

Our Ref: 600902-HEX-XX-XX-C-9203/ST/V01

Hinckley & Bosworth Borough Council
Hinckley Hub
Rugby Road
Hinckley
LE10 0FR

4 St Mary's Place
Nottingham NG1 1PH
+44 (0)115 648 5252
info@hexaconsulting.co.uk
hexaconsulting.co.uk

Saturday, 02 May 2026

Dear Sir or Madam,

Twycross Zoo – Surface water drainage proposals

We are writing to provide information to respond to comments from the LLFA. For ease of reference, we have pasted the comments below and placed our responses next to them in red.

- The proposed HydroBrake chambers must be labelled with product model references and design head and flow details removed. This is to minimise the risk of the appointed contractor substituting for an alternative control which may have a less efficient head/flow relationship. This is an issue the LLFA has identified on other schemes, which can have a significant impact on the suitability of attenuation capacity and related flood risk. – we have added the product model references to the plan, but left flow details on the plan as these are important to understand the flows on the site. We have also provided specification sheets that the contractor has provided as proof these are the products used. The supporting hydraulic calculations match these models.
- The cellular storage tanks shown do not provide any clarity on how water is discharged to them, with the drawings submitted suggesting that the proposed sewers drain below them (this was not an issue on previous revision submitted under 25/00005/DISCON). Additionally, no cellular storage tank design detail has been submitted; under application 25/00005/DISCON this detail was submitted and approved, which showed surface water out-falling into the tanks. This detail should be submitted under this application (update where required) and layouts amended to more clearly show connectivity between the attenuation tanks and the surface water network. – surface water is discharged to the tanks via pipes. For clarity, none of the tanks are underdrained, the line through the middle of the tank represents the inspection unit. We have added a note to the drawing to clarify this. We have also provided construction details and supplier details.
- No pervious paving detail has been submitted under this application. This detail should be submitted. – these are now enclosed.
- It is unclear how the proposed replacement pond has been sized, the proposed restricted discharge rate calculated and what the overland flow routing from this point during an overtopping scenario will be. No surface water modelling of this section of the proposals has been submitted. While it is likely that detailed modelling may not be required, the LLFA would wish to see evidence to support these proposals. As noted above, the proposed HydroBrake model reference should be clearly shown on the relevant plans. – noted. We have obtained as-built drainage records from the area

which discharges into the existing pond. Drainage surveys for this area appear to corroborate these drawings. We have taken the impermeable areas and also a pumped flow rate of 5l/s which is indicated on the drawings, and created a new hydraulic model to ensure the new pond is sized sufficiently. We have restricted flows to 5l/s.

- The drainage catchment plan drawing reference TWZ-HEX-XX-XX-DR-C-9410 P02 submitted under 25/00005/DISCON should be updated to suit the proposed amendments and submitted to be reviewed against the submitted calculations. – **noted, we have provided an updated catchment plan which matches the latest hydraulic calculations.**

Please also see enclosed supporting documents:

- 600902 - Basin Check (hydraulic calculations relocated basin)
- Chimp Eden As Built Drainage (historic as-built drawing supporting calculations for relocated basin)
- 600902 - SW Network 02.05.2026 (hydraulic calculations main development)
- E77424_01_A - ATT1 - Twycross Zoo (tank 1 supplier detail)
- E77424_02_A - ATT2 - Twycross Zoo (tank 2 supplier detail)
- 3 no. ACO Q-Brake spec sheets
- TWZ-HEX-XX-XX-DR-C-9212-Drainage details sheet 3_C01
- TWZ-HEX-XX-XX-DR-C-9402-External Works Details-C08
- TWZ-HEX-XX-XX-DR-C-9410-Catchment Plan_P03
- TWZ-HEX-XX-XX-DR-C-9200-Surface Water Drainage Layout Sheet 1_C16
- TWZ-HEX-XX-XX-DR-C-9200-Surface Water Drainage Layout Sheet 2_C19

If you have any questions or need further clarification, please do not hesitate to reach out.

Yours faithfully,



Scott Thompson
Principal Engineer
0781 363 5747

For and on behalf of Hexa Consulting Ltd