



Title: Applicant Response to Hertfordshire
County Council LLFA Consultation
Response

Date: 25th July 2024

1.0 Introduction

- 1.1 Jubb has been commissioned by Hallam Land Management Ltd to provide flood risk and drainage advice in relation to a proposed residential development of land located to the west of Buntingford in Hertfordshire.
- 1.2 A planning application (Reference: 3/24/0966/OUT) was submitted for the following:
- "Outline planning application for development of up to 600 dwellings (C3), elderly accommodation (C3), Mixed Use Local Centre (including flexible use E, F and Sui Generis), First School, informal and formal open space, associated works and infrastructure including a new access from the A507 and pedestrian bridge over the A10, with all matters reserved except access."*
- 1.3 A Flood Risk Assessment and Drainage Strategy (FRADS(N)-01), dated 15th May 2024, was prepared by Jubb and submitted with the planning application.
- 1.4 Hertfordshire County Council (HCC), in its role as the Lead Local Flood Authority (LLFA), provided a consultation response to the planning application on 28th June 2024.
- 1.5 This technical note provides a formal response to the comments received from HCC LLFA in its consultation response.

2.0 Applicant Response to LLFA Comments

- 2.1 **Table 2.1** summarises the comments received from HCC and the applicant response.

No.	LLFA Comment	Applicant Response
1	OBJECTION Provide updated information within an amended FRA on; Surface water flow path originating offsite. Further information required on the surface water flow paths on the site. Without carrying out further modelling, the EA maps are the best source of data available. We understand that this modelling may not account for some mitigation measures in and around the	As mentioned in the LLFA response, the EA surface water flood maps are the best source of data available showing potential flow routes and areas at risk of flooding. However, the EA state that their mapping is only indicative and does not contain sufficient information for it to be used as sole evidence for any specific planning decision or assessment of risk. We have therefore taken the EA data and undertaken further review and assessment of the site and the surrounding area to determine the actual risk of flooding to the site. Several key factors have been considered to further assess the risk to the site:

No.	LLFA Comment	Applicant Response
	proposed site, however in the absence of detailed modelling the site outline development areas MUST be located outside of the 0.1% AEP outline and any likely road crossings to be indicated to connect development parcels. If the drainage system is to cater for flow paths, the extra volumes must be calculated and included in any outline drainage storage calculations. This may influence the Parameter Plan that would be associated with an outline application and the available space for the number of dwellings indicated with associated infrastructure e.g. road with swales and SuDS attenuation features.	- Upstream Catchment – Levels & Characteristics A detailed review of the existing nature, levels and any drainage features has been undertaken to determine the actual upstream catchment where flows would be conveyed towards the subject site. A plan has been included in Appendix A which shows the upstream catchment extents along with the location of the existing drainage features which have been identified within the area. The area outlined in light blue shows the total upstream catchment taking into account the existing levels and any existing drainage features, with the area outlined in purple showing the area of the upstream catchment where there is known to be existing field drains present. The upstream catchment is relatively small and comprises of fully greenfield land which is currently used for agricultural purposes. BGS maps indicate that the site is underlain with bedrock of the Lewes Nodular & Seaford Chalk formation, with overlying superficial deposits of Lowestoft Formation. The superficial deposits are expected to extend a significant depth beneath the site and consist of chalky til, together with outwash sands and gravels, silts and clays. While this strata is expected to be unsuitable for the discharge of concentrated surface water run-off from the development via large scale point infiltration features, the strata has a mix of characteristics including chalk, sands and gravels, it is therefore considered that this type of strata has an element of permeability which will intercept a proportion of the runoff from the surface. Based on the size, nature and characteristics of the existing upstream catchment it is considered that the generated run-off will be minor and that the EA surface water flow routes are an exaggeration of the actual real-life scenario. - Existing Drainage, Ditches & Field Drains A large amount of existing drainage features are present within the site and the surrounding area, these features have not been taken into account as part of the EA mapping which further highlights the level of detail of the current data.

No.	LLFA Comment	Applicant Response
		The existing drainage features include: i) An existing drainage ditch is present running along the western boundary, before running through the site in an easterly direction. ii) A section of Throcking Lane which bounds the site to the north is positively drained with highways drainage present. iii) The culverting of the existing drainage features within the site beneath the A10 is not taken into account, instead flows are shown backing up into the site due to the levels of the A10. iiii) Most importantly there is a significant network of existing field drains which are present within the site and the adjacent land to the west and north. All these features play a significant role is the interception of overland flows from the neighbouring land which significantly affects the flow paths running across the site. Based on the presence of these features and the nature of the catchment and surrounding area, it is considered that these features will intercept a significant proportion of any overland flows from the neighbouring land. Consequently, it is considered that the flow paths shown on the EA mapping are significantly exaggerated compared to the actual current scenario. Based on the factors discussed above, it is considered that the risk of flooding from overland and surface water sources is low and does not pose a significant risk to the development. Although it is not considered necessary, to further mitigate any residual risk to the site it is proposed to construct an interceptor trench along the western and northern site boundaries as part of the development proposals. This feature will intercept any surplus run-off, with flows conveyed to avoid the development and discharge into the existing watercourse on the eastern boundary, in line with the existing greenfield regime of the site. Based on the further assessment undertaken and the extra mitigation measures proposed, it is considered that the risk to the site is very low and development within these areas shown at risk is appropriate. It is considered that further hydraulic modelling is not necessary to demonstrate the appropriateness of development within these areas as the factors raised above clearly demonstrate that the risk posed is very low.

No.	LLFA Comment	Applicant Response
2	OBJECTION Use the sequential approach with the following hierarchy. i) How can the development first avoid the risk of flooding ii) How will it be mitigated (with evidence) iii) How will flood resistance and resilience be employed Development should be steered away from an existing flow paths.	The full extents of the proposed development is located within Flood Zone 1 (tidal & fluvial), with only a small area of the site shown within an area at risk of surface water flooding. A detailed assessment of the existing flow paths and EA surface water flood risk map has been undertaken. This has concluded that the EA mapping and existing flow paths are not a fair representation of the actual existing onsite scenario. Therefore, it has been concluded that the existing flow paths and risk of surface water flooding do not pose a significant risk to the site and therefore the development proposed in these areas is appropriate. Despite the low risk posed to the development, the development has proposed to further mitigate the risk by including the following measures: • An interceptor trench will be constructed along the northern and north-western site boundary. • Finished floor levels will be set a minimum of 150mm above existing ground levels. • The existing ground profile will be designed to convey any potential flows away from buildings or vulnerable areas. Based on detailed assessment undertaken it is considered that the development has followed the hierarchy approach in line with the risk posed to the development.
3	INFORMATIVE Provide information on safe access and egress to show how the development will be safe for its lifetime. This may include assessment of how proposals will not increase the number of people living and working in areas of flood risk and if there is any additional burden placed on the emergency services. An emergency plan may also form part of this assessment. Main access point from the site is not in an area of current flood risk but this may need to be revisited at the detailed design stage.	As mentioned in the LLFA response, the proposed site access is not in an area of current flood risk. Due to the location and nature of the site, the main access point is at a significantly higher level than the surrounding area and is not at risk of flooding.

No.	LLFA Comment	Applicant Response
4	INFORMATIVE Provide site specific ordinary watercourse or surface water flow path hydrological and hydraulic modelling. This will be required if development is not steered away from the existing EA 0.1% AEP surface water flow paths (1% plus 40% climate change proxy).	As discussed in responses to points 1 & 2, further detailed assessment has been undertaken which has determined that the risk of flooding from overland or surface water sources is very low. It is therefore considered that site specific ordinary watercourse or surface water flow path hydrological and hydraulic modelling will not be necessary to support the development proposals.
5	INFORMATIVE Evidence required on ground conditions/ BRE365 or similar infiltration testing/ dissolution potential/ seasonally high groundwater levels. We note that no ground investigation (including infiltration testing) has been carried out. We would expect this to take place to confirm the viability of infiltration techniques before the application progresses to reserved matters. We suggest at this stage indicative testing is undertaken to help understand the general conditions in the area. This 'Plan A' could be conditioned if the applicant is agreeable but only if there is a viable and evidenced 'Plan B' provided.	Based on the currently available information it is anticipated that the discharge of surface water run-off via the use of infiltration techniques will not be feasible. As a result, an alternative attenuation strategy is the preferred option which has been proven to be a viable solution. As suggested in the LLFA response, further ground investigation works will be undertaken across the proposed site as the site is taken forward to confirm the assumption that infiltration is not a viable option. At the outline planning stage, an attenuation strategy 'Plan B' has been demonstrated as a viable strategy for the development. We would therefore suggest that the requirement for infiltration testing is covered by a suitably worded condition with the testing to be undertaken as the site is taken forward.
6	OBJECTION Greenfield runoff rates and volumes are missing or need to be recalculated (incorrect input parameters). To enable 'Plan B' to be checked we require catchment plans to go with the calculations provided. We require clarification on the difference catchments used and how the total area for each one has been derived e.g. using topographical information from on site, LIDAR or other sources plus the full hydrological assumptions for each catchment labelled.	The proposed drainage calculations have been based on catchments informed by the onsite topographical survey. The catchments are based on the existing levels with each catchment considered to reflect the current catchments of the greenfield site, to ensure the drainage proposals mimic the existing drainage regime of the site. A drainage catchment plan has been produced and is included in Appendix B.

No.	LLFA Comment	Applicant Response
7	OBJECTION Drawing required to show where existing drainage network and outfall/s are, plus confirmation if they will be retained or removed. Whilst a plan of the current land drainage network is provided, the LLFA need confirmation if this land drainage will be removed as part of the development and a drawing showing the current catchment areas that drain to each location within the proposed development site boundary. It must be shown that if land drainage is cut off as part of the works, a continuation of that drainage be provided without increasing the risk of flooding.	The proposed site is split into two fields, existing land drains have been identified within the northern field and the neighbouring land to the north-west of the site. No land drainage is shown to be present within the southern field. Where possible any existing land drainage within the site will be retained and accommodated as part of the development proposals. Where the development impacts the existing land drains and the drains are no longer required they will be abandoned and removed. Any land drains serving the neighbouring land which passes through the site will be maintained. Where the route of these drains is impacted by the development, they will be diverted to accommodate proposals. The development proposals will ensure that the development proposals do not increase the risk of flood risk to the site or the surrounding area. A plan of the existing land drainage is included in Appendix C. This shows the sections of the existing drainage which will be maintained, removed or diverted.
8	OBJECTION Surface watercourse – does it connect to the wider network and is there permission and there are agreed access locations for proposed outfalls with the riparian owner? Drainage system proposed to discharge to a ditch which connects into an ordinary watercourse, the condition of this watercourse to accept a discharge and evidence that it is connected to the wider watercourse network should be provided.	The vast majority of the existing greenfield site drains to the north-east corner of the site, where existing drainage ditches convey flows offsite beneath the A10, with the ditch continuing to the east before converging with the River Rib. The development drainage strategy aims to mimic the existing drainage regime of the greenfield site with flows discharged at a restricted pre-development greenfield rate for all events up to the 1 in 100 +climate change. It is considered that the development drainage strategy will be providing a betterment on the existing greenfield regime with discharge from the site being restricted compared to the current free discharge. It is therefore considered that the existing drainage ditches are in an acceptable condition and are capable of accommodating the discharge from the development as these ditches are currently serving the existing site effectively with the development discharge to provide a betterment on the existing scenario. A plan showing the downstream connectivity of the existing watercourse is included in Appendix D.

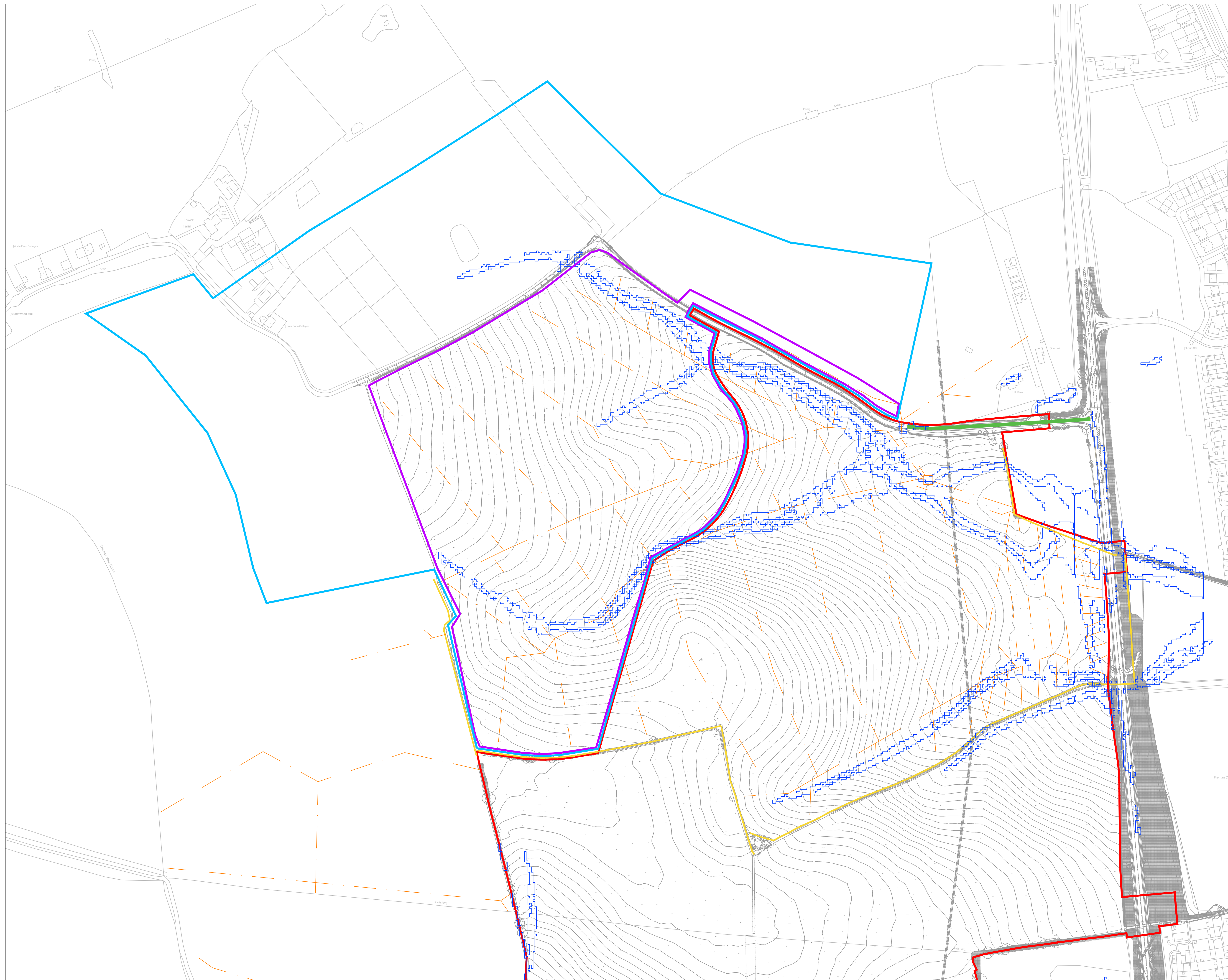
9	OBJECTION Surface water sewer – no in principle agreement from owner of the asset. Prior to discharging to the sewer to the southeast, evidence for a connection to the watercourse to the southwest should be explored and evidenced. There is no principle agreement from Thames Water provided to confirm capacity in the surface water sewer network. Nor is there agreement to install a new connection across third party land plus permission to cross Highways Authority infrastructure (including existing drainage features).	The topography of the southern region of the site is split by a crest running in a north-south direction, with levels falling away to the east and west. The development parcel within the south-eastern corner of the site falls on the eastern side of the crest, with levels falling in a south-easterly direction towards the existing Buntingford Business Park. There is a significant level difference, of approximately 8m, between the south-east corner of the site and the top of the crest. In order to achieve an outfall to the watercourse to the southwest (the Thistley Vale Brook), the surface water discharge would have to be pumped up to the top of the crest, before a gravity connection could be achieved to the Brook. Our drainage proposals have been designed to reflect the existing greenfield nature and catchments of the site. The south-eastern development parcel does not fall within the catchment of the Thistley Vale Brook. Consequently, pumping surface water flows to this Brook will increase flows beyond its natural catchment and could potentially increase the risk of flooding downstream. Based on the information described above, a connection to the Thistley Vale Brook is not considered appropriate, with the discharge to the existing public sewer considered a viable option which reflects the natural catchments of the site. Discussions with Thames Water have been ongoing in relation to the discharge to the existing public surface water sewer. Thames Water consider a connection to the existing an acceptable option, however, they have raised there is currently limited capacity within the existing sewer network. We are continuing discussions with Thames Water, including the progress of network hydraulic modelling, to determine an appropriate point of connection and identify any necessary network upgrades to accommodate the proposals. It is considered through further discussions with Thames Water that a connection to the existing sewer network can be achieved and is a viable option. The offsite connection from the development to the public sewer has been considered. The connection route avoids third party land and can be delivered within land either under the ownership of the landowner or the Highways Authority. A future s278 or s50 application will be submitted to obtain permission to lay the offsite connection within Highways Authority Land, however, planning permission is required before this permission can be obtained. At this outline planning stage, it is considered that the discharge to the existing public sewer is a viable option and
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No.	LLFA Comment	Applicant Response
		can be delivered with the agreement of Thames Water and the Highways Authority. We would therefore suggest that the requirement for an agreement with Thames Water and the Highways Authority is covered by a suitably worded condition with this information to be provided as the site is taken forward.
10	INFORMATIVE The most precautionary infiltration rate should be used in the design of the attenuation feature. Infiltration not proposed within the drainage strategy, but this must be proved not to be viable prior to discounting it entirely.	Based on the currently available information it is anticipated that the discharge of surface water run-off via the use of infiltration techniques will not be feasible. As a result, an alternative attenuation strategy is the preferred option which has been proven to be a viable solution. Further ground investigation works will be undertaken across the proposed site as the site is taken forward to confirm the assumption that infiltration is not a viable option. At the outline planning stage, a viable attenuation strategy has been demonstrated as a viable strategy for the development. We would suggest that the requirement for infiltration is covered by a suitably worded condition with the testing to be undertaken as the site is taken forward.
11	INFORMATIVE Outline drainage modelling calculations should be resubmitted and demonstrate how 10% urban creep has been included in the volume of the SuDS storage required. It is not clear whether urban creep has been included in the calculations – this should be clarified at this outline stage but details provided at the detailed design.	In accordance with local guidance, a 10% increase in the impermeable area to account for urban creep has been included as part of the proposed attenuation calculations.
12	INFORMATIVE Outline drainage modelling calculations should be resubmitted using CV value of 1. Currently volumes of water to be stored will be underestimated. New calculations should be provided using CV value of 1.	The proposed drainage calculations have been revised with CV values set equal to 1 for the summer and winter events. A copy of the updated drainage calculations and drainage strategy plan have been included in Appendix E.

No.	LLFA Comment	Applicant Response
13	INFORMATIVE Masterplan drawings need to show the high-level location of all SuDS and demonstrate that the volume of storage can be achieved in the layout. This includes the consideration for constraints (e.g., pipeline crossings and how gravity drainage can be achieved). Drainage plan indicates potential locations for the main storage features. Some indication of where other above ground features (e.g. swales) could be located is beneficial to show there will be enough space on the site alongside the proposed development areas. E.g. the 5 to 10m of land take required next to the main spine road developments for swales.	It is proposed to incorporate a variety of SuDS features as part of the site wide drainage strategy, with additional features such as permeable paving, raingardens and swales etc to supplement the attenuation basins. A separate drainage strategy plan has been produced to show indicative locations for these additional SuDS features, this includes: - Highlighted green corridors which could be utilised for swales. - Verges alongside main roads highlighted which could be utilised for raingardens or tree pits. - Courtyard areas and driveways which could be constructed of permeable paving. A SuDS overview plan is included in Appendix F. Please note that at this outline planning stage the proposed masterplan is not fixed and is subject to change. The additional drainage features are shown indicatively to highlight the principals that will be applied to the development masterplan as this is taken forward to detailed design.
14	INFORMATIVE Appropriate easements (to the adopting authority standard) to SuDS features should be shown on the masterplan drawing, this will be a minimum of 3m. This additional space should be shown as a buffer around key locations.	A 3m offset has been shown around the proposed attenuation basins to account for easement and maintenance requirements, notes have been added to the proposed drainage strategy drawing to highlight the easements shown.
15	OBJECTION As it is a phased development, a surface water management and construction phasing plan is required. This must show how each phase can be provided independently (in terms of surface water drainage) and how any infrastructure which is relies on will be constructed prior to any housing or commercial development.	At this outline planning stage, the development proposals are subject to change and details on the construction phasing are not known. The proposed drainage strategy will be designed to account for the phasing of the development, ensuring that each phase can be accommodated separately. At this stage in the planning process, we would suggest that a surface water management and construction phasing plan is covered by a suitably worded condition, with further details to be provided as the site is taken forward.

No.	LLFA Comment	Applicant Response
16	INFORMATIVE A high-level assessment of how water quantity and water quality will be managed during the construction phase is required. Identifying high level assumptions of a construction management plan, such as the need to discharge to a sewer or watercourse with appropriate pollution measures.	Throughout the construction phase of the development the contractor will be required to ensure that appropriate provisions are put into place to ensure that the water quality of the surface water discharge from the site is being maintained. This will involve measures to prevent silts and other construction waste being conveyed offsite through surface water run-off. At this outline planning stage, we would suggest that a construction management plan including details of how water quantity and quality will be managed is covered by a suitably worded condition, with further details to be provided as the site is taken forward and a contractor is onboard.

Appendix A: Offsite Flow Route Review Plan



Legend

-  Site Boundary
- Upstream Catchment
-  Upstream Area with Land Drainage
-  Existing Area of Throcking Lane with Highway Drainage
- Existing Drainage Ditch
-  Existing Field Drain
- Areas of Surface Water Flood Risk
(Taken from EA Online Mapping)

P1	22.07.24	Preliminary Issue	LE	LE
<i>Rev</i>	<i>Date</i>	<i>Description</i>	<i>By</i>	<i>Apvd</i>

PROJECT:
LAND NORTH OF BALDOCK ROAD,
BUNTINGFORD

TITLE:
FLOW ROUTE REVIEW PLAN

CLIENT:
HALLAM LAND MANAGEMENT

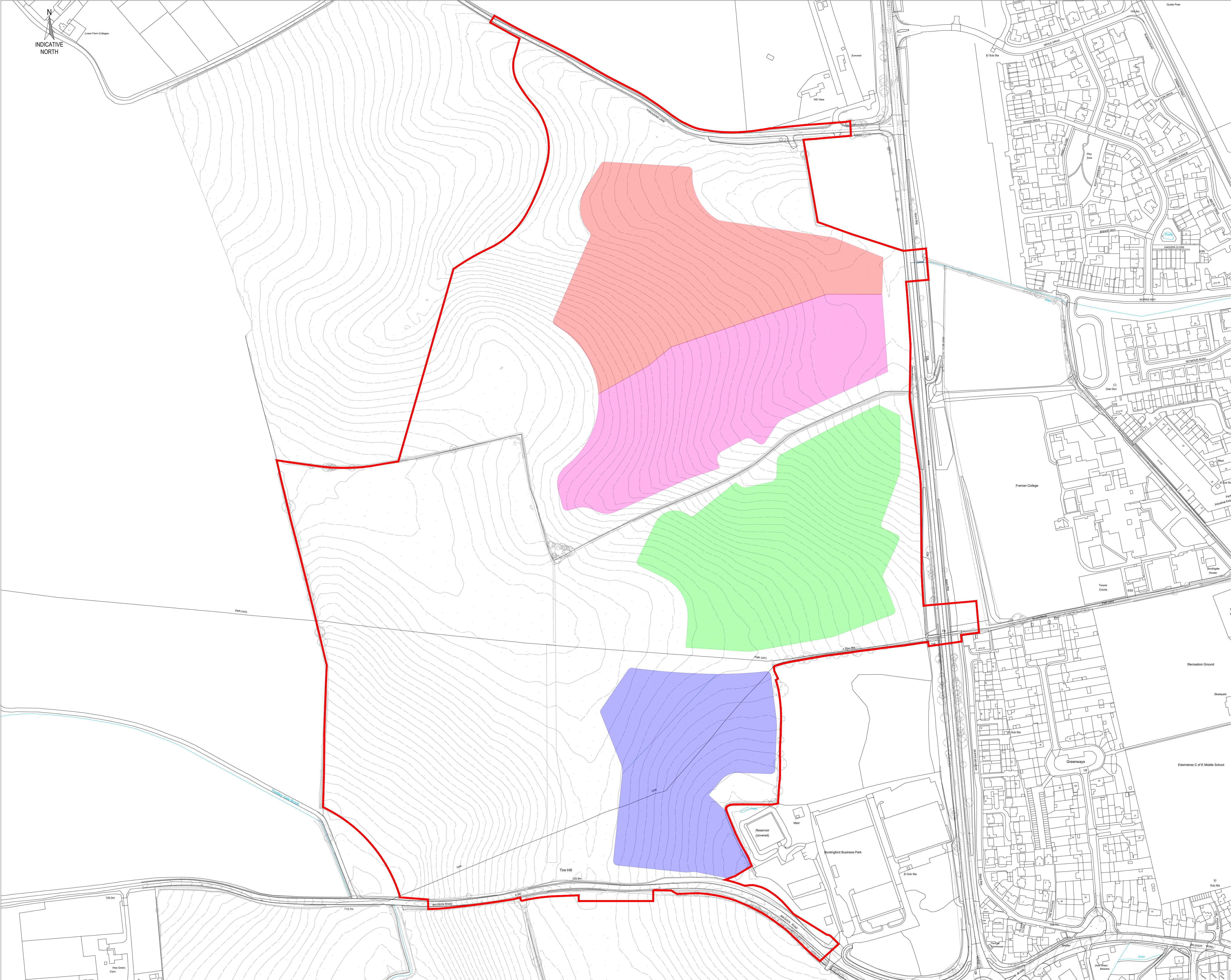
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PROJECT REF:	
23161	
DRAWING No:	REV:
SK-C-011	P1

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction



Appendix B: Proposed Drainage Catchment Plan



Legend

Catchment 1

Catchment 2

Catchment 3

Catchment 4

P1	22.07.24	Preliminary Issue	RJ	LE
Rev	Date	Description	By	Apvd

PROJECT:

LAND NORTH OF BALDOCK ROAD,
BUNTINGFORD

TITLE:

DRAINAGE CATCHMENT PLAN

CLIENT:

HALLAM LAND MANAGEMENT

SCALE@A1:

1:2000

PROJECT REF:

23161

DRAWING No:

SK-C-009

STATUS:

REV:

P1

Revision Referencing

P = Preliminary A = Approval T = Tender C = Construction

Jubb

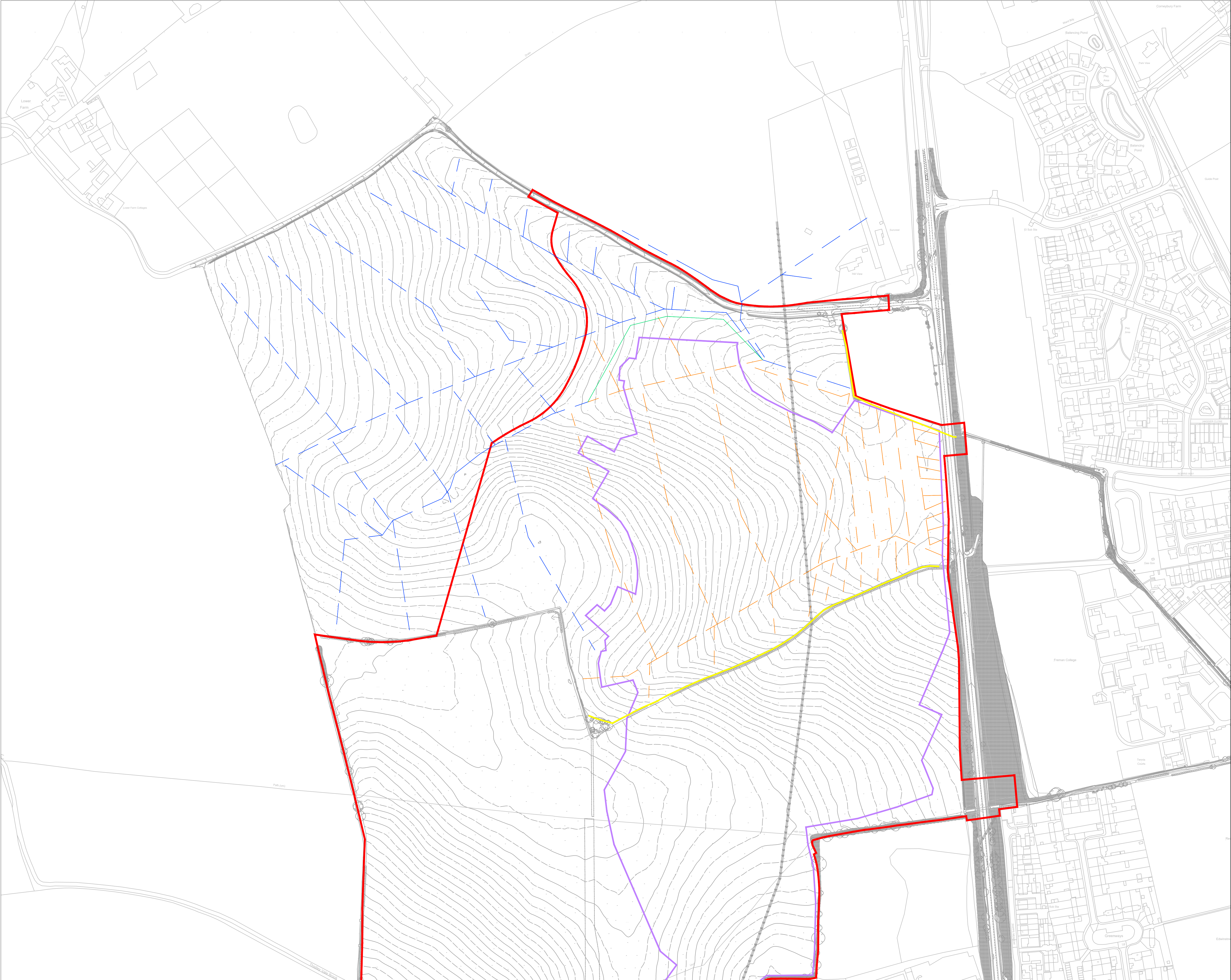
Bristol, Cardiff, Plymouth, Winchester

Kings Orchard, 1 Queen St, Bristol BS2 0HQ

jubb.uk.com

+44(0)117 922 6266

Appendix C: Land Drainage Plan



- Legend**
- Site Boundary
 - Existing Field Drain (To Be Retained)
 - Existing Field Drain (To Be Removed)
 - Diversion of Field Drain
 - Outline of Proposed Development
 - Existing Drainage Ditch

P2	22.07.24	LLFA Consultation response	LE	LE
P1	13.02.24	Land drainage positions overlaid onto current masterplan	LE	LE
Rev	Date	Description	By	Apvd

PROJECT:
LAND NORTH OF BALDOCK ROAD,
BUNTINGFORD

TITLE:
LAND DRAINAGE PLAN

CLIENT:
HALLAM LAND MANAGEMENT

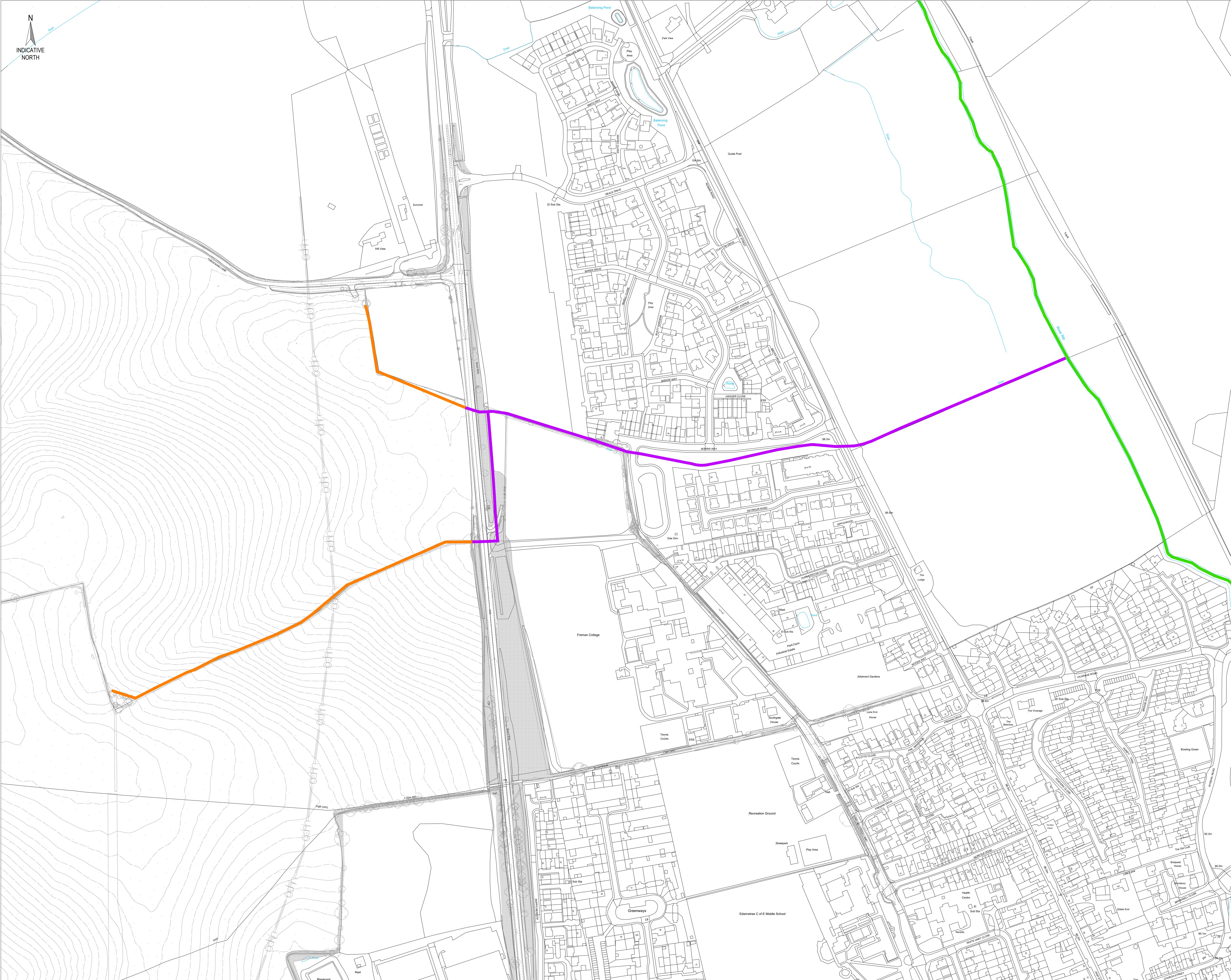
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PROJECT REF:
23161
DRAWING No:
SK-C-006
REV:
P2

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction



Appendix D: Offsite Watercourse Connectivity Plan



- Legend
- On Site Ordinary Watercourse
 - Off Site Ordinary Watercourse
 - Environment Agency Main River

P1	22.07.24	Preliminary Issue	RJ	LE
Rev	Date	Description	By	Apvd

PROJECT:
LAND NORTH OF BALDOCK ROAD,
BUNTINGFORD

TITLE:
DRAINAGE DITCH CONNECTIVITY PLAN

CLIENT:
HALLAM LAND MANAGEMENT

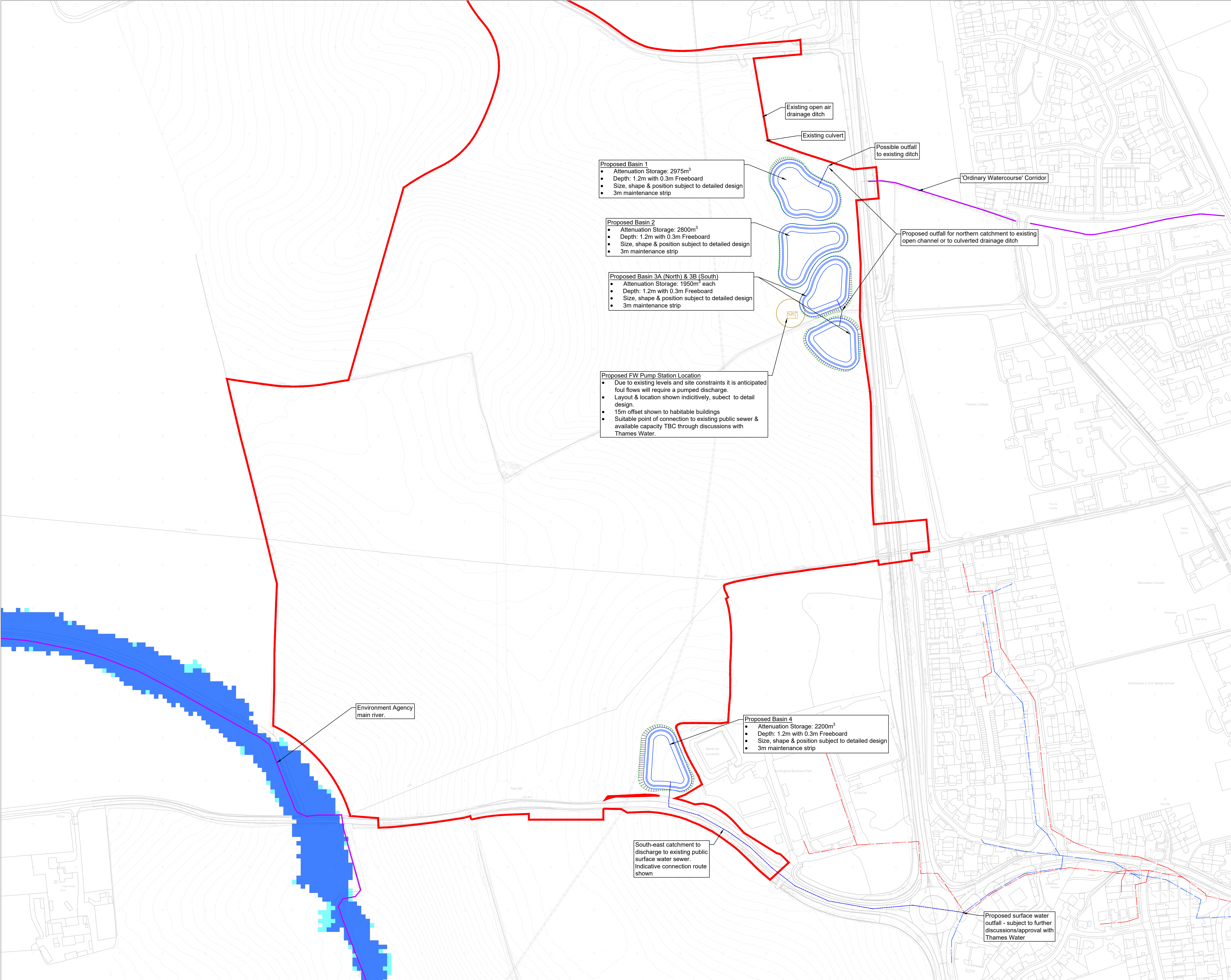
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PROJECT REF:
23161
DRAWING No:
SK-C-010

STATUS:
REV:
P1

Revision Referencing
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Appendix E: Updated Drainage Calculations & Drainage Strategy Plan



Legend

Notes:

- Do not scale from this drawing.
- The location of existing sewers and other features are shown indicatively based on utility companies asset plans. The location and details of any existing apparatus/features should be further investigated prior to commencement of works onsite.
- Fluvial flood zones and surface water flood risk zones shown based on EA flood maps. These zones are subject to change following further investigation of EA flood data.
- No detailed ground investigation information data is available for the site.
- BGS data shows the site is underlain with Chalk of the Lewes Nodular Chalk Formation and Seaford Chalk Formation, which may be suitable for infiltration. Full infiltration testing in accordance with BRE Digest 365 guidance is required onsite to check infiltration feasibility.
- If infiltration is found not to be a viable option, the preferred drainage strategy for the development is to discharge to the existing watercourses/ public sewer within the site and surrounding area, subject to approval from the LLFA, with surface water run-off from the development restricted to a pre-development greenfield Qbar rate.
- Indicative attenuation basins shown have been sized to contain the 1 in 100 year including 40% CC allowance event.
- The proposed basins are shown indicatively with grading shown tying into existing levels. The size, shape and position is subject to detail design.
- An indicative overview of the drainage strategy is shown based on currently available information. This is subject to change and further assessment as the site is taken forward and more detailed information becomes available.
- There is a considerable level difference in parts of the site, proposed basins have been shown to try to reflect the existing topography. However, significant earthworks may be required in the construction of the basins.
- Due to the existing topography of the site, it is anticipated that foul flows from northern parcel of the site will require a pumped connection to the proposed point of connection on the public sewer.
- For the attenuation option, it is anticipated that surface flows from the development will be conveyed to a suitable point of connection to the existing public sewer network or a local watercourse located within close proximity to the site. This is subject to approval with Thames Water/ LLFA.

P4	22.07.24	Updated to LLFA comments	RJ	LE
P3	14.05.24	Updated Redline Plan	LE	LE
P2	22.03.24	Updated redline plan	LE	LE
P1	15.02.24	Preliminary Issue	MD	LE

Rev Date Description By Apvd

PROJECT:
LAND NORTH OF BALDOCK ROAD,
BUNTINGFORD

TITLE:
PRELIMINARY DRAINAGE LAYOUT

CLIENT:
HALLAM LAND MANAGEMENT

SCALE@A1:
1:2000

PROJECT REF:
23161

DRAWING No:
SK-C-007

REV:
P4

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

Bristol, Cardiff, Plymouth, Winchester
St James Court, St James Parade, Bristol BS1 3LH

jubb.uk.com
+44(0)117 922 6266

Project: Land North of Baldock Road Catchment 1	Date: 18/07/2024		
	Designed by: rjethwa	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address:		



Pond - TAD 1

Type : Catchment Area

Area (ha)	3.60
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Dynamic Sizing

Runoff Method	Time Area Diagram
Summer Volumetric Runoff Coefficient	1.000
Winter Volumetric Runoff Coefficient	1.000
Percentage Impervious (%)	100
Time (mins)	Area (ha)
4	1.00
8	1.00
12	1.60

Project:	Land North of Baldock Road Catchment 1		Date:	18/07/2024	
Report Details:	Type: Stormwater Controls Storm Phase: Phase		Designed by:	Checked by:	Approved By:
			rjethwa		
			Company Address:		



Pond

Type : Pond

Dimensions

Exceedence Level (m)	1.500
Depth (m)	1.500
Base Level (m)	0.000
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	4462.500

Depth (m)	Area (m²)	Volume (m³)
0.000	2975.00	0.000
1.000	2975.00	2975.000

Inlets

Inlet

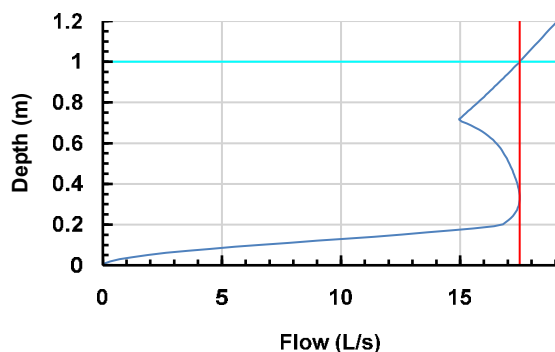
Inlet Type	Point Inflow
Incoming Item(s)	Pond - TAD 1
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Hydro-Brake®
Invert Level (m)	0.000
Design Depth (m)	1.000
Design Flow (L/s)	17.5
Objective	Minimise Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☒

Unit Reference SHE-0187-1750-1000-1750



Project: Land North of Baldock Road Catchment 1	Date: 18/07/2024			
Report Title: Rainfall Analysis Criteria	Designed by: rjethwa	Checked by:		Approved By:
Company Address:				

Rainfall

Rainfall Details FEH

Type: FEH

Site Location	GB 536400 228400 TL 36400 28400		
Rainfall Version	2013		
Data Type	Catchment		
Summer	☒		
Winter	☒		

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0
30.0	0
100.0	40

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520

Project: Land North of Baldock Road Catchment 1		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:		
		Company Address:		



Pond

Critical Storm: Rainfall Details FEH: 100 years: Increase Rainfall (%): +40: 720 mins: Winter

Type : Pond

Tables

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.000	0.0
5	0.9	0.000	0.000	0.113	0.000	0.0
10	3.5	0.001	0.000	0.714	0.000	0.0
15	7.3	0.004	0.000	2.259	0.000	0.0
20	12.0	0.009	0.000	5.081	0.000	0.0
25	16.6	0.016	0.000	9.305	0.000	0.0
30	20.4	0.024	0.000	14.800	0.000	0.0
35	23.4	0.032	0.000	21.324	0.000	0.0
40	26.3	0.040	0.000	28.743	0.000	0.0
45	28.7	0.046	0.000	36.956	0.000	0.0
50	30.5	0.051	0.000	45.803	0.000	0.0
55	32.1	0.054	0.000	55.188	0.000	0.0
60	33.4	0.057	0.000	65.014	0.000	0.0
65	34.3	0.060	0.000	75.175	0.000	0.0
70	35.0	0.063	0.000	85.574	0.000	0.0
75	35.6	0.065	0.000	96.159	0.000	0.0
80	35.9	0.067	0.000	106.884	0.000	0.0
85	36.1	0.069	0.001	117.690	0.000	0.0
90	36.2	0.070	0.003	128.537	0.000	0.0
95	36.2	0.072	0.007	139.398	0.000	0.1
100	36.2	0.073	0.014	150.218	0.000	0.2
105	36.2	0.074	0.023	161.006	0.000	0.4
110	36.2	0.075	0.034	171.677	0.000	0.9
115	36.2	0.076	0.044	182.157	0.000	1.5
120	36.2	0.077	0.053	192.401	0.000	2.1
125	36.4	0.079	0.060	202.596	0.000	2.6
130	36.6	0.080	0.066	212.691	0.000	3.1
135	36.9	0.082	0.071	222.732	0.000	3.5
140	37.5	0.084	0.075	232.779	0.000	3.9
145	38.1	0.087	0.079	242.876	0.000	4.3
150	38.8	0.090	0.083	253.063	0.000	4.7
155	39.9	0.093	0.086	263.398	0.000	5.0
160	41.0	0.096	0.090	273.947	0.000	5.4
165	42.3	0.099	0.094	284.739	0.000	5.8
170	43.9	0.103	0.098	295.832	0.000	6.3
175	45.8	0.107	0.102	307.319	0.000	6.7
180	47.6	0.111	0.106	319.225	0.000	7.2
185	49.9	0.115	0.110	331.595	0.000	7.7
190	52.6	0.119	0.114	344.556	0.000	8.2
195	55.1	0.123	0.119	358.143	0.000	8.8
200	58.0	0.128	0.124	372.366	0.000	9.3
205	61.4	0.133	0.129	387.336	0.000	9.9
210	64.7	0.138	0.134	403.132	0.000	10.6
215	68.1	0.144	0.140	419.745	0.000	11.3
220	72.2	0.150	0.146	437.266	0.000	11.9
225	76.3	0.156	0.152	455.822	0.000	12.6
230	80.3	0.163	0.159	475.391	0.000	13.3
235	84.9	0.169	0.166	496.013	0.000	14.0
240	89.8	0.177	0.173	517.846	0.000	14.7
245	94.3	0.184	0.181	540.880	0.000	15.4

Project: Land North of Baldock Road Catchment 1		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
		Company Address:	



Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
250	99.3	0.192	0.189	565.126	0.000	16.2
255	104.8	0.201	0.199	591.006	0.000	16.7
260	109.9	0.210	0.207	618.690	0.000	16.9
265	115.2	0.219	0.217	647.684	0.000	17.0
270	121.0	0.230	0.227	677.664	0.000	17.1
275	126.4	0.240	0.238	708.808	0.000	17.2
280	131.6	0.252	0.249	742.647	0.000	17.3
285	137.6	0.263	0.266	779.350	0.000	17.4
290	143.2	0.276	0.274	814.725	0.000	17.4
295	148.6	0.289	0.286	854.164	0.000	17.4
300	154.2	0.302	0.299	893.973	0.000	17.5
305	159.8	0.316	0.313	935.898	0.000	17.5
310	165.1	0.331	0.329	979.721	0.000	17.5
315	170.1	0.346	0.344	1024.496	0.000	17.5
320	175.4	0.362	0.358	1071.300	0.000	17.5
325	180.1	0.377	0.376	1119.198	0.000	17.5
330	184.5	0.394	0.392	1168.787	0.000	17.4
335	188.8	0.412	0.409	1219.124	0.000	17.4
340	192.7	0.430	0.427	1271.739	0.000	17.3
345	196.2	0.446	0.444	1324.633	0.000	17.3
350	199.4	0.461	0.463	1379.228	0.000	17.2
355	202.2	0.483	0.481	1433.692	0.000	17.1
360	204.2	0.503	0.500	1489.979	0.000	17.1
365	205.3	0.520	0.520	1546.114	0.000	17.0
370	205.1	0.540	0.539	1602.156	0.000	16.9
375	203.9	0.558	0.557	1658.969	0.000	16.8
380	201.6	0.577	0.575	1715.070	0.000	16.7
385	198.7	0.597	0.596	1770.157	0.000	16.6
390	195.5	0.615	0.613	1824.881	0.000	16.4
395	192.0	0.632	0.630	1877.009	0.000	16.2
400	187.8	0.648	0.648	1929.275	0.000	16.0
405	183.5	0.666	0.665	1980.057	0.000	15.8
410	179.2	0.683	0.682	2029.820	0.000	15.5
415	174.2	0.698	0.699	2078.431	0.000	15.2
420	168.9	0.716	0.713	2125.029	0.000	15.0
425	164.0	0.731	0.728	2170.882	0.000	15.1
430	158.7	0.745	0.744	2214.547	0.000	15.2
435	152.8	0.759	0.759	2256.882	0.000	15.3
440	147.5	0.772	0.772	2296.926	0.000	15.5
445	142.1	0.785	0.785	2335.825	0.000	15.6
450	136.2	0.798	0.798	2372.524	0.000	15.7
455	130.7	0.809	0.810	2407.441	0.000	15.8
460	125.3	0.821	0.821	2442.094	0.000	15.9
465	119.6	0.832	0.831	2473.875	0.000	16.0
470	114.0	0.842	0.841	2503.861	0.000	16.1
475	109.0	0.852	0.851	2532.495	0.000	16.2
480	103.7	0.860	0.860	2559.449	0.000	16.3
485	98.2	0.869	0.869	2585.061	0.000	16.4
490	93.5	0.877	0.877	2608.884	0.000	16.4
495	88.8	0.885	0.885	2631.493	0.000	16.5
500	83.9	0.892	0.891	2652.326	0.000	16.6
505	79.6	0.898	0.898	2671.871	0.000	16.6
510	75.5	0.905	0.904	2690.254	0.000	16.7
515	71.3	0.911	0.910	2707.212	0.000	16.7
520	67.4	0.916	0.915	2723.042	0.000	16.8
525	64.1	0.920	0.920	2737.617	0.000	16.8
530	60.7	0.925	0.925	2751.214	0.000	16.9
535	57.4	0.929	0.929	2763.830	0.000	16.9

Project: Land North of Baldock Road Catchment 1		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
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Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
540	54.7	0.933	0.933	2775.811	0.000	16.9
545	52.0	0.937	0.937	2786.657	0.000	17.0
550	49.4	0.940	0.940	2796.756	0.000	17.0
555	47.3	0.943	0.943	2806.127	0.000	17.0
560	45.4	0.946	0.946	2814.980	0.000	17.0
565	43.6	0.949	0.949	2823.228	0.000	17.1
570	42.0	0.952	0.951	2830.958	0.000	17.1
575	40.8	0.954	0.954	2838.227	0.000	17.1
580	39.6	0.956	0.956	2845.200	0.000	17.1
585	38.7	0.959	0.959	2851.742	0.000	17.1
590	37.9	0.960	0.961	2858.172	0.000	17.2
595	37.3	0.963	0.963	2864.302	0.000	17.2
600	36.8	0.965	0.965	2870.249	0.000	17.2
605	36.5	0.967	0.967	2876.033	0.000	17.2
610	36.3	0.969	0.969	2881.875	0.000	17.2
615	36.2	0.971	0.971	2887.536	0.000	17.2
620	36.2	0.973	0.972	2893.280	0.000	17.3
625	36.2	0.975	0.974	2898.847	0.000	17.3
630	36.2	0.976	0.977	2904.615	0.000	17.3
635	36.2	0.978	0.978	2910.265	0.000	17.3
640	36.2	0.980	0.980	2915.975	0.000	17.3
645	36.2	0.982	0.982	2921.635	0.000	17.3
650	36.1	0.984	0.984	2927.255	0.000	17.4
655	35.9	0.986	0.986	2932.821	0.000	17.4
660	35.5	0.988	0.988	2938.265	0.000	17.4
665	34.9	0.990	0.989	2943.617	0.000	17.4
670	34.2	0.991	0.991	2948.789	0.000	17.4
675	33.1	0.993	0.993	2953.664	0.000	17.4
680	31.7	0.994	0.994	2958.159	0.000	17.4
685	30.2	0.996	0.996	2962.209	0.000	17.5
690	28.3	0.997	0.997	2965.735	0.000	17.5
695	25.7	0.998	0.998	2968.613	0.000	17.5
700	22.9	0.999	0.999	2970.659	0.000	17.5
705	19.8	0.999	0.999	2971.823	0.000	17.5
710	15.7	0.999	0.999	2971.910	0.000	17.5
715	11.0	0.999	0.999	2970.692	0.000	17.5
720	6.5	0.998	0.998	2968.100	0.000	17.5
725	2.7	0.996	0.996	2964.229	0.000	17.5
730	0.6	0.995	0.995	2959.469	0.000	17.5
735	0.0	0.993	0.993	2954.330	0.000	17.4
740	0.0	0.991	0.991	2949.107	0.000	17.4
745	0.0	0.989	0.990	2943.876	0.000	17.4
750	0.0	0.988	0.988	2938.672	0.000	17.4
755	0.0	0.986	0.986	2933.528	0.000	17.4
760	0.0	0.984	0.984	2928.307	0.000	17.4
765	0.0	0.983	0.982	2923.066	0.000	17.4
770	0.0	0.981	0.981	2917.819	0.000	17.3
775	0.0	0.979	0.979	2912.647	0.000	17.3
780	0.0	0.977	0.977	2907.446	0.000	17.3
785	0.0	0.976	0.975	2902.335	0.000	17.3
790	0.0	0.974	0.974	2897.066	0.000	17.3
795	0.0	0.972	0.972	2891.975	0.000	17.3
800	0.0	0.970	0.970	2886.731	0.000	17.2
805	0.0	0.969	0.968	2881.528	0.000	17.2
810	0.0	0.967	0.967	2876.408	0.000	17.2
815	0.0	0.965	0.965	2871.234	0.000	17.2
820	0.0	0.963	0.963	2866.063	0.000	17.2
825	0.0	0.962	0.962	2860.894	0.000	17.2

Project: Land North of Baldock Road Catchment 1		Date: 18/07/2024	
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Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
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Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m ³)	Flooded Volume (m ³)	Total Outflow (L/s)
830	0.0	0.960	0.960	2855.809	0.000	17.2
835	0.0	0.958	0.958	2850.598	0.000	17.1
840	0.0	0.956	0.956	2845.454	0.000	17.1
845	0.0	0.955	0.955	2840.418	0.000	17.1
850	0.0	0.953	0.953	2835.199	0.000	17.1
855	0.0	0.951	0.951	2830.060	0.000	17.1
860	0.0	0.950	0.950	2824.989	0.000	17.1
865	0.0	0.948	0.948	2819.849	0.000	17.1
870	0.0	0.946	0.946	2814.705	0.000	17.0
875	0.0	0.944	0.944	2809.594	0.000	17.0
880	0.0	0.943	0.943	2804.538	0.000	17.0
885	0.0	0.941	0.941	2799.371	0.000	17.0
890	0.0	0.939	0.939	2794.280	0.000	17.0
895	0.0	0.938	0.938	2789.252	0.000	17.0
900	0.0	0.936	0.936	2784.095	0.000	17.0
905	0.0	0.934	0.934	2779.033	0.000	16.9
910	0.0	0.932	0.933	2774.129	0.000	16.9
915	0.0	0.931	0.931	2768.889	0.000	16.9
920	0.0	0.929	0.929	2763.868	0.000	16.9
925	0.0	0.927	0.927	2758.714	0.000	16.9
930	0.0	0.926	0.926	2753.648	0.000	16.9
935	0.0	0.924	0.924	2748.605	0.000	16.9
940	0.0	0.922	0.922	2743.588	0.000	16.8
945	0.0	0.920	0.920	2738.534	0.000	16.8
950	0.0	0.919	0.919	2733.454	0.000	16.8
955	0.0	0.917	0.917	2728.408	0.000	16.8
960	0.0	0.915	0.915	2723.390	0.000	16.8
965	0.0	0.914	0.914	2718.382	0.000	16.8
970	0.0	0.912	0.912	2713.373	0.000	16.7
975	0.0	0.910	0.910	2708.334	0.000	16.7
980	0.0	0.909	0.909	2703.356	0.000	16.7
985	0.0	0.907	0.907	2698.421	0.000	16.7
990	0.0	0.905	0.905	2693.328	0.000	16.7
995	0.0	0.904	0.904	2688.270	0.000	16.7
1000	0.0	0.902	0.902	2683.293	0.000	16.7
1005	0.0	0.900	0.900	2678.298	0.000	16.6
1010	0.0	0.899	0.899	2673.278	0.000	16.6
1015	0.0	0.897	0.897	2668.299	0.000	16.6
1020	0.0	0.895	0.895	2663.393	0.000	16.6
1025	0.0	0.894	0.894	2658.359	0.000	16.6
1030	0.0	0.892	0.892	2653.365	0.000	16.6
1035	0.0	0.890	0.890	2648.397	0.000	16.6
1040	0.0	0.889	0.888	2643.482	0.000	16.5
1045	0.0	0.887	0.887	2638.453	0.000	16.5
1050	0.0	0.885	0.885	2633.508	0.000	16.5
1055	0.0	0.884	0.884	2628.569	0.000	16.5
1060	0.0	0.882	0.882	2623.616	0.000	16.5
1065	0.0	0.880	0.880	2618.785	0.000	16.5
1070	0.0	0.879	0.878	2613.715	0.000	16.5
1075	0.0	0.877	0.877	2608.804	0.000	16.4
1080	0.0	0.875	0.875	2603.894	0.000	16.4
1085	0.0	0.874	0.874	2598.966	0.000	16.4
1090	0.0	0.872	0.872	2594.040	0.000	16.4
1095	0.0	0.870	0.870	2589.086	0.000	16.4
1100	0.0	0.869	0.869	2584.236	0.000	16.4
1105	0.0	0.867	0.867	2579.279	0.000	16.4
1110	0.0	0.865	0.865	2574.374	0.000	16.3
1115	0.0	0.864	0.864	2569.500	0.000	16.3

Project: Land North of Baldock Road Catchment 1		Date: 18/07/2024	
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Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1120	0.0	0.862	0.862	2564.587	0.000	16.3
1125	0.0	0.860	0.860	2559.680	0.000	16.3
1130	0.0	0.859	0.859	2554.860	0.000	16.3
1135	0.0	0.857	0.857	2549.947	0.000	16.3
1140	0.0	0.856	0.855	2545.023	0.000	16.3
1145	0.0	0.854	0.854	2540.216	0.000	16.2
1150	0.0	0.852	0.852	2535.304	0.000	16.2
1155	0.0	0.851	0.851	2530.429	0.000	16.2
1160	0.0	0.849	0.849	2525.601	0.000	16.2
1165	0.0	0.844	0.848	2520.578	0.000	16.2
1170	0.0	0.846	0.846	2515.902	0.000	16.2
1175	0.0	0.844	0.844	2511.000	0.000	16.1
1180	0.0	0.842	0.842	2506.182	0.000	16.1
1185	0.0	0.841	0.841	2501.334	0.000	16.1
1190	0.0	0.839	0.839	2496.561	0.000	16.1
1195	0.0	0.838	0.837	2491.675	0.000	16.1
1200	0.0	0.836	0.836	2486.882	0.000	16.1
1205	0.0	0.834	0.834	2482.013	0.000	16.1
1210	0.0	0.833	0.833	2477.268	0.000	16.0
1215	0.0	0.831	0.831	2472.430	0.000	16.0
1220	0.0	0.829	0.830	2467.601	0.000	16.0
1225	0.0	0.828	0.828	2462.793	0.000	16.0
1230	0.0	0.826	0.826	2458.074	0.000	16.0
1235	0.0	0.825	0.825	2453.200	0.000	16.0
1240	0.0	0.823	0.823	2448.408	0.000	16.0
1245	0.0	0.821	0.821	2443.657	0.000	15.9
1250	0.0	0.820	0.820	2438.847	0.000	15.9
1255	0.0	0.818	0.819	2434.156	0.000	15.9
1260	0.0	0.816	0.817	2429.402	0.000	15.9
1265	0.0	0.815	0.815	2424.527	0.000	15.9
1270	0.0	0.813	0.813	2419.763	0.000	15.9
1275	0.0	0.812	0.812	2415.044	0.000	15.9
1280	0.0	0.810	0.810	2410.272	0.000	15.8
1285	0.0	0.809	0.809	2405.521	0.000	15.8
1290	0.0	0.807	0.807	2400.794	0.000	15.8
1295	0.0	0.805	0.805	2396.186	0.000	15.8
1300	0.0	0.804	0.804	2391.299	0.000	15.8
1305	0.0	0.802	0.802	2386.551	0.000	15.8
1310	0.0	0.801	0.801	2381.857	0.000	15.7
1315	0.0	0.799	0.799	2377.114	0.000	15.7
1320	0.0	0.797	0.797	2372.428	0.000	15.7
1325	0.0	0.796	0.796	2367.764	0.000	15.7
1330	0.0	0.794	0.794	2362.965	0.000	15.7
1335	0.0	0.793	0.793	2358.279	0.000	15.7
1340	0.0	0.791	0.791	2353.646	0.000	15.7
1345	0.0	0.790	0.789	2348.945	0.000	15.6
1350	0.0	0.788	0.788	2344.227	0.000	15.6
1355	0.0	0.786	0.786	2339.561	0.000	15.6
1360	0.0	0.785	0.785	2334.872	0.000	15.6
1365	0.0	0.783	0.783	2330.161	0.000	15.6
1370	0.0	0.782	0.782	2325.498	0.000	15.6
1375	0.0	0.780	0.780	2320.865	0.000	15.6
1380	0.0	0.779	0.779	2316.258	0.000	15.5
1385	0.0	0.777	0.777	2311.524	0.000	15.5
1390	0.0	0.775	0.775	2306.831	0.000	15.5
1395	0.0	0.774	0.774	2302.177	0.000	15.5
1400	0.0	0.772	0.772	2297.563	0.000	15.5
1405	0.0	0.771	0.771	2292.880	0.000	15.5

Project: Land North of Baldock Road Catchment 1		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1410	0.0	0.769	0.769	2288.241	0.000	15.5
1415	0.0	0.768	0.768	2283.645	0.000	15.4
1420	0.0	0.766	0.766	2279.046	0.000	15.4
1425	0.0	0.765	0.764	2274.353	0.000	15.4
1430	0.0	0.763	0.763	2269.736	0.000	15.4
1435	0.0	0.761	0.761	2265.187	0.000	15.4
1440	0.0	0.760	0.760	2260.586	0.000	15.4

Project: Land North of Baldock Road Catchment 2	Date: 18/07/2024		
	Designed by: rjethwa	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address:		



Pond - TAD 1

Type : Catchment Area

Area (ha)	3.38
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Dynamic Sizing

Runoff Method	Time Area Diagram
Summer Volumetric Runoff Coefficient	1.000
Winter Volumetric Runoff Coefficient	1.000
Percentage Impervious (%)	100
Time (mins)	Area (ha)
4	1.00
8	1.00
12	1.38

Project:	Land North of Baldock Road Catchment 2		Date:	18/07/2024	
Report Details:			Designed by:	Checked by:	Approved By:
Type: Stormwater Controls			rjethwa		
Storm Phase: Phase			Company Address:		



Pond

Type : Pond

Dimensions

Exceedence Level (m)	1.500
Depth (m)	1.500
Base Level (m)	0.000
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	4200.000

Depth (m)	Area (m²)	Volume (m³)
0.000	2800.00	0.000
1.000	2800.00	2800.000

Inlets

Inlet

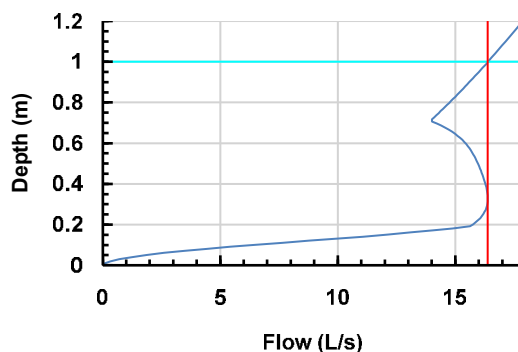
Inlet Type	Point Inflow
Incoming Item(s)	Pond - TAD 1
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Hydro-Brake®
Invert Level (m)	0.000
Design Depth (m)	1.000
Design Flow (L/s)	16.4
Objective	Minimise Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☒

Unit Reference SHE-0182-1640-1000-1640



Project: Land North of Baldock Road Catchment 2	Date: 18/07/2024			
Report Title: Rainfall Analysis Criteria	Designed by: rjethwa	Checked by:		Approved By:
Company Address:				

Rainfall

Rainfall Details FEH

Type: FEH

Site Location	GB 536400 228400 TL 36400 28400		
Rainfall Version	2013		
Data Type	Catchment		
Summer	☒		
Winter	☒		

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0
30.0	0
100.0	40

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520

Project: Land North of Baldock Road Catchment 2		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		



Pond
Critical Storm: Rainfall Details FEH: 100 years: Increase Rainfall (%): +40: 720 mins: Winter

Type : Pond

Tables

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.000	0.0
5	0.9	0.000	0.000	0.113	0.000	0.0
10	3.4	0.001	0.000	0.704	0.000	0.0
15	7.0	0.004	0.000	2.199	0.000	0.0
20	11.5	0.009	0.000	4.899	0.000	0.0
25	15.8	0.016	0.000	8.919	0.000	0.0
30	19.2	0.024	0.000	14.122	0.000	0.0
35	22.1	0.032	0.000	20.282	0.000	0.0
40	24.8	0.040	0.000	27.280	0.000	0.0
45	27.0	0.046	0.000	35.020	0.000	0.0
50	28.7	0.051	0.000	43.347	0.000	0.0
55	30.2	0.054	0.000	52.177	0.000	0.0
60	31.4	0.057	0.000	61.420	0.000	0.0
65	32.2	0.060	0.000	70.970	0.000	0.0
70	32.9	0.063	0.000	80.742	0.000	0.0
75	33.4	0.065	0.000	90.687	0.000	0.0
80	33.7	0.067	0.000	100.761	0.000	0.0
85	33.9	0.069	0.001	110.908	0.000	0.0
90	34.0	0.070	0.003	121.094	0.000	0.0
95	34.0	0.072	0.007	131.291	0.000	0.1
100	34.0	0.073	0.014	141.449	0.000	0.2
105	34.0	0.074	0.023	151.573	0.000	0.4
110	34.0	0.075	0.034	161.581	0.000	0.9
115	34.0	0.076	0.044	171.403	0.000	1.5
120	34.0	0.077	0.053	180.999	0.000	2.0
125	34.2	0.078	0.060	190.544	0.000	2.5
130	34.4	0.080	0.066	199.989	0.000	3.0
135	34.7	0.082	0.070	209.379	0.000	3.4
140	35.2	0.084	0.075	218.774	0.000	3.8
145	35.8	0.087	0.079	228.214	0.000	4.2
150	36.5	0.090	0.082	237.737	0.000	4.5
155	37.5	0.093	0.086	247.399	0.000	4.9
160	38.6	0.096	0.090	257.259	0.000	5.3
165	39.8	0.099	0.093	267.347	0.000	5.7
170	41.3	0.103	0.097	277.718	0.000	6.1
175	43.1	0.107	0.101	288.461	0.000	6.5
180	44.8	0.110	0.105	299.591	0.000	7.0
185	47.0	0.114	0.109	311.156	0.000	7.5
190	49.5	0.119	0.114	323.280	0.000	8.0
195	51.9	0.123	0.118	335.988	0.000	8.5
200	54.6	0.128	0.123	349.292	0.000	9.0
205	57.8	0.133	0.128	363.304	0.000	9.6
210	60.9	0.138	0.134	378.091	0.000	10.2
215	64.1	0.144	0.139	393.640	0.000	10.9
220	67.9	0.149	0.145	410.044	0.000	11.5
225	71.8	0.155	0.151	427.426	0.000	12.1
230	75.5	0.162	0.158	445.761	0.000	12.7
235	79.9	0.169	0.165	465.094	0.000	13.4
240	84.5	0.176	0.172	485.576	0.000	14.1
245	88.7	0.184	0.180	507.179	0.000	14.7

Project: Land North of Baldock Road Catchment 2		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
		Company Address:	



Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
250	93.4	0.192	0.189	529.907	0.000	15.4
255	98.6	0.200	0.197	553.971	0.000	15.7
260	103.3	0.209	0.206	579.480	0.000	15.8
265	108.2	0.219	0.216	606.519	0.000	15.9
270	113.6	0.229	0.226	634.823	0.000	16.0
275	119.0	0.240	0.237	666.179	0.000	16.1
280	123.8	0.251	0.248	696.583	0.000	16.2
285	129.2	0.263	0.260	729.963	0.000	16.2
290	134.9	0.275	0.273	766.017	0.000	16.3
295	139.7	0.288	0.285	801.973	0.000	16.3
300	144.9	0.301	0.299	838.650	0.000	16.4
305	150.5	0.314	0.313	878.919	0.000	16.4
310	155.0	0.328	0.329	920.160	0.000	16.4
315	159.9	0.345	0.343	962.332	0.000	16.4
320	164.9	0.361	0.358	1005.838	0.000	16.4
325	169.2	0.377	0.374	1051.237	0.000	16.3
330	173.3	0.391	0.394	1098.591	0.000	16.3
335	177.6	0.410	0.408	1145.586	0.000	16.3
340	181.2	0.429	0.426	1194.674	0.000	16.2
345	184.3	0.445	0.443	1243.968	0.000	16.2
350	187.3	0.464	0.462	1295.986	0.000	16.1
355	189.9	0.481	0.479	1346.902	0.000	16.0
360	191.8	0.502	0.499	1399.518	0.000	16.0
365	192.8	0.520	0.517	1452.638	0.000	15.9
370	192.6	0.539	0.537	1505.160	0.000	15.8
375	191.3	0.557	0.557	1557.686	0.000	15.7
380	189.2	0.577	0.574	1610.542	0.000	15.6
385	186.3	0.595	0.594	1662.476	0.000	15.5
390	183.4	0.613	0.612	1713.453	0.000	15.3
395	180.2	0.630	0.629	1762.767	0.000	15.2
400	176.2	0.647	0.648	1811.697	0.000	15.0
405	172.1	0.665	0.664	1859.642	0.000	14.8
410	168.1	0.681	0.681	1906.601	0.000	14.5
415	163.5	0.699	0.697	1951.985	0.000	14.2
420	158.4	0.714	0.713	1995.772	0.000	14.0
425	153.9	0.729	0.728	2037.997	0.000	14.1
430	148.9	0.743	0.743	2080.243	0.000	14.2
435	143.2	0.758	0.754	2119.478	0.000	14.4
440	138.3	0.771	0.770	2156.692	0.000	14.5
445	133.2	0.784	0.783	2193.644	0.000	14.6
450	127.6	0.796	0.796	2228.181	0.000	14.7
455	122.4	0.808	0.808	2261.411	0.000	14.8
460	117.5	0.820	0.819	2293.847	0.000	14.9
465	112.0	0.831	0.829	2322.968	0.000	15.0
470	106.9	0.840	0.840	2350.211	0.000	15.1
475	102.3	0.849	0.849	2377.363	0.000	15.2
480	97.0	0.858	0.858	2403.422	0.000	15.3
485	92.0	0.867	0.867	2427.174	0.000	15.3
490	87.7	0.875	0.875	2449.681	0.000	15.4
495	83.2	0.882	0.882	2470.398	0.000	15.5
500	78.7	0.890	0.889	2490.548	0.000	15.5
505	74.6	0.896	0.896	2508.172	0.000	15.6
510	70.8	0.903	0.901	2525.581	0.000	15.6
515	66.8	0.908	0.908	2541.553	0.000	15.7
520	63.2	0.913	0.913	2556.433	0.000	15.7
525	60.1	0.918	0.918	2570.002	0.000	15.7
530	56.8	0.923	0.922	2582.766	0.000	15.8
535	53.8	0.927	0.927	2594.755	0.000	15.8

Project: Land North of Baldock Road Catchment 2		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
		Approved By:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:	



Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
540	51.3	0.931	0.931	2605.658	0.000	15.9
545	48.7	0.935	0.934	2616.031	0.000	15.9
550	46.3	0.937	0.938	2625.368	0.000	15.9
555	44.4	0.941	0.941	2634.216	0.000	15.9
560	42.6	0.944	0.944	2642.540	0.000	16.0
565	40.8	0.947	0.947	2650.220	0.000	16.0
570	39.4	0.949	0.949	2657.510	0.000	16.0
575	38.3	0.952	0.951	2664.363	0.000	16.0
580	37.2	0.954	0.954	2670.811	0.000	16.0
585	36.3	0.956	0.956	2677.050	0.000	16.1
590	35.6	0.958	0.958	2683.066	0.000	16.1
595	35.0	0.960	0.960	2688.810	0.000	16.1
600	34.6	0.962	0.962	2694.446	0.000	16.1
605	34.3	0.964	0.964	2699.894	0.000	16.1
610	34.1	0.966	0.966	2705.312	0.000	16.1
615	34.0	0.968	0.968	2710.758	0.000	16.1
620	34.0	0.970	0.970	2716.080	0.000	16.2
625	34.0	0.972	0.972	2721.397	0.000	16.2
630	34.0	0.973	0.974	2726.785	0.000	16.2
635	34.0	0.976	0.976	2732.066	0.000	16.2
640	34.0	0.978	0.975	2736.824	0.000	16.2
645	34.0	0.980	0.980	2742.626	0.000	16.2
650	33.9	0.982	0.981	2748.099	0.000	16.3
655	33.7	0.983	0.983	2753.299	0.000	16.3
660	33.3	0.985	0.985	2758.907	0.000	16.3
665	32.7	0.987	0.987	2763.505	0.000	16.3
670	32.1	0.989	0.989	2768.271	0.000	16.3
675	31.1	0.990	0.990	2772.925	0.000	16.3
680	29.7	0.992	0.992	2777.153	0.000	16.3
685	28.3	0.993	0.993	2780.889	0.000	16.3
690	26.5	0.994	0.994	2784.217	0.000	16.4
695	24.1	0.995	0.995	2786.929	0.000	16.4
700	21.4	0.996	0.996	2788.851	0.000	16.4
705	18.5	0.997	0.996	2789.917	0.000	16.4
710	14.6	0.996	0.996	2789.975	0.000	16.4
715	10.2	0.996	0.996	2788.786	0.000	16.4
720	6.0	0.995	0.995	2786.344	0.000	16.4
725	2.5	0.994	0.994	2782.668	0.000	16.4
730	0.5	0.992	0.992	2778.178	0.000	16.3
735	0.0	0.991	0.990	2773.362	0.000	16.3
740	0.0	0.989	0.989	2768.532	0.000	16.3
745	0.0	0.987	0.987	2763.623	0.000	16.3
750	0.0	0.985	0.985	2758.714	0.000	16.3
755	0.0	0.984	0.983	2753.859	0.000	16.3
760	0.0	0.982	0.982	2748.922	0.000	16.3
765	0.0	0.980	0.980	2744.141	0.000	16.2
770	0.0	0.978	0.978	2739.238	0.000	16.2
775	0.0	0.977	0.977	2734.344	0.000	16.2
780	0.0	0.975	0.975	2729.545	0.000	16.2
785	0.0	0.973	0.973	2724.639	0.000	16.2
790	0.0	0.971	0.971	2719.785	0.000	16.2
795	0.0	0.970	0.970	2714.897	0.000	16.2
800	0.0	0.968	0.968	2710.065	0.000	16.1
805	0.0	0.966	0.966	2705.224	0.000	16.1
810	0.0	0.964	0.964	2700.447	0.000	16.1
815	0.0	0.963	0.963	2695.575	0.000	16.1
820	0.0	0.961	0.961	2690.745	0.000	16.1
825	0.0	0.959	0.959	2685.925	0.000	16.1

Project: Land North of Baldock Road Catchment 2		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:		
		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
830	0.0	0.958	0.958	2681.071	0.000	16.1
835	0.0	0.956	0.956	2676.437	0.000	16.0
840	0.0	0.954	0.954	2671.430	0.000	16.0
845	0.0	0.952	0.952	2666.697	0.000	16.0
850	0.0	0.951	0.951	2661.852	0.000	16.0
855	0.0	0.949	0.949	2657.107	0.000	16.0
860	0.0	0.947	0.947	2652.260	0.000	16.0
865	0.0	0.946	0.945	2647.467	0.000	16.0
870	0.0	0.944	0.944	2642.690	0.000	16.0
875	0.0	0.942	0.942	2637.852	0.000	15.9
880	0.0	0.940	0.940	2633.075	0.000	15.9
885	0.0	0.939	0.939	2628.293	0.000	15.9
890	0.0	0.937	0.937	2623.550	0.000	15.9
895	0.0	0.935	0.935	2618.815	0.000	15.9
900	0.0	0.934	0.934	2614.072	0.000	15.9
905	0.0	0.932	0.932	2609.296	0.000	15.9
910	0.0	0.930	0.930	2604.506	0.000	15.8
915	0.0	0.928	0.928	2599.734	0.000	15.8
920	0.0	0.927	0.927	2594.965	0.000	15.8
925	0.0	0.925	0.925	2590.254	0.000	15.8
930	0.0	0.923	0.923	2585.513	0.000	15.8
935	0.0	0.922	0.922	2580.748	0.000	15.8
940	0.0	0.920	0.920	2576.103	0.000	15.8
945	0.0	0.918	0.918	2571.291	0.000	15.8
950	0.0	0.917	0.917	2566.637	0.000	15.7
955	0.0	0.915	0.915	2561.964	0.000	15.7
960	0.0	0.913	0.913	2557.144	0.000	15.7
965	0.0	0.912	0.911	2552.470	0.000	15.7
970	0.0	0.910	0.910	2547.731	0.000	15.7
975	0.0	0.908	0.908	2543.034	0.000	15.7
980	0.0	0.907	0.906	2538.488	0.000	15.7
985	0.0	0.905	0.905	2533.645	0.000	15.6
990	0.0	0.903	0.903	2528.978	0.000	15.6
995	0.0	0.902	0.902	2524.227	0.000	15.6
1000	0.0	0.900	0.900	2519.579	0.000	15.6
1005	0.0	0.898	0.898	2514.867	0.000	15.6
1010	0.0	0.897	0.896	2510.230	0.000	15.6
1015	0.0	0.895	0.895	2505.524	0.000	15.6
1020	0.0	0.893	0.893	2500.894	0.000	15.5
1025	0.0	0.892	0.892	2496.287	0.000	15.5
1030	0.0	0.890	0.890	2491.551	0.000	15.5
1035	0.0	0.888	0.888	2486.908	0.000	15.5
1040	0.0	0.886	0.887	2482.392	0.000	15.5
1045	0.0	0.885	0.885	2477.625	0.000	15.5
1050	0.0	0.883	0.883	2472.953	0.000	15.5
1055	0.0	0.882	0.882	2468.349	0.000	15.5
1060	0.0	0.880	0.880	2463.709	0.000	15.4
1065	0.0	0.878	0.878	2459.142	0.000	15.4
1070	0.0	0.877	0.877	2454.461	0.000	15.4
1075	0.0	0.875	0.875	2449.902	0.000	15.4
1080	0.0	0.873	0.873	2445.221	0.000	15.4
1085	0.0	0.872	0.872	2440.629	0.000	15.4
1090	0.0	0.870	0.870	2436.016	0.000	15.3
1095	0.0	0.868	0.868	2431.453	0.000	15.3
1100	0.0	0.867	0.867	2426.818	0.000	15.3
1105	0.0	0.865	0.865	2422.187	0.000	15.3
1110	0.0	0.863	0.863	2417.657	0.000	15.3
1115	0.0	0.862	0.862	2413.034	0.000	15.3

Project: Land North of Baldock Road Catchment 2		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1120	0.0	0.860	0.860	2408.512	0.000	15.3
1125	0.0	0.859	0.858	2403.896	0.000	15.3
1130	0.0	0.857	0.857	2399.285	0.000	15.2
1135	0.0	0.855	0.855	2394.775	0.000	15.2
1140	0.0	0.854	0.854	2390.171	0.000	15.2
1145	0.0	0.852	0.852	2385.572	0.000	15.2
1150	0.0	0.850	0.850	2381.074	0.000	15.2
1155	0.0	0.849	0.849	2376.535	0.000	15.2
1160	0.0	0.847	0.847	2371.932	0.000	15.2
1165	0.0	0.845	0.845	2367.426	0.000	15.1
1170	0.0	0.844	0.844	2362.871	0.000	15.1
1175	0.0	0.842	0.842	2358.331	0.000	15.1
1180	0.0	0.841	0.841	2353.757	0.000	15.1
1185	0.0	0.839	0.839	2349.211	0.000	15.1
1190	0.0	0.837	0.837	2344.730	0.000	15.1
1195	0.0	0.836	0.836	2340.191	0.000	15.1
1200	0.0	0.834	0.834	2335.667	0.000	15.1
1205	0.0	0.833	0.832	2331.211	0.000	15.0
1210	0.0	0.831	0.831	2326.622	0.000	15.0
1215	0.0	0.829	0.829	2322.128	0.000	15.0
1220	0.0	0.828	0.828	2317.634	0.000	15.0
1225	0.0	0.826	0.826	2313.160	0.000	15.0
1230	0.0	0.825	0.825	2308.782	0.000	15.0
1235	0.0	0.823	0.823	2304.161	0.000	15.0
1240	0.0	0.821	0.821	2299.690	0.000	14.9
1245	0.0	0.820	0.820	2295.180	0.000	14.9
1250	0.0	0.818	0.818	2290.700	0.000	14.9
1255	0.0	0.816	0.817	2286.284	0.000	14.9
1260	0.0	0.815	0.815	2281.827	0.000	14.9
1265	0.0	0.813	0.813	2277.302	0.000	14.9
1270	0.0	0.812	0.812	2272.838	0.000	14.9
1275	0.0	0.810	0.810	2268.459	0.000	14.8
1280	0.0	0.809	0.808	2263.921	0.000	14.8
1285	0.0	0.807	0.807	2259.474	0.000	14.8
1290	0.0	0.805	0.805	2255.052	0.000	14.8
1295	0.0	0.804	0.804	2250.619	0.000	14.8
1300	0.0	0.802	0.802	2246.249	0.000	14.8
1305	0.0	0.801	0.801	2241.766	0.000	14.8
1310	0.0	0.799	0.799	2237.336	0.000	14.7
1315	0.0	0.797	0.797	2232.920	0.000	14.7
1320	0.0	0.796	0.796	2228.495	0.000	14.7
1325	0.0	0.794	0.794	2224.075	0.000	14.7
1330	0.0	0.793	0.793	2219.696	0.000	14.7
1335	0.0	0.791	0.791	2215.310	0.000	14.7
1340	0.0	0.790	0.790	2210.861	0.000	14.7
1345	0.0	0.788	0.788	2206.504	0.000	14.6
1350	0.0	0.786	0.787	2202.106	0.000	14.6
1355	0.0	0.785	0.785	2197.661	0.000	14.6
1360	0.0	0.783	0.783	2193.264	0.000	14.6
1365	0.0	0.782	0.782	2188.889	0.000	14.6
1370	0.0	0.780	0.780	2184.523	0.000	14.6
1375	0.0	0.779	0.779	2180.153	0.000	14.6
1380	0.0	0.777	0.777	2175.851	0.000	14.6
1385	0.0	0.776	0.775	2171.400	0.000	14.5
1390	0.0	0.774	0.774	2167.119	0.000	14.5
1395	0.0	0.772	0.772	2162.688	0.000	14.5
1400	0.0	0.771	0.771	2158.339	0.000	14.5
1405	0.0	0.769	0.769	2154.028	0.000	14.5

Project: Land North of Baldock Road Catchment 2		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1410	0.0	0.768	0.768	2149.657	0.000	14.5
1415	0.0	0.766	0.766	2145.308	0.000	14.5
1420	0.0	0.765	0.765	2140.997	0.000	14.4
1425	0.0	0.763	0.763	2136.733	0.000	14.4
1430	0.0	0.762	0.762	2132.392	0.000	14.4
1435	0.0	0.760	0.760	2128.041	0.000	14.4
1440	0.0	0.759	0.758	2123.719	0.000	14.4

Project: Land North of Baldock Road Catchment 3	Date: 18/07/2024		
	Designed by: rjethwa	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address:		



Pond - TAD 1

Type : Catchment Area

Area (ha)	4.82
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Dynamic Sizing

Runoff Method	Time Area Diagram
Summer Volumetric Runoff Coefficient	1.000
Winter Volumetric Runoff Coefficient	1.000
Percentage Impervious (%)	100
Time (mins)	Area (ha)
4	1.00
8	1.80
12	2.02

Project: Land North of Baldock Road Catchment 3		Date: 18/07/2024			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: rjethwa	Checked by:		Approved By:
		Company Address:			



Pond

Type : Pond

Dimensions

Exceedence Level (m)	1.500
Depth (m)	1.500
Base Level (m)	0.000
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	5925.000

Depth (m)	Area (m²)	Volume (m³)
0.000	3950.00	0.000
1.000	3950.00	3950.000

Inlets

Inlet

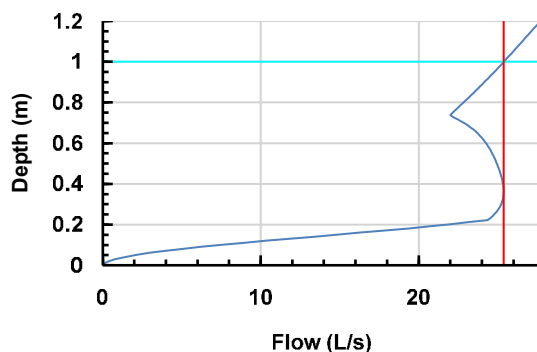
Inlet Type	Point Inflow
Incoming Item(s)	Pond - TAD 1
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Hydro-Brake®
Invert Level (m)	0.000
Design Depth (m)	1.000
Design Flow (L/s)	25.4
Objective	Minimise Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☒

Unit Reference SHE-0220-2540-1000-2540



Project: Land North of Baldock Road Catchment 3	Date: 18/07/2024			
Report Title: Rainfall Analysis Criteria	Designed by: rjethwa	Checked by:		Approved By:
Company Address:				

Rainfall

Rainfall Details FEH

Type: FEH

Site Location	GB 536400 228400 TL 36400 28400		
Rainfall Version	2013		
Data Type	Catchment		
Summer	☒		
Winter	☒		

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0
30.0	0
100.0	40

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520

Project: Land North of Baldock Road Catchment 3		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		



Pond
Critical Storm: Rainfall Details FEH: 100 years: Increase Rainfall (%): +40: 720 mins: Winter

Type : Pond

Tables

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.000	0.0
5	1.0	0.000	0.000	0.131	0.000	0.0
10	4.4	0.001	0.000	0.879	0.000	0.0
15	9.6	0.004	0.000	2.885	0.000	0.0
20	15.8	0.009	0.000	6.597	0.000	0.0
25	22.1	0.015	0.000	12.187	0.000	0.0
30	27.2	0.024	0.000	19.508	0.000	0.0
35	31.2	0.032	0.000	28.206	0.000	0.0
40	35.1	0.040	0.000	38.098	0.000	0.0
45	38.3	0.046	0.000	49.068	0.000	0.0
50	40.7	0.051	0.000	60.895	0.000	0.0
55	42.9	0.054	0.000	73.440	0.000	0.0
60	44.7	0.057	0.000	86.581	0.000	0.0
65	45.9	0.060	0.000	100.178	0.000	0.0
70	46.8	0.063	0.000	114.091	0.000	0.0
75	47.6	0.065	0.000	128.256	0.000	0.0
80	48.1	0.067	0.000	142.614	0.000	0.0
85	48.3	0.069	0.001	157.079	0.000	0.0
90	48.5	0.071	0.003	171.603	0.000	0.0
95	48.5	0.072	0.007	186.148	0.000	0.1
100	48.5	0.073	0.014	200.640	0.000	0.2
105	48.5	0.075	0.023	215.100	0.000	0.5
110	48.4	0.076	0.034	229.426	0.000	1.0
115	48.4	0.077	0.045	243.524	0.000	1.7
120	48.5	0.078	0.054	257.340	0.000	2.3
125	48.7	0.079	0.061	271.126	0.000	2.9
130	49.0	0.080	0.067	284.807	0.000	3.5
135	49.4	0.082	0.071	298.439	0.000	4.0
140	50.1	0.085	0.076	312.095	0.000	4.5
145	50.9	0.087	0.080	325.841	0.000	4.9
150	51.9	0.090	0.084	339.724	0.000	5.4
155	53.3	0.094	0.087	353.818	0.000	5.8
160	54.9	0.097	0.091	368.214	0.000	6.3
165	56.5	0.101	0.095	382.952	0.000	6.8
170	58.7	0.104	0.099	398.100	0.000	7.3
175	61.3	0.108	0.103	413.792	0.000	7.8
180	63.7	0.112	0.107	430.066	0.000	8.4
185	66.6	0.116	0.112	446.959	0.000	9.0
190	70.3	0.121	0.116	464.650	0.000	9.7
195	73.7	0.125	0.121	483.214	0.000	10.4
200	77.5	0.130	0.126	502.627	0.000	11.1
205	82.0	0.135	0.131	523.040	0.000	11.9
210	86.5	0.141	0.137	544.581	0.000	12.7
215	91.0	0.146	0.142	567.219	0.000	13.6
220	96.4	0.152	0.149	591.067	0.000	14.4
225	102.0	0.159	0.155	616.304	0.000	15.4
230	107.3	0.165	0.162	642.884	0.000	16.4
235	113.3	0.172	0.169	670.820	0.000	17.5
240	120.1	0.180	0.176	700.336	0.000	18.6
245	126.0	0.188	0.184	731.441	0.000	19.7

Project: Land North of Baldock Road Catchment 3		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
250	132.6	0.196	0.193	764.470	0.000	20.8
255	140.4	0.204	0.201	799.732	0.000	21.9
260	146.9	0.214	0.211	835.402	0.000	23.0
265	153.7	0.223	0.220	873.169	0.000	24.1
270	161.5	0.233	0.230	913.226	0.000	24.5
275	169.3	0.244	0.241	956.629	0.000	24.7
280	176.0	0.255	0.252	1000.201	0.000	24.8
285	183.7	0.267	0.265	1046.475	0.000	24.9
290	191.5	0.279	0.277	1095.739	0.000	25.1
295	198.6	0.293	0.289	1146.665	0.000	25.1
300	206.0	0.305	0.303	1199.589	0.000	25.2
305	214.2	0.320	0.318	1255.934	0.000	25.3
310	220.8	0.334	0.332	1313.498	0.000	25.3
315	227.2	0.350	0.346	1372.660	0.000	25.4
320	234.8	0.365	0.361	1434.995	0.000	25.4
325	241.0	0.380	0.379	1498.169	0.000	25.4
330	246.7	0.396	0.396	1563.681	0.000	25.3
335	252.8	0.415	0.413	1631.276	0.000	25.3
340	258.1	0.433	0.429	1700.459	0.000	25.3
345	262.5	0.450	0.448	1771.012	0.000	25.2
350	266.7	0.462	0.466	1842.611	0.000	25.1
355	270.7	0.486	0.484	1915.828	0.000	25.0
360	273.3	0.498	0.504	1989.980	0.000	24.9
365	274.9	0.523	0.522	2065.782	0.000	24.8
370	274.7	0.532	0.541	2139.861	0.000	24.7
375	273.0	0.561	0.560	2214.156	0.000	24.6
380	270.1	0.580	0.579	2288.453	0.000	24.4
385	266.1	0.598	0.599	2361.874	0.000	24.3
390	261.8	0.618	0.615	2433.885	0.000	24.1
395	257.3	0.635	0.632	2504.596	0.000	23.9
400	251.8	0.645	0.651	2572.823	0.000	23.7
405	245.9	0.672	0.670	2641.056	0.000	23.4
410	240.1	0.686	0.685	2706.806	0.000	23.2
415	233.5	0.702	0.701	2771.405	0.000	22.8
420	226.2	0.717	0.718	2833.509	0.000	22.5
425	219.9	0.733	0.732	2893.396	0.000	22.1
430	212.8	0.748	0.747	2952.079	0.000	22.1
435	204.7	0.762	0.761	3008.106	0.000	22.3
440	197.6	0.776	0.774	3061.725	0.000	22.5
445	190.7	0.788	0.789	3112.236	0.000	22.7
450	182.6	0.801	0.800	3161.525	0.000	22.8
455	175.0	0.813	0.813	3208.869	0.000	23.0
460	168.0	0.824	0.823	3253.721	0.000	23.2
465	160.5	0.835	0.834	3295.235	0.000	23.3
470	152.8	0.845	0.844	3335.449	0.000	23.4
475	146.2	0.854	0.854	3373.641	0.000	23.6
480	139.1	0.864	0.863	3409.440	0.000	23.7
485	131.6	0.871	0.872	3442.755	0.000	23.8
490	125.5	0.880	0.879	3473.917	0.000	23.9
495	119.2	0.887	0.887	3503.714	0.000	24.0
500	112.4	0.894	0.894	3531.462	0.000	24.1
505	106.7	0.900	0.900	3556.990	0.000	24.2
510	101.5	0.906	0.906	3580.574	0.000	24.2
515	95.7	0.913	0.912	3603.013	0.000	24.3
520	90.4	0.918	0.917	3623.918	0.000	24.4
525	86.0	0.923	0.922	3642.962	0.000	24.4
530	81.4	0.927	0.927	3660.680	0.000	24.5
535	76.9	0.931	0.930	3677.192	0.000	24.5

Project: Land North of Baldock Road Catchment 3		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:		
		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
540	73.4	0.935	0.935	3692.280	0.000	24.6
545	69.8	0.938	0.938	3706.521	0.000	24.6
550	66.2	0.942	0.941	3719.487	0.000	24.7
555	63.4	0.945	0.944	3731.473	0.000	24.7
560	60.9	0.948	0.947	3742.645	0.000	24.8
565	58.4	0.950	0.950	3753.125	0.000	24.8
570	56.3	0.953	0.952	3763.005	0.000	24.8
575	54.7	0.955	0.955	3772.143	0.000	24.9
580	53.1	0.957	0.957	3780.838	0.000	24.9
585	51.8	0.959	0.959	3789.135	0.000	24.9
590	50.8	0.961	0.961	3797.115	0.000	24.9
595	50.0	0.963	0.963	3804.740	0.000	24.9
600	49.3	0.965	0.965	3812.163	0.000	25.0
605	48.9	0.967	0.967	3819.367	0.000	25.0
610	48.7	0.969	0.969	3826.551	0.000	25.0
615	48.5	0.971	0.970	3833.598	0.000	25.0
620	48.4	0.973	0.972	3840.627	0.000	25.1
625	48.4	0.974	0.974	3847.635	0.000	25.1
630	48.5	0.976	0.976	3854.642	0.000	25.1
635	48.5	0.978	0.978	3861.561	0.000	25.1
640	48.5	0.980	0.979	3868.610	0.000	25.1
645	48.5	0.981	0.981	3875.598	0.000	25.2
650	48.3	0.983	0.983	3882.599	0.000	25.2
655	48.0	0.985	0.985	3889.482	0.000	25.2
660	47.5	0.987	0.987	3896.302	0.000	25.2
665	46.7	0.988	0.988	3902.847	0.000	25.3
670	45.8	0.990	0.990	3909.119	0.000	25.3
675	44.5	0.991	0.991	3915.056	0.000	25.3
680	42.6	0.993	0.992	3920.544	0.000	25.3
685	40.5	0.994	0.994	3925.388	0.000	25.3
690	38.0	0.995	0.995	3929.561	0.000	25.3
695	34.7	0.996	0.996	3932.877	0.000	25.3
700	30.7	0.996	0.996	3935.125	0.000	25.4
705	26.7	0.997	0.997	3936.138	0.000	25.4
710	21.5	0.996	0.997	3935.776	0.000	25.4
715	15.0	0.996	0.996	3933.607	0.000	25.4
720	8.9	0.995	0.995	3929.643	0.000	25.3
725	3.8	0.993	0.993	3923.976	0.000	25.3
730	0.8	0.992	0.992	3917.095	0.000	25.3
735	0.0	0.990	0.990	3909.501	0.000	25.3
740	0.0	0.988	0.988	3901.896	0.000	25.3
745	0.0	0.986	0.986	3894.320	0.000	25.2
750	0.0	0.984	0.984	3886.850	0.000	25.2
755	0.0	0.982	0.982	3879.292	0.000	25.2
760	0.0	0.980	0.980	3871.694	0.000	25.2
765	0.0	0.978	0.978	3864.138	0.000	25.1
770	0.0	0.976	0.976	3856.659	0.000	25.1
775	0.0	0.974	0.974	3849.074	0.000	25.1
780	0.0	0.973	0.972	3841.524	0.000	25.1
785	0.0	0.971	0.971	3834.027	0.000	25.0
790	0.0	0.969	0.969	3826.513	0.000	25.0
795	0.0	0.967	0.967	3819.029	0.000	25.0
800	0.0	0.965	0.965	3811.547	0.000	25.0
805	0.0	0.963	0.963	3804.039	0.000	24.9
810	0.0	0.961	0.961	3796.671	0.000	24.9
815	0.0	0.959	0.959	3789.096	0.000	24.9
820	0.0	0.958	0.957	3781.618	0.000	24.9
825	0.0	0.956	0.956	3774.170	0.000	24.9

Project: Land North of Baldock Road Catchment 3		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
830	0.0	0.954	0.954	3766.749	0.000	24.8
835	0.0	0.952	0.952	3759.241	0.000	24.8
840	0.0	0.950	0.950	3751.862	0.000	24.8
845	0.0	0.948	0.948	3744.395	0.000	24.8
850	0.0	0.946	0.946	3736.951	0.000	24.7
855	0.0	0.944	0.944	3729.640	0.000	24.7
860	0.0	0.942	0.942	3722.180	0.000	24.7
865	0.0	0.940	0.940	3714.717	0.000	24.7
870	0.0	0.939	0.939	3707.370	0.000	24.6
875	0.0	0.937	0.937	3699.960	0.000	24.6
880	0.0	0.935	0.935	3692.588	0.000	24.6
885	0.0	0.933	0.933	3685.217	0.000	24.6
890	0.0	0.931	0.931	3677.844	0.000	24.6
895	0.0	0.929	0.929	3670.490	0.000	24.5
900	0.0	0.927	0.927	3663.215	0.000	24.5
905	0.0	0.926	0.925	3655.736	0.000	24.5
910	0.0	0.924	0.924	3648.385	0.000	24.5
915	0.0	0.922	0.922	3641.059	0.000	24.4
920	0.0	0.920	0.920	3633.783	0.000	24.4
925	0.0	0.918	0.918	3626.424	0.000	24.4
930	0.0	0.916	0.916	3619.124	0.000	24.4
935	0.0	0.914	0.914	3611.901	0.000	24.3
940	0.0	0.913	0.913	3604.614	0.000	24.3
945	0.0	0.911	0.911	3597.203	0.000	24.3
950	0.0	0.909	0.909	3589.920	0.000	24.3
955	0.0	0.907	0.907	3582.635	0.000	24.2
960	0.0	0.905	0.905	3575.376	0.000	24.2
965	0.0	0.903	0.903	3568.139	0.000	24.2
970	0.0	0.902	0.902	3560.866	0.000	24.2
975	0.0	0.900	0.900	3553.664	0.000	24.1
980	0.0	0.898	0.898	3546.420	0.000	24.1
985	0.0	0.896	0.896	3539.181	0.000	24.1
990	0.0	0.894	0.894	3531.920	0.000	24.1
995	0.0	0.892	0.892	3524.684	0.000	24.1
1000	0.0	0.891	0.891	3517.545	0.000	24.0
1005	0.0	0.889	0.889	3510.391	0.000	24.0
1010	0.0	0.887	0.887	3503.055	0.000	24.0
1015	0.0	0.885	0.885	3495.914	0.000	24.0
1020	0.0	0.883	0.883	3488.681	0.000	23.9
1025	0.0	0.881	0.881	3481.526	0.000	23.9
1030	0.0	0.880	0.880	3474.375	0.000	23.9
1035	0.0	0.878	0.878	3467.189	0.000	23.9
1040	0.0	0.876	0.876	3460.104	0.000	23.8
1045	0.0	0.874	0.874	3452.866	0.000	23.8
1050	0.0	0.872	0.872	3445.788	0.000	23.8
1055	0.0	0.871	0.870	3438.644	0.000	23.8
1060	0.0	0.869	0.869	3431.472	0.000	23.7
1065	0.0	0.867	0.867	3424.356	0.000	23.7
1070	0.0	0.865	0.865	3417.265	0.000	23.7
1075	0.0	0.863	0.863	3410.263	0.000	23.7
1080	0.0	0.862	0.861	3403.068	0.000	23.7
1085	0.0	0.860	0.860	3395.966	0.000	23.6
1090	0.0	0.858	0.858	3388.887	0.000	23.6
1095	0.0	0.856	0.856	3381.773	0.000	23.6
1100	0.0	0.854	0.854	3374.754	0.000	23.6
1105	0.0	0.853	0.853	3367.646	0.000	23.5
1110	0.0	0.851	0.851	3360.583	0.000	23.5
1115	0.0	0.849	0.849	3353.568	0.000	23.5

Project: Land North of Baldock Road Catchment 3		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:		
		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m ³)	Flooded Volume (m ³)	Total Outflow (L/s)
1120	0.0	0.847	0.847	3346.509	0.000	23.5
1125	0.0	0.845	0.845	3339.490	0.000	23.5
1130	0.0	0.844	0.844	3332.469	0.000	23.4
1135	0.0	0.842	0.842	3325.381	0.000	23.4
1140	0.0	0.840	0.840	3318.419	0.000	23.4
1145	0.0	0.838	0.838	3311.389	0.000	23.4
1150	0.0	0.837	0.836	3304.384	0.000	23.3
1155	0.0	0.835	0.835	3297.387	0.000	23.3
1160	0.0	0.833	0.833	3290.407	0.000	23.3
1165	0.0	0.831	0.831	3283.433	0.000	23.3
1170	0.0	0.830	0.829	3276.619	0.000	23.2
1175	0.0	0.828	0.828	3269.546	0.000	23.2
1180	0.0	0.826	0.826	3262.581	0.000	23.2
1185	0.0	0.824	0.824	3255.547	0.000	23.2
1190	0.0	0.822	0.822	3248.650	0.000	23.1
1195	0.0	0.821	0.821	3241.752	0.000	23.1
1200	0.0	0.819	0.819	3234.808	0.000	23.1
1205	0.0	0.817	0.817	3227.808	0.000	23.1
1210	0.0	0.815	0.815	3220.906	0.000	23.0
1215	0.0	0.814	0.814	3214.063	0.000	23.0
1220	0.0	0.812	0.812	3207.126	0.000	23.0
1225	0.0	0.810	0.810	3200.196	0.000	23.0
1230	0.0	0.808	0.808	3193.387	0.000	23.0
1235	0.0	0.807	0.806	3186.402	0.000	22.9
1240	0.0	0.805	0.805	3179.522	0.000	22.9
1245	0.0	0.803	0.803	3172.640	0.000	22.9
1250	0.0	0.801	0.801	3165.855	0.000	22.9
1255	0.0	0.800	0.800	3158.927	0.000	22.8
1260	0.0	0.798	0.798	3152.076	0.000	22.8
1265	0.0	0.796	0.796	3145.314	0.000	22.8
1270	0.0	0.795	0.795	3138.514	0.000	22.8
1275	0.0	0.793	0.793	3131.593	0.000	22.7
1280	0.0	0.791	0.791	3124.780	0.000	22.7
1285	0.0	0.789	0.789	3118.016	0.000	22.7
1290	0.0	0.788	0.788	3111.226	0.000	22.7
1295	0.0	0.786	0.786	3104.348	0.000	22.6
1300	0.0	0.784	0.784	3097.686	0.000	22.6
1305	0.0	0.783	0.782	3090.884	0.000	22.6
1310	0.0	0.781	0.781	3084.047	0.000	22.6
1315	0.0	0.779	0.779	3077.263	0.000	22.5
1320	0.0	0.777	0.777	3070.564	0.000	22.5
1325	0.0	0.776	0.776	3063.770	0.000	22.5
1330	0.0	0.774	0.774	3057.036	0.000	22.5
1335	0.0	0.772	0.772	3050.255	0.000	22.4
1340	0.0	0.771	0.770	3043.553	0.000	22.4
1345	0.0	0.769	0.769	3036.810	0.000	22.4
1350	0.0	0.767	0.767	3030.086	0.000	22.4
1355	0.0	0.765	0.765	3023.443	0.000	22.4
1360	0.0	0.764	0.764	3016.660	0.000	22.3
1365	0.0	0.762	0.762	3010.085	0.000	22.3
1370	0.0	0.760	0.760	3003.281	0.000	22.3
1375	0.0	0.759	0.759	2996.855	0.000	22.3
1380	0.0	0.757	0.757	2990.019	0.000	22.2
1385	0.0	0.755	0.755	2983.303	0.000	22.2
1390	0.0	0.754	0.754	2976.594	0.000	22.2
1395	0.0	0.752	0.752	2969.975	0.000	22.2
1400	0.0	0.750	0.750	2963.330	0.000	22.2
1405	0.0	0.749	0.749	2956.678	0.000	22.1

Project: Land North of Baldock Road Catchment 3		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1410	0.0	0.747	0.747	2950.008	0.000	22.1
1415	0.0	0.745	0.745	2943.405	0.000	22.1
1420	0.0	0.743	0.743	2936.980	0.000	22.1
1425	0.0	0.742	0.742	2930.244	0.000	22.1
1430	0.0	0.740	0.740	2923.548	0.000	22.0
1435	0.0	0.738	0.738	2917.037	0.000	22.0
1440	0.0	0.737	0.737	2910.337	0.000	22.0

Project: Land North of Baldock Road Catchment 4	Date: 18/07/2024		
	Designed by: rjethwa	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address:		



Pond - TAD 1

Type : Catchment Area

Area (ha)	2.66
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Dynamic Sizing

Runoff Method	Time Area Diagram
Summer Volumetric Runoff Coefficient	1.000
Winter Volumetric Runoff Coefficient	1.000
Percentage Impervious (%)	100
Time (mins)	Area (ha)
4	1.00
8	1.00
12	0.66

Project:	Land North of Baldock Road Catchment 4		Date:	18/07/2024	
Report Details:			Designed by:	Checked by:	Approved By:
Type: Stormwater Controls			rjethwa		
Storm Phase: Phase			Company Address:		



Pond

Type : Pond

Dimensions

Exceedence Level (m)	1.500
Depth (m)	1.500
Base Level (m)	0.000
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	3300.000

Depth (m)	Area (m²)	Volume (m³)
0.000	2200.00	0.000
1.000	2200.00	2200.000

Inlets

Inlet

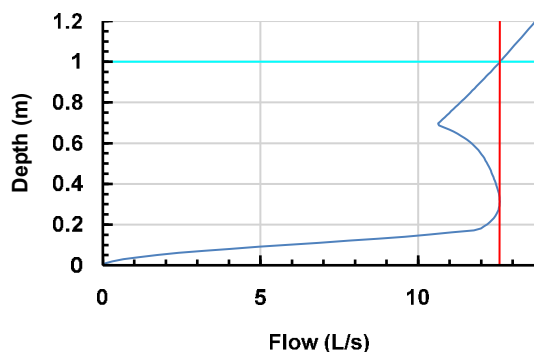
Inlet Type	Point Inflow
Incoming Item(s)	Pond - TAD 1
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Hydro-Brake®
Invert Level (m)	0.000
Design Depth (m)	1.000
Design Flow (L/s)	12.6
Objective	Minimise Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☒

Unit Reference	SHE-0162-1260-1000-1260
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Project: Land North of Baldock Road Catchment 4	Date: 18/07/2024			
Report Title: Rainfall Analysis Criteria	Designed by: rjethwa	Checked by:		Approved By:
Company Address:				

Rainfall

Rainfall Details FEH Type: FEH

Site Location	GB 536400 228400 TL 36400 28400		
Rainfall Version	2013		
Data Type	Catchment		
Summer	☒		
Winter	☒		

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0
30.0	0
100.0	40

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520

Project: Land North of Baldock Road Catchment 4	Date: 18/07/2024		
	Designed by: rjethwa	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		



Pond
Critical Storm: Rainfall Details FEH: 100 years: Increase Rainfall (%): +40: 720 mins: Winter

Type : Pond

Tables

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.000	0.0
5	0.9	0.000	0.000	0.114	0.000	0.0
10	3.1	0.002	0.000	0.672	0.000	0.0
15	6.1	0.005	0.000	2.002	0.000	0.0
20	9.7	0.010	0.000	4.309	0.000	0.0
25	13.0	0.017	0.000	7.664	0.000	0.0
30	15.6	0.026	0.000	11.913	0.000	0.0
35	17.8	0.034	0.000	16.882	0.000	0.0
40	19.9	0.041	0.000	22.505	0.000	0.0
45	21.5	0.047	0.000	28.696	0.000	0.0
50	22.8	0.051	0.000	35.326	0.000	0.0
55	24.0	0.055	0.000	42.341	0.000	0.0
60	24.9	0.058	0.000	49.670	0.000	0.0
65	25.5	0.061	0.000	57.221	0.000	0.0
70	26.0	0.063	0.000	64.936	0.000	0.0
75	26.4	0.065	0.000	72.787	0.000	0.0
80	26.6	0.067	0.000	80.730	0.000	0.0
85	26.7	0.069	0.001	88.723	0.000	0.0
90	26.8	0.071	0.004	96.741	0.000	0.0
95	26.8	0.072	0.008	104.763	0.000	0.1
100	26.8	0.073	0.016	112.745	0.000	0.2
105	26.7	0.074	0.025	120.685	0.000	0.5
110	26.7	0.076	0.036	128.510	0.000	0.9
115	26.7	0.077	0.046	136.162	0.000	1.4
120	26.8	0.078	0.054	143.617	0.000	2.0
125	26.9	0.079	0.061	151.018	0.000	2.4
130	27.1	0.080	0.066	158.329	0.000	2.8
135	27.4	0.082	0.071	165.589	0.000	3.2
140	27.8	0.084	0.075	172.848	0.000	3.5
145	28.2	0.087	0.079	180.138	0.000	3.9
150	28.8	0.090	0.083	187.486	0.000	4.2
155	29.6	0.093	0.086	194.945	0.000	4.5
160	30.5	0.096	0.090	202.559	0.000	4.8
165	31.5	0.100	0.093	210.345	0.000	5.2
170	32.8	0.103	0.097	218.357	0.000	5.5
175	34.2	0.107	0.101	226.666	0.000	5.9
180	35.5	0.110	0.105	235.269	0.000	6.3
185	37.3	0.114	0.109	244.217	0.000	6.7
190	39.3	0.119	0.114	253.624	0.000	7.1
195	41.1	0.123	0.118	263.478	0.000	7.5
200	43.4	0.128	0.123	273.799	0.000	8.0
205	45.9	0.133	0.128	284.702	0.000	8.4
210	48.3	0.138	0.133	296.212	0.000	8.9
215	50.9	0.143	0.139	308.326	0.000	9.4
220	54.1	0.149	0.145	321.147	0.000	9.8
225	57.1	0.155	0.151	334.760	0.000	10.3
230	59.9	0.162	0.157	349.120	0.000	10.7
235	63.6	0.168	0.164	364.295	0.000	11.2
240	67.2	0.176	0.172	380.408	0.000	11.8
245	70.3	0.183	0.180	397.430	0.000	11.9

Project: Land North of Baldock Road Catchment 4		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
		Company Address:	



Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m ³)	Flooded Volume (m ³)	Total Outflow (L/s)
250	74.3	0.191	0.188	415.451	0.000	12.1
255	78.3	0.200	0.197	434.659	0.000	12.1
260	82.0	0.209	0.206	455.338	0.000	12.2
265	86.0	0.219	0.216	477.128	0.000	12.3
270	90.2	0.229	0.226	499.526	0.000	12.4
275	94.3	0.240	0.237	524.007	0.000	12.4
280	98.1	0.251	0.249	548.755	0.000	12.5
285	102.8	0.263	0.261	575.649	0.000	12.5
290	106.8	0.276	0.273	602.864	0.000	12.6
295	110.5	0.287	0.288	632.318	0.000	12.6
300	115.0	0.301	0.305	662.221	0.000	12.6
305	119.2	0.317	0.314	693.441	0.000	12.6
310	122.6	0.332	0.329	725.866	0.000	12.6
315	126.6	0.346	0.345	759.078	0.000	12.6
320	130.4	0.362	0.363	793.980	0.000	12.5
325	133.7	0.379	0.377	830.083	0.000	12.5
330	137.0	0.395	0.393	866.922	0.000	12.5
335	140.2	0.413	0.411	904.672	0.000	12.4
340	143.1	0.432	0.428	943.757	0.000	12.4
345	145.5	0.448	0.446	982.999	0.000	12.4
350	147.8	0.467	0.465	1023.583	0.000	12.3
355	149.8	0.485	0.484	1064.310	0.000	12.2
360	151.2	0.504	0.502	1105.731	0.000	12.2
365	151.8	0.523	0.522	1147.772	0.000	12.1
370	151.4	0.541	0.541	1189.387	0.000	12.0
375	150.4	0.561	0.560	1231.519	0.000	12.0
380	148.5	0.579	0.579	1272.739	0.000	11.8
385	146.3	0.597	0.597	1312.982	0.000	11.7
390	143.9	0.616	0.615	1353.075	0.000	11.6
395	141.4	0.633	0.633	1392.539	0.000	11.4
400	138.1	0.651	0.650	1431.197	0.000	11.2
405	134.8	0.668	0.668	1468.674	0.000	11.0
410	131.8	0.681	0.684	1505.118	0.000	10.7
415	127.8	0.701	0.701	1540.787	0.000	10.7
420	123.9	0.719	0.718	1575.949	0.000	10.8
425	120.5	0.732	0.731	1609.129	0.000	10.9
430	116.3	0.747	0.746	1641.443	0.000	11.0
435	111.9	0.760	0.760	1672.502	0.000	11.1
440	108.2	0.774	0.773	1702.109	0.000	11.2
445	104.0	0.787	0.786	1730.628	0.000	11.2
450	99.6	0.799	0.799	1757.612	0.000	11.3
455	95.6	0.810	0.810	1783.627	0.000	11.4
460	91.8	0.823	0.822	1808.219	0.000	11.5
465	87.4	0.832	0.833	1831.369	0.000	11.6
470	83.3	0.843	0.843	1853.930	0.000	11.6
475	79.8	0.852	0.852	1874.770	0.000	11.7
480	75.6	0.862	0.861	1894.687	0.000	11.7
485	71.7	0.870	0.870	1913.334	0.000	11.8
490	68.5	0.878	0.877	1930.697	0.000	11.8
495	64.9	0.885	0.885	1946.742	0.000	11.9
500	61.2	0.892	0.889	1962.773	0.000	11.9
505	58.2	0.899	0.898	1976.661	0.000	12.0
510	55.2	0.904	0.905	1989.972	0.000	12.0
515	52.0	0.911	0.910	2002.646	0.000	12.1
520	49.3	0.916	0.916	2014.247	0.000	12.1
525	46.9	0.920	0.921	2024.906	0.000	12.1
530	44.2	0.925	0.925	2034.903	0.000	12.1
535	41.9	0.929	0.929	2044.288	0.000	12.2

Project: Land North of Baldock Road Catchment 4		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
540	40.1	0.933	0.933	2052.945	0.000	12.2
545	38.0	0.937	0.937	2060.972	0.000	12.2
550	36.1	0.940	0.940	2068.429	0.000	12.2
555	34.7	0.943	0.943	2075.330	0.000	12.3
560	33.2	0.946	0.946	2081.866	0.000	12.3
565	31.9	0.949	0.949	2087.939	0.000	12.3
570	30.9	0.952	0.952	2093.718	0.000	12.3
575	29.9	0.954	0.954	2099.104	0.000	12.3
580	29.1	0.957	0.956	2104.265	0.000	12.3
585	28.4	0.959	0.959	2109.206	0.000	12.4
590	27.9	0.961	0.961	2113.928	0.000	12.4
595	27.5	0.963	0.963	2118.510	0.000	12.4
600	27.2	0.965	0.965	2122.982	0.000	12.4
605	27.0	0.967	0.967	2127.447	0.000	12.4
610	26.8	0.969	0.969	2131.781	0.000	12.4
615	26.7	0.971	0.971	2136.104	0.000	12.4
620	26.7	0.973	0.973	2140.350	0.000	12.4
625	26.7	0.975	0.975	2144.651	0.000	12.4
630	26.7	0.977	0.977	2148.926	0.000	12.5
635	26.8	0.979	0.979	2153.246	0.000	12.5
640	26.8	0.980	0.981	2157.518	0.000	12.5
645	26.7	0.983	0.983	2161.790	0.000	12.5
650	26.6	0.985	0.985	2166.077	0.000	12.5
655	26.5	0.987	0.986	2170.281	0.000	12.5
660	26.1	0.988	0.988	2174.421	0.000	12.5
665	25.7	0.990	0.990	2178.389	0.000	12.5
670	25.1	0.992	0.992	2182.250	0.000	12.6
675	24.3	0.994	0.994	2185.925	0.000	12.6
680	23.2	0.995	0.995	2189.273	0.000	12.6
685	22.1	0.997	0.996	2192.294	0.000	12.6
690	20.6	0.998	0.998	2194.905	0.000	12.6
695	18.6	0.999	0.999	2196.998	0.000	12.6
700	16.5	0.999	0.999	2198.464	0.000	12.6
705	14.1	1.000	1.000	2199.287	0.000	12.6
710	10.8	1.000	1.000	2199.262	0.000	12.6
715	7.4	0.999	0.999	2198.239	0.000	12.6
720	4.1	0.998	0.998	2196.156	0.000	12.6
725	1.5	0.997	0.997	2193.282	0.000	12.6
730	0.3	0.995	0.995	2189.727	0.000	12.6
735	0.0	0.994	0.994	2185.971	0.000	12.6
740	0.0	0.992	0.992	2182.210	0.000	12.6
745	0.0	0.990	0.990	2178.438	0.000	12.5
750	0.0	0.988	0.988	2174.695	0.000	12.5
755	0.0	0.987	0.987	2170.938	0.000	12.5
760	0.0	0.985	0.985	2167.163	0.000	12.5
765	0.0	0.983	0.983	2163.446	0.000	12.5
770	0.0	0.982	0.982	2159.818	0.000	12.5
775	0.0	0.980	0.980	2155.960	0.000	12.5
780	0.0	0.978	0.978	2152.174	0.000	12.5
785	0.0	0.977	0.976	2148.497	0.000	12.5
790	0.0	0.975	0.975	2144.705	0.000	12.4
795	0.0	0.973	0.973	2140.992	0.000	12.4
800	0.0	0.972	0.971	2137.240	0.000	12.4
805	0.0	0.970	0.970	2133.519	0.000	12.4
810	0.0	0.968	0.968	2129.821	0.000	12.4
815	0.0	0.966	0.966	2126.067	0.000	12.4
820	0.0	0.965	0.965	2122.354	0.000	12.4
825	0.0	0.963	0.963	2118.654	0.000	12.4

Project: Land North of Baldock Road Catchment 4		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:		
		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
830	0.0	0.961	0.961	2114.960	0.000	12.4
835	0.0	0.960	0.960	2111.243	0.000	12.4
840	0.0	0.958	0.958	2107.550	0.000	12.3
845	0.0	0.956	0.956	2103.878	0.000	12.3
850	0.0	0.955	0.955	2100.157	0.000	12.3
855	0.0	0.953	0.953	2096.462	0.000	12.3
860	0.0	0.951	0.951	2092.750	0.000	12.3
865	0.0	0.950	0.949	2089.083	0.000	12.3
870	0.0	0.948	0.948	2085.365	0.000	12.3
875	0.0	0.946	0.946	2081.669	0.000	12.3
880	0.0	0.944	0.945	2077.973	0.000	12.3
885	0.0	0.943	0.943	2074.305	0.000	12.3
890	0.0	0.941	0.941	2070.658	0.000	12.2
895	0.0	0.940	0.939	2066.974	0.000	12.2
900	0.0	0.938	0.938	2063.301	0.000	12.2
905	0.0	0.936	0.936	2059.651	0.000	12.2
910	0.0	0.935	0.935	2055.961	0.000	12.2
915	0.0	0.933	0.933	2052.330	0.000	12.2
920	0.0	0.931	0.931	2048.704	0.000	12.2
925	0.0	0.930	0.930	2045.046	0.000	12.2
930	0.0	0.928	0.928	2041.371	0.000	12.2
935	0.0	0.926	0.926	2037.707	0.000	12.2
940	0.0	0.925	0.925	2034.056	0.000	12.1
945	0.0	0.923	0.923	2030.412	0.000	12.1
950	0.0	0.921	0.921	2026.781	0.000	12.1
955	0.0	0.920	0.920	2023.200	0.000	12.1
960	0.0	0.918	0.918	2019.504	0.000	12.1
965	0.0	0.916	0.916	2015.885	0.000	12.1
970	0.0	0.915	0.915	2012.270	0.000	12.1
975	0.0	0.913	0.913	2008.614	0.000	12.1
980	0.0	0.911	0.911	2005.018	0.000	12.1
985	0.0	0.910	0.910	2001.434	0.000	12.1
990	0.0	0.908	0.908	1997.774	0.000	12.0
995	0.0	0.906	0.906	1994.149	0.000	12.0
1000	0.0	0.905	0.905	1990.576	0.000	12.0
1005	0.0	0.903	0.903	1986.949	0.000	12.0
1010	0.0	0.902	0.901	1983.368	0.000	12.0
1015	0.0	0.900	0.900	1979.746	0.000	12.0
1020	0.0	0.898	0.898	1976.157	0.000	12.0
1025	0.0	0.897	0.897	1972.599	0.000	12.0
1030	0.0	0.895	0.895	1968.998	0.000	12.0
1035	0.0	0.893	0.893	1965.457	0.000	11.9
1040	0.0	0.892	0.892	1961.845	0.000	11.9
1045	0.0	0.890	0.890	1958.291	0.000	11.9
1050	0.0	0.888	0.888	1954.646	0.000	11.9
1055	0.0	0.887	0.887	1951.116	0.000	11.9
1060	0.0	0.885	0.885	1947.509	0.000	11.9
1065	0.0	0.884	0.884	1943.950	0.000	11.9
1070	0.0	0.882	0.882	1940.370	0.000	11.9
1075	0.0	0.880	0.880	1936.882	0.000	11.9
1080	0.0	0.879	0.879	1933.279	0.000	11.8
1085	0.0	0.877	0.877	1929.735	0.000	11.8
1090	0.0	0.876	0.875	1926.156	0.000	11.8
1095	0.0	0.874	0.874	1922.669	0.000	11.8
1100	0.0	0.872	0.872	1919.077	0.000	11.8
1105	0.0	0.871	0.871	1915.521	0.000	11.8
1110	0.0	0.869	0.869	1912.046	0.000	11.8
1115	0.0	0.867	0.868	1908.505	0.000	11.8

Project: Land North of Baldock Road Catchment 4		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
		Company Address:	



Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m ³)	Flooded Volume (m ³)	Total Outflow (L/s)
1120	0.0	0.866	0.866	1904.924	0.000	11.8
1125	0.0	0.864	0.864	1901.391	0.000	11.8
1130	0.0	0.863	0.863	1897.861	0.000	11.8
1135	0.0	0.861	0.861	1894.391	0.000	11.7
1140	0.0	0.859	0.859	1890.834	0.000	11.7
1145	0.0	0.858	0.858	1887.359	0.000	11.7
1150	0.0	0.856	0.856	1883.797	0.000	11.7
1155	0.0	0.855	0.855	1880.307	0.000	11.7
1160	0.0	0.853	0.853	1876.785	0.000	11.7
1165	0.0	0.851	0.851	1873.276	0.000	11.7
1170	0.0	0.850	0.850	1869.790	0.000	11.7
1175	0.0	0.848	0.848	1866.315	0.000	11.7
1180	0.0	0.847	0.847	1862.818	0.000	11.7
1185	0.0	0.845	0.845	1859.276	0.000	11.6
1190	0.0	0.844	0.843	1855.766	0.000	11.6
1195	0.0	0.842	0.842	1852.405	0.000	11.6
1200	0.0	0.840	0.840	1848.844	0.000	11.6
1205	0.0	0.839	0.839	1845.341	0.000	11.6
1210	0.0	0.837	0.837	1841.841	0.000	11.6
1215	0.0	0.836	0.836	1838.375	0.000	11.6
1220	0.0	0.834	0.834	1834.902	0.000	11.6
1225	0.0	0.832	0.832	1831.450	0.000	11.6
1230	0.0	0.831	0.831	1828.023	0.000	11.5
1235	0.0	0.829	0.829	1824.531	0.000	11.5
1240	0.0	0.828	0.828	1821.036	0.000	11.5
1245	0.0	0.826	0.826	1817.647	0.000	11.5
1250	0.0	0.825	0.825	1814.164	0.000	11.5
1255	0.0	0.823	0.823	1810.694	0.000	11.5
1260	0.0	0.821	0.822	1807.249	0.000	11.5
1265	0.0	0.820	0.820	1803.849	0.000	11.5
1270	0.0	0.818	0.818	1800.364	0.000	11.5
1275	0.0	0.817	0.817	1797.010	0.000	11.5
1280	0.0	0.815	0.815	1793.482	0.000	11.4
1285	0.0	0.814	0.814	1790.048	0.000	11.4
1290	0.0	0.812	0.812	1786.698	0.000	11.4
1295	0.0	0.811	0.811	1783.240	0.000	11.4
1300	0.0	0.809	0.809	1779.768	0.000	11.4
1305	0.0	0.807	0.807	1776.343	0.000	11.4
1310	0.0	0.806	0.806	1772.936	0.000	11.4
1315	0.0	0.804	0.804	1769.518	0.000	11.4
1320	0.0	0.803	0.803	1766.150	0.000	11.4
1325	0.0	0.801	0.801	1762.715	0.000	11.4
1330	0.0	0.800	0.800	1759.343	0.000	11.3
1335	0.0	0.798	0.798	1755.920	0.000	11.3
1340	0.0	0.797	0.797	1752.500	0.000	11.3
1345	0.0	0.795	0.795	1749.112	0.000	11.3
1350	0.0	0.793	0.793	1745.718	0.000	11.3
1355	0.0	0.792	0.792	1742.334	0.000	11.3
1360	0.0	0.790	0.790	1738.957	0.000	11.3
1365	0.0	0.789	0.789	1735.658	0.000	11.3
1370	0.0	0.787	0.787	1732.229	0.000	11.3
1375	0.0	0.786	0.786	1728.808	0.000	11.2
1380	0.0	0.784	0.784	1725.443	0.000	11.2
1385	0.0	0.783	0.783	1722.064	0.000	11.2
1390	0.0	0.781	0.781	1718.691	0.000	11.2
1395	0.0	0.780	0.780	1715.373	0.000	11.2
1400	0.0	0.778	0.778	1711.988	0.000	11.2
1405	0.0	0.777	0.777	1708.645	0.000	11.2

Project: Land North of Baldock Road Catchment 4		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
		Approved By:		
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1410	0.0	0.775	0.775	1705.300	0.000	11.2
1415	0.0	0.773	0.774	1701.926	0.000	11.2
1420	0.0	0.772	0.772	1698.579	0.000	11.1
1425	0.0	0.771	0.771	1695.225	0.000	11.1
1430	0.0	0.769	0.769	1691.912	0.000	11.1
1435	0.0	0.768	0.767	1688.581	0.000	11.1
1440	0.0	0.766	0.766	1685.261	0.000	11.1

Project: Land North of Baldock Road Catchment 5	Date: 18/07/2024		
	Designed by: rjethwa	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address:		



Pond - TAD 1

Type : Catchment Area

Area (ha)	3.68
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Dynamic Sizing

Runoff Method	Time Area Diagram
Summer Volumetric Runoff Coefficient	1.000
Winter Volumetric Runoff Coefficient	1.000
Percentage Impervious (%)	100
Time (mins)	Area (ha)
4	1.00
8	1.00
12	1.68

Project: Land North of Baldock Road Catchment 5		Date: 18/07/2024			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: rjethwa	Checked by:		Approved By:
		Company Address:			



Pond

Type : Pond

Dimensions

Exceedence Level (m)	1.500
Depth (m)	1.500
Base Level (m)	0.000
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	4687.500

Depth (m)	Area (m²)	Volume (m³)
0.000	3125.00	0.000
1.000	3125.00	3125.000

Inlets

Inlet

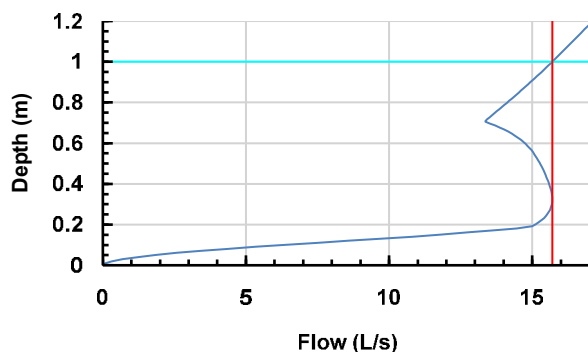
Inlet Type	Point Inflow
Incoming Item(s)	Pond - TAD 1
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Hydro-Brake®
Invert Level (m)	0.000
Design Depth (m)	1.000
Design Flow (L/s)	15.7
Objective	Minimise Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☒

Unit Reference SHE-0179-1570-1000-1570



Project: Land North of Baldock Road Catchment 5	Date: 18/07/2024			
Report Title: Rainfall Analysis Criteria	Designed by: rjethwa	Checked by:		Approved By:
Company Address:				

Rainfall

Rainfall Details FEH Type: FEH

Site Location	GB 536400 228400 TL 36400 28400		
Rainfall Version	2013		
Data Type	Catchment		
Summer	☒		
Winter	☒		

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0
30.0	0
100.0	40

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520

Project: Land North of Baldock Road Catchment 5		Date: 18/07/2024		
		Designed by: rjethwa	Checked by:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Company Address:		



Pond
Critical Storm: Rainfall Details FEH: 100 years: Increase Rainfall (%): +40: 960 mins: Winter

Type : Pond

Tables

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.000	0.0
5	0.7	0.000	0.000	0.089	0.000	0.0
10	1.8	0.001	0.000	0.439	0.000	0.0
15	4.3	0.002	0.000	1.305	0.000	0.0
20	7.2	0.005	0.000	2.989	0.000	0.0
25	10.3	0.009	0.000	5.568	0.000	0.0
30	12.8	0.014	0.000	8.997	0.000	0.0
35	15.3	0.020	0.000	13.159	0.000	0.0
40	17.2	0.026	0.000	18.002	0.000	0.0
45	19.2	0.032	0.000	23.438	0.000	0.0
50	20.8	0.037	0.000	29.417	0.000	0.0
55	22.3	0.041	0.000	35.860	0.000	0.0
60	23.5	0.044	0.000	42.716	0.000	0.0
65	24.7	0.047	0.000	49.924	0.000	0.0
70	25.6	0.049	0.000	57.463	0.000	0.0
75	26.4	0.051	0.000	65.262	0.000	0.0
80	27.1	0.053	0.000	73.278	0.000	0.0
85	27.6	0.055	0.000	81.471	0.000	0.0
90	28.0	0.057	0.000	89.813	0.000	0.0
95	28.4	0.058	0.000	98.274	0.000	0.0
100	28.6	0.060	0.001	106.792	0.000	0.0
105	28.8	0.061	0.002	115.412	0.000	0.0
110	28.9	0.062	0.004	124.074	0.000	0.0
115	29.0	0.064	0.009	132.759	0.000	0.1
120	29.1	0.065	0.014	141.408	0.000	0.2
125	29.1	0.065	0.021	150.061	0.000	0.4
130	29.1	0.066	0.030	158.637	0.000	0.7
135	29.0	0.067	0.038	167.064	0.000	1.1
140	29.0	0.068	0.045	175.380	0.000	1.5
145	29.0	0.069	0.051	183.593	0.000	1.8
150	29.0	0.070	0.055	191.701	0.000	2.1
155	29.0	0.071	0.059	199.715	0.000	2.4
160	29.1	0.072	0.063	207.654	0.000	2.7
165	29.2	0.074	0.066	215.531	0.000	3.0
170	29.3	0.076	0.069	223.363	0.000	3.2
175	29.5	0.078	0.072	231.170	0.000	3.5
180	29.7	0.080	0.075	238.966	0.000	3.7
185	30.0	0.082	0.077	246.769	0.000	4.0
190	30.4	0.085	0.080	254.601	0.000	4.2
195	30.9	0.087	0.082	262.479	0.000	4.5
200	31.4	0.089	0.085	270.423	0.000	4.8
205	32.0	0.092	0.088	278.458	0.000	5.0
210	32.7	0.094	0.090	286.607	0.000	5.3
215	33.5	0.097	0.093	294.893	0.000	5.6
220	34.3	0.099	0.096	303.341	0.000	5.9
225	35.4	0.102	0.099	311.976	0.000	6.2
230	36.3	0.105	0.102	320.829	0.000	6.5
235	37.6	0.108	0.105	329.917	0.000	6.8
240	38.7	0.111	0.108	339.275	0.000	7.1
245	40.3	0.114	0.111	348.921	0.000	7.5

Project: Land North of Baldock Road Catchment 5		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
		Company Address:	



Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m ³)	Flooded Volume (m ³)	Total Outflow (L/s)
250	41.7	0.117	0.114	358.905	0.000	7.8
255	43.4	0.120	0.117	369.238	0.000	8.2
260	44.9	0.123	0.121	379.958	0.000	8.6
265	46.9	0.127	0.124	391.074	0.000	9.0
270	48.7	0.131	0.128	402.631	0.000	9.4
275	50.8	0.135	0.132	414.639	0.000	9.8
280	52.8	0.139	0.136	427.140	0.000	10.3
285	55.1	0.143	0.140	440.145	0.000	10.7
290	57.3	0.147	0.144	453.699	0.000	11.1
295	59.8	0.151	0.149	467.828	0.000	11.5
300	62.2	0.156	0.154	482.569	0.000	12.0
305	64.8	0.161	0.159	497.933	0.000	12.5
310	67.5	0.166	0.164	513.947	0.000	12.9
315	70.3	0.171	0.169	530.636	0.000	13.4
320	73.2	0.177	0.175	548.028	0.000	13.9
325	76.0	0.183	0.181	566.146	0.000	14.4
330	79.1	0.189	0.187	585.598	0.000	14.7
335	82.0	0.195	0.193	604.803	0.000	15.0
340	85.5	0.202	0.200	626.106	0.000	15.1
345	88.4	0.208	0.207	647.727	0.000	15.2
350	91.9	0.216	0.214	669.787	0.000	15.2
355	94.8	0.223	0.221	692.893	0.000	15.3
360	98.4	0.231	0.229	716.974	0.000	15.4
365	101.4	0.238	0.237	742.994	0.000	15.4
370	105.3	0.248	0.246	769.316	0.000	15.5
375	108.4	0.256	0.257	797.517	0.000	15.5
380	112.1	0.265	0.264	825.352	0.000	15.6
385	115.0	0.273	0.273	854.777	0.000	15.6
390	118.7	0.285	0.283	884.910	0.000	15.6
395	121.8	0.295	0.293	916.279	0.000	15.7
400	125.2	0.304	0.311	949.048	0.000	15.7
405	128.4	0.315	0.314	982.397	0.000	15.7
410	131.7	0.326	0.325	1016.073	0.000	15.7
415	134.8	0.337	0.336	1051.288	0.000	15.7
420	137.9	0.349	0.348	1087.631	0.000	15.7
425	140.9	0.361	0.359	1125.249	0.000	15.7
430	143.7	0.373	0.372	1163.113	0.000	15.7
435	146.6	0.386	0.384	1201.670	0.000	15.6
440	149.2	0.396	0.396	1241.690	0.000	15.6
445	151.8	0.411	0.409	1281.953	0.000	15.6
450	154.0	0.425	0.423	1323.881	0.000	15.5
455	156.3	0.438	0.436	1364.662	0.000	15.5
460	158.3	0.449	0.463	1407.942	0.000	15.4
465	160.2	0.465	0.464	1450.453	0.000	15.4
470	161.7	0.480	0.479	1494.723	0.000	15.3
475	163.2	0.493	0.493	1539.145	0.000	15.3
480	164.3	0.506	0.507	1582.614	0.000	15.2
485	164.9	0.522	0.520	1628.286	0.000	15.2
490	164.9	0.536	0.536	1673.141	0.000	15.1
495	164.1	0.550	0.549	1717.935	0.000	15.1
500	163.0	0.565	0.563	1762.482	0.000	15.0
505	161.4	0.579	0.579	1806.214	0.000	14.8
510	159.8	0.593	0.591	1850.434	0.000	14.8
515	157.9	0.606	0.606	1892.984	0.000	14.7
520	155.9	0.620	0.620	1935.680	0.000	14.6
525	153.6	0.635	0.633	1978.596	0.000	14.4
530	151.2	0.647	0.646	2019.808	0.000	14.3
535	148.7	0.659	0.659	2060.328	0.000	14.1

Project: Land North of Baldock Road Catchment 5		Date: 18/07/2024	
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Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
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Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m ³)	Flooded Volume (m ³)	Total Outflow (L/s)
540	146.0	0.673	0.672	2100.466	0.000	14.0
545	143.2	0.685	0.684	2139.874	0.000	13.7
550	140.4	0.699	0.697	2177.603	0.000	13.5
555	137.4	0.709	0.709	2215.639	0.000	13.4
560	134.2	0.722	0.720	2253.297	0.000	13.4
565	131.2	0.732	0.732	2288.061	0.000	13.6
570	127.8	0.745	0.745	2323.296	0.000	13.7
575	124.7	0.755	0.756	2357.289	0.000	13.8
580	121.2	0.765	0.765	2389.374	0.000	13.8
585	118.1	0.775	0.775	2420.799	0.000	13.9
590	114.4	0.784	0.785	2451.993	0.000	14.0
595	111.4	0.794	0.794	2481.690	0.000	14.1
600	107.6	0.805	0.802	2510.716	0.000	14.1
605	104.6	0.809	0.812	2537.940	0.000	14.2
610	100.8	0.818	0.820	2564.510	0.000	14.3
615	97.9	0.829	0.829	2589.385	0.000	14.4
620	94.3	0.837	0.837	2614.058	0.000	14.4
625	91.2	0.844	0.844	2637.819	0.000	14.5
630	87.8	0.851	0.851	2660.421	0.000	14.6
635	84.8	0.859	0.858	2681.973	0.000	14.6
640	81.5	0.866	0.864	2703.041	0.000	14.6
645	78.6	0.871	0.871	2722.124	0.000	14.7
650	75.5	0.877	0.877	2740.834	0.000	14.8
655	72.7	0.883	0.883	2758.617	0.000	14.8
660	69.8	0.888	0.888	2775.368	0.000	14.8
665	67.1	0.894	0.893	2791.676	0.000	14.9
670	64.5	0.898	0.898	2806.681	0.000	14.9
675	61.8	0.903	0.903	2821.383	0.000	15.0
680	59.4	0.907	0.907	2835.089	0.000	15.0
685	56.9	0.911	0.911	2847.881	0.000	15.0
690	54.7	0.915	0.915	2860.197	0.000	15.1
695	52.4	0.919	0.919	2871.669	0.000	15.1
700	50.4	0.922	0.922	2882.632	0.000	15.1
705	48.3	0.926	0.926	2892.843	0.000	15.1
710	46.6	0.929	0.928	2902.662	0.000	15.2
715	44.6	0.932	0.932	2911.788	0.000	15.2
720	43.1	0.934	0.935	2920.388	0.000	15.2
725	41.4	0.937	0.937	2928.490	0.000	15.2
730	40.0	0.940	0.939	2936.129	0.000	15.2
735	38.5	0.942	0.942	2943.342	0.000	15.3
740	37.4	0.944	0.944	2950.184	0.000	15.3
745	36.2	0.946	0.946	2956.521	0.000	15.3
750	35.2	0.948	0.948	2962.751	0.000	15.3
755	34.2	0.950	0.950	2968.570	0.000	15.3
760	33.4	0.952	0.952	2974.067	0.000	15.3
765	32.6	0.953	0.953	2979.176	0.000	15.4
770	31.9	0.955	0.955	2984.408	0.000	15.4
775	31.3	0.956	0.957	2989.308	0.000	15.4
780	30.8	0.958	0.958	2993.921	0.000	15.4
785	30.3	0.960	0.959	2998.555	0.000	15.4
790	30.0	0.961	0.961	3002.974	0.000	15.4
795	29.7	0.962	0.962	3007.256	0.000	15.4
800	29.5	0.964	0.964	3011.539	0.000	15.4
805	29.3	0.965	0.965	3015.715	0.000	15.4
810	29.1	0.966	0.966	3019.813	0.000	15.4
815	29.1	0.968	0.968	3023.924	0.000	15.5
820	29.0	0.969	0.969	3028.011	0.000	15.5
825	29.0	0.970	0.970	3032.047	0.000	15.5

Project: Land North of Baldock Road Catchment 5		Date: 18/07/2024		
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Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
830	29.0	0.972	0.972	3036.138	0.000	15.5
835	29.0	0.973	0.973	3040.166	0.000	15.5
840	29.0	0.974	0.974	3044.216	0.000	15.5
845	29.1	0.976	0.976	3048.238	0.000	15.5
850	29.1	0.977	0.977	3052.379	0.000	15.5
855	29.1	0.978	0.978	3056.364	0.000	15.5
860	29.0	0.979	0.979	3060.471	0.000	15.5
865	28.9	0.981	0.981	3064.485	0.000	15.6
870	28.8	0.982	0.982	3068.478	0.000	15.6
875	28.6	0.983	0.983	3072.447	0.000	15.6
880	28.3	0.985	0.984	3076.251	0.000	15.6
885	28.0	0.986	0.986	3080.074	0.000	15.6
890	27.5	0.987	0.987	3083.683	0.000	15.6
895	26.9	0.988	0.988	3087.201	0.000	15.6
900	26.3	0.989	0.989	3090.506	0.000	15.6
905	25.4	0.990	0.990	3093.563	0.000	15.6
910	24.5	0.991	0.991	3096.384	0.000	15.6
915	23.3	0.992	0.992	3098.867	0.000	15.6
920	22.1	0.992	0.992	3100.994	0.000	15.6
925	20.5	0.993	0.993	3102.689	0.000	15.6
930	19.0	0.993	0.993	3103.910	0.000	15.6
935	16.9	0.994	0.993	3104.604	0.000	15.6
940	14.9	0.993	0.993	3104.689	0.000	15.6
945	12.4	0.993	0.993	3104.117	0.000	15.6
950	9.9	0.993	0.990	3103.469	0.000	15.6
955	6.6	0.992	0.992	3100.521	0.000	15.6
960	3.8	0.991	0.991	3097.421	0.000	15.6
965	1.5	0.990	0.990	3093.539	0.000	15.6
970	0.5	0.989	0.989	3089.138	0.000	15.6
975	0.0	0.987	0.987	3084.524	0.000	15.6
980	0.0	0.985	0.986	3079.935	0.000	15.6
985	0.0	0.984	0.984	3075.173	0.000	15.6
990	0.0	0.983	0.983	3070.566	0.000	15.6
995	0.0	0.981	0.981	3065.872	0.000	15.6
1000	0.0	0.980	0.980	3061.208	0.000	15.5
1005	0.0	0.978	0.978	3056.510	0.000	15.5
1010	0.0	0.977	0.977	3051.936	0.000	15.5
1015	0.0	0.975	0.975	3047.192	0.000	15.5
1020	0.0	0.974	0.974	3042.574	0.000	15.5
1025	0.0	0.972	0.972	3037.907	0.000	15.5
1030	0.0	0.971	0.971	3033.313	0.000	15.5
1035	0.0	0.969	0.969	3028.620	0.000	15.5
1040	0.0	0.968	0.968	3024.009	0.000	15.5
1045	0.0	0.966	0.966	3019.349	0.000	15.4
1050	0.0	0.965	0.965	3014.787	0.000	15.4
1055	0.0	0.963	0.963	3010.087	0.000	15.4
1060	0.0	0.962	0.962	3005.468	0.000	15.4
1065	0.0	0.960	0.960	3000.898	0.000	15.4
1070	0.0	0.959	0.959	2996.228	0.000	15.4
1075	0.0	0.957	0.957	2991.614	0.000	15.4
1080	0.0	0.956	0.956	2987.007	0.000	15.4
1085	0.0	0.954	0.954	2982.404	0.000	15.4
1090	0.0	0.953	0.953	2977.763	0.000	15.3
1095	0.0	0.951	0.951	2973.208	0.000	15.3
1100	0.0	0.950	0.950	2968.596	0.000	15.3
1105	0.0	0.948	0.948	2963.988	0.000	15.3
1110	0.0	0.947	0.947	2959.396	0.000	15.3
1115	0.0	0.946	0.945	2954.841	0.000	15.3

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Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1120	0.0	0.944	0.944	2950.215	0.000	15.3
1125	0.0	0.943	0.943	2945.700	0.000	15.3
1130	0.0	0.941	0.941	2941.048	0.000	15.3
1135	0.0	0.940	0.940	2936.498	0.000	15.2
1140	0.0	0.938	0.938	2931.911	0.000	15.2
1145	0.0	0.937	0.937	2927.413	0.000	15.2
1150	0.0	0.935	0.935	2922.839	0.000	15.2
1155	0.0	0.934	0.934	2918.242	0.000	15.2
1160	0.0	0.932	0.932	2913.635	0.000	15.2
1165	0.0	0.931	0.931	2909.101	0.000	15.2
1170	0.0	0.929	0.929	2904.594	0.000	15.2
1175	0.0	0.928	0.928	2900.032	0.000	15.2
1180	0.0	0.926	0.927	2895.519	0.000	15.1
1185	0.0	0.925	0.925	2890.941	0.000	15.1
1190	0.0	0.924	0.924	2886.427	0.000	15.1
1195	0.0	0.922	0.922	2881.879	0.000	15.1
1200	0.0	0.921	0.921	2877.308	0.000	15.1
1205	0.0	0.919	0.919	2872.801	0.000	15.1
1210	0.0	0.918	0.918	2868.250	0.000	15.1
1215	0.0	0.916	0.916	2863.751	0.000	15.1
1220	0.0	0.915	0.915	2859.218	0.000	15.1
1225	0.0	0.914	0.914	2854.690	0.000	15.0
1230	0.0	0.912	0.912	2850.188	0.000	15.0
1235	0.0	0.911	0.911	2845.670	0.000	15.0
1240	0.0	0.909	0.909	2841.168	0.000	15.0
1245	0.0	0.908	0.908	2836.664	0.000	15.0
1250	0.0	0.906	0.906	2832.167	0.000	15.0
1255	0.0	0.905	0.905	2827.660	0.000	15.0
1260	0.0	0.903	0.903	2823.244	0.000	15.0
1265	0.0	0.902	0.902	2818.763	0.000	15.0
1270	0.0	0.900	0.900	2814.236	0.000	14.9
1275	0.0	0.899	0.899	2809.755	0.000	14.9
1280	0.0	0.898	0.898	2805.277	0.000	14.9
1285	0.0	0.896	0.896	2800.806	0.000	14.9
1290	0.0	0.895	0.895	2796.357	0.000	14.9
1295	0.0	0.894	0.893	2791.836	0.000	14.9
1300	0.0	0.892	0.892	2787.380	0.000	14.9
1305	0.0	0.891	0.890	2782.934	0.000	14.9
1310	0.0	0.889	0.889	2778.473	0.000	14.9
1315	0.0	0.888	0.888	2774.123	0.000	14.8
1320	0.0	0.886	0.886	2769.573	0.000	14.8
1325	0.0	0.885	0.885	2765.146	0.000	14.8
1330	0.0	0.883	0.883	2760.687	0.000	14.8
1335	0.0	0.882	0.882	2756.384	0.000	14.8
1340	0.0	0.881	0.881	2751.793	0.000	14.8
1345	0.0	0.879	0.879	2747.381	0.000	14.8
1350	0.0	0.878	0.878	2742.919	0.000	14.8
1355	0.0	0.876	0.876	2738.533	0.000	14.7
1360	0.0	0.875	0.875	2734.138	0.000	14.7
1365	0.0	0.874	0.873	2729.652	0.000	14.7
1370	0.0	0.872	0.872	2725.232	0.000	14.7
1375	0.0	0.871	0.871	2720.839	0.000	14.7
1380	0.0	0.869	0.869	2716.461	0.000	14.7
1385	0.0	0.868	0.868	2712.028	0.000	14.7
1390	0.0	0.866	0.866	2707.694	0.000	14.7
1395	0.0	0.865	0.865	2703.210	0.000	14.7
1400	0.0	0.864	0.864	2698.885	0.000	14.6
1405	0.0	0.862	0.862	2694.494	0.000	14.6

Project: Land North of Baldock Road Catchment 5		Date: 18/07/2024	
		Designed by: rjethwa	Checked by:
Report Details: Type: Stormwater Control Results Storm Phase: Phase		Approved By:	
		Company Address:	



Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1410	0.0	0.861	0.861	2690.143	0.000	14.6
1415	0.0	0.859	0.859	2685.710	0.000	14.6
1420	0.0	0.858	0.858	2681.338	0.000	14.6
1425	0.0	0.857	0.857	2676.893	0.000	14.6
1430	0.0	0.855	0.855	2672.549	0.000	14.6
1435	0.0	0.854	0.854	2668.179	0.000	14.6
1440	0.0	0.852	0.852	2663.770	0.000	14.6
1445	0.0	0.851	0.851	2659.408	0.000	14.6
1450	0.0	0.850	0.850	2655.042	0.000	14.5
1455	0.0	0.848	0.848	2650.745	0.000	14.5
1460	0.0	0.847	0.847	2646.313	0.000	14.5
1465	0.0	0.845	0.845	2642.036	0.000	14.5
1470	0.0	0.844	0.844	2637.658	0.000	14.5
1475	0.0	0.843	0.843	2633.262	0.000	14.5
1480	0.0	0.841	0.841	2628.935	0.000	14.5
1485	0.0	0.840	0.840	2624.601	0.000	14.5
1490	0.0	0.839	0.838	2620.237	0.000	14.4
1495	0.0	0.837	0.837	2615.918	0.000	14.4
1500	0.0	0.836	0.836	2611.598	0.000	14.4
1505	0.0	0.834	0.834	2607.300	0.000	14.4
1510	0.0	0.833	0.833	2602.955	0.000	14.4
1515	0.0	0.832	0.832	2598.644	0.000	14.4
1520	0.0	0.830	0.830	2594.386	0.000	14.4
1525	0.0	0.829	0.829	2589.989	0.000	14.4
1530	0.0	0.827	0.827	2585.716	0.000	14.4
1535	0.0	0.826	0.826	2581.378	0.000	14.3
1540	0.0	0.825	0.825	2577.092	0.000	14.3
1545	0.0	0.823	0.823	2572.781	0.000	14.3
1550	0.0	0.822	0.822	2568.493	0.000	14.3
1555	0.0	0.821	0.820	2564.255	0.000	14.3
1560	0.0	0.819	0.819	2559.986	0.000	14.3
1565	0.0	0.818	0.818	2555.617	0.000	14.3
1570	0.0	0.816	0.816	2551.335	0.000	14.3
1575	0.0	0.815	0.815	2547.080	0.000	14.3
1580	0.0	0.814	0.814	2542.784	0.000	14.2
1585	0.0	0.812	0.812	2538.590	0.000	14.2
1590	0.0	0.811	0.811	2534.255	0.000	14.2
1595	0.0	0.810	0.810	2529.983	0.000	14.2
1600	0.0	0.808	0.809	2525.740	0.000	14.2
1605	0.0	0.807	0.807	2521.491	0.000	14.2
1610	0.0	0.805	0.806	2517.215	0.000	14.2
1615	0.0	0.804	0.804	2513.052	0.000	14.2
1620	0.0	0.803	0.803	2508.743	0.000	14.1
1625	0.0	0.801	0.802	2504.473	0.000	14.1
1630	0.0	0.800	0.800	2500.264	0.000	14.1
1635	0.0	0.799	0.799	2496.005	0.000	14.1
1640	0.0	0.797	0.797	2491.764	0.000	14.1
1645	0.0	0.796	0.796	2487.555	0.000	14.1
1650	0.0	0.795	0.795	2483.369	0.000	14.1
1655	0.0	0.793	0.793	2479.119	0.000	14.1
1660	0.0	0.792	0.792	2474.881	0.000	14.1
1665	0.0	0.791	0.791	2470.667	0.000	14.1
1670	0.0	0.789	0.789	2466.486	0.000	14.0
1675	0.0	0.788	0.788	2462.249	0.000	14.0
1680	0.0	0.787	0.787	2458.030	0.000	14.0
1685	0.0	0.785	0.785	2453.838	0.000	14.0
1690	0.0	0.784	0.784	2449.744	0.000	14.0
1695	0.0	0.783	0.782	2445.436	0.000	14.0

Project: Land North of Baldock Road Catchment 5		Date: 18/07/2024	
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Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
1700	0.0	0.781	0.781	2441.236	0.000	14.0
1705	0.0	0.780	0.780	2437.117	0.000	14.0
1710	0.0	0.779	0.779	2432.889	0.000	13.9
1715	0.0	0.777	0.777	2428.672	0.000	13.9
1720	0.0	0.776	0.776	2424.493	0.000	13.9
1725	0.0	0.775	0.774	2420.395	0.000	13.9
1730	0.0	0.773	0.773	2416.209	0.000	13.9
1735	0.0	0.772	0.772	2411.980	0.000	13.9
1740	0.0	0.771	0.770	2407.858	0.000	13.9
1745	0.0	0.769	0.769	2403.656	0.000	13.9
1750	0.0	0.768	0.768	2399.515	0.000	13.9
1755	0.0	0.767	0.767	2395.360	0.000	13.8
1760	0.0	0.765	0.765	2391.250	0.000	13.8
1765	0.0	0.764	0.764	2387.045	0.000	13.8
1770	0.0	0.763	0.763	2382.898	0.000	13.8
1775	0.0	0.761	0.761	2378.764	0.000	13.8
1780	0.0	0.760	0.760	2374.623	0.000	13.8
1785	0.0	0.759	0.759	2370.582	0.000	13.8
1790	0.0	0.757	0.757	2366.432	0.000	13.8
1795	0.0	0.756	0.756	2362.296	0.000	13.8
1800	0.0	0.755	0.755	2358.103	0.000	13.7
1805	0.0	0.753	0.753	2354.024	0.000	13.7
1810	0.0	0.752	0.752	2349.865	0.000	13.7
1815	0.0	0.751	0.751	2345.773	0.000	13.7
1820	0.0	0.749	0.749	2341.653	0.000	13.7
1825	0.0	0.748	0.748	2337.539	0.000	13.7
1830	0.0	0.747	0.747	2333.453	0.000	13.7
1835	0.0	0.745	0.745	2329.351	0.000	13.7
1840	0.0	0.744	0.744	2325.266	0.000	13.7
1845	0.0	0.743	0.743	2321.252	0.000	13.6
1850	0.0	0.741	0.741	2317.067	0.000	13.6
1855	0.0	0.740	0.740	2312.956	0.000	13.6
1860	0.0	0.739	0.739	2308.866	0.000	13.6
1865	0.0	0.738	0.738	2304.856	0.000	13.6
1870	0.0	0.736	0.736	2300.706	0.000	13.6
1875	0.0	0.735	0.735	2296.652	0.000	13.6
1880	0.0	0.734	0.734	2292.567	0.000	13.6
1885	0.0	0.732	0.732	2288.541	0.000	13.6
1890	0.0	0.731	0.731	2284.467	0.000	13.5
1895	0.0	0.730	0.730	2280.371	0.000	13.5
1900	0.0	0.728	0.728	2276.317	0.000	13.5
1905	0.0	0.727	0.727	2272.281	0.000	13.5
1910	0.0	0.726	0.726	2268.239	0.000	13.5
1915	0.0	0.724	0.725	2264.216	0.000	13.5
1920	0.0	0.723	0.723	2260.109	0.000	13.5

Appendix F: Additional SuDS Overview Plan



- Legend
- Indicative Swale
 - Indicative Rain Garden
 - Indicative Permeable Paving



P1	22.07.24	Preliminary Issue	RJ	LE
Rev	Date	Description	By	Apvd

PROJECT:
LAND NORTH OF BALDOCK ROAD,
BUNTINGFORD

TITLE:
SUDS OVERVIEW PLAN

CLIENT:
HALLAM LAND MANAGEMENT

SCALE@A1:
1:2000

PROJECT REF: 23161	STATUS: P1
DRAWING No: SK-C-012	REV: P1

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

