

From: Roger Spencer
Sent: 04 July 2019 10:44

Cc: Karl McLaughlin <Karl.McLaughlin@arun.gov.uk>; Ros Bryant <Ros.Bryant@arun.gov.uk>; Anita Gardner <Anita.Gardner@arun.gov.uk>

Subject: RE: Littlehampton - Drainage plan Rev2

Dear Sue,

I can confirm that all of the queries raised have been closed off within your drawing (Rev 3 v2) to my satisfaction.

Regards,

Roger

Roger Spencer MICE | Engineering Services Manager, Arun District Council | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

Internal: 37812 | External: +44 (0) 1903 737812 | E-mail: roger.spencer@arun.gov.uk

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From: Karl McLaughlin <Karl.McLaughlin@arun.gov.uk>
Sent: 02 July 2019 17:09

Cc: Roger Spencer <Roger.Spencer@arun.gov.uk>; Ros Bryant <Ros.Bryant@arun.gov.uk>
Subject: FW: Littlehampton - Drainage plan Rev2

Hi Sue,

The final engineering comments are as follows; (See below)

Unfortunately, I'm now on leave until 15th July so further correspondence should be through Roger Spencer (CC'd). Roger is the Engineering Services Manager and will be able to sign off the revised drawing provided it is in his inbox before end of play tomorrow (16:00, 03/07/2019). I can only apologise for the short deadline but we are extremely thin on the ground.

Kind regards,
Karl McLaughlin

Karl McLaughlin | Coastal Engineer, Engineering Services Arun District Council | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

Internal: 37814 | External: +44 (0) 1903 737814 | E-mail: karl.mclaughlin@arun.gov.uk

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From: Laura Gibbons
Sent: 02 July 2019 15:10
To: Karl McLaughlin
Subject: RE: Littlehampton - Drainage plan Rev2

Comments in *green*.

Laura Gibbons, MEng, GMICE
Engineer (Drainage & Coastal)

Laura Gibbons | Engineer (Drainage & Coastal), Engineering Services, Arun District Council | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

Internal: 37818 | External: +44 (0) 1903 737818 | Fax: +44 (0) 1903 716018 | E-mail: laura.gibbons@arun.gov.uk

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From: sue mitchener [REDACTED]
Sent: 28 June 2019 13:27
To: Karl McLaughlin
Cc: Rachel Alderson; Ros Bryant; mark clogg
Subject: Littlehampton - Drainage plan Rev2

Hello Karl

Thanks for your email - all requirements are noted.
Datasheets for Aquacells and Root Barrier proposed are attached.
Responses to Paul Cann's points are below in red for ease of reference

I trust this is all in order, please confirm in due course

Many thanks

Kind regards
Sue

1. They will need to confirm that there will be no structural stability issues with the skate park structure or bunds, as result of the proximity of the soakaway trench/crate systems.

I can confirm there will be no structural stability issues. *Okay. Okay*

2. The bunds adjacent the trench soakaway may creep over the trench soakaway, over a period of time – would they consider reinforcing the bunds in this area with geogrid mesh or similar?

We would not recommend this adjacent to the skatepark. We have moved the trenches away from the bunds as much as is possible. *Okay. Okay*

3. The trench soakaway laid at the gradient proposed will act as conveyance of water but will achieve infiltration on route due to the nature of the ground conditions. Please specify proposed base levels of the trench soakaway at say every 5 metres. Please also provide a construction detail in line with the descriptive text ie. 500x500mm clean stone fully wrapped in permeable geotextile and 200mm of topsail laid over the top.

Amended dwg attached with base levels *Please provide construction detail drawing. Okay*

4. Specify pipe link between trench and crate soakaway as 150mm diameter as opposed to 100mm, twin walled polypipe with 150mm thick ST4 concrete bed and surround. Upstream end of pipe to be wrapped in permeable geotextile to let water through but not stone. Indicate pipe invert levels upstream and downstream.

Noted and confirm change to 150mm and added spec to construction detail. *Please provide invert levels upstream and downstream. Okay*

5. Provide a further layer of 400mm deep crates to increase crate depth to 800mm, and provide 400mm of topsoil above. Crates to be wrapped in permeable geotextile. Stone surround to crates is not required. Specify base level of crates. Indicate precise model of polystorm crate ie. polystorm standard (44t/m2 compressive strength). Alter the construction detail to suit.

Noted and confirmed - datasheet of crates attached. 10 additional crates included to depth of 800mm. Base level added. *Please state on plan that the crates will be aquacell eco. Please change levels on plan so that crates are formed on a level base. Okay*

6. An impermeable root barrier will be required to protect the crate soakaway from root intrusion due to proximity of vegetated area on the north side. Provide construction details, etc of the proposed arrangement. The permeable membrane wrapping to the crates is not considered sufficient to fully prevent root intrusion hence the additional measure being required.

Noted - root barrier we propose to use is attached. *Please include root barrier on construction detail, this must include details of the depth below surface that this root barrier starts, and how far down the barrier extends. Okay*

7. Please note that we have compromised on the amount of storage volume originally specified.

Noted - whilst we had not costed for this in our tender return we confirm that we are happy to adjust our construction detail to take account of the additional measures you wish to see implemented.

Kind regards

Sue

On Mon, Jun 24, 2019 at 3:39 PM sue mitchener [REDACTED] wrote:

Hi Karl

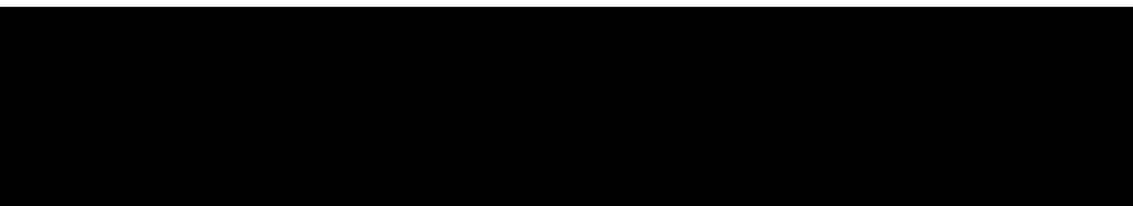
Following your discussion with Mark, please find attached revised drainage plan for consideration.

Please let us know whether this meets with your requirements.

Kind regards

Sue

Sue Mitchener | Director



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