PROPOSAL: Relocated railway station comprising platforms, pedestrian bridges, access road, pedestrian and cycle routes, car and cycle parking, with other associated facilities and infrastructure.

Land between Cody Road and railway, north of Waterbeach, Cambs

Comments from Lead Local Flood Authority (LLFA)

Dear Sir,

Thank you for your consultation which we received on 5th March 2018.

We have reviewed the submitted documents and at present we **object** to the grant of planning permission for the following reasons:

1. As outlined in paragraph 6.3.6 of the SPD, all new developments on greenfield land are required to discharge the runoff from impermeable areas at the same greenfield runoff rate, or less than, if locally agreed with an appropriate authority or as detailed within the local planning policies of District and City councils.
2. There are a number of inconsistencies between the submitted plans and calculations and as such the applicant has not demonstrated that the controlled discharge rate from the proposed development and the on-site attenuation proposed are acceptable.

**Informative**

In principle the LLFA is supportive of the proposed scheme. It is appreciated that the scheme follows the SuDS hierarchy and that whilst infiltration is not feasible, surface attenuation and controlled release is being utilised. However, at this stage the flow control in the calculations is not reflective of the required controlled release and there are several inconsistencies between the submitted plans and calculations. As such it cannot be confirmed that the detail of the proposed scheme is appropriate.

If the following inconsistencies are addressed we will look to review our objection.
- The 2 flow controls detailed on page 6 of the calculations are limited to 1.1l/s, meaning a total...
discharge of 2.2l/s. This is greater than the 1.1l/s/ha that is referenced in section 4.5 of the report and on drawings 2263 and 2262. Note that l/s/ha should not be confused with l/s.

- MicroDrainage Page 1 – Confirmation is required on the contributing areas. The calculations show 1.6ha to HA14 and 0.71 ha to H17 but plan 2241 shows an impermeable area of 1.3ha and permeable paving of 0.47ha

- MicroDrainage Page 2 – The slopes for most of the Swales and conduits on Page 2 of the calculations do not match the plans (e.g. S1.001 calculation shows gradient of 1:295.5 and plan shows gradient of 1:370). These must be reviewed and updated where appropriate to ensure plans and calculations are consistent.

- MicroDrainage Page 2 – The length of the proposed features should also be checked for consistency (e.g. S1.005 calculations it has a length of 15.647m and plan shows a length of 26m).

- MicroDrainage Page 2 – The length, labelling and diameter of S1.006 should be checked. The plan shows S1.006 and the calculations show S1.006 and S1.007.

- MicroDrainage Page 2 – Clarification is required on the approach being proposed between the Swales for H2 and H3; and H4 and H5. On the plans these are shown as 225mm conduits whilst in the calculations they have been modelled as junctions. As such it is unclear what the impact is of using 225mm conduits.

- MicroDrainage Page 2 – The location of S2.005 must be made clear on the plans. This is recorded as twin 150mm diameter pipes in the calculations.

- MicroDrainage Page 2 – The length, labelling and diameter of S2.007 must be checked. The plan shows S2.007 and the calculations show S2.007 and S2.008

- MicroDrainage Page 2 – There are inconsistencies between the Manhole Cover levels and Depths between the calculations and those shown in the plans. These need to be reviewed and updated accordingly.

- MicroDrainage Page 3 – A static water level of 1.5m has been assumed in the receiving watercourse. Evidence should be provided to confirm how this figure has been determined and that it is realistic. Consider the need for sensitivity testing of downstream water level.

- MicroDrainage Page 6 – There are inconsistencies between the invert of the second hydrobreak between the calculations and the plans. These need to be reviewed and updated accordingly.

- MicroDrainage Page 8 – The total porous car park area in calculations is 0.451ha whilst the plans show 0.4691ha. Therefore, 180m² of porous paving is unaccounted for according to the drawings. Clarification is required as to the areas of porous paving and drawings and calculations need to be updated accordingly.

- MicroDrainage Page 8 – There are inconsistencies in the slope of the porous paving between the calculations (1:80) and the drawings (1:100). These need to be reviewed and updated accordingly.
- MicroDrainage Page 8 – There are inconsistencies in the invert levels of the porous paving between the calculations and the drawings. These need to be reviewed and updated accordingly.
- MicroDrainage Page 15 – It appears that the calculation have been combined from another model run. Confirmation is required that all parameters are unchanged.

In addition to the above, the extent of exceedance should also be shown on the plans rather than just showing flow routes.

Pre-application Advice
To ensure the required information is provided with an application and therefore reduce the likelihood of receiving an objection, it is strongly advised that applicants utilise the LLFA’s pre-application service. Further information can be found on our website.

Yours faithfully,

Julia Beeden

Flood Risk & Biodiversity Business Manager
Environment and Commercial

Please note: We are reliant on the accuracy and completeness of the reports in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.

If you have any queries regarding this application please contact the Officer named at the top of this letter (contact details are above).