

Gallagher Estates Ltd
University Hospitals Coventry and Warwickshire

SCOPING REPORT FOR AN ENVIRONMENTAL STATEMENT

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1.0 INTRODUCTION

- 1.01 This report sets out the likely scope of an Environmental Impact Assessment (EIA) process for proposals encompassing the University Hospital Coventry and Warwickshire (UHCW) and land to its immediate east adjacent to the A46. A Site Plan is provided as Annex 1.
- 1.02 The scheme encompasses land within the jurisdiction of the development plan powers of Coventry City Council.
- 1.03 This Scoping Report will be used as a basis of agreeing the scope of the EIA with Coventry City Council and its consultees. In line with Regulation 10 of the Town and Country Planning (Environmental Impact Assessment (England and Wales) Regulations 1999, a Scoping Opinion is sought.
- 1.04 Information on how the EIA process will be conducted, the need for production of a formal Environmental Statement (ES) and the likely format of the ES documentation is also covered by this document.
- 1.05 The following actions have informed this report:
- an initial data analysis for site designations;
 - environmental work conducted during the selection process of the land uses within the proposal;
 - discussions with the land owners;
 - study of the relevant Ordnance Survey mapping;
 - seasonal site visits;
 - liaison with the Highway Agency;
 - liaison with the Highway Authority;
 - liaison with utility providers; and
 - extensive discussions with specialists within the client team.

OUR APPROACH TO ENVIRONMENTAL IMPACT ASSESSMENT

- 1.06 The Environmental Impact Assessment is an integrated part of the design process. The aim is to reduce the severity of 'significant' environmental effects, or even remove them, through the design process. Such mitigation is referred to as inherent or design mitigation. By following the same practice, the potential for positive effects of the

development can be enhanced. In assessing the environmental impacts arising from the proposed development, full account will be taken of both its construction and operational phases.

1.07 The assessment process will involve:

- Scoping of works to be assessed;
- Baseline identification of sensitive receptors and resources;
- Impact identification;
- Mitigation proposals; and
- Identification and reporting of any residual significant effects.

ASSESSMENT METHOD AND TERMINOLOGY

1.08 The assessment process will use the term 'impact' to identify the change that a process will create over a specified period of time. For example, construction machinery will result in an increase in local noise levels while in use. This change is the impact of the activity. The term 'effect' will describe the outcome of the assessment of an impact upon a receptor. Following the same example, the impact of noise from the use of construction machinery would be assessed for its effect upon a receptor.

1.09 For any effect to be 'significant' it must exceed a threshold. Wherever possible, such thresholds are set using national industry norms. Where such norms do not exist, the experience of the assessor is used to determine the significance threshold. Effects falling below the threshold are termed 'non-significant effects'.

1.10 Above the threshold a simple matrix comparing the severity of the impact upon the sensitivity of the receptor will be used. The magnitude of the impact will wherever possible be based upon a measurable element but will also include factors such as duration, timing and seasonality. The sensitivity element will include the number and type of receptor.

1.11 The significance of the impact will be related to four terms, namely, 'Severe', 'Major', 'Moderate' and 'Low'. Individual specialisms have assessment guidelines developed by professional bodies, e.g. the Landscape Institute and IEEM. These guidelines utilise matrices for significance assessment, where appropriate these guidelines will be modified to provide the standardisation of terms used in this assessment.

1.12 All effects will be assessed for significance based on agreed mitigation measures being in place. Some impacts cannot be directly mitigated and therefore

compensatory measures may be required to offset the predicted adverse effects. Where such measures are proposed these will be described and taken into account in the assessment of significant effects.

THE NEED FOR ENVIRONMENTAL IMPACT ASSESSMENT

- 1.13 The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 require that before consent is granted for certain types of development, an environmental impact assessment must be undertaken. The Regulations set out the form of development which must always be subject to Environmental Impact Assessment (Schedule 1 development) and other developments which may require assessment if they give rise to significant environmental effects. "Urban development projects" of over 0.5 hectares fall into this latter (Schedule 2) category.
- 1.14 Schedule 3 to the Regulations describes the criteria for determining whether a Schedule 2 development should in fact be subject to environmental impact assessment.

THE PURPOSE OF THIS REPORT

- 1.15 Regulation 10 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 provides for potential applicants to ask the relevant local planning authority to state in writing the information that ought to be provided in an environmental statement. The "scoping opinion" is to be offered only following consultation with the consultation bodies. The Regulations also stipulate a number of formal requirements regarding the scoping procedure.
- 1.16 The purpose of this report is to set out the results of the scoping exercise undertaken to date to identify the potential effects that might arise as a result of the development and to invite the comments of the Council and other statutory consultees on the appropriate scope of the ES.
- 1.17 The environmental baseline studies, consultations and preliminary mitigation strategies have informed this request for a scoping opinion.
- 1.18 The scoping report also describes the intended structure and form of the Statement; the responsibilities assigned to the consultant team; and the range of issues that need to be considered in preparing the Statement. The main part of the report sets out the scope of consideration under each topic, noting the issues to be considered and, where appropriate, the main sources of information to be used. In particular, it seeks

to draw attention to potentially significant effects arising from the development, which will be considered in greater detail in the environmental impact assessment.

THE CONSULTANT TEAM

1.19 The report has been commissioned by Gallagher Estates Ltd and University Hospitals Coventry and Warwickshire. The consultant team assembled to prepare the report comprises the following specialist consultants:

- David Lock Associates – town planning and urban design;
- Denis Wilson Partnership;
- The Environmental Dimension Partnership;
- JBA Consulting; and
- Arups Acoustics.

2.0 LOCATION OF DEVELOPMENT

- 2.01 The site lies in Walsgrave On Sowe, within the administrative boundary of the city of Coventry. The proposed application site comprises the new NHS University Hospital and adjacent farmland to the east.
- 2.02 The new NHS University Hospital in Coventry is a 1,250 bed state-of-the art hospital that replaces the Coventry and Warwickshire Hospital and Walsgrave Hospital in Coventry. From July 1st 2006 all wards and departments based in these two hospitals began to move to the new University Hospital and the two old hospitals will subsequently close.
- 2.03 The land subject of the EIA and forthcoming planning application also includes Walsgrave Hill Farm, land which lies to the east of the hospital adjacent to the A46 and B4082.
- 2.04 Walsgrave Hill Farm is allocated as a housing site in the City of Coventry Unitary Development Plan 1996 – 2011. Policy H8 identifies the site as a principal housing site for 500 dwellings which will be released when the annually monitored housing land supply falls below the five year dwelling requirement.
- 2.05 Paragraph 4.41 of the Development Plan makes clear that the early release of this land may be considered favourably should the opportunities arise for coordination of infrastructure provision, in particular access provision, for housing and the redevelopment of Walsgrave Hospital.

3.0 NATURE OF DEVELOPMENT

THE APPLICATION PROPOSALS

3.01 University Hospitals Coventry and Warwickshire and Gallagher Estates Ltd have joined together to provide much needed hospital infrastructure improvements as well as key worker housing for hospital staff. This can be delivered by the provision of 300 market dwellings on land allocated for residential development under policy H8.

3.02 The planning application proposals will include:

- Residential development including 200 Key Worker housing units
- Regularisation of hospital car parking
- New bus link connection to Farber Road
- Access to public transport link
- Compensatory flood storage
- Noise mitigation measures
- Landscaping
- Highways works to comprise minor alterations to existing roundabout plus new distributor road
- Community facilities
- Public Open Space

4.0 THE ENVIRONMENTAL STATEMENT

GENERAL STRUCTURE

- 4.01 The proposed structure of the Environmental Statement proposed is in line with good practice guidance.
- 4.02 The Statement will comprise three main parts:
- a non technical summary
 - the Statement; and
 - and supporting technical appendices.
- 4.03 The following chapters are presently envisaged:
1. Introduction
 2. The Application Site and the Development Proposal
 3. Consideration of Alternatives
 4. Landscape and Visual Assessment
 5. Ecology and Nature Conservation
 6. Agricultural Land
 7. Cultural Heritage/Archaeology
 8. Socio Economic Effects
 9. Transport
 10. Water Resources
 11. Utilities and Energy Efficiency
 12. Noise and Vibration Assessment
 13. Summary Effects Matrix

INTRODUCTION

- 4.04 The introduction will address the background to the project and the context for the application proposals. Other aspects to be covered will include the scoping exercise and consultation responses; the identification of the main environmental effects and the general approach to the assessment of effects.

THE APPLICATION SITE AND THE DEVELOPMENT PROPOSALS

- 4.05 This section will describe:
- the strategic location and access to the site;

- the site context and characteristics of the application site itself;
 - the components and character of the development; and
 - the broad approach to construction and phasing.
- 4.06 The description of the proposals and the planning policy context will be amplified in a Planning, Access and Design Statement to accompany the planning application.

CONSIDERATION OF ALTERNATIVES

- 4.07 Part II of Schedule 4 of the Regulations requires the developer to include an outline of any alternatives studied. Circular 2/99 explains that this does not impose an obligation upon the developer to undertake a specific study of the alternatives. However, the Circular does indicate that where alternatives have been considered, they should be outlined in the Environmental Statement.
- 4.08 The application proposals will represent the progressive evolution of alternative schemes within the application boundary to produce the most sustainable and environmentally appropriate scheme. Whilst the alternative site development options will be described in general terms along with the broadest environmental implications, the applicants will not produce an environmental assessment of the alternatives.

TECHNICAL CHAPTERS

- 4.09 Each technical chapter addressing each potential environmental impact will be produced on a common basis as follows:
- an introduction including relevant policy considerations;
 - a description of the methodology followed;
 - a summary of baseline conditions and survey results (if appropriate);
 - a description of the predicted effects of development initially in the construction phase (where relevant) and subsequently during the operation stage of development;
 - a description of the mitigation strategies incorporated into the proposals or to be adopted to address the effects both in the construction phase and in the operation phases; and
 - a description of the residual effects of development following the implementation of the mitigation strategies.

4.10 The effects will be assessed according to four criteria:

- geographical significance;
- nature of effect;
- significance of effect; and
- duration of effect.

4.11 The following categories of effect will be used:

- geographical significance;
 - international effect
 - national effect;
 - regional effect;
 - district effect; and
 - local effect.
- nature of effect:
 - neutral effect;
 - adverse effect; and
 - beneficial effect.
- significance of effect:
 - insignificant;
 - minor;
 - moderate; and
 - major.
- duration of effect:
 - long term effect; and
 - short term effect.

4.12 Each chapter will also include a summary matrix outlining the results of the assessment process having taken into account the mitigation measures proposed as part of the application. An example of the summary matrix is shown overleaf.

Summary Matrix of Impacts Before Mitigation.

Issue	Description of impact	Geographical significance					Environmental Impact, significance and duration
		I	N	R	D	L	
E.g. Transport	During Construction						
	Effect on...				*	*	Beneficial Moderate Short term
	Effect on...				*	*	Beneficial Moderate Short term
	On Completion						
	Effect on...			*	*	*	Beneficial Major Long term

Summary of Mitigation and Enhancement Measures and Residual Effects

The effect of enhancement measures (not required as mitigation of adverse impacts) is shown in [CAPITALS].

Issue	Description of impact	Mitigation measures	Impact following mitigation
E.g. Transport	On Completion		
	Beneficial Moderate Long term

5.0 ASSESSMENT OF EFFECTS

- 5.01 The application proposals will have a wide range of potential effects both positive and negative. In the following chapters a summary of the key issues is provided based on the preliminary scoping work.
- 5.02 To assist the focussing of the environmental assessment work a distinction is drawn between the main issues that will need significant investigation and those issues which are unlikely to be significant.
- 5.03 For each topic the consultancies likely to have an input to the relevant assessment are indicated. In many instances close liaison will be required with other specialists in the consultant team to ensure the quality of the final Statement.
- 5.04 The lead consultancy on each topic will take the initiative in ensuring that effective liaison and consultation takes place within the team and with outside organisations during the preparation of the relevant material. David Lock Associates will retain an overall co-ordinating role and will take responsibility for preparation of the final Statement.

6.0 LANDSCAPE AND VISUAL ASSESSMENT

LEAD CONSULTANT

- 6.01 The lead consultant for the landscape and visual impact assessment will be The Environmental Dimension Partnership (EDP).

PRELIMINARY SCOPING

- 6.02 Analysis and preliminary scoping of landscape and visual issues has revealed that the site does not lie within or close to any landscapes designated for their scenic beauty. Part of the site lies within the Green Belt (which PPG2 states is not a qualitative landscape designation). Coombe Abbey, a Grade 1 listed building, lies to the east of the site; its surrounding park is listed Grade II* within English Heritage's register of Parks and Gardens of historic importance. One of the main landscape issues will be the character and extent of views from Walsgrave Hill (to the east of the A46) and from surrounding trunk roads and residential areas.

ISSUES TO BE CONSIDERED

- 6.03 The effects to be considered during the landscape and visual assessment process include:
- the physical effect of the construction and operational phases including loss of, or change to, elements of the landscape including woodland, specimen trees and landscape character generally;
 - the visual impact and change in views during construction and following completion of the development in the short and long terms (residual impact);
 - the need for appropriate landscape management and maintenance regimes.

APPROACH

- 6.04 The landscape and visual effect impact assessment (LVIA) will be conducted using guidance on assessment set out in:

- "Guidelines for Landscape and Visual Impact Assessment" published by the Landscape Institute and Institute of Environmental Assessment in May 2002; and
 - "Landscape Assessment Guidance for England and Scotland" published by The Countryside Agency and SNH, also in 2002.
- 6.05 A baseline landscape assessment of landscape character and visual amenity will be conducted using the above as guiding documents. The baseline work will be updated to:
- assess how the landscape character of the application site and its surroundings fits into and potentially change the existing landscape; and
 - identify the visual envelope and the Zone of Visual Influence from within which views of the existing site and proposed development can be obtained and to identify the potential visual receptors from which the visual effect will be assessed.
- 6.06 Visual issues will be assessed using selected viewpoints representative of the character, direction and distance of views available from public vantage points. Private views will be considered, but in accordance with best practice guidance listed in para 6.04 only public views will be used to assess the significance of changes to the landscape.
- 6.07 The analysis of visual effects will include the following assessments:
- during the construction stage;
 - on the assumed date of completion of the development; and
 - on a date 20 years after completion.
- 6.08 The effect will be considered on local views (within 1.5km), medium distance views (1.5km – 3km) and long distance views (over 3km – where such views exist) taking account of:
- The sensitivity and rarity of the location as determined by environmental and planning policy;
 - the magnitude of the effect on the view and the significance of the effect;
 - the number and location of landscape and visual receptors affected; and

- whether the effect is permanent.

7.0 ECOLOGY AND NATURE CONSERVATION

LEAD CONSULTANT

- 7.01 The lead consultant on ecological matters will be The Environmental Dimension Partnership (EDP). EDP consists of a team of environmental consultants embracing the disciplines of landscape, planning, design and management, archaeology and cultural heritage, ecology and protected species, agricultural land quality and rural resource planning, EIA and SEA, arboriculture, and rights of way and access. The practice is based in Cirencester, Gloucestershire and operates throughout England, Scotland and in Wales.

PRELIMINARY SCOPING

- 7.02 EDP was commissioned by Gallagher Estates Ltd to prepare a baseline ecology report of a site in Walsgrave, Coventry, centered on Ordnance Survey Grid Reference (OSGR) SP 387 804. The report forms part of the formal scoping document.
- 7.03 The report has been prepared to inform a future Outline Planning Application for the site, which will be submitted together with a formal Environmental Statement.
- 7.04 The appraisal included undertaking a desk study and extended Phase 1 survey. The key conclusions and proposed way forward are set out in the "Approach" section.
- 7.05 With respect to ecological matters, this report will be circulated to Coventry City Council, English Nature, the Environment Agency and the Warwickshire Wildlife Trust in order to scope further detailed surveys required to inform the baseline of the Environmental Statement.
- 7.06 Scotland and in Wales.

METHODOLOGY

Desk Study

- 7.07 The desk study is an important element of undertaking an ecological appraisal of a site proposed for development, since it enables the initial collation and review of

contextual information such as designated sites and known records of protected and priority species.

7.08 The desk study involved collating information from relevant organisations. The organisations contacted included:

- English Nature (North Mercia and Warwickshire Teams);
- Environment Agency (Upper Trent Area);
- Warwickshire County Council;
- Warwickshire Biological Records Centre;
- Warwickshire Museum;
- Warwickshire Wildlife Trust;
- Warwickshire Bird Group;
- Warwickshire Amphibian and Reptile Group; and
- Warwickshire Badger Group.

7.09 The majority of known biodiversity information for the area is held by the Warwickshire Biological Records Centre. Biodiversity information was requested from the Warwickshire Biological Records Centre for an area of 2km surrounding the entire study area. In light of the scope of the proposals, this area of search is considered to be more than sufficient to cover the likely zone of influence of the proposals¹.

7.10 In addition to contacting the Warwickshire Biological Records Centre, other species-specific organisations were also contacted as set out above. The area of search was the same as for the Warwickshire Biological Records Centre request.

7.11 The Government's Multi-agency Geographic Information System for the Countryside (MAGIC2) was also consulted during the desk study. The area of search used for collating MAGIC information was extended to 5km around the whole of the study area in order to identify any internationally important sites within proximity to the proposed development site.

¹ Zone of Influence – the areas and resources that may be affected by the proposed development

² www.magic.gov.uk

- 7.12 Any pertinent information received as a result of the desk study has been included and specifically referenced within the section entitled "Issues to be Considered".

Extended Phase 1 Survey

- 7.13 The survey technique adopted for the initial habitat assessment was at a level intermediate between a standard Phase 1 Survey technique³, based on habitat mapping and description, and a phase 2 survey, based on detailed habitat and species surveys. The survey technique is commonly known as an Extended Phase 1 Survey.
- 7.14 The level of survey involves identifying and broadly mapping the principle habitat types and identifying the dominant plant species present in each principle habitat type. In addition, any actual or potential protected or priority species⁴ constraints were identified and scoped.
- 7.15 The survey was undertaken on the 11th May 2006. The weather conditions during the survey were dry and sunny with an approximate air temperature of 20°C.

Evaluation

- 7.16 The findings of the ecological appraisal will be evaluated during the preparation of the subsequent ecology Environmental Statement chapter. The evaluation will be undertaken with reference to the Ecological Impact Assessment (EclA) guidance published by a steering group of the Institute of Ecology and Environmental Management (IEEM)⁵.

ISSUES TO BE CONSIDERED

- 7.17 The following will be considered as part of the environmental assessment process:
- the likely effects on statutory and non-statutory designated sites;

³ Joint Nature Conservation Council (2004) Handbook for Phase 1 Habitat Survey – A technique for Environmental Audit (reprinted with minor corrections for original Nature Conservancy Council publication).

⁴ Species list in accordance with Section 74 of the CRoW Act as set out in Annex C of Circular 06/05

⁵ IEEM (July 2006) Guidelines for Ecological Impact Assessment

- the likely effects on protected species;
- the likely effects on other species and habitats present on the site;
- the loss of existing habitats and the opportunities for the creation of new habitats in accordance with local Biodiversity Action Plans; and
- the management and enhancement of any retained or new ecological features within the site.

SITE CONTEXT

- 7.18 The site is located to the south east of Coventry and is bounded to the north by residential development. It is bounded to the west by the new hospital, to the south by the B4082 and to the east by the A46.
- 7.19 The site itself consists of agricultural fields with associated field boundaries, wet ditches and farm ponds. At the time of survey, a number of fields were being used as soil storage areas as a part of the development of the hospital site, which is separated from the site by the River Sowe.

DESIGNATED SITES

- 7.20 Information regarding designated sites has been received from the Warwickshire Biological Records Centre and MAGIC.
- 7.21 The site is not partially or wholly covered by any statutory designations. There is, however, one statutorily designated Sites of Special Scientific Interest (SSSI), close to the site as described below.
- 7.22 The site is partially covered by the River Sowe non-statutorily designated Ecosite. There are also a further three Ecosites within 2km of the site.
- 7.23 Designated sites within 2km of the site are summarised in the table below.

Site Name	Site Location	Reason for Designation
Combe Pool SSSI and Ecosite	Approximately 170m to the south east of the site.	One of the most important ornithological sites in Warwickshire for its herons and other breeding birds, and for its wintering wildfowl
River Sowe Ecosite	Adjacent the western site boundary.	Much of the river retains aquatic, emergent and bankside vegetation.

River Sowe and Tributaries Ecosite	Stemming from section of River Sowe within the site, to the north of the site.	Important Wildlife Corridor
Hill park Wood Ecosite	Approximately 1km to the north east of the site.	Ancient woodland listed on English Nature
Wyken Croft Nature Park Ecosite	Approximately 2km to the west of the site.	Reclaimed from mining into a nature park during the 1980s

HABITATS

- 7.24 The broad habitats within the study area are illustrated in Plan EDP 1. The site consists of fields in agricultural production bounded by hedgerows. The following account should be read in conjunction with this plan.

FIELDS

- 7.25 The fields are in use for arable production with associated wet ditches and hedgerows. The field margins are made up of a number of grass species including barren brome (*Bromus sterilis*), meadow foxtail (*Alopecurus pratensis*), annual meadow grass (*Poa annua*) and false oat-grass (*Arrhenatherum elatius*). Other species present within the field margins include nettle (*Urtica dioica*), bramble (*rubus fruticosus* agg.), cow parsley (*Anthriscus sylvestris*), rosebay willowherb (*Chamerion angustifolium*), cleavers (*Galium aparine*) and dock (*Rumex* sp.).

HEDGEROWS

- 7.26 The fields are separated by a range of hedgerows (H1 – H20). Some of these hedgerows may qualify as 'important' under the Hedgerow Regulations 1997.

WATERBODIES

- 7.27 There is one field pond, several wet and dry ditches and the River Sowe within the site boundary. These are described below.

PONDS

- 7.28 The pond is situated in the corner of one of the agricultural fields on the north eastern boundary of the site. The pond is approximately 2m long, 1.5m wide and ranges in depth from approximately 0.5m to 1m at the centre. The water was clear at the time of survey with some litter and debris within it. There was very little submerged vegetation present within the pond at the time of survey.

RIVER SOWE

- 7.29 The River Sowe is a generally shallow watercourse flowing south through the site. The section of the river within the northern-most section of the site has a gravel bottom, further south the bottom becomes more silty. For the majority of its length the river is overshadowed by the hedgerows bounding the adjacent fields. For this reason there is very little vegetation along much of the river's length. The species present include branched bur-reed (*Sparganium erectum*) and Canadian waterweed (*Elodea Canadensis*). The banks are vegetated with tall ruderal vegetation for the most part with species including nettle, rosebay willowherb, cow parsley, dock, wavy hair-grass (*Deschampsia caespitosa*), celandine (*Ranunculus ficaria*), black nightshade (*Nigrum solanum*), cocksfoot and false oat grass.

SPECIES

- 7.30 The following species account summarises the findings of the desk study combined with any actual or potential species constraints identified during the general field survey.

BATS

- 7.31 Very few existing bat records have been received for the area of search and no records of bats have been received for the area within the site. Species that have been recorded for the area surrounding the site include serotine (*Eptesicus serotinus*), Daubenton's (*Myotis daubentonii*), noctule (*Nyctalus notula*), soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*P. pipistrellus*) and whiskered/Brandt's (*Myotis mystacinus*). The records that have been received date from between 1982 and 2000.

- 7.32 Opportunities for bats within the site of the proposed development range from listed farm buildings and mature trees with the hedgerows acting as both potential commuting and foraging habitat for bats roosting within and outside of the site.

OTHER MAMMALS

- 7.33 Water vole (*Arvicola terrestris*) have been recorded within the vicinity of the site including on the River Sowe and its tributaries, the Smite Brook and Coombe Pool during 2002 and 2003.
- 7.34 A potential badger sett is located in the south eastern corner of the site with several other records of badger setts within the vicinity of site. One record of otter has been received for the Smite Brook which is situated to the west of the site with links to the River Sowe and its tributaries as well as Coombe Pool.

AMPHIBIANS AND REPTILES

- 7.35 Several records of common reptile and amphibian species have been recorded from within the search area. Species include grass snake (*Natrix natrix*), smooth newt (*Triturus vulgaris*), common toad (*Bufo bufo*) and common frog (*Rana temporaria*). There are suitable habitats within the site for both reptiles and amphibians.

BIRDS

- 7.36 No records of birds have been received to date, however, incidental records of several species were made during the extended Phase 1 survey. Species recorded included song thrush (*Turdus philomelos*), great tit (*Parus major*), robin (*Erithacus rubecula*), chaffinch (*Fringilla coelebs*), house sparrow (*Passer domesticus*), collared dove (*Streptopelia decaocto*), wren (*Troglodytes troglodytes*) wood pigeon (*Columba palumbus*), blackbird (*Turdus merula*), cuckoo (*Cuculus canorus*), blue tit (*Parus caeruleus*), magpie (*Pica pica*), crow (*Corvus corone*), long-tailed tit (*Aegithalos caudatus*), chaffinch (*Phylloscopus collybita*) and yellowhammer (*Emberiza citrinella*).

INVERTEBRATES

- 7.37 No records of invertebrates have been received to date. Incidental records of invertebrates were made during the extended Phase 1 survey and included orange

tip (*Antnocharius*), bumble bee (*Bombus* sp.), red admiral (*Vanessa atalanta*), peacock (*Inachis io*) and speckled wood (*Pararge aegeria*).

APPROACH

7.38 The following detailed surveys will be undertaken to complete the assessment of the issues set out above:

- River Corridor Survey;
- Hedgerow Survey;
- Bat Survey;
- Water Vole Survey;
- Otter Survey;
- Badger Survey;
- Amphibian Survey;
- Reptile Survey; and
- Breeding Bird Survey.

7.39 Where appropriate, the detailed survey briefs for the above surveys will be scoped with the appropriate body. The following survey methods are proposed.

RIVER CORRIDOR

7.40 The survey technique adopted will follow the guidelines outlined in the National Rivers Authority River Corridor Survey: Methods and Procedures booklet⁶. The whole length of the river within the site will be surveyed. The survey will be undertaken from both from the banks (where possible), and from within the watercourse itself (again, where possible). Abundant plant species will be recorded both from on the banks and within the river channel and note will also be made of other species of interest.

⁶ National Rivers Authority (1992). River Corridor Surveys: Methods and Procedures. Conservation Technical Handbook No 1.

HEDGEROW SURVEY

- 7.41 This survey will be undertaken in accordance with criteria from the Department of Environment (1997) *The Hedgerows Regulations 1997*. The methodology used will be in accordance with that described in the Hedgerow Survey Handbook⁷ and will involve recording both woody species and ground flora from measured sections and generally assessing each of the hedgerows within the site. The composition and other features of each hedgerow will then be assessed against criteria set out in the Hedgerows Regulations 1997.

BAT SURVEY

- 7.42 The bat survey will be undertaken in accordance with survey methodology set out in English Nature's Bat Mitigation Guidelines⁸. All buildings falling within the site boundary will be subject to both internal and external inspections. All mature trees within the site will be assessed for their potential to support roosting bats through an assessment of the features that they have such as rot holes, crevices and loose bark, and those of highest potential will be subject to further investigation using an endoscope. Following preliminary assessments, emergence and activity surveys will be undertaken using a Duet bat detector and computer analysis using Batsound.

WATER VOLE SURVEY

- 7.43 The standard methodology for assessment of 500m stretches of watercourse⁹ will be used to assess the lengths of the River Sowe for presence/absence of water vole. The number of water vole latrines, burrows and feeding stations will be noted in order to make an assessment of population status at the site. A standard form will be used to record the evidence of water vole amongst other species and the description of the ditch habitat and surrounding land uses.

⁷ Bickmore, C. 2002. Hedgerow Survey Handbook: a standard procedure for local surveys in the UK. Steering Group for the UK Biodiversity Action Plan for Ancient and/or Species-rich Hedgerows

⁸ Mitchell-Jones, A. 2004. Bat Mitigation Guidelines. English Nature

⁹ Methodology and standard survey forms obtained from Strachan, R. 1998. Water Vole Conservation Handbook, English Nature, the Environment Agency and the Wildlife Conservation Research Unit.

OTTER SURVEY

- 7.44 A standard methodology for assessment of watercourses will be undertaken in accordance with LIFE's Monitoring the Otter¹⁰. Suitable bridges where spraint sites could be located will be identified and the whole length of the watercourse within the site will be surveyed for evidence of otter. Evidence searched for will include spraints, footprints and otter sightings.

BADGER SURVEY

- 7.45 The survey will be undertaken in accordance with standard methodology published by the Mammal Society¹¹. The survey will involve checking all suitable habitat for evidence of badgers. Evidence looked for will include setts, latrines, hairs attached to fencing and well-used pathways.

AMPHIBIAN SURVEY

- 7.46 Three standard techniques will be used in order to determine the presence/absence and abundance of amphibians in the stagnant water bodies present within the site. The survey will be particularly intended to establish whether great crested newts (*Triturus cristatus*) are present at the site and, if present, assess the population levels. Therefore, the surveys will be undertaken in accordance with the survey standards set out in English Nature's guidelines¹². The techniques are described more fully elsewhere¹³ but are summarised below:
- 7.47 Torching: This involves searching water bodies by torchlight between dusk and midnight and is an effective means of detecting adult newts. A 1,000,000 candle power torch was used during this part of the survey;
- 7.48 Bottle Trapping: This involves the use of funnel traps (made from 2 litre plastic bottles) that are inserted into the water along the margin of the pond during the

¹⁰ Chanin, P. 2003. Monitoring the Otter: Conserving Natura 2000 Rivers Monitoring Series 10, Life in UK Rivers

¹¹ Harris, S., Cresswell, P. and Jefferies, D. 1989. Surveying Badgers, Mammal Society

¹² English Nature (2001). Great Crested Newt Mitigation Guidelines. English Nature, Peterborough.

¹³ For Example: Langton, T, Beckett, C and Foster, J (2001). Great Crested Newt Conservation Handbook. Froglife, Halesworth.

evening and checked the following morning. Newts are able to gain easy access but become trapped by the funnel arrangement;

- 7.49 Netting: This involves use of a dip-net to detect adult newts or, later in the year, newt larvae. A net with 250mm frame and 2mm mesh was used; and
- 7.50 Egg Searching: This method involves searching both live and dead submerged vegetation for newt eggs. This is an effective method for detecting the presence of newts.
- 7.51 The amphibian surveys will be undertaken by English Nature great crested newt licensed surveyors.

REPTILE SURVEY

- 7.52 Standard methodology as stated in the Herpetofauna Workers Manual¹⁴ and Herpetofauna Groups of Britain and Ireland (HGBI) Reptile Survey advice sheet¹⁵ will be combined for this survey. This survey will involve the setting out of artificial refugia, in the form of 0.5m x 0.5m squares of roofing felt and leaving them to 'bed-in' for two weeks. Once the refugia have 'bedded in', seven separate checks in suitable weather will be undertaken. This will allow an assessment of the population to be made.

BREEDING BIRD SURVEY

- 7.53 Due to the paucity of the habitats within the site, it is not proposed to undertake detailed bird surveys to inform the EIA. However, owing to the presence of some local and national Biodiversity Action Plan species recorded during the extended Phase 1 survey of the site it is proposed that one survey visit based on standard British Trust for Ornithology Common Bird Census methodology will be undertaken.

INVERTEBRATES

- 7.54 Due to the paucity of the habitats within the site, it is not proposed to undertake detailed invertebrate surveys to inform the EIA.

¹⁴ Gent, T. and Gibson, S. 2003. Herpetofauna Workers' Manual, JNCC

CONCLUSION

7.55 From the surveys it will be possible to:

- classify the habitats found and identify their relevant importance and capacity to accommodate change;
- establish potential populations of species;
- produce representative species lists for those habitats considered to be of merit; and
- assess the effect of the development on areas of nature conservation value off site.

7.56 The final part of the assessment is to:

- assess the magnitude and significance of any effects arising from the development;
- to identify constraints to the development; and
- identify opportunities for the site in ecological terms and propose mitigation strategies to offset effects identified and an appropriate habitat creation and management scheme.

7.57 Assessment of impact will be undertaken with reference to the Ecological Impact Assessment (EclA) guidance published by a steering group of the Institute of Ecology and Environmental Management (IEEM).

¹⁵ Froglife. 1999. Froglife Advice Sheet 10 Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation, HGBI

8.0 AGRICULTURAL LAND

LEAD CONSULTANT

- 8.01 The lead consultant addressing cultural heritage matters will be The Environmental Dimension Partnership (EDP).

PRELIMINARY SCOPING

- 8.02 This chapter will focus on agricultural land issues, which are likely to relate to the loss of farmland through the construction programme. This relates to the permanent loss of farmland to the occupying farm businesses and the national agricultural resource of farmland, as well as the soil quality itself, coupled with the financial implications to the farm businesses.

ISSUES TO BE CONSIDERED

- 8.03 The main issues to be considered are:
- The potential loss of high quality agricultural land (Best and Most Versatile).
 - The financial implications for the businesses currently farming the land both from a lost income perspective due to a reduced farmed area and through increased costs created by fragmentation of the land.
 - The physical implications for the farm businesses of the development on the farmland, which would include fragmentation of farm units, trespass originating from residential development and the disruption of land drainage systems.

APPROACH

- 8.04 The chapter will include the study of published information on climate, geology, soils and DEFRA (MAFF) provisional Agricultural Land Classification (ALC). Should there be no published ALC data, there may be a need to undertake on-site ALC fieldwork.

- 8.05 Assessing the possible effect of the proposed development upon the management of farmland requires analysis of the existing farm businesses. This analysis will involve looking at the viability of the farm businesses without this land, the effect on the businesses cost structures due to fragmentation, the impact on subsidy payments to the farm businesses under the Single Payment Scheme run by the RPA and the impact on environmental management schemes that may currently be in place on the land. This issues and the issues such as fragmentation of farm units, trespass and disruption of drainage will be assessed through farmer interviews and assessment on business performance either from actual farm accounts or standard data for the area.

9.0 CULTURAL HERITAGE/ARCHAEOLOGY

LEAD CONSULTANT

- 9.01 The lead consultant addressing cultural heritage matters will be EDP.

PRELIMINARY SCOPING

- 9.02 This section will focus on archaeological and cultural heritage issues. Preliminary studies have indicated the potential for archaeological deposits to survive, as well as issues relating to the setting of listed buildings and a grade II* Registered Park and Garden (Coombe Abbey).

ISSUES TO BE CONSIDERED

- 9.03 The following issues are to be considered as part of the EIA process:
- The potential for buried archaeological features to survive within the application area, In particular medieval rural deposits may survive
 - The potential for earthworks, in the form of ridge and furrow earthworks to survive
 - The setting of other cultural heritage features including listed buildings and a Registered Park and Garden.
- 9.04 Development in the form of housing, car parking, infrastructure and flood alleviation measures could impact on any buried archaeological features or could affect the

APPROACH

- 9.05 Initial work has included consulting both the Coventry City and Warwickshire County Council Sites and Monuments Records, as well as checking historic maps and other records. Air photographs (held by the National Monuments Record in Swindon), listed building records and English Heritage's Register of Parks and Gardens have also been checked. A walkover has also been undertaken. This included checking the site area, as well as the nearby Coombe Abbey Park. Although archaeology and cultural heritage are unlikely to be a major issue, there is likely to be a need to undertake a limited amount of fieldwork. This is due to the size of the proposed development area

and the known potential for the area. Initially, evaluation is likely to involve undertaking geophysical survey. The work will be undertaken in accordance with guidelines produced by the Institute of Field Archaeologists, as well as will County and Local Plan policy.

- 9.06 The results of this work will provide the basis for assessing any impacts on the archaeological / cultural heritage resource and for preparing appropriate mitigation strategies. Mitigation could take the form of masterplan design, preservation *in situ* through open space provision, archaeological excavation or watching briefs during the construction programme.
- 9.07 As part of the overall mitigation strategy the results of any fieldwork will be prepared into a site archive and the results published in an appropriate journal.

10.0 SOCIO-ECONOMIC EFFECTS

LEAD CONSULTANT

- 10.01 The lead consultant in respect of socio-economic effects will be David Lock Associates.

PRELIMINARY SCOPING

- 10.02 This section will focus in particular on demography, land use and property, the economy, community facilities and recreation opportunities. Preliminary surveys have been undertaken of the range of facilities and services in the surrounding settlements.
- 10.03 Identified housing needs will be met and the services and facilities in the area will be supplemented to meet the needs of the community. The effect of the development on demography, services and amenities is therefore unlikely to be a key issue.

ISSUES TO BE CONSIDERED

- 10.04 The issues to be considered are:
- the balance between employment and housing development, taking account of existing employment on the site and in the surrounding area;
 - the provision of appropriate affordable housing including key working housing; and
 - the likely effect on existing services and facilities in existing settlements and the need for new facilities.

APPROACH

- 10.05 The assessment will:
- review housing need, patterns of settlement and access to facilities;
 - survey and where appropriate determine the capacity of community, sports and recreation facilities services in the surrounding area; and
 - identify the facilities that will be affected by the development.

- 10.06 Effects will be assessed on a qualitative basis by assessing the demand for additional facilities and services and relating demand to the provision made in the area already and in the application proposals. Regard will had to existing and emerging planning policy which may deliver additional development and related facilities in the vicinity although the objective is to ensure that the application proposals deliver a balanced and well served community.

11.0 TRANSPORT

LEAD CONSULTANT

- 11.01 The lead consultant on transport matters will be the Denis Wilson Partnership (DWP). DWP is an independent firm of specialist consultant whose core business is transport planning and highway infrastructure design.

PRELIMINARY SCOPING

- 11.02 DWP were commissioned by UHCW and Gallagher Estates Ltd to prepare two preliminary scoping reports. The first of these was entitled "Access Options" and examined available options for providing secondary access to the hospital; the second was entitled "Transport Assessment Scoping Report" and was prepared to establish the scope and methodology of the Transport Assessment.
- 11.03 The Transport Assessment Scoping Report includes a summary of the Access Options report and has been issued to the Highways Agency, Coventry City Council and Warwickshire County Council.

ISSUES TO BE CONSIDERED

- 11.04 The following matters will be considered as part of the EIA process:
- the likely impact of the transportation strategy, Travel Plan and in particular the public transport strategy, on patterns of movement of people and goods, on modal shift (changing how people travel to more sustainable modes of transport), and on reducing the need to travel especially by car; and
 - the scope for giving priority to pedestrians and cyclists (including leisure routes) and the potential to minimise trip generation by car;
 - the likely effect of development on the local highway network, based upon the re-distribution of traffic and any net increase in traffic over and above that generated by the previous, established use of the site;
 - the need for highway improvements;

- the road, bus and pedestrian hierarchy within the site and the distribution of traffic within the new community; and
- impact of construction traffic during the construction phase of development.

APPROACH

- 11.05 The Transport Assessment Scoping report has been issued to and consultations have taken place with the Highways Agency, Coventry City Council and Warwickshire County Council. That report has established the principles for the extent and methodology of the Transport Assessment and the means by which mitigation measures can be agreed by all parties.
- 11.06 It was also clear from this study that any residential development located on the allocated land would need to link into the adjacent residential area of Farber Road and Brade Drive for planning and highway reasons. This link should not provide access into the hospital.

METHODOLOGY

Options analysis

- 11.07 The primary objective of the hospital is to achieve a second point of access to meet their existing "blue-light" and operational requirements. DWP examined 6 separate locations from which to gain a second point of access into the hospital. As follows:
- Brade Drive (x2)
 - Farber Road
 - Dorchester Way
 - Clifford Bridge Road roundabout
 - Sowe link road
- 11.08 Consideration was also given to whether a new grade-separated access onto the A46 would be required to meet the development needs.
- 11.09 These were each considered in isolation and in a variety of combinations. In considering these access options the following constraints and opportunities were considered:

- Ability to serve the main hospital's needs
 - Ability to serve the key worker accommodation
 - Highway capacity
 - Land availability
 - Flood plain constraints
 - Means of access to open market housing
- 11.10 These criteria were considered for each of the combinations of access options with particular weighting being given to the first three.
- 11.11 The Environmental Statement will further examine these access options in terms of landscape, ecology, economy, heritage, water resources and noise.
- 11.12 From this study a preferred means of access for the hospital was determined. This comprised the upgrading of the existing access and the construction of a new access road from a new junction on the Sowe link road, running parallel to the A46 and linking into the hospital at the north-west corner of its site. The alignment and design of this route has been chosen so as not to prejudice any future plans to provide a grade separated junction onto the A46.

Travel Plan and sustainable travel

- 11.13 As part of the planning permission granted for the redevelopment of the Walsgrave Hospital site a number of conditions and planning obligations were imposed concerning the requirements for improving travel choice to the site. The Trust entered into a Section 106 Agreement with Coventry City Council which outlines the following obligations that the Trust must honour. These are as follows:
- 11.14 Contributions to physical works:
- To pay "The Public Transport Infrastructure Contribution" of £1.5million to the Council within 7 days of Financial Close.
 - To provide a Showcase Extension to the satisfaction of the City Council prior to the first use of phase 2.

- To provide a bus passenger lounge prior to the first use of phase 2, including the provision of real time information systems.

11.15 Green Travel obligations:

- To appoint a Staff Travel Plan Co-ordinator
- To submit a Green Travel Plan within 28 days of Financial Closure
- Inclusion of a monitoring scheme
- Modal Share Targets
- Increased awareness of public transport and provision for taxis
- Car Share register
- The restriction and management of on-site parking facilities, including pricing structure to encourage the use of alternative modes
- To maintain the internal Rugby Bus service
- To investigate the bus route and service alterations required to meet the "Bus Programme Requirement" and to provide annual support in the sum of £750,000 for those enhanced services.
- To investigate report and recommend the basis for a residential parking scheme for the area directly adjacent to the site and to pay the City Council the costs of implementation of such a scheme and £20,000 per annum for a period of 10 years for the future maintenance associated with the scheme.

11.16 The current proposals to rationalise car parking at the hospital and to provide a secondary access do not alter the Trust's obligations under the existing S106 Agreement. However, it will be necessary to review the Travel Plan to identify whether the change in parking and access arrangements, and the relocation of the key worker accommodation requires any changes to the schemes and management measures proposed as part of the Travel Plan.

11.17 The new residential development will require a Travel Plan of its own which will be tailored to the specific needs of a residential community but which will link closely with the hospital's Travel Plan to capitalise on the larger scale of sustainable travel initiatives included in that plan.

- 11.18 Both Travel Plans will be prepared as drafts and prepared in partnership with Coventry City Council and the Highways agency.

Traffic generation and re-distribution

- 11.19 The residential element of the development will generate new vehicle trips on the surrounding highway network. The level of traffic generation will be determined with reference to established traffic generation databases such as TRICS but will also take account of the effect of the Travel Plan and future sustainable travel initiatives and practices.
- 11.20 The hospital will not generate any more traffic as a result of the proposed secondary access and rationalised car parking. These proposals will however, result in a re-distribution of vehicle movements on the highway network, the impact of which will need to be determined.
- 11.21 The home postcodes of 5,725 staff, full time, part time and bank staff, which are currently based at Walsgrave Hospital, were obtained from the Trust. The postcodes were plotted on Microsoft Autoroute mapping software in order to locate the residence of each employee in relation to the road network.
- 11.22 Assuming that the new secondary access to the hospital is to be located on the Sowe Link and this access will serve all new car parking at the hospital there are five main routes to approach the new access as shown below:
- via the M6 (M69);
 - via the A46 junction with B4082 (from the south);
 - via the A4600 Ansty Road from the south and the north; and
 - the B4082 from the A428 junction and further south.
- 11.23 Assumptions have been made for each group of postcodes as to their likely route to the hospital site.
- 11.24 For the purpose of establishing a distribution network for the future residential traffic we have examined existing journey to work data and the existing flow of traffic on the highway network surrounding the site. At present more people commute into Coventry to work than commute out at a ratio of approximately 2:1. The site benefits

from employment sites in close proximity, however, with a robust travel plan the aim is that much of this local commuting will be by cycle, walking or local transport.

- 11.25 The residual car borne journeys to work in Coventry will be travelling to the city centre. For this reason traffic distribution will be weighted 60% towards the city centre. The remaining 40% will be using the trunk road network, either northwards towards the motorway or southwards on the A46. On the basis of existing traffic flows on the local highway network it is reasonable to assume that this will be divided 25% to the north and 15% to the south.
- 11.26 These traffic distribution principles will be used within the Transport Assessment to establish changes in traffic levels on the highway network.

Scope of traffic analysis – junction selection

- 11.27 During early discussions with Coventry City Council and the Highways Agency it has been agreed that the junctions to be analysed as part of the traffic analysis should be determined by the following criteria:
- Junctions onto the highway network;
 - Junctions at which the proposed development would increase traffic flows by 5% (for congested roads) or 10% (uncongested) during the peak periods; and
 - Other junctions known to be sensitive that may be affected by the development.
- 11.28 By applying these criteria the TA will include capacity analyses at the following junctions:
- Existing hospital access
 - New junction onto Sowe link road
 - Residential link onto Farber Road
- 11.29 The junctions immediately “up and downstream” of the site accesses are likely to experience more than 5% increase in traffic and will therefore need to be analysed:
- Existing at-grade roundabout on A46 j/w Sowe link road
 - Clifford Bridge Road / Sown link road roundabout
 - Clifford Bridge Road / Ansty Road roundabout

11.30 A network analysis will then be conducted using the agreed traffic distribution to assess proportional increases in traffic along each link from the above junctions. As the traffic dissipates into the network the proportional increase of traffic will reduce at each subsequent junction. The threshold of 5% will generally be applied to classified roads and 10% to unclassified roads respectively unless specific circumstances exist which alter that assumption. The area of investigation will extend to a point where the development results in less than 5% or 10% on the network. It may not be necessary for every such junction to be analysed for operational capacity so the TA will make a reasoned recommendation for each junction.

Method of junction analysis

11.31 Each junction identified as meeting the assessment criteria will be analysed for operational capacity individually using the following nationally recognised computer software:

- Priority junctions and cross roads: [TRL] PICADY
- Roundabouts and mini-roundabouts: [TRL] ARCADY
- Signal controlled roundabouts or linked signal junctions: [TRL] TRANSYT
- Individual signal controlled junctions: [JCT Consultancy] LINSIG

11.32 The development is anticipated to have a phased completion with the key worker accommodation and hospital parking being completed in 2008 and the open market residential development being completed in 2010. The junctions will be analysed for the assumed years of completion of 2008 and 2010 plus 5 years after completion (2015). In the case of the trunk road network a further sensitivity test will be conducted for 15 years after completion (2025). If any highway mitigation measures are identified, they will also be assessed for a design year of 2025.

11.33 A growth factor will be applied to the base (surveyed) traffic from the year of survey to the year of completion and then to the assessment year (and sensitivity test). The appropriate growth factor is NRTF Low growth.

11.34 Where junctions are assessed for operational capacity they will be tested for 2006 as a calibration then year of opening and design year. In each case the capacity analyses will be undertaken both with and without development traffic. Should mitigation measures be required for the "with development" scenarios they will be

designed to achieve nil-detriment when compared to the "without development" assessments.

Safety

- 11.35 Safety records will be analysed to determine any trends, clusters or patterns of accidents that may be affected by the development or any proposed mitigation measures. Where any such trends, clusters or patterns are identified, and can be shown to be affected by the development, accident remedial measures will be proposed within the TA.
- 11.36 Police accident records for the last 5 years will be used for the road safety analysis work. The area of assessment will coincide with the area of assessment derived for capacity analysis.
- 11.37 In addition to the highway network accident analysis Stage 1 Road Safety Audits will be undertaken for any proposed highway improvements whether they are proposed for capacity or safety reasons. The Stage 1 RSAs will be conducted by DWP qualified Safety Auditors for whom CVs will be submitted to the highway authorities. No member of DWP staff involved in any other aspect of the proposed development will be permitted to act as a member of the Safety Audit team.

12.0 WATER RESOURCES

INTRODUCTION AND LEAD CONSULTANT

- 12.01 The lead consultant for addressing the effects on local hydrology will be JBA. A further consultant will assess the strategy for foul water, hydro-geology of the locality and surface water drainage.

PRELIMINARY SCOPING

- 12.02 This section will focus in particular on the floodplain issues relating to the River Sowe and its tributary, Withybrook.
- 12.03 A topographic survey has been completed and a hydraulic computer model of the Withybrook and River Sowe has been updated as requested by the Environment Agency. The 1 in 100-year (PPG25 flood zone 3) and 1 in 1000-year (PPG25 flood zone 2) flood extents have been identified.
- 12.04 Floodplain rationalisation will be considered to make better use of the site for development layouts, whilst retaining essential floodplain.

ISSUES TO BE CONSIDERED

- 12.05 The following issues will be considered as part of the environmental assessment process:
- the development of a strategy for surface water drainage;
 - the likely effects on the hydro-geology of the locality including the effects on infiltration of groundwater, water quality and local abstraction;
 - the likely effects on local hydrology including local water courses; and
 - the strategy for the management and treatment of foul water (including waste water use).

APPROACH

- 12.06 A drainage strategy will be prepared in accordance with best practice in achieving sustainable urban drainage and PPG25. The existing foul water drainage network

shall be investigated and assessed. Appropriate means of foul water disposal will be considered and agreed with the appropriate authorities.

12.07 Surface Water will need to be attenuated on site before regulated discharge to existing watercourses. The run-off from the proposed development should be restricted not to exceed the current rate of runoff from the site. Surface water attenuation is already accommodated in existing balancing ponds.

12.08 The inter-relationship between the drainage strategy and the protection and creation of important habitats will also be addressed.

13.0 UTILITIES AND ENERGY EFFICIENCY

LEAD CONSULTANT

- 13.01 The lead consultant in respect of utilities will be David Lock Associates.

PRELIMINARY SCOPING

- 13.02 Initial consultations have been held with the principal energy and utility providers in the area and have confirmed that the development can be serviced from local networks.
- 13.03 The applicant is keen to pursue sustainable development principles and as such has identified a need to consider the means available to ensure the efficient use of energy and of managing the production, recycling and disposal of waste.
- 13.04 Much of the strategy for the reduction in energy consumption is driven at national level. The purpose of the energy section in the EIA is to scope the potential for measures in house design, layout and energy supply might contribute to the reduction in energy demand within the new community.

ISSUES TO BE CONSIDERED

- 13.05 The issues to be considered are as follows:
- the contribution that settlement planning might make to energy conservation and management;
 - the scope for the incorporation of energy saving principles in house design; and;
 - the effective supply of utilities to the new community.

APPROACH

- 13.06 The approach adopted will include:
- a review of national and local energy objectives;
 - consultations with energy providers to identify potential energy supplies;

- scoping of some of the elements that might comprise part of an energy strategy for the new community to be developed as part of a Design Code for the development and in individual site briefs.

14.0 NOISE AND VIBRATION ASSESSMENT

LEAD CONSULTANT

- 14.01 The lead consultant for the landscape and vibration assessment will be Arup Acoustics.

PRELIMINARY SCOPING

- 14.02 An initial examination of the proposals has indicated that the proposed development will have a result in changes in the likely volume and character of the traffic flow in the area. The noise and vibration effects from the site to the surrounding area are likely to be involved only in the changes to the traffic. The site will be affected by the noise from both the A46 and the proposed new link road and the effect upon the suitability of the site for residential development will also be considered.

ISSUES TO BE CONSIDERED

- 14.03 The effects to be considered during the assessment process include:
- the noise and vibration exposure that may result as a consequence of the construction process – this will include the initial site properties and grading;
 - the noise and vibration changes attributable to the traffic changes in the local area and in the operation of the proposed link road; and
 - an assessment of the site suitability for residential development.

APPROACH

- 14.04 These environmental factors will be assessed using the guidance included in:
- DMRB
 - BS5228
 - BS4142
 - PPG 24

- 14.05 A baseline noise survey will be carried out to measure the ambient noise conditions on and around the site. Using the traffic figures for the opening year and the design year and the methods and procedures of the Calculation of Road Traffic Noise a noise model will be prepared to calculate the road noise exposure of the area. The model will be used to compare the "do something" to the "do minimum" situation and the noise effects will be categorised from the change in these impacts. These noise maps will also be used to assess the suitability of the site for residential development.
- 14.06 The analysis of noise and vibration effects will also include those during the construction phases of the development.
- 14.07 The effects will be assessed as the direct impact of the development in the immediate area of the site and the indirect impact upon area at a distance of 300m from the nearest new or altered highway.

15.0 AIR QUALITY

LEAD CONSULTANT

- 15.01 The lead consultant for the air quality assessment will be Arup.

PRELIMINARY SCOPING

- 15.02 This section will review the likely significant air quality issues resulting from the proposed development. This will inform the assessment process by identifying which aspects should be investigated to establish how air quality in the surrounding area will be affected by the proposed development.

SITE CONTEXT

- 15.03 The proposed development site borders the A46 to the east and residential areas to the north and west (properties to the north border the proposed development site red line boundary).
- 15.04 Air quality monitoring is carried out by Coventry City Council (CCC) and has led to the designation of three Air Quality Management Areas (AQMAs) within Coventry City area, with data from continuous and diffusion tube monitors showing air quality to be typical of an urban area, with nitrogen dioxide (NO₂) objectives being exceeded at roadside locations in recent years¹⁶. AQMA 2 is the closest to proposed development site, being over 2km to the west.

ISSUES TO BE CONSIDERED

- 15.05 The potential issues to be considered during the assessment process include:
- Construction related traffic and activities and their effect on existing local air quality;
 - The effect on local air quality of predicted changes in traffic volumes on the local road network and in car parking on-site;

¹⁶ Coventry City Council, Air Quality Updating and Screening Assessment (2006)

- Any on site boilers included within the development.

APPROACH

- 15.06 The assessment approach will consider the changes in traffic on local roads and will examine whether any AQMAs are likely to be affected by the proposals.
- 15.07 It is most likely that detailed dispersion modeling will be used to assess the impact of the proposed development on the local air quality. The model used is expected to be CALINE4; however, this is dependent on the scope of the traffic changes identified. The modeling will compare the Do Nothing (i.e. without the proposed development) with the Do Something situation. The model will be used to derive the appropriate parameters for comparison with relevant air quality limit values objectives for the proposed year of opening of the development and 2010. Modelling will be carried out where there is likely to be a significant change in traffic (based on the National Society for Clean Air and Environmental Protection Guidance [NSCA]¹⁷) or where an AQMA may be affected.
- 15.08 Input data for the modeling will be obtained from the transport consultants, the Meteorological Office (if detailed dispersion modeling is used) and from the National Air Quality Archive (for background pollutant concentrations).
- 15.09 The air quality assessment will take into account of relevant DEFRA and NSCA guidance regarding air quality and development planning.
- 15.10 The construction impacts of the proposed development will be assessed using the methodology detailed in the Draft London Best Practice Guide¹⁸, and where needed, design and mitigation measures will be implemented.

¹⁷ NSCA, Development Control: Planning for Air Quality (2004)

¹⁸ Greater London Authority, Draft London Best Practice Guide: The control of dust and emissions from construction and demolition (2006)

16.0 ANNEX 1

SCOPING PLAN

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