



**Discharge of Conditions 9 & 10  
Drainage Verification Report  
Planning Approval DOV/21/01632**

for

Proposed Residential Development  
former Summerfield Nurseries  
Barnsole Road  
Staple  
Kent, CT3 1LD

on behalf of

**Elivia Homes Eastern**

## CONTENTS

1.0	Introduction.....	3
	Background.....	3
2.0	Verification Statement.....	4
3.0	Maintenance Statement.....	9

Appendix A	Tridax Drawings
	T-2019-114-011-revE – Overall Site Drainage Plan
	T-2019-114-012-revC – Drainage Plan Sheet 1
	T-2019-114-013-revF – Drainage Plan Sheet 2
	T-2019-114-020-revC – Foul Water Schedules
	T-2019-114-021-revC – Surface Water Schedules
	T-2019-114-022-revC – Construction Details Sheet 1
	T-2019-114-023-revC – Construction Details Sheet 2
	T-2019-114-024-revF – Construction Details Sheet 3
	T-2019-114-S104-02-revE – Agreement Plan
	T-2019-114-S104-03-revD – Construction Details
Appendix B	MicroDrainage Network Details & Simulation Results
Appendix C	Southern Water Section 104 Agreement
	Southern Water Section 106 Sewer Connection Approval
Appendix D	Drainage Asset Record Sheets

## 1.0 INTRODUCTION

### Background

1.1 Tridax Ltd have been commissioned by Elivia Homes Eastern and requested to prepare the Verification Report for the residential development on land at former Summerfield Nurseries, Barnsole Road, Staple, CT3 1LD for the discharge of condition 5 of the planning approval DOV/21/01632 to Dover District Council in order to allow occupation.

- 9 The approved scheme for the disposal of foul sewerage shall be fully implemented in accordance with document '26 Apr 2021 T-2019-114 CONDITIONS 10 DETAILS'. A verification report, demonstrating that the approved scheme has been fully implemented and is operational shall be submitted before any of the dwellings hereby permitted are first occupied. The foul drainage scheme shall be maintained in accordance with the approved details thereafter.  
Reason: To avoid increasing the risks of flooding on site or elsewhere and to ensure that the material considerations of any above ground development can be properly assessed.
- 10 No development above ground shall take place until a detailed scheme for the disposal of the site's surface water, comprising engineering drawings and calculations, the provision of oil interceptions (as necessary) and designed in accordance with the principles of sustainable urban drainage, together with programme for implementation and long term maintenance, has been submitted to and approved in writing by the local planning authority. The approved scheme shall be fully implemented and a verification report, demonstrating that the approved scheme has been fully implemented and is operational shall be submitted before any of the dwellings hereby permitted are first occupied. The surface water drainage scheme shall be maintained in accordance with the approved details thereafter. There shall be no infiltration of surface water other than that which is approved.  
Reason: These details are required prior to the commencement of the development in order to reduce the impact of the development on flooding, manage run-off flow rates, protect water quality and improve the appearance of the development.

### Frame 1 ~ Extract of Planning Conditions

**2.0 VERIFICATION STATEMENT****2.1 Condition 9 Foul Water Drainage**

The foul water drainage for the site, including the off-site connection to the public sewer, is now complete. Included within Appendix A is a copy of the record drawings of the drainage installed.

- 2.2 The off-site foul water connection has been installed under a Section 104 Water Industry Act agreement. A copy of the Section 104 Agreement and the Section 106 Approval to connect are included within Appendix C.

**Construction Photographs**

- 2.3 Below as frame 2 are completion photographs taken of the off-site foul water sewer manholes.



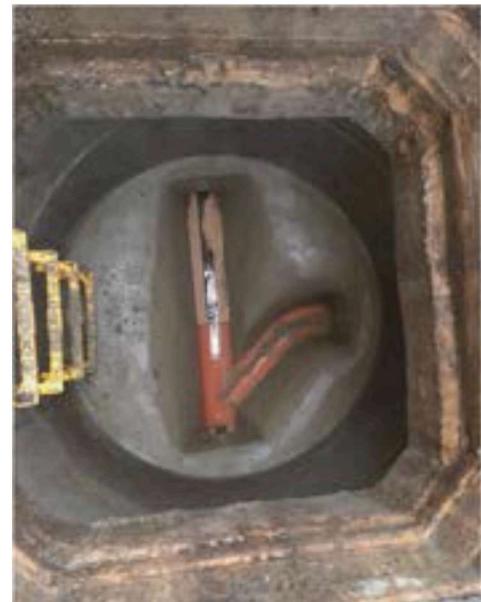
MHF1.12 Context



MHF1.12 Internal



MHF1.13 Context



MHF1.13 Internal



MH 8201 Context



MH 8201 Internal

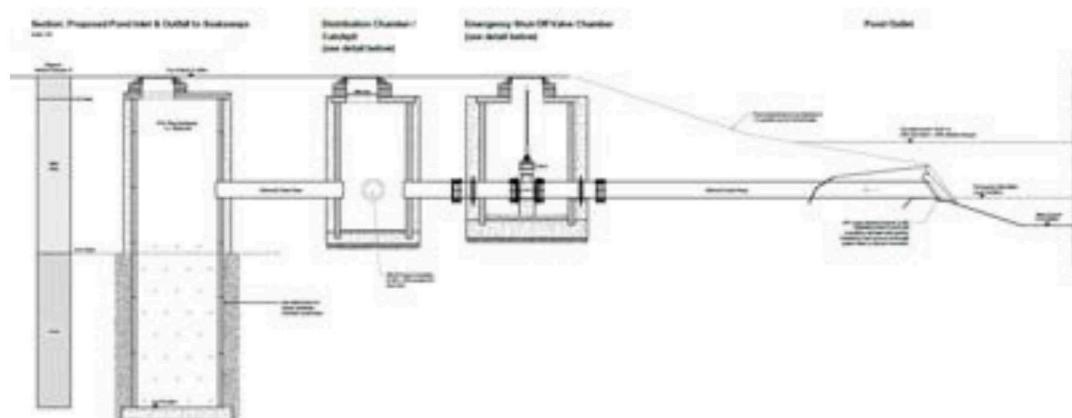
#### Frame 2 ~ Foul Water Construction Photographs

- 2.4 Tridax Ltd confirms that the foul water drainage system has been installed as per the details shown on the record drawings and meets with the design intent to adequately manage the foul water disposal.

## 2.5 Condition 10 Surface Water Drainage

The surface water drainage for the site is now complete. Included within Appendix A is a copy of the record drawings of the drainage installed.

## 2.6 The approved SUDS solution for the site is formed using an attenuation pond with an outfall to 3No ringed soakaways via distribution chamber and an emergency shut-off valve chamber requested by The Environment Agency.



Frame 3 –SUDS Structures

## 2.7 Included within Appendix B are MicroDrainage network details and simulation results to demonstrate that the installed surface water systems as shown on the record drawings is adequate to cater for a 1in100 year return period with a 40% allowance for climate change. The drainage calculations provided comply with the new Kent County Council SUDS guidance;

### **Construction Photographs**

## 2.8 Below as frame 4 are progress photographs taken during the installation of the Phase One Drainage



Attenuation Pond  
Viewed from east



Attenuation Pond  
Viewed from south



Catchpit / Distribution Chamber



Shut-off Valve Chamber



Soakaway Sa3 of3 Context



Soakaway SA3 of3

#### Frame 4 ~ Surface Water Construction Photographs

- 2.9 Tridax Ltd confirms that the surface water drainage system the site has been installed as per the details shown on the record drawings and meets with the design intent to adequately manage the surface water disposal.

### **3.0 OPERATION & MAINTENANCE STATEMENT**

- 3.1 The adoptable off-site foul water sewer will be maintained by Southern Water Services. The onsite foul & surface water sewers will remain private and will be maintained by an appropriate management company set up for the development by Elivia Homes Eastern.
- 3.2 It is recommended that the chambers, catch pits, attenuation pond, and the soakaway structures are inspected as part of the general planned inspection and maintenance regime for the development, but certainly at no greater intervals than once a year.
- 3.3 Monthly Inspection to include;
- Remove litter and debris to the pond
  - Inspect marginal and bankside vegetation and remove nuisance plants (for first 3 years).
  - Inspect inlets / outlets for evidence of blockage and/or physical damage.
  - Inspect water body for signs of poor water quality.
  - Carry out works as identified from inspection.
- 3.4 Annual Inspection to include;
- Hand cut submerged and emergent aquatic plants (at minimum of 0.1m above pond base; include max 25% of pond surface).
  - Remove 25% of bank vegetation from water's edge to a minimum of 1m above water level.
  - Tidy all dead growth (scrub clearance) before start of growing season
  - Lift manhole covers to the catch pits and check general condition
  - Note that inspection chambers upstream of the pond are constructed as catch-pits and from the construction detail it can be seen that there is a 600mm sump for silt collection below the

standing water that will need to be damped and empty as required by licensed carrier.

- Close and reopen the emergency shut-off valve and grease as necessary to ensure continued operation and availability in an emergency.
- Review quantities of silt removed and consider whether inspections should be increased or possibly reduced to every two years. **Note that it is important to the effectiveness of the soakaways that silt is not allowed to enter and potential block the filtration fissures.**
- Access covers are provided to each soakaway structure and should be lifted, and the structure checked to be dry and clear of silt (should be dry within 24 hours following a storm event). Review the general location of the soakaway to check the integrity (no cracking or subsidence in the external finishes).

### 3.5 Five year Inspection / Five Year Anniversary

- Hand cut submerged and emergent aquatic plants (at minimum of 0.1m above pond base; include max 25% of pond surface).
- Remove 25% of bank vegetation from water's edge to a minimum of 1m above water level.
- Tidy all dead growth (scrub clearance) before start of growing season
- Carry out jetting to all pipe work to ensure no blockages and free flow of water to the catch pits and to check overall integrity and remove any silt.
- Remove all silt and water from the catchpits with a vacuum sucker and dispose off site by a licensed carrier.
- Carry out a CCTV survey of the soakaway structure by lifting the inspection covers and lowering a camera (crates are designed to allow a standard CCTV tractor unit to pass) to check overall structural integrity and condition of the membrane.
- Carry out works as identified from inspection.

### 3.6 25-30 Years (dependent on 6monthly assessment)

- Remove sediment from any forebay
- Remove sediment and planting from one quadrant of the main body of pond without sediment forebays
- Remove sediment from the main body of the pond when pool volume is reduced by 20%

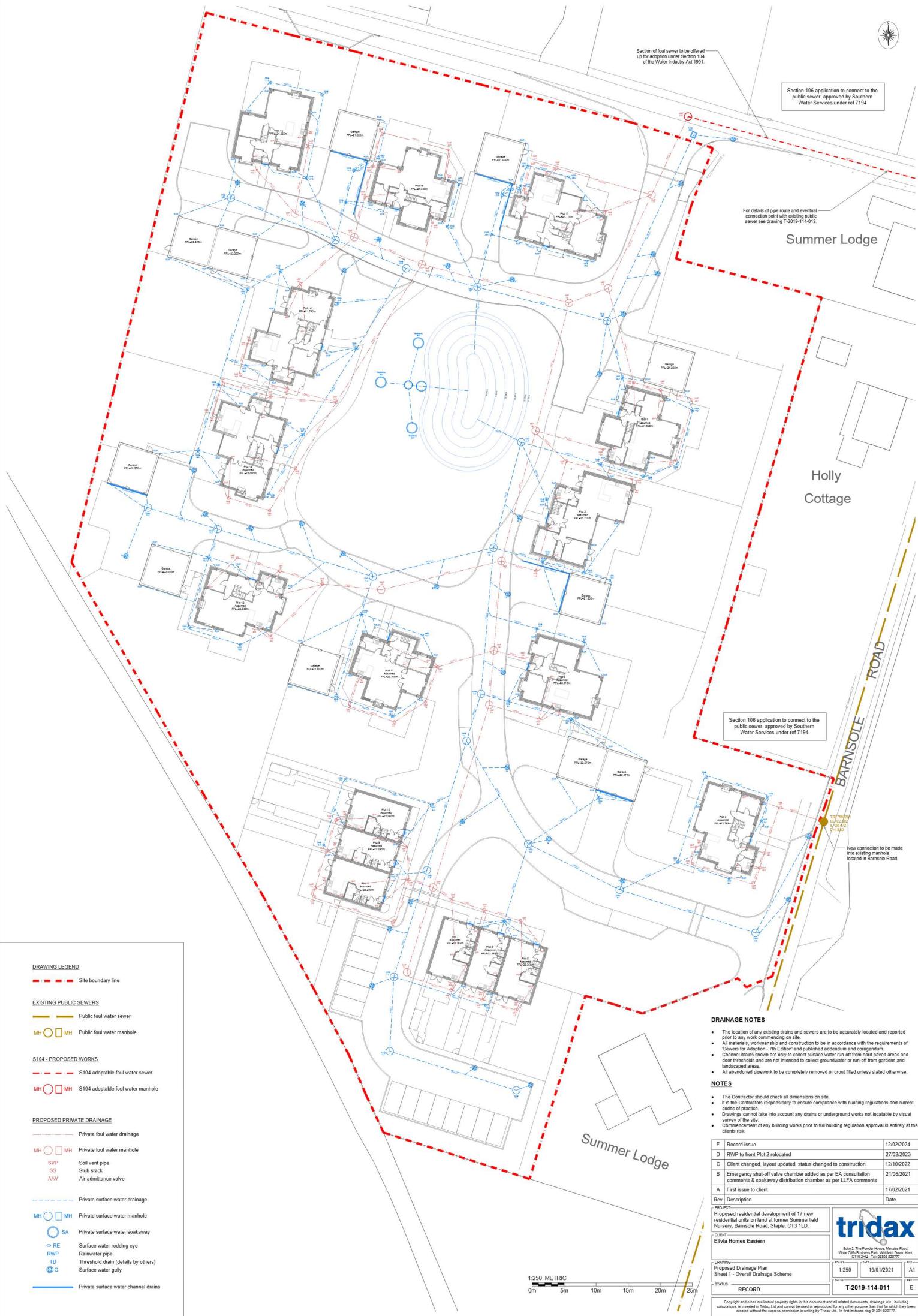
### 3.7 Implementation Programme

The developer will be responsible for the first year's maintenance and will arrange for a joint handover inspection between the Developer and the maintenance contractor to be appointed by the Management Company with a copy of this report provided in order for Maintenance Contractor to become familiar with and understand the requirements.

## APPENDIX A

### Tridax Drawings

- T-2019-114-011-revE – Overall Site Drainage Plan
- T-2019-114-012-revC – Drainage Plan Sheet 1
- T-2019-114-013-revF – Drainage Plan Sheet 2
- T-2019-114-020-revC – Foul Water Schedules
- T-2019-114-021-revC – Surface Water Schedules
- T-2019-114-022-revC – Construction Details Sheet 1
- T-2019-114-023-revC – Construction Details Sheet 2
- T-2019-114-024-revF – Construction Details Sheet 3
- T-2019-114-S104-02-revE – Agreement Plan
- T-2019-114-S104-03-revD – Construction Details







FOUL WATER PIPE SCHEDULE											
Ref.	Manhole Cover Level (m)	Invert Level (m)	Backstop Depth (m)	Manhole Depth (m)	Manhole Type	Pipe Ø (mm)	Material	Gradient Grade	Budding	Remarks	Bedding
MHFF1.0	23.240	22.950	-	0.650	PPIC	45	A15	-	PNF1.0	5.47	100
MHFF1.1	23.240	22.653	-	0.787	PPIC	45	A15	-	PNF1.1	5.06	100
MHFF1.2	23.240	22.356	-	0.914	PPIC	45	A15	-	PNF1.2	7.68	100
MHFF1.3	23.240	20.950	-	1.300	Type 2	1200	D400	-	PNF1.3	13.85	100
MHFF1.4	23.000	21.840	-	1.300	Type 2	1200	D400	-	PNF1.4	29.79	100
MHFF1.5	22.220	20.445	-	1.335	Type 2	1200	D400	-	PNF1.5	8.56	100
MHFF1.6	22.220	19.750	-	1.365	Type 2	1200	D400	-	PNF1.6	13.99	100
MHFF1.7	21.860	19.920	-	1.360	Type 2	1200	D400	-	PNF1.7	21.01	150
MHFF1.8	21.260	18.629	-	1.371	Type 2	1200	D400	-	PNF1.8	20.53	150
MHFF1.9	21.165	18.815	-	2.360	Type 2	1200	D400	-	PNF1.9	6.52	150
MHFF1.10	20.760	18.766	-	2.360	Type 2	1200	D400	-	PNF1.0	16.07	150
MHFF1.11	20.760	16.647	-	2.113	Type 2	1200	D400	-	PNF1.11	13.48	150
MHFF1.12	20.420	16.546	-	1.874	Type 2	1200	D400	-	PNF1.12	52.06	150
MHFF1.13	20.100	17.711	(Interpolated)	2.389	Type 2	1200	D400	-	PNF1.20	5.31	100
MHFF2.0	23.330	22.880	-	0.700	PPIC	45	B125	-	PNF2.1	5.35	100
MHFF2.1	23.330	22.652	-	0.848	PPIC	45	B125	-	PNF2.2	3.45	100
MHFF2.2	23.250	22.318	-	0.932	PPIC	45	B125	-	PNF3.0	5.06	100
MHFF3.0	23.170	22.513	-	0.657	PPIC	45	A15	-	PNF3.1	6.01	100
MHFF3.1	23.170	22.248	-	0.742	PPIC	45	A15	-	PNF3.2	1.41	100
MHFF3.2	23.170	22.238	-	0.842	PPIC	45	A15	-	PNF3.3	13.27	100
MHFF3.3	23.170	22.384	-	0.865	PPIC	45	A15	-	PNF3.4	6.84	100
MHFF3.4	23.190	22.602	-	1.108	PPIC	45	B125	-	PNF3.5	4.02	100
MHFF3.5	23.175	21.918	-	1.257	PPIC	45	B125	-	PNF4.0	5.16	100
MHFF4.0	23.210	22.670	-	0.600	SIC	300	A15	-	PNF4.5	8.07	100
MHFF5.0	22.240	21.480	-	1.000	PPIC	45	A15	-	PNF5.0	6.44	100
MHFF6.0	22.330	20.700	-	0.600	SIC	300	A15	-	PNF6.0	7.45	100
MHFF7.0	22.650	20.350	-	0.600	PPIC	45	A15	-	PNF7.1	5.74	100
MHFF7.1	22.630	20.843	-	0.787	PPIC	45	A15	-	PNF7.2	20.56	100
MHFF7.2	22.650	21.700	-	0.933	PPIC	45	A15	-	PNF7.3	9.20	100
MHFF7.3	22.630	21.506	-	1.124	PPIC	45	A15	-	PNF7.4	8.5	100
MHFF8.0	22.600	21.900	-	0.600	SIC	300	A15	-	PNF8.0	6.54	100
MHFF8.1	22.600	21.926	-	0.674	PPIC	45	A15	-	PNF8.1	6.94	100
MHFF8.2	22.600	21.579	-	0.921	PPIC	45	A15	-	PNF8.2	19.34	100
MHFF8.3	22.605	21.195	-	1.300	Type 2	1200	D400	-	PNF9.0	11.41	100
MHFF9.0	22.710	22.110	-	0.600	SIC	450	A15	-	PNF10.0	Removed from scheme	
MHFF10.0	Removed from scheme								PNF10.0	7.45	100
MHFF11.0	21.700	20.925	-	0.775	PPIC	45	B125	-	PNF11.0	5.76	100
MHFF12.0	21.200	20.370	-	0.600	SIC	300	A15	-	PNF12.1	6.79	100
MHFF12.1	21.240	20.946	-	1.004	PPIC	45	A15	-	PNF13.0	10.93	100
MHFF13.0	21.200	20.600	-	0.600	SIC	300	A15	-	PNF14.0	6.64	100
MHFF14.0	22.000	21.300	-	0.700	PPIC	45	A15	-	PNF14.1	7.71	100
MHFF14.1	22.000	21.134	-	0.865	PPIC	45	A15	-	PNF14.2	12.13	100
MHFF14.2	22.000	20.341	-	1.059	PPIC	45	B125	-	PNF14.3	23.78	100
MHFF14.3	21.800	20.637	-	1.163	PPIC	45	B125	-	PNF15.0	4.95	100
MHFF14.4	21.600	19.750	-	1.750	Type 2	1200	D400	-	PNF15.1	7.74	100
MHFF15.0	21.340	21.340	-	0.600	SIC	300	A15	-	PNF15.2	10.61	100
MHFF15.1	21.540	21.257	-	0.683	PPIC	45	A15	-	PNF16.0	5.50	100
MHFF16.0	21.600	21.060	-	0.877	PPIC	45	A15	-	PNF16.1	7.74	100
MHFF16.1	21.690	20.560	-	0.749	PPIC	45	A15	-	PNF16.2	10.63	100
MHFF16.2	21.650	20.020	-	0.870	PPIC	45	B125	-	PNF17.1	9.96	100
MHFF17.0	21.840	21.240	-	0.600	SIC	300	A15	-	PNF17.2	11.35	100
MHFF17.1	21.550	20.160	-	1.465	Type 2	1200	D400	-	PNF18.0	10.43	100
MHFF17.2	21.260	19.930	-	1.600	Type 2	1200	D400	-	PNF19.0	11.12	100
MHFF17.3	21.270	21.120	-	0.600	PPIC	45	A15	-	PNF20.0	8.96	100
MHFF18.0	21.650	20.000	-	0.650	PPIC	45	A15	-	PNF20.1	5.33	100
MHFF19.0	21.220	20.620	-	0.600	SIC	300	A15	-	PNF20.2	4.99	100
MHFF20.0	21.220	20.240	-	0.800	PPIC	45	A15	-	PNF20.3	10.8	100
MHFF20.1	21.220	20.320	-	0.950	PPIC	45	A15	-	PNF21.0	6.68	100
MHFF20.2	21.220	20.070	-	1.150	PPIC	45	A15	-			
MHFF21.0	21.220	20.600	-	0.620	SIC	300	A15	-			

PNF22.0	9.83	100	UPVC	40	A15	-
PNF22.1	5.14	20.364	-	0.846	PPIC	450
PNF22.2	21.210	21.210	-	0.976	PPIC	450
PNF22.3	21.210	20.000	-	1.210	PPIC	450
PNF23.0	4.15	20.200	-	0.809	PPIC	450
PNF23.1	3.75	20.130	-	0.870	PPIC	450
PNF23.2	21.000	20.067	-	0.933	PPIC	450
PNF24.0	21.000	21.000	-	1.255	PPIC	450
PNF25.0	22.660	22.660	-	0.500	SIC	300
PNF25.1	10.18	100	UPVC	40	A15	-
PNF25.2	22.560	22.560	-	0.622	PPIC	450
PNF25.3	2.40	100	UPVC	40	A15	-
PNF25.4	7.59	100	UPVC	40	A15	-
PNF25.5	7.14	100	UPVC	7.1	A15	-

PNF26.0	22.660	22.660	-	0.567	SIC	300
PNF26.1	22.560	22.560	-	0.567	SIC	300
PNF26.2	22.560	21.838	-	0.888	PPIC	450
PNF26.3	22.660	21.772	-	0.888	PPIC	450
PNF26.4	22.660	21.712	-	0.948	PPIC	450
PNF26.5	22.660	21.472	-	1.128	PPIC	450

PNF27.0	22.660	22.660	-	0.567	SIC	300
PNF27.1	22.560	22.560	-	0.567	SIC	300
PNF27.2	22.560	21.838	-	0.888	PPIC	450
PNF27.3	22.660	21.772	-	0.888	PPIC	450
PNF27.4	22.660	21.712	-	0.948	PPIC	450

PNF28.0	22.660	22.660	-	0.567	SIC	300
PNF28.1	22.560	22.560	-	0.567	SIC	300
PNF28.2	22.560	21.838	-	0.888	PPIC	450
PNF28.3	22.660	21.772	-	0.888	PPIC	450
PNF28.4	22.660	21.712	-	0.948	PPIC	450

PNF29.0	22.660	22.660	-	0.567	SIC	300
PNF29.1	22.560	22.560	-	0.567	SIC	300
PNF29.2	22.560	21.838	-	0.888	PPIC	450
PNF29.3	22.660	21.772	-	0.888	PPIC	450
PNF29.4	22.660	21.712	-	0.948	PPIC	450

PNF30.0	22.660	22.660	-</td
---------	--------	--------	-------

SURFACE WATER PIPE SCHEDULE						
Pipe Ref.	Pipe Length (m)	Pipe Ø (mm)	Plate Material	Gradient (1 in 9.7)	B bedding	Remarks
PHS18.0	10.77	100	UPVC	33.9	Class S	-
PHS18.1	15.57	100	UPVC	119.9	Class S	-
PHS18.2	5.88	100	UPVC	111.6	Class S & Z	To pipe bed and around pipe under driveway
PHS18.3	9.82	100	UPVC	12.6	Class Z	-
PHS18.4	11.86	150	UPVC	36.5	Class S	-
PHS16.5	11.52	150	UPVC	31.2	Class S	-
PHS16.6	10.43	225	UPVC	42.3	Class S	-
PHS16.7	3.33	100	UPVC	15.4	Class S	-
PHS20.0	11.63	100	UPVC	40.1	Class S	-
PHS20.1	8.34	100	UPVC	118.1	Class S	-
PHS21.1	13.36	100	UPVC	118.3	Class S & Z	Concrete bed and surround pipe under driveway
PHS22.1	10.67	100	UPVC	12.7	Class S & Z	Concrete bed and surround pipe under driveway
PHS22.0	4.29	100	UPVC	119.4	Class S & Z	To pipe bed and around pipe under driveway
PHS22.1	5.12	100	UPVC	15.4	Class Z	-
PHS22.2	6.09	100	UPVC	60	Class Z	-
PHS23.0	10.73	100	UPVC	107.4	Class S	-
PHS23.1	15.80	100	UPVC	57.5	Class S	-
PHS23.2	14.72	100	UPVC	11.8	Class S	-
PHS24.0	7.79	100	UPVC	-	Class S	-
PHS25.0	6.79	100	UPVC	119.3	Class S	-
PHS25.1	10.48	100	UPVC	9.1	Class S	-
PHS26.0	6.69	100	UPVC	119.5	Class S	-
PHS26.1	3.38	100	UPVC	120.7	Class S	-
PHS26.2	3.12	100	UPVC	120.0	Class S & Z	Concrete bed and surround pipe under driveway
PHS26.3	6.35	100	UPVC	115.6	Class Z	-
PHS26.4	8.51	100	UPVC	10.9	Class Z	-
PHS27.0	15.47	100	UPVC	58.4	Class S & Z	Concrete bed and surround pipe under driveway
PHS28.0	32.05	150	UPVC	75.9	Class Z	-
PHS28.1	20.00	225	UPVC	63.6	Class S	-
PHS29.0	9.04	100	UPVC	11.9	Class Z	-

Seaway Ref.	Cover Level (m)	Inlet Levels (m)	Inset Depth (m)	Effective Depth (m)	Sump Level (m)	Total Depth (m)	Seaway Type	Seaway Ø (mm)	Cover/Fill Guide	D400
Sa1	21.040	19.000	2.400	3.800	15.200	6.200	PCC-RNG	1500		D400
Sa2	21.040	19.000	2.400	3.800	15.200	6.200	PCC-RNG	1500		D400
Sa3	21.200	19.000	2.200	3.800	15.200	6.000	PCC-RNG	1500		D400

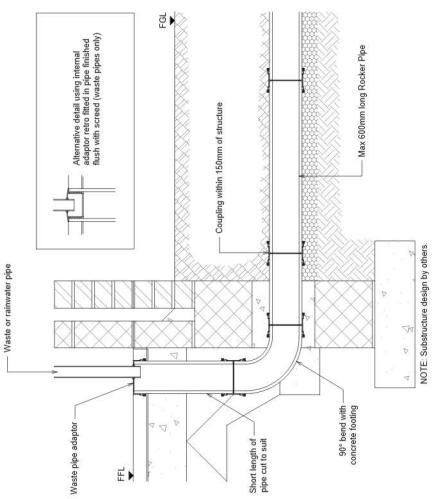
SUSQUEHANNA WATER PIPE SCHEDULE						
	Pipe No.	Pipe Length (m)	Pipe Ø (mm)	Pipe Material	Gauge Factor (1 in.)	Remarks
PNS1.0	PNS1.0	20.50	150	UPVC	118.3	Class S
PNS1.1	PNS1.1	11.59	150	UPVC	202.8	Class S
PNS1.2	PNS1.2	17.44	150	UPVC	187.9	Class S
PNS1.3	PNS1.3	21.11	150	UPVC	27.5	Class S
PNS1.4	PNS1.4	7.66	225	UPVC	341	Class S
PNS1.5	PNS1.5	25.90	225	UPVC	63.9	Class S
PNS1.6	PNS1.6	17.02	225	UPVC	37.8	Class S
PNS1.7	PNS1.7	7.68	225	UPVC	7.8	Class S
PNS2.0	PNS2.0	14.98	100	UPVC	15.8	Class S
PNS3.0	PNS3.0	10.62	100	UPVC	43	Class S
PNS3.1	PNS3.1	14.11	100	UPVC	118.4	Class S
PNS3.2	PNS3.2	3.19	100	UPVC	2.3	Class S
PNS4.1	PNS4.1	22.22	150	UPVC	118.8	Class S
PNS4.2	PNS4.2	16.00	150	UPVC	202	Class S
PNS5.0	PNS5.0	18.73	150	UPVC	202	Class S
PNS5.1	PNS5.1	3.56	100	UPVC	60	Class S
PNS5.2	PNS5.2	20.20	100	UPVC	46.4	Class S
PNS5.3	PNS5.3	14.10	100	UPVC	117.7	Class S
PNS6.0	PNS6.0	10.01	100	UPVC	15.6	Class S
PNS6.1	PNS6.1	8.40	100	UPVC	31.6	Class S
PNS7.0	PNS7.0	13.61	100	UPVC	7.5	Class S
PNS8.0	PNS8.0	13.12	100	UPVC	13.5	Class S Z Covering the base of the dam to prevent soil intrusion to pipes and soil intrusion to pipes
PNS9.0	PNS9.0	10.15	100	UPVC	101.5	Class S
PNS1.1	PNS1.1	4.40	100	UPVC	11.6	Class Z
PNS1.2	PNS1.2	7.71	100	UPVC	118.6	Class S
PNS1.0	PNS1.0	8.22	100	UPVC	-	Class S
PNS1.10	PNS1.10	11.40	150	UPVC	253.3	Class S
PNS1.11	PNS1.11	25.33	150	UPVC	202.6	Class S
PNS1.12	PNS1.12	19.39	150	UPVC	37	Class S
PNS1.0	PNS1.0	8.52	100	UPVC	118.5	Class S
PNS1.21	PNS1.21	11.43	100	UPVC	119.2	Class S
PNS1.22	PNS1.22	4.59	100	UPVC	5.6	Class S
PNS1.31	PNS1.31	13.38	100	UPVC	60	Class S
PNS1.32	PNS1.32	6.08	100	UPVC	20.5	Class S
PNS1.40	PNS1.40	10.10	100	UPVC	40	Class S
PNS1.50	PNS1.50	4.25	100	UPVC	12.5	Class S
PNS1.51	PNS1.51	6.64	100	UPVC	44	Class S
PNS1.52	PNS1.52	7.56	100	UPVC	44	Class S
PNS1.60	PNS1.60	9.73	100	UPVC	43.7	Class S
PNS1.70	PNS1.70	8.54	100	UPVC	9.7	Class S
PNS1.71	PNS1.71	5.61	100	UPVC	119.5	Class S
PNS1.72	PNS1.72	6.92	100	UPVC	118.6	Class S
PNS1.83	PNS1.83	12.84	100	UPVC	119.2	Class S
PNS1.90	PNS1.90	12.84	100	UPVC	39.8	Class S

SURFACE WATER MANHOLE SCHEDULE									
	Manhole Ref.	Cover Level	Invert	Depth (m)	Manhole Depth (m)	Manhole Type	Manhole Ø (mm)	Coatings	Remarks
MHS1.0	23.325	-	N=21.975	-	N=1.350	Type 2	1200	D400	650mm deep sump
			SL=21.375	-	SL=1.950	Catalpa			
MHS1.1	23.525	-	N=21.880	-	N=1.725	Type 2	1200	D400	650mm deep sump
			SL=21.280	-	SL=2.125	Catalpa			
MHS1.2	23.275	-	N=21.743	-	N=1.532	Type 2	1200	D400	650mm deep sump
			SL=21.213	-	SL=2.132	Catalpa			PNS0.0 IN=21.73m
MHS1.3	23.000	-	N=21.660	-	N=1.350	Type 2	1200	D400	650mm deep sump
			SL=21.060	-	SL=1.950	Catalpa			
MHS1.4	22.520	-	N=20.881	-	N=1.639	Type 2	1200	D400	650mm deep sump
			SL=20.286	-	SL=2.314	Catalpa			
MHS1.5	22.320	-	N=20.884	-	N=1.536	Type 2	1200	D400	650mm deep sump
			SL=20.284	-	SL=2.136	Catalpa			PNS0.1 IN=21.32m
MHS1.6	21.650	-	N=20.025	-	N=1.425	Type 2	1200	D400	650mm deep sump
			SL=19.425	-	SL=2.025	Catalpa			
MHS1.7	21.400	-	N=19.975	-	N=1.425	Type 2	1200	D400	650mm deep sump
			SL=19.375	-	SL=2.025	Catalpa			PNS0.1 IN=20.10m
MHS2.0	23.240	-	N=22.740	-	N=0.900	SIC	300	A16	-
MHS3.0	23.170	-	N=22.670	-	N=0.900	SIC	300	A15	-
MHS3.1	23.170	-	N=22.418	-	0.752	PPIC	450	B125	-
MHS3.2	23.270	-	N=22.299	-	0.571	PPIC	450	B125	-
MHS4.0	22.890	-	N=21.240	-	N=1.650	Type 2	1200	D400	650mm deep sump
			SL=20.640	-	SL=2.250	Catalpa			
MHS4.1	22.910	-	N=21.165	-	N=1.857	Type 2	1200	D400	650mm deep sump
			SL=20.565	-	SL=2.467	Catalpa			PNS0.5 IN=21.10m
MHS4.2	22.735	-	N=20.874	-	N=1.761	Type 2	1200	D400	650mm deep sump
			SL=20.274	-	SL=2.461	Catalpa			PNS0.0 IN=21.12m
MHS5.0	22.650	-	N=22.200	-	0.450	SIC	300	A15	-
MHS5.1	22.600	-	N=22.134	-	0.466	SIC	300	A15	-
MHS5.2	22.600	-	N=21.944	-	0.866	PPIC	450	A15	-
MHS5.3	22.660	-	N=22.060	-	0.566	PPIC	450	A15	-
MHS6.0	22.660	-	N=22.700	-	0.600	SIC	300	A15	-
MHS7.0	23.300	-	N=22.600	-	0.600	PPIC	450	B125	-
MHS8.0	22.440	-	N=21.800	-	0.600	PPIC	450	A15	-
MHS9.1	22.300	-	N=21.700	-	0.600	PPIC	450	A15	-
MHS10.1	22.150	-	N=21.550	-	0.600	SIC	300	A15	-
MHS11.0	22.545	-	N=21.155	-	0.665	PPIC	450	A15	-
			SL=21.155	-	SL=1.950	Type 2	1200	D400	650mm deep sump
MHS11.1	22.500	-	N=21.150	-	N=1.350	Type 2	1200	D400	650mm deep sump
			SL=21.150	-	SL=1.950	Catalpa			
MHS11.2	22.400	-	N=21.025	-	N=1.375	Type 2	1200	D400	650mm deep sump
			SL=21.025	-	SL=1.975	Catalpa			
MHS12.0	22.710	-	N=21.110	-	0.600	SIC	300	A15	-
MHS12.1	22.500	-	N=21.833	-	0.797	PPIC	450	A15	-
MHS12.2	22.700	-	N=21.942	-	0.758	PPIC	450	A15	-
MHS13.0	22.640	-	N=22.640	-	0.600	SIC	300	A15	-
MHS13.1	22.630	-	N=21.961	-	0.669	PPIC	450	A15	-
MHS13.2	22.630	-	N=21.180	-	1.420	PPIC	450	A15	-
MHS14.0	22.640	-	N=22.640	-	0.600	SIC	300	A15	-
MHS15.0	21.580	-	N=20.980	-	0.600	SIC	300	A15	-
MHS15.1	21.580	-	N=20.883	-	0.597	PPIC	450	A15	-
MHS17.0	21.700	-	N=20.732	-	0.568	PPIC	450	A15	-
MHS17.1	21.210	-	N=20.532	-	0.578	PPIC	450	A15	-
MHS17.2	21.210	-	N=20.483	-	0.777	PPIC	450	A15	-
MHS17.3	21.200	-	N=20.240	-	0.777	PPIC	450	A15	-



## Typical External Rainwater Pipe Connection Detail

scale 1:10

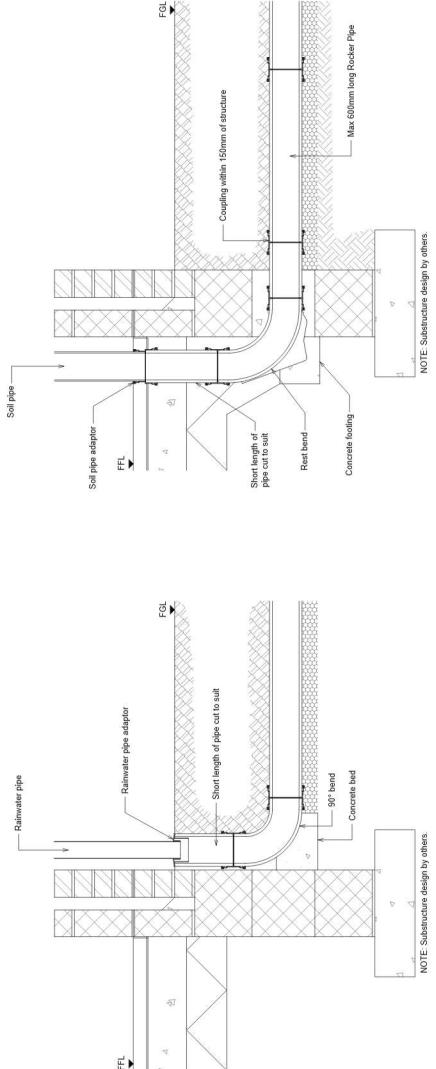


## Typical Internal Waste Pipe Connection Details

scale 1:10

## Typical Soil Vent Pipe / Stub Stack Connection Detail

scale 1:10



## Typical Soil Vent Pipe / Stub Stack Connection Detail

scale 1:10

**Polypropylene Inspection Chamber (PPIC)**  
Use on private drainage works only

**Polypropylene Inspection**  
Use on private drainage works only

**Alternate Access Cover**  
Use on private drainage works only  
scale 1:20

**Typical PCC Catchpit (750x600mm)**  
Scale 1:25

**Shallow Inspection Chamber (SIC)**  
Use on private drainage works only

**NOTE:** These chains are available in lengths of 50' or 20' increments. Longer chains are made by splicing 45' lengths end-to-end and outlet pipes.

**Maximum diameter of steel chain:** 150/160mm  
**Maximum pull diameter of steel cable:** 160/170mm

Unused links are to be sealed and made water-tight.

Choker to be well compacted around shaft of chamber.

No licensing branch is to be less than 50' from the outgoing direction of flow.

**DRAWDOWN NOTES**

The location of my existing utilities and services are to be accurately located and reported prior to my work commencing. I shall liaise with the relevant authorities to ascertain the requirements of Services for Adoption. The Education and published documents and congegation, Charities drawdown show any other source of water run-off in hard paved areas and drainage systems. I am also to liaise with my local authority and my water provider to advise of any potential issues and/or to obtain drawdown information from my partners and clients.

All abandoned pework to be completely removed at ground level unless stated otherwise.

**NOTES**

The Contractor should check all dimensions on site. Drawings cannot take into account any areas of underground works not locatable by visual inspection. Commencement of any building work prior to full building regulation approval is entirely at the clients risk.

C	Record Issue	12/02/2024	
C	B Client changed status changed to CONSTRUCTION	12/10/2024	
A	First Issue to Client	11/02/2021	
	Date		
 <p><b>tridax</b></p>			
	Rev Description		
	Proposed residential development of 17 new residential units on land at former Summerville Homes Barndale Road, Suite C101 LD 110		
	Elvira Horner's Easterns		
	Planned		
	Proposed Dewatering Details		
	Sheet 2		
	Printed:		
	RECORD		
	Copyright © 2024 Tridax. All rights reserved. This document and all documents it refers to, and any other information contained in or referred to by this document, are the sole property of Tridax, Inc., and may only be used for the purpose intended by Tridax, Inc. No part of this document may be reproduced, stored in a retrieval system, or transmitted, in whole or in part, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of Tridax, Inc.		

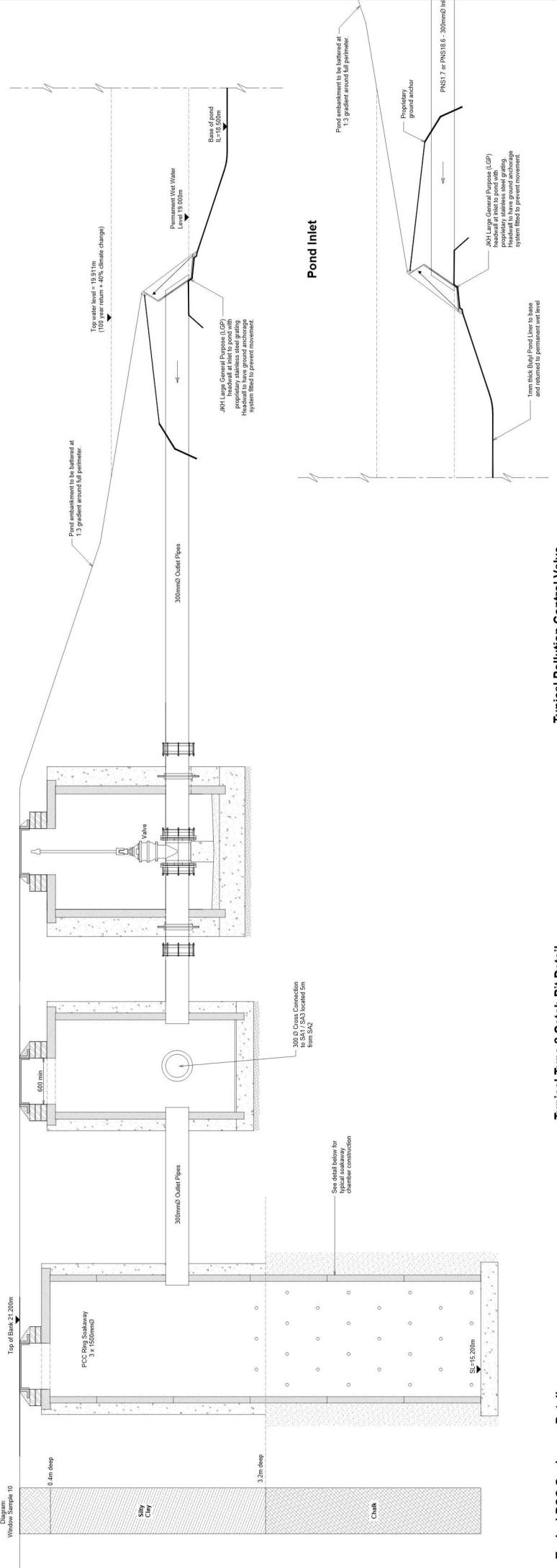
## **Section: Proposed Pond Inlet & Outfall to Soakaways**

Scale 1:25

Distribution Chamber /  
Catchpit  
(see detail below)

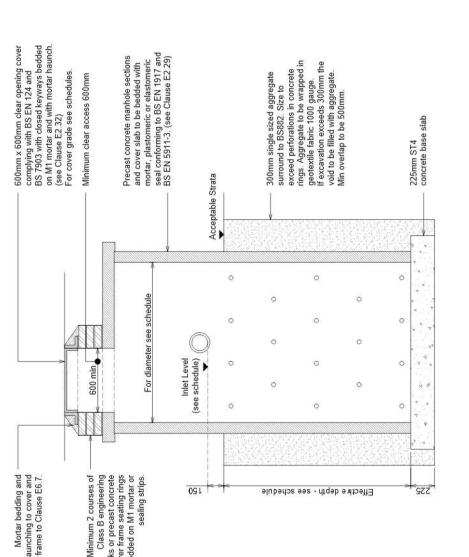
**Emergency Shut-Off Valve Chamber  
(see detail below)**

Pond Outlet



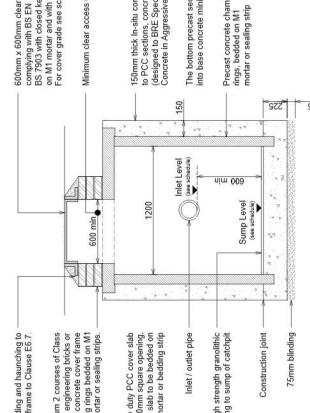
FCC Soakaway detail  
scale 1:25

cale 1:



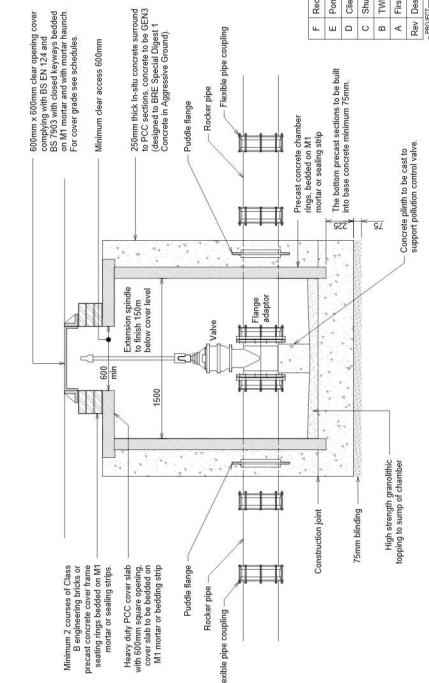
scale 1:25

1:25

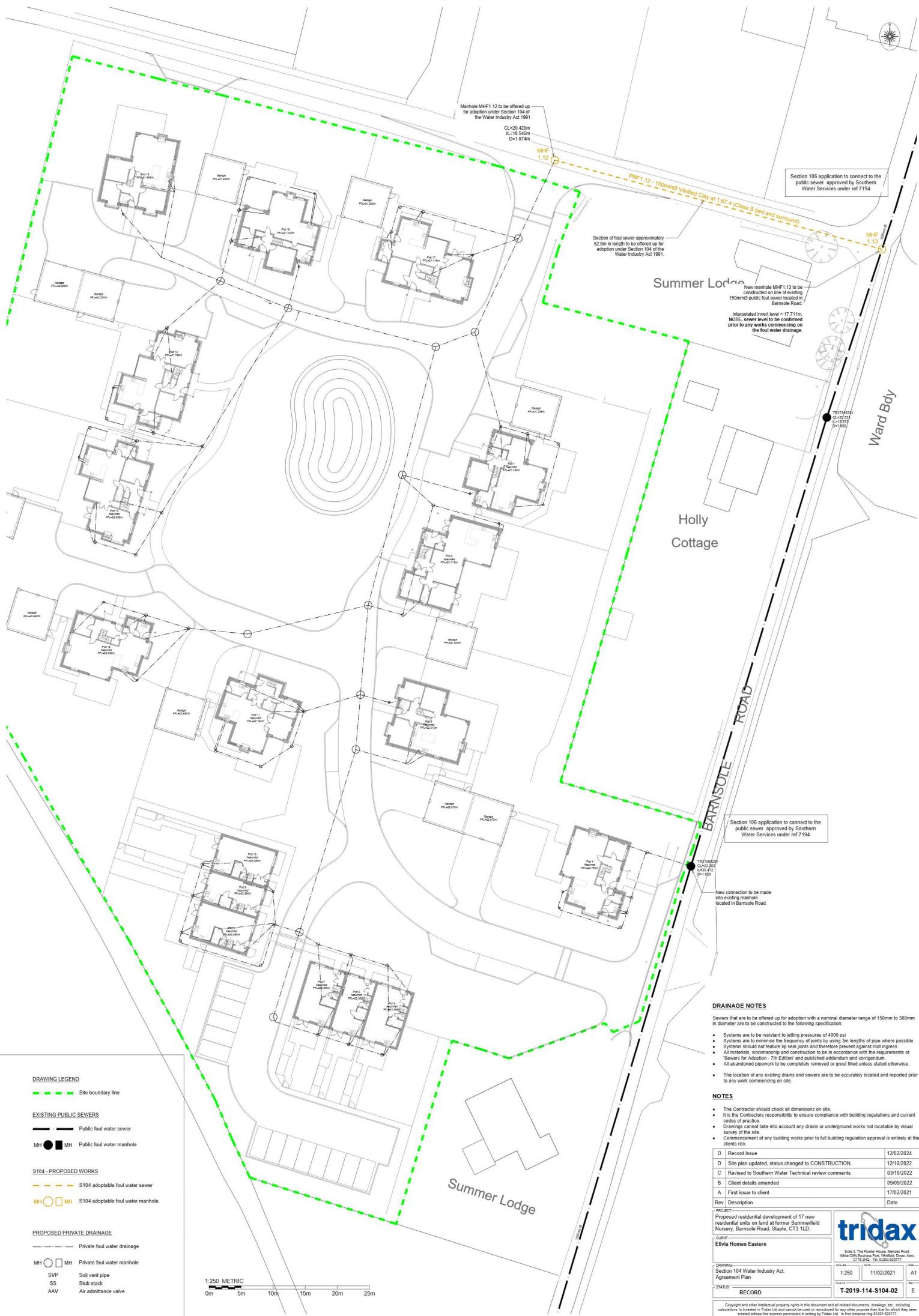


Piscataquis County Drive

scale 1:2



<b>tridax</b>	
Sage 2 Project Management Software White Box Software, Inc., 10000 N. 100 E., Suite C-100, Cottonwood Heights, UT 84121, Tel: 800-227-7777	
<b>T-2019-114-024</b>	<b>F</b>
<p>Proposed residential development of 17 new single family detached units at former Suncadia property, 11700 Altonom Road, Salt Lake City, UT 84113</p> <p><b>Elkton Homes Eastern</b></p> <p><b>As Noted</b></p> <p><b>RECORD</b></p>	
<p><b>Document Type:</b> Sheet 3 <b>Sheeted Damage Details</b></p> <p><b>Comments:</b> This document is a record of damage to property as a result of a natural disaster or other emergency. It is not a formal insurance claim. It is intended to be used by insurance companies, property owners, and other interested parties to facilitate the repair of damaged property.</p> <p><b>Comments:</b> This document is a record of damage to property as a result of a natural disaster or other emergency. It is not a formal insurance claim. It is intended to be used by insurance companies, property owners, and other interested parties to facilitate the repair of damaged property.</p>	
<b>11/12/2021</b>	<b>A1</b>





---

## APPENDIX B

MicroDrainage Network Details & Simulation Results

Tridax Ltd											Page 1						
Honeywood House Whitfield Kent CT16 3EH				Summerfield Nursery													
Date 19/05/2021 File T-2019-114 SW Network Re...				Designed by prl Checked by													
XP Solutions				Network 2020.1.3													
<u>Existing Network Details for Storm</u>																	
PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section	Type						
1.000	20.700	0.175	118.3	0.026	5.00		0.0	0.600	o	150	Pipe/Conduit						
1.001	11.600	0.057	202.8	0.000	0.00		0.0	0.600	o	150	Pipe/Conduit						
2.000	15.750	0.847	18.6	0.009	5.00		0.0	0.600	o	100	Pipe/Conduit						
1.002	17.440	0.093	187.9	0.019	0.00		0.0	0.600	o	150	Pipe/Conduit						
1.003	21.120	0.769	27.5	0.006	0.00		0.0	0.600	o	150	Pipe/Conduit						
3.000	18.000	0.152	118.4	0.006	5.00		0.0	0.600	o	100	Pipe/Conduit						
3.001	14.110	0.119	118.6	0.006	0.00		0.0	0.600	o	100	Pipe/Conduit						
3.002	3.200	1.368	2.3	0.000	0.00		0.0	0.600	o	100	Pipe/Conduit						
4.000	22.220	0.187	118.8	0.023	5.00		0.0	0.600	o	150	Pipe/Conduit						
5.000	3.960	0.050	79.2	0.002	5.00		0.0	0.600	o	100	Pipe/Conduit						
5.001	10.200	0.086	118.6	0.003	0.00		0.0	0.600	o	100	Pipe/Conduit						
5.002	14.100	0.120	117.7	0.003	0.00		0.0	0.600	o	100	Pipe/Conduit						
6.000	8.410	0.266	31.6	0.002	5.00		0.0	0.600	o	100	Pipe/Conduit						
5.003	10.010	0.691	14.5	0.002	0.00		0.0	0.600	o	100	Pipe/Conduit						
4.001	16.000	0.079	202.0	0.009	0.00		0.0	0.600	o	150	Pipe/Conduit						
7.000	12.610	1.676	7.5	0.009	5.00		0.0	0.600	o	100	Pipe/Conduit						
<u>Network Results Table</u>																	
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)												
1.000	21.975	0.026	0.0	0.92	16.3												
1.001	21.800	0.026	0.0	0.70	12.4												
2.000	22.640	0.009	0.0	1.80	14.1												
1.002	21.743	0.054	0.0	0.73	12.9												
1.003	21.650	0.060	0.0	1.93	34.1												
3.000	22.570	0.006	0.0	0.71	5.5												
3.001	22.418	0.012	0.0	0.71	5.5												
3.002	22.299	0.012	0.0	5.10	40.0												
4.000	21.240	0.023	0.0	0.92	16.3												
5.000	22.050	0.002	0.0	0.87	6.8												
5.001	22.000	0.005	0.0	0.71	5.5												
5.002	21.914	0.008	0.0	0.71	5.6												
6.000	22.060	0.002	0.0	1.38	10.8												
5.003	21.794	0.012	0.0	2.04	16.0												
4.001	21.053	0.044	0.0	0.70	12.4												
7.000	22.700	0.009	0.0	2.84	22.3												

Tridax Ltd											Page 2
Honeywood House Whitfield Kent CT16 3EH				Summerfield Nursery							
Date 19/05/2021 File T-2019-114 SW Network Re...				Designed by prl Checked by							
XP Solutions				Network 2020.1.3							

#### Existing Network Details for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
8.000	13.120	0.976	13.4	0.011	5.00	0.0	0.600	o	100	Pipe/Conduit
4.002	18.730	0.093	202.0	0.026	0.00	0.0	0.600	o	150	Pipe/Conduit
1.004	7.660	0.022	341.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
9.000	10.150	0.100	101.5	0.007	5.00	0.0	0.600	o	100	Pipe/Conduit
9.001	4.400	0.791	5.6	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
1.005	22.900	0.359	63.9	0.012	0.00	0.0	0.600	o	225	Pipe/Conduit
10.000	7.710	0.065	118.6	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
10.001	8.220	0.935	8.8	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
11.000	11.410	0.004	2852.5	0.022	5.00	0.0	0.600	o	150	Pipe/Conduit
12.000	8.530	0.072	118.5	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
12.001	11.440	0.096	119.2	0.005	0.00	0.0	0.600	o	100	Pipe/Conduit
12.002	4.600	0.742	6.2	0.005	0.00	0.0	0.600	o	100	Pipe/Conduit
11.001	25.350	0.125	202.2	0.005	0.00	0.0	0.600	o	150	Pipe/Conduit
13.000	9.390	0.079	118.9	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
13.001	13.380	0.113	118.4	0.009	0.00	0.0	0.600	o	100	Pipe/Conduit

#### Network Results Table

PN	US/IL (m)	$\Sigma$ I.Area (ha)	$\Sigma$ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
8.000	22.000	0.011	0.0	2.12	16.6
4.002	20.974	0.090	0.0	0.70	12.4
1.004	20.806	0.162	0.0	0.70	27.9
9.000	21.800	0.007	0.0	0.76	6.0
9.001	21.700	0.010	0.0	3.30	25.9
1.005	20.784	0.184	0.0	1.64	65.2
10.000	21.550	0.003	0.0	0.70	5.5
10.001	21.485	0.006	0.0	2.62	20.6
11.000	21.195	0.022	0.0	0.18	3.2
12.000	22.110	0.003	0.0	0.71	5.5
12.001	22.038	0.008	0.0	0.70	5.5
12.002	21.942	0.013	0.0	3.13	24.6
11.001	21.150	0.040	0.0	0.70	12.4
13.000	22.040	0.003	0.0	0.70	5.5
13.001	21.961	0.012	0.0	0.71	5.5



Tridax Ltd										Page 3	
Honeywood House Whitfield Kent CT16 3EH				Summerfield Nursery							
Date 19/05/2021 File T-2019-114 SW Network Re...				Designed by prl Checked by							
XP Solutions				Network 2020.1.3							



#### Existing Network Details for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
14.000	10.100	0.192	52.6	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
13.002	6.090	0.773	7.9	0.009	0.00	0.0	0.600	o	100	Pipe/Conduit
11.002	19.400	0.525	37.0	0.011	0.00	0.0	0.600	o	150	Pipe/Conduit
15.000	4.260	0.036	118.3	0.002	5.00	0.0	0.600	o	100	Pipe/Conduit
15.001	6.640	0.056	118.6	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
15.002	7.950	0.338	23.5	0.011	0.00	0.0	0.600	o	100	Pipe/Conduit
1.006	17.020	0.450	37.8	0.004	0.00	0.0	0.600	o	225	Pipe/Conduit
16.000	6.250	1.000	6.3	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
17.000	9.270	0.078	118.8	0.005	5.00	0.0	0.600	o	100	Pipe/Conduit
17.001	5.810	0.049	118.6	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit
17.002	7.150	0.060	119.2	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
17.003	12.840	0.323	39.8	0.005	0.00	0.0	0.600	o	100	Pipe/Conduit
1.007	5.580	0.717	7.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
18.000	10.770	0.318	33.9	0.005	5.00	0.0	0.600	o	100	Pipe/Conduit
19.000	3.330	0.028	118.9	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit

#### Network Results Table

PN	US/IL (m)	$\Sigma$ I.Area (ha)	$\Sigma$ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
14.000	22.040	0.003	0.0	1.06	8.4
13.002	21.848	0.024	0.0	2.77	21.8
11.002	21.025	0.075	0.0	1.66	29.4
15.000	20.980	0.002	0.0	0.71	5.5
15.001	20.944	0.005	0.0	0.71	5.5
15.002	20.888	0.016	0.0	1.60	12.6
1.006	20.425	0.285	0.0	2.13	84.8
16.000	21.100	0.003	0.0	3.11	24.5
17.000	20.610	0.005	0.0	0.70	5.5
17.001	20.532	0.005	0.0	0.71	5.5
17.002	20.483	0.008	0.0	0.70	5.5
17.003	20.423	0.013	0.0	1.23	9.6
1.007	19.975	0.301	0.0	4.72	187.6
18.000	21.380	0.005	0.0	1.33	10.4
19.000	21.090	0.003	0.0	0.70	5.5

Tridax Ltd										Page 4	
Honeywood House Whitfield Kent CT16 3EH				Summerfield Nursery							
Date 19/05/2021 File T-2019-114 SW Network Re...				Designed by prl Checked by							
XP Solutions				Network 2020.1.3							

#### Existing Network Details for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
18.001	15.570	0.131	118.9	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
18.002	5.880	0.050	117.6	0.004	0.00	0.0	0.600	o	100	Pipe/Conduit
18.003	9.820	0.781	12.6	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
20.000	17.630	0.440	40.1	0.019	5.00	0.0	0.600	o	100	Pipe/Conduit
21.000	8.340	0.070	119.1	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
21.001	13.370	0.113	118.3	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
21.002	10.670	0.837	12.7	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
22.000	4.300	0.036	119.4	0.005	5.00	0.0	0.600	o	100	Pipe/Conduit
22.001	5.120	0.043	119.1	0.005	0.00	0.0	0.600	o	100	Pipe/Conduit
22.002	6.100	0.441	13.8	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
18.004	11.860	0.325	36.5	0.020	0.00	0.0	0.600	o	150	Pipe/Conduit
23.000	10.740	0.100	107.4	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
23.001	15.800	0.275	57.5	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
23.002	14.720	1.250	11.8	0.006	0.00	0.0	0.600	o	100	Pipe/Conduit
24.000	7.800	1.185	6.6	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
18.005	11.530	0.370	31.2	0.007	0.00	0.0	0.600	o	150	Pipe/Conduit

#### Network Results Table

PN	US/IL (m)	$\Sigma$ I.Area (ha)	$\Sigma$ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
18.001	21.062	0.011	0.0	0.70	5.5
18.002	20.931	0.015	0.0	0.71	5.6
18.003	20.881	0.018	0.0	2.19	17.2
20.000	20.540	0.019	0.0	1.22	9.6
21.000	21.120	0.003	0.0	0.70	5.5
21.001	21.050	0.006	0.0	0.71	5.5
21.002	20.937	0.009	0.0	2.18	17.1
22.000	20.620	0.005	0.0	0.70	5.5
22.001	20.584	0.010	0.0	0.70	5.5
22.002	20.541	0.013	0.0	2.09	16.4
18.004	20.050	0.079	0.0	1.67	29.5
23.000	21.400	0.003	0.0	0.74	5.8
23.001	21.300	0.006	0.0	1.02	8.0
23.002	21.025	0.012	0.0	2.26	17.8
24.000	20.960	0.003	0.0	3.03	23.8
18.005	19.725	0.101	0.0	1.81	32.0



Tridax Ltd		Page 5
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



#### Existing Network Details for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
25.000	6.800	0.057	119.3	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
25.001	10.480	1.158	9.1	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
26.000	6.690	0.056	119.5	0.003	5.00	0.0	0.600	o	100	Pipe/Conduit
26.001	3.380	0.028	120.7	0.003	0.00	0.0	0.600	o	100	Pipe/Conduit
26.002	3.120	0.026	120.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit
26.003	6.360	0.055	115.6	0.012	0.00	0.0	0.600	o	100	Pipe/Conduit
27.000	15.470	0.265	58.4	0.006	5.00	0.0	0.600	o	100	Pipe/Conduit
26.004	8.510	0.830	10.3	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit
28.000	32.100	0.402	79.9	0.022	5.00	0.0	0.600	o	150	Pipe/Conduit
29.000	9.050	1.212	7.5	0.006	5.00	0.0	0.600	o	100	Pipe/Conduit
28.001	20.910	0.033	633.6	0.023	0.00	0.0	0.600	o	225	Pipe/Conduit
18.006	7.620	0.180	42.3	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
1.008	1.000	0.100	10.0	0.010	0.00	0.0	0.600	o	375	Pipe/Conduit
1.009	1.000	0.000	0.0	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit
1.010	1.000	0.000	0.0	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit
1.011	1.000	0.000	0.0	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit

#### Network Results Table

PN	US/IL (m)	$\Sigma$ I.Area (ha)	$\Sigma$ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
25.000	20.620	0.003	0.0	0.70	5.5
25.001	20.563	0.006	0.0	2.58	20.3
26.000	20.400	0.003	0.0	0.70	5.5
26.001	20.344	0.006	0.0	0.70	5.5
26.002	20.316	0.006	0.0	0.70	5.5
26.003	20.290	0.018	0.0	0.71	5.6
27.000	20.500	0.006	0.0	1.01	7.9
26.004	20.235	0.024	0.0	2.43	19.1
28.000	19.790	0.022	0.0	1.13	19.9
29.000	20.550	0.006	0.0	2.85	22.4
28.001	19.313	0.051	0.0	0.51	20.4
18.006	19.280	0.182	0.0	2.02	80.2
1.008	19.100	0.493	0.0	5.76	635.9
1.009	19.000	0.493	0.0	0.00	0.0
1.010	15.200	0.493	0.0	0.00	0.0
1.011	15.200	0.493	0.0	0.00	0.0

Tridax Ltd		Page 6
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



### Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
MHS1.0	23.325	1.350	Open Manhole	1200	1.000	21.975	150				
MHS1.1	23.525	1.725	Open Manhole	1200	1.001	21.800	150	1.000	21.800	150	
MHS2.0	23.240	0.600	Open Manhole	600	2.000	22.640	100				
MHS1.2	23.275	1.532	Open Manhole	1200	1.002	21.743	150	1.001	21.743	150	
								2.000	21.793	100	
MHS1.3	23.000	1.350	Open Manhole	1200	1.003	21.650	150	1.002	21.650	150	
MHS3.0	23.170	0.600	Open Manhole	600	3.000	22.570	100				
MHS3.1	23.170	0.752	Open Manhole	600	3.001	22.418	100	3.000	22.418	100	
MHS3.2	23.270	0.971	Open Manhole	600	3.002	22.299	100	3.001	22.299	100	
MHS4.0	22.890	1.650	Open Manhole	1200	4.000	21.240	150				
MHS5.0	22.650	0.600	Open Manhole	600	5.000	22.050	100				
MHS5.1	22.600	0.600	Open Manhole	600	5.001	22.000	100	5.000	22.000	100	
MHS5.2	22.600	0.686	Open Manhole	600	5.002	21.914	100	5.001	21.914	100	
MHS6.0	22.660	0.600	Open Manhole	600	6.000	22.060	100				
MHS5.3	22.660	0.866	Open Manhole	600	5.003	21.794	100	5.002	21.794	100	
								6.000	21.794	100	
MHS4.1	22.910	1.857	Open Manhole	1200	4.001	21.053	150	4.000	21.053	150	
								5.003	21.103	100	
MHS7.0	23.300	0.600	Open Manhole	600	7.000	22.700	100				
MHS8.0	22.600	0.600	Open Manhole	600	8.000	22.000	100				
MHS4.2	22.735	1.761	Open Manhole	1200	4.002	20.974	150	4.001	20.974	150	
								7.000	21.024	100	
								8.000	21.024	100	
MHS1.4	22.520	1.714	Open Manhole	1200	1.004	20.806	225	1.003	20.881	150	
								3.002	20.931	100	
								4.002	20.881	150	
MHS9.0	22.400	0.600	Open Manhole	600	9.000	21.800	100				
MHS9.1	22.300	0.600	Open Manhole	600	9.001	21.700	100	9.000	21.700	100	
MHS1.5	22.320	1.536	Open Manhole	1200	1.005	20.784	225	1.004	20.784	225	
								9.001	20.909	100	
MHS10.0	22.150	0.600	Open Manhole	600	10.000	21.550	100				
MHS10.1	22.150	0.665	Open Manhole	600	10.001	21.485	100	10.000	21.485	100	
MHS11.0	22.545	1.350	Open Manhole	1200	11.000	21.195	150				
MHS12.0	22.710	0.600	Open Manhole	600	12.000	22.110	100				
MHS12.1	22.680	0.642	Open Manhole	600	12.001	22.038	100	12.000	22.038	100	
MHS12.2	22.700	0.758	Open Manhole	600	12.002	21.942	100	12.001	21.942	100	
MHS11.1	22.500	1.350	Open Manhole	1200	11.001	21.150	150	11.000	21.191	150	41
								12.002	21.200	100	
MHS13.0	22.640	0.600	Open Manhole	600	13.000	22.040	100				
MHS13.1	22.630	0.669	Open Manhole	600	13.001	21.961	100	13.000	21.961	100	

Tridax Ltd									Page 7				
Honeywood House Whitfield Kent CT16 3EH				Summerfield Nursery									
Date 19/05/2021 File T-2019-114 SW Network Re...				Designed by prl Checked by									
XP Solutions				Network 2020.1.3									
<u>Manhole Schedules for Storm</u>													
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)		
MHS14.0	22.640	0.600	Open Manhole	600	14.000	22.040	100						
MHS13.2	22.600	0.752	Open Manhole	600	13.002	21.848	100	13.001	21.848	100			
								14.000	21.848	100			
MHS11.2	22.400	1.375	Open Manhole	600	11.002	21.025	150	11.001	21.025	150			
								13.002	21.075	100			
MHS15.0	21.580	0.600	Open Manhole	600	15.000	20.980	100						
MHS15.1	21.580	0.636	Open Manhole	600	15.001	20.944	100	15.000	20.944	100			
MHS15.2	21.700	0.812	Open Manhole	600	15.002	20.888	100	15.001	20.888	100			
MHS1.6	21.850	1.425	Open Manhole	1200	1.006	20.425	225	1.005	20.425	225			
								10.001	20.550	100			
								11.002	20.500	150			
								15.002	20.550	100			
MHS16.0	21.700	0.600	Open Manhole	600	16.000	21.100	100						
MHS17.0	21.210	0.600	Open Manhole	600	17.000	20.610	100						
MHS17.1	21.210	0.678	Open Manhole	600	17.001	20.532	100	17.000	20.532	100			
MHS17.2	21.210	0.727	Open Manhole	600	17.002	20.483	100	17.001	20.483	100			
MHS17.3	21.200	0.777	Open Manhole	600	17.003	20.423	100	17.002	20.423	100			
MHS1.7	21.400	1.425	Open Manhole	1200	1.007	19.975	225	1.006	19.975	225			
								16.000	20.100	100			
								17.003	20.100	100			
MHS18.0	21.980	0.600	Open Manhole	600	18.000	21.380	100						
MHS19.0	21.690	0.600	Open Manhole	600	19.000	21.090	100						
MHS18.1	21.950	0.888	Open Manhole	600	18.001	21.062	100	18.000	21.062	100			
								19.000	21.062	100			
MHS18.2	21.700	0.769	Open Manhole	600	18.002	20.931	100	18.001	20.931	100			
MHS18.3	21.850	0.969	Open Manhole	600	18.003	20.881	100	18.002	20.881	100			
MHS20.0	21.840	1.300	Open Manhole	1200	20.000	20.540	100						
MHS21.0	21.720	0.600	Open Manhole	600	21.000	21.120	100						
MHS21.1	21.720	0.670	Open Manhole	600	21.001	21.050	100	21.000	21.050	100			
MHS21.2	21.550	0.613	Open Manhole	600	21.002	20.937	100	21.001	20.937	100			
MHS22.0	21.220	0.600	Open Manhole	600	22.000	20.620	100						
MHS22.1	21.275	0.691	Open Manhole	600	22.001	20.584	100	22.000	20.584	100			
MHS22.2	21.300	0.759	Open Manhole	600	22.002	20.541	100	22.001	20.541	100			
MHS18.4	21.400	1.350	Open Manhole	1200	18.004	20.050	150	18.003	20.100	100			
								20.000	20.100	100			
								21.002	20.100	100			
								22.002	20.100	100			
MHS23.0	22.000	0.600	Open Manhole	600	23.000	21.400	100						
MHS23.1	21.900	0.600	Open Manhole	600	23.001	21.300	100	23.000	21.300	100			
MHS23.2	21.625	0.600	Open Manhole	600	23.002	21.025	100	23.001	21.025	100			

Tridax Ltd						Page 8	
Honeywood House Whitfield Kent CT16 3EH			Summerfield Nursery				
Date 19/05/2021			Designed by prl				
File T-2019-114 SW Network Re...			Checked by				
XP Solutions		Network 2020.1.3					



### Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
MHS24.0	21.560	0.600	Open Manhole	600	24.000	20.960	100				
MHS18.5	21.075	1.350	Open Manhole	1200	18.005	19.725	150	18.004	19.725	150	
								23.002	19.775	100	
								24.000	19.775	100	
MHS25.0	21.220	0.600	Open Manhole	600	25.000	20.620	100				
MHS25.1	21.220	0.657	Open Manhole	600	25.001	20.563	100	25.000	20.563	100	
MHS26.0	21.000	0.600	Open Manhole	600	26.000	20.400	100				
MHS26.1	21.000	0.656	Open Manhole	600	26.001	20.344	100	26.000	20.344	100	
MHS26.2	21.000	0.684	Open Manhole	600	26.002	20.316	100	26.001	20.316	100	
MHS26.3	21.025	0.735	Open Manhole	600	26.003	20.290	100	26.002	20.290	100	
MHS27.0	21.100	0.600	Open Manhole	600	27.000	20.500	100				
MHS26.4	21.050	0.815	Open Manhole	600	26.004	20.235	100	26.003	20.235	100	
								27.000	20.235	100	
MHS28.0	20.390	0.600	Open Manhole	1200	28.000	19.790	150				
MHS29.0	21.150	0.600	Open Manhole	600	29.000	20.550	100				
MHS28.1	21.000	1.687	Open Manhole	1200	28.001	19.313	225	28.000	19.388	150	
								29.000	19.338	100	
MHS18.6	21.040	1.760	Open Manhole	1200	18.006	19.280	225	18.005	19.355	150	
								25.001	19.405	100	
								26.004	19.405	100	
								28.001	19.280	225	
pond inlet	21.200	2.100	Open Manhole	1350	1.008	19.100	375	1.007	19.258	225	8
								18.006	19.100	225	
pond outlet	21.200	2.200	Open Manhole	1350	1.009	19.000	375	1.008	19.000	375	
Soakaways	21.200	6.000	Open Manhole	1350	1.010	15.200	375	1.009	19.000	375	3800
dummy	21.200	6.000	Open Manhole	1350	1.011	15.200	375	1.010	15.200	375	
dummy	21.200	6.000	Open Manhole	0		OUTFALL		1.011	15.200	375	

No coordinates have been specified, layout information cannot be produced.

Tridax Ltd						Page 9
Honeywood House Whitfield Kent CT16 3EH			Summerfield Nursery			
Date 19/05/2021 File T-2019-114 SW Network Re...			Designed by prl Checked by			
XP Solutions			Network 2020.1.3			
						

### Pipeline Schedules for Storm

#### Upstream Manhole

PN	Hyd	Diam	MH	C.Level	I.Level	D.Depth	MH	MH DIAM., L*W
	Sect	(mm)	Name	(m)	(m)	(m)	Connection	(mm)
1.000	o	150	MHS1.0	23.325	21.975	1.200	Open Manhole	1200
1.001	o	150	MHS1.1	23.525	21.800	1.575	Open Manhole	1200
2.000	o	100	MHS2.0	23.240	22.640	0.500	Open Manhole	600
1.002	o	150	MHS1.2	23.275	21.743	1.382	Open Manhole	1200
1.003	o	150	MHS1.3	23.000	21.650	1.200	Open Manhole	1200
3.000	o	100	MHS3.0	23.170	22.570	0.500	Open Manhole	600
3.001	o	100	MHS3.1	23.170	22.418	0.652	Open Manhole	600
3.002	o	100	MHS3.2	23.270	22.299	0.871	Open Manhole	600
4.000	o	150	MHS4.0	22.890	21.240	1.500	Open Manhole	1200
5.000	o	100	MHS5.0	22.650	22.050	0.500	Open Manhole	600
5.001	o	100	MHS5.1	22.600	22.000	0.500	Open Manhole	600
5.002	o	100	MHS5.2	22.600	21.914	0.586	Open Manhole	600
6.000	o	100	MHS6.0	22.660	22.060	0.500	Open Manhole	600
5.003	o	100	MHS5.3	22.660	21.794	0.766	Open Manhole	600
4.001	o	150	MHS4.1	22.910	21.053	1.707	Open Manhole	1200

#### Downstream Manhole

PN	Length	Slope	MH	C.Level	I.Level	D.Depth	MH	MH DIAM., L*W
	(m)	(1:X)	Name	(m)	(m)	(m)	Connection	(mm)
1.000	20.700	118.3	MHS1.1	23.525	21.800	1.575	Open Manhole	1200
1.001	11.600	202.8	MHS1.2	23.275	21.743	1.382	Open Manhole	1200
2.000	15.750	18.6	MHS1.2	23.275	21.793	1.382	Open Manhole	1200
1.002	17.440	187.9	MHS1.3	23.000	21.650	1.200	Open Manhole	1200
1.003	21.120	27.5	MHS1.4	22.520	20.881	1.489	Open Manhole	1200
3.000	18.000	118.4	MHS3.1	23.170	22.418	0.652	Open Manhole	600
3.001	14.110	118.6	MHS3.2	23.270	22.299	0.871	Open Manhole	600
3.002	3.200	2.3	MHS3.4	22.520	20.931	1.489	Open Manhole	1200
4.000	22.220	118.8	MHS4.1	22.910	21.053	1.707	Open Manhole	1200
5.000	3.960	79.2	MHS5.1	22.600	22.000	0.500	Open Manhole	600
5.001	10.200	118.6	MHS5.2	22.600	21.914	0.586	Open Manhole	600
5.002	14.100	117.7	MHS5.3	22.660	21.794	0.766	Open Manhole	600
6.000	8.410	31.6	MHS5.3	22.660	21.794	0.766	Open Manhole	600
5.003	10.010	14.5	MHS4.1	22.910	21.103	1.707	Open Manhole	1200
4.001	16.000	202.0	MHS4.2	22.735	20.974	1.611	Open Manhole	1200

Tridax Ltd		Page 10
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021 File T-2019-114 SW Network Re...	Designed by prl Checked by	
XP Solutions	Network 2020.1.3	

### Pipeline Schedules for Storm

#### Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
7.000	o	100	MHS7.0	23.300	22.700	0.500	Open Manhole	600
8.000	o	100	MHS8.0	22.600	22.000	0.500	Open Manhole	600
4.002	o	150	MHS4.2	22.735	20.974	1.611	Open Manhole	1200
1.004	o	225	MHS1.4	22.520	20.806	1.489	Open Manhole	1200
9.000	o	100	MHS9.0	22.400	21.800	0.500	Open Manhole	600
9.001	o	100	MHS9.1	22.300	21.700	0.500	Open Manhole	600
1.005	o	225	MHS1.5	22.320	20.784	1.311	Open Manhole	1200
10.000	o	100	MHS10.0	22.150	21.550	0.500	Open Manhole	600
10.001	o	100	MHS10.1	22.150	21.485	0.565	Open Manhole	600
11.000	o	150	MHS11.0	22.545	21.195	1.200	Open Manhole	1200
12.000	o	100	MHS12.0	22.710	22.110	0.500	Open Manhole	600
12.001	o	100	MHS12.1	22.680	22.038	0.542	Open Manhole	600
12.002	o	100	MHS12.2	22.700	21.942	0.658	Open Manhole	600

#### Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
7.000	12.610	7.5	MHS4.2	22.735	21.024	1.611	Open Manhole	1200
8.000	13.120	13.4	MHS4.2	22.735	21.024	1.611	Open Manhole	1200
4.002	18.730	202.0	MHS1.4	22.520	20.881	1.489	Open Manhole	1200
1.004	7.660	341.0	MHS1.5	22.320	20.784	1.311	Open Manhole	1200
9.000	10.150	101.5	MHS9.1	22.300	21.700	0.500	Open Manhole	600
9.001	4.400	5.6	MHS1.5	22.320	20.909	1.311	Open Manhole	1200
1.005	22.900	63.9	MHS1.6	21.850	20.425	1.200	Open Manhole	1200
10.000	7.710	118.6	MHS10.1	22.150	21.485	0.565	Open Manhole	600
10.001	8.220	8.8	MHS1.6	21.850	20.550	1.200	Open Manhole	1200
11.000	11.410	2852.5	MHS11.1	22.500	21.191	1.159	Open Manhole	1200
12.000	8.530	118.5	MHS12.1	22.680	22.038	0.542	Open Manhole	600
12.001	11.440	119.2	MHS12.2	22.700	21.942	0.658	Open Manhole	600
12.002	4.600	6.2	MHS11.1	22.500	21.200	1.200	Open Manhole	1200

Tridax Ltd						Page 11
Honeywood House Whitfield Kent CT16 3EH						
Date 19/05/2021 File T-2019-114 SW Network Re...						
XP Solutions						
Network 2020.1.3						



### PIPELINE SCHEDULES for Storm

#### Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
11.001	o	150	MHS11.1	22.500	21.150	1.200	Open Manhole	1200
13.000	o	100	MHS13.0	22.640	22.040	0.500	Open Manhole	600
13.001	o	100	MHS13.1	22.630	21.961	0.569	Open Manhole	600
14.000	o	100	MHS14.0	22.640	22.040	0.500	Open Manhole	600
13.002	o	100	MHS13.2	22.600	21.848	0.652	Open Manhole	600
11.002	o	150	MHS11.2	22.400	21.025	1.225	Open Manhole	600
15.000	o	100	MHS15.0	21.580	20.980	0.500	Open Manhole	600
15.001	o	100	MHS15.1	21.580	20.944	0.536	Open Manhole	600
15.002	o	100	MHS15.2	21.700	20.888	0.712	Open Manhole	600
1.006	o	225	MHS1.6	21.850	20.425	1.200	Open Manhole	1200
16.000	o	100	MHS16.0	21.700	21.100	0.500	Open Manhole	600
17.000	o	100	MHS17.0	21.210	20.610	0.500	Open Manhole	600
17.001	o	100	MHS17.1	21.210	20.532	0.578	Open Manhole	600
17.002	o	100	MHS17.2	21.210	20.483	0.627	Open Manhole	600
17.003	o	100	MHS17.3	21.200	20.423	0.677	Open Manhole	600

#### Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
11.001	25.350	202.2	MHS11.2	22.400	21.025	1.225	Open Manhole	600
13.000	9.390	118.9	MHS13.1	22.630	21.961	0.569	Open Manhole	600
13.001	13.380	118.4	MHS13.2	22.600	21.848	0.652	Open Manhole	600
14.000	10.100	52.6	MHS13.2	22.600	21.848	0.652	Open Manhole	600
13.002	6.090	7.9	MHS11.2	22.400	21.075	1.225	Open Manhole	600
11.002	19.400	37.0	MHS1.6	21.850	20.500	1.200	Open Manhole	1200
15.000	4.260	118.3	MHS15.1	21.580	20.944	0.536	Open Manhole	600
15.001	6.640	118.6	MHS15.2	21.700	20.888	0.712	Open Manhole	600
15.002	7.950	23.5	MHS1.6	21.850	20.550	1.200	Open Manhole	1200
1.006	17.020	37.8	MHS1.7	21.400	19.975	1.200	Open Manhole	1200
16.000	6.250	6.3	MHS1.7	21.400	20.100	1.200	Open Manhole	1200
17.000	9.270	118.8	MHS17.1	21.210	20.532	0.578	Open Manhole	600
17.001	5.810	118.6	MHS17.2	21.210	20.483	0.627	Open Manhole	600
17.002	7.150	119.2	MHS17.3	21.200	20.423	0.677	Open Manhole	600
17.003	12.840	39.8	MHS1.7	21.400	20.100	1.200	Open Manhole	1200

Tridax Ltd						Page 12
Honeywood House Whitfield Kent CT16 3EH			Summerfield Nursery			
Date 19/05/2021 File T-2019-114 SW Network Re...			Designed by prl Checked by			
XP Solutions			Network 2020.1.3			



### Pipeline Schedules for Storm

#### Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.007	o	225	MHS1.7	21.400	19.975	1.200	Open Manhole	1200
18.000	o	100	MHS18.0	21.980	21.380	0.500	Open Manhole	600
19.000	o	100	MHS19.0	21.690	21.090	0.500	Open Manhole	600
18.001	o	100	MHS18.1	21.950	21.062	0.788	Open Manhole	600
18.002	o	100	MHS18.2	21.700	20.931	0.669	Open Manhole	600
18.003	o	100	MHS18.3	21.850	20.881	0.869	Open Manhole	600
20.000	o	100	MHS20.0	21.840	20.540	1.200	Open Manhole	1200
21.000	o	100	MHS21.0	21.720	21.120	0.500	Open Manhole	600
21.001	o	100	MHS21.1	21.720	21.050	0.570	Open Manhole	600
21.002	o	100	MHS21.2	21.550	20.937	0.513	Open Manhole	600
22.000	o	100	MHS22.0	21.220	20.620	0.500	Open Manhole	600
22.001	o	100	MHS22.1	21.275	20.584	0.591	Open Manhole	600
22.002	o	100	MHS22.2	21.300	20.541	0.659	Open Manhole	600
18.004	o	150	MHS18.4	21.400	20.050	1.200	Open Manhole	1200

#### Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.007	5.580	7.8	pond inlet	21.200	19.258	1.717	Open Manhole	1350
18.000	10.770	33.9	MHS18.1	21.950	21.062	0.788	Open Manhole	600
19.000	3.330	118.9	MHS18.1	21.950	21.062	0.788	Open Manhole	600
18.001	15.570	118.9	MHS18.2	21.700	20.931	0.669	Open Manhole	600
18.002	5.880	117.6	MHS18.3	21.850	20.881	0.869	Open Manhole	600
18.003	9.820	12.6	MHS18.4	21.400	20.100	1.200	Open Manhole	1200
20.000	17.630	40.1	MHS18.4	21.400	20.100	1.200	Open Manhole	1200
21.000	8.340	119.1	MHS21.1	21.720	21.050	0.570	Open Manhole	600
21.001	13.370	118.3	MHS21.2	21.550	20.937	0.513	Open Manhole	600
21.002	10.670	12.7	MHS18.4	21.400	20.100	1.200	Open Manhole	1200
22.000	4.300	119.4	MHS22.1	21.275	20.584	0.591	Open Manhole	600
22.001	5.120	119.1	MHS22.2	21.300	20.541	0.659	Open Manhole	600
22.002	6.100	13.8	MHS18.4	21.400	20.100	1.200	Open Manhole	1200
18.004	11.860	36.5	MHS18.5	21.075	19.725	1.200	Open Manhole	1200

Tridax Ltd		Page 13
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021 File T-2019-114 SW Network Re...	Designed by prl Checked by	
XP Solutions	Network 2020.1.3	

### Pipeline Schedules for Storm

#### Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
23.000	o	100	MHS23.0	22.000	21.400	0.500	Open Manhole	600
23.001	o	100	MHS23.1	21.900	21.300	0.500	Open Manhole	600
23.002	o	100	MHS23.2	21.625	21.025	0.500	Open Manhole	600
24.000	o	100	MHS24.0	21.560	20.960	0.500	Open Manhole	600
18.005	o	150	MHS18.5	21.075	19.725	1.200	Open Manhole	1200
25.000	o	100	MHS25.0	21.220	20.620	0.500	Open Manhole	600
25.001	o	100	MHS25.1	21.220	20.563	0.557	Open Manhole	600
26.000	o	100	MHS26.0	21.000	20.400	0.500	Open Manhole	600
26.001	o	100	MHS26.1	21.000	20.344	0.556	Open Manhole	600
26.002	o	100	MHS26.2	21.000	20.316	0.584	Open Manhole	600
26.003	o	100	MHS26.3	21.025	20.290	0.635	Open Manhole	600
27.000	o	100	MHS27.0	21.100	20.500	0.500	Open Manhole	600
26.004	o	100	MHS26.4	21.050	20.235	0.715	Open Manhole	600
28.000	o	150	MHS28.0	20.390	19.790	0.450	Open Manhole	1200
29.000	o	100	MHS29.0	21.150	20.550	0.500	Open Manhole	600

#### Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
23.000	10.740	107.4	MHS23.1	21.900	21.300	0.500	Open Manhole	600
23.001	15.800	57.5	MHS23.2	21.625	21.025	0.500	Open Manhole	600
23.002	14.720	11.8	MHS18.5	21.075	19.775	1.200	Open Manhole	1200
24.000	7.800	6.6	MHS18.5	21.075	19.775	1.200	Open Manhole	1200
18.005	11.530	31.2	MHS18.6	21.040	19.355	1.535	Open Manhole	1200
25.000	6.800	119.3	MHS25.1	21.220	20.563	0.557	Open Manhole	600
25.001	10.480	9.1	MHS18.6	21.040	19.405	1.535	Open Manhole	1200
26.000	6.690	119.5	MHS26.1	21.000	20.344	0.556	Open Manhole	600
26.001	3.380	120.7	MHS26.2	21.000	20.316	0.584	Open Manhole	600
26.002	3.120	120.0	MHS26.3	21.025	20.290	0.635	Open Manhole	600
26.003	6.360	115.6	MHS26.4	21.050	20.235	0.715	Open Manhole	600
27.000	15.470	58.4	MHS26.4	21.050	20.235	0.715	Open Manhole	600
26.004	8.510	10.3	MHS18.6	21.040	19.405	1.535	Open Manhole	1200
28.000	32.100	79.9	MHS28.1	21.000	19.388	1.462	Open Manhole	1200
29.000	9.050	7.5	MHS28.1	21.000	19.338	1.562	Open Manhole	1200

Tridax Ltd		Page 14
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



### Pipeline Schedules for Storm

#### Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
28.001	o	225	MHS28.1	21.000	19.313	1.462	Open Manhole	1200
18.006	o	225	MHS18.6	21.040	19.280	1.535	Open Manhole	1200
1.008	o	375	pond inlet	21.200	19.100	1.725	Open Manhole	1350
1.009	o	375	pond outlet	21.200	19.000	1.825	Open Manhole	1350
1.010	o	375	Soakaways	21.200	15.200	5.625	Open Manhole	1350
1.011	o	375	dummy	21.200	15.200	5.625	Open Manhole	1350

#### Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
28.001	20.910	633.6	MHS18.6	21.040	19.280	1.535	Open Manhole	1200
18.006	7.620	42.3	pond inlet	21.200	19.100	1.875	Open Manhole	1350
1.008	1.000	10.0	pond outlet	21.200	19.000	1.825	Open Manhole	1350
1.009	1.000	0.0	Soakaways	21.200	19.000	1.825	Open Manhole	1350
1.010	1.000	0.0	dummy	21.200	15.200	5.625	Open Manhole	1350
1.011	1.000	0.0	dummy	21.200	15.200	5.625	Open Manhole	0

#### Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D, L (mm)	W (m)
1.011	dummy	21.200	15.200	0.000	0	0

#### Simulation Criteria for Storm

Volumetric Runoff Coeff 0.750 Additional Flow - % of Total Flow 0.000  
Areal Reduction Factor 1.000 MADD Factor \* 10m³/ha Storage 2.000  
Hot Start (mins) 0 Inlet Coeffiecient 0.800  
Hot Start Level (mm) 0 Flow per Person per Day (l/per/day) 0.000  
Manhole Headloss Coeff (Global) 0.500 Run Time (mins) 60  
Foul Sewage per hectare (l/s) 0.000 Output Interval (mins) 1

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0  
Number of Online Controls 1 Number of Storage Structures 2 Number of Real Time Controls 0

#### Synthetic Rainfall Details

Rainfall Model FEH Return Period (years) 30

Tridax Ltd		Page 15
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



#### Synthetic Rainfall Details

FEH Rainfall Version	2013	Winter Storms	No
Site Location	GB 627768 156284 TR 27768 56284	Cv (Summer)	0.750
Data Type	Point	Cv (Winter)	0.840
Summer Storms	Yes	Storm Duration (mins)	30

Tridax Ltd		Page 16
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



Online Controls for Storm

Pump Manhole: dummy, DS/PN: 1.011, Volume (m³): 8.5

Invert Level (m) 15.200

Depth (m)	Flow (l/s)								
0.200	0.0000	1.400	0.0000	2.600	0.0000	3.800	0.0000	5.000	0.0000
0.400	0.0000	1.600	0.0000	2.800	0.0000	4.000	0.0000	5.200	0.0000
0.600	0.0000	1.800	0.0000	3.000	0.0000	4.200	0.0000	5.400	0.0000
0.800	0.0000	2.000	0.0000	3.200	0.0000	4.400	0.0000	5.600	0.0000
1.000	0.0000	2.200	0.0000	3.400	0.0000	4.600	0.0000	5.800	0.0000
1.200	0.0000	2.400	0.0000	3.600	0.0000	4.800	0.0000	6.000	0.0000

Tridax Ltd	Page 17
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery
Date 19/05/2021	Designed by prl
File T-2019-114 SW Network Re...	Checked by
XP Solutions	Network 2020.1.3



### Storage Structures for Storm

#### Tank or Pond Manhole: pond outlet, DS/PN: 1.009

Invert Level (m) 19.000

Depth (m)	Area (m <sup>2</sup> )								
0.000	28.0	0.500	75.0	1.000	136.0	1.500	211.0	2.200	301.0

#### Lined Soakaway Manhole: Soakaways, DS/PN: 1.010

Infiltation Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.50
Infiltation Coefficient Side (m/hr)	6.12000	Pit Multiplier	1.5
Safety Factor	2.0	Number Required	3
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	15.200	Cap Infiltration Depth (m)	2.800

Tridax Ltd		Page 18
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000  
 Hot Start (mins) 0 MADD Factor \* 10m³/ha Storage 2.000  
 Hot Start Level (mm) 0 Inlet Coeffiecient 0.800  
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000  
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0  
 Number of Online Controls 1 Number of Storage Structures 2 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH	Data Type	Point
FEH Rainfall Version	2013	Cv (Summer)	0.750
Site Location	GB 627768 156284 TR 27768 56284	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep 2.5 Second Increment (Extended)	
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)	Summer and Winter
Duration(s) (mins) 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440	
Return Period(s) (years) 2, 30, 100	
Climate Change (%) 0, 0, 20	

PN	Event	Water			Flooded			Pipe	
		US/CL	Level	Volume	Flow / Cap.	Discharge Vol (m³)	(l/s)	Status	
1.000	30 minute 2 year Summer I+0%	23.325	22.023	0.000	0.22	2.171	3.4	OK	
1.001	30 minute 2 year Summer I+0%	23.525	21.857	0.000	0.30	2.171	3.4	OK	
2.000	30 minute 2 year Summer I+0%	23.240	22.660	0.000	0.09	0.752	1.2	OK	
1.002	30 minute 2 year Summer I+0%	23.275	21.824	0.000	0.56	4.510	6.7	OK	
1.003	30 minute 2 year Summer I+0%	23.000	21.699	0.000	0.23	5.009	7.4	OK	
3.000	30 minute 2 year Summer I+0%	23.170	22.596	0.000	0.15	0.501	0.8	OK	
3.001	30 minute 2 year Summer I+0%	23.170	22.454	0.000	0.28	1.003	1.5	OK	
3.002	30 minute 2 year Summer I+0%	23.270	22.313	0.000	0.05	1.002	1.5	OK	
4.000	30 minute 2 year Summer I+0%	22.890	21.285	0.000	0.20	1.921	3.0	OK	
5.000	30 minute 2 year Summer I+0%	22.650	22.064	0.000	0.05	0.167	0.3	OK	
5.001	30 minute 2 year Summer I+0%	22.600	22.023	0.000	0.12	0.418	0.6	OK	
5.002	30 minute 2 year Summer I+0%	22.600	21.943	0.000	0.18	0.668	0.9	OK	
6.000	30 minute 2 year Summer I+0%	22.660	22.071	0.000	0.03	0.167	0.3	OK	
5.003	30 minute 2 year Summer I+0%	22.660	21.815	0.000	0.10	1.002	1.4	OK	
4.001	30 minute 2 year Summer I+0%	22.910	21.126	0.000	0.47	3.674	5.5	OK	
7.000	30 minute 2 year Summer I+0%	23.300	22.715	0.000	0.06	0.752	1.2	OK	
8.000	30 minute 2 year Summer I+0%	22.600	22.020	0.000	0.09	0.919	1.5	OK	
4.002	30 minute 2 year Summer I+0%	22.735	21.089	0.000	0.93	7.514	10.9	OK	
1.004	30 minute 2 year Summer I+0%	22.520	20.979	0.000	0.94	13.521	19.5	OK	
9.000	30 minute 2 year Summer I+0%	22.400	21.827	0.000	0.17	0.585	0.9	OK	
9.001	30 minute 2 year Summer I+0%	22.300	21.715	0.000	0.06	0.835	1.3	OK	
1.005	30 minute 2 year Summer I+0%	22.320	20.878	0.000	0.37	15.354	22.0	OK	
10.000	30 minute 2 year Summer I+0%	22.150	21.569	0.000	0.08	0.251	0.4	OK	
10.001	30 minute 2 year Summer I+0%	22.150	21.498	0.000	0.04	0.501	0.7	OK	
11.000	30 minute 2 year Summer I+0%	22.545	21.274	0.000	0.54	1.837	2.9	OK	
12.000	30 minute 2 year Summer I+0%	22.710	22.128	0.000	0.08	0.251	0.4	OK	

Tridax Ltd		Page 19
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	Event	US/CL	Water	Flooded	Pipe			Status
			Level (m)	Volume (m³)	Flow / Cap.	Discharge Vol (m³)	Flow (l/s)	
12.001	30 minute 2 year Summer I+0%	22.680	22.067	0.000	0.19	0.668	1.0	OK
12.002	30 minute 2 year Summer I+0%	22.700	21.960	0.000	0.07	1.085	1.5	OK
11.001	30 minute 2 year Summer I+0%	22.500	21.218	0.000	0.42	3.339	5.0	OK
13.000	30 minute 2 year Summer I+0%	22.640	22.058	0.000	0.08	0.251	0.4	OK
13.001	30 minute 2 year Summer I+0%	22.630	21.996	0.000	0.27	1.003	1.4	OK
14.000	30 minute 2 year Summer I+0%	22.640	22.054	0.000	0.05	0.251	0.4	OK
13.002	30 minute 2 year Summer I+0%	22.600	21.874	0.000	0.15	2.004	2.9	OK
11.002	30 minute 2 year Summer I+0%	22.400	21.084	0.000	0.33	6.260	9.0	OK
15.000	30 minute 2 year Summer I+0%	21.580	20.995	0.000	0.06	0.167	0.3	OK
15.001	30 minute 2 year Summer I+0%	21.580	20.967	0.000	0.12	0.418	0.6	OK
15.002	30 minute 2 year Summer I+0%	21.700	20.915	0.000	0.16	1.336	1.9	OK
1.006	30 minute 2 year Summer I+0%	21.850	20.530	0.000	0.45	23.777	33.7	OK
16.000	30 minute 2 year Summer I+0%	21.700	21.109	0.000	0.02	0.251	0.4	OK
17.000	30 minute 2 year Summer I+0%	21.210	20.634	0.000	0.13	0.418	0.7	OK
17.001	30 minute 2 year Summer I+0%	21.210	20.556	0.000	0.13	0.417	0.7	OK
17.002	30 minute 2 year Summer I+0%	21.210	20.513	0.000	0.20	0.668	1.0	OK
17.003	30 minute 2 year Summer I+0%	21.200	20.451	0.000	0.17	1.085	1.6	OK
1.007	30 minute 2 year Summer I+0%	21.400	20.059	0.000	0.30	25.104	35.6	OK
18.000	30 minute 2 year Summer I+0%	21.980	21.397	0.000	0.07	0.418	0.7	OK
19.000	30 minute 2 year Summer I+0%	21.690	21.110	0.000	0.09	0.251	0.4	OK
18.001	30 minute 2 year Summer I+0%	21.950	21.097	0.000	0.26	0.918	1.4	OK
18.002	30 minute 2 year Summer I+0%	21.700	20.973	0.000	0.37	1.252	1.8	OK
18.003	30 minute 2 year Summer I+0%	21.850	20.906	0.000	0.14	1.502	2.2	OK
20.000	30 minute 2 year Summer I+0%	21.840	20.575	0.000	0.27	1.587	2.5	OK
21.000	30 minute 2 year Summer I+0%	21.720	21.139	0.000	0.08	0.251	0.4	OK
21.001	30 minute 2 year Summer I+0%	21.720	21.075	0.000	0.14	0.501	0.7	OK
21.002	30 minute 2 year Summer I+0%	21.550	20.954	0.000	0.07	0.752	1.1	OK
22.000	30 minute 2 year Summer I+0%	21.220	20.645	0.000	0.14	0.418	0.7	OK
22.001	30 minute 2 year Summer I+0%	21.275	20.618	0.000	0.26	0.835	1.2	OK
22.002	30 minute 2 year Summer I+0%	21.300	20.563	0.000	0.11	1.085	1.6	OK
18.004	30 minute 2 year Summer I+0%	21.400	20.112	0.000	0.36	6.594	9.6	OK
23.000	30 minute 2 year Summer I+0%	22.000	21.418	0.000	0.07	0.251	0.4	OK
23.001	30 minute 2 year Summer I+0%	21.900	21.321	0.000	0.10	0.501	0.7	OK
23.002	30 minute 2 year Summer I+0%	21.625	21.045	0.000	0.08	1.002	1.4	OK
24.000	30 minute 2 year Summer I+0%	21.560	20.969	0.000	0.02	0.251	0.4	OK
18.005	30 minute 2 year Summer I+0%	21.075	19.793	0.000	0.42	8.428	12.2	OK
25.000	30 minute 2 year Summer I+0%	21.220	20.639	0.000	0.08	0.251	0.4	OK
25.001	30 minute 2 year Summer I+0%	21.220	20.576	0.000	0.04	0.501	0.7	OK
26.000	30 minute 2 year Summer I+0%	21.000	20.419	0.000	0.08	0.251	0.4	OK
26.001	30 minute 2 year Summer I+0%	21.000	20.371	0.000	0.16	0.501	0.7	OK
26.002	30 minute 2 year Summer I+0%	21.000	20.344	0.000	0.16	0.501	0.7	OK
26.003	30 minute 2 year Summer I+0%	21.025	20.335	0.000	0.42	1.503	2.1	OK
27.000	30 minute 2 year Summer I+0%	21.100	20.522	0.000	0.10	0.501	0.8	OK
26.004	30 minute 2 year Summer I+0%	21.050	20.262	0.000	0.16	2.003	2.9	OK
28.000	30 minute 2 year Summer I+0%	20.390	19.829	0.000	0.15	1.837	2.9	OK
29.000	30 minute 2 year Summer I+0%	21.150	20.563	0.000	0.04	0.501	0.8	OK
28.001	30 minute 2 year Summer I+0%	21.000	19.417	0.000	0.40	4.260	6.2	OK
18.006	30 minute 2 year Summer I+0%	21.040	19.375	0.000	0.37	15.187	22.2	OK
1.008	30 minute 2 year Summer I+0%	21.200	19.282	0.000	0.47	41.114	58.2	OK
1.009	30 minute 2 year Summer I+0%	21.200	19.206	0.000	0.59	40.953	53.6	OK
1.010	30 minute 2 year Winter I+0%	21.200	16.722	0.000	0.04	0.103	3.8	SURCHARGED
1.011	30 minute 2 year Winter I+0%	21.200	16.722	0.000	0.00	0.000	0.0	SURCHARGED

Tridax Ltd		Page 20
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



30 year Return Period Summary of Critical Results by Maximum Level (Rank 1)  
for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0  
 Number of Online Controls 1 Number of Storage Structures 2 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH	Data Type	Point
FEH Rainfall Version	2013	Cv (Summer)	0.750
Site Location	GB 627768 156284 TR 27768 56284	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)	Summer and Winter
Duration(s) (mins)	30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 20

PN	Event	US/CL	Water	Flooded	Pipe			
			Level (m)	Volume (m³)	Flow / Cap.	Discharge Vol (m³)	Flow (l/s)	Status
1.000	30 minute 30 year Summer I+0%	23.325	22.052	0.000	0.52	5.049	8.0	OK
1.001	30 minute 30 year Summer I+0%	23.525	21.970	0.000	0.71	5.049	7.9	SURCHARGED
2.000	30 minute 30 year Summer I+0%	23.240	22.671	0.000	0.21	1.748	2.8	OK
<b>1.002 30 minute 30 year Summer I+0%</b>	<b>23.275 21.943</b>	<b>0.000</b>	<b>1.26</b>	<b>10.486</b>	<b>15.1</b>	<b>SURCHARGED</b>		
1.003	30 minute 30 year Summer I+0%	23.000	21.727	0.000	0.52	11.651	16.7	OK
3.000	30 minute 30 year Summer I+0%	23.170	22.611	0.000	0.35	1.165	1.8	OK
3.001	30 minute 30 year Summer I+0%	23.170	22.481	0.000	0.71	2.330	3.7	OK
3.002	30 minute 30 year Summer I+0%	23.270	22.322	0.000	0.12	2.330	3.7	OK
4.000	30 minute 30 year Summer I+0%	22.890	21.553	0.000	0.39	4.465	6.1	SURCHARGED
5.000	30 minute 30 year Summer I+0%	22.650	22.072	0.000	0.11	0.388	0.6	OK
5.001	30 minute 30 year Summer I+0%	22.600	22.038	0.000	0.30	0.971	1.6	OK
5.002	30 minute 30 year Summer I+0%	22.600	21.964	0.000	0.48	1.553	2.6	OK
6.000	30 minute 30 year Summer I+0%	22.660	22.076	0.000	0.06	0.388	0.6	OK
5.003	30 minute 30 year Summer I+0%	22.660	21.828	0.000	0.26	2.330	3.8	OK
<b>4.001 30 minute 30 year Summer I+0%</b>	<b>22.910 21.522</b>	<b>0.000</b>	<b>1.00</b>	<b>8.544</b>	<b>11.5</b>	<b>SURCHARGED</b>		
7.000	30 minute 30 year Summer I+0%	23.300	22.724	0.000	0.13	1.748	2.8	OK
8.000	30 minute 30 year Summer I+0%	22.600	22.031	0.000	0.21	2.136	3.4	OK
<b>4.002 30 minute 30 year Summer I+0%</b>	<b>22.735 21.447</b>	<b>0.000</b>	<b>1.93</b>	<b>17.477</b>	<b>22.5</b>	<b>SURCHARGED</b>		
<b>1.004 30 minute 30 year Summer I+0%</b>	<b>22.520 21.090</b>	<b>0.000</b>	<b>2.03</b>	<b>31.458</b>	<b>42.5</b>	<b>SURCHARGED</b>		
9.000	30 minute 30 year Summer I+0%	22.400	21.843	0.000	0.39	1.359	2.2	OK
9.001	30 minute 30 year Summer I+0%	22.300	21.725	0.000	0.14	1.942	3.1	OK
1.005	30 minute 30 year Summer I+0%	22.320	20.938	0.000	0.81	35.730	48.1	OK
10.000	30 minute 30 year Summer I+0%	22.150	21.579	0.000	0.18	0.583	0.9	OK
10.001	30 minute 30 year Summer I+0%	22.150	21.506	0.000	0.10	1.165	1.9	OK
<b>11.000 30 minute 30 year Winter I+0%</b>	<b>22.545 21.360</b>	<b>0.000</b>	<b>1.16</b>	<b>4.784</b>	<b>6.2</b>	<b>SURCHARGED</b>		
12.000	30 minute 30 year Summer I+0%	22.710	22.139	0.000	0.18	0.583	0.9	OK

Tridax Ltd		Page 21
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



30 year Return Period Summary of Critical Results by Maximum Level (Rank 1)  
for Storm

PN	Event	US/CL	Water	Flooded	Pipe			Status
			Level (m)	Volume (m³)	Flow / Cap.	Discharge Vol (m³)	Flow (l/s)	
12.001	30 minute 30 year Summer I+0%	22.680	22.088	0.000	0.49	1.553	2.5	OK
12.002	30 minute 30 year Summer I+0%	22.700	21.972	0.000	0.19	2.524	4.1	OK
11.001	30 minute 30 year Summer I+0%	22.500	21.292	0.000	1.00	7.767	11.8	OK
13.000	30 minute 30 year Summer I+0%	22.640	22.068	0.000	0.18	0.583	0.9	OK
13.001	30 minute 30 year Summer I+0%	22.630	22.026	0.000	0.73	2.330	3.8	OK
14.000	30 minute 30 year Summer I+0%	22.640	22.063	0.000	0.12	0.583	0.9	OK
13.002	30 minute 30 year Summer I+0%	22.600	21.892	0.000	0.39	4.660	7.6	OK
11.002	30 minute 30 year Summer I+0%	22.400	21.129	0.000	0.82	14.563	22.5	OK
15.000	30 minute 30 year Summer I+0%	21.580	21.004	0.000	0.13	0.388	0.6	OK
15.001	30 minute 30 year Summer I+0%	21.580	20.983	0.000	0.32	0.971	1.6	OK
15.002	30 minute 30 year Summer I+0%	21.700	20.935	0.000	0.45	3.107	5.1	OK
1.006	30 minute 30 year Summer I+0%	21.850	20.644	0.000	1.00	55.341	75.6	OK
16.000	30 minute 30 year Summer I+0%	21.700	21.113	0.000	0.04	0.583	0.9	OK
17.000	30 minute 30 year Summer I+0%	21.210	20.647	0.000	0.30	0.971	1.5	OK
17.001	30 minute 30 year Summer I+0%	21.210	20.570	0.000	0.31	0.971	1.5	OK
17.002	30 minute 30 year Summer I+0%	21.210	20.533	0.000	0.50	1.553	2.5	OK
17.003	30 minute 30 year Summer I+0%	21.200	20.470	0.000	0.45	2.524	4.1	OK
1.007	30 minute 30 year Summer I+0%	21.400	20.110	0.000	0.67	58.447	80.3	OK
18.000	30 minute 30 year Summer I+0%	21.980	21.406	0.000	0.16	0.971	1.5	OK
19.000	30 minute 30 year Summer I+0%	21.690	21.126	0.000	0.20	0.583	0.9	OK
18.001	30 minute 30 year Summer I+0%	21.950	21.121	0.000	0.65	2.136	3.4	OK
18.002	30 minute 30 year Summer I+0%	21.700	21.008	0.000	0.95	2.913	4.7	OK
18.003	30 minute 30 year Summer I+0%	21.850	20.922	0.000	0.35	3.495	5.6	OK
20.000	30 minute 30 year Summer I+0%	21.840	20.598	0.000	0.64	3.689	5.8	OK
21.000	30 minute 30 year Summer I+0%	21.720	21.149	0.000	0.18	0.583	0.9	OK
21.001	30 minute 30 year Summer I+0%	21.720	21.092	0.000	0.36	1.165	1.9	OK
21.002	30 minute 30 year Summer I+0%	21.550	20.966	0.000	0.18	1.748	2.8	OK
22.000	30 minute 30 year Summer I+0%	21.220	20.659	0.000	0.32	0.971	1.5	OK
22.001	30 minute 30 year Summer I+0%	21.275	20.644	0.000	0.65	1.942	3.1	OK
22.002	30 minute 30 year Summer I+0%	21.300	20.577	0.000	0.28	2.524	4.1	OK
18.004	30 minute 30 year Summer I+0%	21.400	20.214	0.000	0.89	15.339	23.8	SURCHARGED
23.000	30 minute 30 year Summer I+0%	22.000	21.427	0.000	0.17	0.583	0.9	OK
23.001	30 minute 30 year Summer I+0%	21.900	21.334	0.000	0.25	1.165	1.9	OK
23.002	30 minute 30 year Summer I+0%	21.625	21.057	0.000	0.23	2.330	3.8	OK
24.000	30 minute 30 year Summer I+0%	21.560	20.973	0.000	0.04	0.583	0.9	OK
18.005	30 minute 30 year Summer I+0%	21.075	19.986	0.000	0.99	19.610	28.5	SURCHARGED
25.000	30 minute 30 year Summer I+0%	21.220	20.649	0.000	0.18	0.583	0.9	OK
25.001	30 minute 30 year Summer I+0%	21.220	20.584	0.000	0.10	1.165	1.9	OK
26.000	30 minute 30 year Summer I+0%	21.000	20.430	0.000	0.18	0.583	0.9	OK
26.001	30 minute 30 year Summer I+0%	21.000	20.412	0.000	0.40	1.165	1.8	OK
26.002	30 minute 30 year Summer I+0%	21.000	20.405	0.000	0.43	1.165	2.0	OK
26.003	30 minute 30 year Summer I+0%	21.025	20.398	0.000	1.10	3.495	5.5	SURCHARGED
27.000	30 minute 30 year Summer I+0%	21.100	20.533	0.000	0.24	1.165	1.8	OK
26.004	30 minute 30 year Summer I+0%	21.050	20.280	0.000	0.42	4.660	7.3	OK
28.000	30 minute 30 year Summer I+0%	20.390	19.851	0.000	0.35	4.272	6.7	OK
29.000	30 minute 30 year Summer I+0%	21.150	20.570	0.000	0.09	1.165	1.8	OK
28.001	30 minute 30 year Winter I+0%	21.000	19.661	0.000	0.78	11.093	12.1	SURCHARGED
18.006	30 minute 30 year Winter I+0%	21.040	19.638	0.000	0.77	39.580	45.8	SURCHARGED
1.008	30 minute 30 year Summer I+0%	21.200	19.508	0.000	1.07	95.726	132.2	SURCHARGED
1.009	30 minute 30 year Summer I+0%	21.200	19.410	0.000	1.17	95.543	107.1	SURCHARGED
1.010	30 minute 30 year Winter I+0%	21.200	19.228	0.000	0.08	0.221	7.6	SURCHARGED
1.011	30 minute 30 year Winter I+0%	21.200	19.228	0.000	0.00	0.000	0.0	SURCHARGED

Tridax Ltd		Page 22
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



100 year Return Period Summary of Critical Results by Maximum Level (Rank 1)  
for Storm

Simulation Criteria  
Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000  
Hot Start (mins) 0 MADD Factor \* 10m³/ha Storage 2.000  
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800  
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000  
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0  
Number of Online Controls 1 Number of Storage Structures 2 Number of Real Time Controls 0

Synthetic Rainfall Details  
Rainfall Model FEH Data Type Point  
FEH Rainfall Version 2013 Cv (Summer) 0.750  
Site Location GB 627768 156284 TR 27768 56284 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0  
Analysis Timestep 2.5 Second Increment (Extended)  
DTS Status ON  
DVD Status ON  
Inertia Status ON

Profile(s) Summer and Winter  
Duration(s) (mins) 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440  
Return Period(s) (years) 2, 30, 100  
Climate Change (%) 0, 0, 20

PN	Event	US/CL	Water	Flooded	Pipe		
			Level (m)	Volume (m³)	Flow / Cap.	Discharge Vol (m³)	(l/s)
1.000	30 minute 100 year Summer I+20%	23.325	22.260	0.000	0.71	7.828	10.9 SURCHARGED
1.001	30 minute 100 year Summer I+20%	23.525	22.169	0.000	0.98	7.828	11.0 SURCHARGED
2.000	30 minute 100 year Summer I+20%	23.240	22.679	0.000	0.32	2.710	4.3 OK
1.002	30 minute 100 year Summer I+20%	23.275	22.120	0.000	1.83	16.258	22.0 SURCHARGED
1.003	30 minute 100 year Summer I+20%	23.000	21.849	0.000	0.71	18.064	22.8 SURCHARGED
3.000	30 minute 100 year Summer I+20%	23.170	22.622	0.000	0.54	1.806	2.9 OK
3.001	30 minute 100 year Summer I+20%	23.170	22.534	0.000	1.06	3.612	5.6 SURCHARGED
3.002	30 minute 100 year Summer I+20%	23.270	22.327	0.000	0.17	3.612	5.6 OK
4.000	30 minute 100 year Summer I+20%	22.890	22.158	0.000	0.51	6.922	7.9 SURCHARGED
5.000	30 minute 100 year Summer I+20%	22.650	22.176	0.000	0.17	0.602	1.0 SURCHARGED
5.001	30 minute 100 year Summer I+20%	22.600	22.173	0.000	0.47	1.505	2.4 SURCHARGED
5.002	30 minute 100 year Summer I+20%	22.600	22.161	0.000	0.73	2.409	3.9 SURCHARGED
6.000	30 minute 100 year Summer I+20%	22.660	22.145	0.000	0.10	0.602	1.0 OK
5.003	30 minute 100 year Summer I+20%	22.660	22.141	0.000	0.36	3.613	5.4 SURCHARGED
4.001	30 minute 100 year Summer I+20%	22.910	22.108	0.000	1.44	13.244	16.6 SURCHARGED
7.000	30 minute 100 year Summer I+20%	23.300	22.731	0.000	0.20	2.710	4.3 OK
8.000	30 minute 100 year Summer I+20%	22.600	22.078	0.000	0.33	3.312	5.2 OK
4.002	30 minute 100 year Summer I+20%	22.735	22.020	0.000	2.37	27.094	27.6 SURCHARGED
1.004	30 minute 100 year Summer I+20%	22.520	21.489	0.000	2.62	48.770	54.7 SURCHARGED
9.000	30 minute 100 year Summer I+20%	22.400	21.856	0.000	0.60	2.107	3.3 OK
9.001	30 minute 100 year Summer I+20%	22.300	21.732	0.000	0.22	3.011	4.8 OK
1.005	30 minute 100 year Summer I+20%	22.320	21.344	0.000	1.03	55.393	61.5 SURCHARGED
10.000	30 minute 100 year Summer I+20%	22.150	21.586	0.000	0.28	0.903	1.4 OK
10.001	30 minute 100 year Summer I+20%	22.150	21.511	0.000	0.15	1.806	2.9 OK
11.000	30 minute 100 year Summer I+20%	22.545	21.729	0.000	1.68	6.623	8.9 SURCHARGED
12.000	30 minute 100 year Summer I+20%	22.710	22.146	0.000	0.28	0.903	1.4 OK

Tridax Ltd		Page 23
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



100 year Return Period Summary of Critical Results by Maximum Level (Rank 1)  
for Storm

PN	Event	US/CL	Water Flooded			Pipe Flow			Status
			Level (m)	Volume (m³)	Flow / Cap.	Discharge Vol (m³)	Flow (l/s)		
12.001	30 minute 100 year Summer I+20%	22.680	22.104	0.000	0.75	2.408	3.9	OK	
12.002	30 minute 100 year Summer I+20%	22.700	21.980	0.000	0.30	3.914	6.4	OK	
11.001	30 minute 100 year Summer I+20%	22.500	21.696	0.000	1.32	12.042	15.7	SURCHARGED	
13.000	30 minute 100 year Summer I+20%	22.640	22.092	0.000	0.28	0.903	1.4	OK	
13.001	30 minute 100 year Summer I+20%	22.630	22.081	0.000	1.10	3.612	5.8	SURCHARGED	
14.000	30 minute 100 year Summer I+20%	22.640	22.069	0.000	0.18	0.903	1.4	OK	
13.002	30 minute 100 year Summer I+20%	22.600	21.904	0.000	0.60	7.225	11.6	OK	
11.002	30 minute 100 year Summer I+20%	22.400	21.510	0.000	1.03	22.579	28.3	SURCHARGED	
15.000	30 minute 100 year Summer I+20%	21.580	21.047	0.000	0.20	0.602	0.9	OK	
15.001	30 minute 100 year Summer I+20%	21.580	21.044	0.000	0.49	1.505	2.4	SURCHARGED	
15.002	30 minute 100 year Summer I+20%	21.700	21.034	0.000	0.69	4.817	8.0	SURCHARGED	
1.006	30 minute 100 year Summer I+20%	21.850	20.957	0.000	1.29	85.800	97.7	SURCHARGED	
16.000	30 minute 100 year Summer I+20%	21.700	21.117	0.000	0.07	0.903	1.4	OK	
17.000	30 minute 100 year Summer I+20%	21.210	20.658	0.000	0.47	1.505	2.4	OK	
17.001	30 minute 100 year Summer I+20%	21.210	20.581	0.000	0.48	1.505	2.4	OK	
17.002	30 minute 100 year Summer I+20%	21.210	20.550	0.000	0.77	2.408	3.9	OK	
17.003	30 minute 100 year Summer I+20%	21.200	20.485	0.000	0.70	3.914	6.3	OK	
1.007	30 minute 100 year Summer I+20%	21.400	20.216	0.000	0.86	90.617	102.6	SURCHARGED	
18.000	30 minute 100 year Summer I+20%	21.980	21.413	0.000	0.24	1.505	2.4	OK	
19.000	30 minute 100 year Summer I+20%	21.690	21.202	0.000	0.31	0.903	1.4	SURCHARGED	
18.001	30 minute 100 year Summer I+20%	21.950	21.197	0.000	0.96	3.312	5.0	SURCHARGED	
18.002	30 minute 100 year Summer I+20%	21.700	21.074	0.000	1.38	4.516	6.8	SURCHARGED	
18.003	30 minute 100 year Summer I+20%	21.850	20.983	0.000	0.51	5.419	8.1	SURCHARGED	
20.000	30 minute 100 year Summer I+20%	21.840	21.030	0.000	0.80	5.720	7.3	SURCHARGED	
21.000	30 minute 100 year Summer I+20%	21.720	21.156	0.000	0.28	0.903	1.4	OK	
21.001	30 minute 100 year Summer I+20%	21.720	21.104	0.000	0.56	1.806	2.9	OK	
21.002	30 minute 100 year Summer I+20%	21.550	20.973	0.000	0.28	2.710	4.4	OK	
22.000	30 minute 100 year Summer I+20%	21.220	20.882	0.000	0.48	1.505	2.3	SURCHARGED	
22.001	30 minute 100 year Summer I+20%	21.275	20.873	0.000	0.97	3.011	4.7	SURCHARGED	
22.002	30 minute 100 year Summer I+20%	21.300	20.853	0.000	0.38	3.914	5.6	SURCHARGED	
18.004	30 minute 100 year Summer I+20%	21.400	20.816	0.000	1.04	23.783	27.8	SURCHARGED	
23.000	30 minute 100 year Summer I+20%	22.000	21.435	0.000	0.26	0.903	1.4	OK	
23.001	30 minute 100 year Summer I+20%	21.900	21.343	0.000	0.38	1.806	2.9	OK	
23.002	30 minute 100 year Summer I+20%	21.625	21.066	0.000	0.35	3.613	5.9	OK	
24.000	30 minute 100 year Summer I+20%	21.560	20.977	0.000	0.07	0.903	1.4	OK	
18.005	30 minute 100 year Summer I+20%	21.075	20.462	0.000	1.24	30.406	35.8	SURCHARGED	
25.000	30 minute 100 year Summer I+20%	21.220	20.656	0.000	0.29	0.903	1.4	OK	
25.001	30 minute 100 year Summer I+20%	21.220	20.589	0.000	0.15	1.806	2.9	OK	
26.000	30 minute 100 year Summer I+20%	21.000	20.521	0.000	0.30	0.903	1.5	SURCHARGED	
26.001	30 minute 100 year Summer I+20%	21.000	20.512	0.000	0.65	1.806	2.9	SURCHARGED	
26.002	30 minute 100 year Summer I+20%	21.000	20.501	0.000	0.68	1.806	3.1	SURCHARGED	
26.003	30 minute 100 year Summer I+20%	21.025	20.491	0.000	1.68	5.419	8.4	SURCHARGED	
27.000	30 minute 100 year Summer I+20%	21.100	20.542	0.000	0.38	1.806	2.9	OK	
26.004	30 minute 100 year Summer I+20%	21.050	20.294	0.000	0.64	7.225	11.2	OK	
28.000	30 minute 100 year Summer I+20%	20.390	20.006	0.000	0.50	6.623	9.7	SURCHARGED	
29.000	30 minute 100 year Summer I+20%	21.150	20.575	0.000	0.14	1.807	2.9	OK	
28.001	30 minute 100 year Summer I+20%	21.000	19.931	0.000	1.25	15.356	19.4	SURCHARGED	
18.006	30 minute 100 year Winter I+20%	21.040	19.912	0.000	1.07	61.364	64.0	SURCHARGED	
1.008	30 minute 100 year Winter I+20%	21.200	19.850	0.000	1.35	166.229	167.7	SURCHARGED	
1.009	30 minute 100 year Winter I+20%	21.200	19.747	0.000	1.66	165.675	152.2	SURCHARGED	
1.010	30 minute 100 year Winter I+20%	21.200	19.743	0.000	0.17	1.020	15.3	SURCHARGED	
1.011	30 minute 100 year Winter I+20%	21.200	19.743	0.000	0.00	0.000	0.0	SURCHARGED	

Tridax Ltd		Page 1
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery 40% Test	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



### Summary of Critical Results by Maximum Level (Rank 1) for Storm

#### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000  
 Hot Start (mins) 0 MADD Factor \* 10m³/ha Storage 2.000  
 Hot Start Level (mm) 0 Inlet Coeffiecient 0.800  
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (1/per/day) 0.000  
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0  
 Number of Online Controls 1 Number of Storage Structures 2 Number of Real Time Controls 0

#### Synthetic Rainfall Details

Rainfall Model	FEH	Data Type	Point
Return Period (years)	100	Cv (Summer)	0.750
FEH Rainfall Version	2013	Cv (Winter)	0.840
Site Location	GB 627768 156284	TR 27768 56284	

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)	Summer and Winter
Duration(s) (mins)	30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Sensitivity flows(s) (%)	0, +40

PN	Event	US/CL	Water Flooded			Pipe Flow		
			Level (m)	Volume (m³)	Flow / Cap.	Discharge Vol (m³)	(l/s)	Status
1.000	30 minute 100 year Summer Q+40%	23.325	22.478	0.000	0.76	9.159	11.8	SURCHARGED
1.001	30 minute 100 year Summer Q+40%	23.525	22.396	0.000	0.99	9.159	11.1	SURCHARGED
2.000	30 minute 100 year Summer Q+40%	23.240	22.682	0.000	0.37	3.170	5.0	OK
1.002	30 minute 100 year Summer Q+40%	23.275	22.351	0.000	1.94	19.022	23.4	SURCHARGED
1.003	30 minute 100 year Summer Q+40%	23.000	22.093	0.000	0.71	21.135	23.0	SURCHARGED
3.000	30 minute 100 year Summer Q+40%	23.170	22.638	0.000	0.62	2.113	3.3	OK
3.001	30 minute 100 year Summer Q+40%	23.170	22.580	0.000	1.23	4.226	6.5	SURCHARGED
3.002	30 minute 100 year Summer Q+40%	23.270	22.329	0.000	0.20	4.226	6.5	OK
4.000	30 minute 100 year Winter Q+40%	22.890	22.469	0.000	0.53	9.072	8.2	SURCHARGED
5.000	30 minute 100 year Winter Q+40%	22.650	22.489	0.000	0.17	0.789	1.0	FLOOD RISK
5.001	30 minute 100 year Winter Q+40%	22.600	22.486	0.000	0.46	1.972	2.4	FLOOD RISK
5.002	30 minute 100 year Winter Q+40%	22.600	22.474	0.000	0.72	3.156	3.8	FLOOD RISK
6.000	30 minute 100 year Winter Q+40%	22.660	22.457	0.000	0.10	0.789	1.0	FLOOD RISK
5.003	30 minute 100 year Winter Q+40%	22.660	22.453	0.000	0.41	4.734	6.1	FLOOD RISK
4.001	30 minute 100 year Winter Q+40%	22.910	22.417	0.000	1.46	17.357	16.9	SURCHARGED
7.000	30 minute 100 year Summer Q+40%	23.300	22.733	0.000	0.24	3.171	5.0	OK
8.000	30 minute 100 year Summer Q+40%	22.600	22.369	0.000	0.37	3.875	5.8	FLOOD RISK
4.002	30 minute 100 year Winter Q+40%	22.735	22.303	0.000	2.50	35.505	29.2	SURCHARGED
1.004	30 minute 100 year Summer Q+40%	22.520	21.733	0.000	2.72	57.062	56.7	SURCHARGED
9.000	30 minute 100 year Summer Q+40%	22.400	21.862	0.000	0.70	2.466	3.9	OK
9.001	30 minute 100 year Summer Q+40%	22.300	21.734	0.000	0.25	3.522	5.6	OK
1.005	30 minute 100 year Summer Q+40%	22.320	21.573	0.000	1.07	64.811	64.0	SURCHARGED
10.000	30 minute 100 year Summer Q+40%	22.150	21.589	0.000	0.33	1.057	1.7	OK
10.001	30 minute 100 year Summer Q+40%	22.150	21.514	0.000	0.18	2.113	3.4	OK
11.000	30 minute 100 year Summer Q+40%	22.545	22.021	0.000	1.77	7.749	9.5	SURCHARGED
12.000	30 minute 100 year Summer Q+40%	22.710	22.149	0.000	0.33	1.057	1.7	OK
12.001	30 minute 100 year Summer Q+40%	22.680	22.112	0.000	0.88	2.818	4.6	OK

Tridax Ltd		Page 2
Honeywood House Whitfield Kent CT16 3EH	Summerfield Nursery 40% Test	
Date 19/05/2021	Designed by prl	
File T-2019-114 SW Network Re...	Checked by	
XP Solutions	Network 2020.1.3	



Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	Event	US/CL	Water Flooded			Pipe Flow			Status
			Level (m)	Volume (m³)	Flow / Cap.	Discharge Vol (m³)	Flow (l/s)		
12.002	30 minute 100 year Summer Q+40%	22.700	22.016	0.000	0.35	4.579	7.5	OK	
11.001	30 minute 100 year Summer Q+40%	22.500	21.981	0.000	1.43	14.089	16.9	SURCHARGED	
13.000	30 minute 100 year Summer Q+40%	22.640	22.143	0.000	0.32	1.057	1.6	SURCHARGED	
13.001	30 minute 100 year Summer Q+40%	22.630	22.131	0.000	1.26	4.227	6.6	SURCHARGED	
14.000	30 minute 100 year Summer Q+40%	22.640	22.071	0.000	0.21	1.057	1.7	OK	
13.002	30 minute 100 year Summer Q+40%	22.600	21.993	0.000	0.67	8.454	12.9	SURCHARGED	
11.002	30 minute 100 year Summer Q+40%	22.400	21.769	0.000	1.10	26.417	30.3	SURCHARGED	
15.000	30 minute 100 year Winter Q+40%	21.580	21.241	0.000	0.20	0.789	0.9	SURCHARGED	
15.001	30 minute 100 year Winter Q+40%	21.580	21.238	0.000	0.48	1.972	2.4	SURCHARGED	
15.002	30 minute 100 year Winter Q+40%	21.700	21.228	0.000	0.67	6.312	7.7	SURCHARGED	
1.006	30 minute 100 year Summer Q+40%	21.850	21.156	0.000	1.35	100.386	102.2	SURCHARGED	
16.000	30 minute 100 year Summer Q+40%	21.700	21.118	0.000	0.08	1.057	1.7	OK	
17.000	30 minute 100 year Summer Q+40%	21.210	20.663	0.000	0.54	1.761	2.8	OK	
17.001	30 minute 100 year Summer Q+40%	21.210	20.586	0.000	0.57	1.761	2.8	OK	
17.002	30 minute 100 year Summer Q+40%	21.210	20.558	0.000	0.90	2.818	4.5	OK	
17.003	30 minute 100 year Summer Q+40%	21.200	20.493	0.000	0.81	4.579	7.4	OK	
1.007	30 minute 100 year Winter Q+40%	21.400	20.374	0.000	0.90	118.745	107.0	SURCHARGED	
18.000	30 minute 100 year Summer Q+40%	21.980	21.416	0.000	0.29	1.761	2.8	OK	
19.000	30 minute 100 year Summer Q+40%	21.690	21.365	0.000	0.30	1.057	1.4	SURCHARGED	
18.001	30 minute 100 year Summer Q+40%	21.950	21.360	0.000	1.02	3.875	5.4	SURCHARGED	
18.002	30 minute 100 year Summer Q+40%	21.700	21.265	0.000	1.42	5.284	7.0	SURCHARGED	
18.003	30 minute 100 year Summer Q+40%	21.850	21.193	0.000	0.52	6.340	8.3	SURCHARGED	
20.000	30 minute 100 year Summer Q+40%	21.840	21.324	0.000	0.80	6.692	7.4	SURCHARGED	
21.000	30 minute 100 year Summer Q+40%	21.720	21.159	0.000	0.33	1.057	1.7	OK	
21.001	30 minute 100 year Summer Q+40%	21.720	21.110	0.000	0.65	2.114	3.4	OK	
21.002	30 minute 100 year Summer Q+40%	21.550	21.080	0.000	0.32	3.170	5.1	SURCHARGED	
22.000	30 minute 100 year Summer Q+40%	21.220	21.125	0.000	0.48	1.761	2.3	FLOOD RISK	
22.001	30 minute 100 year Summer Q+40%	21.275	21.115	0.000	0.97	3.522	4.7	FLOOD RISK	
22.002	30 minute 100 year Summer Q+40%	21.300	21.091	0.000	0.41	4.579	6.1	FLOOD RISK	
18.004	30 minute 100 year Summer Q+40%	21.400	21.046	0.000	1.11	27.826	29.6	SURCHARGED	
23.000	30 minute 100 year Summer Q+40%	22.000	21.438	0.000	0.31	1.057	1.7	OK	
23.001	30 minute 100 year Summer Q+40%	21.900	21.347	0.000	0.45	2.113	3.4	OK	
23.002	30 minute 100 year Summer Q+40%	21.625	21.070	0.000	0.41	4.227	6.9	OK	
24.000	30 minute 100 year Summer Q+40%	21.560	20.978	0.000	0.08	1.057	1.7	OK	
18.005	30 minute 100 year Summer Q+40%	21.075	20.657	0.000	1.32	35.576	38.2	SURCHARGED	
25.000	30 minute 100 year Summer Q+40%	21.220	20.660	0.000	0.34	1.057	1.7	OK	
25.001	30 minute 100 year Summer Q+40%	21.220	20.592	0.000	0.18	2.113	3.4	OK	
26.000	30 minute 100 year Summer Q+40%	21.000	20.585	0.000	0.33	1.057	1.6	SURCHARGED	
26.001	30 minute 100 year Summer Q+40%	21.000	20.575	0.000	0.70	2.113	3.2	SURCHARGED	
26.002	30 minute 100 year Summer Q+40%	21.000	20.562	0.000	0.76	2.113	3.4	SURCHARGED	
26.003	30 minute 100 year Summer Q+40%	21.025	20.550	0.000	1.93	6.340	9.7	SURCHARGED	
27.000	30 minute 100 year Summer Q+40%	21.100	20.546	0.000	0.44	2.113	3.3	OK	
26.004	30 minute 100 year Summer Q+40%	21.050	20.373	0.000	0.71	8.454	12.4	SURCHARGED	
28.000	30 minute 100 year Summer Q+40%	20.390	20.155	0.000	0.51	7.749	9.7	FLOOD RISK	
29.000	30 minute 100 year Summer Q+40%	21.150	20.577	0.000	0.16	2.114	3.3	OK	
28.001	30 minute 100 year Winter Q+40%	21.000	20.067	0.000	1.36	20.122	21.0	SURCHARGED	
18.006	30 minute 100 year Winter Q+40%	21.040	20.054	0.000	1.20	71.801	72.0	SURCHARGED	
1.008	30 minute 100 year Winter Q+40%	21.200	20.008	0.000	1.47	194.491	182.0	SURCHARGED	
1.009	30 minute 100 year Winter Q+40%	21.200	19.909	0.000	1.73	193.384	158.3	SURCHARGED	
1.010	30 minute 100 year Winter Q+40%	21.200	19.871	0.000	0.18	2.244	16.5	SURCHARGED	
1.011	30 minute 100 year Winter Q+40%	21.200	19.871	0.000	0.00	0.000	0.0	SURCHARGED	

## **APPENDIX C**

Southern Water Section 104 Agreement  
Southern Water Section 106 Sewer Connection Approval

**MILLWOOD DESIGNER HOMES LIMITED**

and

**SOUTHERN WATER SERVICES LIMITED**

## **Sewer Agreement**

---

S104 Water Industry Act 1991 relating to sewers at

Summerfield Nurseries, Staple Land at former Summerfield Nurseries Site, Barn Sole Road  
Kent CT3 1LD

LEGAL REF: RT/8/1099  
SITE REF: DSA000015745-S104-7195  
DOC No: S4567  
DATE: .... *12 July* 2023

