

14 Overview and Summary

14.1 Introduction

14.1.1 This Chapter forms the summary of the Environmental Statement (ES) which addresses any likely significant environmental effects as a result of the proposed development at Keresley, Coventry. The ES accompanies the submission of an outline planning application for development of up to 800 dwellings, local centre and associated works. This means that the detailed design of the scheme has yet to be fixed and will be subject to further design stages and subsequently detailed planning proposals. In this instance all matters are reserved for subsequent determination, with the exception of the access points onto Bennetts Road South and Tamworth Road.

14.1.2 This outline application has been submitted on behalf of Lioncourt Homes Limited.

14.2 Site Description

14.2.1 The site is contained between the Tamworth Road (B4098) to the west, Sandpits Lane to the south, Bennetts Road South forms the eastern boundary and the northern boundary is formed by the Hall Brook. It has an area of 42.2 hectares. All of the land is open and in use for varying agricultural purposes and for the keeping of horses. It contains various trees, hedgerows and other landscape features.

14.2.2 The wider area surrounding the site is characterised as part of the Coventry urban fringe. Notable features include various areas of residential development including Keresley Newlands to the north, areas of Holbrook to the southeast and in particular ProLogis Industrial Park to the northeast. ProLogis is an urbanising feature being in a prominent location and having bold colours used in the design of buildings.

14.2.3 Other notable features within the site include the electricity line on substantial pylons which cross the site in a southeast/northwest direction. The Hall Brook is another feature and this flows northwest/southwest. The brook corridor contains numerous trees and other vegetation.

14.2.4 The site is gently undulating. The highest point is located in the vicinity of Keresley Manor with levels generally dropping towards the east. The land rises towards the southern portion of Bennetts Road South.

14.2.5 Parts of the eastern part of the site are in use for equestrian purposes. Fields are often sub-divided to provide smaller areas of grazing for horses. The remainder of the site is largely in use for agricultural purposes in a mix of arable and pasture fields.

14.3 Proposed Development

14.3.1 In accordance with EIA case law the parameters of the proposed development have been fixed to enable a robust assessment of the proposals to be completed at this stage. The future reserved matters applications will be in accordance with these parameters. A parameters assessment plan showing the layout, land uses, site access, maximum building heights, proposed open spaces and indicative landscaping of the proposed development is provided within the ES at **Figures 1.2 – 1.5**. It is these plans that have been assessed against baseline conditions within each environmental discipline. Figure 1.6, the Indicative Masterplan, takes these concepts forward and illustrates one way in which the proposals could be successfully delivered.

14.3.2 The proposed development will comprise of the following:

- Up to 800 residential dwellings with a mix of size, tenures and types
- Provision of a local centre to include small convenience store and potentially crèche, cafe and community meeting room
- Primary school

- Public open space and green infrastructure including children's equipped play area, nature conservation areas, informal and incidental open space, retained and new landscaping, allotments and orchards
 - Vehicular access to Tamworth Road and Bennetts Road South.
 - Associated infrastructure including surface water attenuation facilities, foul drainage and retained ponds.
 - Network of pedestrian and cycle paths including greenway
 - Development of village square plus other key note open spaces within the development
- 14.3.3 The proposed development will provide residential units with a range of dwelling types and tenures of various sizes. However in view of the location of the site on the edge of Coventry, there is a desire to accommodate aspirational dwellings of large 3 and 4 bedroom homes. The precise mix of the affordable housing to be provided will be determined at the detailed design stage but the general mix of size and tenure will be along the lines of 1/3 affordable rent, 1/3 social rent and 1/3 intermediate housing.
- 14.3.4 Lifetime home requirements will be met where practicable. In addition new development will accord with the relevant Code for Sustainable Homes in force at the time.
- 14.3.5 The homes will vary in height with the majority being between 2 and 3 storey. Taller buildings are likely to be located in specific locations to ensure variety and aid legibility, for example in and around the local centre or close to the major formal open spaces (the Greens).
- 14.3.6 A local centre will be provided adjacent to Bennetts Road South. This facility will be available for residents of the new development but also for the existing community in the vicinity. This will contain the majority of the community, social and retail facilities. The local centre will provide a mix of the following uses:
- Convenience store (between 300 sq.m and 500 sq.m. gross floor area)
 - Community building suitable for crèche/gym/health facility
 - Suitable car parking within a landscaped setting
 - Access to Bennetts Road South as well as to the wider development to the west
- 14.3.7 A site for a primary school with associated grounds including playing fields and playgrounds is identified on the east of the site, immediately to the south of the proposed local centre. The location of the school has changed following feedback from the consultation event. It is envisaged that this school could be managed by the President Kennedy School and act as a new feeder school.
- 14.3.8 The proposed development will provide a comprehensive green infrastructure and open space network. This is based upon a series of greenways which link rural areas adjacent to the site and provide green corridors through the development itself. Other open spaces are shown on the northern boundary (Water Meadows) and along the primary spine road avenue. The design has sought to break up the development so as to provide smaller neighbourhoods well integrated with their own open spaces in the forms of village greens.
- 14.3.9 The open space will include nature conservation areas. Existing wetlands/water features are all retained within the proposed development and utilised as ecological resources. The Hall brook runs through the site and this will be maintained and integrated into the proposal.
- 14.3.10 The primary vehicular access route would run east-west through the centre of the site providing a new direct link from Tamworth Road to Bennetts Road South. New residential areas would be served off secondary roads linked to the primary road network.
- 14.3.11 The principle road through the development has been designed to accommodate development traffic as well as other traffic from the surrounding area which would utilise the route. New improvements are proposed to the Tamworth Road/Long Lane junction which will improve what is an

already congested junction. Other modifications are proposed to the Penny Park Lane/Bennetts Road South junction and new crossing facilities for Sandpits Lane and within the site.

14.3.12 The assessment of the impact of flood risk is based on the Flood Risk Assessment prepared for the application site in accordance with the NPPF. A copy of this is enclosed in **Appendix 10** in Volume 3. It addresses, identifies and quantifies the risk from various sources of flood risk to the site. It draws on information obtained from the Environment Agency, the Coventry Level 1 and 2 Strategic Flood Risk Assessment, the Coventry Preliminary Flood Risk Assessment, site observations and local residents input at a public consultation event. The risk associated with surface water, ground water and sewage has been assessed qualitatively using available information.

14.3.13 The proposal provides for a number of mitigation measures which include the following:

- Careful storage of construction materials and plant to ensure that they are managed in the event of flood and ensure they do not cause a pollution incident
- Controls on vehicle refuelling to contain any pollutants

14.3.14 It is acknowledged that the phasing of development will be discussed further at the more detailed stages, however for the purposes of the assessment it is envisaged that the proposed development will commence by mid/late 2016 and be completed by 2024. Development is likely to first commence around the proposed site access to Tamworth Road in two separate phases incorporating land north and south of the western greenway. A start could also be made on the eastern portion of the site providing the new local centre, primary school and associated residential development. For the assessment purposes this assumes approximately 100 dwellings per year over an approximately 8 year build programme (2016-2024).

14.4 Planning Policy Context

14.4.1 An assessment of the planning policy applicable to the site has been undertaken which reviewed national planning policy and local policies as well as other material considerations.

14.4.2 The site lies within the jurisdiction of Coventry City Council, the Coventry Unitary Development Plan dates from 2001. Whilst Core Strategies were produced in 2009 and 2012 these have not moved forward towards adoption. Nevertheless a detailed assessment has been made of the policies contained within the Coventry Development Plan which remains the adopted Plan in the area and how these impact upon the proposed development.

14.4.3 The National Planning Policy Framework is a particularly important consideration bearing in mind this gives an up-to-date direction of travel for future planning policy including the development of new planning policy within Coventry City.

14.4.4 At the heart of the Framework is a presumption in favour of sustainable development and, as paragraph 14 notes, this should be seen as a golden thread running through both plan making and decision taking. In respect of the latter paragraph 14 continues:

“ For decision-taking this means [unless material considerations indicate otherwise]:

approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:

- ***any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or***
- ***specific policies in this Framework indicate development should be restricted*** [such as Green Belt, SSSI or AONB].”

14.4.5 The Framework contains a set of core land use principles which should underpin both development management and plan making. These principles are that planning should:

- be genuinely plan-led with plans being kept up-to-date and based on joint working and co-operation to address larger than local issues. Plans should provide a practical framework within which applications can be decided;
- not simply be about scrutiny but be a creative exercise in finding ways to enhance and improve the places in which people live their lives;

- proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet housing, business and other development needs, taking account of market signals and setting a clear strategy for allocating sufficient land;
- always seek to secure high quality design and a good standard of amenity;
- take account of the different roles and character of different areas, promoting the vitality of our main urban areas, protecting the green belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it;
- support the transition to a low carbon future, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, and encourage the use of renewable resources;
- contribute to conserving and enhancing the natural environment and reducing pollution;
- encourage the effective use of land by reusing land that has been previously developed, provided that it is not of high environmental value;
- promote mixed-use developments, and encourage multiple benefits from the use of land in urban and rural areas;
- conserve heritage assets in a manner appropriate to their significance;
- actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable; and,
- take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs.

14.4.6 In addition to the presumption in favour of sustainable development and core planning principles, the 'Achieving Sustainable Development' section also addresses the delivery of sustainable development and covers various subject matters including promoting sustainable transport, delivering a wide choice of high quality homes, requiring good design, promoting healthy communities, climate change and flood risk, and conserving and enhancing both the natural and historic environments.

14.4.7 Paragraphs 79 – 92 of the Framework relate to Green Belts. These confirm that the Government attaches great importance to Green Belts and that their fundamental aim is to prevent urban sprawl by keeping land permanently open. The essential characteristics of Green Belts are their openness and permanence.

14.4.8 Green Belts serve five purposes:

- To check the unrestricted sprawl of large built up areas
- To prevent neighbouring towns merging into one another
- To assist in safeguarding the countryside for encroachment
- To preserve the setting and special character of historic towns
- To assist in urban regeneration by encouraging the recycling of derelict and other urban land

14.4.9 When considering any planning applications local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. The Planning Statement undertakes this particular assessment.

14.4.10 A further significant material consideration relates to the National Planning Practice Guidance (PPG). This provides specific guidance relative to the EIA process. The PPG identifies five broad stages to the EIA process. This consists of screening, scoping, preparing an environmental statement, making a planning application and consultation and decision making. In this case the applicants have received screening and scoping opinions from the local planning authority. The Environmental Statement has been prepared in accordance with relevant guidance. The statement will form part of the planning application submitted to Coventry City Council and will be subject to consultation.

14.4.11 The PPG makes clear that an applicant does not need to consider alternatives, however where alternatives have been considered Paragraph 4 of Part 2 Schedule 4 requires the applicant to include in the Environmental Statement an outline of the main alternatives considered and the main reasons for their choice.

14.5. Socio Economic Issues

- 14.5.1 The socio-economic impacts arising from the proposed development have been examined. The baseline data used to analyse the study has been formulated using a range of sources of information including the latest ONS Sensus Data. The development of up to 800 dwellings is likely to give a population generation figure of 1896. This equates to a population increase of 0.60% for Coventry City and a population increase of 12% for the Bablake Ward. This will have some impact in respect of services, facilities and infrastructure. However there will also be spin-off benefits in terms of new job opportunities both with the construction of the new homes and the creation of indirect service sector employment. The development will also provide a local centre which will deliver new retail facilities plus addition community facilities which could include medical facilities.
- 14.5.2 The proposal includes the creation of a new primary school and this is anticipated to be delivered in association with existing President Kennedy Secondary School. The likely impact on both primary and secondary school level facilities has been assessed. It is envisaged that mitigation will be provided via the new primary school and section 106 contributions.
- 14.5.3 There are a number of existing Doctors Surgeries within the vicinity of the site including Keresley Green Medical Centre. In addition there is also scope for the expansion of existing facilities to provide for additional consulting space or some new facilities within the proposed local centre.
- 14.5.4 In particular the development will deliver the refurbishment of the existing swimming pool at President Kennedy School. This facility is open to the public and is well used and in need of significant refurbishment. Whilst the proposal will increase demand for recreation provision this can be mitigated through section 106 contributions including the refurbishment of the swimming pool. Overall the assessment concludes that there will be a moderate positive impact in terms of social and economic considerations.

14.6 Ecology and Nature Conservation

Introduction

- 14.6.1 An Ecological Survey of the site has been undertaken, including a desk study, an extended Phase 1 Habitat Survey and Phase II Faunal Surveys and Assessment/Evaluation.

14.7 Baseline Conditions

- 14.7.1 A number of statutory ecological designations were identified by the desk study, although these are well removed from the application site. The closest statutory designation being Hearsall Common LNR, located approximately 4 kilometres from the application site.
- 14.7.2 A number of non-statutory designations have been identified within and adjacent to the application site including the Sandpits Lane Meadow LWS.
- 14.7.3 The application site is dominated by arable and species poor grassland which is considered to be low to negligible ecological value. Habitats within and surrounding the application site which are considered to have a greater value include hedgerows, ponds and watercourse (Hall Brook) will be largely retained and protected under the proposals. Surveys have indicated that protected species have been found within the application site and these comprise of low levels of use by foraging/commuting bats, low population of Great Crested Newts and a range of bird species. Again these will be protected.

Likely Significant Effects

- 14.7.4 A range of potential effects have been identified in regard to designations. These are separate from the direct consideration of habitats and fauna within and surrounding the application site.
- **Major Impact** – where the proposal could be expected to have a major impact be it positive or negative.
 - **Moderate Impact** – where the proposal could be expected to have a noticeable impact be it positive or negative.
 - **Minor Impact** – where the proposal could be expected to result in a small, barely noticeable impact be it positive or negative.
 - **Negligible** – No noticeable change expected.

14.8 Mitigation

- 14.8.1 Mitigation and enhancement measures are proposed, including the provision of natural and semi-natural green space, new tree and shrub planting and grassland creation. This will be guided by local information in order to accord with the existing general character and species associated with the local Arden landscape character area. These measures will provide new areas of valuable wildlife habitat providing benefits to a wide variety of species.
- 14.8.2 The proposed development and mitigation scheme have been designed to achieve compliance with the relevant legislation and planning policy. Measures are proposed to avoid any adverse impact on protected species such as Great Crested Newts, reptiles and birds. Long term management of the ecology found on the site is proposed in line with relevant policies.
- 14.8.3 Following mitigation it is considered the proposed development will result in benefits in respect of habitats and the animal life within the site, whilst existing ecology of value will be safeguarded and incorporated into new extensive green infrastructure provision.

14.9 Conclusions

- 14.9.1 Following mitigation it is considered that the proposed development will result in significant enhancements to the existing ecological interest of the site.

14.10 Archaeology and Cultural Heritage

Introduction

- 14.10.1 The likely significant effects on the archaeological and cultural heritage of the site and surrounding area has been assessed. The scale, scope, survival and value of identified and potential sub-surface archaeological remains are considered, as are the elements of the built heritage and historic landscape resource.

14.11 Baseline Conditions

- 14.11.1 The baseline conditions currently existing within the site and the surrounding area have been accumulated. This took the form of desk-based assessments, geophysical surveys, documentary assessment and field walking. This assessed the known cultural heritage resources on-site and a 500m study area around it. A geophysical survey was carried in February 2014. A documentary records assessment was undertaken utilising the archives of Queens College, University of Oxford. The fieldwalking of the site was carried out in May 2014. This was aimed at providing information about the likely archaeological resources within the western part of the site where a previous fieldwalking survey had noted some prehistoric finds.
- 14.11.2 The proposed development also assessed the wider setting of listed buildings within close proximity to the site. This included five Grade II Listed Buildings and five locally listed buildings. Two of the Grade II listed structures, Akon House and Beechwood Hotel, are located in close proximity to the site.

14.12 Likely Significant Effects

- 14.12.1 Ground disturbance associated with the proposed development will be likely to permanently remove any below ground archaeological remains. The significance of development effects upon the archaeological remains will be dependent upon the nature, date and state of preservation of any archaeological remains present. The proposed development would also potentially introduce change within the wider setting of listed buildings located in close proximity to the site. However the development design incorporates mitigation measures which include the retention of vegetation and open spaces adjacent to heritage assets such as the listed buildings which will reduce the severity of the effect.

14.13 Mitigation and Enhancement

- 14.13.1 Proposed mitigation measures with regard to archaeology include the preservation by record via excavation. Targeted trench evaluation, including test pitting within the area with some prehistoric potential, will be undertaken to establish the presence/absence and value of the archaeological remains on the site. The results of the evaluation will allow for an appropriate programme of

mitigation to be agreed prior to construction commencing. This will be agreed with the City Council's Heritage Officers.

14.13.2 In order to reduce any potential impact upon the setting of the two listed buildings located in close proximity to the site mitigation measures have been incorporated into the design. The proposal as illustrated in the Masterplan includes the retention of open space within the fields immediately to the west of the listed buildings and it also proposes to retain the hedgerows alongside the boundaries of the site. This will improve the screening of the site from the designated heritage assets.

14.14 Conclusions

14.4.1 The effects of the proposed development upon below ground archaeological remains have been considered to be slightly adverse following the implementation of the agreed archaeological mitigation. No significant effects upon designated heritage assets located within the surroundings of the site are anticipated as a result of the proposed development. As a consequence of the mitigation proposals incorporated into the development design the impact upon heritage assets will be neutral or at worst slightly adverse.

14.15 Landscape and Visual Issues

14.15.1 This chapter comprises a landscape and visual assessment of the proposed development at the site. The purpose of this chapter is to identify the elements of the development site and its surroundings that are important in terms of landscape resources and landscape character, and to assess the extent to which these would be affected by the proposals. A visual assessment has also been conducted to identify the receptors of views and to determine the degree to which development of the site would have a visual effect upon the surrounding environment.

14.16 Baseline Conditions

14.16.1 The individual components of the physical landscape that are present within the identified study area have been subject to analysis. This includes topography and land form, drainage and water bodies, land use, vegetation patterns, public access, landscape character and key characteristics. Findings of the published Regional and County Landscape Character Assessments have been utilised to provide a relevant context to the study area. At a local level reference has been made to published guidance including the Coventry Joint Green Belt Review and the Coventry Historic Landscape Characterisation Project. Consideration was given to the nature and extent of existing views from, towards and between the site and surrounding area. This included specific reference to locations that will be subject to impacts as a result of the development proposal.

14.16.2 Overall it was found that there is a relatively tight visual envelope for the site and this was defined as follows:

- From the north and northwest views towards the site are largely limited to high ground south of Corley as a consequence of a number of woodland blocks that provide visual enclosure;
- From the west views towards the site are limited by the linear development and associated vegetation along Tamworth Road;
- From the south views are limited by the existing settlement edge and urban fringe features including Cardinal Newman School and a golf driving range;
- From the north there are some views towards the site from the edge of Keresley although more distant views are limited by intervening vegetation including Bunsons Wood;
- From the east views towards the site are limited by the existing settlement edge;
- Within the overall visual envelope there are variations in the degree of inter-visibility between areas and in the nature and extent of views.

14.17 Likely Significant Effects

14.17.1 The main effect on the landscape character has been considered both through the construction phase and post-completion phase. Through the construction phase this is likely to be a gradual

transformation of the site from an urban fringe landscape to a development site. The proposals include residential development, which is an existing component of the established landscape character.

14.18 Mitigation

14.18.1 The vast majority of the landscape and visual mitigation measures are inherent to the design. This includes the following:

- Identification of a landscape and visually led development envelope within which the development form will fit;
- Retention of the majority of existing planting on site;
- Provision of a comprehensive landscape infrastructure planting scheme in strategic locations to supplement and enhance the existing landscape;
- Provision of a coherent, structured and varied landscape and open space hierarchy;
- Wildlife and biodiversity opportunities;
- Additional mitigation measures will be included as part of the detailed design process in respect of the design and layout of buildings and open spaces.

14.19 Conclusions

14.19.1 The landscape strategy for the proposal will ensure the scheme is acceptable in landscape and visual terms. The Masterplan has been informed through the careful consideration of the scale and form of development in combination with the baseline landscape analysis.

14.19.2 Any adverse consequences will be limited through the delivery of substantial green infrastructure, the careful consideration of the location of new buildings and other built development including infrastructure and the mitigation proposed through additional substantial tree planting and associated landscaping.

14.20 Air Quality

Introduction

14.20.1 This chapter assesses the potential air quality impacts associated with the additional road traffic generated by the proposed development. Air dispersion modelling has been carried out to assess the potential air quality impact of development generated traffic. In addition the potential impact of dust arising from the construction phase has also been considered.

14.21 Baseline Conditions

14.21.1 Coventry City Council have declared a citywide air quality management area for nitrogen dioxide and consequently the site is located within the existing area. Information from roadside monitoring has been utilised in order to establish baseline conditions for air quality. In addition information provided by DEFRA via their local air quality management web pages have been utilised to identify concentrations of certain emissions which are not covered by roadside monitoring stations. The baseline assessment has been carried out for 11 existing sensitive receptors.

14.22 Likely Significant Effects

14.22.1 The effects as a consequence of construction. This includes stripping and stockpiling of topsoil, levelling ground, trenching, road construction, vehicle movements and windblown materials. The nearest receptors to the site are residential properties and hotel located along Tamworth Road and Bennetts Road South. In addition consideration is given to the transport of dust and dirt by vehicles at a construction site onto the public road network.

14.22.2 In addition the impact assessment has considered the "with development" scenario which factors in traffic associated with the proposed development.

14.22.3 For the construction phase, without any mitigation, there is potential for a significant impact. For post development impact associated with traffic 9 of the 11 receptors are likely to have negligible impact for NO₂ and PN₁₀. The assessment also predicted pollutant concentrations at four locations within the proposed site.

14.23 Mitigation and Enhancement

14.23.1 For the construction phase site specific mitigation measures have been recommended to minimise potential dust emissions. This includes following best practice construction techniques, utilisation of a construction management plan and other measures such as wheel washing to minimise the transportation of dust onto the public highway.

14.23.2 Other measures to tackle the operational phase include the implementation of a Green Travel Plan and utilisation of low emission boilers to be installed within buildings.

14.24 Conclusions

14.24.1 With the site specific mitigation measures outlined there is a nucleus of dust effects for earthworks, construction and potential for dust emissions to be transferred to the public highway are considered to be negligible. The impact of post completion traffic on air quality is not considered to be significant. Mitigation will reduce this impact further.

14.25 Noise and Vibration

Introduction

14.25.1 This chapter assesses the noise and vibration impacts of the proposed development. In particular it considers the potential effects of noise and vibration from the construction phase, the impact during the operational phase of the development, the potential impact of existing noise sources and the potential impact of entertainment noise from adjacent leisure facilities.

14.26 Baseline Conditions

14.26.1 A desktop study was undertaken to identify the potential major sources of noise. Potential existing sensitive locations and the proposed location for on-site noise measurement were identified. Monitoring location positions and time periods were agreed with Coventry City Council prior to measurements being carried out. A noise survey was undertaken to establish noise levels across the site. In addition future traffic noise levels had been predicted using modelling software. Sources of noise on the site were identified as road traffic on the existing road network, hotels, restaurants, golf driving range and air traffic noise.

14.27 Likely Significant Effects

14.27.1 The activities carried out during the construction phase, particularly earthworks and building construction, have the potential to generate short term increases in noise levels. The use of heavy plant associated with the earthworks and construction also has the potential to give rise to vibration. This impact was considered to be minor adverse for temporary and short periods.

14.27.2 Changes in road traffic noise as a result of the development was considered to lead to negligible impacts in the long term. The dominant source of noise at sensitive areas in the proposed development, such as the proposed school and residential areas were identified as coming from road traffic noise and existing leisure facilities located to the south-east of the site boundary.

14.28 Mitigation

14.28.1 To minimise the potential impact of construction works mitigation measures will be put in place. These will include restrictions on working hours, the implementation of temporary screening where possible, utilisation of best working practices and compliance with a construction management plan. With these measures in place the impact of noise and vibration during the construction phase was considered to be negligible.

14.28.2 Mitigation measures will also be incorporated into parts of the proposed primary school to reduce internal noise levels. In addition it is proposed to ensure that the school playground area is located

away from noise sensitive receptors with areas of open space between. Mitigation measures can also be incorporated into the design of the local centre to ensure noise impacts are reduced to acceptable levels.

14.29 Conclusions

- 14.29.1 The significance of noise and vibration from earthworks in construction was considered to be negligible once site specific mitigation measures were in place. However, the construction operations may have a short term, minor to moderate adverse impact at sensitive receptors located in the immediate vicinity of the construction phases over the development site. The increase in road traffic noise following the completion of development was also considered to be negligible. Mitigation measures can be installed both via inherent design solutions and also in regard to the primary school to ensure that internal noise levels comply with the relevant guidance.
- 14.29.2 The significance of noise and vibration effects is considered to be negligible. Similarly the impact of road traffic noise associated with the development is also considered to be negligible.

14.30 Agriculture and Soil Resources

- 14.30.1 This chapter of the ES assesses the likely significant effects of the proposed development on the environment with respect to soil resources and agricultural land. It identifies quality of the agricultural land and soil resource that would be affected and the use made of the land in terms of agricultural businesses.

14.31 Baseline Conditions

- 14.31.1 A survey of the land revealed that around half was under grass, with one field grazed by horses and the remainder was arable either recently cropped or containing a maize crop. Local climatic factors were sourced via the Met Office and this revealed the site has moderate rain fall and is moderately cool.
- 14.31.2 The principle geology of the site is that of the Keresley Member which predominately comprises sandstone. The soil survey of England shows three soil associations present being the Salop, Bromsgrove and Wimple 2 Association. The land was surveyed in association with guidance and criteria published by MAFF. Grade II land runs roughly through the centre of the site.
- 14.31.3 The assessment assumed that all the agricultural land within the site would be rendered unproductive as a result of the proposal and that the agricultural capabilities of the soil resource would be lost. As a consequence the proposal will have a direct permanent adverse effect of modelled significance. The loss of the land from the existing farm holding was considered to be of major/moderate adverse significance.

14.32 Mitigation

- 14.32.1 Mitigation can be provided through protecting soils which are to remain in situ during the construction phase. Reuse of soils displaced during the construction phase within design of gardens, landscape areas and other green infrastructure. Surplus soils can then after be utilised in a sustainable manner in accordance with the Construction Code of Practice for the sustainable use of soils on construction sites. It can also include a requirement to ensure the quality of soils retained on-site and reused off-site (if required) is maintained by following Best Practice Guidance on Soil Handling.
- 14.32.2 With the implementation of the mitigation measures the magnitude of the impact on soil resource is assessed as low and the significance of the effect will be reduced to moderate/minor. The residual impact on the farming business remains one of major/moderate significance.

14.33 Conclusions

- 14.33.1 With mitigation the effect on agricultural land will remain as moderate, the effect on the soil resource will remain as moderate/minor and the effect on the farm holding will remain as major/moderate.

14.34 Land Contamination and Geo-Technical Issues

14.34.1 This chapter provides an assessment of the potential environmental impacts associated with ground conditions associated with the proposal. Specifically it considers potential effects to soil and water contamination, ground gas and effects of ground conditions on buried structures.

14.35 Baseline Conditions

14.35.1 A walkover inspection has been undertaken. Published geological mapping was also utilised to identify areas of made-ground deposits. Historically land use maps were also utilised other information about local geology is available via historic borehole records from the proximity of the former Coventry Colliery. No faults are recorded to cross the site and they intersect at a point approximately 80 metres north of the site.

14.35.2 A coal mining report has been obtained and this reveals that past mining ceased in 1996. The Coal Authority have confirmed that there are no recorded mine entries within 20 metres of the site boundary.

14.36 Likely Significant Effects

14.36.1 The potential significant effects are largely precautionary as there is a relatively low probability that significant contamination sources exist at the site. However as this cannot be discounted without intrusive investigation a precautionary approach is considered appropriate. As a consequence the classifications will need to be reviewed following intrusive investigation. The chapter identifies that mitigation is likely only if intrusive ground investigation works identify significant potential source of contamination which had not been revealed in preliminary investigations.

14.37 Conclusions

14.37.1 The approach toward ground conditions has been a precautionary one. Whilst mitigation is unlikely to be required this will not be fully revealed until intrusive investigation has taken place.

14.38 Drainage and Flood Risk

Introduction

14.38.1 This chapter assesses the likely significant environmental effects of the proposed development in respect of the water resources, flood risk and the wider water environment. A detailed Flood Risk Assessment which is included within Volume 3 of the ES also forms part of the assessment.

14.39 Baseline Conditions

14.39.1 The site contains the Hall brook which runs along the northern boundary of the site and is a potential source of flooding. The Brook has been modelled to show that with the exception of a narrow strip along the northern boundary, the site is located within Flood Zone 1 (low risk).

14.39.2 The application site is not subject to significant surface water flooding by virtue of its topography however Coventry City Council and local residents have reported that Bennetts Road South and Watery Lane beyond the site boundary are subject to surface water flooding. A potential risk of flooding was identified from the fish pond located to the north west of the application site. There are also a number of foul water/combined sewers in the vicinity. According to the Environment Agency the site is located within a Source Protection Zone 3 and the quality of ground water is classified as poor. Severn Trent Water have confirmed that there are sufficient water resources to provide a water supply for the proposed development.

14.40 Likely Significant Effects

14.40.1 Flooding from surface water and ground water has been identified as the most significant impact on the application site during construction. Once the site has been completed these are added to by sewer flooding and the impact of the local surface and foul water sewer systems. The impacts in summary relate to the worsening of off-site flood risk, overloading of existing infrastructure and potential degradation of existing water quality.

14.41 Mitigation

14.41.1 The proposed development identifies a number of mitigation measures relating to both the construction and post-completion phases. These include limiting post-development discharge rates through water attenuation, utilisation of SUDS techniques, ensuring that new drainage systems are designed in accordance with Legislation, Standards, Guidance and Best Practice applicable at the time and ensuring that surface water drainage systems will be designed to manage adverse off-site conditions in terms of surcharged outfalls. Surface water overland flow corridors can be incorporated within the design and continued liaison will be required with Severn Trent Water to ensure that necessary works are undertaken to rectify any issues restricting water supply.

14.42 Conclusions

14.42.1 The proposed development is both impacted by and impacts upon the surrounding water environment. The mitigation measures identified allow the various impacts to be addressed as far as practicable. The likelihood of any adverse impact is therefore low and the control of flow rates entering the Hall brook represent an improvement on the existing situation in terms of lower flood risk downstream.

14.43 Transport

Introduction

14.43.1 This chapter identifies the likely significant effects of the development in terms of transport and incorporates a summary of the Transport Assessment which is included in Volume 3 of the ES. It describes the assessment methodology, baseline conditions, potential significant environmental effects, mitigation measures and the potential residual effects after mitigation measures have been employed.

14.44 Baseline Conditions

14.44.1 The surrounding highway network has been thoroughly assessed. It includes existing bus, rail, pedestrian and cycle facilities. Traffic surveys were undertaken during March 2013 to establish current traffic flows. Data was obtained from the City Council to establish accidents on the highway network over the five year period 2008 – 2013. This identified evident sensitive locations which would be particularly sensitive to increased traffic flows.

14.45 Likely Significant Effects

14.45.1 The proposal will clearly result in an increase in traffic levels associated with the construction of the site. Full details of the likely construction traffic have been assessed. All the effects associated with post-completion development including traffic, severance, driver delay, pedestrian and cycle delay, pedestrian and cycle amenity, fear and intimidation as a consequence of traffic accidents and safety were all identified.

14.46 Mitigation

14.46.1 Measures associated with the construction phase include the provision of wheel washing facilities, a Construction Traffic Management Plan to define hours when deliveries were made and routes that vehicles will take, ensuring vehicle movements are spread throughout the day and deliveries are timed to avoid peak times. Mitigation associated with the post-completion phase includes the provision of an appropriately designed access position, introduction of new junction features into the highway to reduce vehicle speeds, provision of improved junction arrangements at Long Lane/Tamworth Road and other modifications to junctions in the vicinity, provision of pedestrian and cycle facilities as well as direct pedestrian and cycle links. Bus services will be re-routed through the site to ensure public transport links are provided. A Travel Plan will be provided to encourage non-car modes of travel by residents.

14.47 Conclusions

14.47.1 The results of the assessment indicated that the potential environmental effects resulting from the increase in traffic generated by the proposed development and construction traffic are relatively minor or not significant, subject to the identified mitigation measures which are integral to the proposal being implemented.

14.48 Overall Conclusions

14.48.1 This ES has demonstrated that there are no overriding environmental constraints which would preclude the proposed development at Keresley from coming forward. All aspects of the proposal have taken full account of the pertinent environmental issues and, where necessary, mitigation measures have been suggested and will ensure the environment is adequately protected and any impacts from the proposal are minimised.