Planning Response

Flosh Meadows
Cleator
The Meadows (SR12, SR12A, Top Meadows)
4/22/2092/001,
4/21/2554/0R1,
4/22/2255/DOC

Issue Date: 13 July 2022

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Report Number:

1842-PR2

Client:

Lakeland Associates (Cleator) Limited

Revision

Α



1.00 Planning response

1.01 Context

The following text sets out Coast Consulting Engineers formal response to comments received relating to a proposed residential development adjacent to Flosh Meadows, Cleator, dated 08 July 2022. The comments relate to the entire development.

2.00 <u>LLFA comments</u>

There are a few fundamental outstanding matters which if you can explain satisfactorily I think we might be able to reach an agreeable strategy:

2.01 **LLFA comment** - Regarding the 'mill races'. Despite what you say in the report and the sketch plan, I have studied the topography and old OS maps and can see no evidence of there being a mill that these could feed, nor a watercourse that could feed these races. It is clear from old OS maps that the two mills just off the River Ehen were fed from mill races placed just above weirs as is normal for mills. So I think we will have to agree to disagree that these are mill races. They are more likely part of the land drainage system to drain the clay soil and improve the ground. In which case these would become riparian ownership drains or watercourses.

Coast response – For reference, we have previously designed a full drainage scheme based upon surface water discharging to the mill race. At the time, we believed the mill race to be a land drainage network that discharged into a culvert and as such, following the hierarchy set out within NPPF, utilised the mill race as the point of outfall for the surface water network.

Homes England (H.E.) first identified a potential issue as part of their due diligence whilst reviewing the scheme for funding. H.E. identified that the developer had no legal right to discharge to the mill race, following the proposed change of land use. The developer subsequently sought legal advice from Baines Wilson LLP who confirmed that in this instance, H.E assessment of the issue is correct. Further work was undertaken by both United Utilities (U.U.) and the Lead Local Floor Authority (LLFA) who all concluded that unusually, in this instance, the proposed network could not discharge to the mill race. Please refer to the drainage strategy documents for each phase which include a statement from Baines Wilson providing a comprehensive assessment.

With the agreement of U.U. and the LLFA, the developer has previously been permitted to discharge to the nearby U.U. combined sewer.

The developer has provided further information, for reference, in regards to the historical presence of the mill that the mill race feeds, which we have listed below.



Developer response.

- 1. Published information mainly about Mills at Cleator relates to 1800 when T Birley started to build Birley Flax and spinning Mills. later known as Cleator Mills, he earlier had a much smaller Flax Mill at Home Farm (see below)
 - i. Cleator Mills was accepted in early 1800s as the largest worldwide flax & spinning mill
 - ii. Cleator Mill was powered by water wheels from the immediately adjacent river Ehen
- 2. T Birley in early 1800s bought an existing 1700s farm building, from Messrs Robertson's & Benn and built Cleator Mansion the mansion later became 'The Flosh' and is presently called the Ennerdale Country House Hotel
- 3. The 1700s building later the mansion became 'The Flosh' it had an adjacent farm called Home Farm with outbuildings
 - i. Home Farm no longer exists but some derelict buildings remain directly opposite the road entrance to Richard & Betty Mulholland (R&B) home address of Flosh Farm House on the A5086
- 4. Lord Ainsworth's bought the Mansion and surrounding land & buildings in mid 1800s when Birley went 'bust'
- 5. All the above was common Cleator Village knowledge when R&B bought Flosh Farm House in 1993
- 6. R&B are the 3rd owners of Flosh Farm House, they bought it in 1993 from Watsons who in 1900 bought it from Robertsons
 - i. all persons giving this information to R&B were family members of earlier owners of the various buildings
- 7. Unknown date but considered from 1750 to 1800s Home Farm outbuilding, later being Ainsworth Coach house, was a flax-linen mill with a substantial water wheel powered by straight line culvert/s from Robertsons/ Benn later Birley land. Presently part of Flosh Meadows development.

All above information was given to R&B by previous owners Watson & frequent visitor Mr Robertson from Cleator village who worked for Watson as a farm manager.

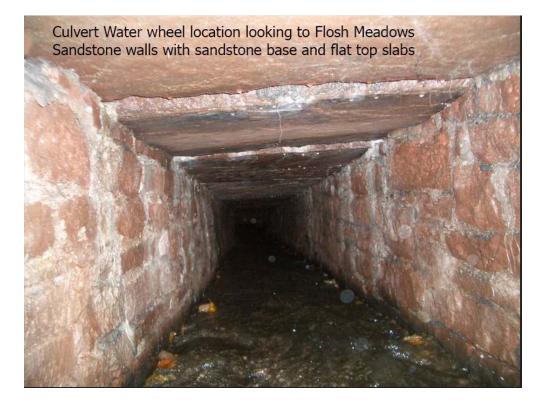
Mrs Watson & Mr Robertson arranged for R&B to view the route and underground layout of the 1750s flaxmill in the (later) Lord Ainsworth Coach house.

Attached are pictures showing the substantial water wheel location with required mill race & onward culvert to the River Ehen. All can be seen to be built to an exceptionally high standard to service the mill.

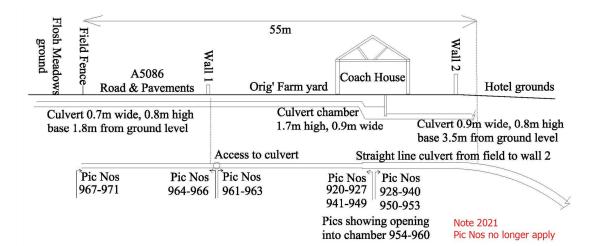
The Mill race and water wheel location with highly engineered culverts are still in existence.





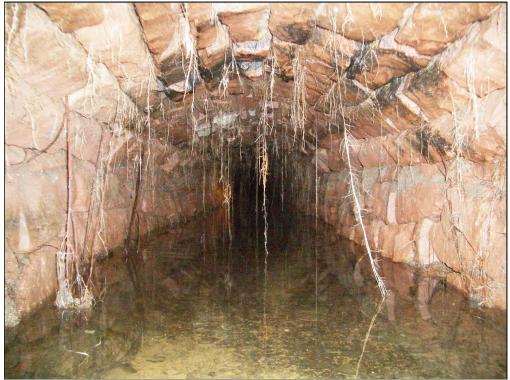




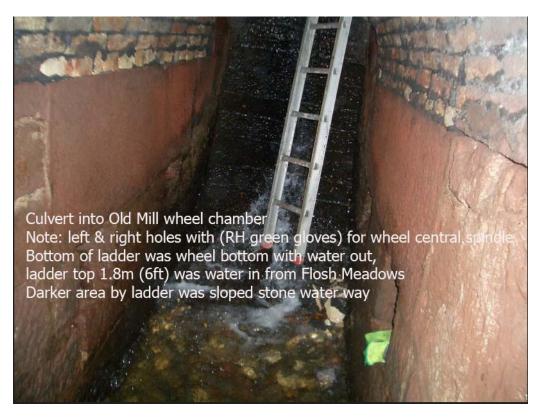


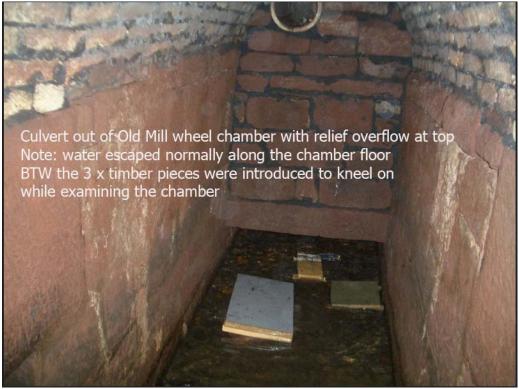




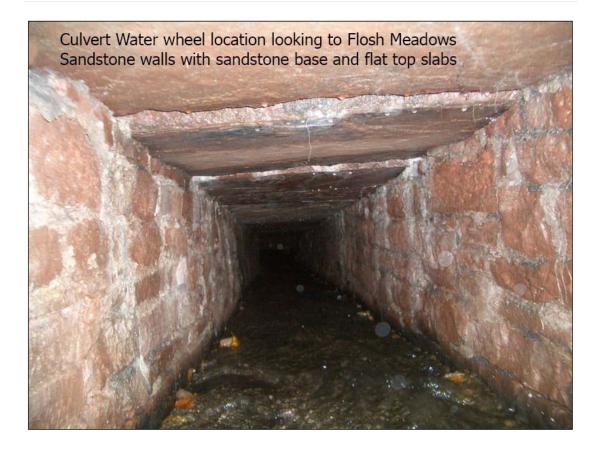














2.02 **LLFA comment** - You state that the field drains via land drains to the culverts at present, so in principle, the land should continue to do so in the proposed design. However, having looked at the invert and cover levels more closely, the relatively flat topography and shallow culvert might be problematic for a gravity solution whilst maintaining cover. You state 'Furthermore, a number of exercises have been completed to prove that a connection to a nearby surface water network cannot be achieved without the use of a surface water pump. '. You are correct - we would not accept a SW pumped solution so understanding the constraints for a route to an existing SW system is crucial. Apart from the drainage long sections and option A and Option B design plans, is there any other information I should be reviewing? If we are satisfied that a gravity solution to the watercourse or existing SW drains is not practicable, or viable, then the proposed option would be the next available option in the hierarchy.

Coast response – Please refer to the response within 2.01. A gravity connection to the existing SW network is not possible. Options A and B are the correct plans to reference.

2.03 **LLFA comment** - Can you send me the impermeable surfaces drawing showing the contributing areas to the surface water drainage system.

Coast response – Impermeable areas plan enclosed.

2.04 **LLFA comment** - For the sake of clarity and simplicity can you also include a HR Wallingford storage calculation overview for the whole site (or split it into two as necessary) and show the storage volumes for the crates and over-sized carrier drains. I note you have done the HR Wallingford Greenfied Run-off rate calculations and that is really useful.

Coast response – HR Wallingford calculations enclosed.

2.05 LLFA comment - I don't quite understand the four sections of filter drains for draining the road on the southern meadow layout. The LHA would not want the added burden of filter drains and I can't see why these sections of road cannot drain into the SW carrier drain. Please explain or remove.

Coast response – The filter drains were still included from the original proposal to discharge to the mill race. They have now been removed.

2.06 **LLFA comment** - 6. I note the alignment of the perimeter land drain through the gardens and that it does not cross under the road. However, I still have some reservations over the risk that this carries into the future

Coast response – It is intended to include information describing the purpose of the perimeter drainage within the homeowners pack. This will also include a maintenance schedule.

