



Drainage Addendum

Site: Land to the North of Arundel Road, Fontwell, West Sussex BN18 OSF

Client: Harlequin Developments

Prepared by: DHA Environment
Eclipse House
Eclipse Park
Sittingbourne Road
Maidstone ME14 3EN

Date: August 2026

1.1 Introduction

- 1.1.1 This Drainage Technical Note (TN) has been produced in response to the latest response from West Sussex County Council (LLFA) dated 4th August 2026 in relation to Planning Application Reference: WA/18/26/PL concerning a proposed residential development of up to 64 units on Land to the North of Arundel Road, Fontwell, West Sussex BN18 OSF.
- 1.1.2 The site has been allocated in the Walberton Neighbourhood Plan for up to approximately 40 units and a childcare facility.

1.2 Responses to WSCC comments

- 1.2.1 WSCC full response is contained in **Appendix A** and can be summarised with response to each point as follows: -

"Infiltration is not being used to drain the site, due to the groundwater levels. As mentioned, several times, all references to an "infiltration basin" shall be removed from all drawings, as this does not reflect the function of the basin. In the Contributing Areas Plan, reference is still made to an "infiltration basin"."

- 1.2.2 There is no reference to an infiltration basin on the contributing areas plan reference 33186-D-01 Rev P3. A copy of the latest plan is shown in **Appendix B**.

"As LLFA, our role in the planning process is to provide LPAs with technical guidance about an application. It is for the LPA (as approving body) to determine whether any departures or deviations from the National Standards for SuDS, or any other policies or guidance, is allowed for a specific development."

"As stated by the applicant, we advise the LPA that Standard 2 (Interception) has not been satisfied for this application."

- 1.2.3 It is acknowledged that it is the responsibility of LPA to determine whether any departures or deviations from the National Standards for SuDS, is allowed for a specific development, however we would expect the LLFA to provide a view rather than just stating that it has not been met to aid the LPA in the decision-making process.
- 1.2.4 The justification has previously been set out but is summarised below.
- 1.2.5 Without being able to rely on infiltration, this reduces the ability to intercept the first 5mm. This normally leaves lined porous paving for the areas of hardstanding and rainwater harvesting for roofs as the only viable methods. Lined porous paving has already been incorporated in the design which just leaves the area of roofs to be dealt with.
- 1.2.6 The drainage has been designed to keep the drainage system as shallow possible to keep the attenuation above the highest groundwater level. This has been achieved by using the porous paving to both convey and attenuate flows.
- 1.2.7 Rainwater harvesting tanks require an overflow which would be below the base of the porous paving. The overflow also contains debris prior to filtration which would potentially block the porous paving so is not suitable.
- 1.2.8 The only way rainwater harvesting could therefore be implemented on this site would be to separate the roof runoff from the porous paving into a piped system. Given the levels, this would mean any attenuation for the roof element would be too deep to drain to an above ground pond and instead would be to an underground tank the base of which along with any carrier pipes would be below the highest ground water level.
- 1.2.9 We would also note that the allowable discharge has been restricted to 5.4 l/s rather than the greenfield rate of 9.9l/s.
- "The liner does not appear to be included in the basin cross section."*
- 1.2.10 It has previously been stated the pond will be lined. A note has been added to drawing 33186-D-02 Rev P3. The section for the porous pavement has also been included on drawing.
- "We require the updated drainage plan"*
- 1.2.11 Updated drainage plan has been provided in **Appendix B**.
- "As requested, we require the easement to go round the entirety of the basin. As these issues could affect the layout and scale of the site, it would not be reasonable for the above to be covered via conditions at this stage"*
- 1.2.12 A 3m easement has been provided around entire perimeter of the pond

1.3 Summary and Conclusions

As set out in this technical note it can be demonstrated that all issues raised by the LLFA have been addressed.

APPENDIX A



WSCC Response

Ground Floor
Northleigh
County Hall
Chichester
West Sussex
PO19 1RH



Lead Local Flood Authority

Mr S Davis
Planning and Building Control
Arun District Council
Arun Civic Centre
Maltravers Road
Littlehampton
West Sussex
BN17 5LF

Date 4th August 2026

Dear Mr Davis,

RE: WA/18/26/PL - Land off Arundel Road Fontwell

Thank you for your consultation on the above site, received on 24th July 2026. We have reviewed the application as submitted and wish to make the following comments. Please note, this is now our 5th response to this application, which is more than usual.

This is a full application for the erection of 64 residential dwellings with access off Arundel Road, together with associated parking, open space, play space, landscaping, drainage and infrastructure.

The comments are structured with screenshots from the email from the applicant (black text is LLFA comments, highlighted yellow is from the applicant), with updated LLFA comments underneath.

While infiltration is not being used to drain the site, there are several instances where the drainage strategy implies infiltration is still being used. For example, paragraphs 1.3.23 and 1.3.34 and the Contributing Areas Plan and Drainage Strategy Plan all still mention infiltration or infiltration basin. This does not accurately reflect how the site is proposed to drain. There may be other instances where this is an issue. It is also important that this is reflected in any other relevant document submitted under this application, to ensure documents are consistent.

The infiltration basin is still included in the Contributing Areas plan.

Response

We don't understand this point. Could clarification be provided.

Infiltration is not being used to drain the site, due to the groundwater levels. As mentioned several times, all references to an "infiltration basin" shall be removed from all drawings, as this does not reflect the function of the basin.

In the Contributing Areas Plan, reference is still made to an “infiltration basin”.

Standard 2

As stated by the applicant in paragraph 1.2.8, Standard 2 (Interception) is not met, and we are not aware that a departure from the Standards has been agreed with the LPA as approving body. For avoidance of doubt, as LLFA, we are unable to agree to any departures, because we are not the approving body. As stated, it is currently proposed that the porous pavement will be lined and will also drain the roof area. This means that the Permeable surfaces section of Standard 2 is not complied with. Additional interception features are required. While attenuation basins do not count as an interception basin, a detention basin may if designed according to the Standards.

Response

The previous outline approval was based entirely on infiltration and was agreed by the LLFA following the winter testing. By removing the ability to incorporate infiltration in the design it is not possible to meet this standard in full. We are of the understanding that any feature would need to be lined based on the proximity of the groundwater to the base of the pond. Detention basins need to be unlined to deal with the first 5mm. We therefore seek a departure on this standard. The National standards for sustainable drainage systems (SuDS) state that there may be specific circumstances or constraints, that mean it is not possible to deliver one or more of the standards. In these circumstances the opportunity to meet the standard shall be maximised and

1

Justification be developed in consultation with the approving body, who may agree to a departure unless regulatory controls prohibit such a departure. In this case we have demonstrated that we have maximised compliance to this standard and provided justification why this can not be met in full. We were of the understanding that the LLFA are the Approving Body in this case as they have the technical understanding rather than the LPA. Given the LLFA are stating that they can not agree this departure is this something you are able to agree?

As LLFA, our role in the planning process is to provide LPAs with technical guidance about an application. It is for the LPA (as approving body) to determine whether any departures or deviations from the National Standards for SuDS, or any other policies or guidance, is allowed for a specific development.

As stated by the applicant, we advise the LPA that Standard 2 (Interception) has not been satisfied for this application.

It is unclear whether the design of the attenuation basin has considered the high groundwater levels. We request a cross section of the basin and porous paving, to ensure groundwater is considered in the design of SuDS features.

This is not adequately addressed. Currently, the cross section shows that the base of the basin is where the highest groundwater level is located. There does not appear to be any evidence of how the groundwater has been considered in the design of the basin. It is important the capacity of the basin is not impacted by high groundwater levels, as flood risk could increase elsewhere.

Response

The groundwater monitoring results were shown in the FRA. The pond was in the location where the groundwater was at its lowest through the winter testing. This was at a depth of 1.5m BGL. Given a ground level of 31.6m AOD, the maximum groundwater level can therefore be seen to be 30.10m AOD. This coincides with the base of the pond so will not affect the capacity of the lined pond.

The liner does not appear to be included in the basin cross section.

In addition, the permeable paving cross section is missing.

Response

We can provide a typical permeable paving section.

This has not been provided still.

It is unclear whether freeboard from the 1 in 100 year plus climate change event has been included in the basin design.

To ensure the application is in accordance with national planning policy and guidance, residual risk should be safely managed. There is currently 50mm between the maximum water level in the 1 in 100 plus climate change event (design event). There does not appear to be any plans showing finished floor levels. This therefore means the residual risk if the capacity of the basin and associated infrastructure were exceeded has not been adequately addressed.

Response

Levels are shown on the drainage plan. Additional levels have been shown on the adjacent dwellings which indicate a maximum freeboard of 0.3 above the 1 in 100 year plus climate change level.

We require the updated drainage plan.

A minimum 3m easement for the attenuation basin is required, for maintenance access.

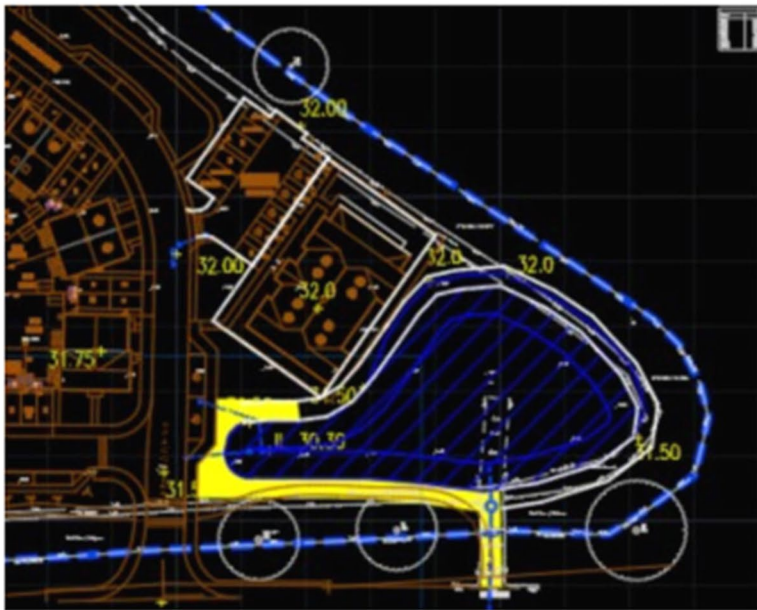
The easement shall go around the entire basin, rather than part of it. For the side near the building, it is unclear whether the basin can be safely maintained. As these issues could affect the layout and scale of the site, it would not be reasonable for the above to be covered via conditions at this stage

Response

We have currently shown a 3m easement for maintenance for the inlet and outlet structures. Any other maintenance can be carried out from within the basin.

Notwithstanding the above we can tweak the layout to provide the 3m easement around the entire perimeter as below.

2



As requested, we require the easement to go round the entirety of the basin.

As these issues could affect the layout and scale of the site, it would not be reasonable for the above to be covered via conditions at this stage.

Yours sincerely,

Eleanor Read
Flood Risk Management Team

Please do not reply directly to this email.

Any formal reconsultation on the application should be directed to

[REDACTED] but the responding officer can be contacted directly via email if there are any questions relating to this response.

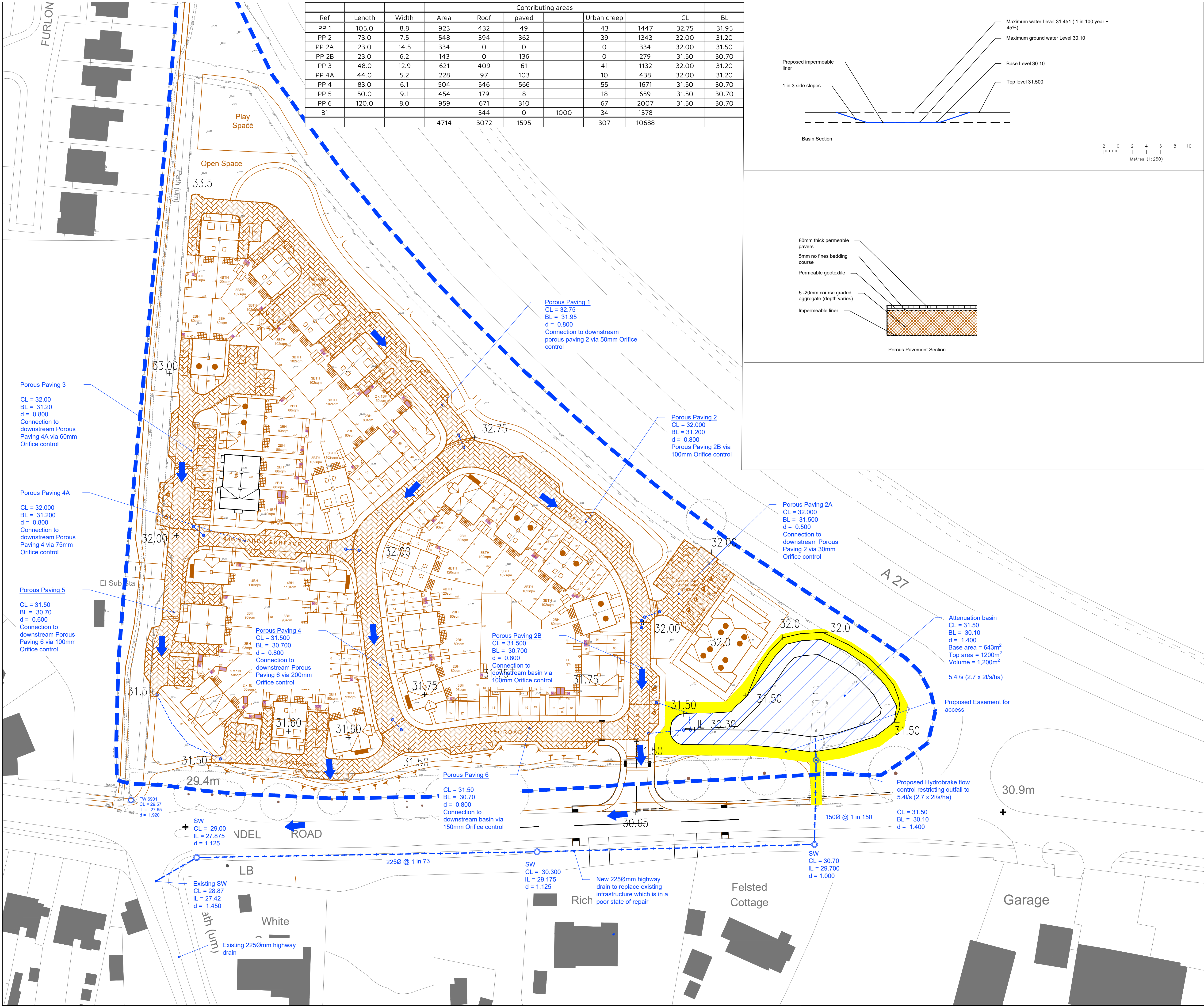
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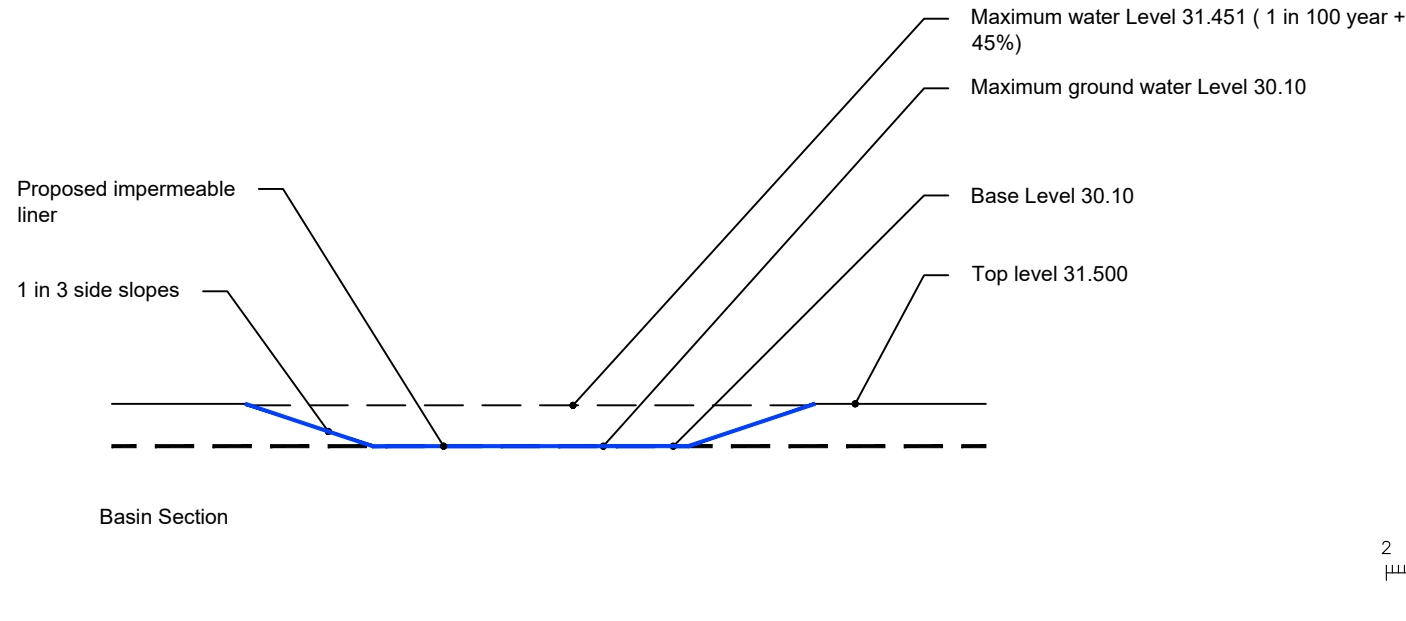
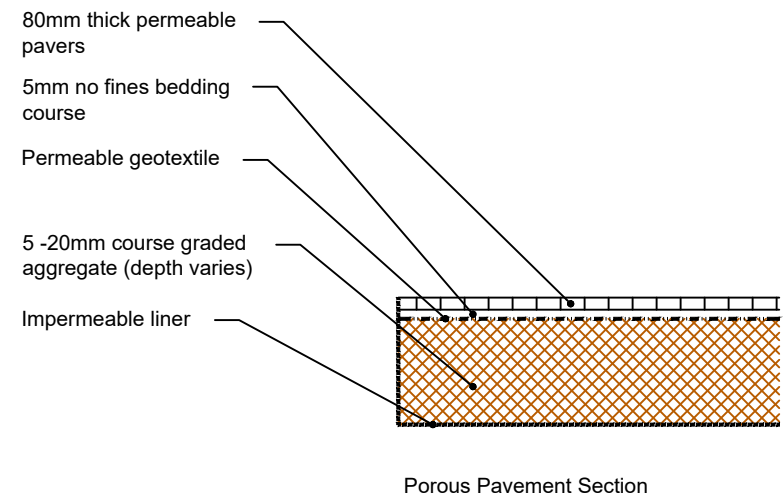
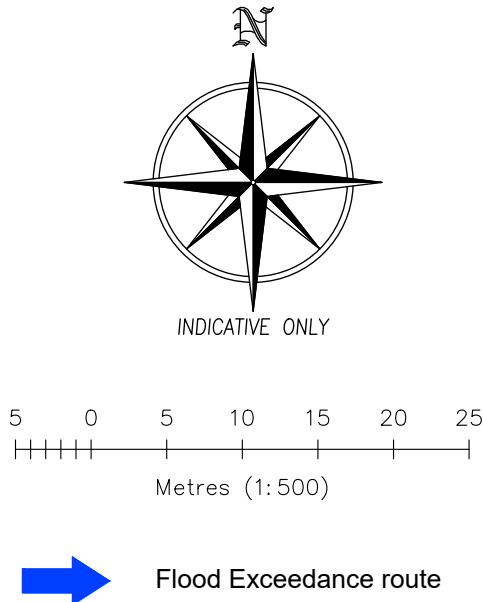
APPENDIX B



Revised drainage drawings



Contributing areas									
Ref	Length	Width	Area	Roof	paved	Urban creep		CL	BL
PP 1	105.0	8.8	923	432	49	43	1447	32.75	31.95
PP 2	73.0	7.5	548	394	362	39	1343	32.00	31.20
PP 2A	23.0	14.5	334	0	0	0	334	32.00	31.50
PP 2B	23.0	6.2	143	0	136	0	279	31.50	30.70
PP 3	48.0	12.9	621	409	61	41	1132	32.00	31.20
PP 4A	44.0	5.2	228	97	103	10	438	32.00	31.20
PP 4	83.0	6.1	504	546	566	55	1671	31.50	30.70
PP 5	50.0	9.1	454	179	8	18	659	31.50	30.70
PP 6	120.0	8.0	959	671	310	67	2007	31.50	30.70
B1				344	0	1000	34	1378	
			4714	3072	1595	307	10688		



Water Butts to be provided on all plots as shown on the architects layout plans.

P7	Amended to suit LLFA comments	10.08.26	CS
P6	Layout attenuation basin amended	17.06.26	CS
P5	Amended to discharge to highway drain	19.05.26	CS
P4	Exceedance routes added	27.04.26	CS
P3	Amended layout	05.03.26	CS
P2	Amended to suit LLFA comments	27.09.24	CS
P1	First issue	28.05.24	CS

REV	AMENDMENTS	DATE	CHK
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Client
HARLEQUIN DEVELOPMENTS

Project
LAND NORTH OF ARUNDEL ROAD FONTWELL

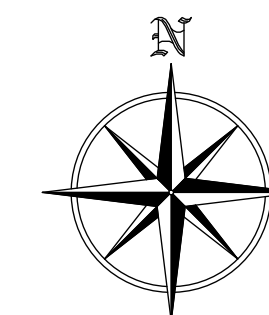
Title
DRAINAGE STRATEGY PLAN

Dwg	Rev	Scale	Date
33186-D-02	P7	1:500	28.05.24

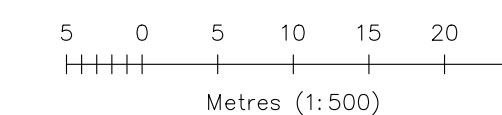


Eclipse House, Eclipse Park, Sittingbourne Road
Maidstone, Kent. ME14 3EN
t: 01622 776226 e: info@dhaplanning.co.uk f: 01622 776227 w: www.dhaplanning.co.uk

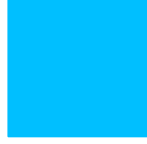
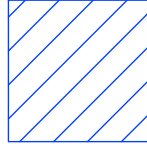
CAD Reference: **A1**



INDICATIVE ONLY



Metres (1:500)

	Proposed site area	-	2.74Ha
	Proposed Porous pavement (Modelled)	-	4,714m ²
	Proposed porous paving (Draining to modelled)	-	1,595m ²
	Proposed roofs	-	3,072m ²
	Proposed pond	-	1,200m ²
	Proposed impermeable area	-	10,581m ²
	10% allowance for urban creep	-	307m ²
	Total contributing area	-	10,888m ²

P3	Layout/areas amended	17.06.26	CS
P2	Layout amended	05.03.26	CS
P1	First issue	28.05.24	CS
REV	AMENDMENTS	DATE	CH

Client

HARLEQUIN DEVELOPMENTS

Project

LAND NORTH OF ARUNDEL ROAD
FONTWELL

	Title
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CONTRIBUTING AREAS PLAN

Drwg	Rev	Scale	Date
33186-D-01	P3	1:500	28.05.24



Eclipse House, Eclipse Park, Sittingbourne Road
Maidstone, Kent, ME14 3EN

t: 01622 776226

f. 01622 776227

e: info@dhaplanning.co.uk

w: www.dhaplanning.co.uk

CAD Reference:

A1