Flood Management & Drainage Consultation - Lead Local Flood Authority – Statutory Consultee

Consultation on Application Number: 2016/62/91158/E

Address: Flockton Green Working Mens Club, Barnsley Road, Flockton, Huddersfield, WF4 4AA

Proposal: Erection of 87 dwellings and demolition of existing working mens club

DC Officer: Adam Walker

Drainage Officer: Paul Farndale

Comments:-

Further information is required in order to fully assess this application. This includes:-

- **An initial drainage design to ensure that the required attenuation can be accommodated in the layout promoted with a connection to an appropriate outfall(s).**
- **A justification of flood routing for the promoted layout demonstrating that it has been taken into account and a safe layout will be achieved.**

Flood Risk Assessment

We agree with the majority of the findings of the Flood Risk Assessment submitted by ARP Associates dated October 2015.

A 3.5l/s restriction to connect to the western watercourse would be acceptable if a survey reveals this system to be suitable both in size and condition. It has to be certain that a suitable outfall is available at this stage. Further work is therefore required.

A ditch to the northern boundary would need to be replaced with a permanent, protected, and maintained land drainage system to intercept potential overland flows from fields to the north.

The western boundary watercourse appears to have a suitable stand-off distance. An idea of finished floor levels in relation to watercourse will be required. The watercourse needs to be kept open and boundary construction should not interfere

with the flow. An idea of future maintenance responsibilities and protection from interference should be established in the planning process.

Pre-planning meetings have ruled out the use of SUDS on this sloping site.

The FRA only suggests minimal mitigation in respect of flood routing. We do not approve these measures at this moment in time and would like to explore flood routing in more detail before supporting the layout. We advise the Planning Officer to be careful of promoted conditions by other organisations 'approving' the flood risk assessment at this stage.

Flood Routing

In addition to the flood risk assessment, a pre-application discussion has taken place with the applicant. The promoted layout appears to improve the potential for safe flood routing to the natural low spots on the site. However experience tells us to formalise this early in the application.

Flood routing from a blocked watercourse needs to be considered.

Flood routing from exceedance event concerning the attenuation needs to be considered.

Flood routing from intense events where gullies surcharge or are blocked.

Clearly an idea of the positioning of necessary attenuation is required to fully understand flood routing with regard to this layout. The route should look to utilise highway and public open space and not curtilage. Localised basins should be avoided unless finished floor levels have suitable freeboard. There are some circumstances where secondary flood routes have to go through curtilages. These should be discussed with Kirklees Flood Management at an early stage.

Boundaries and traffic calming need to be considered in relation to flood routing.

Our concerns so far are, can the road outside plots 10-15 contain surcharging system without affecting properties.

How are potential flows from the cul-de-sac around plots 45-46 (including consideration of retaining walls) to be managed?

To this effect an idea of levels will be required to agree a strategy for the detailed design.

Temporary Drainage Plan

We expect a temporary drainage plan to be promoted prior to commencement on site that looks specifically at the increased risk of flooding post site soil strip for property and road network, and local drainage systems at lower levels. This must include a plan for controlling sediment discharge to the watercourse and be linked to

the phasing of the works. Such plans require initial and back up mitigation measures. This aspect can be conditioned going forward.

Other Drainage Aspects

Can all areas of the site, including that currently occupied by the club drain by gravity to the same outfall as other parts of the site? Further work is required.

An analysis of where the surface water from the club currently drains to would be useful in that a similar connection from the new club may be required, or, the area reserved for the new club has to be factored in to this drainage scheme in terms of contributing area of hardstanding and facilitating connections.

Signed: Paul Farndale

Date: 20th May 2016