District: Cherwell
Application No: 19/00213/DISC
Proposal : Discharge of conditions 6 (new link road), 8 (surface water drainage), 9 (floor levels), 10 (play areas), 11 (arboricultural survey), 12 (ecology), 13 (secured by design), 14 (contamination), 18 (mitigation for badgers) and 35 (cycle lanes) of 15/01326/OUT
Location:OS Parcels 6741 And 5426 West Of Cricket Field Nor, Wykham Lane, Bodicote

---

Economy and Skills

Recommendation:

Condition 8 Not Discharged

Key issues:

- **Discharge Rates not in line with local and National Standards**
- **Previous requested information has still not been provided.**

Detailed comments:

Greenfield runoff rates and proposed discharge rates for the site need clarifying.

Total site area = 17.5ha
Developable area = 8.6ha
Area positively draining into Thames Water sewer at MH7101= 0.684ha

Area used to ascertain greenfield runoff rates is 17.5ha (total site area) and the following rates are noted:

Qbar - 2.71 l/s
1y - 14.9 l/s
30y - 40.3 l/s
100y - 55.9 l/s

The proposed system is discharging at the following rates:

2y – 53.5 l/s
30y – 56.0 l/s
100y+40%cc – 56.0 l/s

This results in an increase in the peak rate of runoff over existing greenfield conditions. No consideration of the increase in runoff volume has been made. Inline

with local and national standards, flow rates must be restricted to Qbar or a complex control used to ensure volume isn't increased from the development.

We need an impermeable areas catchment plan to check correct urban creep has been applied where applicable.

The calcs have been run for up to the 1:100y+40%cc event. OK

No flooding during the 30y event.

The following flood volume are experienced during the 100y+40% event:
MH100 – 0.827 m3
MH124 – 1.411 m3
MH125 – 10.412 m3
MH107 – 21.744 m3
MH108 – 6.178 m3
MH141 – 5.148 m3
MH150 – 4.497 m3
MH151 – 9.946 m3
MH142 – 4.641 m3
MH143 – 0.508 m3
MH145 – 13.629 m3
MH109 – 5.784 m3
MH160 – 8.2 m3
MH190 – 3.37 m3
MH214 – 6.71 m3
MH275 – 1.99 m3
MH277 – 0.276 m3
MH278 – 10.320 m3

No Flood exceedance plan has been provided. This is required to understand what happens to the accumulated flooding at the following manhole locations:

- S107/S108
- S150/S151/S142/S143/S160
- S214/S215

The infiltration rates used for the SuDS features including swales, filter trenches and cellular soakways all look correct and in line with the test results.
A safety factor of 3 has been applies to the infiltration rate. OK
The calcs for the cellular soakaways, filter trenches and the private swales look OK
However, no calcs have been provided for SuDS ponds 3,4,5&6.
These are in the network calcs however we need a detailed section drawing through all the SuDS ponds or contours on the drawing to check top of bank levels against peak water levels in the calcs.

The following information still hasn't been submitted;

- A compliance report to demonstrate how the scheme complies with the overall drainage strategy for the site and current local and national surface water drainage standards;
- Details of how existing surface water flow routes will be maintained and managed post development;
- A Flood Exceedance Conveyance Plan;
- Detailed design drainage layout drawings of the SuDS proposals including cross section details;
- Detailed maintenance management plan in accordance with Section 32 of CIRIA C753 including maintenance schedules for each drainage element; and
- Details of how water quality will be maintained during construction.

Officer's Name: Richard Bennett
Officer's Title: Flood Risk Engineer
Date: 06 August 2020