LAND AT WEAVERS HILL, ANGMERING

SCOPING REPORT

March 2010

Our Ref: JWS.1074

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1 INTRODUCTION

a) Introduction

1.1 A consortium of private landowners are proposing to develop land to at Weavers Hill, Angmering. It is proposed that the 11.6 hectare site would be developed for mixed uses to include residential, employment and community uses. A master plan for the site would be developed in light of the environmental constraints resulting from the studies outlined in this document.

1.2 It is anticipated that the site would comprise residential housing (including affordable), employment uses and the remainder community uses / public open space.

b) Scoping

1.3 Whilst a formal Screening Opinion has not been sought, officers at Arun District Council (ADC) have confirmed during discussions that the proposed development would be considered an EIA development due to the size of the site and its proximity to the South Downs National Park.

1.4 Government Circular no. 2/99 provides further advice on the requirements for EIA in relation to Schedule 2 development. This states that applications for urban development projects which exceed 0.5 hectares are likely to require an EIA.

1.5 An EIA will therefore be undertaken to allow the environmental impacts of the proposed development to be assessed. The resulting Environmental Statement (ES) will be submitted alongside the planning application for the proposed development.

1.6 Regulation 10(1) of the 1999 Regulations provides for a person who is minded to make an EIA application to ask the relevant planning authority to state in writing their opinion as to the information to be provided in the Environmental Statement.

1.7 Although not legally required by the Regulations, scoping is an important facet of EIA. This importance was highlighted in para. 2.2 of the Department of the Environment's Good Practice Guide 24, which states:-

"Defining the scope is one of the most critical parts of an EIA in that it sets the context for what follows. If the scope is defined too narrowly, some critical area of uncertainty or adverse effect may emerge late in the day. Decisions on the shape of the project may then be too far advanced to allow for any real change. On the other hand, if the scope of work is too loosely defined, then much time, effort and cost may be spent on pursuing unnecessary detail."

1.8 The Guide advises that the main function of the Scoping exercise will be to confirm:-

- The nature of the development;
- The breadth of the EIA;
- The range of key issues;
- The extent to which each environmental topic needs to be investigated.

1.9 This report has been prepared to assist in the formal scoping of the environmental impacts of the proposed development that will need to be addressed in the EIA. The reports sets out:-

- Details of the proposed development;
- Details of the site and its surroundings; and
- Proposed content of the EIA - consideration of the relevant environmental issues pertinent to the proposed development.

c) <u>The Environmental Statement</u>

1.10 The Environmental Statement (ES), which would contain the findings of the Environmental Impact Assessment, would be prepared in accordance with the requirements of The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 ('The Regulations').

1.11 The Regulations require the ES to include 'at least' the information referred to in Part II of Schedule 4, and information referred to in Part I of Schedule 4 'as is reasonably required to assess the environmental effects of the development, and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be expected to compile'.

1.12 The ES will therefore include, as a minimum:-

- A description of the development comprising information on the site, design and size of the development;
- A description of the measures envisaged to avoid, reduce and if possible remedy significant adverse effects;
- The data required to identify and assess the main effects which the development is likely to have on the environment;
- An outline of the main alternatives studied and an indication of the main reasons for his choice, taking into account the environmental effects;
- A non-technical summary of the information set out above.

1.13 Each environmental topic area will be considered in turn, and will include:

- A description of baseline conditions;
- An assessment of potential effects that may arise during both construction and operation / implementation of the proposals;
- Mitigation measures proposed to remove, reduce or remedy potentially significant adverse effects;
- A description of any significant adverse residual impacts that may remain following implementation of the mitigation proposals.

1.14 The nature of Environmental Impact Assessment (EIA) requires objective and subjective assessment to be made of predicted impacts. Quantitative assessment methods will be used wherever practicable, however, it will be necessary to adopt qualitative methods for some topics.

1.15 Sections 5 to 16 inclusive of this report set out the proposed methodologies in respect of individual topic areas to be considered within the Environmental Statement.

2 THE DEVELOPMENT PROPOSALS AND SITE CONTEXT

a) Context

2.1 The proposed development site covers 11.6 hectares of land at the eastern edge of Angmering. Land uses are currently pony paddocks and arable farm land. The site includes two residential properties at The Avenals, and stabling associated with the pony paddocks.

2.2 The eastern boundary of the site is defined by the A280 Angmering Bypass. To the south, the site adjoins the rear of residential properties located along Angmering's High Street and The Avenals. Part of the western boundary adjoins Weavers Hill. Buildings and land associated with Avenal Farm form part of the northern boundary, whilst Water Lane forms the remainder of this boundary.

2.3 Hedge planting at the eastern edge of the proposed development site, associated with the bypass construction, has yet to mature. Elsewhere on site, other vegetation includes arable crops, grazing, hedgerows and scrub habitats associated with the pond and stream to the north of the site.

b) Description of Development

2.4 The proposed site would be developed for mixed uses to include residential, employment and community uses. A master plan for the site would be developed in light of the environmental constraints resulting from the studies outlined in this document.

2.5 It is anticipated that the site would comprise residential housing (including affordable), employment uses and the remainder community uses / public open space.

3 PROPOSED CONTENT OF THE EIA

a) General

3.1 The proposed content of the Environmental Impact Assessment (EIA) has been developed following an initial discussion with Arun District Council, desk based topic specific assessments and site visits where appropriate, a review of the relevant development plan policy and RPS's previous experience of similar developments. Regard has also been given to the Scoping Report and Opinion provided by Arun DC for a site (Barnham Lane, Barnham) which the council considers to offer similar potential issues.

3.2 The EIA will assess the potential significant impacts associated with the proposal. The individual EIA subjects/topics proposed include the following:-

1. Background, Introduction and Context
2. The Site and Its Setting
3. Planning History and Planning Policy Context
4. Description of Development
5. Need and Alternatives
6. Landscape and Visual
7. Traffic and Transportation
8. Air Quality
9. Noise and Vibration
10. Hydrology and Water Quality
11. Hydrogeology and Ground Conditions
12. Archaeology and Historic Environment
13. Ecology and Biodiversity
14. Agricultural Assessment
15. Construction and Waste
16. Cumulative Impacts
17. Summary

3.3 Together, these subjects will form the Environmental Statement (ES) document. Liaison between consultants will take place where necessary to ensure that where issues may cross over subjects, they are dealt with in the most appropriate way.

b) The Study Area

3.4 The study area is based on the proposed development site at Angmering and surrounding area. The study area considered for each topic area within the ES will be drawn so as to encompass the assessment of significant direct and indirect impacts that may arise as a result of the development. The proposed planning application boundary is shown at Figure 1.

c) Background, Introduction and Context

3.5 This section will include narrative on the format and content of the ES and the statutory background to the EIA process.

3.6 It will also include information regarding the applicant, the assessment team and the organisation of the ES.

d) The Site and Its Setting

3.7 This part of the Statement will describe the general physical and environmental characteristics of the application site and its surrounding environs. Other chapters of the Environmental Statement will provide detailed descriptions of the site in relation to particular environmental topics, providing "baseline" surveys against which the effects of the proposals may be evaluated.

e) Planning History & Planning Policy Context

Context

3.8 This section will include information regarding the planning history of the site and a summary of the policy context at the national, regional and local level. The relevant policies will be reviewed and key points of relevance summarised. This will set the context for more detailed topic analysis that will be included in the specific chapters of the ES.

f) Description of Development

3.9 This section will describe the development for which planning permission is sought including the layout of the proposed facility together with description of the waste processes to be undertaken on site. It will also set out the basis against which the EIA will be conducted.

g) Need and Alternatives

3.10 This chapter will include an outline of the main alternatives that have been considered by the applicant and an indication of the main reasons for the choice put forward in the proposals. The need for the development will also be discussed in the context of the undersupply of land within Arun District for housing development within the next five years and the recently published Strategic Housing Land Availability Assessment (SHLAA).

h) Landscape and Visual Impact

Context

3.11 The proposed development site is located adjacent to residential and farm properties on the eastern side of Angmering. The A280 Angmering Bypass lies to the immediate east of site.

3.12 The boundary of the South Downs National Park lies approximately 100m to the east of the proposed site's boundaries, largely beyond the A280. A further part of the national park boundary lies approximately 850m to the north of the site, beyond the A27 Arundel Road.

Proposed Scope of Assessment

3.13 The potential landscape and visual impacts for the proposed development will be comprehensively assessed following the guidelines in:-

- The Guidelines for Landscape and Visual Impact Assessment (second edition), published April 2002 by the Landscape Institute and Institute of Environmental Management and Assessment; and
- Landscape Character Assessment, Guidance for England and Scotland, published April 2002 by the Countryside Agency and Scottish Natural Heritage; and
- Landscape Assessments including: the Countryside Character: Volume 7 South East & London, 1999; West Sussex County Landscape Strategy and Land Management Guidelines (2005); the Arun Landscape Study (2006); and, the Arun District Urban Design and Landscape Appraisal Study (which is currently being produced), if completed before the ES is submitted.

3.14 The Landscape and Visual Impact Assessment will involve the determination of:-

- Landscape and visual impact assessment methodology and significance criteria;
- Baseline studies, including assessment of existing landscape character and identification of existing visual receptors (including within the National Park, Access Land and public rights of way);
- Review of development proposals and landscape master plan / mitigation measures;
- Assessment of impact to existing landscape character at a scale appropriate to the development site;
- Visual impact assessment at Year 1 and Year 15 (residual effects) from completion, and
- Commentary on construction (temporary) effects.

3.15 The associated ES chapter would be illustrated by photographs of existing views (both winter and summer views) and a photograph location plan.

3.16 A Tree and hedgerow Survey carried out to BS5837: 2005 would form an appendix to the ES. Its findings would be considered within the Landscape and Visual chapter.

i) Traffic and Transportation

3.17 The scope of the work associated with the Transport Assessment is likely to involve the following:

- Undertake a site visit to audit the local highway infrastructure;

- Discussion and agreement of the scope of the work with the Highway Authority. This will involve the preparation of a detailed scoping report that will be discussed with the Highway Authority at a meeting.

- Obtain relevant traffic flow information. The area lies on the periphery of the Worthing and Adur traffic model. It is therefore unlikely that reliable modelled flows will be available. It is understood that the only relevant existing traffic survey data is for the A280 to the north of Water Lane, therefore surveys at key junctions will be undertaken, if necessary.

- Inform the Highways Agency of the proposed development and establish their requirements in terms of data and assessment;

- Confirmation of highway boundary locations in the vicinity of the proposed site access;

- Preparation of a preliminary layout of the site access on Water Lane and identification of appropriate visibility splays and necessary off-site highways works;

- Provision of transport input to site layout (Master plan). This work is expected to comprise general advice on highway standards, treatment of shared surface or other circulation areas, parking standards and layouts, pedestrian routes, servicing requirements and cycle parking.

- Review the accessibility of the site by all modes, links to local facilities (shops, schools, leisure and employment) and links to public transport facilities;

- Review the record of personal injury accidents in the vicinity of the site;

- Assessment of the daily profile of person and vehicle movements during construction and operation. This work would need to include a consideration of the internalisation of trips if employment and community facilities are provided on the site;

- Identification of committed development in the vicinity of the site and associated traffic generation and, if appropriate, planned off-site highways or other transport improvements;

- Establish future year base flows on the local highway network by applying agreed traffic growth rates;

- Distribution and assignment of generated vehicle movements onto the local highway network;

- Identification of the % impact of development traffic on the local highway network during construction and during operation;

- Undertake operational assessments of key junctions affected by the development;

- Identification of transport mitigation measures suitable for the predicted level of transport and highways impact (see also Travel Plan);

- Compilation of a final Transport Assessment for submission to the Highway Authority.

j) Air Quality

Context

3.18 Air quality is a material issue that can act as a constraint to development in certain circumstances. Local authorities have a responsibility to continually review and assess air quality within their administrative area in line with guidance issued by Defra. Pollution levels are compared against objectives set out in the UK Air Quality Strategy (AQS). Any location likely to exceed the objectives must be designated an Air Quality management Area (AQMA).

3.19 The proposed application site is located within Arun District. ADC has not declared an AQMA as air quality is considered generally "good".

3.20 It is considered that the traffic flows generated by the development are unlikely to significantly alter traffic flow characterises on the local road network. In addition, as the A280 Angmering Bypass is situated within a cutting, the site is not located within an AQMA; and the site is bound by residential dwellings, it is considered that the proposed location suitable for its mixed use purposes.

3.21 On the basis of the above, it is considered unlikely that a full air quality assessment would be required for this project. Therefore, it is proposed that the following scope of works are carried out in order to scope out a detailed air quality assessment:

- Review of ADC's air quality Review and Assessment documents;
- Establishment of the current air quality in the area with specific regard to the findings of the Review and Assessment process and the results of available local monitoring;
- Analysis of available traffic flows on the local network; and
- Review of operational traffic flows from the proposed development and a review of the detailed Master plan.

3.22 If, following the above programme of works, it is established that additional Air Quality assessment is required, the scope of the assessment would be agreed with relevant officers at ADC.

k) Noise and Vibration

3.23 Context

3.24 The proposed development lies between existing residential properties (to the north, west and south), farm properties (between parts of the northern boundary) and farm land (to the north and beyond the A280 Angmering Bypass lies to the immediate east of the site).

Potential Impacts of the Proposed Development

3.25 The key aspects with regards to noise and vibration for this project are considered to be:

- • *Construction Effects:* noise and vibration effects from plant and activities associated with the construction of the proposed development on existing sensitive receptors (significant vibration effects are unlikely);

- • *Operational Effects:* noise effects from changes in traffic flow characteristics on the local road network associated with the proposed development; and
- • *Site Suitability:* determine the suitability of the site for its proposed uses, in accordance with the appropriate criteria and ADC's requirements.

Proposed Scope of Assessment

3.26 The scope of the noise assessment would encompass:

- Measurement of the existing baseline noise conditions within the application site. It is proposed that one long-term noise survey will be installed for a 1-week period. In addition, attended short-term measurements will be undertaken to determine the spatial variation of noise across the site. The location, number and duration of the noise surveys would be agreed in advance with ADC's Environmental Health Officer.
- Quantitative assessment of the noise and vibration effects of the construction phase of the Proposed Development on existing noise sensitive receptors, in accordance with the relevant British Standards, government guidance and ADC's policies. Given the outline nature of the application and the consequent limited information on a construction programme, a generic assessment will be undertaken based on the information available.
- Quantitative assessment of noise effects due to changes in the traffic flow characteristics on the local road network from traffic associated with the Proposed Development on existing noise sensitive receptors, in accordance with the relevant guidance.
- Identification of any constraints on the Proposed Development from existing noise sources within the area and assess the suitability of the site for residential development. The site will be assessed in accordance with Planning Policy Guidance: Planning and Noise (PPG 24). Based on the proposed master plan layout, internal noise levels will be assessed in accordance with British Standard 8233 and external noise levels in amenity areas will be assessed in accordance with World Health Organisation guidance.
- Where necessary, appropriate levels of mitigation would be recommended in accordance with best practice and ADC's policies, to ensure acceptable noise levels prevail during the construction phase and operational phase, and to optimise the site for residential development.

3.27 Depending on the outcome of the preliminary assessment, a more detailed review may be required. The scope of any further review would be agreed with the relevant officers at ADC.

l) Hydrology and Water Quality

Context

3.28 A tributary of the River Arun flows approximately from northeast to south west, close to part of the proposed site's northern boundary. The northernmost parts of the site are shown to

contain areas of Flood Zone 3 (High Probability) and Flood Zone 2 (Medium Probability) according to the information provided by the Flood Mapping available on the Environment Agency website.

Proposed Scope of Assessment

3.29 The Environmental Statement chapter would provide a baseline on Hydrology so as to consider any potential impacts to surrounding watercourses and features and on the quality and quantity of surface water drainage during the construction and operation phase of the proposed development. Mitigation measures for any identified impacts would then be outlined. On the basis of the desk-top information available with regard to superficial deposits, any proposed SuDS scheme for the development should assume that discharge to ground is unlikely to be a reliable option.

3.30 The impact of flooding to the site, and the potential adverse impact on flooding to the surrounding area from the development of the site should be addressed in a Flood Risk Assessment. The results of the Flood Risk Assessment will be summarised in the Environmental Statement.

3.31 The Environmental Statement chapter would make links to the findings in other Environmental Statement chapters, as appropriate. Local water resources would also be considered.

3.32 The following scope of works are proposed for the preparation of the Hydrology and Water Quality Environmental Statement Chapter:

- Liaison with regulatory authorities;
- Desk survey and data / sample acquisition;
- Review of data and impact assessment.

m) Hydrogeology and Ground Conditions

3.33 The application site has been located within a zone of groundwater emergence by the local Strategic Flood Risk Assessment (SFRA) although this is due to a precautionary preliminary assessment for the Chalk in the absence of specific data. However, the SFRA states that no historic groundwater flooding events have been recorded in Arun DC although it currently not possible to quantify areas that have a high probability of being affected by flooding from groundwater. Additionally, the site may be located within an area of concealed Chalk where groundwater emergence is unlikely due to low permeability strata overlying the Chalk.

3.34 Pre application consultation with Arun District Council's Engineering Services Team has confirmed the need for monitoring of the groundwater table to inform the design of any infiltration drainage scheme for the development and not for historical flooding of the site. This was cited as essential to confirm that the groundwater table does not rise above the base of the designed infiltration layer of any soakaway or Sustainable Urban Drainage System (SuDS) at any time, due to the resultant removal of storage space, and preventing infiltration into the ground. Additionally, Arun DC requested that there must also be a margin of safety between the infiltration base of any SuDS and the highest groundwater table, to allow water to percolate

satisfactorily into the ground at all times due to flood storage being required when the groundwater table is likely to be at its highest position.

3.35 Therefore, in the absence of a SuDS design requirement to utilise soakaways, no groundwater monitoring is proposed. Accordingly, a baseline assessment will be undertaken based on available literature and scientific evidence to allow the site groundwater environment to be put in context with the requirements of the SFRA and wider groundwater policies.

3.36 The baseline hydrogeological site setting will be delineated from the following sources:

- OS Topography map
- BGS Geology Map (Drift and Solid)
- IGS Regional Hydrogeology Map
- BGS borehole records
- Site walkover
- Interviews with land owners/occupiers.

3.37 Local knowledge will be obtained to provide invaluable factual evidence on historical extreme weather impacts on site drainage and possible areas of groundwater emergence (i.e. soil water logging, springs, surface water ponding). Site record collation and reporting is recognised within the SFRA framework as a primary source of data for determining sites prone to a groundwater flood risk. The landowners will therefore be approached to provide any pertinent information to support the application and also to include any knowledge of groundwater elevation monitoring locations present within or surrounding the site, i.e. boreholes, wells and springs.

3.38 An assessment will be undertaken on the significance of all beneficial and adverse impacts arising from the site proposals with any mitigation measures required to manage such impacts to an acceptable residual magnitude and extent.

n) <u>Archaeology and Historic Environment</u>

3.39 A full desk based assessment relating to the proposed development has yet to be carried out, however, initial background research has shown that the following:

- Listed Buildings
    - Ecclesden Manor is Grade II* listed and there is also a Grade II listed dovecote close to the manor house. Whilst these are located on the other side of the A280 Angmering Bypass, this recently constructed road is in a cutting, allowing the potential for effects on the setting of these listed buildings
    - There are three Grade II listed buildings on the west side of Weavers Hill that potentially have quite clear views into the site. These are Cressingham Cottage and a barn just to the south of the cottage, and Weaver Cottage at the junction of Weavers Hill and Water Lane.

- Conservation Area
    - The Angmering Conservation Area extends east from the village core and includes all of the Grade II listed buildings on High Street and Weavers Hill that border onto the site. Any development within the proposal site would have to address the issue of potential effects on the setting of the Conservation Area. There is no published Character Appraisal for this Conservation Area at present.
- Historic Landscape Characterisation
    - It is understood that the West Sussex Historic Landscape Characterisation is in preparation but has yet to be published. If this becomes available before submission of the ES, then it will be used as a reference document.
- Buried Archaeology
    - Archaeological works were carried out in advance of the A280 Angmering Bypass but have yet to be published. However, it is understood that two main areas of interest were identified. A site approximately 80 yards from Water Lane included evidence of Middle Bronze Age settlement (c. 1700 BC). A second site was located between The Spotted Cow and Ecclesden Manor and this included settlement evidence of Middle/Late Bronze Age date (c. 1500 BC), Iron Age date (c. 750 BC - 0 AD) and Saxon date (c. 450-800 AD).
    - A preliminary report states that boundary ditches at each of these sites extended beyond the bypass route and into adjoining fields. There is therefore a high potential for the presence of buried archaeological remains of all periods within the proposal site.

Proposed Scope of Assessment

3.40 A desk based assessment of historic environment potential for the development site would be prepared. This would review the known and potential historic environment resources that could be affected by any proposed development. A fully illustrated report would be prepared. Sources examined would include all available historic maps (tithe and enclosure maps, early Ordnance Survey maps etc) and the county Historic Environment Record (HER). If the current reports on the results of the archaeological work on the Angmering Bypass are not available from the HER than these would requested from Oxford Archaeology (who carried out the works). Additionally a site visit would be made to check for previously unrecorded minor earthworks etc.

o) Ecology and Biodiversity

Context

3.41 A Phase 1 Habitat and Ecological Scoping Survey was carried out in February 2010. The survey involved identifying broad habitats present on site and features associated with boundaries, and an initial assessment the potential of the site to support protected species was made.

3.42 Broad habitats noted on site comprised semi-improved grassland, improved grassland, arable fields, ephemeral vegetation, scrub and bare ground. Scattered mixed trees were recorded around the site.

3.43 No Japanese Knotweed or other species listed on Schedule 9 of the Wildlife and Countryside Act (1981) were identified within the site boundary.

3.44 No Nationally Rare or Nationally Scarce plants were found on site, nor were any plants listed as being at risk of extinction in Great Britain found (www.jncc.gov.uk). In addition, no plant species listed as being of principal conservation importance in Section 41 of the Natural Environment & Rural Communities Act (2006) were found on site. Of the plant species recorded on site, none are of conservation importance.

3.45 There are records of Great Crested Newts (GCN) in the local area and potential aquatic breeding habitat on site. Consequently, further surveys are considered necessary to ascertain if GCN are utilising the pond and connecting stream on site.

3.46 Large areas of suitable reptile habitat are present on site. These may potentially support three of the common species of reptile: Slow Worm, Common Lizard and Grass Snake. Surveys for reptiles will therefore be required in areas of suitable habitat within the site.

3.47 It is considered unlikely that any bird species listed on Schedule 1 of the Wildlife and Countryside Act 1981 would use the site for breeding. There were no sites suitable for roosting or breeding Barn Owls Tyto alba and the fields are unlikely to provide high quality foraging habitat. Although it is likely may be some UKBAP/BoCC red/amber list species within and around the site, populations are likely to be small and long-term impacts would not be significant. Therefore, further survey of breeding birds is not considered necessary.

3.48 Although suitable habitat for Badgers is present surrounding the site, no evidence of Badger activity was observed on or directly adjacent to the site.

3.49 It was considered that the buildings and trees present on site would not provide potential bat roosting habitat. However, the site provides potential foraging habitat for bats, and there is potential roosting habitat off-site in nearby mature trees and some buildings.

3.50 Although there is potential habitat for Brown Hares, it is considered unlikely that they occur on site and no further surveys are considered necessary.

3.51 The site is not considered to provide potential habitat for Dormice. Consequently, no surveys for this species are considered necessary.

3.52 Although there is some potential habitat for Hedgehogs, it is considered unlikely that they occur in significant numbers on site, and further surveys are not considered necessary.

3.53 There is limited potential habitat for Water Voles along the stream, but the habitat within the site boundary is poor quality. Furthermore, no signs of Water Vole were observed during the survey. Consequently, no surveys for this species are considered necessary.

3.54 Recommendations are made relating to further detailed species surveys that should be carried out in order to fully evaluate the ecological potential of the site. These are:

- Surveys for bat activity involve walking a series of transects with a bat detector in the period May to September. These will enable identification of feeding areas and commuting routes and provides information about the species using the site.
- Surveys for reptiles should preferably be carried out in April-May and/or September. These surveys involve the placement of 'refugia' in the suitable habitat. Refugia are sheets of roofing felt and corrugated metal that are used by reptiles for basking and sheltering under. These refugia are checked seven times on different days in appropriate weather conditions.
- Surveys to determine presence or absence of GCN in ponds involve four visits, mid March to the end of May, to carry out bottle trapping, torch counts and an egg search.

3.55 The likely impacts of the development on the ecology of the site and its surroundings and of the local ecological environment will be assessed. This assessment will form a separate chapter to the Environmental Statement. Reports on specific surveys (bat emergence, reptile and GCN surveys) and details from an ecological a data search would be included as appendices to the chapter.

p) Agricultural Assessment

3.56 The environmental statement would contain an assessment of the effects of the proposal on agricultural land use both within and surrounding the site.

Proposed Scope of Assessment

3.57 The assessment of the effect of the proposal on agricultural land use during the construction and operation of the proposal would include the appraisal of:

- agricultural land quality and soil resources; and
- the farm holdings affected by the proposals.

3.58 The assessment would be carried out in accordance with current best practice guidance issued by the Department for Environment, Food and Rural Affairs (DEFRA), Natural England (NE), the Institute of Environmental Assessment and Management (IEMA) plus all other relevant UK guidance.

3.59 The assessment of the effects on agricultural land quality and soil resources would include firstly a desk top assessment of relevant published information and secondly a detailed site survey.

Desk Top Study

3.60 This would include a desk top assessment of the following information:

- Published Soils Information from the Soil Survey of England and Wales (1:63,360 and 1:250,000)
- MAFF Published 1 inch to 1 mile ALC Sheets

- British Geological Sheet at 1:50,000
- Detailed DEFRA survey information within and close to the Study Area
- Published Climatic Information from the Soil Survey LANDIS database. This information is relevant to the assessment of key criteria within the Agricultural Land Classification system.

3.61 An initial study of the detailed DEFRA survey information indicates that the eastern part of the site has been surveyed and comprises grades 2 and 3a land.

Site survey

3.62 Part of the site has already been surveyed in detail by DEFRA as grades 2 and 3a. The published soils information indicates that the land to the west comprises soils mainly from the Hamble 2 association. This association comprises deep, well drained silty soils that are often graded 1 or 2 according to the MAFF Agricultural Land Classification system.

3.63 A detailed survey would therefore be undertaken on the unsurveyed area using a 1m dutch hand auger to examine soil profiles at approximately 50 intervals across the agricultural land within the site. The survey would also include a verification of the gradings of the eastern area comprising an additional 5 or 6 auger borings and would check if there has been any significant disturbance to the land arising from the construction of the road to the east.

3.64 In addition, where appropriate soil pits would be excavated within identified soil units to confirm key soils and Agricultural Land Classification (ALC) criteria observed in the auger boring survey.

3.65 The soils information would be combined with site (topographic) and climatic information to produce the Agricultural Land Classification of the agricultural land within the study area in accordance with MAFF Agricultural Land Classification of England and Wales *Revised guidelines and criteria for grading the quality of agricultural land*, Published in October 1988.

Farm Holdings

3.66 The assessment of the impacts of the proposed scheme on the farm holdings affected would consider the following key agricultural elements, as follows:

- The type of agricultural enterprises being carried out and the husbandry/management currently employed
- The potential effects of land take from the scheme. In this context, land take would include land taken directly by the scheme and also land which would no longer be viable for agricultural use, for example, where severance makes it impossible to farm productively
- The potential effects of proposed accommodation works for access, drainage and water supply

- The potential effects of the proposals of land currently within farm diversification and agri-environment schemes.

Assessment

3.67 The effects on the individual agricultural resources, agricultural land quality, soil resources and farm holdings would be considered, to provide a combined assessment of the overall construction and residual effects on agricultural land use.

3.68 The effects on agricultural land quality would be assessed in terms of the permanent loss of the "best and most versatile" grades 1, 2 and 3a agricultural land according to the MAFF Agricultural Land Classification guidelines (October 1988).

3.69 The effects on soil resources would be assessed according to the balance between the loss of agricultural soil materials arising from the proposal and the extent to which these soil materials can be re-used for other soil functions, including landscaping, ecological and archaeological purposes within the proposed development.

3.70 Farm holdings would be assessed according to the disruption to the operation of the individual farm enterprises.

q) Construction and Waste

3.71 The construction effects chapter would describe the anticipated programme and methodology for construction of the scheme. The impacts of the construction phase upon the landscape and visual resources, traffic and transportation, air quality, noise and vibration, hydrology and water quality, archaeology and historic environment, ecology and biodiversity, and agriculture would be assessed. Potential effects that may arise in relation to receptors in the local area would be identified, and mitigation measures proposed to limit or avoid any impacts upon the immediate environs of the development.

3.72 This chapter would also consider the likely construction waste impacts. Operational waste impacts would be considered within the sustainability statement which would accompany the planning application.

r) Cumulative Impacts

3.73 This section of the ES would identify, describe and evaluate the in combination effects of the proposals with other relevant committed developments. The chapter would review the cumulative impacts of relevant development which have planning approval but have yet to be completed. The list of schemes to be included within this assessment would be agreed with ADC.

s) Summary

3.74 A Non-Technical Summary of the key issues arising from the EIA would be provided.

t) Sustainability

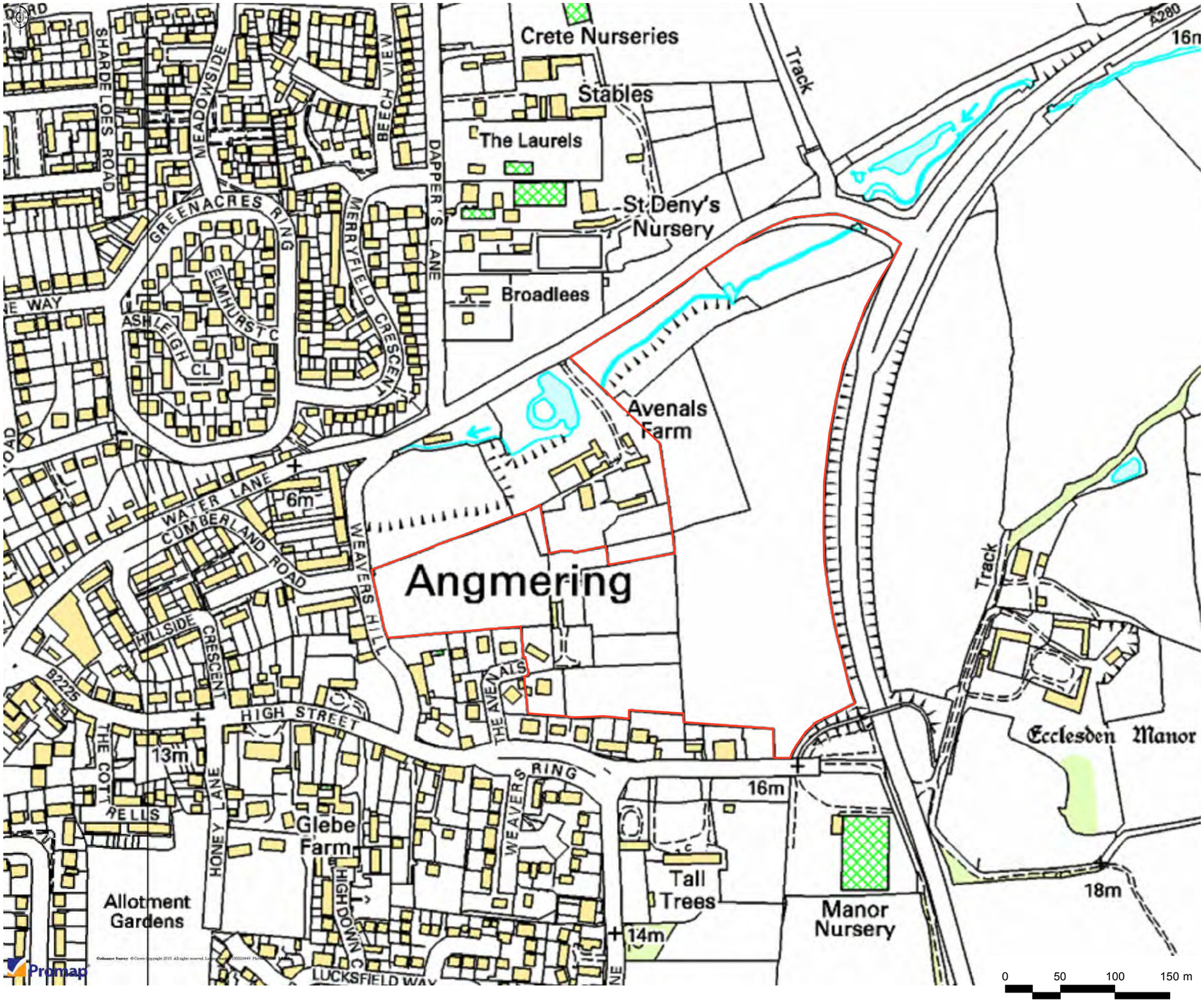
3.75 It is proposed that a Sustainability Statement be compiled for the site to support the proposed planning application. This would be submitted as a separate report in support of the

Environmental Statement (ES), as Environmental Impact Assessment good practice guidance indicates that there is no requirement to include a sustainability appraisal within the ES. Details of the Sustainability Statement are included here for ease of reference for ADC, rather than as a commitment to include a sustainability chapter within the ES.

3.76 The Sustainability Statement would address general policy requirements relating to sustainability and, in particular, specific policies identified within the Local Development Framework. Where available, the report would include key supporting information from relevant specialist studies (e.g. waste management plan, ecology report, flood / drainage risk assessment). Although it has not specifically identified that the achievement of a specific level of the Code for Sustainable Homes is required, a pre-assessment of the proposed development against the scheme would be included to provide the Local Authority with objective information on sustainability against a recognised national scheme. In addition, since a rating against the Code has been mandatory for all new homes since May 2008, the pre-assessment would provide valuable information to the developer on the likely scoring of the development and would highlight additional features or measures that could be incorporated into the design to achieve additional credits. As the scheme would be at outline stage, the pre-assessment would apply to the development as a whole.

3.77 It is recommended that an Energy Feasibility Study should also be undertaken. This would include calculations to determine the predicted energy demand of the site and investigations into the methods of low-carbon energy generation which may be suitable for the site. The findings of this study would be included within the Sustainability Statement to support the planning application.

APPENDIX 1: SITE LOCATION PLAN



Key

Site Boundary
(11.61 ha / 28.69 ac)

Rev:	Date:	Amendment:	Name:	Checked:
C	19-02-10	Boundary modification.	CHx	CHx
B	19-02-10	Boundary modification.	CHx	CHx
A	18-02-10	Boundary modification.	CHx	CHx

Drawing Based Upon: -

Status: FOR INFORMATION

Notes: Contractors are not to scale from this drawing. All dimensions to be checked on site and any discrepancies, ambiguities and/or ommisions between this drawing and information given elsewhere must be reported to this office. If in doubt, ask.

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Client: Mr J. F. Somerset

Project: Land at Water Lane, Angmering

Title: Site Location Plan

Date	Scale:	Original Paper Size:
17-02-10	1:2500	A2
Drawn	Checked	Job Ref:
CHx	CHx	JWS.1074

Drawing no: 600-01 Rev: C

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