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E10/5225/HS/002

13 August 2010

FAO Diane Goldthorpe
Goldthorpe's Corn Millers Ltd
Lee Lane Mill
Millhouse Green
Sheffield
S36 9NN

Dear Madam,

Re: Proposed Industrial Building off Lee Lane, Millhouse Green.

Please find attached our engineering appraisal indicating the proposed drainage based on the available information.

Yorkshire Water has been contacted and confirms there are no public sewers within close vicinity of the development. The nearest recorded public sewer is a 150mm diameter combined sewer located approximately 770m east of the site. A copy of the Pre Planning enquiry is enclosed for your information.

Recent on-site investigations have verbally established that an existing 225mm diameter surface water sewer connection, serving the existing site, discharges into a 225mm diameter highway drain located along Lee Lane. With this in mind, our intention is to connect the new surface water drainage system which will serve both the existing mill complex and proposed grain storage building into this drain.

The total existing impermeable area has been calculated to be 4272m^2. By assuming an annual rainfall rate of 50mm/hr, the run-off rate for the existing site has been calculated to be 59lit/sec. See drawing no. E10/5225/01 for details.

Further to discussions with Barnsley Land Drainage, a 30% reduction in the existing discharge is required when calculating the run-off rate for the proposed development. Therefore, the discharge rate for the new development is to be restricted to a maximum 42lit/sec.

Adequate storage is also required to cater for 1 in 100 yr storm duration plus a 30% volume increase for climatic change. At present we have allowed for the full volume of the storage to be provided in an underground storage system.

The volume of surface water storage required for the 1 in 100yr storm event (+30% climate change) is calculated to be approximately 115m^3. This equates to an 8mx16mx0.9m deep Aquacell storage system or similar to be laid on-site. A flow control

device will also be required within the downstream storage manhole to reduce the discharge to the required 42lit/sec. The new surface water system will then connect into the existing 225mm diameter highway sewer as above via a new 225mm diameter connection. A copy of the proposed drainage feasibility has been enclosed for your information.

Kindly note, the existing 225mm diameter surface water sewer previously connecting into the highway sewer is to be abandoned, made good and all existing private drainage discharging into this connection is, in turn, to be diverted into the new surface water storage system as shown.

Furthermore, the existing highway drain and gullys along Lee Lane are to be de-silted and invert levels re-confirmed prior to any work commencing on site.

Any existing foul water drainage serving the development is to be maintained. No foul water drainage appears to be required for the new extension.

I trust that the above is sufficient for your present requirements, but should you have any queries please do not hesitate to contact me direct.

Yours faithfully,

HELEN SHAW
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Enclosures.