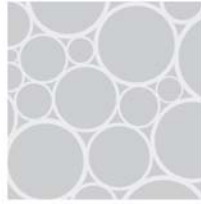




ENVIRONMENTAL



FLOOD RISK



DRAINAGE



ECOLOGY

John Ellis College FRA

Leicester City Council



Project Aims

Discussions with Environment Agency and Leicester City Council to agree approach and scope of study. Produce flood risk assessment for planning submission. Assess potential fluvial flood risk from River Soar, potential impact of development on local drainage infrastructure and propose outline mitigation measures.

The key aspects of this study included liaison with EA and LCC, site surveys, flood risk assessment and drainage impact assessment.

Project Summary

The site under consideration was the sports pitches and playing fields to the John Ellis College, located adjacent to the River Soar north of Leicester City Council. The site covers an area approaching 6 hectares and the proposals included the development of the land to provide improved recreational and leisure facilities. Part of the site is to include new sports pitches with improved drainage, while a pond

is to be formed to improve the ecological characteristics of the site. The EA's indicative flood plain mapping showed that the site lay within the zone of 1% fluvial flood risk. To progress the planning application it was necessary to assess flood risk in relation to the development proposals, to assess runoff from the development and to propose outline mitigation measures.

The key flood risks were identified as the River Soar and surface water runoff. The flood level adjacent to the site during the 1 in 100 year event and the 1 in 100 year plus climate change level were determined to be above the highest point on the site. Therefore, the site would be submerged and the risk of flooding during the 1 in 100 year flood was considered to be high.

The existing site is totally grassed and as such the site was considered to be 100% permeable. Any increase in paved or roofed area would need to be attenuated to the existing greenfield runoff rate. However, the proposed development does not increase the impermeable area and as such there is no increase in runoff from the proposed development.

Although the proposed site is within the 1 in 100 year flood zone for the River Soar there are no proposed buildings or structures that could be flooded or could cause increased flooding to others. Provided that the development did not result in an overall increase in ground levels across the site, there would be no effect on flood plain performance as a result of the proposed sports pitch development. The nature of the development proposals were considered to be low risk as flooding of the site would only cause temporary nuisance and loss of use, but would not create a risk to life or damage to property.

