becoming light yellow SAND rare rounded to sub-rounded fine to medium flint gravel noted locally		
				19/09/2023: DRY	Complete at 7.32m				
Remarks Vacuum excavated service clearance pit by others from GL - 1.00m Borehole cased to 6.00m. Groundwater was not encountered. SPT Refused at 7.32m - position aborted by Engineer. Borehole backfilled with bentonite granules and pellets upon completion. DT1 - Hammer Energy Ratio: 62% - blow count not corrected for energy ratio.								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.WS035	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS036
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 143mm cased to 3.00m		Ground Level (mOD) 50.79		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472566.902 E 172560.188 N		Dates 21/09/2023- 22/09/2023		Project Contractor TFGI		Sheet 1/2	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45	SPT(C) N=10					(1.00)	Service Clearance Pit		
1.20-2.00	B1		DRY	2,1/2,2,3,3	49.79 49.66	(0.13)	MADE GROUND: Soft dark brown sandy gravelley CLAY. Gravel is fine to coarse flint. Sand is fine. Frequent rootlets rare red brick fragments noted.		
2.00-2.45	SPT(C) N=18	2.00	DRY	2,2/3,5,4,6			Soft to firm becoming stiff orangish brown sandy gravelly CLAY. Sand is fine to medium. Gravel is angular to sub-rounded fine to coarse flint. Occasional black oxidation spots and rare rootlets observed. TAPLOW GRAVEL MEMBER		
2.00-3.00	B2					(3.12)			
3.00-3.45	SPT N=24	3.00	DRY	3,5/5,5,7,7			rare pockets of light brown silty fine sand noted - rootlets becoming absent		
3.00-4.00	B3								
4.00-4.45	SPT N=23	3.00	DRY	3,5/6,7,5,5	46.54	4.25	Medium dense orangish brown SAND AND GRAVEL. Gravel is angular to rounded fine to coarse flint. Sand is fine to coarse. TAPLOW GRAVEL MEMBER		
4.60-4.75	D4					(0.75)			
4.80-5.00	D5								
5.00-5.45	SPT N=16	3.00	DRY	2,2/2,2,4,8	45.79	5.00	Firm brown CLAY with frequent oxidation spots. TAPLOW GRAVEL MEMBER		
5.00-5.64	B6					(0.64)			
6.00-6.45	SPT N=15	3.00	DRY	3,3/3,3,4,5	45.15	5.64	Medium dense orangish brown SAND AND GRAVEL. Gravel is angular to rounded fine to coarse flint. Sand is fine to coarse. TAPLOW GRAVEL MEMBER		
6.30-7.00	B7								
7.00-7.45	SPT N=26	3.00	DRY	3,3/6,5,7,8		(3.16)			
7.22-8.80	B8								
8.00-8.45	SPT N=30	3.00	DRY	4,5/9,7,8,6					
8.80-9.00	D9				41.99	8.80	Firm light orangish brown mottled grey locally reddish orange slightly gravelly sandy CLAY with occasional black oxidation spots. Gravel is angular fine of flint. LAMBETH GROUP		
9.00-9.45	SPT N=35	3.00	DRY	5,6/7,9,8,11		(1.57)			
10.00-10.37	SPT 100/220			5,5/15,35,50					
Remarks Vacuum excavated service clearance pit by others from GL - 1.00m Borehole cased to 3.00m. Groundwater was not encountered. Borehole backfilled with bentonite granules and pellets upon completion. DT1 - Hammer Energy Ratio: 62% - blow count not corrected for energy ratio.								Scale (approx) 1:50	Logged By
								Figure No. TFGI/1418/23.WS036	

TFGI TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS036	
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 143mm cased to 3.00m		Ground Level (mOD) 50.79		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23		
		Location 472566.902 E 172560.188 N		Dates 21/09/2023- 22/09/2023		Project Contractor TFGI		Sheet 2/2		
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
					40.42	10.37	Complete at 10.37m			
Remarks							Scale (approx)	Logged By		
							1:50			
							Figure No. TFGI/1418/23.WS036			

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS037
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 113mm cased to		Ground Level (mOD) 50.73		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472590.392 E 172565.374 N		Dates 07/09/2023- 08/09/2023		Project Contractor TFGI		Sheet 1/2	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00-1.60	SPT(C) N=14 B1		DRY	2,4/3,3,3,5	49.73	1.00	Service Clearance Pit		
1.60-3.00	B2						Firm becoming stiff orangish brown mottled grey sandy slightly gravelly CLAY. Gravel is angular to well-rounded fine to coarse flint. TAPLOW GRAVEL MEMBER		
2.00-2.45	SPT(C) N=15	2.00	DRY	2,3/3,4,3,5		(3.15)			
3.00-3.45 3.00-3.30 3.30-4.00	SPT(C) N=22 D3 B4	3.00	DRY	2,4/5,4,5,8					
4.00-4.45 4.00-4.15 4.15-4.80	SPT(C) N=23 D5 B6	4.00	DRY	2,3/6,5,5,7	46.58	4.15	Dense to medium dense brownish grey gravelly SAND interbedded with soft to firm orangish brown CLAY. Bedding thickness ranges from ~100mm - 450mm. TAPLOW GRAVEL MEMBER		
4.80-4.92 4.92-5.05 5.00-5.45 5.05-5.22 5.22-5.70	D7 D8 SPT(C) N=11 D9 B10	5.00	DRY	0,0/1,1,4,5			becoming slightly sandy silty CLAY - sand is fine becoming gravelly sand - gravel is angular to sub-angular fine to medium flint becoming fissured light orange CLAY - fissures are closely spaced and randomly orientated - black oxidation spots noted on fissure walls		
5.70-8.00	B11						becoming brown SAND and GRAVEL - gravel is angular to sub-rounded fine to coarse flint		
6.00-6.45	SPT(C) N=10	6.00	DRY	2,5/2,3,2,3		(4.35)			
7.00-7.45	SPT(C) N=5	7.00	DRY	2,1/2,1,1,1					
8.00-8.45	SPT(C) N=10	8.00	DRY	4,2/2,3,2,3					
8.50-9.00	B12			07/09/2023:DRY 08/09/2023:DRY	42.23	8.50	Stiff becoming very stiff red and greyish green gravelly slightly sandy CLAY. Gravel is angular to sub-rounded fine to coarse flint. LAMBETH GROUP sands and gravels become absent		
9.00-9.45 9.00-10.00	SPT(C) N=24 B13	9.00	DRY	2,3/4,6,6,8					
9.50	D14					(2.50)			
10.00-10.45	SPT(C) N=29	9.00	DRY	3,5/7,7,7,8					
Remarks Vacuum excavated service clearance pit by others from GL - 1.00m Borehole cased to 9.00m. Groundwater was not encountered. Borehole backfilled with bentonite granules and pellets upon completion. DT1 - Hammer Energy Ratio: 62% - blow count not corrected for energy ratio.								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.WS037	

TFGI TERRA FIRMA Ground Investigation Ltd						Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS037	
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 113mm cased to		Ground Level (mOD) 50.73		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472590.392 E 172565.374 N		Dates 07/09/2023-08/09/2023		Project Contractor TFGI		Sheet 2/2	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.60-11.00	B15						becoming whitish yellow SAND	<	

 TERRA FIRMA Ground Investigation Ltd							Site Royal Berkshire Hospital, London Road, Reading, Berkshire. RG1 5AN.		Borehole Number WS038
Boring Method Dando Terrier 2002 Dynamic Sampling		Casing Diameter 143mm cased to 4.00m		Ground Level (mOD) 50.70		Client Royal Berkshire NHS Foundation Trust		Job Number TFGI/1418/23	
		Location 472607.606 E 172572.079 N		Dates 25/09/2023- 26/09/2023		Project Contractor TFGI		Sheet 1/2	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00-1.60	SPT(C) N=22 B1		DRY	6,6/7,5,5,5	49.70	(1.00) 1.00 (0.60)	Service Clearance Pit MADE GROUND: Stiff dark brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse flint. Sand is fine. Occasional rootlets rare red brick fragments noted.		
2.00-2.45 2.00-3.00	SPT(C) N=13 B2	2.00	DRY	2,1/2,3,4,4	49.10	1.60	Firm becoming very soft orangish brown slightly sandy gravelly CLAY. Sand is fine to medium. Gravel is angular to sub rounded fine to coarse flint. Occasional black oxidation spots and rare rootlets observed. TAPLOW GRAVEL MEMBER		
3.00-3.45 3.00-4.00	SPT(C) N=13 B3	3.00	DRY	1,2/3,2,3,5					
4.00-4.45 4.00-4.67	SPT(C) N=11 B4	4.00	DRY	2,3/2,3,3,3		(4.64)			
5.00-5.45 5.00-6.00	SPT N=11 B5	4.00	DRY	2,2/2,2,4,3			becoming slightly gravelly sandy CLAY		
6.00-6.45 6.24-7.00	SPT N=4 B6	4.00	DRY	1,1/1,1,1,1	44.46	6.24	Loose orangish brown locally clayey SAND AND GRAVEL. Gravel is angular to rounded fine to coarse flint. Sand is fine to coarse. TAPLOW GRAVEL MEMBER rootlets becoming absent		
7.00-7.45 7.40-8.00	SPT N=8 B7	4.00	DRY	1,2/2,2,2,2					
8.00-9.00 8.00-8.45	B8 SPT N=5	4.00	8.00	Water strike(1) at 8.00m. 2,3/2,1,1,1			becoming brown slightly gravelly SAND		▽1
9.00-9.45 9.00-10.00	SPT N=11 B9	4.00	9.00	2,3/3,3,3,2		(5.76)			
10.00-10.45	SPT N=8	4.00	10.00	25/09/2023:9.00m 26/09/2023:DRY 2,1/1,0,3,4			becoming brown SAND and GRAVEL		
Remarks Vacuum excavated service clearance pit by others from GL - 1.00m Borehole cased to 4.00m. Groundwater was encountered at 8.00m. Borehole backfilled with bentonite granules and pellets upon completion. DT1 - Hammer Energy Ratio: 62% - blow count not corrected for energy ratio.								Scale (approx) 1:50	Logged By CW
								Figure No. TFGI/1418/23.WS038	

APPENDIX E - THAMES WATER PLANNING CONSULTATION CORRESPONDENCE

From: BCTAdmin@thameswater.co.uk
Sent: Tuesday, April 18, 2023 9:31 AM
To: Planning Administration
Subject: 3rd Party Planning Application - 230321

*** *WARNING - this is an External Email ***

STOP, THINK, before you CLICK links or OPEN attachments or REPLY.

Reading Borough Council
Council Offices
Civic Centre
Reading
Berkshire
RG1 7TD

Our DTS Ref: 74653
Your Ref: 230321

18 April 2023

Dear Sir/Madam

Re: New ward, ICU / ERF, South Block, Royal Berkshire Hospital, London Road, READING, Berkshire, RG1 5AN

Waste Comments

Thames Water recognises this catchment is subject to high infiltration flows during certain groundwater conditions. The scale of the proposed development doesn't materially affect the sewer network and as such we have no objection, however care needs to be taken when designing new networks to ensure they don't surcharge and cause flooding. In the longer term Thames Water, along with other partners, are working on a strategy to reduce groundwater entering the sewer networks.

Thames Water recognises this catchment is subject to high infiltration flows during certain groundwater conditions. The developer should liaise with the LLFA to agree an appropriate sustainable surface water strategy following the sequential approach before considering connection to the public sewer network. The scale of the proposed development doesn't materially affect the sewer network and as such we have no objection, however care needs to be taken when designing new networks to ensure they don't surcharge and cause flooding. In the longer term Thames Water, along with other partners, are working on a strategy to reduce groundwater entering the sewer network.

.

Thames Water would advise that with regard to FOUL WATER sewerage network infrastructure capacity, we would not have any objection to the above planning application, based on the information provided.

Thames Water would advise that with regard to SURFACE WATER network infrastructure capacity, we would not have any objection to the above planning application, based on the information provided.

Water Comments

If you are planning on using mains water for construction purposes, it's important you let Thames Water know before you start using it, to avoid potential fines for improper usage. More information and how to apply can be found online at thameswater.co.uk/buildingwater.

On the basis of information provided, Thames Water would advise that with regard to water network and water treatment infrastructure capacity, we would not have any objection to the above planning application. Thames Water recommends the following informative be attached to this planning permission. Thames Water will aim to provide customers with a minimum pressure of 10m head (approx 1 bar) and a flow rate of 9 litres/minute at the point where it leaves Thames Waters pipes. The developer should take account of this minimum pressure in the design of the proposed development.

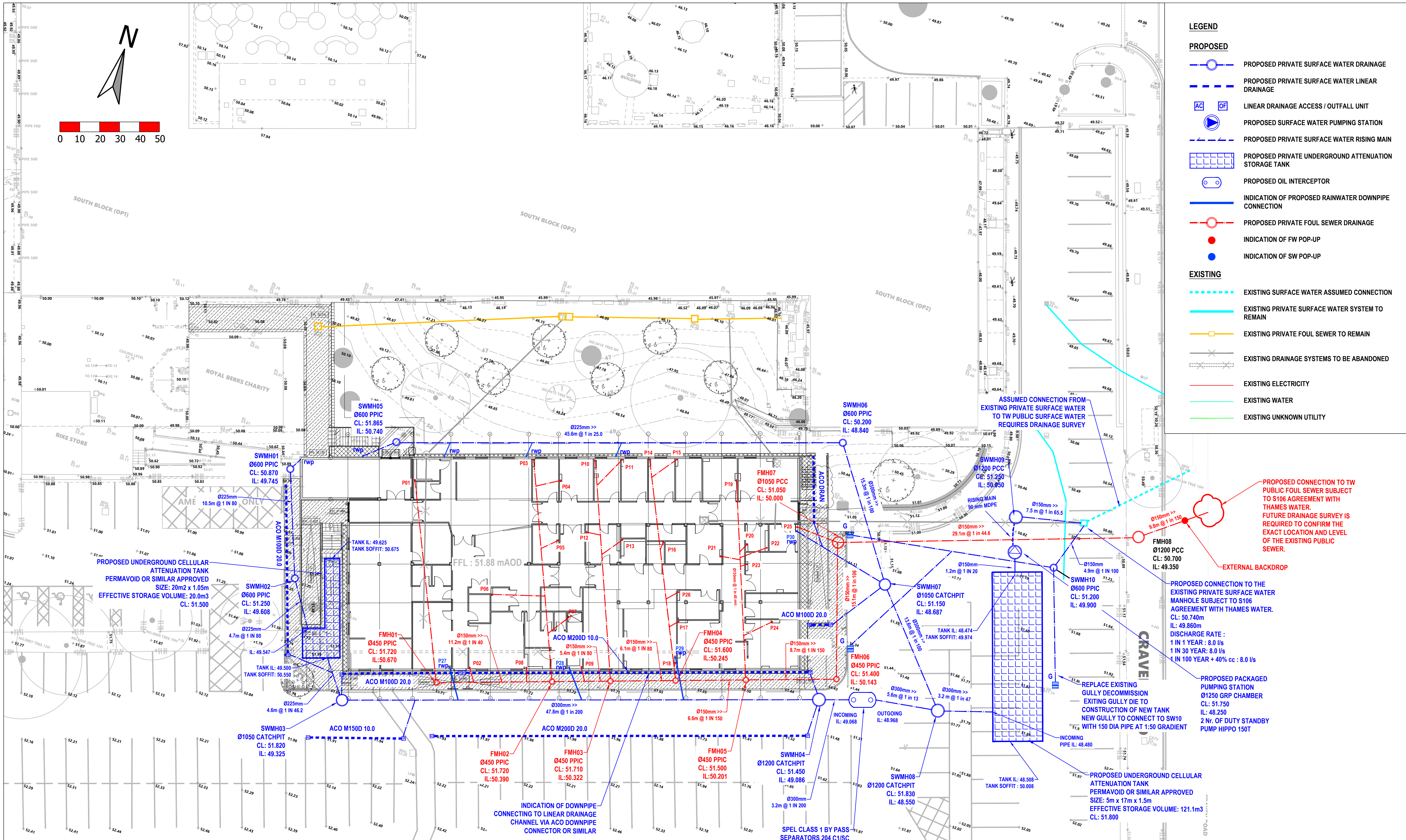
Yours faithfully
Development Planning Department

Development Planning,
Thames Water,
Maple Lodge STW,
Denham Way,
Rickmansworth,
WD3 9SQ
Tel:020 3577 9998
Email: devcon.team@thameswater.co.uk

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APPENDIX F – PROPOSED DRAINAGE LAYOUT



LEGEND

PROPOSED

- PROPOSED PRIVATE SURFACE WATER DRAINAGE
- PROPOSED PRIVATE SURFACE WATER LINEAR DRAINAGE
- LINEAR DRAINAGE ACCESS / OUTFALL UNIT
- PROPOSED SURFACE WATER PUMPING STATION
- PROPOSED PRIVATE SURFACE WATER RISING MAIN
- PROPOSED PRIVATE UNDERGROUND ATTENUATION STORAGE TANK
- PROPOSED OIL INTERCEPTOR
- INDICATION OF PROPOSED RAINWATER DOWNPIPE CONNECTION
- PROPOSED PRIVATE FOUL SEWER DRAINAGE
- INDICATION OF FW POP-UP
- INDICATION OF SW POP-UP

EXISTING

- EXISTING SURFACE WATER ASSUMED CONNECTION
- EXISTING PRIVATE SURFACE WATER SYSTEM TO REMAIN
- EXISTING PRIVATE FOUL SEWER TO REMAIN
- EXISTING DRAINAGE SYSTEMS TO BE ABANDONED
- EXISTING ELECTRICITY
- EXISTING WATER
- EXISTING UNKNOWN UTILITY

NOTE:

- THIS DRAWING IS FOR INFORMATION ONLY AND SHOULD NOT BE UTILISED FOR CONSTRUCTION PURPOSE.
- DRAINAGE DESIGN SUBJECT TO DESIGN DEVELOPMENT.
- ALL EXISTING UTILITY SERVICES SHOWN ARE INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE EXACT LOCATION, FOOTPRINT AND LEVEL OF THE EXISTING UTILITIES SERVICES PRIOR TO CONSTRUCTION.
- ALL PRIVATE DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH ALL THE CURRENT RELEVANT BRITISH STANDARDS, SPECIFICATIONS AND BUILDING REGULATIONS. PARTICULAR ATTENTION IS DRAWN TO THE FOLLOWING DOCUMENTS - BUILDING REGULATIONS 2000 PART H, BS EN 752, BS EN 1610, BS EN 295, BS EN 5911 AND BS EN 124.
- DO NOT SCALE OFF THIS DRAWING ONLY WORK TO DIMENSIONS OR CO-ORDINATES PROVIDED.
- ALL PIPEWORK IS TO BE LAID SOFFIT TO SOFFIT UNLESS NOTED OTHERWISE.
- COVER LEVELS ARE PROVISIONAL AND SUBJECT TO ADJUSTMENT TO SUIT FINISHED GROUND LEVELS.
- GULLY GRATINGS ARE TO BE IN ACCORDANCE WITH BS EN 124-CLASS D400, UNLESS NOTED OTHERWISE, DUCTILE IRON AND BSI KITEMARKED, 100mm MINIMUM FRAME DEPTH NON-ROCK DESIGN WITH A CAPTIVE HINGE SET ON THE TRAFFIC SIDE OF THE GULLY. GRATING SLOTS SHOULD BE PERPENDICULAR TO THE DIRECTION OF TRAFFIC.
- CONCRETE PROTECTION IS TO BE PROVIDED, WITH EXPANSION JOINTS INSTALLED AT ALTERNATE PIPE JOINTS, ON ALL PIPES FOLLOWS:
 - WITHIN VEHICLE ACCESSIBLE AREAS IF THE COVER IS LESS THAN 1.2m.
 - WITHIN LANDSCAPE AND PEDESTRIAN ACCESSIBLE ONLY AREAS WHERE THE COVER IS LESS THAN 0.6m.
 - WHERE REQUIRED DUE TO THE PROXIMITY OF FOUNDATIONS AND OTHER LOADINGS.
- PIPES ARE TO BE A MINIMUM OF 100mm DIAMETER UNLESS NOTED OTHERWISE, OR 150mm FOR GULLIES AND DRAINAGE CHANNEL SUMPS, AND SHOULD CONFORM TO BE THE FOLLOWING MINIMUM REQUIREMENTS:
 - VITRIFIED CLAY JOINT SYSTEM E TO BS EN 295 AND BE BSI KITEMARKED
 - 100mm Ø & 150mm Ø - FN 40
 - 225mm Ø - CLASS 200
 - 300mm Ø - CLASS 240
- ALL MANHOLES ARE TO BE PRECAST CONCRETE, UNLESS NOTED OTHERWISE, TO BS EN 1917 AND BS 5911-3

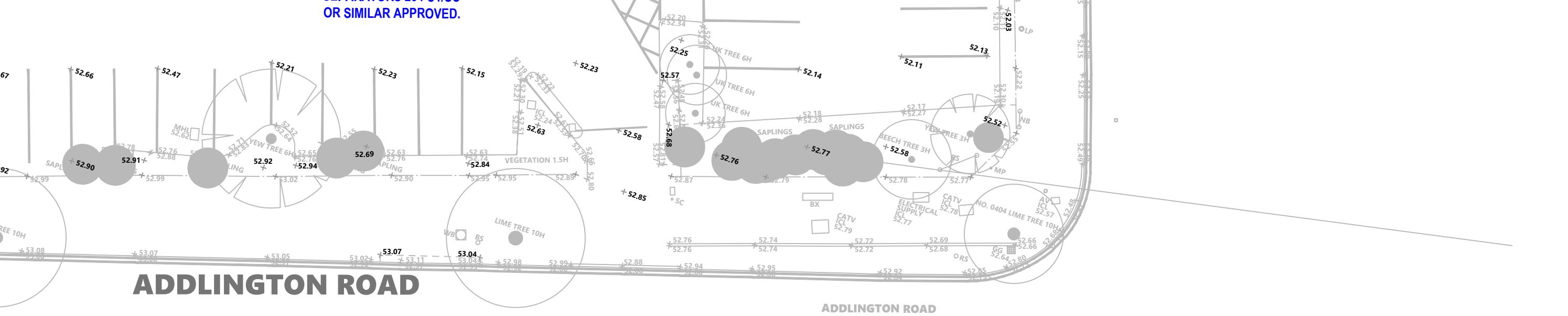
Manhole Ref.	Coordinate		Cover Level	Invert Level	Depth to Pipe Soffit (m)	Depth to Pipe Invert (m)	Size (ø)	Type	Cover Frame
	E	N							
SWMH01	472558.19	172558.37	50.870	49.745	0.900	1.125	600mm	PPIC	Class C
SWMH02	472561.93	172548.03	51.250	49.608	1.342	1.642	600mm	PPIC	Class C
SWMH03	472570.14	172537.80	51.820	49.325	2.195	2.495	1050mm	Catchpit	Class D
SWMH04	472615.78	172552.28	51.450	49.086	2.064	2.364	1200mm	Catchpit	Class D
SWMH05	472567.53	172564.15	51.865	50.740	0.900	1.125	600mm	PPIC	Class C
SWMH06	472610.27	172577.61	50.200	48.840	1.060	1.360	600mm	PPIC	Class C
SWMH07	472618.60	172565.31	51.150	48.687	2.163	2.463	1050mm	Catchpit	Class D
SWMH08	472627.48	172554.83	51.830	48.550	3.130	3.280	1200mm	Catchpit	Class D
Pumping Station Chamber	472630.05	172572.34	51.750	48.250	-	3.500	1250mm	GRP Chamber	Class D
SWMH09	472629.09	172575.71	51.250	50.050	1.050	1.200	1200mm	PPIC	Class D

NOTE: ALL CATCHPIT TO HAVE MINIMUM 300mm SUMP DEPTH

PROPOSED SURFACE WATER MANHOLE SCHEDULE

Manhole Ref.	Coordinate		Cover Level	Invert Level	Depth to Pipe Soffit (m)	Depth to Pipe Invert (m)	Size (ø)	Type	Cover Frame
	E	N							
FMH01	472578.67	172542.35	51.720	50.670	0.900	1.050	600mm	PPIC	Class C
FMH02	472589.68	172545.93	51.720	50.390	1.180	1.330	600mm	PPIC	Class C
FMH03	472595.26	172547.75	51.710	50.322	1.238	1.388	600mm	PPIC	Class C
FMH04	472601.48	172549.78	51.600	50.245	1.205	1.355	600mm	PPIC	Class C
FMH05	472608.18	172551.96	51.500	50.201	1.149	1.299	600mm	PPIC	Class C
FMH06	472616.82	172554.78	51.400	50.143	1.107	1.257	600mm	PPIC	Class C
FMH07	472612.85	172567.90	51.050	50.000	0.900	1.050	1050mm	PCC	Class C
FMH08	472641.42	172577.53	50.700	49.350	1.200	1.350	1200mm	PPIC	Class D

PROPOSED FOUL SEWER MANHOLE SCHEDULE



ADDLINGTON ROAD

Pop-up Ref.	Coordinate		Pop-up Ref.	Coordinate		Pop-up Ref.	Coordinate	
	E	N		E	N		E	N
P01	472570.4457	172561.0972	P11	472589.6775	172569.3069	P21	472602.0170	172563.0442
P02	472581.3654	172544.7888	P12	472588.4502	172561.3047	P22	472606.1722	172565.2450
P03	472581.2092	172566.6103	P13	472592.1182	172561.6199	P23	472604.7687	172563.0698
P04	472584.4061	172565.4548	P14	472592.8984	172570.1547	P24	472608.9349	172568.3252
P05	472585.9676	172569.6064	P15	472594.8902	172570.9801	P25	472608.4448	172568.1484
P06	472581.2894	172552.4702	P16	472596.1080	172562.6033	P26	472599.0587	172558.3223
P07	472589.5092	172552.8224	P17	472599.9608	172555.5109			
P08	472586.8172	172546.4914	P18	472600.9187	172551.4790			
P09	472592.0441	172548.2160	P19	472601.2248	172570.8038			
P10	472587.1436	172568.3770	P20	472604.1699	172564.9415			

FOUL POP-UP COORDINATE TABLE

Pop-up Ref.	Coordinate		Pop-up Ref.	Coordinate		Pop-up Ref.	Coordinate	
	E	N		E	N		E	N
P27	472579.4684	172544.2141						
P28	472590.8811	172547.8117						
P29	472600.7523	172551.9793						
P30	472608.5370	172567.7526						

SURFACE WATER POP-UP COORDINATE TABLE

STAGE 4



Client Name
ROYAL BERKSHIRE NHS FOUNDATION TRUST

Project Name
ROYAL BERKSHIRE HOSPITAL, ICS ER PROJECT

Drawing Title
PROPOSED DRAINAGE STRATEGY

MDA Job No	RBH-DD	Uniclass	Uniclass Classification
Status	FOR TENDERING	Scale at A1	1 in 200
Drawn by	JY	Checked by	MY
Date	17.06.2024	Revision	C07

Drawing Number
RBH-DD-XX-XX-RP-D-0500

APPENDIX G – FOUL PEAK FLOW ESTIMATION

Project: Royal Berkshire Hospital

BS EN 12056-2:2000

Units	Discharge Rate	Frequency Factors (K)	K
Bath	0.8	Congested use, e.g. in toilets / showers open to public	1
Dishwasher (household)	0.8	Frequent use, e.g. in hospital, school, restaurant, hotel	0.7
Floor gully DN 100	2	Intermittent use, e.g. in dwelling, guesthouse, office	0.5
Floor gully DN 50	0.8	Special use, e.g. laboratory	1.2
Floor gully DN 70	1.5		
Kitchen sink	0.8		
Shower with plug	0.8		
Shower without plug	0.6		
Single urinal with cistern	0.8		
Slab urinal	0.2		
Urinal with flushing valve	0.5		
Wash basin, bidet	0.5		
Washing machine up to 12kg	1.5		
Washing machine up to 6kg	0.8		
WC with 4,0 l cistern	1.8		
WC with 6,0 l cistern	2		
WC with 7,5 l cistern	2		
WC with 9,0 l cistern	2.5		

Soil Vent Pipe 01	No.	Total
Wash basin, bidet	17	8.5
WC with 6,0 l cistern	6	12
Kitchen sink	1	0.8
$\sum DU$		21.3
Frequency Factors (K) Intermittent use, e.g. in dwelling, guesthouse, o		0.7
$Q_{ww} = K \sqrt{\sum DU}$		3.231

APPENDIX H – CAUSEWAY FLOW HYDRAULIC REPORT

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	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	18.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.252	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SWMH01	0.016	5.00	50.870	600	472558.216	172558.346	1.125
SWMH02			51.250	600	472561.948	172548.014	1.642
Tank			51.500		472565.204	172544.340	1.953
Dummy			51.500		472567.632	172541.693	2.000
SWMH03	0.061	5.00	51.820	1050	472570.121	172537.806	2.495
SWMH04	0.137	5.00	51.450	1200	472615.751	172552.234	2.364
Oil Interceptor			51.450		472619.182	172553.380	2.482
SWMH05	0.030	5.00	51.865	600	472566.553	172563.886	1.125
SWMH06	0.013	5.00	50.200	600	472609.978	172577.895	1.360
SWMH07	0.004	5.00	51.150	1050	472618.631	172565.227	2.463
SWMH08			51.830	1200	472627.498	172554.806	3.280
12			51.750		472630.677	172555.653	3.270
Tank Outlet			51.440		472633.054	172557.558	2.966
Packaged PS			51.750	1250	472632.180	172560.590	3.500
SWMH09			51.250	1200	472629.894	172572.546	1.200
15_OUT			50.740		472635.782	172577.251	0.805

Links (Results)

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	1.461	58.1	2.1	0.900	1.417	0.016	0.0
1.001	1.459	58.0	2.1	1.417	1.728	0.016	0.0
1.002	1.497	59.5	2.1	1.728	1.775	0.016	0.0
1.003	1.930	76.7	2.1	1.775	2.195	0.016	0.0
1.004	1.107	78.3	10.4	2.195	2.064	0.076	0.0
1.005	1.105	78.1	29.0	2.064	2.082	0.214	0.0
1.006	1.105	78.1	29.0	2.182	2.604	0.214	0.0
2.000	2.627	104.5	4.0	0.900	1.060	0.030	0.0
2.001	1.570	111.0	5.7	1.060	2.163	0.042	0.0
2.002	1.573	111.2	6.2	2.163	2.980	0.046	0.0
1.007	2.299	162.5	35.2	2.980	2.970	0.260	0.0
1.008	0.691	48.8	35.2	2.970	2.666	0.260	0.0
1.009	2.263	40.0	35.2	2.816	3.284	0.260	0.0
1.010	1.000	6.4	35.2	3.410	1.110	0.260	0.0
1.011	1.244	22.0	35.2	1.050	0.655	0.260	0.0

Pipeline Schedule

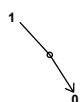
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	10.985	80.2	225	1 STANDARD	50.870	49.745	0.900	51.250	49.608	1.417
1.001	4.909	80.5	225	1 STANDARD	51.250	49.608	1.417	51.500	49.547	1.728
1.002	3.592	76.4	225	1 STANDARD	51.500	49.547	1.728	51.500	49.500	1.775
1.003	4.616	46.2	225	1 STANDARD	51.500	49.500	1.775	51.820	49.400	2.195
1.004	47.857	200.2	300	1 STANDARD	51.820	49.325	2.195	51.450	49.086	2.064
1.005	3.618	201.0	300	1 STANDARD	51.450	49.086	2.064	51.450	49.068	2.082
1.006	8.437	200.9	300	1 STANDARD	51.450	48.968	2.182	51.830	48.926	2.604
2.000	45.629	25.0	225	1 STANDARD	51.865	50.740	0.900	50.200	48.915	1.060
2.001	15.341	100.3	300	1 STANDARD	50.200	48.840	1.060	51.150	48.687	2.163
2.002	13.683	99.9	300	1 STANDARD	51.150	48.687	2.163	51.830	48.550	2.980
1.007	3.290	47.0	300	1 STANDARD	51.830	48.550	2.980	51.750	48.480	2.970
1.008	3.047	507.8	300	1 STANDARD	51.750	48.480	2.970	51.440	48.474	2.666
1.009	3.156	20.0	150	1 STANDARD	51.440	48.474	2.816	51.750	48.316	3.284
1.010	12.172	-6.8	90	1 STANDARD	51.750	48.250	3.410	51.250	50.050	1.110
1.011	7.537	65.5	150	1 STANDARD	51.250	50.050	1.050	50.740	49.935	0.655

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	SWMH01	600	Manhole	1 STANDARD	SWMH02	600	Manhole	1 STANDARD
1.001	SWMH02	600	Manhole	1 STANDARD	Tank		Junction	
1.002	Tank		Junction		Dummy		Junction	
1.003	Dummy		Junction		SWMH03	1050	Manhole	1 STANDARD
1.004	SWMH03	1050	Manhole	1 STANDARD	SWMH04	1200	Manhole	1 STANDARD
1.005	SWMH04	1200	Manhole	1 STANDARD	Oil Interceptor		Junction	
1.006	Oil Interceptor		Junction		SWMH08	1200	Manhole	1 STANDARD
2.000	SWMH05	600	Manhole	1 STANDARD	SWMH06	600	Manhole	1 STANDARD
2.001	SWMH06	600	Manhole	1 STANDARD	SWMH07	1050	Manhole	1 STANDARD
2.002	SWMH07	1050	Manhole	1 STANDARD	SWMH08	1200	Manhole	1 STANDARD
1.007	SWMH08	1200	Manhole	1 STANDARD	12		Junction	
1.008	12		Junction		Tank Outlet		Junction	
1.009	Tank Outlet		Junction		Packaged PS	1250	Manhole	1 STANDARD
1.010	Packaged PS	1250	Manhole	1 STANDARD	SWMH09	1200	Manhole	1 STANDARD
1.011	SWMH09	1200	Manhole	1 STANDARD	15_OUT		Manhole	1 STANDARD

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SWMH01	472558.216	172558.346	50.870	1.125	600				
SWMH02	472561.948	172548.014	51.250	1.642	600		0	1.000	49.745
Tank	472565.204	172544.340	51.500	1.953			1	1.001	49.608
							0	1.002	49.547

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
Dummy	472567.632	172541.693	51.500	2.000			1	1.002	49.500	225
							0	1.003	49.500	225
SWMH03	472570.121	172537.806	51.820	2.495	1050		1	1.003	49.400	225
							0	1.004	49.325	300
SWMH04	472615.751	172552.234	51.450	2.364	1200		1	1.004	49.086	300
							0	1.005	49.086	300
Oil Interceptor	472619.182	172553.380	51.450	2.482			1	1.005	49.068	300
							0	1.006	48.968	300
SWMH05	472566.553	172563.886	51.865	1.125	600		0	2.000	50.740	225
SWMH06	472609.978	172577.895	50.200	1.360	600		1	2.000	48.915	225
							0	2.001	48.840	300
SWMH07	472618.631	172565.227	51.150	2.463	1050		1	2.001	48.687	300
							0	2.002	48.687	300
SWMH08	472627.498	172554.806	51.830	3.280	1200		1	2.002	48.550	300
							2	1.006	48.926	300
							0	1.007	48.550	300
12	472630.677	172555.653	51.750	3.270			1	1.007	48.480	300
							0	1.008	48.480	300
Tank Outlet	472633.054	172557.558	51.440	2.966			1	1.008	48.474	300
							0	1.009	48.474	150
Packaged PS	472632.180	172560.590	51.750	3.500	1250		1	1.009	48.316	150
							0	1.010	48.250	90
SWMH09	472629.894	172572.546	51.250	1.200	1200		1	1.010	50.050	90
							0	1.011	50.050	150
15_OUT	472635.782	172577.251	50.740	0.805			1	1.011	49.935	150

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
Rainfall Events	Singular	Skip Steady State	x
FSR Region	England and Wales	Drain Down Time (mins)	480
M5-60 (mm)	18.000	Additional Storage (m³/ha)	20.0
Ratio-R	0.252	Starting Level (m)	
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440
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Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
5	0	0	0
100	40	0	0

Node Packaged PS Online Pump Control

Flap Valve	x	Invert Level (m)	48.250	Switch off depth (m)	0.010
Replaces Downstream Link	✓	Switch on depth (m)	0.200		

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.010	8.000	1.200	8.000	2.200	8.000	3.200	8.000	4.200	8.000	5.200	8.000
0.400	8.000	1.400	8.000	2.400	8.000	3.400	8.000	4.400	8.000	5.400	8.000
0.600	8.000	1.600	8.000	2.600	8.000	3.600	8.000	4.600	8.000	5.600	8.000
0.800	8.000	1.800	8.000	2.800	8.000	3.800	8.000	4.800	8.000	5.800	8.000
1.000	8.000	2.000	8.000	3.000	8.000	4.000	8.000	5.000	8.000	6.000	8.000

Node Tank Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	49.547
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	0

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	20.0	0.0	1.050	20.0	0.0	1.051	0.0	0.0

Node 12 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	48.480
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	88

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	85.0	0.0	1.500	85.0	0.0	1.501	0.0	0.0

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
5 year 15 minute summer	142.361	40.283	100 year +40% CC 15 minute summer	369.515	104.560
5 year 15 minute winter	99.903	40.283	100 year +40% CC 15 minute winter	259.309	104.560
5 year 30 minute summer	98.175	27.780	100 year +40% CC 30 minute summer	263.088	74.445
5 year 30 minute winter	68.895	27.780	100 year +40% CC 30 minute winter	184.623	74.445
5 year 60 minute summer	70.155	18.540	100 year +40% CC 60 minute summer	192.272	50.812
5 year 60 minute winter	46.610	18.540	100 year +40% CC 60 minute winter	127.741	50.812
5 year 120 minute summer	45.964	12.147	100 year +40% CC 120 minute summer	126.511	33.433
5 year 120 minute winter	30.537	12.147	100 year +40% CC 120 minute winter	84.051	33.433
5 year 180 minute summer	36.677	9.438	100 year +40% CC 180 minute summer	99.698	25.656
5 year 180 minute winter	23.841	9.438	100 year +40% CC 180 minute winter	64.806	25.656
5 year 240 minute summer	29.809	7.878	100 year +40% CC 240 minute summer	79.691	21.060
5 year 240 minute winter	19.804	7.878	100 year +40% CC 240 minute winter	52.945	21.060
5 year 360 minute summer	23.648	6.085	100 year +40% CC 360 minute summer	62.013	15.958
5 year 360 minute winter	15.372	6.085	100 year +40% CC 360 minute winter	40.310	15.958
5 year 480 minute summer	19.156	5.062	100 year +40% CC 480 minute summer	49.480	13.076
5 year 480 minute winter	12.727	5.062	100 year +40% CC 480 minute winter	32.873	13.076
5 year 600 minute summer	15.982	4.371	100 year +40% CC 600 minute summer	40.910	11.190
5 year 600 minute winter	10.920	4.371	100 year +40% CC 600 minute winter	27.952	11.190
5 year 720 minute summer	14.526	3.893	100 year +40% CC 720 minute summer	36.730	9.844
5 year 720 minute winter	9.762	3.893	100 year +40% CC 720 minute winter	24.685	9.844
5 year 960 minute summer	12.312	3.242	100 year +40% CC 960 minute summer	30.494	8.030
5 year 960 minute winter	8.155	3.242	100 year +40% CC 960 minute winter	20.200	8.030
5 year 1440 minute summer	9.342	2.504	100 year +40% CC 1440 minute summer	22.413	6.007
5 year 1440 minute winter	6.279	2.504	100 year +40% CC 1440 minute winter	15.063	6.007

Results for 5 year Critical Storm Duration. Lowest mass balance: 99.91%

Node Event	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
15 minute winter	10	49.780	0.035	2.9	0.0000	OK
15 minute winter	10	49.643	0.035	2.9	0.0000	OK
15 minute winter	13	49.576	0.029	2.8	0.0000	OK
15 minute winter	13	49.527	0.027	2.2	0.0000	OK
15 minute winter	11	49.404	0.079	12.2	0.0000	OK
15 minute winter	11	49.237	0.151	36.8	0.0000	OK
15 minute winter	11	49.118	0.150	36.2	0.0000	OK
15 minute winter	10	50.775	0.035	5.4	0.0000	OK
15 minute winter	10	48.894	0.054	7.5	0.0000	OK
15 minute winter	11	48.741	0.055	8.2	0.0000	OK
60 minute winter	49	48.759	0.209	27.1	0.0000	OK
60 minute winter	47	48.732	0.252	27.1	0.0000	OK
60 minute winter	47	48.733	0.259	12.6	0.0000	SURCHARGED
60 minute winter	48	48.725	0.475	10.9	0.0000	SURCHARGED
60 minute summer	144	50.120	0.070	8.0	0.0000	OK
720 minute summer	570	49.999	0.064	8.3	0.0000	OK

Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2.9	0.730	0.049	0.0430	
2.8	1.041	0.049	0.0161	
2.2	0.766	0.037	0.0102	
2.2	0.841	0.029	0.0120	
12.1	0.486	0.154	1.2057	
36.2	1.059	0.463	0.1236	
36.3	1.068	0.464	0.2867	
5.2	1.374	0.050	0.1739	
7.5	0.864	0.067	0.1331	
8.2	0.500	0.074	0.2401	
27.1	1.811	0.167	0.1898	
12.6	0.976	0.258	0.1950	
10.9	1.752	0.272	0.0556	
8.0				
8.3	1.102	0.376	0.0568	36.1

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.91%

Node Event	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
15 minute winter	10	49.802	0.057	7.5	0.0000	OK
15 minute winter	10	49.664	0.056	7.4	0.0000	OK
15 minute winter	12	49.597	0.051	7.4	0.0000	OK
15 minute winter	12	49.546	0.046	6.7	0.0000	OK
180 minute winter	148	49.505	0.180	11.4	0.0000	OK
180 minute winter	144	49.504	0.419	31.9	0.0000	SURCHARGED
180 minute winter	148	49.505	0.537	31.9	0.0000	SURCHARGED
15 minute winter	10	50.796	0.056	14.1	0.0000	OK
180 minute winter	148	49.504	0.664	6.3	0.0000	SURCHARGED
180 minute winter	148	49.504	0.817	6.1	0.0000	SURCHARGED
180 minute winter	148	49.504	0.954	35.6	0.0000	SURCHARGED
180 minute winter	148	49.504	1.024	37.7	0.0000	SURCHARGED
180 minute winter	148	49.504	1.030	8.8	0.0000	SURCHARGED
180 minute winter	148	49.494	1.244	9.3	0.0000	SURCHARGED
120 minute winter	336	50.120	0.070	8.0	0.0000	OK
720 minute winter	720	49.999	0.064	8.3	0.0000	OK

Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7.4	0.955	0.128	0.0856	
7.4	1.165	0.127	0.0348	
6.7	1.073	0.112	0.0224	
6.7	1.133	0.087	0.0331	
11.4	0.495	0.145	2.7404	
31.9	1.025	0.408	0.2548	
31.7	1.030	0.405	0.5941	
13.8	1.817	0.132	0.4810	
5.6	0.750	0.051	1.0803	
5.3	0.333	0.048	0.9635	
37.7	1.691	0.232	0.2317	
8.8	0.877	0.180	0.2146	
9.3	1.489	0.231	0.0556	
8.0				
8.0	1.110	0.366	0.0565	144.9

Results for 5 year 15 minute summer. 495 minute analysis at 1 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
15 minute summer	SWMH01	10	49.779	0.034	2.8	0.0192	0.0000	OK
15 minute summer	SWMH02	10	49.643	0.035	2.8	0.0099	0.0000	OK
15 minute summer	Tank	13	49.575	0.028	2.7	0.5359	0.0000	OK
15 minute summer	Dummy	13	49.526	0.026	2.0	0.0000	0.0000	OK
15 minute summer	SWMH03	11	49.402	0.077	11.5	0.1036	0.0000	OK
15 minute summer	SWMH04	11	49.233	0.147	34.9	0.3382	0.0000	OK
15 minute summer	Oil Interceptor	11	49.114	0.146	34.5	0.0000	0.0000	OK
15 minute summer	SWMH05	10	50.774	0.034	5.2	0.0274	0.0000	OK
15 minute summer	SWMH06	10	48.893	0.053	7.2	0.0248	0.0000	OK
15 minute summer	SWMH07	11	48.740	0.054	7.9	0.0483	0.0000	OK
15 minute summer	SWMH08	12	48.666	0.116	42.5	0.1312	0.0000	OK
15 minute summer	12	18	48.643	0.163	42.3	13.1489	0.0000	OK
15 minute summer	Tank Outlet	18	48.643	0.169	11.2	0.0000	0.0000	SURCHARGED
15 minute summer	Packaged PS	18	48.633	0.383	13.3	0.4702	0.0000	SURCHARGED
15 minute summer	SWMH09	78	50.120	0.070	8.0	0.0787	0.0000	OK
15 minute summer	15_OUT	42	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	2.8	0.720	0.047	0.0421	
15 minute summer	SWMH02	1.001	Tank	2.7	1.060	0.047	0.0153	
15 minute summer	Tank	1.002	Dummy	2.0	0.746	0.033	0.0096	
15 minute summer	Dummy	1.003	SWMH03	2.0	0.820	0.026	0.0113	
15 minute summer	SWMH03	1.004	SWMH04	11.4	0.477	0.146	1.1635	
15 minute summer	SWMH04	1.005	Oil Interceptor	34.5	1.046	0.442	0.1194	
15 minute summer	Oil Interceptor	1.006	SWMH08	34.6	1.055	0.443	0.2766	
15 minute summer	SWMH05	2.000	SWMH06	5.0	1.358	0.048	0.1691	
15 minute summer	SWMH06	2.001	SWMH07	7.2	0.854	0.065	0.1293	
15 minute summer	SWMH07	2.002	SWMH08	7.9	0.501	0.071	0.2284	
15 minute summer	SWMH08	1.007	12	42.3	2.544	0.260	0.0997	
15 minute summer	12	1.008	Tank Outlet	11.2	0.779	0.230	0.1219	
15 minute summer	Tank Outlet	1.009	Packaged PS	13.3	1.460	0.333	0.0556	
15 minute summer	Packaged PS	Pump	SWMH09	8.0				
15 minute summer	SWMH09	1.011	15_OUT	8.2	1.115	0.373	0.0562	19.2

Results for 5 year 15 minute winter. 495 minute analysis at 1 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
15 minute winter	SWMH01	10	49.780	0.035	2.9	0.0196	0.0000	OK
15 minute winter	SWMH02	10	49.643	0.035	2.9	0.0100	0.0000	OK
15 minute winter	Tank	13	49.576	0.029	2.8	0.5591	0.0000	OK
15 minute winter	Dummy	13	49.527	0.027	2.2	0.0000	0.0000	OK
15 minute winter	SWMH03	11	49.404	0.079	12.2	0.1065	0.0000	OK
15 minute winter	SWMH04	11	49.237	0.151	36.8	0.3474	0.0000	OK
15 minute winter	Oil Interceptor	11	49.118	0.150	36.2	0.0000	0.0000	OK
15 minute winter	SWMH05	10	50.775	0.035	5.4	0.0279	0.0000	OK
15 minute winter	SWMH06	10	48.894	0.054	7.5	0.0253	0.0000	OK
15 minute winter	SWMH07	11	48.741	0.055	8.2	0.0492	0.0000	OK
15 minute winter	SWMH08	12	48.672	0.122	44.5	0.1380	0.0000	OK
15 minute winter	12	17	48.666	0.186	44.3	15.0139	0.0000	OK
15 minute winter	Tank Outlet	17	48.666	0.192	15.6	0.0000	0.0000	SURCHARGED
15 minute winter	Packaged PS	19	48.658	0.408	11.5	0.5009	0.0000	SURCHARGED
15 minute winter	SWMH09	66	50.120	0.070	8.0	0.0787	0.0000	OK
15 minute winter	15_OUT	57	49.999	0.064	8.3	0.0000	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 winter	SWMH01	1.000	SWMH02	2.9	0.730	0.049	0.0430	
15 minute winter	SWMH02	1.001	Tank	2.8	1.041	0.049	0.0161	
15 minute winter	Tank	1.002	Dummy	2.2	0.766	0.037	0.0102	
15 minute winter	Dummy	1.003	SWMH03	2.2	0.841	0.029	0.0120	
15 minute winter	SWMH03	1.004	SWMH04	12.1	0.486	0.154	1.2057	
15 minute winter	SWMH04	1.005	Oil Interceptor	36.2	1.059	0.463	0.1236	
15 minute winter	Oil Interceptor	1.006	SWMH08	36.3	1.068	0.464	0.2867	
15 minute winter	SWMH05	2.000	SWMH06	5.2	1.374	0.050	0.1739	
15 minute winter	SWMH06	2.001	SWMH07	7.5	0.864	0.067	0.1331	
15 minute winter	SWMH07	2.002	SWMH08	8.2	0.500	0.074	0.2401	
15 minute winter	SWMH08	1.007	12	44.3	2.552	0.273	0.1177	
15 minute winter	12	1.008	Tank Outlet	15.6	0.904	0.319	0.1426	
15 minute winter	Tank Outlet	1.009	Packaged PS	11.5	1.463	0.289	0.0556	
15 minute winter	Packaged PS	Pump	SWMH09	8.0				
15 minute winter	SWMH09	1.011	15_OUT	8.3	1.102	0.376	0.0568	22.5

Results for 5 year 30 minute summer. 510 minute analysis at 1 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
30 minute summer	SWMH01	18	49.778	0.033	2.6	0.0186	0.0000	OK
30 minute summer	SWMH02	18	49.641	0.034	2.6	0.0095	0.0000	OK
30 minute summer	Tank	20	49.576	0.029	2.6	0.5581	0.0000	OK
30 minute summer	Dummy	20	49.527	0.027	2.2	0.0000	0.0000	OK
30 minute summer	SWMH03	18	49.402	0.077	11.7	0.1035	0.0000	OK
30 minute summer	SWMH04	18	49.231	0.146	34.1	0.3338	0.0000	OK
30 minute summer	Oil Interceptor	18	49.112	0.144	33.7	0.0000	0.0000	OK
30 minute summer	SWMH05	18	50.773	0.033	4.9	0.0269	0.0000	OK
30 minute summer	SWMH06	18	48.892	0.052	7.0	0.0244	0.0000	OK
30 minute summer	SWMH07	18	48.739	0.053	7.7	0.0474	0.0000	OK
30 minute summer	SWMH08	28	48.708	0.158	41.2	0.1790	0.0000	OK
30 minute summer	12	27	48.685	0.205	40.8	16.5175	0.0000	OK
30 minute summer	Tank Outlet	27	48.684	0.210	10.4	0.0000	0.0000	SURCHARGED
30 minute summer	Packaged PS	26	48.677	0.427	11.3	0.5237	0.0000	SURCHARGED
30 minute summer	SWMH09	77	50.120	0.070	8.0	0.0789	0.0000	OK
30 minute summer	15_OUT	70	49.999	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	2.6	0.713	0.045	0.0401	
30 minute summer	SWMH02	1.001	Tank	2.6	0.884	0.045	0.0159	
30 minute summer	Tank	1.002	Dummy	2.2	0.766	0.036	0.0102	
30 minute summer	Dummy	1.003	SWMH03	2.2	0.838	0.028	0.0119	
30 minute summer	SWMH03	1.004	SWMH04	11.4	0.486	0.146	1.1493	
30 minute summer	SWMH04	1.005	Oil Interceptor	33.7	1.039	0.431	0.1174	
30 minute summer	Oil Interceptor	1.006	SWMH08	33.5	1.046	0.429	0.2708	
30 minute summer	SWMH05	2.000	SWMH06	4.9	1.346	0.047	0.1653	
30 minute summer	SWMH06	2.001	SWMH07	7.0	0.844	0.063	0.1266	
30 minute summer	SWMH07	2.002	SWMH08	7.6	0.475	0.069	0.2739	
30 minute summer	SWMH08	1.007	12	40.8	1.957	0.251	0.1450	
30 minute summer	12	1.008	Tank Outlet	10.4	0.892	0.213	0.1583	
30 minute summer	Tank Outlet	1.009	Packaged PS	11.3	1.467	0.282	0.0556	
30 minute summer	Packaged PS	Pump	SWMH09	8.0				
30 minute summer	SWMH09	1.011	15_OUT	8.2	1.110	0.375	0.0567	26.5

Results for 5 year 30 minute winter. 510 minute analysis at 1 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
30 minute winter	SWMH01	18	49.777	0.032	2.4	0.0179	0.0000	OK
30 minute winter	SWMH02	18	49.640	0.032	2.4	0.0091	0.0000	OK
30 minute winter	Tank	20	49.576	0.029	2.4	0.5486	0.0000	OK
30 minute winter	Dummy	20	49.526	0.026	2.1	0.0000	0.0000	OK
30 minute winter	SWMH03	19	49.399	0.074	10.7	0.0997	0.0000	OK
30 minute winter	SWMH04	18	49.224	0.138	31.1	0.3171	0.0000	OK
30 minute winter	Oil Interceptor	18	49.104	0.136	30.8	0.0000	0.0000	OK
30 minute winter	SWMH05	18	50.772	0.032	4.4	0.0256	0.0000	OK
30 minute winter	SWMH06	18	48.889	0.049	6.3	0.0231	0.0000	OK
30 minute winter	SWMH07	18	48.737	0.050	6.9	0.0451	0.0000	OK
30 minute winter	SWMH08	26	48.719	0.169	37.6	0.1913	0.0000	OK
30 minute winter	12	29	48.713	0.233	37.1	18.8038	0.0000	OK
30 minute winter	Tank Outlet	29	48.713	0.239	12.9	0.0000	0.0000	SURCHARGED
30 minute winter	Packaged PS	27	48.703	0.453	10.6	0.5554	0.0000	SURCHARGED
30 minute winter	SWMH09	13	50.119	0.069	8.0	0.0775	0.0000	OK
30 minute winter	15_OUT	95	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	2.4	0.698	0.041	0.0378	
30 minute winter	SWMH02	1.001	Tank	2.4	0.818	0.041	0.0153	
30 minute winter	Tank	1.002	Dummy	2.1	0.757	0.035	0.0099	
30 minute winter	Dummy	1.003	SWMH03	2.1	0.829	0.027	0.0116	
30 minute winter	SWMH03	1.004	SWMH04	10.6	0.480	0.135	1.0795	
30 minute winter	SWMH04	1.005	Oil Interceptor	30.8	1.015	0.394	0.1098	
30 minute winter	Oil Interceptor	1.006	SWMH08	30.7	1.023	0.393	0.2535	
30 minute winter	SWMH05	2.000	SWMH06	4.4	1.304	0.042	0.1536	
30 minute winter	SWMH06	2.001	SWMH07	6.3	0.821	0.057	0.1175	
30 minute winter	SWMH07	2.002	SWMH08	6.9	0.452	0.062	0.3043	
30 minute winter	SWMH08	1.007	12	37.1	2.047	0.228	0.1615	
30 minute winter	12	1.008	Tank Outlet	12.9	1.003	0.263	0.1811	
30 minute winter	Tank Outlet	1.009	Packaged PS	10.6	1.457	0.265	0.0556	
30 minute winter	Packaged PS	Pump	SWMH09	8.0				
30 minute winter	SWMH09	1.011	15_OUT	8.2	1.113	0.372	0.0561	30.8

Results for 5 year 60 minute summer. 540 minute analysis at 1 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
60 minute summer	SWMH01	33	49.775	0.030	2.1	0.0168	0.0000	OK
60 minute summer	SWMH02	33	49.638	0.030	2.1	0.0085	0.0000	OK
60 minute summer	Tank	35	49.574	0.028	2.1	0.5232	0.0000	OK
60 minute summer	Dummy	35	49.525	0.025	1.9	0.0000	0.0000	OK
60 minute summer	SWMH03	33	49.395	0.070	9.5	0.0939	0.0000	OK
60 minute summer	SWMH04	33	49.215	0.129	27.4	0.2955	0.0000	OK
60 minute summer	Oil Interceptor	33	49.095	0.127	27.2	0.0000	0.0000	OK
60 minute summer	SWMH05	33	50.770	0.030	3.9	0.0241	0.0000	OK
60 minute summer	SWMH06	33	48.886	0.046	5.5	0.0216	0.0000	OK
60 minute summer	SWMH07	33	48.733	0.047	6.0	0.0421	0.0000	OK
60 minute summer	SWMH08	47	48.727	0.177	33.1	0.2003	0.0000	OK
60 minute summer	12	44	48.708	0.228	32.6	18.4315	0.0000	OK
60 minute summer	Tank Outlet	43	48.708	0.234	11.0	0.0000	0.0000	SURCHARGED
60 minute summer	Packaged PS	47	48.697	0.447	10.5	0.5488	0.0000	SURCHARGED
60 minute summer	SWMH09	144	50.120	0.070	8.0	0.0789	0.0000	OK
60 minute summer	15_OUT	105	49.999	0.064	8.3	0.0000	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	SWMH01	1.000	SWMH02	2.1	0.673	0.036	0.0343	
60 minute summer	SWMH02	1.001	Tank	2.1	0.759	0.036	0.0142	
60 minute summer	Tank	1.002	Dummy	1.9	0.734	0.032	0.0092	
60 minute summer	Dummy	1.003	SWMH03	1.9	0.805	0.025	0.0108	
60 minute summer	SWMH03	1.004	SWMH04	9.4	0.466	0.120	0.9869	
60 minute summer	SWMH04	1.005	Oil Interceptor	27.2	0.982	0.348	0.1002	
60 minute summer	Oil Interceptor	1.006	SWMH08	27.1	0.991	0.347	0.2311	
60 minute summer	SWMH05	2.000	SWMH06	3.9	1.259	0.037	0.1409	
60 minute summer	SWMH06	2.001	SWMH07	5.5	0.792	0.049	0.1062	
60 minute summer	SWMH07	2.002	SWMH08	6.0	0.420	0.054	0.3156	
60 minute summer	SWMH08	1.007	12	32.6	1.725	0.201	0.1647	
60 minute summer	12	1.008	Tank Outlet	11.0	0.866	0.226	0.1773	
60 minute summer	Tank Outlet	1.009	Packaged PS	10.5	1.554	0.262	0.0556	
60 minute summer	Packaged PS	Pump	SWMH09	8.0				
60 minute summer	SWMH09	1.011	15_OUT	8.3	1.102	0.376	0.0568	36.1

Results for 5 year 60 minute winter. 540 minute analysis at 1 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
60 minute winter	SWMH01	33	49.772	0.027	1.7	0.0151	0.0000	OK
60 minute winter	SWMH02	33	49.635	0.027	1.7	0.0077	0.0000	OK
60 minute winter	Tank	35	49.572	0.025	1.7	0.4828	0.0000	OK
60 minute winter	Dummy	36	49.523	0.023	1.6	0.0000	0.0000	OK
60 minute winter	SWMH03	34	49.389	0.064	7.9	0.0859	0.0000	OK
60 minute winter	SWMH04	33	49.201	0.116	22.4	0.2652	0.0000	OK
60 minute winter	Oil Interceptor	33	49.082	0.114	22.4	0.0000	0.0000	OK
60 minute winter	SWMH05	34	50.767	0.027	3.1	0.0217	0.0000	OK
60 minute winter	SWMH06	34	48.881	0.041	4.4	0.0193	0.0000	OK
60 minute winter	SWMH07	45	48.731	0.045	4.8	0.0403	0.0000	OK
60 minute winter	SWMH08	49	48.759	0.209	27.1	0.2359	0.0000	OK
60 minute winter	12	47	48.732	0.252	27.1	20.3864	0.0000	OK
60 minute winter	Tank Outlet	47	48.733	0.259	12.6	0.0000	0.0000	SURCHARGED
60 minute winter	Packaged PS	48	48.725	0.475	10.9	0.5831	0.0000	SURCHARGED
60 minute winter	SWMH09	117	50.120	0.070	8.0	0.0788	0.0000	OK
60 minute winter	15_OUT	117	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	1.7	0.634	0.029	0.0295	
60 minute winter	SWMH02	1.001	Tank	1.7	0.714	0.029	0.0124	
60 minute winter	Tank	1.002	Dummy	1.6	0.698	0.027	0.0082	
60 minute winter	Dummy	1.003	SWMH03	1.6	0.766	0.021	0.0096	
60 minute winter	SWMH03	1.004	SWMH04	7.9	0.447	0.100	0.8579	
60 minute winter	SWMH04	1.005	Oil Interceptor	22.4	0.932	0.286	0.0868	
60 minute winter	Oil Interceptor	1.006	SWMH08	22.3	0.941	0.286	0.2002	
60 minute winter	SWMH05	2.000	SWMH06	3.1	1.175	0.030	0.1204	
60 minute winter	SWMH06	2.001	SWMH07	4.4	0.742	0.040	0.0910	
60 minute winter	SWMH07	2.002	SWMH08	4.8	0.386	0.043	0.3976	
60 minute winter	SWMH08	1.007	12	27.1	1.811	0.167	0.1898	
60 minute winter	12	1.008	Tank Outlet	12.6	0.976	0.258	0.1950	
60 minute winter	Tank Outlet	1.009	Packaged PS	10.9	1.752	0.272	0.0556	
60 minute winter	Packaged PS	Pump	SWMH09	8.0				
60 minute winter	SWMH09	1.011	15_OUT	8.2	1.102	0.373	0.0569	39.4

Results for 5 year 120 minute summer. 600 minute analysis at 2 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
120 minute summer	SWMH01	64	49.769	0.024	1.4	0.0138	0.0000	OK
120 minute summer	SWMH02	64	49.632	0.025	1.4	0.0070	0.0000	OK
120 minute summer	Tank	66	49.570	0.023	1.4	0.4439	0.0000	OK
120 minute summer	Dummy	66	49.521	0.021	1.3	0.0000	0.0000	OK
120 minute summer	SWMH03	64	49.384	0.059	6.8	0.0796	0.0000	OK
120 minute summer	SWMH04	64	49.192	0.107	19.3	0.2448	0.0000	OK
120 minute summer	Oil Interceptor	64	49.073	0.105	19.3	0.0000	0.0000	OK
120 minute summer	SWMH05	64	50.765	0.025	2.7	0.0203	0.0000	OK
120 minute summer	SWMH06	64	48.878	0.038	3.8	0.0180	0.0000	OK
120 minute summer	SWMH07	64	48.726	0.040	4.2	0.0356	0.0000	OK
120 minute summer	SWMH08	76	48.724	0.174	23.8	0.1971	0.0000	OK
120 minute summer	12	80	48.706	0.226	32.4	18.2791	0.0000	OK
120 minute summer	Tank Outlet	80	48.706	0.232	9.1	0.0000	0.0000	SURCHARGED
120 minute summer	Packaged PS	78	48.698	0.448	9.0	0.5496	0.0000	SURCHARGED
120 minute summer	SWMH09	140	50.119	0.069	8.0	0.0784	0.0000	OK
120 minute summer	15_OUT	38	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	1.4	0.600	0.024	0.0256	
120 minute summer	SWMH02	1.001	Tank	1.4	0.639	0.024	0.0110	
120 minute summer	Tank	1.002	Dummy	1.3	0.661	0.022	0.0072	
120 minute summer	Dummy	1.003	SWMH03	1.3	0.727	0.017	0.0084	
120 minute summer	SWMH03	1.004	SWMH04	6.7	0.426	0.086	0.7700	
120 minute summer	SWMH04	1.005	Oil Interceptor	19.3	0.895	0.247	0.0780	
120 minute summer	Oil Interceptor	1.006	SWMH08	19.3	0.904	0.247	0.1798	
120 minute summer	SWMH05	2.000	SWMH06	2.7	1.127	0.026	0.1092	
120 minute summer	SWMH06	2.001	SWMH07	3.8	0.709	0.034	0.0822	
120 minute summer	SWMH07	2.002	SWMH08	4.2	0.357	0.038	0.3153	
120 minute summer	SWMH08	1.007	12	32.4	1.496	0.199	0.1611	
120 minute summer	12	1.008	Tank Outlet	9.1	0.800	0.185	0.1760	
120 minute summer	Tank Outlet	1.009	Packaged PS	9.0	1.514	0.225	0.0556	
120 minute summer	Packaged PS	Pump	SWMH09	8.0				
120 minute summer	SWMH09	1.011	15_OUT	8.2	1.108	0.374	0.0562	44.0

Results for 5 year 120 minute winter. 600 minute analysis at 2 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
120 minute winter	SWMH01	66	49.767	0.022	1.1	0.0123	0.0000	OK
120 minute winter	SWMH02	62	49.630	0.022	1.1	0.0062	0.0000	OK
120 minute winter	Tank	66	49.568	0.021	1.1	0.4039	0.0000	OK
120 minute winter	Dummy	66	49.519	0.019	1.1	0.0000	0.0000	OK
120 minute winter	SWMH03	64	49.378	0.053	5.4	0.0712	0.0000	OK
120 minute winter	SWMH04	64	49.179	0.093	15.0	0.2144	0.0000	OK
120 minute winter	Oil Interceptor	64	49.060	0.092	15.0	0.0000	0.0000	OK
120 minute winter	SWMH05	64	50.762	0.022	2.1	0.0180	0.0000	OK
120 minute winter	SWMH06	64	48.874	0.034	3.0	0.0160	0.0000	OK
120 minute winter	SWMH07	64	48.722	0.035	3.3	0.0317	0.0000	OK
120 minute winter	SWMH08	78	48.736	0.186	23.0	0.2106	0.0000	OK
120 minute winter	12	86	48.716	0.236	23.4	19.0659	0.0000	OK
120 minute winter	Tank Outlet	86	48.715	0.242	9.3	0.0000	0.0000	SURCHARGED
120 minute winter	Packaged PS	86	48.704	0.454	9.5	0.5568	0.0000	SURCHARGED
120 minute winter	SWMH09	40	50.119	0.069	8.0	0.0779	0.0000	OK
120 minute winter	15_OUT	38	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	1.1	0.561	0.019	0.0216	
120 minute winter	SWMH02	1.001	Tank	1.1	0.627	0.019	0.0095	
120 minute winter	Tank	1.002	Dummy	1.1	0.623	0.018	0.0063	
120 minute winter	Dummy	1.003	SWMH03	1.1	0.684	0.014	0.0073	
120 minute winter	SWMH03	1.004	SWMH04	5.3	0.404	0.068	0.6457	
120 minute winter	SWMH04	1.005	Oil Interceptor	15.0	0.836	0.192	0.0650	
120 minute winter	Oil Interceptor	1.006	SWMH08	15.0	0.846	0.192	0.1500	
120 minute winter	SWMH05	2.000	SWMH06	2.1	1.045	0.020	0.0917	
120 minute winter	SWMH06	2.001	SWMH07	3.0	0.662	0.027	0.0695	
120 minute winter	SWMH07	2.002	SWMH08	3.3	0.340	0.030	0.3408	
120 minute winter	SWMH08	1.007	12	23.4	1.481	0.144	0.1678	
120 minute winter	12	1.008	Tank Outlet	9.3	0.847	0.191	0.1832	
120 minute winter	Tank Outlet	1.009	Packaged PS	9.5	1.688	0.237	0.0556	
120 minute winter	Packaged PS	Pump	SWMH09	8.0				
120 minute winter	SWMH09	1.011	15_OUT	8.2	1.127	0.374	0.0562	52.3

Results for 5 year 180 minute summer. 660 minute analysis at 4 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
180 minute summer	SWMH01	96	49.767	0.022	1.1	0.0123	0.0000	OK
180 minute summer	SWMH02	96	49.630	0.022	1.1	0.0062	0.0000	OK
180 minute summer	Tank	96	49.568	0.021	1.1	0.4011	0.0000	OK
180 minute summer	Dummy	96	49.519	0.019	1.1	0.0000	0.0000	OK
180 minute summer	SWMH03	96	49.378	0.053	5.4	0.0712	0.0000	OK
180 minute summer	SWMH04	96	49.180	0.094	15.1	0.2152	0.0000	OK
180 minute summer	Oil Interceptor	96	49.060	0.092	15.1	0.0000	0.0000	OK
180 minute summer	SWMH05	96	50.762	0.022	2.1	0.0180	0.0000	OK
180 minute summer	SWMH06	96	48.874	0.034	3.0	0.0160	0.0000	OK
180 minute summer	SWMH07	96	48.722	0.035	3.3	0.0317	0.0000	OK
180 minute summer	SWMH08	112	48.706	0.156	19.0	0.1767	0.0000	OK
180 minute summer	12	116	48.684	0.204	27.3	16.4930	0.0000	OK
180 minute summer	Tank Outlet	116	48.685	0.211	9.2	0.0000	0.0000	SURCHARGED
180 minute summer	Packaged PS	116	48.679	0.429	9.0	0.5259	0.0000	SURCHARGED
180 minute summer	SWMH09	376	50.119	0.069	8.0	0.0783	0.0000	OK
180 minute summer	15_OUT	40	49.999	0.064	8.3	0.0000	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	SWMH01	1.000	SWMH02	1.1	0.560	0.019	0.0216	
180 minute summer	SWMH02	1.001	Tank	1.1	0.585	0.019	0.0094	
180 minute summer	Tank	1.002	Dummy	1.1	0.621	0.018	0.0062	
180 minute summer	Dummy	1.003	SWMH03	1.1	0.680	0.014	0.0072	
180 minute summer	SWMH03	1.004	SWMH04	5.4	0.403	0.068	0.6481	
180 minute summer	SWMH04	1.005	Oil Interceptor	15.1	0.838	0.194	0.0654	
180 minute summer	Oil Interceptor	1.006	SWMH08	15.1	0.847	0.194	0.1507	
180 minute summer	SWMH05	2.000	SWMH06	2.1	1.045	0.020	0.0917	
180 minute summer	SWMH06	2.001	SWMH07	3.0	0.662	0.027	0.0696	
180 minute summer	SWMH07	2.002	SWMH08	3.3	0.339	0.030	0.2722	
180 minute summer	SWMH08	1.007	12	27.3	1.352	0.168	0.1448	
180 minute summer	12	1.008	Tank Outlet	9.2	0.805	0.187	0.1584	
180 minute summer	Tank Outlet	1.009	Packaged PS	9.0	1.587	0.225	0.0556	
180 minute summer	Packaged PS	Pump	SWMH09	8.0				
180 minute summer	SWMH09	1.011	15_OUT	8.3	1.101	0.376	0.0569	56.0

Results for 5 year 180 minute winter. 660 minute analysis at 4 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
180 minute winter	SWMH01	96	49.765	0.020	0.9	0.0112	0.0000	OK
180 minute winter	SWMH02	96	49.628	0.020	0.9	0.0056	0.0000	OK
180 minute winter	Tank	96	49.566	0.019	0.9	0.3658	0.0000	OK
180 minute winter	Dummy	96	49.517	0.017	0.9	0.0000	0.0000	OK
180 minute winter	SWMH03	96	49.372	0.047	4.2	0.0630	0.0000	OK
180 minute winter	SWMH04	96	49.168	0.082	11.7	0.1876	0.0000	OK
180 minute winter	Oil Interceptor	96	49.049	0.081	11.7	0.0000	0.0000	OK
180 minute winter	SWMH05	96	50.760	0.020	1.6	0.0158	0.0000	OK
180 minute winter	SWMH06	96	48.870	0.030	2.3	0.0141	0.0000	OK
180 minute winter	SWMH07	100	48.718	0.031	2.5	0.0278	0.0000	OK
180 minute winter	SWMH08	120	48.704	0.154	14.2	0.1738	0.0000	OK
180 minute winter	12	124	48.679	0.199	21.3	16.0696	0.0000	OK
180 minute winter	Tank Outlet	124	48.679	0.205	9.9	0.0000	0.0000	SURCHARGED
180 minute winter	Packaged PS	120	48.669	0.419	9.3	0.5146	0.0000	SURCHARGED
180 minute winter	SWMH09	376	50.120	0.070	8.0	0.0789	0.0000	OK
180 minute winter	15_OUT	64	49.998	0.063	8.1	0.0000	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 winter	SWMH01	1.000	SWMH02	0.9	0.530	0.015	0.0187	
180 minute winter	SWMH02	1.001	Tank	0.9	0.544	0.016	0.0082	
180 minute winter	Tank	1.002	Dummy	0.9	0.583	0.015	0.0054	
180 minute winter	Dummy	1.003	SWMH03	0.9	0.640	0.011	0.0063	
180 minute winter	SWMH03	1.004	SWMH04	4.2	0.378	0.053	0.5378	
180 minute winter	SWMH04	1.005	Oil Interceptor	11.7	0.780	0.149	0.0541	
180 minute winter	Oil Interceptor	1.006	SWMH08	11.7	0.788	0.149	0.1248	
180 minute winter	SWMH05	2.000	SWMH06	1.6	0.965	0.015	0.0757	
180 minute winter	SWMH06	2.001	SWMH07	2.3	0.614	0.021	0.0574	
180 minute winter	SWMH07	2.002	SWMH08	2.5	0.325	0.022	0.2663	
180 minute winter	SWMH08	1.007	12	21.3	1.331	0.131	0.1403	
180 minute winter	12	1.008	Tank Outlet	9.9	0.898	0.203	0.1538	
180 minute winter	Tank Outlet	1.009	Packaged PS	9.3	1.590	0.233	0.0556	
180 minute winter	Packaged PS	Pump	SWMH09	8.0				
180 minute winter	SWMH09	1.011	15_OUT	8.1	1.101	0.370	0.0566	61.5

Results for 5 year 240 minute summer. 720 minute analysis at 4 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
240 minute summer	SWMH01	124	49.766	0.021	1.0	0.0117	0.0000	OK
240 minute summer	SWMH02	124	49.629	0.021	1.0	0.0059	0.0000	OK
240 minute summer	Tank	128	49.567	0.020	1.0	0.3779	0.0000	OK
240 minute summer	Dummy	128	49.518	0.018	0.9	0.0000	0.0000	OK
240 minute summer	SWMH03	124	49.374	0.049	4.7	0.0663	0.0000	OK
240 minute summer	SWMH04	124	49.172	0.087	13.1	0.1987	0.0000	OK
240 minute summer	Oil Interceptor	124	49.053	0.085	13.0	0.0000	0.0000	OK
240 minute summer	SWMH05	124	50.761	0.021	1.8	0.0167	0.0000	OK
240 minute summer	SWMH06	124	48.872	0.032	2.6	0.0149	0.0000	OK
240 minute summer	SWMH07	124	48.719	0.032	2.8	0.0291	0.0000	OK
240 minute summer	SWMH08	148	48.667	0.117	17.6	0.1329	0.0000	OK
240 minute summer	12	144	48.659	0.179	15.7	14.4925	0.0000	OK
240 minute summer	Tank Outlet	144	48.660	0.186	10.5	0.0000	0.0000	SURCHARGED
240 minute summer	Packaged PS	144	48.653	0.403	9.6	0.4945	0.0000	SURCHARGED
240 minute summer	SWMH09	308	50.120	0.070	8.0	0.0789	0.0000	OK
240 minute summer	15_OUT	48	49.999	0.064	8.3	0.0000	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	SWMH01	1.000	SWMH02	1.0	0.544	0.017	0.0200	
240 minute summer	SWMH02	1.001	Tank	1.0	0.566	0.017	0.0086	
240 minute summer	Tank	1.002	Dummy	0.9	0.596	0.016	0.0057	
240 minute summer	Dummy	1.003	SWMH03	0.9	0.655	0.012	0.0066	
240 minute summer	SWMH03	1.004	SWMH04	4.6	0.388	0.059	0.5817	
240 minute summer	SWMH04	1.005	Oil Interceptor	13.0	0.803	0.166	0.0586	
240 minute summer	Oil Interceptor	1.006	SWMH08	13.0	0.811	0.166	0.1348	
240 minute summer	SWMH05	2.000	SWMH06	1.8	0.997	0.017	0.0817	
240 minute summer	SWMH06	2.001	SWMH07	2.6	0.638	0.023	0.0619	
240 minute summer	SWMH07	2.002	SWMH08	2.8	0.324	0.025	0.1929	
240 minute summer	SWMH08	1.007	12	15.7	1.312	0.097	0.1141	
240 minute summer	12	1.008	Tank Outlet	10.5	0.918	0.215	0.1370	
240 minute summer	Tank Outlet	1.009	Packaged PS	9.6	1.687	0.241	0.0556	
240 minute summer	Packaged PS	Pump	SWMH09	8.0				
240 minute summer	SWMH09	1.011	15_OUT	8.3	1.103	0.376	0.0569	63.4

Results for 5 year 240 minute winter. 720 minute analysis at 4 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
240 minute winter	SWMH01	132	49.763	0.018	0.7	0.0099	0.0000	OK
240 minute winter	SWMH02	116	49.625	0.018	0.7	0.0050	0.0000	OK
240 minute winter	Tank	136	49.564	0.017	0.7	0.3301	0.0000	OK
240 minute winter	Dummy	136	49.516	0.016	0.7	0.0000	0.0000	OK
240 minute winter	SWMH03	128	49.368	0.043	3.5	0.0579	0.0000	OK
240 minute winter	SWMH04	124	49.161	0.075	9.9	0.1723	0.0000	OK
240 minute winter	Oil Interceptor	124	49.042	0.074	9.9	0.0000	0.0000	OK
240 minute winter	SWMH05	124	50.758	0.018	1.4	0.0148	0.0000	OK
240 minute winter	SWMH06	124	48.868	0.028	2.0	0.0131	0.0000	OK
240 minute winter	SWMH07	124	48.716	0.029	2.2	0.0260	0.0000	OK
240 minute winter	SWMH08	144	48.649	0.099	13.3	0.1123	0.0000	OK
240 minute winter	12	152	48.639	0.159	18.3	12.8708	0.0000	OK
240 minute winter	Tank Outlet	152	48.640	0.166	9.5	0.0000	0.0000	SURCHARGED
240 minute winter	Packaged PS	152	48.632	0.382	9.3	0.4683	0.0000	SURCHARGED
240 minute winter	SWMH09	236	50.119	0.069	8.0	0.0784	0.0000	OK
240 minute winter	15_OUT	220	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	0.7	0.491	0.012	0.0157	
240 minute winter	SWMH02	1.001	Tank	0.7	0.532	0.012	0.0069	
240 minute winter	Tank	1.002	Dummy	0.7	0.543	0.012	0.0046	
240 minute winter	Dummy	1.003	SWMH03	0.7	0.599	0.009	0.0054	
240 minute winter	SWMH03	1.004	SWMH04	3.5	0.360	0.045	0.4765	
240 minute winter	SWMH04	1.005	Oil Interceptor	9.9	0.744	0.126	0.0481	
240 minute winter	Oil Interceptor	1.006	SWMH08	9.9	0.753	0.126	0.1107	
240 minute winter	SWMH05	2.000	SWMH06	1.4	0.921	0.013	0.0685	
240 minute winter	SWMH06	2.001	SWMH07	2.0	0.586	0.018	0.0517	
240 minute winter	SWMH07	2.002	SWMH08	2.2	0.337	0.019	0.1593	
240 minute winter	SWMH08	1.007	12	18.3	1.276	0.112	0.0931	
240 minute winter	12	1.008	Tank Outlet	9.5	0.881	0.195	0.1187	
240 minute winter	Tank Outlet	1.009	Packaged PS	9.3	1.713	0.233	0.0556	
240 minute winter	Packaged PS	Pump	SWMH09	8.0				
240 minute winter	SWMH09	1.011	15_OUT	8.2	1.104	0.374	0.0565	65.7

Results for 5 year 360 minute summer. 840 minute analysis at 8 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
360 minute summer	SWMH01	184	49.764	0.019	0.8	0.0105	0.0000	OK
360 minute summer	SWMH02	184	49.626	0.019	0.8	0.0053	0.0000	OK
360 minute summer	Tank	184	49.565	0.018	0.8	0.3398	0.0000	OK
360 minute summer	Dummy	192	49.516	0.016	0.7	0.0000	0.0000	OK
360 minute summer	SWMH03	184	49.369	0.044	3.7	0.0595	0.0000	OK
360 minute summer	SWMH04	184	49.163	0.077	10.5	0.1769	0.0000	OK
360 minute summer	Oil Interceptor	184	49.044	0.076	10.4	0.0000	0.0000	OK
360 minute summer	SWMH05	184	50.759	0.019	1.5	0.0153	0.0000	OK
360 minute summer	SWMH06	184	48.869	0.029	2.1	0.0134	0.0000	OK
360 minute summer	SWMH07	184	48.716	0.030	2.3	0.0265	0.0000	OK
360 minute summer	SWMH08	184	48.618	0.068	12.6	0.0764	0.0000	OK
360 minute summer	12	208	48.620	0.140	12.5	11.3002	0.0000	OK
360 minute summer	Tank Outlet	208	48.620	0.146	9.9	0.0000	0.0000	OK
360 minute summer	Packaged PS	208	48.611	0.361	9.1	0.4426	0.0000	SURCHARGED
360 minute summer	SWMH09	152	50.119	0.069	8.0	0.0781	0.0000	OK
360 minute summer	15_OUT	120	49.999	0.064	8.2	0.0000	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	SWMH01	1.000	SWMH02	0.8	0.510	0.014	0.0171	
360 minute summer	SWMH02	1.001	Tank	0.8	0.523	0.014	0.0074	
360 minute summer	Tank	1.002	Dummy	0.7	0.554	0.013	0.0048	
360 minute summer	Dummy	1.003	SWMH03	0.7	0.610	0.010	0.0056	
360 minute summer	SWMH03	1.004	SWMH04	3.7	0.365	0.047	0.4952	
360 minute summer	SWMH04	1.005	Oil Interceptor	10.4	0.754	0.133	0.0499	
360 minute summer	Oil Interceptor	1.006	SWMH08	10.4	0.762	0.133	0.1147	
360 minute summer	SWMH05	2.000	SWMH06	1.5	0.942	0.014	0.0719	
360 minute summer	SWMH06	2.001	SWMH07	2.1	0.595	0.019	0.0534	
360 minute summer	SWMH07	2.002	SWMH08	2.3	0.324	0.020	0.1053	
360 minute summer	SWMH08	1.007	12	12.5	1.204	0.077	0.0673	
360 minute summer	12	1.008	Tank Outlet	9.9	0.903	0.203	0.1008	
360 minute summer	Tank Outlet	1.009	Packaged PS	9.1	1.547	0.227	0.0554	
360 minute summer	Packaged PS	Pump	SWMH09	8.0				
360 minute summer	SWMH09	1.011	15_OUT	8.2	1.128	0.375	0.0564	71.5

Results for 5 year 360 minute winter. 840 minute analysis at 8 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
360 minute winter	SWMH01	192	49.761	0.016	0.6	0.0092	0.0000	OK
360 minute winter	SWMH02	184	49.624	0.016	0.6	0.0046	0.0000	OK
360 minute winter	Tank	192	49.563	0.016	0.6	0.3081	0.0000	OK
360 minute winter	Dummy	192	49.514	0.014	0.6	0.0000	0.0000	OK
360 minute winter	SWMH03	184	49.363	0.038	2.8	0.0519	0.0000	OK
360 minute winter	SWMH04	184	49.152	0.066	7.7	0.1512	0.0000	OK
360 minute winter	Oil Interceptor	184	49.033	0.065	7.7	0.0000	0.0000	OK
360 minute winter	SWMH05	184	50.756	0.016	1.1	0.0132	0.0000	OK
360 minute winter	SWMH06	184	48.865	0.025	1.5	0.0115	0.0000	OK
360 minute winter	SWMH07	184	48.712	0.025	1.6	0.0224	0.0000	OK
360 minute winter	SWMH08	192	48.605	0.055	9.2	0.0626	0.0000	OK
360 minute winter	12	208	48.572	0.092	9.2	7.4337	0.0000	OK
360 minute winter	Tank Outlet	216	48.569	0.095	8.7	0.0000	0.0000	OK
360 minute winter	Packaged PS	208	48.572	0.322	10.1	0.3952	0.0000	SURCHARGED
360 minute winter	SWMH09	352	50.120	0.070	8.0	0.0787	0.0000	OK
360 minute winter	15_OUT	392	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	0.6	0.468	0.010	0.0141	
360 minute winter	SWMH02	1.001	Tank	0.6	0.481	0.010	0.0062	
360 minute winter	Tank	1.002	Dummy	0.6	0.519	0.010	0.0042	
360 minute winter	Dummy	1.003	SWMH03	0.6	0.572	0.008	0.0048	
360 minute winter	SWMH03	1.004	SWMH04	2.8	0.340	0.036	0.3989	
360 minute winter	SWMH04	1.005	Oil Interceptor	7.7	0.693	0.098	0.0400	
360 minute winter	Oil Interceptor	1.006	SWMH08	7.7	0.701	0.098	0.0922	
360 minute winter	SWMH05	2.000	SWMH06	1.1	0.855	0.010	0.0582	
360 minute winter	SWMH06	2.001	SWMH07	1.5	0.543	0.013	0.0420	
360 minute winter	SWMH07	2.002	SWMH08	1.6	0.292	0.014	0.0795	
360 minute winter	SWMH08	1.007	12	9.2	1.096	0.057	0.0430	
360 minute winter	12	1.008	Tank Outlet	8.7	0.842	0.178	0.0564	
360 minute winter	Tank Outlet	1.009	Packaged PS	10.1	1.671	0.253	0.0464	
360 minute winter	Packaged PS	Pump	SWMH09	8.0				
360 minute winter	SWMH09	1.011	15_OUT	8.2	1.124	0.374	0.0569	86.4

Results for 5 year 480 minute summer. 960 minute analysis at 8 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	SWMH01	248	49.761	0.016	0.6	0.0092	0.0000	OK
480 minute summer	SWMH02	248	49.624	0.016	0.6	0.0046	0.0000	OK
480 minute summer	Tank	248	49.563	0.016	0.6	0.3067	0.0000	OK
480 minute summer	Dummy	248	49.514	0.014	0.6	0.0000	0.0000	OK
480 minute summer	SWMH03	248	49.365	0.040	3.0	0.0537	0.0000	OK
480 minute summer	SWMH04	248	49.155	0.069	8.5	0.1593	0.0000	OK
480 minute summer	Oil Interceptor	248	49.036	0.068	8.5	0.0000	0.0000	OK
480 minute summer	SWMH05	248	50.757	0.017	1.2	0.0138	0.0000	OK
480 minute summer	SWMH06	248	48.866	0.026	1.7	0.0122	0.0000	OK
480 minute summer	SWMH07	248	48.714	0.027	1.9	0.0244	0.0000	OK
480 minute summer	SWMH08	248	48.610	0.060	10.4	0.0683	0.0000	OK
480 minute summer	12	264	48.586	0.106	10.4	8.5527	0.0000	OK
480 minute summer	Tank Outlet	264	48.585	0.111	8.7	0.0000	0.0000	OK
480 minute summer	Packaged PS	264	48.581	0.331	8.1	0.4066	0.0000	SURCHARGED
480 minute summer	SWMH09	48	50.119	0.069	8.0	0.0784	0.0000	OK
480 minute summer	15_OUT	48	49.999	0.064	8.2	0.0000	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	SWMH01	1.000	SWMH02	0.6	0.468	0.010	0.0141	
480 minute summer	SWMH02	1.001	Tank	0.6	0.504	0.010	0.0062	
480 minute summer	Tank	1.002	Dummy	0.6	0.518	0.010	0.0041	
480 minute summer	Dummy	1.003	SWMH03	0.6	0.570	0.008	0.0048	
480 minute summer	SWMH03	1.004	SWMH04	3.0	0.342	0.038	0.4266	
480 minute summer	SWMH04	1.005	Oil Interceptor	8.5	0.713	0.109	0.0431	
480 minute summer	Oil Interceptor	1.006	SWMH08	8.5	0.722	0.109	0.0992	
480 minute summer	SWMH05	2.000	SWMH06	1.2	0.881	0.011	0.0622	
480 minute summer	SWMH06	2.001	SWMH07	1.7	0.559	0.015	0.0467	
480 minute summer	SWMH07	2.002	SWMH08	1.9	0.319	0.017	0.0907	
480 minute summer	SWMH08	1.007	12	10.4	1.128	0.064	0.0485	
480 minute summer	12	1.008	Tank Outlet	8.7	0.861	0.178	0.0698	
480 minute summer	Tank Outlet	1.009	Packaged PS	8.1	1.663	0.202	0.0498	
480 minute summer	Packaged PS	Pump	SWMH09	8.0				
480 minute summer	SWMH09	1.011	15_OUT	8.2	1.110	0.375	0.0569	81.3

Results for 5 year 480 minute winter. 960 minute analysis at 8 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
480 minute winter	SWMH01	256	49.760	0.015	0.5	0.0085	0.0000	OK
480 minute winter	SWMH02	240	49.623	0.015	0.5	0.0043	0.0000	OK
480 minute winter	Tank	256	49.562	0.015	0.5	0.2842	0.0000	OK
480 minute winter	Dummy	256	49.513	0.013	0.5	0.0000	0.0000	OK
480 minute winter	SWMH03	248	49.360	0.035	2.3	0.0474	0.0000	OK
480 minute winter	SWMH04	248	49.146	0.060	6.4	0.1379	0.0000	OK
480 minute winter	Oil Interceptor	248	49.027	0.059	6.4	0.0000	0.0000	OK
480 minute winter	SWMH05	248	50.755	0.015	0.9	0.0122	0.0000	OK
480 minute winter	SWMH06	248	48.863	0.023	1.3	0.0107	0.0000	OK
480 minute winter	SWMH07	248	48.710	0.024	1.4	0.0212	0.0000	OK
480 minute winter	SWMH08	248	48.599	0.049	7.8	0.0559	0.0000	OK
480 minute winter	12	248	48.553	0.072	7.8	5.8543	0.0000	OK
480 minute winter	Tank Outlet	248	48.522	0.048	7.7	0.0000	0.0000	OK
480 minute winter	Packaged PS	320	48.455	0.205	7.8	0.2514	0.0000	SURCHARGED
480 minute winter	SWMH09	424	50.120	0.070	8.0	0.0789	0.0000	OK
480 minute winter	15_OUT	384	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	0.5	0.444	0.009	0.0124	
480 minute winter	SWMH02	1.001	Tank	0.5	0.481	0.009	0.0055	
480 minute winter	Tank	1.002	Dummy	0.5	0.490	0.008	0.0037	
480 minute winter	Dummy	1.003	SWMH03	0.5	0.541	0.007	0.0043	
480 minute winter	SWMH03	1.004	SWMH04	2.3	0.321	0.029	0.3499	
480 minute winter	SWMH04	1.005	Oil Interceptor	6.4	0.658	0.082	0.0352	
480 minute winter	Oil Interceptor	1.006	SWMH08	6.4	0.666	0.082	0.0811	
480 minute winter	SWMH05	2.000	SWMH06	0.9	0.807	0.009	0.0509	
480 minute winter	SWMH06	2.001	SWMH07	1.3	0.519	0.012	0.0384	
480 minute winter	SWMH07	2.002	SWMH08	1.4	0.291	0.013	0.0692	
480 minute winter	SWMH08	1.007	12	7.8	1.013	0.048	0.0340	
480 minute winter	12	1.008	Tank Outlet	7.7	0.814	0.159	0.0309	
480 minute winter	Tank Outlet	1.009	Packaged PS	7.8	1.672	0.194	0.0316	
480 minute winter	Packaged PS	Pump	SWMH09	8.0				
480 minute winter	SWMH09	1.011	15_OUT	8.2	1.120	0.374	0.0569	106.6

Results for 5 year 600 minute summer. 1080 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
600 minute summer	SWMH01	315	49.760	0.015	0.5	0.0085	0.0000	OK
600 minute summer	SWMH02	315	49.623	0.015	0.5	0.0043	0.0000	OK
600 minute summer	Tank	315	49.562	0.015	0.5	0.2839	0.0000	OK
600 minute summer	Dummy	315	49.513	0.013	0.5	0.0000	0.0000	OK
600 minute summer	SWMH03	315	49.361	0.036	2.5	0.0493	0.0000	OK
600 minute summer	SWMH04	315	49.149	0.063	7.1	0.1454	0.0000	OK
600 minute summer	Oil Interceptor	315	49.030	0.062	7.1	0.0000	0.0000	OK
600 minute summer	SWMH05	315	50.756	0.016	1.0	0.0127	0.0000	OK
600 minute summer	SWMH06	315	48.864	0.024	1.4	0.0111	0.0000	OK
600 minute summer	SWMH07	315	48.711	0.024	1.5	0.0219	0.0000	OK
600 minute summer	SWMH08	315	48.602	0.052	8.6	0.0593	0.0000	OK
600 minute summer	12	315	48.556	0.076	8.6	6.1502	0.0000	OK
600 minute summer	Tank Outlet	330	48.545	0.071	8.2	0.0000	0.0000	OK
600 minute summer	Packaged PS	330	48.550	0.300	8.5	0.3685	0.0000	SURCHARGED
600 minute summer	SWMH09	405	50.119	0.069	8.0	0.0781	0.0000	OK
600 minute summer	15_OUT	405	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	0.5	0.444	0.009	0.0124	
600 minute summer	SWMH02	1.001	Tank	0.5	0.481	0.009	0.0055	
600 minute summer	Tank	1.002	Dummy	0.5	0.490	0.008	0.0037	
600 minute summer	Dummy	1.003	SWMH03	0.5	0.540	0.006	0.0043	
600 minute summer	SWMH03	1.004	SWMH04	2.5	0.325	0.032	0.3753	
600 minute summer	SWMH04	1.005	Oil Interceptor	7.1	0.678	0.091	0.0379	
600 minute summer	Oil Interceptor	1.006	SWMH08	7.1	0.686	0.091	0.0873	
600 minute summer	SWMH05	2.000	SWMH06	1.0	0.833	0.010	0.0548	
600 minute summer	SWMH06	2.001	SWMH07	1.4	0.532	0.013	0.0404	
600 minute summer	SWMH07	2.002	SWMH08	1.5	0.289	0.013	0.0746	
600 minute summer	SWMH08	1.007	12	8.6	0.924	0.053	0.0366	
600 minute summer	12	1.008	Tank Outlet	8.2	0.770	0.168	0.0398	
600 minute summer	Tank Outlet	1.009	Packaged PS	8.5	1.668	0.212	0.0408	
600 minute summer	Packaged PS	Pump	SWMH09	8.0				
600 minute summer	SWMH09	1.011	15_OUT	8.2	1.096	0.374	0.0565	55.6

Results for 5 year 600 minute winter. 1080 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
600 minute winter	SWMH01	330	49.759	0.014	0.4	0.0076	0.0000	OK
600 minute winter	SWMH02	285	49.621	0.014	0.4	0.0038	0.0000	OK
600 minute winter	Tank	345	49.560	0.013	0.4	0.2555	0.0000	OK
600 minute winter	Dummy	345	49.512	0.012	0.4	0.0000	0.0000	OK
600 minute winter	SWMH03	330	49.357	0.032	1.9	0.0433	0.0000	OK
600 minute winter	SWMH04	315	49.141	0.055	5.4	0.1267	0.0000	OK
600 minute winter	Oil Interceptor	315	49.022	0.054	5.4	0.0000	0.0000	OK
600 minute winter	SWMH05	315	50.754	0.014	0.8	0.0115	0.0000	OK
600 minute winter	SWMH06	315	48.861	0.021	1.1	0.0099	0.0000	OK
600 minute winter	SWMH07	315	48.709	0.022	1.2	0.0197	0.0000	OK
600 minute winter	SWMH08	315	48.595	0.045	6.6	0.0507	0.0000	OK
600 minute winter	12	315	48.547	0.067	6.6	5.4033	0.0000	OK
600 minute winter	Tank Outlet	300	48.517	0.044	6.7	0.0000	0.0000	OK
600 minute winter	Packaged PS	165	48.452	0.202	6.6	0.2475	0.0000	SURCHARGED
600 minute winter	SWMH09	660	50.120	0.070	8.0	0.0789	0.0000	OK
600 minute winter	15_OUT	390	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	0.4	0.415	0.007	0.0106	
600 minute winter	SWMH02	1.001	Tank	0.4	0.481	0.007	0.0047	
600 minute winter	Tank	1.002	Dummy	0.4	0.457	0.007	0.0031	
600 minute winter	Dummy	1.003	SWMH03	0.4	0.506	0.005	0.0036	
600 minute winter	SWMH03	1.004	SWMH04	1.9	0.306	0.024	0.3087	
600 minute winter	SWMH04	1.005	Oil Interceptor	5.4	0.627	0.069	0.0312	
600 minute winter	Oil Interceptor	1.006	SWMH08	5.4	0.634	0.069	0.0719	
600 minute winter	SWMH05	2.000	SWMH06	0.8	0.778	0.008	0.0469	
600 minute winter	SWMH06	2.001	SWMH07	1.1	0.492	0.010	0.0343	
600 minute winter	SWMH07	2.002	SWMH08	1.2	0.283	0.011	0.0607	
600 minute winter	SWMH08	1.007	12	6.6	0.996	0.041	0.0300	
600 minute winter	12	1.008	Tank Outlet	6.7	0.830	0.138	0.0271	
600 minute winter	Tank Outlet	1.009	Packaged PS	6.6	1.587	0.164	0.0316	
600 minute winter	Packaged PS	Pump	SWMH09	8.0				
600 minute winter	SWMH09	1.011	15_OUT	8.2	1.104	0.373	0.0564	83.8

Results for 5 year 720 minute summer. 1200 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
720 minute summer	SWMH01	375	49.760	0.015	0.5	0.0085	0.0000	OK
720 minute summer	SWMH02	375	49.623	0.015	0.5	0.0043	0.0000	OK
720 minute summer	Tank	375	49.562	0.015	0.5	0.2839	0.0000	OK
720 minute summer	Dummy	375	49.513	0.013	0.5	0.0000	0.0000	OK
720 minute summer	SWMH03	375	49.360	0.035	2.3	0.0474	0.0000	OK
720 minute summer	SWMH04	375	49.146	0.061	6.5	0.1390	0.0000	OK
720 minute summer	Oil Interceptor	375	49.028	0.060	6.5	0.0000	0.0000	OK
720 minute summer	SWMH05	375	50.755	0.015	0.9	0.0122	0.0000	OK
720 minute summer	SWMH06	375	48.863	0.023	1.3	0.0107	0.0000	OK
720 minute summer	SWMH07	375	48.710	0.024	1.4	0.0212	0.0000	OK
720 minute summer	SWMH08	375	48.600	0.050	7.9	0.0563	0.0000	OK
720 minute summer	12	375	48.553	0.073	7.9	5.8844	0.0000	OK
720 minute summer	Tank Outlet	360	48.520	0.046	7.4	0.0000	0.0000	OK
720 minute summer	Packaged PS	225	48.449	0.199	7.9	0.2445	0.0000	SURCHARGED
720 minute summer	SWMH09	585	50.120	0.070	8.0	0.0787	0.0000	OK
720 minute summer	15_OUT	570	49.999	0.064	8.3	0.0000	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	SWMH01	1.000	SWMH02	0.5	0.444	0.009	0.0124	
720 minute summer	SWMH02	1.001	Tank	0.5	0.481	0.009	0.0055	
720 minute summer	Tank	1.002	Dummy	0.5	0.490	0.008	0.0037	
720 minute summer	Dummy	1.003	SWMH03	0.5	0.540	0.006	0.0043	
720 minute summer	SWMH03	1.004	SWMH04	2.3	0.318	0.029	0.3526	
720 minute summer	SWMH04	1.005	Oil Interceptor	6.5	0.661	0.083	0.0356	
720 minute summer	Oil Interceptor	1.006	SWMH08	6.5	0.669	0.083	0.0820	
720 minute summer	SWMH05	2.000	SWMH06	0.9	0.807	0.009	0.0509	
720 minute summer	SWMH06	2.001	SWMH07	1.3	0.519	0.012	0.0384	
720 minute summer	SWMH07	2.002	SWMH08	1.4	0.287	0.013	0.0698	
720 minute summer	SWMH08	1.007	12	7.9	0.924	0.049	0.0343	
720 minute summer	12	1.008	Tank Outlet	7.4	0.808	0.151	0.0302	
720 minute summer	Tank Outlet	1.009	Packaged PS	7.9	1.636	0.197	0.0285	
720 minute summer	Packaged PS	Pump	SWMH09	8.0				
720 minute summer	SWMH09	1.011	15_OUT	8.3	1.098	0.376	0.0569	87.0

Results for 5 year 720 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	SWMH01	375	49.759	0.014	0.4	0.0076	0.0000	OK
720 minute winter	SWMH02	375	49.621	0.014	0.4	0.0038	0.0000	OK
720 minute winter	Tank	375	49.560	0.013	0.4	0.2549	0.0000	OK
720 minute winter	Dummy	375	49.512	0.012	0.4	0.0000	0.0000	OK
720 minute winter	SWMH03	375	49.356	0.031	1.8	0.0422	0.0000	OK
720 minute winter	SWMH04	375	49.138	0.053	4.9	0.1207	0.0000	OK
720 minute winter	Oil Interceptor	375	49.020	0.052	4.9	0.0000	0.0000	OK
720 minute winter	SWMH05	375	50.753	0.013	0.7	0.0108	0.0000	OK
720 minute winter	SWMH06	375	48.860	0.020	1.0	0.0095	0.0000	OK
720 minute winter	SWMH07	375	48.708	0.021	1.1	0.0190	0.0000	OK
720 minute winter	SWMH08	375	48.592	0.042	6.0	0.0480	0.0000	OK
720 minute winter	12	375	48.544	0.064	6.0	5.1365	0.0000	OK
720 minute winter	Tank Outlet	375	48.516	0.042	6.6	0.0000	0.0000	OK
720 minute winter	Packaged PS	390	48.453	0.203	5.9	0.2495	0.0000	SURCHARGED
720 minute winter	SWMH09	120	50.119	0.069	8.0	0.0785	0.0000	OK
720 minute winter	15_OUT	240	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	0.4	0.415	0.007	0.0106	
720 minute winter	SWMH02	1.001	Tank	0.4	0.481	0.007	0.0047	
720 minute winter	Tank	1.002	Dummy	0.4	0.457	0.007	0.0031	
720 minute winter	Dummy	1.003	SWMH03	0.4	0.505	0.005	0.0036	
720 minute winter	SWMH03	1.004	SWMH04	1.8	0.302	0.023	0.2904	
720 minute winter	SWMH04	1.005	Oil Interceptor	4.9	0.609	0.063	0.0291	
720 minute winter	Oil Interceptor	1.006	SWMH08	4.9	0.616	0.063	0.0670	
720 minute winter	SWMH05	2.000	SWMH06	0.7	0.746	0.007	0.0428	
720 minute winter	SWMH06	2.001	SWMH07	1.0	0.477	0.009	0.0322	
720 minute winter	SWMH07	2.002	SWMH08	1.1	0.278	0.010	0.0563	
720 minute winter	SWMH08	1.007	12	6.0	0.917	0.037	0.0279	
720 minute winter	12	1.008	Tank Outlet	6.6	0.810	0.134	0.0256	
720 minute winter	Tank Outlet	1.009	Packaged PS	5.9	1.554	0.148	0.0324	
720 minute winter	Packaged PS	Pump	SWMH09	8.0				
720 minute winter	SWMH09	1.011	15_OUT	8.2	1.124	0.374	0.0561	114.6

Results for 5 year 960 minute summer. 1440 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
960 minute summer	SWMH01	510	49.759	0.014	0.4	0.0076	0.0000	OK
960 minute summer	SWMH02	480	49.621	0.014	0.4	0.0038	0.0000	OK
960 minute summer	Tank	510	49.560	0.013	0.4	0.2555	0.0000	OK
960 minute summer	Dummy	510	49.512	0.012	0.4	0.0000	0.0000	OK
960 minute summer	SWMH03	495	49.358	0.033	2.0	0.0444	0.0000	OK
960 minute summer	SWMH04	495	49.141	0.056	5.5	0.1279	0.0000	OK
960 minute summer	Oil Interceptor	495	49.023	0.055	5.5	0.0000	0.0000	OK
960 minute summer	SWMH05	495	50.754	0.014	0.8	0.0115	0.0000	OK
960 minute summer	SWMH06	495	48.861	0.021	1.1	0.0099	0.0000	OK
960 minute summer	SWMH07	495	48.709	0.022	1.2	0.0197	0.0000	OK
960 minute summer	SWMH08	495	48.595	0.045	6.7	0.0512	0.0000	OK
960 minute summer	12	495	48.547	0.067	6.7	5.4296	0.0000	OK
960 minute summer	Tank Outlet	510	48.516	0.042	6.8	0.0000	0.0000	OK
960 minute summer	Packaged PS	435	48.449	0.199	6.6	0.2444	0.0000	SURCHARGED
960 minute summer	SWMH09	135	50.120	0.070	8.0	0.0786	0.0000	OK
960 minute summer	15_OUT	135	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	0.4	0.415	0.007	0.0106	
960 minute summer	SWMH02	1.001	Tank	0.4	0.481	0.007	0.0047	
960 minute summer	Tank	1.002	Dummy	0.4	0.457	0.007	0.0031	
960 minute summer	Dummy	1.003	SWMH03	0.4	0.506	0.005	0.0036	
960 minute summer	SWMH03	1.004	SWMH04	2.0	0.310	0.026	0.3150	
960 minute summer	SWMH04	1.005	Oil Interceptor	5.5	0.630	0.070	0.0316	
960 minute summer	Oil Interceptor	1.006	SWMH08	5.5	0.637	0.070	0.0728	
960 minute summer	SWMH05	2.000	SWMH06	0.8	0.778	0.008	0.0469	
960 minute summer	SWMH06	2.001	SWMH07	1.1	0.492	0.010	0.0343	
960 minute summer	SWMH07	2.002	SWMH08	1.2	0.280	0.011	0.0612	
960 minute summer	SWMH08	1.007	12	6.7	0.887	0.041	0.0303	
960 minute summer	12	1.008	Tank Outlet	6.8	0.790	0.140	0.0267	
960 minute summer	Tank Outlet	1.009	Packaged PS	6.6	1.533	0.165	0.0307	
960 minute summer	Packaged PS	Pump	SWMH09	8.0				
960 minute summer	SWMH09	1.011	15_OUT	8.2	1.112	0.374	0.0569	103.2

Results for 5 year 960 minute winter. 1440 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
960 minute winter	SWMH01	495	49.757	0.012	0.3	0.0067	0.0000	OK
960 minute winter	SWMH02	435	49.620	0.012	0.3	0.0034	0.0000	OK
960 minute winter	Tank	510	49.558	0.012	0.3	0.2237	0.0000	OK
960 minute winter	Dummy	510	49.510	0.010	0.3	0.0000	0.0000	OK
960 minute winter	SWMH03	495	49.354	0.029	1.5	0.0387	0.0000	OK
960 minute winter	SWMH04	495	49.134	0.048	4.1	0.1104	0.0000	OK
960 minute winter	Oil Interceptor	495	49.015	0.047	4.1	0.0000	0.0000	OK
960 minute winter	SWMH05	495	50.752	0.012	0.6	0.0100	0.0000	OK
960 minute winter	SWMH06	495	48.858	0.018	0.8	0.0085	0.0000	OK
960 minute winter	SWMH07	495	48.706	0.019	0.9	0.0173	0.0000	OK
960 minute winter	SWMH08	495	48.588	0.038	5.0	0.0433	0.0000	OK
960 minute winter	12	495	48.538	0.058	5.0	4.6996	0.0000	OK
960 minute winter	Tank Outlet	510	48.511	0.037	5.4	0.0000	0.0000	OK
960 minute winter	Packaged PS	690	48.449	0.199	5.0	0.2442	0.0000	SURCHARGED
960 minute winter	SWMH09	90	50.120	0.070	8.0	0.0788	0.0000	OK
960 minute winter	15_OUT	360	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	0.3	0.381	0.005	0.0087	
960 minute winter	SWMH02	1.001	Tank	0.3	0.481	0.005	0.0039	
960 minute winter	Tank	1.002	Dummy	0.3	0.420	0.005	0.0026	
960 minute winter	Dummy	1.003	SWMH03	0.3	0.466	0.004	0.0030	
960 minute winter	SWMH03	1.004	SWMH04	1.5	0.287	0.019	0.2556	
960 minute winter	SWMH04	1.005	Oil Interceptor	4.1	0.580	0.052	0.0256	
960 minute winter	Oil Interceptor	1.006	SWMH08	4.1	0.586	0.052	0.0590	
960 minute winter	SWMH05	2.000	SWMH06	0.6	0.712	0.006	0.0385	
960 minute winter	SWMH06	2.001	SWMH07	0.8	0.442	0.007	0.0277	
960 minute winter	SWMH07	2.002	SWMH08	0.9	0.263	0.008	0.0485	
960 minute winter	SWMH08	1.007	12	5.0	0.798	0.031	0.0243	
960 minute winter	12	1.008	Tank Outlet	5.4	0.775	0.110	0.0221	
960 minute winter	Tank Outlet	1.009	Packaged PS	5.0	1.484	0.124	0.0300	
960 minute winter	Packaged PS	Pump	SWMH09	8.0				
960 minute winter	SWMH09	1.011	15_OUT	8.2	1.115	0.372	0.0568	95.6

Results for 5 year 1440 minute summer. 1920 minute analysis at 30 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
1440 minute summer	SWMH01	750	49.757	0.012	0.3	0.0067	0.0000	OK
1440 minute summer	SWMH02	720	49.620	0.012	0.3	0.0033	0.0000	OK
1440 minute summer	Tank	780	49.558	0.012	0.3	0.2237	0.0000	OK
1440 minute summer	Dummy	780	49.510	0.010	0.3	0.0000	0.0000	OK
1440 minute summer	SWMH03	750	49.354	0.029	1.5	0.0387	0.0000	OK
1440 minute summer	SWMH04	750	49.134	0.049	4.2	0.1117	0.0000	OK
1440 minute summer	Oil Interceptor	750	49.016	0.048	4.2	0.0000	0.0000	OK
1440 minute summer	SWMH05	750	50.752	0.012	0.6	0.0100	0.0000	OK
1440 minute summer	SWMH06	750	48.858	0.018	0.8	0.0085	0.0000	OK
1440 minute summer	SWMH07	750	48.706	0.019	0.9	0.0173	0.0000	OK
1440 minute summer	SWMH08	750	48.589	0.039	5.1	0.0438	0.0000	OK
1440 minute summer	12	750	48.539	0.059	5.1	4.7534	0.0000	OK
1440 minute summer	Tank Outlet	720	48.510	0.037	4.9	0.0000	0.0000	OK
1440 minute summer	Packaged PS	930	48.446	0.196	5.1	0.2403	0.0000	SURCHARGED
1440 minute summer	SWMH09	1260	50.120	0.070	8.0	0.0786	0.0000	OK
1440 minute summer	15_OUT	780	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	0.3	0.381	0.005	0.0086	
1440 minute summer	SWMH02	1.001	Tank	0.3	0.390	0.005	0.0039	
1440 minute summer	Tank	1.002	Dummy	0.3	0.420	0.005	0.0026	
1440 minute summer	Dummy	1.003	SWMH03	0.3	0.466	0.004	0.0030	
1440 minute summer	SWMH03	1.004	SWMH04	1.5	0.283	0.019	0.2587	
1440 minute summer	SWMH04	1.005	Oil Interceptor	4.2	0.583	0.054	0.0260	
1440 minute summer	Oil Interceptor	1.006	SWMH08	4.2	0.590	0.054	0.0601	
1440 minute summer	SWMH05	2.000	SWMH06	0.6	0.712	0.006	0.0385	
1440 minute summer	SWMH06	2.001	SWMH07	0.8	0.442	0.007	0.0277	
1440 minute summer	SWMH07	2.002	SWMH08	0.9	0.263	0.008	0.0491	
1440 minute summer	SWMH08	1.007	12	5.1	0.701	0.031	0.0247	
1440 minute summer	12	1.008	Tank Outlet	4.9	0.730	0.100	0.0222	
1440 minute summer	Tank Outlet	1.009	Packaged PS	5.1	1.458	0.128	0.0280	
1440 minute summer	Packaged PS	Pump	SWMH09	8.0				
1440 minute summer	SWMH09	1.011	15_OUT	8.2	1.101	0.373	0.0561	114.7

Results for 5 year 1440 minute winter. 1920 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 winter	SWMH01	660	49.755	0.010	0.2	0.0056	0.0000	OK
1440 minute winter	SWMH02	570	49.618	0.010	0.2	0.0028	0.0000	OK
1440 minute winter	Tank	690	49.556	0.010	0.2	0.1869	0.0000	OK
1440 minute winter	Dummy	690	49.509	0.009	0.2	0.0000	0.0000	OK
1440 minute winter	SWMH03	720	49.350	0.025	1.1	0.0335	0.0000	OK
1440 minute winter	SWMH04	750	49.128	0.042	3.1	0.0961	0.0000	OK
1440 minute winter	Oil Interceptor	750	49.009	0.041	3.1	0.0000	0.0000	OK
1440 minute winter	SWMH05	660	50.750	0.010	0.4	0.0083	0.0000	OK
1440 minute winter	SWMH06	840	48.856	0.016	0.6	0.0075	0.0000	OK
1440 minute winter	SWMH07	690	48.704	0.017	0.7	0.0154	0.0000	OK
1440 minute winter	SWMH08	750	48.583	0.033	3.8	0.0372	0.0000	OK
1440 minute winter	12	750	48.531	0.051	3.8	4.0831	0.0000	OK
1440 minute winter	Tank Outlet	720	48.507	0.033	4.2	0.0000	0.0000	OK
1440 minute winter	Packaged PS	960	48.450	0.200	3.8	0.2449	0.0000	SURCHARGED
1440 minute winter	SWMH09	540	50.119	0.069	8.0	0.0786	0.0000	OK
1440 minute winter	15_OUT	630	49.998	0.063	8.1	0.0000	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 winter	SWMH01	1.000	SWMH02	0.2	0.340	0.003	0.0065	
1440 minute winter	SWMH02	1.001	Tank	0.2	0.390	0.003	0.0029	
1440 minute winter	Tank	1.002	Dummy	0.2	0.373	0.003	0.0019	
1440 minute winter	Dummy	1.003	SWMH03	0.2	0.417	0.003	0.0022	
1440 minute winter	SWMH03	1.004	SWMH04	1.1	0.263	0.014	0.2081	
1440 minute winter	SWMH04	1.005	Oil Interceptor	3.1	0.534	0.040	0.0210	
1440 minute winter	Oil Interceptor	1.006	SWMH08	3.1	0.540	0.040	0.0484	
1440 minute winter	SWMH05	2.000	SWMH06	0.4	0.633	0.004	0.0288	
1440 minute winter	SWMH06	2.001	SWMH07	0.6	0.419	0.005	0.0230	
1440 minute winter	SWMH07	2.002	SWMH08	0.7	0.263	0.006	0.0393	
1440 minute winter	SWMH08	1.007	12	3.8	0.710	0.023	0.0197	
1440 minute winter	12	1.008	Tank Outlet	4.2	0.718	0.087	0.0182	
1440 minute winter	Tank Outlet	1.009	Packaged PS	3.8	1.388	0.095	0.0289	
1440 minute winter	Packaged PS	Pump	SWMH09	8.0				
1440 minute winter	SWMH09	1.011	15_OUT	8.1	1.097	0.370	0.0564	124.7

Results for 100 year +40% CC 15 minute summer. 495 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
15 minute summer	SWMH01	10	49.801	0.056	7.2	0.0314	0.0000	OK
15 minute summer	SWMH02	10	49.663	0.055	7.1	0.0156	0.0000	OK
15 minute summer	Tank	12	49.596	0.049	7.1	0.9350	0.0000	OK
15 minute summer	Dummy	12	49.545	0.045	6.3	0.0000	0.0000	OK
15 minute summer	SWMH03	11	49.457	0.132	32.2	0.1787	0.0000	OK
15 minute summer	SWMH04	11	49.358	0.273	93.3	0.6252	0.0000	OK
15 minute summer	Oil Interceptor	11	49.253	0.285	92.3	0.0000	0.0000	OK
15 minute summer	SWMH05	10	50.795	0.055	13.4	0.0442	0.0000	OK
15 minute summer	SWMH06	19	48.966	0.126	18.9	0.0586	0.0000	OK
15 minute summer	SWMH07	19	48.966	0.279	20.5	0.2509	0.0000	OK
15 minute summer	SWMH08	19	48.966	0.416	110.8	0.4707	0.0000	SURCHARGED
15 minute summer	12	19	48.966	0.486	108.3	39.2431	0.0000	SURCHARGED
15 minute summer	Tank Outlet	19	48.966	0.492	11.6	0.0000	0.0000	SURCHARGED
15 minute summer	Packaged PS	19	48.956	0.706	9.6	0.8667	0.0000	SURCHARGED
15 minute summer	SWMH09	120	50.120	0.070	8.0	0.0788	0.0000	OK
15 minute summer	15_OUT	116	49.999	0.064	8.2	0.0000	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	SWMH01	1.000	SWMH02	7.1	0.945	0.123	0.0830	
15 minute summer	SWMH02	1.001	Tank	7.1	1.198	0.122	0.0335	
15 minute summer	Tank	1.002	Dummy	6.3	1.053	0.106	0.0215	
15 minute summer	Dummy	1.003	SWMH03	6.3	1.115	0.082	0.0307	
15 minute summer	SWMH03	1.004	SWMH04	32.2	0.636	0.411	2.3247	
15 minute summer	SWMH04	1.005	Oil Interceptor	92.3	1.449	1.181	0.2294	
15 minute summer	Oil Interceptor	1.006	SWMH08	92.5	1.424	1.184	0.5432	
15 minute summer	SWMH05	2.000	SWMH06	13.2	1.794	0.126	0.3349	
15 minute summer	SWMH06	2.001	SWMH07	18.7	1.108	0.169	0.7385	
15 minute summer	SWMH07	2.002	SWMH08	20.3	0.606	0.183	0.9493	
15 minute summer	SWMH08	1.007	12	108.3	2.717	0.667	0.2317	
15 minute summer	12	1.008	Tank Outlet	11.6	0.848	0.237	0.2146	
15 minute summer	Tank Outlet	1.009	Packaged PS	9.6	1.461	0.240	0.0556	
15 minute summer	Packaged PS	Pump	SWMH09	8.0				
15 minute summer	SWMH09	1.011	15_OUT	8.2	1.109	0.375	0.0569	51.0

Results for 100 year +40% CC 15 minute winter. 495 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
15 minute winter	SWMH01	10	49.802	0.057	7.5	0.0321	0.0000	OK
15 minute winter	SWMH02	10	49.664	0.056	7.4	0.0159	0.0000	OK
15 minute winter	Tank	12	49.597	0.051	7.4	0.9616	0.0000	OK
15 minute winter	Dummy	12	49.546	0.046	6.7	0.0000	0.0000	OK
15 minute winter	SWMH03	11	49.461	0.136	34.2	0.1837	0.0000	OK
15 minute winter	SWMH04	10	49.368	0.282	98.5	0.6466	0.0000	OK
15 minute winter	Oil Interceptor	11	49.269	0.301	96.5	0.0000	0.0000	SURCHARGED
15 minute winter	SWMH05	10	50.796	0.056	14.1	0.0452	0.0000	OK
15 minute winter	SWMH06	19	49.028	0.188	19.8	0.0880	0.0000	OK
15 minute winter	SWMH07	19	49.028	0.342	21.5	0.3068	0.0000	SURCHARGED
15 minute winter	SWMH08	19	49.029	0.479	115.5	0.5416	0.0000	SURCHARGED
15 minute winter	12	19	49.029	0.549	113.1	44.3158	0.0000	SURCHARGED
15 minute winter	Tank Outlet	19	49.029	0.555	13.9	0.0000	0.0000	SURCHARGED
15 minute winter	Packaged PS	19	49.019	0.769	12.8	0.9437	0.0000	SURCHARGED
15 minute winter	SWMH09	145	50.120	0.070	8.0	0.0789	0.0000	OK
15 minute winter	15_OUT	118	49.998	0.063	8.1	0.0000	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 winter	SWMH01	1.000	SWMH02	7.4	0.955	0.128	0.0856	
15 minute winter	SWMH02	1.001	Tank	7.4	1.165	0.127	0.0348	
15 minute winter	Tank	1.002	Dummy	6.7	1.073	0.112	0.0224	
15 minute winter	Dummy	1.003	SWMH03	6.7	1.133	0.087	0.0331	
15 minute winter	SWMH03	1.004	SWMH04	33.8	0.646	0.432	2.3849	
15 minute winter	SWMH04	1.005	Oil Interceptor	96.5	1.482	1.235	0.2340	
15 minute winter	Oil Interceptor	1.006	SWMH08	96.9	1.446	1.240	0.5535	
15 minute winter	SWMH05	2.000	SWMH06	13.8	1.817	0.132	0.4810	
15 minute winter	SWMH06	2.001	SWMH07	19.6	1.117	0.177	0.8974	
15 minute winter	SWMH07	2.002	SWMH08	20.5	0.590	0.184	0.9635	
15 minute winter	SWMH08	1.007	12	113.1	2.856	0.696	0.2317	
15 minute winter	12	1.008	Tank Outlet	13.9	0.850	0.284	0.2146	
15 minute winter	Tank Outlet	1.009	Packaged PS	12.8	1.463	0.320	0.0556	
15 minute winter	Packaged PS	Pump	SWMH09	8.0				
15 minute winter	SWMH09	1.011	15_OUT	8.1	1.097	0.367	0.0566	56.2

Results for 100 year +40% CC 30 minute summer. 510 minute analysis at 1 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
30 minute summer	SWMH01	18	49.800	0.055	7.0	0.0310	0.0000	OK
30 minute summer	SWMH02	18	49.662	0.055	7.0	0.0155	0.0000	OK
30 minute summer	Tank	19	49.597	0.050	7.0	0.9503	0.0000	OK
30 minute summer	Dummy	19	49.545	0.045	6.5	0.0000	0.0000	OK
30 minute summer	SWMH03	18	49.458	0.133	32.9	0.1798	0.0000	OK
30 minute summer	SWMH04	18	49.360	0.274	93.3	0.6289	0.0000	OK
30 minute summer	Oil Interceptor	18	49.254	0.286	92.9	0.0000	0.0000	OK
30 minute summer	SWMH05	18	50.794	0.054	13.1	0.0440	0.0000	OK
30 minute summer	SWMH06	33	49.133	0.293	18.6	0.1371	0.0000	OK
30 minute summer	SWMH07	33	49.133	0.446	20.4	0.4009	0.0000	SURCHARGED
30 minute summer	SWMH08	33	49.133	0.583	104.9	0.6598	0.0000	SURCHARGED
30 minute summer	12	33	49.133	0.653	103.5	52.7499	0.0000	SURCHARGED
30 minute summer	Tank Outlet	33	49.133	0.659	10.8	0.0000	0.0000	SURCHARGED
30 minute summer	Packaged PS	33	49.124	0.874	11.0	1.0719	0.0000	SURCHARGED
30 minute summer	SWMH09	180	50.119	0.069	8.0	0.0783	0.0000	OK
30 minute summer	15_OUT	153	49.998	0.063	8.1	0.0000	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	SWMH01	1.000	SWMH02	7.0	0.938	0.120	0.0820	
30 minute summer	SWMH02	1.001	Tank	7.0	1.067	0.121	0.0337	
30 minute summer	Tank	1.002	Dummy	6.5	1.066	0.109	0.0220	
30 minute summer	Dummy	1.003	SWMH03	6.5	1.105	0.085	0.0311	
30 minute summer	SWMH03	1.004	SWMH04	32.5	0.639	0.416	2.3373	
30 minute summer	SWMH04	1.005	Oil Interceptor	92.9	1.452	1.189	0.2302	
30 minute summer	Oil Interceptor	1.006	SWMH08	92.7	1.422	1.186	0.5439	
30 minute summer	SWMH05	2.000	SWMH06	13.1	1.792	0.125	0.9279	
30 minute summer	SWMH06	2.001	SWMH07	18.6	1.057	0.168	1.0773	
30 minute summer	SWMH07	2.002	SWMH08	16.4	0.516	0.147	0.9635	
30 minute summer	SWMH08	1.007	12	103.5	2.432	0.637	0.2317	
30 minute summer	12	1.008	Tank Outlet	10.8	0.826	0.221	0.2146	
30 minute summer	Tank Outlet	1.009	Packaged PS	11.0	1.467	0.275	0.0556	
30 minute summer	Packaged PS	Pump	SWMH09	8.0				
30 minute summer	SWMH09	1.011	15_OUT	8.1	1.105	0.369	0.0556	72.0

Results for 100 year +40% CC 30 minute winter. 510 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 winter	SWMH01	18	49.797	0.052	6.3	0.0293	0.0000	OK
30 minute winter	SWMH02	18	49.660	0.052	6.3	0.0147	0.0000	OK
30 minute winter	Tank	19	49.595	0.048	6.3	0.9151	0.0000	OK
30 minute winter	Dummy	20	49.544	0.044	6.0	0.0000	0.0000	OK
30 minute winter	SWMH03	18	49.452	0.127	30.0	0.1713	0.0000	OK
30 minute winter	SWMH04	18	49.343	0.257	84.8	0.5895	0.0000	OK
30 minute winter	Oil Interceptor	18	49.231	0.263	84.6	0.0000	0.0000	OK
30 minute winter	SWMH05	18	50.792	0.052	11.8	0.0417	0.0000	OK
30 minute winter	SWMH06	32	49.220	0.380	16.8	0.1776	0.0000	SURCHARGED
30 minute winter	SWMH07	32	49.220	0.533	18.5	0.4789	0.0000	SURCHARGED
30 minute winter	SWMH08	32	49.220	0.670	99.4	0.7582	0.0000	SURCHARGED
30 minute winter	12	33	49.220	0.740	97.6	59.7727	0.0000	SURCHARGED
30 minute winter	Tank Outlet	33	49.220	0.746	13.2	0.0000	0.0000	SURCHARGED
30 minute winter	Packaged PS	33	49.211	0.961	9.8	1.1787	0.0000	SURCHARGED
30 minute winter	SWMH09	173	50.119	0.069	8.0	0.0784	0.0000	OK
30 minute winter	15_OUT	173	49.998	0.063	8.1	0.0000	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 winter	SWMH01	1.000	SWMH02	6.3	0.912	0.108	0.0759	
30 minute winter	SWMH02	1.001	Tank	6.3	0.998	0.109	0.0319	
30 minute winter	Tank	1.002	Dummy	6.0	1.041	0.101	0.0209	
30 minute winter	Dummy	1.003	SWMH03	6.0	1.104	0.079	0.0280	
30 minute winter	SWMH03	1.004	SWMH04	29.8	0.627	0.381	2.2145	
30 minute winter	SWMH04	1.005	Oil Interceptor	84.6	1.389	1.083	0.2197	
30 minute winter	Oil Interceptor	1.006	SWMH08	84.5	1.373	1.081	0.5625	
30 minute winter	SWMH05	2.000	SWMH06	11.8	1.740	0.113	0.9887	
30 minute winter	SWMH06	2.001	SWMH07	16.9	1.016	0.152	1.0803	
30 minute winter	SWMH07	2.002	SWMH08	14.9	0.495	0.134	0.9635	
30 minute winter	SWMH08	1.007	12	97.6	2.523	0.601	0.2317	
30 minute winter	12	1.008	Tank Outlet	13.2	0.781	0.271	0.2146	
30 minute winter	Tank Outlet	1.009	Packaged PS	9.8	1.562	0.246	0.0556	
30 minute winter	Packaged PS	Pump	SWMH09	8.0				
30 minute winter	SWMH09	1.011	15_OUT	8.1	1.096	0.368	0.0564	80.3

Results for 100 year +40% CC 60 minute summer. 540 minute analysis at 1 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
60 minute summer	SWMH01	33	49.794	0.049	5.7	0.0278	0.0000	OK
60 minute summer	SWMH02	33	49.657	0.049	5.7	0.0140	0.0000	OK
60 minute summer	Tank	34	49.592	0.046	5.7	0.8695	0.0000	OK
60 minute summer	Dummy	35	49.542	0.042	5.4	0.0000	0.0000	OK
60 minute summer	SWMH03	33	49.445	0.120	27.0	0.1617	0.0000	OK
60 minute summer	SWMH04	33	49.326	0.240	76.2	0.5502	0.0000	OK
60 minute summer	Oil Interceptor	60	49.278	0.310	76.0	0.0000	0.0000	SURCHARGED
60 minute summer	SWMH05	33	50.789	0.049	10.6	0.0395	0.0000	OK
60 minute summer	SWMH06	61	49.278	0.438	15.1	0.2043	0.0000	SURCHARGED
60 minute summer	SWMH07	61	49.277	0.591	16.2	0.5304	0.0000	SURCHARGED
60 minute summer	SWMH08	61	49.278	0.728	87.4	0.8230	0.0000	SURCHARGED
60 minute summer	12	61	49.278	0.798	86.2	64.3991	0.0000	SURCHARGED
60 minute summer	Tank Outlet	61	49.277	0.803	10.1	0.0000	0.0000	SURCHARGED
60 minute summer	Packaged PS	61	49.268	1.018	9.7	1.2489	0.0000	SURCHARGED
60 minute summer	SWMH09	304	50.120	0.070	8.0	0.0789	0.0000	OK
60 minute summer	15_OUT	212	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	5.7	0.888	0.098	0.0705	
60 minute summer	SWMH02	1.001	Tank	5.7	0.962	0.098	0.0296	
60 minute summer	Tank	1.002	Dummy	5.4	1.005	0.092	0.0195	
60 minute summer	Dummy	1.003	SWMH03	5.4	1.089	0.071	0.0242	
60 minute summer	SWMH03	1.004	SWMH04	26.8	0.609	0.343	2.0717	
60 minute summer	SWMH04	1.005	Oil Interceptor	76.0	1.326	0.973	0.2071	
60 minute summer	Oil Interceptor	1.006	SWMH08	75.9	1.317	0.971	0.5941	
60 minute summer	SWMH05	2.000	SWMH06	10.6	1.688	0.101	0.9998	
60 minute summer	SWMH06	2.001	SWMH07	14.8	0.986	0.133	1.0803	
60 minute summer	SWMH07	2.002	SWMH08	12.6	0.402	0.113	0.9635	
60 minute summer	SWMH08	1.007	12	86.2	2.192	0.530	0.2317	
60 minute summer	12	1.008	Tank Outlet	10.1	0.848	0.207	0.2146	
60 minute summer	Tank Outlet	1.009	Packaged PS	9.7	1.631	0.242	0.0556	
60 minute summer	Packaged PS	Pump	SWMH09	8.0				
60 minute summer	SWMH09	1.011	15_OUT	8.2	1.100	0.374	0.0563	97.4

Results for 100 year +40% CC 60 minute winter. 540 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
60 minute winter	SWMH01	33	49.789	0.044	4.6	0.0249	0.0000	OK
60 minute winter	SWMH02	33	49.652	0.044	4.6	0.0125	0.0000	OK
60 minute winter	Tank	34	49.588	0.042	4.6	0.7923	0.0000	OK
60 minute winter	Dummy	34	49.538	0.038	4.5	0.0000	0.0000	OK
60 minute winter	SWMH03	33	49.432	0.107	22.0	0.1451	0.0000	OK
60 minute winter	SWMH04	60	49.396	0.310	62.0	0.7119	0.0000	SURCHARGED
60 minute winter	Oil Interceptor	60	49.396	0.428	61.9	0.0000	0.0000	SURCHARGED
60 minute winter	SWMH05	32	50.784	0.044	8.6	0.0354	0.0000	OK
60 minute winter	SWMH06	60	49.396	0.556	12.2	0.2595	0.0000	SURCHARGED
60 minute winter	SWMH07	60	49.395	0.709	12.9	0.6365	0.0000	SURCHARGED
60 minute winter	SWMH08	60	49.396	0.846	69.3	0.9568	0.0000	SURCHARGED
60 minute winter	12	60	49.396	0.916	68.4	73.9403	0.0000	SURCHARGED
60 minute winter	Tank Outlet	60	49.395	0.922	9.6	0.0000	0.0000	SURCHARGED
60 minute winter	Packaged PS	60	49.386	1.136	10.3	1.3938	0.0000	SURCHARGED
60 minute winter	SWMH09	434	50.120	0.070	8.0	0.0789	0.0000	OK
60 minute winter	15_OUT	236	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	4.6	0.838	0.079	0.0603	
60 minute winter	SWMH02	1.001	Tank	4.6	0.882	0.079	0.0258	
60 minute winter	Tank	1.002	Dummy	4.5	0.947	0.076	0.0171	
60 minute winter	Dummy	1.003	SWMH03	4.5	1.035	0.059	0.0201	
60 minute winter	SWMH03	1.004	SWMH04	22.0	0.578	0.280	1.9891	
60 minute winter	SWMH04	1.005	Oil Interceptor	61.9	1.221	0.792	0.2548	
60 minute winter	Oil Interceptor	1.006	SWMH08	61.8	1.224	0.791	0.5941	
60 minute winter	SWMH05	2.000	SWMH06	8.6	1.584	0.082	1.0167	
60 minute winter	SWMH06	2.001	SWMH07	11.8	0.916	0.106	1.0803	
60 minute winter	SWMH07	2.002	SWMH08	9.8	0.396	0.088	0.9635	
60 minute winter	SWMH08	1.007	12	68.4	2.257	0.421	0.2317	
60 minute winter	12	1.008	Tank Outlet	9.6	0.884	0.197	0.2146	
60 minute winter	Tank Outlet	1.009	Packaged PS	10.3	1.529	0.258	0.0556	
60 minute winter	Packaged PS	Pump	SWMH09	8.0				
60 minute winter	SWMH09	1.011	15_OUT	8.2	1.098	0.373	0.0564	109.6

Results for 100 year +40% CC 120 minute summer. 600 minute analysis at 2 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
120 minute summer	SWMH01	64	49.786	0.041	4.0	0.0232	0.0000	OK
120 minute summer	SWMH02	64	49.649	0.041	4.0	0.0117	0.0000	OK
120 minute summer	Tank	64	49.585	0.039	4.0	0.7359	0.0000	OK
120 minute summer	Dummy	64	49.535	0.035	3.9	0.0000	0.0000	OK
120 minute summer	SWMH03	64	49.425	0.100	19.2	0.1349	0.0000	OK
120 minute summer	SWMH04	100	49.359	0.274	53.7	0.6277	0.0000	OK
120 minute summer	Oil Interceptor	100	49.359	0.391	53.6	0.0000	0.0000	SURCHARGED
120 minute summer	SWMH05	62	50.781	0.041	7.5	0.0330	0.0000	OK
120 minute summer	SWMH06	102	49.359	0.519	10.7	0.2424	0.0000	SURCHARGED
120 minute summer	SWMH07	102	49.359	0.672	10.3	0.6035	0.0000	SURCHARGED
120 minute summer	SWMH08	102	49.359	0.809	60.4	0.9150	0.0000	SURCHARGED
120 minute summer	12	102	49.359	0.879	59.8	70.9581	0.0000	SURCHARGED
120 minute summer	Tank Outlet	102	49.358	0.885	9.4	0.0000	0.0000	SURCHARGED
120 minute summer	Packaged PS	102	49.349	1.099	9.0	1.3486	0.0000	SURCHARGED
120 minute summer	SWMH09	290	50.119	0.069	8.0	0.0779	0.0000	OK
120 minute summer	15_OUT	26	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	4.0	0.807	0.069	0.0545	
120 minute summer	SWMH02	1.001	Tank	4.0	0.854	0.069	0.0234	
120 minute summer	Tank	1.002	Dummy	3.9	0.907	0.065	0.0153	
120 minute summer	Dummy	1.003	SWMH03	3.9	0.993	0.050	0.0179	
120 minute summer	SWMH03	1.004	SWMH04	19.1	0.556	0.244	1.7330	
120 minute summer	SWMH04	1.005	Oil Interceptor	53.6	1.161	0.687	0.2483	
120 minute summer	Oil Interceptor	1.006	SWMH08	53.6	1.168	0.686	0.5941	
120 minute summer	SWMH05	2.000	SWMH06	7.5	1.517	0.072	0.9924	
120 minute summer	SWMH06	2.001	SWMH07	9.4	0.842	0.085	1.0803	
120 minute summer	SWMH07	2.002	SWMH08	8.4	0.352	0.075	0.9635	
120 minute summer	SWMH08	1.007	12	59.8	1.937	0.368	0.2317	
120 minute summer	12	1.008	Tank Outlet	9.4	0.833	0.192	0.2146	
120 minute summer	Tank Outlet	1.009	Packaged PS	9.0	1.609	0.225	0.0556	
120 minute summer	Packaged PS	Pump	SWMH09	8.0				
120 minute summer	SWMH09	1.011	15_OUT	8.2	1.124	0.373	0.0563	131.9

Results for 100 year +40% CC 120 minute winter. 600 minute analysis at 2 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	SWMH01	64	49.781	0.036	3.1	0.0204	0.0000	OK
120 minute winter	SWMH02	64	49.644	0.036	3.1	0.0103	0.0000	OK
120 minute winter	Tank	64	49.581	0.035	3.1	0.6569	0.0000	OK
120 minute winter	Dummy	66	49.532	0.032	3.1	0.0000	0.0000	OK
120 minute winter	SWMH03	114	49.501	0.176	14.9	0.2383	0.0000	OK
120 minute winter	SWMH04	114	49.501	0.415	41.5	0.9527	0.0000	SURCHARGED
120 minute winter	Oil Interceptor	114	49.501	0.533	41.5	0.0000	0.0000	SURCHARGED
120 minute winter	SWMH05	64	50.776	0.036	5.7	0.0288	0.0000	OK
120 minute winter	SWMH06	114	49.501	0.661	8.1	0.3085	0.0000	SURCHARGED
120 minute winter	SWMH07	114	49.500	0.814	8.1	0.7306	0.0000	SURCHARGED
120 minute winter	SWMH08	114	49.501	0.951	46.1	1.0751	0.0000	SURCHARGED
120 minute winter	12	114	49.500	1.020	45.5	82.3864	0.0000	SURCHARGED
120 minute winter	Tank Outlet	114	49.500	1.026	9.4	0.0000	0.0000	SURCHARGED
120 minute winter	Packaged PS	114	49.491	1.241	9.5	1.5222	0.0000	SURCHARGED
120 minute winter	SWMH09	336	50.120	0.070	8.0	0.0790	0.0000	OK
120 minute winter	15_OUT	16	49.998	0.063	8.0	0.0000	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 winter	SWMH01	1.000	SWMH02	3.1	0.753	0.053	0.0453	
120 minute winter	SWMH02	1.001	Tank	3.1	0.781	0.053	0.0196	
120 minute winter	Tank	1.002	Dummy	3.1	0.848	0.051	0.0130	
120 minute winter	Dummy	1.003	SWMH03	3.1	0.929	0.040	0.0422	
120 minute winter	SWMH03	1.004	SWMH04	14.8	0.528	0.190	2.7156	
120 minute winter	SWMH04	1.005	Oil Interceptor	41.5	1.095	0.532	0.2548	
120 minute winter	Oil Interceptor	1.006	SWMH08	41.5	1.103	0.531	0.5941	
120 minute winter	SWMH05	2.000	SWMH06	5.7	1.399	0.055	0.9959	
120 minute winter	SWMH06	2.001	SWMH07	7.4	0.797	0.067	1.0803	
120 minute winter	SWMH07	2.002	SWMH08	6.5	0.343	0.059	0.9635	
120 minute winter	SWMH08	1.007	12	45.5	1.883	0.280	0.2317	
120 minute winter	12	1.008	Tank Outlet	9.4	0.919	0.192	0.2146	
120 minute winter	Tank Outlet	1.009	Packaged PS	9.5	1.661	0.237	0.0556	
120 minute winter	Packaged PS	Pump	SWMH09	8.0				
120 minute winter	SWMH09	1.011	15_OUT	8.0	1.110	0.366	0.0565	144.9

Results for 100 year +40% CC 180 minute summer. 660 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	SWMH01	96	49.781	0.036	3.1	0.0204	0.0000	OK
180 minute summer	SWMH02	96	49.644	0.036	3.1	0.0103	0.0000	OK
180 minute summer	Tank	96	49.581	0.035	3.1	0.6579	0.0000	OK
180 minute summer	Dummy	96	49.532	0.032	3.1	0.0000	0.0000	OK
180 minute summer	SWMH03	96	49.412	0.087	14.8	0.1179	0.0000	OK
180 minute summer	SWMH04	136	49.369	0.283	41.4	0.6496	0.0000	OK
180 minute summer	Oil Interceptor	136	49.369	0.401	41.3	0.0000	0.0000	SURCHARGED
180 minute summer	SWMH05	92	50.776	0.036	5.7	0.0288	0.0000	OK
180 minute summer	SWMH06	136	49.369	0.529	8.1	0.2469	0.0000	SURCHARGED
180 minute summer	SWMH07	136	49.368	0.682	7.4	0.6121	0.0000	SURCHARGED
180 minute summer	SWMH08	136	49.369	0.819	45.7	0.9258	0.0000	SURCHARGED
180 minute summer	12	136	49.368	0.888	45.0	71.7286	0.0000	SURCHARGED
180 minute summer	Tank Outlet	136	49.368	0.894	9.0	0.0000	0.0000	SURCHARGED
180 minute summer	Packaged PS	136	49.359	1.109	9.0	1.3603	0.0000	SURCHARGED
180 minute summer	SWMH09	24	50.119	0.069	8.0	0.0784	0.0000	OK
180 minute summer	15_OUT	24	49.998	0.063	8.1	0.0000	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	SWMH01	1.000	SWMH02	3.1	0.753	0.053	0.0452	
180 minute summer	SWMH02	1.001	Tank	3.1	0.790	0.053	0.0196	
180 minute summer	Tank	1.002	Dummy	3.1	0.849	0.052	0.0130	
180 minute summer	Dummy	1.003	SWMH03	3.1	0.929	0.040	0.0152	
180 minute summer	SWMH03	1.004	SWMH04	14.8	0.527	0.189	1.8030	
180 minute summer	SWMH04	1.005	Oil Interceptor	41.3	1.094	0.529	0.2519	
180 minute summer	Oil Interceptor	1.006	SWMH08	41.3	1.102	0.529	0.5941	
180 minute summer	SWMH05	2.000	SWMH06	5.7	1.402	0.055	0.9796	
180 minute summer	SWMH06	2.001	SWMH07	6.7	0.796	0.060	1.0803	
180 minute summer	SWMH07	2.002	SWMH08	7.1	0.339	0.064	0.9635	
180 minute summer	SWMH08	1.007	12	45.0	1.790	0.277	0.2317	
180 minute summer	12	1.008	Tank Outlet	9.0	0.828	0.184	0.2146	
180 minute summer	Tank Outlet	1.009	Packaged PS	9.0	1.637	0.225	0.0556	
180 minute summer	Packaged PS	Pump	SWMH09	8.0				
180 minute summer	SWMH09	1.011	15_OUT	8.1	1.109	0.370	0.0565	148.2

Results for 100 year +40% CC 180 minute winter. 660 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 winter	SWMH01	96	49.777	0.032	2.4	0.0179	0.0000	OK
180 minute winter	SWMH02	96	49.640	0.032	2.4	0.0090	0.0000	OK
180 minute winter	Tank	96	49.577	0.031	2.4	0.5845	0.0000	OK
180 minute winter	Dummy	96	49.528	0.028	2.4	0.0000	0.0000	OK
180 minute winter	SWMH03	148	49.505	0.180	11.4	0.2431	0.0000	OK
180 minute winter	SWMH04	144	49.504	0.419	31.9	0.9606	0.0000	SURCHARGED
180 minute winter	Oil Interceptor	148	49.505	0.537	31.9	0.0000	0.0000	SURCHARGED
180 minute winter	SWMH05	96	50.771	0.031	4.4	0.0254	0.0000	OK
180 minute winter	SWMH06	148	49.504	0.664	6.3	0.3102	0.0000	SURCHARGED
180 minute winter	SWMH07	148	49.504	0.817	6.1	0.7338	0.0000	SURCHARGED
180 minute winter	SWMH08	148	49.504	0.954	35.6	1.0791	0.0000	SURCHARGED
180 minute winter	12	148	49.504	1.024	37.7	82.6746	0.0000	SURCHARGED
180 minute winter	Tank Outlet	148	49.504	1.030	8.8	0.0000	0.0000	SURCHARGED
180 minute winter	Packaged PS	148	49.494	1.244	9.3	1.5266	0.0000	SURCHARGED
180 minute winter	SWMH09	20	50.118	0.068	8.0	0.0765	0.0000	OK
180 minute winter	15_OUT	44	49.997	0.062	8.0	0.0000	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 winter	SWMH01	1.000	SWMH02	2.4	0.701	0.041	0.0376	
180 minute winter	SWMH02	1.001	Tank	2.4	0.722	0.041	0.0164	
180 minute winter	Tank	1.002	Dummy	2.4	0.789	0.040	0.0109	
180 minute winter	Dummy	1.003	SWMH03	2.4	0.863	0.031	0.0443	
180 minute winter	SWMH03	1.004	SWMH04	11.4	0.495	0.145	2.7404	
180 minute winter	SWMH04	1.005	Oil Interceptor	31.9	1.025	0.408	0.2548	
180 minute winter	Oil Interceptor	1.006	SWMH08	31.7	1.030	0.405	0.5941	
180 minute winter	SWMH05	2.000	SWMH06	4.4	1.285	0.042	0.9816	
180 minute winter	SWMH06	2.001	SWMH07	5.6	0.750	0.051	1.0803	
180 minute winter	SWMH07	2.002	SWMH08	5.3	0.333	0.048	0.9635	
180 minute winter	SWMH08	1.007	12	37.7	1.691	0.232	0.2317	
180 minute winter	12	1.008	Tank Outlet	8.8	0.877	0.180	0.2146	
180 minute winter	Tank Outlet	1.009	Packaged PS	9.3	1.489	0.231	0.0556	
180 minute winter	Packaged PS	Pump	SWMH09	8.0				
180 minute winter	SWMH09	1.011	15_OUT	8.0	1.093	0.364	0.0552	164.8

Results for 100 year +40% CC 240 minute summer. 720 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	SWMH01	124	49.778	0.033	2.6	0.0186	0.0000	OK
240 minute summer	SWMH02	124	49.641	0.033	2.6	0.0094	0.0000	OK
240 minute summer	Tank	128	49.578	0.032	2.6	0.6015	0.0000	OK
240 minute summer	Dummy	128	49.529	0.029	2.5	0.0000	0.0000	OK
240 minute summer	SWMH03	124	49.405	0.080	12.6	0.1084	0.0000	OK
240 minute summer	SWMH04	172	49.356	0.270	35.3	0.6193	0.0000	OK
240 minute summer	Oil Interceptor	172	49.356	0.388	35.1	0.0000	0.0000	SURCHARGED
240 minute summer	SWMH05	124	50.773	0.033	4.9	0.0268	0.0000	OK
240 minute summer	SWMH06	172	49.355	0.515	7.0	0.2407	0.0000	SURCHARGED
240 minute summer	SWMH07	172	49.355	0.668	7.0	0.6003	0.0000	SURCHARGED
240 minute summer	SWMH08	172	49.355	0.805	39.6	0.9109	0.0000	SURCHARGED
240 minute summer	12	172	49.355	0.875	39.2	70.6647	0.0000	SURCHARGED
240 minute summer	Tank Outlet	172	49.355	0.881	8.9	0.0000	0.0000	SURCHARGED
240 minute summer	Packaged PS	172	49.345	1.095	8.6	1.3441	0.0000	SURCHARGED
240 minute summer	SWMH09	392	50.119	0.069	8.0	0.0783	0.0000	OK
240 minute summer	15_OUT	396	49.999	0.064	8.3	0.0000	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	SWMH01	1.000	SWMH02	2.6	0.717	0.045	0.0398	
240 minute summer	SWMH02	1.001	Tank	2.6	0.741	0.045	0.0172	
240 minute summer	Tank	1.002	Dummy	2.5	0.803	0.043	0.0114	
240 minute summer	Dummy	1.003	SWMH03	2.5	0.880	0.033	0.0134	
240 minute summer	SWMH03	1.004	SWMH04	12.5	0.507	0.160	1.7181	
240 minute summer	SWMH04	1.005	Oil Interceptor	35.1	1.050	0.449	0.2465	
240 minute summer	Oil Interceptor	1.006	SWMH08	35.0	1.057	0.448	0.5941	
240 minute summer	SWMH05	2.000	SWMH06	4.9	1.316	0.047	0.9719	
240 minute summer	SWMH06	2.001	SWMH07	6.4	0.755	0.058	1.0803	
240 minute summer	SWMH07	2.002	SWMH08	6.0	0.338	0.054	0.9635	
240 minute summer	SWMH08	1.007	12	39.2	1.677	0.241	0.2317	
240 minute summer	12	1.008	Tank Outlet	8.9	0.835	0.181	0.2146	
240 minute summer	Tank Outlet	1.009	Packaged PS	8.6	1.665	0.216	0.0556	
240 minute summer	Packaged PS	Pump	SWMH09	8.0				
240 minute summer	SWMH09	1.011	15_OUT	8.3	1.105	0.376	0.0568	165.8

Results for 100 year +40% CC 240 minute winter. 720 minute analysis at 4 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
240 minute winter	SWMH01	124	49.774	0.029	2.0	0.0164	0.0000	OK
240 minute winter	SWMH02	124	49.637	0.029	2.0	0.0083	0.0000	OK
240 minute winter	Tank	128	49.575	0.028	2.0	0.5306	0.0000	OK
240 minute winter	Dummy	128	49.525	0.025	1.9	0.0000	0.0000	OK
240 minute winter	SWMH03	184	49.479	0.154	9.4	0.2076	0.0000	OK
240 minute winter	SWMH04	184	49.478	0.393	26.4	0.9005	0.0000	SURCHARGED
240 minute winter	Oil Interceptor	184	49.478	0.510	26.4	0.0000	0.0000	SURCHARGED
240 minute winter	SWMH05	124	50.769	0.029	3.7	0.0234	0.0000	OK
240 minute winter	SWMH06	184	49.478	0.638	5.2	0.2979	0.0000	SURCHARGED
240 minute winter	SWMH07	184	49.478	0.791	5.1	0.7102	0.0000	SURCHARGED
240 minute winter	SWMH08	184	49.478	0.928	29.8	1.0495	0.0000	SURCHARGED
240 minute winter	12	184	49.478	0.998	29.5	80.5532	0.0000	SURCHARGED
240 minute winter	Tank Outlet	184	49.477	1.003	10.7	0.0000	0.0000	SURCHARGED
240 minute winter	Packaged PS	184	49.468	1.218	9.3	1.4943	0.0000	SURCHARGED
240 minute winter	SWMH09	56	50.119	0.069	8.0	0.0782	0.0000	OK
240 minute winter	15_OUT	44	49.998	0.063	8.0	0.0000	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 winter	SWMH01	1.000	SWMH02	2.0	0.666	0.034	0.0329	
240 minute winter	SWMH02	1.001	Tank	2.0	0.683	0.034	0.0143	
240 minute winter	Tank	1.002	Dummy	1.9	0.741	0.033	0.0094	
240 minute winter	Dummy	1.003	SWMH03	2.0	0.814	0.025	0.0309	
240 minute winter	SWMH03	1.004	SWMH04	9.4	0.471	0.120	2.5539	
240 minute winter	SWMH04	1.005	Oil Interceptor	26.4	0.974	0.338	0.2548	
240 minute winter	Oil Interceptor	1.006	SWMH08	26.4	0.983	0.337	0.5941	
240 minute winter	SWMH05	2.000	SWMH06	3.7	1.216	0.035	0.9727	
240 minute winter	SWMH06	2.001	SWMH07	4.7	0.706	0.042	1.0803	
240 minute winter	SWMH07	2.002	SWMH08	5.3	0.331	0.047	0.9635	
240 minute winter	SWMH08	1.007	12	29.5	1.548	0.181	0.2317	
240 minute winter	12	1.008	Tank Outlet	10.7	0.954	0.219	0.2146	
240 minute winter	Tank Outlet	1.009	Packaged PS	9.3	1.694	0.232	0.0556	
240 minute winter	Packaged PS	Pump	SWMH09	8.0				
240 minute winter	SWMH09	1.011	15_OUT	8.0	1.095	0.365	0.0558	181.0

Results for 100 year +40% CC 360 minute summer. 840 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	SWMH01	184	49.774	0.029	2.0	0.0164	0.0000	OK
360 minute summer	SWMH02	184	49.637	0.029	2.0	0.0083	0.0000	OK
360 minute summer	Tank	184	49.574	0.028	2.0	0.5289	0.0000	OK
360 minute summer	Dummy	184	49.525	0.025	1.9	0.0000	0.0000	OK
360 minute summer	SWMH03	184	49.395	0.070	9.7	0.0952	0.0000	OK
360 minute summer	SWMH04	240	49.315	0.230	27.5	0.5271	0.0000	OK
360 minute summer	Oil Interceptor	240	49.316	0.348	27.2	0.0000	0.0000	SURCHARGED
360 minute summer	SWMH05	184	50.769	0.029	3.8	0.0238	0.0000	OK
360 minute summer	SWMH06	240	49.315	0.475	5.4	0.2219	0.0000	SURCHARGED
360 minute summer	SWMH07	240	49.315	0.628	5.3	0.5641	0.0000	SURCHARGED
360 minute summer	SWMH08	240	49.315	0.765	31.1	0.8654	0.0000	SURCHARGED
360 minute summer	12	240	49.315	0.835	37.5	67.4149	0.0000	SURCHARGED
360 minute summer	Tank Outlet	240	49.315	0.841	9.0	0.0000	0.0000	SURCHARGED
360 minute summer	Packaged PS	240	49.305	1.055	8.4	1.2947	0.0000	SURCHARGED
360 minute summer	SWMH09	112	50.119	0.069	8.0	0.0781	0.0000	OK
360 minute summer	15_OUT	88	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	2.0	0.666	0.034	0.0329	
360 minute summer	SWMH02	1.001	Tank	2.0	0.684	0.034	0.0143	
360 minute summer	Tank	1.002	Dummy	1.9	0.739	0.032	0.0094	
360 minute summer	Dummy	1.003	SWMH03	1.9	0.811	0.025	0.0110	
360 minute summer	SWMH03	1.004	SWMH04	9.7	0.472	0.123	1.4995	
360 minute summer	SWMH04	1.005	Oil Interceptor	27.2	0.983	0.349	0.2173	
360 minute summer	Oil Interceptor	1.006	SWMH08	27.2	0.991	0.348	0.5941	
360 minute summer	SWMH05	2.000	SWMH06	3.8	1.247	0.036	0.9621	
360 minute summer	SWMH06	2.001	SWMH07	4.8	0.671	0.044	1.0803	
360 minute summer	SWMH07	2.002	SWMH08	3.9	0.318	0.035	0.9635	
360 minute summer	SWMH08	1.007	12	37.5	1.377	0.231	0.2317	
360 minute summer	12	1.008	Tank Outlet	9.0	0.791	0.184	0.2146	
360 minute summer	Tank Outlet	1.009	Packaged PS	8.4	1.678	0.210	0.0556	
360 minute summer	Packaged PS	Pump	SWMH09	8.0				
360 minute summer	SWMH09	1.011	15_OUT	8.2	1.136	0.372	0.0564	193.1

Results for 100 year +40% CC 360 minute winter. 840 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 winter	SWMH01	184	49.770	0.025	1.5	0.0143	0.0000	OK
360 minute winter	SWMH02	184	49.633	0.025	1.5	0.0072	0.0000	OK
360 minute winter	Tank	184	49.571	0.024	1.5	0.4650	0.0000	OK
360 minute winter	Dummy	184	49.522	0.022	1.5	0.0000	0.0000	OK
360 minute winter	SWMH03	264	49.411	0.086	7.2	0.1165	0.0000	OK
360 minute winter	SWMH04	264	49.411	0.325	20.0	0.7458	0.0000	SURCHARGED
360 minute winter	Oil Interceptor	264	49.411	0.443	20.0	0.0000	0.0000	SURCHARGED
360 minute winter	SWMH05	184	50.765	0.025	2.8	0.0205	0.0000	OK
360 minute winter	SWMH06	264	49.411	0.571	4.0	0.2665	0.0000	SURCHARGED
360 minute winter	SWMH07	264	49.410	0.724	4.0	0.6498	0.0000	SURCHARGED
360 minute winter	SWMH08	264	49.411	0.861	22.7	0.9733	0.0000	SURCHARGED
360 minute winter	12	264	49.410	0.930	35.6	75.1185	0.0000	SURCHARGED
360 minute winter	Tank Outlet	264	49.410	0.936	8.8	0.0000	0.0000	SURCHARGED
360 minute winter	Packaged PS	264	49.401	1.151	9.1	1.4118	0.0000	SURCHARGED
360 minute winter	SWMH09	56	50.119	0.069	8.0	0.0778	0.0000	OK
360 minute winter	15_OUT	56	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	1.5	0.613	0.026	0.0268	
360 minute winter	SWMH02	1.001	Tank	1.5	0.627	0.026	0.0117	
360 minute winter	Tank	1.002	Dummy	1.5	0.680	0.025	0.0077	
360 minute winter	Dummy	1.003	SWMH03	1.5	0.747	0.019	0.0090	
360 minute winter	SWMH03	1.004	SWMH04	7.1	0.438	0.091	2.0850	
360 minute winter	SWMH04	1.005	Oil Interceptor	20.0	0.904	0.256	0.2548	
360 minute winter	Oil Interceptor	1.006	SWMH08	20.0	0.913	0.256	0.5941	
360 minute winter	SWMH05	2.000	SWMH06	2.8	1.127	0.027	0.9604	
360 minute winter	SWMH06	2.001	SWMH07	3.7	0.660	0.033	1.0803	
360 minute winter	SWMH07	2.002	SWMH08	5.9	0.313	0.053	0.9635	
360 minute winter	SWMH08	1.007	12	35.6	1.427	0.219	0.2317	
360 minute winter	12	1.008	Tank Outlet	8.8	0.809	0.180	0.2146	
360 minute winter	Tank Outlet	1.009	Packaged PS	9.1	1.445	0.229	0.0556	
360 minute winter	Packaged PS	Pump	SWMH09	8.0				
360 minute winter	SWMH09	1.011	15_OUT	8.2	1.101	0.374	0.0563	203.1

Results for 100 year +40% CC 480 minute summer. 960 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	SWMH01	248	49.771	0.026	1.6	0.0147	0.0000	OK
480 minute summer	SWMH02	248	49.634	0.026	1.6	0.0074	0.0000	OK
480 minute summer	Tank	248	49.572	0.025	1.6	0.4845	0.0000	OK
480 minute summer	Dummy	248	49.523	0.023	1.6	0.0000	0.0000	OK
480 minute summer	SWMH03	248	49.388	0.063	7.8	0.0855	0.0000	OK
480 minute summer	SWMH04	312	49.262	0.176	22.0	0.4048	0.0000	OK
480 minute summer	Oil Interceptor	312	49.262	0.294	22.0	0.0000	0.0000	OK
480 minute summer	SWMH05	240	50.766	0.026	3.0	0.0212	0.0000	OK
480 minute summer	SWMH06	312	49.262	0.422	4.3	0.1970	0.0000	SURCHARGED
480 minute summer	SWMH07	312	49.262	0.575	4.7	0.5163	0.0000	SURCHARGED
480 minute summer	SWMH08	312	49.262	0.712	25.3	0.8052	0.0000	SURCHARGED
480 minute summer	12	312	49.262	0.782	34.3	63.1146	0.0000	SURCHARGED
480 minute summer	Tank Outlet	312	49.261	0.787	9.6	0.0000	0.0000	SURCHARGED
480 minute summer	Packaged PS	312	49.252	1.002	8.7	1.2294	0.0000	SURCHARGED
480 minute summer	SWMH09	160	50.119	0.069	8.0	0.0778	0.0000	OK
480 minute summer	15_OUT	160	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	1.6	0.624	0.028	0.0281	
480 minute summer	SWMH02	1.001	Tank	1.6	0.642	0.028	0.0124	
480 minute summer	Tank	1.002	Dummy	1.6	0.699	0.027	0.0082	
480 minute summer	Dummy	1.003	SWMH03	1.6	0.767	0.021	0.0096	
480 minute summer	SWMH03	1.004	SWMH04	7.8	0.447	0.100	1.1504	
480 minute summer	SWMH04	1.005	Oil Interceptor	22.0	0.928	0.282	0.1652	
480 minute summer	Oil Interceptor	1.006	SWMH08	22.0	0.937	0.281	0.5928	
480 minute summer	SWMH05	2.000	SWMH06	3.0	1.160	0.029	0.9503	
480 minute summer	SWMH06	2.001	SWMH07	4.3	0.679	0.038	1.0803	
480 minute summer	SWMH07	2.002	SWMH08	3.7	0.318	0.033	0.9635	
480 minute summer	SWMH08	1.007	12	34.3	1.335	0.211	0.2317	
480 minute summer	12	1.008	Tank Outlet	9.6	0.901	0.196	0.2146	
480 minute summer	Tank Outlet	1.009	Packaged PS	8.7	1.650	0.217	0.0556	
480 minute summer	Packaged PS	Pump	SWMH09	8.0				
480 minute summer	SWMH09	1.011	15_OUT	8.2	1.124	0.373	0.0563	203.7

Results for 100 year +40% CC 480 minute winter. 960 minute analysis at 8 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
480 minute winter	SWMH01	248	49.768	0.023	1.2	0.0128	0.0000	OK
480 minute winter	SWMH02	240	49.631	0.023	1.2	0.0065	0.0000	OK
480 minute winter	Tank	256	49.569	0.022	1.2	0.4235	0.0000	OK
480 minute winter	Dummy	256	49.520	0.020	1.2	0.0000	0.0000	OK
480 minute winter	SWMH03	248	49.380	0.055	5.8	0.0740	0.0000	OK
480 minute winter	SWMH04	336	49.321	0.235	16.3	0.5395	0.0000	OK
480 minute winter	Oil Interceptor	336	49.321	0.353	16.3	0.0000	0.0000	SURCHARGED
480 minute winter	SWMH05	240	50.763	0.023	2.3	0.0188	0.0000	OK
480 minute winter	SWMH06	336	49.321	0.481	3.3	0.2245	0.0000	SURCHARGED
480 minute winter	SWMH07	336	49.320	0.634	3.4	0.5690	0.0000	SURCHARGED
480 minute winter	SWMH08	336	49.321	0.771	18.9	0.8716	0.0000	SURCHARGED
480 minute winter	12	336	49.320	0.840	34.1	67.8535	0.0000	SURCHARGED
480 minute winter	Tank Outlet	336	49.320	0.846	9.0	0.0000	0.0000	SURCHARGED
480 minute winter	Packaged PS	336	49.311	1.061	8.8	1.3014	0.0000	SURCHARGED
480 minute winter	SWMH09	136	50.118	0.068	8.0	0.0773	0.0000	OK
480 minute winter	15_OUT	136	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	1.2	0.575	0.021	0.0229	
480 minute winter	SWMH02	1.001	Tank	1.2	0.587	0.021	0.0101	
480 minute winter	Tank	1.002	Dummy	1.2	0.641	0.020	0.0067	
480 minute winter	Dummy	1.003	SWMH03	1.2	0.707	0.016	0.0078	
480 minute winter	SWMH03	1.004	SWMH04	5.8	0.413	0.074	1.5310	
480 minute winter	SWMH04	1.005	Oil Interceptor	16.3	0.855	0.209	0.2219	
480 minute winter	Oil Interceptor	1.006	SWMH08	16.3	0.864	0.209	0.5941	
480 minute winter	SWMH05	2.000	SWMH06	2.3	1.073	0.022	0.9510	
480 minute winter	SWMH06	2.001	SWMH07	3.1	0.636	0.028	1.0803	
480 minute winter	SWMH07	2.002	SWMH08	2.7	0.337	0.025	0.9635	
480 minute winter	SWMH08	1.007	12	34.1	1.321	0.210	0.2317	
480 minute winter	12	1.008	Tank Outlet	9.0	0.849	0.184	0.2146	
480 minute winter	Tank Outlet	1.009	Packaged PS	8.8	1.545	0.221	0.0556	
480 minute winter	Packaged PS	Pump	SWMH09	8.0				
480 minute winter	SWMH09	1.011	15_OUT	8.2	1.101	0.372	0.0560	221.4

Results for 100 year +40% CC 600 minute summer. 1080 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
600 minute summer	SWMH01	315	49.769	0.024	1.3	0.0133	0.0000	OK
600 minute summer	SWMH02	315	49.631	0.024	1.3	0.0067	0.0000	OK
600 minute summer	Tank	315	49.570	0.023	1.3	0.4396	0.0000	OK
600 minute summer	Dummy	315	49.521	0.021	1.3	0.0000	0.0000	OK
600 minute summer	SWMH03	315	49.383	0.058	6.5	0.0782	0.0000	OK
600 minute summer	SWMH04	375	49.207	0.122	18.2	0.2791	0.0000	OK
600 minute summer	Oil Interceptor	375	49.207	0.239	18.2	0.0000	0.0000	OK
600 minute summer	SWMH05	300	50.764	0.024	2.5	0.0195	0.0000	OK
600 minute summer	SWMH06	375	49.207	0.367	3.6	0.1713	0.0000	SURCHARGED
600 minute summer	SWMH07	375	49.206	0.520	3.9	0.4668	0.0000	SURCHARGED
600 minute summer	SWMH08	375	49.207	0.657	21.3	0.7428	0.0000	SURCHARGED
600 minute summer	12	375	49.206	0.726	35.7	58.6540	0.0000	SURCHARGED
600 minute summer	Tank Outlet	375	49.206	0.732	8.3	0.0000	0.0000	SURCHARGED
600 minute summer	Packaged PS	375	49.197	0.947	9.1	1.1616	0.0000	SURCHARGED
600 minute summer	SWMH09	180	50.119	0.069	8.0	0.0780	0.0000	OK
600 minute summer	15_OUT	135	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	1.3	0.588	0.022	0.0243	
600 minute summer	SWMH02	1.001	Tank	1.3	0.601	0.022	0.0107	
600 minute summer	Tank	1.002	Dummy	1.3	0.657	0.022	0.0071	
600 minute summer	Dummy	1.003	SWMH03	1.3	0.723	0.017	0.0083	
600 minute summer	SWMH03	1.004	SWMH04	6.5	0.427	0.083	0.7607	
600 minute summer	SWMH04	1.005	Oil Interceptor	18.2	0.881	0.233	0.1062	
600 minute summer	Oil Interceptor	1.006	SWMH08	18.2	0.891	0.233	0.5430	
600 minute summer	SWMH05	2.000	SWMH06	2.5	1.099	0.024	0.9453	
600 minute summer	SWMH06	2.001	SWMH07	3.6	0.653	0.032	1.0803	
600 minute summer	SWMH07	2.002	SWMH08	3.3	0.325	0.030	0.9635	
600 minute summer	SWMH08	1.007	12	35.7	0.982	0.220	0.2317	
600 minute summer	12	1.008	Tank Outlet	8.3	0.815	0.171	0.2146	
600 minute summer	Tank Outlet	1.009	Packaged PS	9.1	1.650	0.228	0.0556	
600 minute summer	Packaged PS	Pump	SWMH09	8.0				
600 minute summer	SWMH09	1.011	15_OUT	8.2	1.099	0.374	0.0564	222.4

Results for 100 year +40% CC 600 minute winter. 1080 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
600 minute winter	SWMH01	315	49.766	0.021	1.0	0.0117	0.0000	OK
600 minute winter	SWMH02	300	49.629	0.021	1.0	0.0059	0.0000	OK
600 minute winter	Tank	330	49.567	0.020	1.0	0.3893	0.0000	OK
600 minute winter	Dummy	330	49.518	0.018	1.0	0.0000	0.0000	OK
600 minute winter	SWMH03	315	49.375	0.050	4.9	0.0681	0.0000	OK
600 minute winter	SWMH04	405	49.222	0.137	13.9	0.3132	0.0000	OK
600 minute winter	Oil Interceptor	405	49.222	0.254	13.9	0.0000	0.0000	OK
600 minute winter	SWMH05	315	50.761	0.021	1.9	0.0172	0.0000	OK
600 minute winter	SWMH06	405	49.222	0.382	2.7	0.1783	0.0000	SURCHARGED
600 minute winter	SWMH07	405	49.221	0.535	3.0	0.4802	0.0000	SURCHARGED
600 minute winter	SWMH08	405	49.222	0.672	16.3	0.7598	0.0000	SURCHARGED
600 minute winter	12	405	49.221	0.741	33.8	59.8693	0.0000	SURCHARGED
600 minute winter	Tank Outlet	405	49.221	0.747	8.9	0.0000	0.0000	SURCHARGED
600 minute winter	Packaged PS	405	49.212	0.962	9.0	1.1800	0.0000	SURCHARGED
600 minute winter	SWMH09	660	50.119	0.069	8.0	0.0785	0.0000	OK
600 minute winter	15_OUT	660	49.999	0.064	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	1.0	0.546	0.017	0.0201	
600 minute winter	SWMH02	1.001	Tank	1.0	0.556	0.017	0.0089	
600 minute winter	Tank	1.002	Dummy	1.0	0.608	0.017	0.0059	
600 minute winter	Dummy	1.003	SWMH03	1.0	0.668	0.013	0.0069	
600 minute winter	SWMH03	1.004	SWMH04	4.9	0.395	0.063	0.8615	
600 minute winter	SWMH04	1.005	Oil Interceptor	13.9	0.819	0.178	0.1223	
600 minute winter	Oil Interceptor	1.006	SWMH08	13.9	0.828	0.178	0.5646	
600 minute winter	SWMH05	2.000	SWMH06	1.9	1.015	0.018	0.9436	
600 minute winter	SWMH06	2.001	SWMH07	2.7	0.619	0.024	1.0803	
600 minute winter	SWMH07	2.002	SWMH08	2.6	0.311	0.024	0.9635	
600 minute winter	SWMH08	1.007	12	33.8	1.097	0.208	0.2317	
600 minute winter	12	1.008	Tank Outlet	8.9	0.792	0.181	0.2146	
600 minute winter	Tank Outlet	1.009	Packaged PS	9.0	1.414	0.226	0.0556	
600 minute winter	Packaged PS	Pump	SWMH09	8.0				
600 minute winter	SWMH09	1.011	15_OUT	8.2	1.100	0.375	0.0569	246.2

Results for 100 year +40% CC 720 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
720 minute summer	SWMH01	375	49.768	0.023	1.2	0.0128	0.0000	OK
720 minute summer	SWMH02	375	49.631	0.023	1.2	0.0065	0.0000	OK
720 minute summer	Tank	375	49.569	0.022	1.2	0.4234	0.0000	OK
720 minute summer	Dummy	375	49.520	0.020	1.2	0.0000	0.0000	OK
720 minute summer	SWMH03	375	49.380	0.055	5.8	0.0740	0.0000	OK
720 minute summer	SWMH04	375	49.183	0.098	16.3	0.2237	0.0000	OK
720 minute summer	Oil Interceptor	450	49.146	0.178	16.3	0.0000	0.0000	OK
720 minute summer	SWMH05	375	50.763	0.023	2.3	0.0188	0.0000	OK
720 minute summer	SWMH06	450	49.146	0.306	3.3	0.1427	0.0000	SURCHARGED
720 minute summer	SWMH07	450	49.145	0.459	3.6	0.4118	0.0000	SURCHARGED
720 minute summer	SWMH08	450	49.146	0.596	18.7	0.6735	0.0000	SURCHARGED
720 minute summer	12	450	49.145	0.665	28.2	53.7157	0.0000	SURCHARGED
720 minute summer	Tank Outlet	450	49.145	0.671	8.8	0.0000	0.0000	SURCHARGED
720 minute summer	Packaged PS	450	49.136	0.886	8.2	1.0866	0.0000	SURCHARGED
720 minute summer	SWMH09	195	50.118	0.068	8.0	0.0772	0.0000	OK
720 minute summer	15_OUT	195	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	1.2	0.575	0.021	0.0229	
720 minute summer	SWMH02	1.001	Tank	1.2	0.587	0.021	0.0101	
720 minute summer	Tank	1.002	Dummy	1.2	0.641	0.020	0.0067	
720 minute summer	Dummy	1.003	SWMH03	1.2	0.707	0.016	0.0078	
720 minute summer	SWMH03	1.004	SWMH04	5.8	0.413	0.074	0.6847	
720 minute summer	SWMH04	1.005	Oil Interceptor	16.3	0.855	0.209	0.0690	
720 minute summer	Oil Interceptor	1.006	SWMH08	16.3	0.864	0.209	0.4163	
720 minute summer	SWMH05	2.000	SWMH06	2.3	1.074	0.022	0.9347	
720 minute summer	SWMH06	2.001	SWMH07	3.3	0.639	0.030	1.0803	
720 minute summer	SWMH07	2.002	SWMH08	3.0	0.340	0.027	0.9635	
720 minute summer	SWMH08	1.007	12	28.2	0.960	0.174	0.2317	
720 minute summer	12	1.008	Tank Outlet	8.8	0.825	0.181	0.2146	
720 minute summer	Tank Outlet	1.009	Packaged PS	8.2	1.594	0.204	0.0556	
720 minute summer	Packaged PS	Pump	SWMH09	8.0				
720 minute summer	SWMH09	1.011	15_OUT	8.2	1.132	0.372	0.0560	222.4

Results for 100 year +40% CC 720 minute winter. 1200 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 winter	SWMH01	375	49.765	0.020	0.9	0.0112	0.0000	OK
720 minute winter	SWMH02	360	49.628	0.020	0.9	0.0056	0.0000	OK
720 minute winter	Tank	390	49.566	0.020	0.9	0.3706	0.0000	OK
720 minute winter	Dummy	390	49.517	0.017	0.9	0.0000	0.0000	OK
720 minute winter	SWMH03	375	49.373	0.048	4.4	0.0647	0.0000	OK
720 minute winter	SWMH04	375	49.170	0.084	12.3	0.1929	0.0000	OK
720 minute winter	Oil Interceptor	480	49.124	0.156	12.3	0.0000	0.0000	OK
720 minute winter	SWMH05	375	50.760	0.020	1.7	0.0163	0.0000	OK
720 minute winter	SWMH06	480	49.123	0.283	2.4	0.1324	0.0000	OK
720 minute winter	SWMH07	480	49.123	0.436	2.6	0.3919	0.0000	SURCHARGED
720 minute winter	SWMH08	480	49.123	0.573	27.5	0.6485	0.0000	SURCHARGED
720 minute winter	12	480	49.123	0.643	13.9	51.9253	0.0000	SURCHARGED
720 minute winter	Tank Outlet	480	49.123	0.649	8.9	0.0000	0.0000	SURCHARGED
720 minute winter	Packaged PS	480	49.113	0.863	9.0	1.0594	0.0000	SURCHARGED
720 minute winter	SWMH09	75	50.119	0.069	8.0	0.0782	0.0000	OK
720 minute winter	15_OUT	720	49.999	0.064	8.3	0.0000	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 winter	SWMH01	1.000	SWMH02	0.9	0.530	0.015	0.0186	
720 minute winter	SWMH02	1.001	Tank	0.9	0.539	0.016	0.0082	
720 minute winter	Tank	1.002	Dummy	0.9	0.588	0.015	0.0055	
720 minute winter	Dummy	1.003	SWMH03	0.9	0.646	0.012	0.0064	
720 minute winter	SWMH03	1.004	SWMH04	4.4	0.384	0.056	0.5591	
720 minute winter	SWMH04	1.005	Oil Interceptor	12.3	0.791	0.157	0.0563	
720 minute winter	Oil Interceptor	1.006	SWMH08	12.3	0.800	0.157	0.3629	
720 minute winter	SWMH05	2.000	SWMH06	1.7	0.983	0.016	0.9021	
720 minute winter	SWMH06	2.001	SWMH07	2.4	0.605	0.022	1.0689	
720 minute winter	SWMH07	2.002	SWMH08	4.7	0.312	0.042	0.9635	
720 minute winter	SWMH08	1.007	12	13.9	1.092	0.086	0.2317	
720 minute winter	12	1.008	Tank Outlet	8.9	0.880	0.183	0.2146	
720 minute winter	Tank Outlet	1.009	Packaged PS	9.0	1.672	0.225	0.0556	
720 minute winter	Packaged PS	Pump	SWMH09	8.0				
720 minute winter	SWMH09	1.011	15_OUT	8.3	1.100	0.376	0.0567	256.9

Results for 100 year +40% CC 960 minute summer. 1440 minute analysis at 15 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	SWMH01	495	49.766	0.021	1.0	0.0117	0.0000	OK
960 minute summer	SWMH02	495	49.629	0.021	1.0	0.0059	0.0000	OK
960 minute summer	Tank	495	49.567	0.020	1.0	0.3893	0.0000	OK
960 minute summer	Dummy	495	49.518	0.018	1.0	0.0000	0.0000	OK
960 minute summer	SWMH03	495	49.375	0.050	4.8	0.0675	0.0000	OK
960 minute summer	SWMH04	495	49.174	0.088	13.5	0.2025	0.0000	OK
960 minute summer	Oil Interceptor	495	49.055	0.087	13.5	0.0000	0.0000	OK
960 minute summer	SWMH05	495	50.761	0.021	1.9	0.0172	0.0000	OK
960 minute summer	SWMH06	570	49.026	0.186	2.7	0.0869	0.0000	OK
960 minute summer	SWMH07	570	49.026	0.339	3.0	0.3045	0.0000	SURCHARGED
960 minute summer	SWMH08	570	49.026	0.476	33.0	0.5385	0.0000	SURCHARGED
960 minute summer	12	570	49.026	0.546	22.0	44.0687	0.0000	SURCHARGED
960 minute summer	Tank Outlet	570	49.025	0.552	10.0	0.0000	0.0000	SURCHARGED
960 minute summer	Packaged PS	570	49.016	0.766	8.8	0.9400	0.0000	SURCHARGED
960 minute summer	SWMH09	315	50.119	0.069	8.0	0.0782	0.0000	OK
960 minute summer	15_OUT	285	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	1.0	0.546	0.017	0.0201	
960 minute summer	SWMH02	1.001	Tank	1.0	0.556	0.017	0.0089	
960 minute summer	Tank	1.002	Dummy	1.0	0.608	0.017	0.0059	
960 minute summer	Dummy	1.003	SWMH03	1.0	0.668	0.013	0.0069	
960 minute summer	SWMH03	1.004	SWMH04	4.8	0.392	0.061	0.5972	
960 minute summer	SWMH04	1.005	Oil Interceptor	13.5	0.812	0.173	0.0602	
960 minute summer	Oil Interceptor	1.006	SWMH08	13.5	0.821	0.173	0.1387	
960 minute summer	SWMH05	2.000	SWMH06	1.9	1.015	0.018	0.4711	
960 minute summer	SWMH06	2.001	SWMH07	2.7	0.622	0.024	0.8924	
960 minute summer	SWMH07	2.002	SWMH08	6.7	0.331	0.060	0.9635	
960 minute summer	SWMH08	1.007	12	22.0	0.965	0.135	0.2317	
960 minute summer	12	1.008	Tank Outlet	10.0	0.933	0.204	0.2146	
960 minute summer	Tank Outlet	1.009	Packaged PS	8.8	1.576	0.219	0.0556	
960 minute summer	Packaged PS	Pump	SWMH09	8.0				
960 minute summer	SWMH09	1.011	15_OUT	8.2	1.110	0.374	0.0565	249.7

Results for 100 year +40% CC 960 minute winter. 1440 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
960 minute winter	SWMH01	480	49.763	0.018	0.7	0.0099	0.0000	OK
960 minute winter	SWMH02	450	49.625	0.018	0.7	0.0050	0.0000	OK
960 minute winter	Tank	495	49.564	0.017	0.7	0.3301	0.0000	OK
960 minute winter	Dummy	510	49.516	0.016	0.7	0.0000	0.0000	OK
960 minute winter	SWMH03	495	49.368	0.043	3.6	0.0587	0.0000	OK
960 minute winter	SWMH04	495	49.162	0.076	10.1	0.1742	0.0000	OK
960 minute winter	Oil Interceptor	495	49.043	0.075	10.1	0.0000	0.0000	OK
960 minute winter	SWMH05	480	50.758	0.018	1.4	0.0149	0.0000	OK
960 minute winter	SWMH06	600	48.943	0.103	2.0	0.0480	0.0000	OK
960 minute winter	SWMH07	600	48.942	0.256	2.2	0.2296	0.0000	OK
960 minute winter	SWMH08	600	48.943	0.393	17.7	0.4441	0.0000	SURCHARGED
960 minute winter	12	600	48.942	0.462	21.8	37.3330	0.0000	SURCHARGED
960 minute winter	Tank Outlet	600	48.942	0.468	9.0	0.0000	0.0000	SURCHARGED
960 minute winter	Packaged PS	600	48.933	0.683	8.7	0.8376	0.0000	SURCHARGED
960 minute winter	SWMH09	345	50.118	0.068	8.0	0.0770	0.0000	OK
960 minute winter	15_OUT	345	49.998	0.063	8.2	0.0000	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 winter	SWMH01	1.000	SWMH02	0.7	0.491	0.012	0.0157	
960 minute winter	SWMH02	1.001	Tank	0.7	0.499	0.012	0.0069	
960 minute winter	Tank	1.002	Dummy	0.7	0.543	0.012	0.0046	
960 minute winter	Dummy	1.003	SWMH03	0.7	0.599	0.009	0.0054	
960 minute winter	SWMH03	1.004	SWMH04	3.6	0.363	0.046	0.4848	
960 minute winter	SWMH04	1.005	Oil Interceptor	10.1	0.749	0.129	0.0488	
960 minute winter	Oil Interceptor	1.006	SWMH08	10.1	0.757	0.129	0.1125	
960 minute winter	SWMH05	2.000	SWMH06	1.4	0.925	0.013	0.0891	
960 minute winter	SWMH06	2.001	SWMH07	2.0	0.587	0.018	0.6542	
960 minute winter	SWMH07	2.002	SWMH08	4.2	0.324	0.038	0.9195	
960 minute winter	SWMH08	1.007	12	21.8	1.003	0.134	0.2317	
960 minute winter	12	1.008	Tank Outlet	9.0	0.807	0.184	0.2146	
960 minute winter	Tank Outlet	1.009	Packaged PS	8.7	1.667	0.217	0.0556	
960 minute winter	Packaged PS	Pump	SWMH09	8.0				
960 minute winter	SWMH09	1.011	15_OUT	8.2	1.135	0.371	0.0558	275.1

Results for 100 year +40% CC 1440 minute summer. 1920 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	SWMH01	750	49.763	0.018	0.7	0.0099	0.0000	OK
1440 minute summer	SWMH02	750	49.625	0.018	0.7	0.0050	0.0000	OK
1440 minute summer	Tank	750	49.564	0.017	0.7	0.3301	0.0000	OK
1440 minute summer	Dummy	750	49.516	0.016	0.7	0.0000	0.0000	OK
1440 minute summer	SWMH03	750	49.368	0.043	3.5	0.0579	0.0000	OK
1440 minute summer	SWMH04	750	49.161	0.075	9.9	0.1724	0.0000	OK
1440 minute summer	Oil Interceptor	750	49.042	0.074	9.9	0.0000	0.0000	OK
1440 minute summer	SWMH05	750	50.758	0.018	1.4	0.0149	0.0000	OK
1440 minute summer	SWMH06	720	48.868	0.028	2.0	0.0131	0.0000	OK
1440 minute summer	SWMH07	810	48.807	0.121	2.2	0.1082	0.0000	OK
1440 minute summer	SWMH08	810	48.808	0.258	22.8	0.2913	0.0000	OK
1440 minute summer	12	810	48.807	0.327	12.8	26.4329	0.0000	SURCHARGED
1440 minute summer	Tank Outlet	810	48.807	0.333	9.0	0.0000	0.0000	SURCHARGED
1440 minute summer	Packaged PS	810	48.798	0.548	9.6	0.6720	0.0000	SURCHARGED
1440 minute summer	SWMH09	450	50.118	0.068	8.0	0.0770	0.0000	OK
1440 minute summer	15_OUT	450	49.998	0.063	8.2	0.0000	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	SWMH01	1.000	SWMH02	0.7	0.491	0.012	0.0157	
1440 minute summer	SWMH02	1.001	Tank	0.7	0.497	0.012	0.0069	
1440 minute summer	Tank	1.002	Dummy	0.7	0.543	0.012	0.0046	
1440 minute summer	Dummy	1.003	SWMH03	0.7	0.599	0.009	0.0054	
1440 minute summer	SWMH03	1.004	SWMH04	3.5	0.359	0.045	0.4771	
1440 minute summer	SWMH04	1.005	Oil Interceptor	9.9	0.745	0.127	0.0481	
1440 minute summer	Oil Interceptor	1.006	SWMH08	9.9	0.753	0.127	0.1109	
1440 minute summer	SWMH05	2.000	SWMH06	1.4	0.925	0.013	0.0691	
1440 minute summer	SWMH06	2.001	SWMH07	2.0	0.587	0.018	0.2225	
1440 minute summer	SWMH07	2.002	SWMH08	4.0	0.294	0.036	0.6214	
1440 minute summer	SWMH08	1.007	12	12.8	0.781	0.079	0.2217	
1440 minute summer	12	1.008	Tank Outlet	9.0	0.878	0.185	0.2146	
1440 minute summer	Tank Outlet	1.009	Packaged PS	9.6	1.672	0.241	0.0556	
1440 minute summer	Packaged PS	Pump	SWMH09	8.0				
1440 minute summer	SWMH09	1.011	15_OUT	8.2	1.102	0.371	0.0558	255.0

Results for 100 year +40% CC 1440 minute winter. 1920 minute analysis at 30 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
1440 minute winter	SWMH01	750	49.761	0.016	0.6	0.0092	0.0000	OK
1440 minute winter	SWMH02	750	49.624	0.016	0.6	0.0046	0.0000	OK
1440 minute winter	Tank	750	49.563	0.016	0.6	0.3082	0.0000	OK
1440 minute winter	Dummy	750	49.514	0.014	0.6	0.0000	0.0000	OK
1440 minute winter	SWMH03	750	49.363	0.038	2.7	0.0511	0.0000	OK
1440 minute winter	SWMH04	750	49.151	0.065	7.5	0.1495	0.0000	OK
1440 minute winter	Oil Interceptor	750	49.032	0.064	7.5	0.0000	0.0000	OK
1440 minute winter	SWMH05	720	50.756	0.016	1.0	0.0127	0.0000	OK
1440 minute winter	SWMH06	720	48.864	0.024	1.4	0.0111	0.0000	OK
1440 minute winter	SWMH07	720	48.711	0.024	1.5	0.0219	0.0000	OK
1440 minute winter	SWMH08	720	48.603	0.053	9.0	0.0605	0.0000	OK
1440 minute winter	12	810	48.623	0.143	10.3	11.5435	0.0000	OK
1440 minute winter	Tank Outlet	810	48.623	0.149	8.3	0.0000	0.0000	OK
1440 minute winter	Packaged PS	840	48.614	0.364	8.2	0.4464	0.0000	SURCHARGED
1440 minute winter	SWMH09	1380	50.120	0.070	8.0	0.0789	0.0000	OK
1440 minute winter	15_OUT	330	49.999	0.064	8.3	0.0000	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 winter	SWMH01	1.000	SWMH02	0.6	0.468	0.010	0.0141	
1440 minute winter	SWMH02	1.001	Tank	0.6	0.474	0.010	0.0062	
1440 minute winter	Tank	1.002	Dummy	0.6	0.519	0.010	0.0042	
1440 minute winter	Dummy	1.003	SWMH03	0.6	0.572	0.008	0.0048	
1440 minute winter	SWMH03	1.004	SWMH04	2.7	0.336	0.034	0.3921	
1440 minute winter	SWMH04	1.005	Oil Interceptor	7.5	0.689	0.096	0.0394	
1440 minute winter	Oil Interceptor	1.006	SWMH08	7.5	0.697	0.096	0.0908	
1440 minute winter	SWMH05	2.000	SWMH06	1.0	0.833	0.010	0.0548	
1440 minute winter	SWMH06	2.001	SWMH07	1.4	0.532	0.013	0.0404	
1440 minute winter	SWMH07	2.002	SWMH08	1.5	0.314	0.013	0.0762	
1440 minute winter	SWMH08	1.007	12	10.3	0.771	0.063	0.0683	
1440 minute winter	12	1.008	Tank Outlet	8.3	0.822	0.170	0.1036	
1440 minute winter	Tank Outlet	1.009	Packaged PS	8.2	1.688	0.206	0.0555	
1440 minute winter	Packaged PS	Pump	SWMH09	8.0				
1440 minute winter	SWMH09	1.011	15_OUT	8.3	1.102	0.376	0.0566	335.4