Summary of technical reports

Strategic site 4: Land west of Anstey Lane

November 2024

This note provides a summary of the technical work that has been carried out to date in relation to Strategic Site 4: Land west of Anstey Lane allocated under Policy SL05 of the emerging Leicester Local Plan 2020-2036.

The site has been proposed to be allocated for approximately 336 homes that incorporates green infrastructure, open spaces and sustainable drainage systems amongst other infrastructure.

In May 2024, the Council received an initial pre-application enquiry on behalf of David Wilson Homes. The pre-planning application (202490193P) was supported by a Phasing Plan, promotional document and cover letter. This is proposed for approximately 350 dwellings, new vehicular and pedestrian access, public open space, drainage, and other associated works.

However, further documents have been submitted in support of the site allocation in the Local Plan.

Please note that the site is made up of three parcels of land in different ownerships (Site 309: Land North of Billesdon Close, Site 718: The Paddock, Glenfield Hospital, Hallgate Drive and Site 1054: Land West of Anstey Lane/South of Gorse Hill Hospital). These sites have different technical studies associated. Where each technical study applies has been identified below.

Site 309: Land North of Billesdon Close and Site 1054: Land West of Anstey Lane/South of Gorse Hill Hospital:

- Desk Based Archaeological Assessment (University of Leicester, May 2018)
- Flood Risk Assessment (August 2018)
- Tree Survey Plans (July 2018)

Site 718: The Paddock, Glenfield Hospital, Hallgate Drive:

- Flood Risk Assessment and Drainage Strategy Report (May 2021)
- Ecological Impact Assessment (May 2020)
- Transport Assessment (June 2020)
- Travel Plan (June 2020)
- Archaeology And Built Heritage Assessment (June 2020)
- Topographical Surveys (November 2018)

Summaries of the above documents including conclusions, suggested mitigations and council's analysis of each report are outlined below for each site that this applies to.

Sites 309: Land North of Billesdon Close and Site 1054: Land West of Anstey Lane/South of Gorse Hill Hospital

Desk Based Archaeological Assessment (University of Leicester, May 2018)

An archaeological desk-based assessment has been prepared for land off Anstey Road, Glenfrith, Leicestershire.

Findings

- There are several known archaeological sites south-west of the assessment area, including areas of Roman occupation activity discovered during trial trenching near Leicestershire County Hall with finds including large quantities of high-status pottery.
- There are findspots of Roman metal artefacts close to the assessment area to the north.
- The site is within Leicester Forest Area B, or Anstey Park, a medieval deer park and hunting forest.
- There are two boundary earthworks close to the site, the 'Park Pale' to the west and running along part of Anstey Lane to the northeast, which are known to be medieval in date but may have prehistoric origins.
- The site is outside Anstey Conservation Area
- The only listed building close to the site is the 19th century Leicester Frith Hospital Mansion house.
- There are no Scheduled Monuments close to the site.
- There is moderate potential for Roman and medieval archaeological remains to be revealed during any new development on the site, and low potential for prehistoric, Anglo-Saxon, and post-medieval remains.
- The land has remained undeveloped since at least the post-medieval period and so the preservation of any underlying archaeological remains is likely to be very good.

Summary

The Council has reviewed the Desk Based Archaeological Assessment and accepts its findings. In accordance with the Strategic sites document and proposed local plan policies HE01 and HE02 the Council would require an updated archaeological assessment to support an application. The council propose to put this requirement into the policy SL05.

Flood Risk Assessment (August 2018)

Residential and Commercial Engineering LTD were requested to carry out a flood risk assessment on behalf of David Wilson Homes with regards to their development of site 1054 for 177 dwellings.

This assesses the risk of flooding on the site as well as future ground levels and drainage proposals. A detailed assessment was undertaken including the preparation of preliminary

drainage calculations and review of the surface water calculations and this provided a drainage strategy to inform more detailed phases of design work.

Findings

Potential sources of flooding:

- Low risk from fluvial flooding as most of site in flood zone 1 and no history of flooding at the site
- No record of land being susceptible to groundwater flooding considered low risk
- Current surface water flooding follows existing topography and ditch courses. Engineering will reduce the impact of surface water flooding downstream of the site.
- Sewer flooding and flooding from artificial sources e.g. canal and reservoirs not considered a risk.

Summary

The Council requires all development to use sustainable drainage systems with the aim being to discharge the surface water run off primarily into the ground with surface water bodies and sewer systems being secondary to this. Given the known silty clay the site sits on, the FRA assumes that soakaways are unlikely to provide a viable drainage solution on site. There are existing ditches on the site which will become the method of water discharge. Some of these may need to be diverted to accommodate attenuation features.

Recommendations

- Designs should restrict runoff to existing greenfield runoff which may involve throttling the site to achieve the maximum flow rate. The site should be designed to withstand a 1 in 100 year storm event requiring attenuation features to hold a minimum of 3642 m3 volume.
- SuDS features recommended on site include permeable paving, ponds and swales alongside proposed landscaping
- Land drains where bordering developments sit higher than the site
- Minimum of 2 SuDS treatment Trains
- Maintenance of water storage features
- Sewer modelling

The council has reviewed the Flood Risk Assessment and accepts its findings. As such SuDS features and sewer modelling will be used in policy SL05 as mitigations.

Site 718: The Paddock, Glenfield Hospital, Hallgate Drive

Flood Risk Assessment and Drainage Strategy Report (May 2021)

ADC Infrastructure were commissioned on behalf of Davidsons Developments Ltd to produce a flood risk assessment and drainage strategy to support the local authority's allocation of the plan for residential development.

Findings

- Site not currently served by sewer network
- A sewer running through the northwest corner of the site may be a constraint to development if it can't be diverted.
- Ground conditions likely not conducive to infiltration drainage
- Only one recorded flooding event in the vicinity of the site, whole area in flood zone 1

Existing Flood Risk

Fluvial – Low (high ground, only river nearby is Rothley Brook)

Ground water – Low (no groundwater encountered in the soil)

Pluvial – Low (Not susceptible to groundwater flooding)

Drainage through soil infiltration may be limited on site due to local geology and soil conditions necessitating soakaway features.

Surface water runoff from the site should be into the nearest open watercourse although it's unclear whether the infrastructure to facilitate this may not all be feasible and needs further investigation. Preferred discharge would be into a surface sewer to the north of the site.

Because of restricted discharge, several attenuation features need to be considered to collect the site's runoff

Various options for discharge of foul effluent which are likely to be adopted by Severn Trent Water upon completion, all involve connection to sewers off site as there's no existing infrastructure.

Summary and recommendations

- Infiltration testing
- Provision of formal drainage system including SuDS to withstand a 1 in 30 year flooding event
- Floor levels elevated above exterior ground levels where possible
- External levels shaped to direct exceedance away from building entrances and reduce risk of sewer flooding

The council has reviewed the Flood Risk Assessment and Drainage Strategy and accepts its findings and recommendation with requirements for infiltration testing and provision of SuDS to be included in the policy.

Ecological Impact Assessment (May 2020)

Ramm Sanderson Ecology Ltd was instructed by Davidson developments Ltd to produce an ecology impact assessment to establish the potential impacts of development on all ecological features and inform proposals and submission evidence for an application.

Findings

Negligeable impact on priority habitats as current site is low quality habitat, some indirect impact expected from construction.

Low potential for presence of foraging badgers and hedgehogs on site. Potential killing/injury/disturbance of badgers in active sets during development.

Hedgerows discovered to be only valuable habitat on site

No suitable waterbodies for Great Crested Newts

No bat roosts but some sub optimal foraging habitat for Bats

Summary and recommendations

- Retention of hedgerow and root protection areas
- Lighting strategy to protect surrounding habitats
- Precautions according to legislation on protection of individual badgers
- Precautions according to legislation for protection of animals (vegetation clearance outside of nesting season) etc
- Replacement planting of 2:1 with native trees and hedgerows as well as wildflower meadow habitats.
- Implementation of bird and bat boxes so birds don't inhabit bat boxes

The council has reviewed the Ecological Impact Assessment and accepts its findings with requirement for the retention and replacement of hedgerows as well as wildflower meadow habitats to be included in the policy.

Transport Assessment (June 2020)

ADC Infrastructure Ltd were commissioned on behalf of Davidsons Developments Ltd to produce a transport assessment and travel plan to support an outline application for residential development on the site. Through these the impact of development on the highway network has been examined.

Findings

- Access proposed via Hall Gate Drive via new T junction
- Internal vehicle speeds will be restricted to 20mph
- Most trips generated will be on the roads to the north of the site dispersing from Anstey Lane Roundabout
- Fewer trips will be generated going south dispersing from Groby Road Roundabout
- An increase of 30 2 way trips on each route beyond the major junctions is estimated to have minimal impact on traffic conditions

- The Junction on Hall Gate Drive operates with plenty of spare capacity in the morning and evening
- Anstey Lane Roundabout operates at 85% capacity with some queuing however development traffic would only cause minor percentage increases in traffic and add just seconds onto the existing delays
- There would be little to no impact on the operation of Groby Road Roundabout

Summary and recommendations

Site is accessible by sustainable transport options including walking and cycling routes as well as frequent bus services nearby. Development will nearly double flows on Hall Gate Drive at peak hours. The proposed layout would provide safe and suitable access to the development. The development would not negatively impact the signal controlled junctions and no mitigation measures are required.

None of the junctions close to the site have a significant record of accidents and therefore the impact on road safety is unlikely to be unacceptable.

The council has reviewed the transport assessment and find this largely acceptable. The council would expect that any further transport impacts will be addressed through subsequent transport assessments and access to the site is adequate to ensure coordinated development. Further detail will be included in policy SL04.

Travel Plan (June 2020)

Summary

The travel Plan builds on ADXC Ltd's transport assessment for Davidsons developments Ltd. The purpose is to understand how sustainable travel may be integrated into the new development with the aim that residents are both aware of the travel plan and a 10% reduction in single occupancy vehicle mode share will be recorded by 5 years post occupation.

Findings

- Numerous amenities and employment within the 2km pedestrian catchment of the site
- Site is well connected by footways to the south and neighbouring housing estates as well as to Anstey Lane by a shared foot and cycle way
- Much of the city including the city centre is within the cycle catchment area of the site
- The site is linked to traffic free routes in several directions
- Approximately seven busses an hour seven the bus stop adjacent to the site connecting it to the city centre, Braunstone, Hamilton and Beaumont Centre
- The closest rail connection is in Leicester city centre
- Lift sharing and remote working will be accessible in the development

Targets

- Everyone over 16 in the development to be aware of the travel plan's objectives

- 10% reduction in single occupancy vehicle mode share complimented by an increase in share of active travel.
- Measured single occupancy car driver mode share of 47.1%
- Travel plan will be implemented and monitored with a coordinator appointed for this
- Travel plan will be promoted to home buyers with sustainable travel sold as a desirable feature
- Households will be provided with information packs to promote use of active travel

The council has reviewed the travel plan and is satisfied that no further detail needs to be added to the policy.

Archaeology And Built Heritage Assessment (June 2020)

Pegasus group were commissioned by Davidsons Development to produce an archaeology and built heritage assessment. This is to provide information with regards to the significance of the local heritage and archaeological environment and the impacts from development.

Archaeology

- Little recorded evidence of archaeological remains from the prehistoric periods within the site, or its vicinity, therefore the site is considered to have low potential for significant archaeological impact from the prehistoric period.
- Likewise, other than the putative line of a Roman road to the site's immediate north-east, there is little Romano-British archaeology recorded within the vicinity of the site. The site is therefore considered to have low-moderate potential for archaeological remains from this period.
- The site is likely to have formed part of the hinterland to Leicester from at least the medieval period, as well as potentially forming part of a medieval deer park, before it fell under agricultural use.
- Based on previous land use and recorded heritage in the vicinity, the site is considered to have low potential for significant, medieval archaeological remains.
- Other than the now demolished building, formerly associated with Leicester Frith Farm, no post-medieval or modern remains are anticipated to lie within the site. The demolished remains of the mid-20th-century former farm building are not considered to be of heritage significance.

Setting

- The locally listed Leicester Frith Farm lies to the immediate north of the site and is recorded as extending within the site's northwestern corner, due to a former building, (now demolished), previously lying within this area.
- Due to the site's proximity to this non-designated heritage asset and a likely former historic, functional association, development within the site is anticipated to result in a very minor level of harm to the asset's significance.
- As a non-designated heritage asset, harm to the asset's significance, would not preclude development and should be considered as part of a balanced judgement, taking into account the importance of the asset (low) and the scale of the harm (very minor), as per paragraph 197 of the NPPF.

- Development within the site is not anticipated to impact on the significance of any other designated or non-designated heritage assets, in the wider vicinity, through changes in setting.

The council have reviewed and accepted the findings of the Archaeology and Built heritage assessment. The policy will be amended to take account of the heritage aspects on site including Leicester Frith Farm and the Roman Road.

Indicative Phasing Plan

The below map shows the phasing plan for the three sites (309, 718 and 1054) alongside allocation HA12 within Charnwood and potential allocation in Blaby.