

[REDACTED]

From: Amanda Scholes on behalf of Planning.Responses
Sent: 02 December 2019 11:29
To: Planning Scanning
Subject: FW: Pound Place - Report ref R18-12844

a/161/19/DOC

From: Sarah Burrow [REDACTED]
Sent: 02 December 2019 09:31
To: Anita Gardner [REDACTED]
Cc: Planning.Responses [REDACTED]
Subject: RE: Pound Place - Report ref R18-12844

Hi Anita,

I've started to look at the information submitted and have stumbled at the first hurdle. The infiltration tests that have been used to inform the design are inadequate. In order to complete the soakaway test in accordance with BRE 365 the pit needs to be filled three times. I was unclear from the updated report submitted by IESIS as to the volume of water added to the pits and so have referred back to the Superseded Drainage Design Calculations submitted 1/11/2019. On page 7 of 18 of the Arc Engineers Drainage Design Strategy Report in paragraph 2.4.6 the infiltration tests are described. "The borehole tests showed that when some 25 litres of water was introduced into the boreholes (up to three times), the water drained away immediately."

The volume of the two pits used to calculate the infiltration rate which informs the design were 0.081m³ /81litres (TP03) and 2.565m³ / 2565litres.

I might add that the results from TP01 do seem to contradict this as the starting depth is listed at 0.95m bgl.

My problem is that in order to calculate the infiltration rate the pit needs to be filled and the time from it falling to 75% to 25% filled is recorded. In none of these tests is the pit filled to 75% let alone 100%.

Furthermore the dimensions of TP03 are too small, BRE365 states that the trial pit should be 0.3-1m wide and 1-3m long. Therefore the smallest dimensions could be 0.3m-1m rather than 0.3m x 0.3m.

I appreciate that the ground conditions on Roundstone Lane will show excellent potential for infiltration and have no concerns about the viability of infiltration on the site. However, the applicant will need to complete further tests in accordance with BRE365 at the depths and locations of the proposed soakaways in order to calculate an accurate infiltration rate which can then be used to inform the design.

At this stage I have not looked further into the details submitted. I am sure you are aware that the department is stretched at present and I don't want to waste time assessing an application that is likely to need adjustment based on the new data and infiltration rates.

Kind Regards

Sarah Burrow
Engineering Assistant

From: Anita Gardner [REDACTED] >
Sent: 26 November 2019 14:08

To: Sarah Burrow [REDACTED]
Subject: FW: Pound Place - Report ref R18-12844

Hi Sarah,
I attach the revised calculations and report. Can I have your comments please when you have time?
Thanks
Anita

Anita Gardner | Principal Planner, Directorate of Place, Arun District Council | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

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Save the environment - think before you print.

From: Paul Laverty [REDACTED]
Sent: 26 November 2019 13:51
To: Anita Gardner [REDACTED]
Cc: Tom Wilson [REDACTED], Alan Werrett [REDACTED], Nina Vogric <[REDACTED]>
Subject: Re: Pound Place - Report ref R18-12844

Dear Anita,

Please find attached our revised drainage calculations and report as discussed on Friday (see above email chain) regarding Pound Place (Planning Consultation ref A/161/19/DOC).

If there are any questions or if you would like to discuss anything, please feel free to contact myself.

Kind regards,

PAUL LAVERTY | Civil Engineer
HND

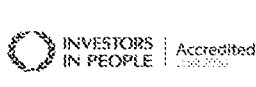
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On Fri, 22 Nov 2019 at 18:15, Paul Laverty [REDACTED] wrote:

Dear Anita,

We have been forwarded your email by Shivani and I have spoken with Sarah Burrow (Engineering Assistant) who drafted the request for clarification and/or further information regarding Pound Place (Planning Consultation ref A/161/19/DOC). Our response follows the same order as per her comments (email dated 20/11/19):

1 – To clarify our drainage strategy, the Drainage Design Strategy Report (DDSR) by ARC Engineers and plan has been removed from Appendix A of our Drainage Design Calculations except the infiltration testing results that correspond to our infiltration devices. Our drainage plan and calculations form Appendix B of our Drainage Design Calculations report.

2 - Our design is based on the infiltration rates used by ARC Engineers stated in their modelling results for their soakaways located at approximately the same depth as our design. Sarah has expressed concern that the rates used are based on the 6m boreholes and not the shallower test pits. We have calculated the infiltration rates for the test pits that correspond with our infiltration devices and the infiltration rates are very good, therefore the changes to the soakaway devices are expected to be minor. We are currently updating our model to ensure everything is fully coordinated and issue our drainage plan, calculations and report using the revised rates on Monday.

3 - The permeable paving mentioned in the DDSR (Section 6.3) was removed during the design development. Sarah has expressed concerns if water quality still can be achieved with the removal of this SuDS tool. The Client has agreed to introduce permeable paving to the parking bays to the west, providing the requested water quality treatment for the western road and parking areas surface water runoff. As noted above we are updating the model and will issue Monday.

4 – The FRA, titled "Land at Pound Nursery, Roundstone Lane, Angmering", for the adjacent development to the south states groundwater monitoring was undertaken from October 2011 to November 2012 (see section 3.3.2 from the FRA). Therefore, testing was carried out during the winter period as required by Arun District Council. I would also like to highlight that section 2.3.2 within the DDSR states that trial pits were excavated to a depth of 3mbgl and proved the water table is below this as all were dry.

5 - The request forms have been completed although the drain times will need to be amended with the revised infiltration information.

I trust the above provides the clarification required to enable you to approve the proposal subject to conditional discharge.

We will provide our revised information / clarification and trust that there are no issues with submitting the revised information by the close of Monday (25/11/19).

If you would like to discuss anything with me, please feel free to contact myself.

Kind regards,

PAUL LAVERTY | Civil Engineer
HND

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----- Forwarded message -----

From: Shivani Bhardwaj [REDACTED]
Date: Fri, 22 Nov 2019 at 09:20
Subject: RE: Pound Place - Report ref R18-12844
To: Tom Wilson [REDACTED]
Cc: Chris Roberts [REDACTED], Alan Werrett [REDACTED], Nina Vogric [REDACTED]
[REDACTED] Paul Laverty [REDACTED]

Great thanks Tom, I have gone back to the planner and let her know that we will be sending information across to her today and that we have also found additional information on ground water monitoring.

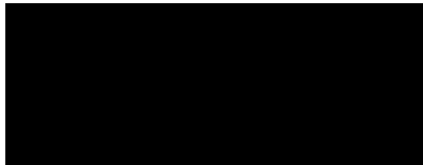
Your swift response is much appreciated.

Kind regards,



SHIVANI BHARDWAJ

Technicial Coordinator



3 Woodbrook Crescent, Radford Way
Billericay, Essex CM12 0EQ



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From: Tom Wilson <[REDACTED]>

Sent: 21 November 2019 17:55

To: Shivani Bhardwaj [REDACTED]

Cc: Chris Roberts [REDACTED] Alan Werrett [REDACTED] Nina Vogric

[REDACTED] Paul Laverty <[REDACTED]>

Subject: Re: Pound Place - Report ref R18-12844

Shivani

After much searching, we have managed to locate an SI report which includes winter groundwater monitoring which was undertaken during October 2011 - March 2012. This confirms that no groundwater was recorded above 4.0m below ground levels. The report is referenced within the 2015 FRA by CEP engineers as part of the planning application for Land at Pound Nursery, Roundstone Lane on behalf of David Wilson Homes.

We will make reference to these reports in our formal response tomorrow but I have attached the reports for your records.

The other items raised by the LPA are minor and just requires a bit of clarification from us, i.e. they appear to be mis interpreting our calculations.

We will provide a full response tomorrow.

Kind regards

TOM WILSON | Director

BEng (Hons) CEng MICE MStructE

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On Wed, 20 Nov 2019 at 17:27, Shivani Bhardwaj [REDACTED] wrote:

Tom,

I have sent this across to the planners and they have said they will not contradict the advice given have we need to clarify if ARC did infact use information from the neighbouring sites are suggested.

Kind regards,

SHIVANI BHARDWAJ

[REDACTED]

Technical Coordinator

3 Woodbrook Crescent, Radford Way
Billericay, Essex CM12 0EQ

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From: Tom Wilson
Sent: 20 November 2019 17:25
To: Shivani Bhardwaj
Cc: Chris Roberts <[REDACTED]> Alan Werrett <[REDACTED]> a Vogric <ninavogric@iesisgroup.com>
Subject: Fwd: Pound Place - Report ref R18-12844

Shivani / Chris

See below and attached email from Arun, confirming that GW standpipes are not required for this site. It would be worth clarifying with them to confirm that this is still the case.

Will you do this, or would you like us to?

Kind regards

TOM WILSON | Director
BEng (Hons) CEng MICE MStructE

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----- Forwarded message -----

From: **Projects** [REDACTED]
Date: Wed, 20 Nov 2019 at 14:32
Subject: RE: Pound Place - Report ref R18-12844
To: Tom Wilson <tom.wilson@iesis-structures.com>, Projects [REDACTED], Shivani Bhardwaj [REDACTED]
Cc: Alan Werrett [REDACTED]

Hi Tom,

Thanks for the email.

Apologies for the delay, I have been reviewing our archive file for this project.

This includes an email from Paul Cann of Arun D.C. specifying that standpipes are not required for this development. It should be confirmed with Paul Cann and the LPA whether this opinion is still current and whether groundwater levels from neighbouring developments were provided by Arc, which seems to be the crux of the issue.

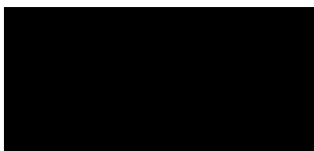
I can still provide costs for groundwater monitoring, in case the views of the LPA have changed.

Kind regards,

Stuart

Stuart Card

Environmental Consultant



Head Office: Unit 3, The Old Grain Store, Ditchling Common Business Park, Ditchling, West Sussex, BN6 8SG

Northern Office: Suite C2, Dunham House, 85-89 Cross Street, Sale, Cheshire, M33 7HH

From: Tom Wilson <[redacted]>

Sent: 18 November 2019 19:32

To: Projects [redacted] Shivani Bhardwaj <[redacted]>

Cc: Alan Werrett [redacted]

Subject: Re: Pound Place - Report ref R18-12844

Good evening Stuart

Thanks for the call this morning and as discussed, I attach a copy of our proposed drainage layout for your reference, showing soakaway locations. The LPA have included a pre-commencement condition (no 3) that winter groundwater monitoring is undertaken as part of the drainage appraisal. Planning conditions attached.

Could you review the attached and provide commentary, based on your recent experience, of whether the LPA are likely to insist on GW monitoring or whether we are likely to be able to discharge this condition without it. It is currently intended to commence construction Jan/Feb 2020 and hence if any GW monitoring is required beyond January then this may affect the start of site date.

I understand that GW monitoring did not form part of your original SI scope.

Could you also provide proposals for the GW monitoring, including costs and programme, for consideration by the client (cc'd).

Many thanks in advance

TOM WILSON | Director
BEng (Hons) CEng MICE MStructE

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On Fri, 15 Nov 2019 at 08:34, Projects [REDACTED]:

Hi Tom,

Standpipes were not installed during the ground investigation and groundwater monitoring was not undertaken.

Is the LPA looking for winter groundwater monitoring?

Kind regards,

Stuart

Stuart Card

Environmental Consultant

Ashdown Site Investigation Ltd

Head Office: Unit 3, The Old Grain Store, Ditchling Common Business Park, Ditchling, West Sussex, BN6 8SG

Northern Office: Suite C2, Dunham House, 85-89 Cross Street, Sale, Cheshire, M33 7HH

From: Tom Wilson [REDACTED]
Sent: 14 November 2019 17:42
To: Project [REDACTED]
Subject: Re: Pound Place - Report ref R18-12844

Hi Alex

One further question about your SI report for Pound Place. Did you undertake any groundwater monitoring?

I note that you didn't encounter GW during the SI but the LPA drainage engineer is requesting evidence that GW monitoring was undertaken.

Any chance you could confirm before CoB Friday please so that I can close this out.

Many thanks

TOM WILSON | Director
BEng (Hons) CEng MICE MStructE

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On Fri, 25 Oct 2019 at 12:22, Tom Wilson <[REDACTED]> wrote:

Dear Alex

Many thanks for coming back to me so promptly.

Kind Regards

TOM WILSON | Director
BEng (Hons) CEng MICE MStructE

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On Fri, 25 Oct 2019 at 12:12, Projects [REDACTED] wrote:

Dear Tom,

I have looked back at the site logs and can confirm that the borehole were undertaken on the 16th March 2018.

Kind Regards

Alex Bewick

Environmental Director

Ashdown Site Investigation Ltd

[REDACTED]
Head Office: Unit 3, The Old Grain Store, Ditchling Common Business Park, Ditchling, East Sussex, BN6 8SG

Northern Office: Suite C2, Dunham House, 85-89 Cross Street, Sale, Cheshire, M33 7HH

From: Tom Wilson [REDACTED]

Sent: 25 October 2019 12:08

To: Projects [REDACTED]

Subject: Pound Place - Report ref R18-12844

FAO Steven McSwinney or Alex Minchell-Bewick

Dear Sirs

We have been appointed by Hallmark Care Homes to undertake civil and structural design for the Pound Place Carehome development and have a question about the date of the BH logs in your report.

We note in the report that the SI was undertaken on 16th March 2018 but the BH logs are dated 16th Feb 2018.

Please confirm the date of the BHs.

Kind regards

TOM WILSON | Director

BEng (Hons) CEng MICE MStructE

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