

27 July 2018

Delivered by email – liam.d'onofrio@coventry.gov.uk

Mr Liam D'Onofrio Senior Planning Officer Coventry City Council Ref: UNIQ3067

Dear Liam

THE TOWN & COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 - REQUEST FOR SCREENING OPINION OF THE LOCAL PLANNING AUTHORITY

#### PROPOSED DEVELOPMENT AT THE UNIVERSITY OF WARWICK

We write on behalf of our client, the University of Warwick, to formally request the adoption of a Screening Opinion pursuant to Part 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the Regulations).

This is in relation to a 'hybrid' planning application which comprises nine development projects on land at the University of Warwick campus, which is located on the south western edge of Coventry. A site location plan is appended to this letter.

In accordance with the Regulations, I enclose the requisite information within this letter, namely:

- A description of the development, including the physical characteristics, the location and environmental sensitivity of the area
- A description of the environment likely to be affected by the development
- A description of the likely significant effects of the proposed development on the environment
- Such other information of the features of the proposed development and measures of potential mitigation

# **Site Location**

The University of Warwick was first established in 1964 and, since then, a succession of development plans and planning permissions have been implemented to enable it to become one of the UK's leading centres for research, teaching and innovation. Its main campus straddles the administrative boundary between Coventry and Warwickshire and extends to 189 hectares in total. Today the University serves over 22,000 students and employs in the order of 5,700 staff.

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The principal points of access to the campus are from the A429 Kenilworth Road and Kirby Corner Road, both of which connect into the A45 Fletchampstead Highway, through Coventry and the latter, which connects via the Stoneleigh Road to the A46.

The University's 'Central Campus' contains the bulk of the present University estate including the Student Union, Warwick Arts Centre, Warwick Business School, the library and the main academic, teaching and support services, as well as student residential and sports facilities. There are a number of new projects currently under construction in this area, including the new University Sports Hub, the National Automotive Innovation Centre (NAIC), the new Mathematics building and 814 student residences at Cryfield.

North west of the main campus is the 'Westwood Campus', which lies to the west of Kirby Corner Road. This area was formerly a teaching training college, but now contains a mix of sports facilities, student accommodation, teaching and support services. To the immediate west and north west of the Westwood campus are the residential areas of Canley and Westwood Heath, including the Westwood Business Park

To the north east of the main campus is Cannon Park which is an area of low density residential dwellings, and the Cannon Park District Centre, where there is a Tesco Supermarket and a range of other shops and services.

'Gibbet Hill Campus' is situated to the south east of Central Campus and provides a focus for the medical school and associated science and biomedical activities. This area is separated from the main campus by the valley of Canley Brook which includes Tocil Wood and wetlands nature reserve. To the east side of Gibbet Hill lies further low density housing.

The west and southerly aspects of the University are bounded by open countryside, currently devoted to agricultural use and woodland coppice. Beyond this to the south lies the settlement of Kenilworth.

# **Development Proposals**

The University of Warwick has assessed its development needs for the next 3-5 years and made a commitment in its 'Capital Plan' to deliver nine specific development projects. These projects are all located on land which is in use for University related activities and in some cases has previously had planning permission for University development, all within the campus boundary.

The aim of the planning application is therefore to provide certainty for the implementation of these projects and its continued evolution.

Each development proposal is described below:

# **Project 1: New Student Residences and Academic Buildings**

Project 1 relates to 3.6 ha of land at the Westwood Campus. The site is currently occupied by buildings in use for academic and support purposes, as well as by a temporary staff car park. Outline planning consent is being sought for the demolition of existing buildings and redevelopment of the site to provide up to 1,000 student bed spaces and up to 2,500 sqm (GEA) floor space of new teaching facilities.

It is anticipated that the proposals could incorporate new cycle and accessible parking, associated hard and soft landscaping and a new pedestrian/cycle link to Charter Avenue, at the northern boundary.



# Project 2: Public Realm and Access Works

Project 2 relates to 1.38 ha of land between Kirby Corner Road and Academic Square, which crosses through the University Science Park. It is partially occupied by two University owned dwellings, by an area of woodland and by an existing access road.

Outline planning consent is being sought for the demolition of two existing residential properties on Kirby Corner Road and the creation of a new pedestrian/cycle route to link Westwood Campus with Academic Square, and this would include new provisions for hard and soft landscaping and a new area of public realm at its southern extremity.

#### Project 3: Degree Apprenticeship Centre (Phase 2)

Project 3 relates to 0.25 ha of land which has previously been in use as a temporary surface car park, and is now a contractor's compound off the Academic Loop Road in Central Campus.

Outline planning consent is being sought for a new academic building comprising floorspace of up to 5,000 sq.m (GEA) and buildings no more than four storeys in height (plus rooftop plant) with associated hard and soft landscaping. The new building is expected to accommodate a Degree Apprenticeship Centre and form phase 2 to the planned Degree Apprenticeship Centre on the adjacent plot which is expected to commence development later this year.

# Project 4: New Academic Buildings

Project 4 relates to 0.74 ha of land which is currently in use as a temporary contractor's compound, in association with the ongoing building work for the NAIC project. It lies between an existing MultiStorey Car Park (Car Park 15) and Riley Court, which forms part of the University Science Park.

Outline planning consent is being sought for a new academic building comprising floorspace of up to 10,555 sq.m (GEA) and no more than five storeys in height (plus rooftop plant) with associated hard and soft landscaping. This project is also intended to incorporate a new pedestrian/cycle route to provide enhanced links between Academic Square and Kirby Corner Road.

# Project 5: New Academic Buildings

Project 5 relates to 1.22 ha of land which is currently occupied by the Humanities Building on University Road, within the Central Campus. Existing buildings amount to six storeys and floor space of c13,290 sqm GEA.

Outline planning consent is being sought for the demolition of the existing buildings (following the completion of project 6 below) and the redevelopment of the site to provide new academic buildings comprising floorspace of up to 18,330 sq.m (GEA) and no more than six storeys in height (plus rooftop plant) with associated hard and soft landscaping.

#### Project 6: Faculty of Arts Building

Project 6 relates to 0.99 ha of land which is currently occupied by a Multi-Storey Car Park (Car Park 7) within the Central Campus over four levels .

Full planning consent is being sought for the demolition of the existing car park and the redevelopment of the site to provide a new eight storey (plus roof top plant) Faculty of Arts building which will



accommodate 17,030 sq.m (GEA) academic floor-space with associated hard and soft landscaping and new cycle and accessible parking bays.

# Project 7: Interdisciplinary BioMedical Research Building (IBRB)

Project 7 relates to 0.83 ha of land at Gibbet Hill Campus which is currently in used partially as surface parking and partially as open ground.

Full planning consent is being sought for a new academic building comprising 7,515 sqm floor space (GEA) and five storeys in height (plus rooftop plant) with associated hard and soft landscaping. This project is also intended to incorporate enhanced pedestrian/cycle links between Gibbet Hill and Central Campus.

# Project 8: Public Realm, Science Square

Project 8 relates to 0.40 ha of land at Gibbet Hill Campus which is currently in use as a surface car park and access road. .

Outline planning consent is being sought for the removal of the existing surface car park and the creation of a new public square to provide enhanced amenity space and accessibility between existing buildings, including hard and soft landscaping and provision of new cycle and accessible parking bays.

# Project 9: Multi-Storey Car Park

Project 9 relates to 0.55 ha of land at Gibbet Hill Campus which is currently in use as decked car park.

Outline planning consent is being sought for the demolition of the existing decked car park and the redevelopment of the site to provide up to 650 spaces. The development would be up to six storeys in height by Gibbet Hill Road and up to seven storeys in height beyond. The proposals will also include associated hard and soft landscaping.

#### Car Parking

As part of the current proposals, it is expected that a S106 Agreement will be entered into which will allow a further 1,030 parking spaces within the campus boundary. This will be achieved through the delivery of the new multi storey car park at Gibbet Hill (project 9 above) alongside further rationalisation of existing and new parking locations across the central campus (the latter of which would require separate planning permission).

# Determining whether Environmental Impact Assessment (EIA) is required

The proposed development is not within any of the categories of development in Schedule 1 of the Regulations and therefore EIA is not mandatory.

It does however fall within one of the categories of development set out in Schedule 2 of the Regulations; namely Category 10(b) Urban Development Projects. With reference to this category, we can confirm that the development site area measures 9.51 ha and therefore exceeds 5 hectares in total (albeit that the largest individual site amounts to just 3.6ha), that it will exceed the 150 dwelling threshold and that the total scale of urban development exceeds 1 hectare.



Consideration has also been given to whether the project falls within Category 13(b) which relates to a change or extension to an approved scheme of development, which could include, for example the University Masterplan, as approved in 2009.

Taking account of the above, the Regulations state that EIA may be necessary and it is therefore necessary to establish whether the development is likely to have significant environmental effects.

In doing so, we note that Planning Policy Guidance (PPG) and the 'indicative thresholds and criteria' provides advice on the types of impact that are most likely to be significant for particular types of development. It states that 'EIA is unlikely to be required for the redevelopment of land unless the new development is on a significantly greater scale than the previous use, or the types of impact of a markedly different nature or there is a high level of contamination'. In response to this, we can confirm that

- The proposed scale of development represents a total newbuild floorspace of 90,934 sq m (GEA), although 21,825 sq m floorspace and two decked car parks will be lost through demolition. This is relative to the existing built estate at the University campus which amounts to circa 541,000 sqm and represents an overall net increase in built area of c13%.
- The proposed uses and activities within the proposed buildings are entirely complementary to
  existing academic and related activities within the University campus and will not give rise to
  differing types of impacts to those already experienced.
- All development sites are within areas which might be expected to be developed for academic related purposes, as identified in the Coventry Local Plan and/or within the series of masterplans developed and approved by the local authorities for the University campus over the past 50 years.

PPG goes on to provide advice in respect of development proposals which relate to sites which have not previously been intensively developed. In this case, all of the sites have been previously developed (in whole or in part) and can be considered to be integral to the built fabric of the existing University campus.

On the basis of the above, it is concluded that the development proposals are unlikely to meet the 'indicative thresholds and criteria' outlined in PPG.

# **Potentially Significant Environmental Effects**

Notwithstanding the above, it is important to consider the scope and significance of any potentially significant environmental effects. In doing so, what may constitute a 'significant' effect must be assessed on the basis of the individual quantifiable facts and evidence base available relative to a particular development proposal. In making an informed judgement on these matters, reference has been made to Schedule 3 of the Regulations, which provides a list of selection criteria which should be taken into account in considering a screening opinion.

### These criteria include:

- · the location of the development;
- · the characteristics of the development; and
- · the characteristics of any potential impact.



PPG and in particular the 'indicative thresholds and criteria' advises that the key issues to consider for category 10(b) projects are likely to be the scale of development, and any potential increase in traffic, emissions or noise.

# The Location of the Development

Schedule 3 of the Regulations indicates that when assessing the environmental sensitivities of an area, particular regard must be had to the existing land use, the relative abundance, quality and regenerative capacity of natural resources in the area and the absorption capacity of the natural environment. Each of these is addressed in turn:

#### Existing Land Use

All sites are integral to the University campus and form part of a well-established urban environment, in an area characterised by various forms and scale of built development all allied to the University; this includes facilities for research, teaching, performance, retail, residential, transport and other infrastructure. The development sites are largely brownfield, with the majority having previously been in active use as part of the wider University campus.

Reference to the planning history confirms that there has been a continuous process of new and replacement development across the campus since 1964. Of particular note is the outline permission granted in 2009 which gave approval for 89,000 sq m of University related floorspace (including for academic, teaching, sports, social, energy, transport and other activities) within the campus boundary within Coventry's administrative area. A similar permission was granted by Warwick District Council for a similar amount of floorspace within its administrative area (as the campus straddles both authorities).

All sites lie within the boundary identified in the adopted Coventry Local Plan Proposals Map for uses associated with the University of Warwick. The associated Development Plan policies give clear recognition to the land being a key focus for new academic development.

Reference to the DEFRA Magic mapping service confirms that none of the sites are affected by particular environmental designations. With reference to Part 2 of the Regulations (page 8) which defines 'sensitive areas, we can confirm that none of the following apply:

- Sites of Special Scientific Interest (including their consultation areas)
- Land to which Nature Conservation Orders apply
- International conservation sites
- National Parks
- · Areas of Outstanding Natural Beauty
- World Heritage Sites
- Scheduled monuments

# **Natural Resources**

The subject sites are all University owned land which has largely been exposed to previous built development. Reference to the Warwickshire Minerals Local Plan and Coventry Local Plan confirms that none of the sites are safeguarded for the purpose of extracting sand and gravel, clay, crushed rock, stone, coal or cement raw materials which are regarded as the main minerals in the area. As such, the sites' mineral resource is considered to be of limited value.

# Natural Environment Resources

The guidance lists a number of natural environments, the absorption capacity of which should be paid particular attention. The majority of these do not apply to the current proposals, although where applicable we have highlighted below where further consideration is justified:



- Wetlands, riparian areas or river mouths not applicable
- Coastal Zones not applicable
- Mountain and forest area not applicable
- Nature reserves and parks not applicable
- Classified areas not applicable
- Areas where environmental quality standards are exceeded –not applicable
- Densely populated areas the University campus is on the edge of Coventry and therefore situated close to existing areas of residential development where receptors may be more sensitive
- Landscapes of historical, cultural or archaeological significance the application site is not
  within a Conservation Area and there are no listed structures within the application site,
  nor any notable archaeological sensitivities. On the wider campus, the Houses for Visiting
  Mathematicians at Gibbet Hill are Grade II listed although not in close proximity to any of
  the proposals. Gibbet Hill Farmhouse is locally listed and whilst in close proximity to
  projects 7, 8 and 9, there is an extant Certificate of Immunity from Listing.

Taking account of the potential range of sensitivities and the particular characteristics of this location, it is submitted that the location of the proposed development has low environmental sensitivity and a high absorption capacity, such that it is unlikely that significant environmental effects will arise.

#### The Characteristics of the Development

With the exception of project 7, all the proposed development sites are all previously developed plots, which form part of the wider University campus. They are all actively occupied at present and have been so for several years. They are all covered by longstanding planning designations, arising either from former planning permissions or from land allocations for academic use, within successive Local Plans.

The most recent Coventry Development Plan examination process, was informed by evidence of the University's projected growth and its policies are underpinned by a Strategic Environmental Assessment (SEA), The Plan includes Policies JE1 and CO1 which give explicit support to continued growth of the University within the area shown on the related Proposals Map and in line with the University's Masterplan. The conclusions of the SEA Final Report were that the overall impacts were likely to be significant positive and that sufficient mitigation is in place, through the policies, to minimise or avoid significant negative effects (including requiring high quality design and sustainable travel measures, for example).

Each of the proposed developments are expected to be of a type which can be considered characteristic of the former use of the plot and consistent with the wider site proposals, in keeping with their University surroundings and complementary to neighbouring land uses. The proposals are consistent with previous Masterplans and with the adopted development Plan for the area, meaning that the principle of the proposed development is entirely of a type which can be deemed suitable and appropriate in this location.

The proposed construction activities are expected to include site preparation, including services diversions and some demolitions, protection of landscape and ecological features, creation of foundations and building slabs and construction of above ground structures; they will constitute standard building practices and be undertaken during normal working hours.

The proposed development will deliver 90,934 sq m GEA development overall, across nine development sites. The scale and form of the development on any plot reflects that of many of the other plots within



the University campus and other academic environments and can be considered to be industry standard; in terms of overall appearance, form and function.

Indeed, the key characteristics of the development are not expected to be markedly different to those which are already prevalent, and accepted in this location. Further consideration to the likely impacts of the development is given under criteria 3 below – but overall it can be concluded that the characteristics of the development are unlikely to give rise to significant effects on the environment.

#### Appraisal of Likely Environmental Effects

Schedule 3 of the Regulations requires potentially significant effects to be considered having regard to:

- The extent of the impact (geographical area and size of the affected population);
- Any transfrontier effects;
- The magnitude and complexity of the impact;
- · The probability of impacts; and
- The duration, frequency and reversibility of the impacts.

We consider that the proposals which comprise academic development will give rise to impacts which are of a type and scale which can only be considered to be local in nature. Whilst the University has strong links with the wider region and an international standing, the primary construction and operation impacts will remain local. The development will complement its urban environment, be compatible with the surrounding uses and will not have any complex, hazardous or significant environmental effects. There will be no transfrontier effects arising from the development.

With reference to this and arising from the technical work undertaken to support the proposals, we consider the following matters to be most relevant to the environmental considerations of the proposals:

- Transport
- Flood Risk and drainage
- Ecology
- Noise
- Landscape and visual impact
- Air quality
- Archaeology and built heritage
- Ground conditions
- Climate change
- Population and human health
- Waste management

In considering these, we have considered the individual impacts of the development together with those which could also be expected to arise, in conjunction with any other schemes which have planning permission within the University campus, or close to it, which are either yet to be built, or are under construction. These include the following

- The University Sports Hub
- The National Automotive Innovation Centre (NAIC)
- Mathematics building
- Materials Engineering Centre
- Degree Apprenticeship Centre



- · Cryfield Residences
- Multi Storey Car Park 16

All of these developments are identified on the attached MJP drawing and the environmental impacts for each were assessed as part of the normal planning application process (none were subject to EIA) and deemed to be not significant.

In addition, the following projects have also been taken account of in the assessment work:

- Whitley South, Coventry
- Stoneleigh Park, Warwickshire
- · Common Lane, Kenilworth
- Kenilworth Station
- Cromwell Lane, Coventry

The main impacts arising in each of these cases related to a combination of transport, ecology, flood risk and drainage, noise, landscape and visual impacts, air quality, archaeology, ground conditions, climate change and waste management effects. Each of these effects have been taken into account and are reflected in the consideration below.

The following sections consider the characteristics of any potential impact on these matters

#### Transport

The University campus can be regarded as a sustainable location in transport terms with an operational Travel Plan introduced in 2009 alongside the current Masterplan. There are good opportunities for access by alternative modes including a recently constructed Bus Interchange, and the new proposals will be fully integrated into the existing campus with access to a variety of sustainable travel options, which are already in place and will be expanded under the current proposals. There is a well-established history of ongoing development at the University and the transport evidence underpinning the local plans has been predicated on the University's continued growth at levels which reflect the current proposals and therefore are enshrined in the Coventry and Warwick Local Plans (both adopted in 2017).

A detailed Transport Assessment (TA) has been prepared to support the current development proposals, including the increase in the car parking cap. The TA takes account of other committed development projects in the locality and has been informed through recent survey work, traffic modelling and close ongoing engagement with the local and strategic highways authorities through a regular Transport Sub Group to determine the likely impacts of development traffic on prevailing and future traffic conditions. This work has also sought to identify any requirements for mitigation and measures which might be implemented in order to make the development acceptable in highways terms.

The outputs of this work have demonstrated that the proposed additional parking on campus will help relieve local roads of on-street parking, but the development as a whole will also add traffic to the existing network and increase congestion at some junctions at peak periods. The overall increase in the critical peak periods could be 16%. In response, the development proposals will be accompanied by a package of mitigation including contributions towards relevant improvements to public transport, the local cycle and public transport network and longer term highway improvements (see accompanying Schedule of Mitigation). With reference to the Guidelines for Environmental Assessment of Road Traffic (IEMA, 1993) the peak increase remains below the recommended threshold of 30%.

In this context, it is expected that the development will include transport mitigation (Schedule of Mitigation - TR1 and TR2) such as will ensure that traffic impacts will be fully addressed as part of the



normal planning application assessment process. Highways and transport impacts arising from the proposals are unlikely to give rise to significant effects on the environment.

#### Flood Risk and Drainage

A Flood Risk Assessment and Drainage Strategy has been prepared in support of the proposals. This work has identified Canley Brook as being the main fluvial feature which runs to the south of the main campus, but that no university above-ground infrastructure lies within the 100 year indicative floodplain.

Two large, unnamed ponds located adjacent to the Tocil Wood are within the indicative 100 year fluvial floodplain of the Canley Brook. These ponds are not a fluvial attenuation structure and are not suitable for such a function due to its location within the indicative floodplain. The Westwood Brook flows from the north through the main campus either in open channel or through a series of culverts. The majority of the University's built environment is located in this sub-catchment.

A detailed hydraulic analysis of the Westwood Brook was undertaken in 2007, and updated in 2013, and determined the 1 in 100 year floodplain. It should be noted that with the current surface water infrastructure, surface water from this catchment drains into the Lakeside waterbodies and is transferred across to the Westwood Brook sub-catchment before discharging into the Westwood Brook via a surface water pumping station. A final sub-catchment exists to the west of the campus, which drains to the Whitefield Coppice Brook. No university infrastructure is at risk of flooding from this brook in the 1 in 100 year flood event.

The EA Aquifer status maps indicate that the bedrock underlying the entire campus is a Principle Aquifer, while superficial deposits, following the routes of the watercourses in the area are Secondary A Aquifers. This means that the bedrock has the potential of containing large quantities of water that could be regionally, if not nationally important, while the water resources in the superficial deposits may be locally important. This information means there is a good chance of water bearing strata underlying the site. EA mapping data also suggests the majority of the Campus lies outside of a groundwater source protection zone, while a section of the grounds within the Whitefield Coppice catchment lies within groundwater source protection zone 3.

The overall change form permeable to impermeable to permeable surfacing if relatively limited, due to the fact that eight out of the nine sites are on previously developed land. This means that there is unlikely to be a change to the overall interaction between surface and ground water.

Each of the proposed developments are located in areas at low risk of both fluvial flooding and pluvial flooding and each development shall introduce mitigation measures to control surface water runoff to ensure there is no increase to flood risk at, or downstream of, each developments locations (Schedule of Mitigation). It is therefore concluded that the development is unlikely to give rise to significant environmental effects.

#### Ecology

Baseline ecological investigations have been undertaken to inform each of Projects 1 to 9. A desk study and walkover survey of each site has been completed and, where necessary, detailed species surveys programmed.

This work has confirmed that there are no statutory designations within any of the project sites and none nearby that will be materially affected by the proposals. Project sites 7, 8 and 9 are covered by a non-statutory designation, however, none of these project sites support any habitat of ecological value



associated with the designated site and the proposals will include enhancement measures complimentary to the non-statutory designation.

The majority of the project sites comprise habitat of negligible ecological value. The project sites comprise of predominantly mown poor-semi-improved grass and semi-mature trees. Within Project sites 1 and 2 are small areas of semi-natural broad-leaved woodland of value at the site level.

In terms of protected species, a bat roost has been recorded within Project site 1 and buildings with potential to support roosting bats have been identified within Project site 1 and Project site 2. Further detailed surveys are programmed to ensure that appropriate mitigation is provided for bat species. Badger activity was also recorded within both the Project sites 2 and 9 site and they are likely to forage across all project sites. Habitat which may potentially support common reptile species was also identified within the Project site 7. In addition, habitat suitable for breeding birds was identified across all project sites. All species constraints identified are capable of being accommodated by the proposals and enhancements delivered for these species by the proposals (Schedule of Mitigation – T1, T2, EC1, LA1).

Consultation is currently underway with Coventry City Council's ecologist with respect to the ecological assessment; including the mitigation and enhancement measures proposed. In relation to enhancement, the proposals will be subject to the Council's Biodiversity Impact Assessment (BIA) Metrics. This will ensure that a net biodiversity gain will be achieved; with any offsetting delivered locally within the University (Schedule of Mitigation – LA1).

Overall no significant ecological issues, such as loss of favourable conservation status for any habitat or species, are predicted. Provided that the Ecological Mitigation Strategy is adhered to, no breaches of wildlife legislation are anticipated.

In this context, it is concluded that there will be no significant environmental impacts in relation to ecology arising from the development proposals.

#### Noise

The baseline noise environment is characterised by high levels of road traffic noise. Under the proposals there will be an increase in traffic flows at critical peak period of around 16%. This level of increase in traffic flow associated with the proposed development is unlikely to result in a greater than negligible increase in noise levels. A significant environmental impact as a result of an increase in traffic flow due to the proposed development is therefore unlikely.

The proposed development sites are largely distant from sensitive receptors, the exception being Project 1 which adjoins residential properties on Charter Avenue. Project 1 is itself a residential development and is therefore not expected to emit significant noise emissions. The occupation and operation of the other development projects are also not expected to give rise to significant noise emissions

It is considered that noise effects from the proposed development, when considered in conjunction with the cumulative effects of the whole site, are capable of being controlled through appropriate design and/or mitigation if required, including hours of operation and control of plant emissions, for example ( Schedule of Mitigation – NO1). It is therefore unlikely that the noise environmental impacts will be significant.

#### Landscape and Visual Impact

Work undertaken in the context of the EIA for the 2009 outline planning consent confirmed that construction of existing University facilities had already resulted in some interference in the landscape



and that this could be expected to be reinforced under any new proposals. Given that most of the proposals are within areas of the campus which are already characterised by significant built development, it can be expected that the visual impact will be minimal from the majority of the surroundings. Notable features including Whitefield Coppice and other local woodlands provide significant screening and, from the majority of surrounding residential areas, views to the University would be limited to overlooking views from first floor window of a small number of properties.

From those vantage points where the University would be visible, the new buildings will be seen against the backdrop of existing University buildings. Whilst building heights will be greater than presently exist in some parts of the campus, no new building would be expected to be so greater, as to constitute a significant change. This includes project 6 Faculty of Arts which is the highest building currently proposed and, at a height of 34.4m, compares with the Main Library at the rear at 30m in height.

The scale and distribution of new buildings proposed within the application would not be expected to significantly impact upon the character and status of the existing campus, including those projects which are also committed, but not yet occupied. Within currently developed areas, the new schemes will provide the opportunity to raise the visual quality and provide a greater sense of cohesion and unification. Appropriate controls over visual and design quality will be secured by planning condition and the submission of reserved matters (Schedule of Mitigation – VI1)

The Archaeology Review submitted in support of the proposals confirms that there are no designated heritage assets in proximity to the development sites, such as could be impacted by the development.

#### Air Quality

An Air Quality Assessment has been prepared which reviews existing air quality at and in the vicinity of the site; assess the potential changes in air quality, and their significance, arising from the construction and operation of the proposed development (in combination with other committed projects); and formulate the mitigation measures, where necessary, to ensure any adverse effects on air quality are minimised (see accompanying Schedule of Mitigation).

The site is within an Air Quality Management Area (AQMA), which Coventry City Council (CCC) declared in 2009 for the whole of Coventry due to exceedences of the annual mean objective for nitrogen dioxide (NO<sub>2</sub>) at various locations across the city. A considerable amount of work has been undertaken by CCC to improve air quality, directly or indirectly, which includes junction improvements on the A45 at Kenilworth Road and Canley, serving University of Warwick campus to reduce rush hour congestion.

At the end of January 2018, Arup commenced a six month NO<sub>2</sub> diffusion tube monitoring programme at eight locations within or close to the University of Warwick campus, and one co-location site at a the Allesley AURN automatic monitoring. These were selected to provide an indication of baseline conditions at the campus and within the local area, and to enable verification of future dispersion modelling.

During construction, the main sources of air pollution are expected to emerge from construction dust and emissions associated with site preparation works, due to vehicles transporting materials to and from the site, and demolition and construction activities taking place on site. However, these impacts are temporary, and can be effectively managed through the application of best practice in construction management. Potential air quality impacts during demolition and construction shall be effectively managed through best practice measures, which will be based on the mitigation measures proposed following a construction dust assessment, in accordance with IAQM guidance1. Therefore, air quality

<sup>&</sup>lt;sup>1</sup> IAQM (2014) Guidance on the Assessment of Dust from Demolition and Construction



impacts associated with demolition and construction activities are not anticipated to result in significant effects.

During operations, the development has the potential to impact existing air quality as a result of pollutants associated with road traffic exhaust emissions, such as  $NO_2$  and particulate matter ( $PM_{2.5}$  and  $PM_{10}$ ), from vehicles travelling to and from the site during the operational phase. It has been forecast that a 16% increase in traffic could occur during critical periods. Dispersion modelling has been undertaken to inform the scope of mitigation measures which may be required.

The Assessment work to date concludes that, whilst the application sites lies within the Coventry AQMA, the proposed development will not necessarily impact on those areas where identified 'Areas of Exceedance' exist. Concentrations are likely to remain below the objective and it is unlikely there will be any significant effect on local air quality once the proposals are operational.

Air quality effects are capable of being controlled through appropriate design and/or mitigation if required (Schedule of Mitigation – T1 and T2).

# Archaeology and Built Heritage

Archaeological assessment work to support the 2009 outline consent and subsequent site specific studies have confirmed that potential impacts to archaeological and cultural heritage are most likely to result from sub-surface disturbance during construction and landscaping activities – but also that these impacts limited to the southern area of the Westwood site and selected areas to the west of central campus. These areas are largely unaffected by the current proposals.

However, some mitigation could be expected to be needed in order to limit the risk of potentially significant impacts on a site by site basis. Such mitigation is expected to include an archaeological 'watching brief' and where necessary intrusive surveys to ensure activities are undertaken with due regard to the preservation of any archaeological resources (Schedule of Mitigation – AY1).

In this context, it is concluded that significant effects are unlikely.

#### **Ground Conditions**

An assessment of ground conditions was undertaken to support the previous 2009 outline planning consent pertaining to the University campus. This noted that the majority of the campus is constructed on land which, prior to its development, was agricultural. Only at the Westwood site is there evidence of development prior to the current education use and the extent of redevelopment of structures prior to the current building footprints is considered minimal. Information drawn from previous site investigations has not provided any evidence of current ground contamination and it is notable that the areas are well maintained without evidence of potential contamination.

Whilst it is acknowledged that there is a possibility of construction activity mobilisation potentially unidentified contaminants or introducing new sources of contamination, it is considered that measures can be employed to minimise these risks (Schedule of Mitigation – RM1) and that, as such, significant effects are unlikely.

# Climate Change

In line with the new EIA regulations, the potential impacts of climate change adaptation and mitigation for the proposed nine projects at the University of Warwick main campus and Gibbet Hill sites have been



considered as separate topics, drawing on the IEMA Mitigation<sup>2</sup> and Adaptation<sup>3</sup> Guidance, for clarity these are:

- Climate Change Mitigation How the proposed development emits and mitigates Greenhouse Gas (GHG) emissions.
- Climate Change Adaptation How the proposed development will adapt to changing climate impacts and incorporate climate change resilience measures.

Climate Change Mitigation: The release of GHG emissions is considered one of the primary causes of climate change. The IEMA Climate Change Mitigation and EIA Principles<sup>4</sup> and 2017 GHG Mitigation Guidance<sup>5</sup> suggest that GHG emissions are approaching a scientifically defined environmental limit and any GHG emissions might be considered significant.

The UK Climate Change Act<sup>6</sup> and UK Carbon Plan<sup>7</sup> respectively set out the UK Carbon Budget, a defined limit in UK emissions taking into account the need for economic growth and development, and a framework for the reduction of UK GHG emissions.

The GHG emissions of the proposed projects are anticipated to be associated with the demolition of existing development, the construction of new buildings and the long term occupation of those buildings. Below is a qualitative review of the anticipated GHG emissions and mitigation proposed taking guidance from the Greenhouse Gas Accounting and Reporting Standard<sup>8</sup>.

- Demolition As part of the development of the nine projects proposed approximately 21, 825 sq.m (GEA) of building space is to be demolished, together with two multi-storey car parks. The demolition of existing structures effectively releases the embodied carbon of the building materials used in construction. As part of the individual development proposals a Site Waste Management Plan will be prepared prior to demolition and where applicable will include measures to recycle and reuse demolition materials.
- Construction In terms of the construction phase the greatest emissions of new
  development are generally associated with the embodied carbon of the materials used in
  construction. As part of the design of individual buildings consideration will be given to
  the embodied carbon of building materials and use of recycled materials to reduce
  embodied carbon emissions.
- Operation The redevelopment of the campus includes the demolition of significant floor space with a net increase in floor space of 69,109m<sup>2</sup> resulting in a modest net increase in operational energy use. Where appropriate, as part of the application documents for new development an Energy Statement will be provided demonstrating how the individual projects will be constructed in accordance with the approved Part L Building Regulations

<sup>&</sup>lt;sup>2</sup> Arup and IEMA (2017) 'Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance', IEMA

Mott MacDonald and IEMA (2015) 'Environmental Impact Assessment Guide to: Climate Change Resilience and Adaptation', IEMA.

<sup>4</sup> IEMA (2010) 'IEMA Principles: Climate Change Mitigation & EIA', IEMA

<sup>&</sup>lt;sup>5</sup> Arup and IEMA (2017) 'Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance', IEMA

<sup>&</sup>lt;sup>6</sup> HM Government (2008) 'Climate Change Act 2008', HM Government

Department of Energy & Climate Change (2011) 'The Carbon Plan – Delivering out Low Carbon Future', HM Government.

<sup>&</sup>lt;sup>8</sup> World Resources Institute, World Business Council for Sustainable Development (2004) 'The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard', GHG Protocol



and deliver 10% of the sites energy through low carbon renewable energy in line with the Council's adopted development plan. This will help reduce energy use and carbon dioxide mitigating the operational GHG emissions and its effect on climate change.

Over the longer term, i.e. a 30 year period the GHG emissions of development are anticipated to reduce significantly due to reductions in the GHG emissions associated with decarbonisation of the UK electricity generation. The Department of Business, Energy and Industrial Strategy sets out the predicted emissions factors associated with electricity generation up to 2100<sup>9</sup>, through the installation of new low carbon renewable energy generation and closure of UK coal generating plants the national electricity grid is anticipated to decarbonise rapidly over the next 20 to 30 years, supporting the UK carbon targets.

At this stage energy modelling has not yet been completed for all of the proposed development. Where available for Projects 6 and 7 the modelled data includes provision of 10% low carbon renewable energy.

In this context, it is considered the GHG impact of the proposed developments is not likely to be significant in terms of local or national GHG emissions and the UK Carbon Budget.

Climate Change Adaptation: The impacts of UK climate change are set out in the 2009 climate change projections, referred to as UKCP09 projections<sup>10</sup> and for the West Midlands region are anticipated to include increased annual temperatures, more very hot days, more intense downpours of rain, increased winter rainfall and an increase in dry spells during the summer. To ensure the development adapts to the impacts of the UK's changing climate the following climate change resilience the following measures will be included in the detailed design of the individual buildings and integration into the existing campus:

- Design of efficient buildings, where possible maximising solar gains, reducing heat loss and designed to take into account the impacts of climate change minimising the impacts of overheating;
- Drainage systems designed to link into the off site attenuation network as part of the wider campus Sustainable Drainage System (SuDs) in accordance with national flood risk requirements;
- Ensuring that individual plot landscaping proposals take into account future climate impacts such as increased winter rainfall, annual temperatures and potential summer dry spells.

This approach demonstrates how the proposed development will incorporate measures to adapt to the key impacts of climate change (Schedule of Mitigation – CC1).

In this context, the climate change mitigation and adaptation measures to be included in the redevelopment projects are considered to be reasonable and proportional to adapt to the predicted impacts of climate change. On this basis, it is not considered that the proposed development would be unlikely to give rise to significant effects.

#### Population and Human Health

The Healthy Urban Development Unit (HUDU) 'Healthy Urban Checklist' (2017) and Department for Health's 'Health Impact Assessment Tools' (2010) have been used to establish screening criteria for this submission. The purpose of the screening exercise is to establish how the proposal affects the

<sup>9</sup> BEIS (2017) 'UK 2005 to 2015 UK local and regional CO2 emissions - data table

http://ukclimateprojections.metoffice.gov.uk



'determinants of health'. The World Health Organisation (WHO) defines these as the environmental, economic and social conditions which impact the health and well-being of a local population.

'Access to a safe environment during construction and operation phase' is the first determinant of human health assessed. The demolition and construction activities can create adverse environmental effects, such as noise pollution from site vehicles, increase in air quality from dust particles and pollution from spillages. These impacts can lead to increased stress, reduced quality of life and pose a risk to those with pre-existing medical condition. Poor air quality has been linked to life-shortening lung and heart conditions, cancer and diabetes. Screening has been carried out for noise, air pollution and demolition and waste management; it has been found that there will be no significant impacts.

The sites will be accessible by multiple transport modes, providing students and employees with a choice of modes of transport to travel to and from work. The Transport Assessment works demonstrates that, whilst there will be an increase in future traffic flows, at some peak times, this is capable of being managed and, adequately mitigated.

'Access to employment opportunities' is another local condition which affects human health. The proposals will help sustain the University's role as a major employer and contributor to the economic well being of the region as well as generate temporary construction jobs on site annually and further temporary FTE jobs supported within the supply chain and related business annually. Additional jobs will have a positive impact on latent demand for jobs and local labour market more broadly.

'Equality and social cohesion', 'access to public services' and 'access to open spaces' are other local conditions which affects local well-being and health. The proposals will provide widespread opportunities for access to education as well as improved access and connectivity within and around the campus environment, including areas of public realm and open space. No significant impacts on these conditions are considered likely.

Environmental hazards (noise, dust, waste, air quality and contamination) and also climate change impacts are considered in other sections to this letter.

The development is not expected to have a detrimental risk to human health either through the construction period or during the operational use of the site, subject to appropriate mitigation (Schedule of Mitigation – HH1, NO1, AL1, T1 and T2)

This screening exercise concludes there are no likely significant human health impacts as a result of the proposed development.

#### Waste Management

The Proposed Scheme will result in the generation of waste and increased demand on the local waste treatment / disposal facilities. However, it is assumed that a Site Waste Management Plan will be developed prior to demolition / construction which will minimise waste streams, their appropriate reuse (including reuse on-site if applicable) or recycling and ultimate disposal to relevant waste handling facilities (Schedule of Mitigation – WA1)

This is in accordance with relevant standards and guidance (i.e. Controlled Waste (England and Wales) Regulations 2012).

As such, significant effects are considered unlikely.



#### Risk of Major Accident of Disaster

The probability, frequency and likelihood of natural disasters arising from climatic occurrences (i.e. hurricanes) are considered to be very low due to the natural climatic condition of the UK within the global climate system.

It is assumed that the future occupiers of the Proposed Scheme would have either risk or operational management plans which would detail the response process to unlikely events, including:

- industrial/technological accidents;
- terrorism incidents or cyber-attacks, minimising any impacts should an unlikely event occur.

There are no Control of Major Accident (COMAH) Sites at the Site or within 2km.

During operation, as no significant increase in traffic flows is anticipated, any increase in major accidents is considered to remain as low, currently managed by stringent safety standards.

Significant effects are unlikely.

#### Conclusion

Having regard to the EIA Regulations, it is evident that the proposed development is not Schedule 1 development, but is considered to fall within those developments listed in Schedule 2 of the Regulations.

The Site is not considered to be sensitive, and a review of its characteristics and location indicate that the proposed development is unlikely to have any significant effects on the environment. The proposal has similar characteristics to those which have been undertaken previously and which are also proposed for adjacent land. Sensitive receptors, including nearby residential properties, the environment and its ecology, are all either not affected by, or can be protected from, adverse effects using standard and commonly employed mitigation techniques. These are summarised in the accompanying Mitigation Schedule.

The effects which are likely to arise from the proposed development, have been considered both individually and cumulatively, including in combination with the wider proposals at the University and the wider local area.

It is concluded that there are unlikely to be significant environmental effects.

If you need any further information or have any queries, please do not hesitate to contact me.

Yours sincerely

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# **Turley**



# University of Warwick - Capital Plan Hybrid Application

# **EIA Screening Request - Schedule of Mitigation**

#### Purpose

In line with Regulation 6(2e) of the EIA Regulations project specific measures to avoid and/or prevent signifincant environmental effects (ie mitigation measures) have been considered when appraising likely environmental effects. The EIA Regulations state that the inclusion of such mesures and the extent to which they avoid and/or prevent adverse environmental effects should be considered by the local planning authoruty when formulating a Screening Opinion.

In order to support the Local Planning Authority, mitigation measures identifed in the accomanying Screening Request have been collated into a single Schedule of Mitigation, set out below. The aim of the schedule is to provide confidence to the LPA that mitigation identified is sufficent to avoid or prevent significant environmental effects and thus validate the determination of likelihood of significant effects as concluded within the Screening Report.

The Schedule of Mitigatgion should also be used by the applicant and contractor to review mitigaiton commitments.

# **Schedule of Mitigation**

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C / O*)	Detail of Mitigation
Demolition Environmental Management Plan (DEMP)	T1	Principal Contractor	С	The DEMP / CEMP should be prepared by the principal contractor in advance of demolition / construction works and submitted to CCC for
Construction Environmental Management Plan (CEMP)	T2	Principal Contractor	С	approval.  The documents should provide, where relevant details of all demolition works, extents and activities, as well as provide the overarching details and principles to avoid and effectively manage potential adverse effects upon the environment.  The DEMP / CEMP should include all measures in line with all relevant government and industry standards, codes of practice and best practice measures (i.e. The Control of Asbestos Regulations, Statutory Instruments 2012 No. 632 (2012); The Construction (Design and Management) Regulations 2015. Statutory Instruments 2015 No. 51); CIRIA C741 Environmental Good Practice on Site Guide (2015); CIRIA C670 Site Health Handbook (2008); and the Considerate Constructors Scheme.
				Specific to the Proposed Scheme the following measures should be detailed with the DEMP / CEMP:
				(I) Traffic Management Plan, providing details of procedure for temporary demolition / construction related traffic;
				(II) Confirmation of working hours, including timing restrictions for deliveries;
				<ul><li>(III) Stakeholder communication method statement or procedure, to outline process for public engagement during the relevant phase;</li></ul>
				(IV) Details of site layout including, site compound, site securement

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C / O*)	Detail of Mitigation
				protocol, laydown / storage areas and other ancillary aspects required;
				(V) Site securement procedure and hoarding to be used;
				(VI) Protection measures for retained features, including tree root protection zones, any requirements for the protected species (including management plans) and pre-construction checks and safeguards for other species not currently identified at the Site;
				(VIII Protection measures to avoid any contamination or sediment entering the surface water drainage network. These will include: roads clear of mud deposits and damped down during dry and windy periods;
				(IX) Measures to avoid nuisance from lighting. These will include: sufficient use of lighting units to avoid the need for tall, wide beam lighting units; reduction in the need for fixed lighting outside working hours; the use of infrared flood lighting and CCTV systems for security; plan outlining requirements for ongoing monitoring and liaison with the local community and CCC;
				(X) Preventative measures to control dust and particulate matter. These will be informed by the Institute of Air Quality Management (IAQM) Guidance and would include measures such as: screening stockpiles of materials; deployment of windbreak netting and dampening exposed soils as appropriate; and plan for ongoing monitoring and liaison with the local community, and HBC; and
				(XI) Contractual requirements for the principal contractor to demonstrate best practice principles and procedures to minimise the consumption of resources such as fuels and raw materials
Vegetation Clearance	EC1	Principal Contractor	С	Where relevant, any clearance of vegetation deemed suitable to support nesting birds should be cleared outside of breeding bird season or

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C / O*)	Detail of Mitigation
				undertaken under supervision of a suitably qualified ecologist.
Protected Species Licenses	Т3	Client / appropriate technical specialist / principle contractor	С	Any works resulting in impacts to protected species should be undertaken by a suitably qualified ecologist in line with any necessary licences (if required). This includes the necessary surveys to establish presence / absence at the outset.
Remediation Statement	RM1	Client / appropriate technical specialist	С	Where necessary, the Remediation Method Statement will set out the results of the site investigations and the remedial measures required avoiding any pathways between existing contaminants and receptors. The Remediation Method Statement will also outline any protocols to manage any unexpected contaminants identified during demolition or construction.
Waste Management Plan (WMP)	WA1	Principal Contractor	С	The principal contractor for each phase of the Proposed Scheme should prepare a suitable waste management plan, identifying how waste produced will be managed in accordance with relevant standards and guidance (i.e. Controlled Waste (England and Wales) Regulations 2012).
Landscaping Planting Plan	LA1	Client / appropriate technical specialist	0	Where details have not been submitted as part of the application, during the detailed design stage, the project team will prepare a detailed landscaping planting plan and submit to CCC for approval.
Visual Impact	VII	Client / appropriate technical specialist	С	Development to be undertaken in accordance with agreed parameters for each site. Where details have not been submitted as part of the application, during the detailed design stage, the project team will prepare detailed designs and submit to CCC for approval.
Lighting Design / Specification	AL1	Client / appropriate technical specialist	0	During the detailed design stage, the project team will prepare a detailed lighting design outlining the proposed operational lighting included as part of the Proposed Scheme. The design should take due consideration of relevant standards (i.e. BS5489-1:2013, Code of Practice for the Design or

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C / O*)	Detail of Mitigation
				Road Lighting: Lighting of Roads and Public Amenity Areas; Chartered Institute of Building Services Engineers (CIBSE) (2016) Lighting Guide 6: The Exterior Environment (SLL LG6, LG06); and Institute of Lighting Professionals (ILP), Guidance Notes for the Reduction of Obtrusive Light GN01:2011). This will be agreed with CCC. This will also ensure that the any illumination or any bat habitat is minimised or avoided.
Drainage Strategy	HY1	Client / appropriate technical specialist	0	Where details have not been submitted as part of the application, during the detailed design stage, the project team should prepare a detailed drainage strategy outlining the measures to be adopted as part of the Proposed Scheme. This would also include the use of interceptors to control any operational spillages. This should be approved by CCC.
Waste Strategy	WA2	Client / appropriate technical specialist	0	A Waste Strategy should be prepared and submitted to CCC for approval.  The Strategy should outline waste handling procedure within the Site, waste reduction techniques and measures in accordance with relevant standards and guidance (i.e. Controlled Waste (England and Wales) Regulations 2012).
Transport Assessment	TR1	Client / appropriate technical specialist	c/o	A package of measures shall be implemented including     Embedded mitigation – physical works to local highway network to enhance safety and capacity     Travel Plan mitigation – measures to improve access by public transport, cycling, walking and other sustainable modes     Financial mitigation – contributions to enable Warwickshire CC and/or Coventry CC to undertake strategic highways interventions
Travel Plan	TR2	Client / appropriate technical specialist	0	The Travel Plan will be adhered to including specific initiatives to reduce single occupancy car driver trips to the campus by encouraging the use of

Mitigation Measure	Mitigation Ref.	Responsibility	Applicable Phase (C / O*)	Detail of Mitigation
				sustainable modes of transport to and from the sites.
Energy and Sustainability Assessment	CC1	Client / appropriate technical specialist	c/o	Where details have not been submitted as part of the application, an Energy and Sustainability Statement will provide details on the primary energy use; efficiency measures and materials to minimise energy demand and associated emissions; and reduction of energy loss.
Noise Assessment	NO1	Client / appropriate technical specialist	0	Where necessary, hours of use restrictions shall be applied and noise emissions thresholds established in relation to plant.
Human Health	HH1	Client / appropriate technical specialist	0	Compliance with relevant legislation on health and safety and adoption of relevant training and best practice
Archaeology	AY1	Client / appropriate technical specialist	С	Where necessary, site specific survey work, sampling and recording to be undertaken.

<sup>\*</sup>C - Construction (including Demolition) / O - Operational