Allington Lane, Eastleigh

Technical Note in Respect of Landscape and Ecological Circumstances

Prepared by:
The Environmental Dimension Partnership Ltd (EDP)

On behalf of
Hallam Land Management, Davies Family and Bovis Homes Ltd.

December 2016
Report Reference
EDP2831_02b

THE ENVIRONMENTAL DIMENSION PARTNERSHIP

ENVIRONMENTAL PLANNING, DESIGN AND MANAGEMENT SERVICES
FOR ALL INVOLVED IN PROPERTY AND DEVELOPMENT

Contents

This version is intended for electronic viewing only

For EDP use

Report no.	L_C_EDP2831_02a
Author	Tom Wigglesworth
Peer Review	Will Gardner
Formatted	Audrey Vuvi
Proofed	Claire Millington
Proof Date	01 December 2016

Section 1
Introduction

1.1 The Environmental Dimension Partnership Ltd (EDP) has been appointed to undertake preliminary environmental appraisals, with particular regard to landsape and ecological circumstances of potential development land at Allington Lane, Eastleigh (hereafter referred to as 'the Site'). The location and boundaries of the Site are illustrated on **Plan EDP 1**.

1.2 EDP is an independent environmental consultancy providing advice to landowner and property development clients in the public and private sectors in the fields of landscape, ecology, heritage, arboriculture and masterplanning. The Practice operates throughout the UK from offices in Cirencester, Shrewsbury and Cardiff. Details of the Practice can be obtained at www.edp-uk.co.uk.

Context and Purpose

1.3 The Site is currently being promoted through the Local Plan as a sustainable development location on the edge of Eastliegh. The purpose of EDP's work is to deepen the understanding of certain environmental issues which may affect the Site's development capacity and/or layout. To this end, the following specific work items have been undertaken:

- Landscape desk study and initial assessment of the Site's landscape character and visual envelope; and
- Ecological desk study and Extended Phase 1 Habitat Assessment.

1.4 This Technical Note is structured as follows :

- For an abbreviated review of EDP's work, the key findings are set out in **Section 2**;
- **Section 3** provides a brief description of the Site and sets out its landscape context; and
- The ecological context is described in **Section 4**.

1.5 The following appendix and plans are provided to the rear of this report which should be referred to alongside the text:

- **Appendix EDP 1** provides photographic plates illustrating the Site's landscape and ecology context;

- **Plan EDP1** is an aerial photograph of the Site boundary illustrating its current character and local context (all disciplines);

- **Plan EDP 2** illustrates the Site's topographic context;

- **Plan EDP 3** presents the findings of the Phase 1 Habitat Survey; and

- **Plan EDP 4** illustrates the Site's landscape and ecological constraints and the opportunities for development.

Section 2
Summary of Findings and Conclusions

2.1 The findings of EDP's assessments are set out in more detail in the following sections of this Technical Note. However, the key findings can be summarised as follows:

- Our overall conclusion is that the Site is well suited to accommodate development to help meet the region's housing need and is capable of being developed in accordance with relevant environmental policy at local and national levels; and

- EDP has not found any 'in principle' constraints that would preclude the Site's allocation for built development.

Conclusions in Respect of Landscape and Visual Matters

- The Site is, nor has ever been, designated for its landscape or scenic qualities;

- It is relatively unexceptional in terms of landscape fabric and visual amenity and is not especially representative of its host landscape type;

- Development would not change land form or landscape pattern nor is it likely to alter the landscape character adversely. It could offer greater public access to the countryside; and

- Preserving and enhancing gaps between the Site and West End, Hedge End, Fairoak and Horton Heath would prevent coalescence.

Conclusions in Respect of Ecology

- There are no 'in principle' development constraints on ecological grounds. There are no statutory designations within the Site, and whilst there are statutory designations less than 500m away, potential adverse impacts can be avoided or sufficiently mitigated through a standard range of detailed design and construction measures;

- EDP's Extended Phase 1 Habitat Assessment has confirmed that the habitats present within the Site are of generally low intrinsic ecological value thereby providing significant opportunities for biodiversity enhancement;

- Some habitats within the Site are subject to non-statutory SINC designation or are important biodiversity resources at a local level. These will provide the foundation of the Green Infrastructure Strategy for the Site which, through habitat retention, restoration and creation, will maintain and enhance the ecological network;

- Key protected species surveys have been recently commissioned by Eastleigh Borough Council, and further detailed surveys would be undertaken to inform any forthcoming planning application and detailed masterplanning for the Site. Any protected species populations present could be readily accommodated within an appropriate layout and associated green infrastructure; and

- In light of the above, it is clear that a development within the Site is capable of complying with legislative and planning policy requirements regarding ecological features, and delivering a range of benefits for biodiversity.

Section 3
Landscape and Visual Matters

3.1 EDP's landscape studies to date have comprised a site walkover and photographic survey on 13 October 2016 together with a desk study, during which information was collated from the following sources:

- Multi-Agency Geographic Information for the Countryside (MAGIC) website;
- Freely available aerial photography at Google Maps and Ordnance Survey mapping and aerial imagery purchased from emapsite;
- Eastleigh Borough Council; and
- Natural England Character Area Profiles.

3.2 The findings of these preliminary studies are summarised below. The following should also be read in conjunction with **Appendix EDP 1** (photographic plates), **Plan EDP 1** (landscape context), **Plan EDP 2** (topography) and **Plan EDP 4** (constraints and opportunities) appended to this document.

Site Description

3.3 The site boundaries are shown on **Plan EDP 1**, an aerial photograph is included which illustrates the character of the local area.

3.4 The Site is not within any designated landscape. The Site is located adjacent to a 'Strategic Gap' to the east of Bubb Lane as identified in the Eastleigh Borough Council Local Plan (Adopted 2006, Policy 2.CO).

3.5 The landscape fabric predominantly comprises pasture fields subdivided by managed hedgerows or post and wire fencing with regular mature and over mature trees. Across the Site there are a number of significant woodland blocks, copses and stands. There are a number of ancient and candidate veteran trees (see **Appendix EDP 1** - **Plate EDP 1**); study of the Woodland Trust's Ancient Tree Hunt website identified a single unverified record. However, such studies are restricted to publicly accessible locations. The actual Site population therefore is likely to be more extensive. A number of public rights of way cross the Site as shown on **Plan EDP 4**.

Planning Policy

3.6 In addition to Policy 2.CO mentioned above, the following saved policies are relevant to landscape matters:

- 18.CO Protection of the landscape:

  "*Development which fails to respect, or has an adverse impact on the intrinsic character of the landscape, will be refused.";*

- 19.CO Protection of landscape features:

  "Development in the countryside or in urban areas will be refused if it would result in the loss of, or damage to locally important features in the landscape, such as water courses, ponds and lakes. Where the Council is satisfied that the loss or reduction of a feature is fully justified, it will require appropriate replacement features to be included in the proposals";

- 59.BE: Design criteria:

  "Development proposals which are in accordance with the other policies in this plan will be permitted provided they meet all the following criteria: i. they take full and proper account of the context of the site including the character and appearance of the locality or neighbourhood and are appropriate in mass, scale, materials, layout, density, design and siting, both in themselves and in relation to adjoining buildings, spaces and views, natural features and trees worthy of retention;...iv. they provide a high standard of landscape design and appropriate planting where required. Development should use native plants in landscape schemes to benefit biodiversity. Development adjacent to or within the urban edge must not have an adverse impact on the setting of the settlement in the surrounding countryside;..."; and

- 146.OS Green Network:

  "Development proposals which would have a detrimental impact on the green network will be refused. Contributions, where appropriate, from adjoining development proposals will be sought to enhance the environment and facilities within the green network".

3.7 Additionally, Eastleigh Borough Council have prepared a number of background and supplementary planning documents relating to landscape matters. These include:

- Green Infrastructure Background Paper 2012;

- Partnership for Urban South Hampshire (PUSH) Green Infrastructure Strategy; and

- Character Area Appraisal for Hedge End, West End and Botley SPD11.

3.8 The Green Infrastructure Background Paper reviews the existing green infrastructure, open space, public rights of way and green routes and correctly identifies the rights of way on the Site. The strategy proposes the enhancing of woodland links, the creation of new woodland and the provision of a multifunction access and recreation network. A number of 'Proposed Strategic Links' are shown crossing the Site from the north and continuing over the M27. The Strawberry Trail strategic route is shown running from Itchen Valley Country Park along the Site's western boundary.

3.9 The PUSH GI Strategy reviews the existing GI network and considers enhancements within Hampshire. The strategy divides the study area into sub-regions for which specific projects are proposed. The Site falls within 'Area 2: Forest of Bere'. Whilst no specific projects are proposed within the Site, projects F1 (Connecting and enhancing woodlands) and F5 (Improving recreational spaces in settlements) should be considerations for any development proposal.

3.10 The Character Area Appraisal for Hedge End, West End and Botley provides guidance on the character of proposed development within the borough and should be considered during the preparation of the development proposals.

Landscape Character

3.11 The Site extends across three landscape character areas identified in the 'Landscape Character Assessment for Eastleigh Borough 2011':

- Areas 9 Horton Heath Undulating Farmland and Woodland;
- Area 10 Oaklands Woodland and Parkland; and
- Area 11 M27 Corridor.

3.12 Broadly speaking, the Site is well-wooded and has a low-lying undulating topography (**Plate EDP 2**). Much of the land is permanent pasture with areas of horsiculture particularly associated with the settlement fringes (**Plate EDP 3**). Fields are bounded by low clipped hedgerows with frequent individual oak trees and stands throughout (**Plate EDP 4**).

3.13 The wider landscape is generally mixed agriculture with trees and tree belts. Fields are generally rectangular in shape and bounded by thorn hedges. Oak is the dominant hedgerow tree.

Site Topography

3.14 The topography of the Site and surroundings is presented on **Plan EDP 2**. The immediate area is relatively flat, sitting between 20-40m. A subtle ridge of land, which runs from the M27 to the north of Winslowe House, bisects the Site.

Visual

3.15 To the south and south-west, land rises toward Harefield and West End, parts of which are visible as wooded horizons from locally prominent locations across the Site. The upper stands and floodlights of the Ageas Bowl are also visible in views towards West End as shown in **Plate EDP 5** and on **Plan EDP 4**.

3.16 Land to the north drops away to the Itchen Valley and then rises in the vicinity of Fair Oak and continues to rise into the South Down National Park. Stoke Park Wood and Park Hills Wood contribute to the wooded horizons visible from local high points to the north of Winslowe House (**Plate EDP 6**). It is probable that the Site will be visible for receptors within Fair Oak at a distance of between 2km and 3km from the Site.

3.17 From the south, much of the Site is screened by vegetation associated with the M27 motorway (**Plate EDP 7**). Whilst Southampton Airport, Brampton Tower (within Bassett, Southampton) and settlement south of the M27 (Barnsland and Redwood Close) are visible, the aforementioned vegetation and landform makes it unlikely that the proposed development will be visible from similar locations.

3.18 Visibility from the west is constrained by Itchen Valley Country Park and the settlement within Southampton and Eastleigh.

3.19 The railway along the Site's north-eastern edge is a prominent feature within the landscape and prevents visibility of the Site within the wider landscape to the east. There will be change in the views experienced by some receptors within the settlement edge of Hedge End. Such changes, however, will be perceived in addition to settlement at Moorgreen, the Crematorium and the garden centre on Bubb Lane.

3.20 Within the Site's immediate vicinity, a number of minor roads retain a rural character (**Plate EDP 8**), this can be retained in part with the landscaping proposals illustrated on **Plan EDP 4**.

Summary of Landscape Matters

3.21 At this stage it is clear that there are no 'in principle' or other significant development constraints in landscape terms. The landscape surrounding the Site has been subjected to incremental small-scale development following transport corridors, which has created a sense of unbroken and continuous settled development. Cohesive masterplanning

with high quality GI would provide an appropriate landscape response. There are pockets of relatively rural areas within the Site, which are shielded by woodland. Parts of the minor road network also exhibit a rural character.

3.22 There is much visual intrusion from the existing settlement edges of Bishopstoke, Fair Oak, Horton Heath and West End. The railway, motorway and airport exert significant urbanising influences on the landscape. The landscape character is semi-urban and the sensitivity relatively low. As shown on **Plan EDP 4**, key landscape fabric can be retained and enhanced.

3.23 The visual sensitivity of the Site aside from the aforementioned minor road character is derived from its function as a largely undeveloped corridor between the settlements to the south of the M27 (West End) and Fair Oak and Horton Heath to the north. However, due to the existing extensive landscape fabric of woodland, trees, hedgerows and watercourses the Site has capacity to accommodate change.

3.24 If the Site were to come forward, an appropriate landscape response would be required to prevent coalescence with the surrounding settlements of West End, Hedge End, Fair Oak and Horton Heath. Such a response should be in-keeping with the objectives of PUSH by retaining and enhancing the local character to ensure a sense of separation. Importantly, this should take no more land than is necessary. An appropriate landscape response would be specific to the immediate landscape setting and can be summarised as follows:

- Preserve the visual containment of views from West End south of the he M27 corridor with strategic woodland planting, green routes and ecological margins. Additionally this space could have the flexibility of incorporating recreational uses such as areas of informal play interlinked by green routes;

- Preserve the open character of the gap with Hedge End at Bubb Lane, currently achieved with the provision of Policy 2.CO; and

- Preserve and enhance the visual containment of the Site from Fair Oak and Horton Heath by strengthening strategic landscaping along the railway corridor.

3.25 The landscape constraints and opportunities for development are presented at **Plan EDP 4**. This has been guided by the following principles:

- Retain the existing trees and hedgerow network where possible as primary structuring elements of the concept masterplan;

- Provide a high quality connected green infrastructure network with areas of formal and informal play with connectivity into and out from existing settlement;

- Locate open space on the highest and most visually exposed areas of the Site;

- Retain, protect and enhance important ecological assets; and

- Create landscape buffers along the development edge.

3.26 A future planning application would be supported by a full Landscape and Visual Impact Assessment, prepared with reference to *Guidelines for Landscape and Visual Impact Assessment – Third Edition* (LI/IEMA, 2013). This would likely be informed by additional photoviewpoints, the locations of which would be agreed in consultation with Eastleigh Borough Council's Landscape Officer, and potentially digital modelling of the emerging development proposals to assist with the assessment.

3.27 In the process of assessing the effects of, and informing the design of, the Illustrative Masterplan and associated Parameter Plans for a planning application, it is anticipate that a Landscape Strategy (potentially as part of a wider GI Strategy) would also be prepared. This would illustrate how any potentially harmful effects could be avoided or mitigated through planting and other soft landscaping within and around the development.

Section 4
Ecology Matters

4.1 EDP's ecological studies to date have comprised the following:

- A review of freely available online information sources (MAGIC website etc.) and a full data search via the Hampshire Biodiversity Information Centre (HBIC);
- A Phase 1 walkover survey on 13 October 2016; and
- Informal Consultation with Eastleigh Borough Council's (EBC) Biodiversity Officer.

4.2 The findings of these preliminary studies are summarised below. The following should also be read in conjunction with **Appendix EDP 1** (photographic plates), **Plan EDP 3** (Phase 1 habitat survey) and **Plan EDP 4** (constraints and opportunities) appended to this document.

Statutory Designations

4.3 A search has been undertaken for international designations/European sites within 10km of the Site and national statutory designations within 5km. The Site is not covered by any statutory designations, however there are three SACs and one SPA/Ramsar site within 10km, and five SSSIs within 5km. As summarised in **Table EDP 1** below, many of these designations overlap/coincide with each another.

Table EDP 1: Statutory designations within the Site's potential zone of influence

Designation	Distance from site at nearest point	Interest Feature(s)
River Itchen SAC (overlaps with River Itchen SSSI)	440m north west	Chalk river and tributaries, southern damselfly, bullhead, brook lamprey, Atlantic salmon, white-clawed crayfish and otter
Moorgreen Meadows SSSI	445m south east (nearest intact unit)	Neutral meadows and alder woodland (northern-most unit destroyed)
Solent and Southampton Water SPA and Ramsar site (overlaps with Solent Maritime SAC, Lee-On-The Solent to Itchen Estuary SSSI)	3.1km south	Estuarine intertidal habitats including mudflats and saltmarsh, populations of breeding and overwintering birds of European importance

Designation	Distance from site at nearest point	Interest Feature(s)
Upper Hamble Estuary and Woods SSSI (partly overlaps with Solent SPA and SAC)	4km south	Ancient woodland and unimproved grassland in addition to estuarine habitats and species described above
Southampton Common SSSI	4.3km west	Mosaic of woodland, wood pasture, grassland and water bodies, large amphibian population including great crested newt
Emer Bog SAC	9km north west	Transition mires and quaking bogs

4.4 The most pertinent statutory designations, namely those which could be potentially affected by development within the Site, are discussed in turn below. The remainder are not considered to be at risk of any adverse impacts, owing to their separation distance and/or lack of ecological connectivity.

River Itchen Special Area of Conservation

4.5 The SAC is located over 400m from the Site at the nearest point and therefore no direct impacts would result from development within the Site. In terms of potential indirect effects, previous Habitat Regulations Assessment (HRA) Screening Reports prepared by EBC have identified the following as potentially the most significant effects of any increase in housing in the district (not site-specific):

- Air quality effects - increased nitrogen deposition from traffic over the River Itchen either directly harming southern damselfly, or causing habitat changes through nutrient enrichment; and

- Water quality effects - increased phosphates, entering the River Itchen directly or via tributaries from new developments and/or Wastewater Treatment Works, causing habitat changes through nutrient enrichment.

4.6 During consultation in October 2016, EDP was advised by EBC's Biodiversity Officer to disregard the previous HRA reports as the Council's position (together with Natural England and Environment Agency) with regard to potential effects and required mitigation is under review. EDP understands that a revised HRA is in preparation which will reflect the fact that both of the effects identified above are strategic issues for EBC (and beyond) and require strategic solutions.

Air Quality

4.7 At present it is understood that there is no proven link between increased atmospheric nitrogen (from traffic or other sources) and detrimental impacts upon southern damselfly (either through toxic effects, or habitat changes through nutrient enrichment).

However, whilst there continues to be some uncertainty in this regard, it is prudent to exercise the 'precautionary principal' and to consider what increase in atmospheric nitrogen might occur as a direct result of development at the SIte.

4.8 This Technical Note draws on the detailed traffic and air quality modelling recently undertaken for the Site by Brookbanks Consulting (BC), which is described in full within the following reports:

- Air Quality Assessment, November 2016 (report ref. 10440/AQ01); and
- Transport Opportunity Report, November 2016 (report ref. 10440TOR01)

4.9 Using information contained within these reports, specific consideration has been given to the likely changes in traffic flows, and likely changes in nitrogen dioxide (NO_2) concentrations at the three road crossings over the River Itchen SAC, namely:

- M27 (section between junctions 5 and 7);
- A27 (Mansbridge Road); and
- B3037 (Bishopstoke Road/Fair Oak Road)

4.10 These road crossings are discussed in turn below. In all cases, the figures quoted are based on what is referred to in BC's reports as the '2036 Do Minimum + Development' scenario. This is essentially a worst case scenario which does not take account of likely infrastructure improvements funded by future development, or the modal shift away from car travel that the development at Allington Lane is capable of facilitating both through detailed design and preparation of a Travel Plan at the planning application stage. The latter is typically capable of achieving a 10% reduction in trips by car.

M27

4.11 BC's traffic modelling predicts that the proposed development would result no increase (0%) in traffic flows (set against the future baseline) in either direction along the section of the M27 which crosses the River Itchen SAC. On this basis, whilst the M27 was not specifically modelled as a 'receptor' within BC's Air Quality Assessment, it is clear that there would be no 'site-specific' traffic-related air quality effects on the River Itchen SAC around the M27 should the development at Allington Lane come forward.

A27 (Mansbridge Road)

4.12 The section of the A27 which crosses the River Itchen SAC (Mansfield Road) is included within BC's traffic modelling and is also represented by four receptors (no.s 18 to 21) modelled within BC's Air Quality Assessment. Receptor points 20 and 21 are located either side of the bridge over the River Itchen SAC.

4.13 In terms of traffic flows, the predicted worst case scenario is a 28.2% increase in car trips during morning peak, and a 32.3% increase during the afternoon peak. However, when this information is fed into the air quality model, the predicted increase in NO_2 concentration as a result of this traffic is much smaller. This is summarised in respect of receptor points 20 and 21 in **Table EDP 2** below:

Table EDP 2: Predicted changes in NO_2 concentrations at A27 (Mansbridge Road)

Air quality receptor point	**Predicted mean annual NO_2 concentration (µg/m^3)**		**% increase resulting from devmt**	**Increase expressed as % of AQAL***
	***2036 Do Minimum* scenario**	***2036 DM + Devmt* scenario**		
20	26.5	27.1	2.26	1.5
21	27	27.7	2.59	1.75

*'Legal limit' Air Quality Assessment Level (AQAL) = 40 µg/m^3

4.14 As set out above, the predicted increases in NO_2 concentrations where the A27 crosses the River Itchen SAC, as a direct result of the potential development at Allington Lane, is in the region of 2.5%. Bearing in mind that this based on the worst case scenario in terms of traffic generation, this is considered to be an insignificant increase.

B3037 (Bishopstoke Road/Fair Oak Road)

4.15 The section of the B3027 which crosses the River Itchen SAC (Bishopstoke Road/Fair Oak Road) is included within BC's traffic modelling and is also well represented by one receptor (no. 52) within BC's Air Quality Assessment.

4.16 In terms of traffic flows, the predicted worst case scenario is an 8.5% increase in car trips during morning peak, and an 11.1% increase during the afternoon peak. Unsurprisingly, given the relatively small increases described above in relation to the 'busier' A27, NO_2 concentrations at receptor point 52 are predicted to increase from 26.1 to 26.4 µg/m^3, a rise of just 1.15% (or 0.75% of AQAL).

Conclusions in respect of Air Quality

4.17 Based on the evidence summarised above, the increases in NO_2 concentration that would occur as a direct result of the proposed development at the Site would be insignificant. Furthermore, there is a realistic prospect of these increases being reduced further through a range of measures including detailed scheme design, a site-specific Travel Plan, technological advances and improved infrastructure. The Site's proximity to surrounding settlements, and relatively flat topography, would enable the promotion of a significant modal shift towards pedestrian and cycle use. The Site also lends itself to providing other forms of sustainable transport, and the concept masterplan aims to achieve high levels of self-containment by using Garden City/Village principles including a good mix of complimentary land uses (e.g. residential, employment and recreation), all of which would minimise the increase in car traffic and resulting emissions.

4.18 EBC's Biodiversity Officer has indicated that, whilst the effects of individual developments are unlikely to be significant, the cumulative effect of all new housing in Eastleigh Borough (and a related increase in residential population and traffic levels) over the next plan period could result in a harmful effect on the SAC/southern damselfly. On this basis, EBC is developing a Borough-wide Mitigation Strategy whereby new development will be expected to contribute to a formal scheme of new habitat creation and management (wet ditches and grazing marsh) for southern damselfly. This will compensate for potential habitat degradation within the SAC, which is predicted to occur within the 200m zone either side of the three road crossings over the River Itchen which are described above.

4.19 Based on the insignificant increases in NO_2 concentrations predicted in the worst case, together with the scope to deliver further reductions in car traffic/NO2 emissions, there is no doubt that any residual impacts on the River Itchen which would result from development at the Site could be mitigated. Such mitigation could be achieved either through a financial contribution to formal scheme of compensatory habitat creation or by making land within the Consortium's control available for this purpose.

Water Quality

4.20 Potential, Site-specific, development effects on the SAC relate to the presence of water courses within the Site which eventually drain into the River Itchen. Potential effects and avoidance/mitigation are summarised in **Table EDP 3** below.

Table EDP 3: Site-specific effects and mitigation regarding River Itchen SAC

Effect	Summary	Avoidance/Mitigation (Apply to Both Effects)
Hydrological effects on SAC habitats and species	Downstream changes in water quality and flow rates, resulting from development within or near watercourses in the Site	1. Buffer on-site water courses from development, protect during construction and enhance/restore riparian habitat where relevant 2. Incorporate a sustainable drainage system (open swales and attenuation ponds) to ensure no net change in greenfield run-off rate and maintain or improve water quality
Loss/disturbance of otter foraging habitat	Harm to otter population present in the SAC via disturbance or disruption of foraging along watercourses in the Site	

4.21 The primary drainage network within the Site (based on OS MasterMap Water Network) and an appropriate buffer to the water courses (illustrated on **Plan EDP 4**) have been fed into the concept masterplan for the Site, to ensure their retention and protection within a future development.

4.22 By engaging with EBC regarding the strategic solutions relating to air quality and waste water, and by adopting standard mitigation measures in respect of the site-specific

effects, indirect effects on River Itchen SAC can be suitably avoided or mitigated. On this basis it would be possible for development at the Site to ensure that no significant effects would occur, and a site-specific Appropriate Assessment would be screened out in consultation with Natural England.

Moorgreen Meadows SSSI

4.23 Moorgreen Meadows SSSI is over 400m from the Site at the nearest point and there are no direct drainage connections. Therefore no direct or indirect hydrological impacts are anticipated as a result of development within the Site.

4.24 This SSSI is accessible along a public right of way connecting into and running through the Site and there is therefore a minor risk of indirect recreational impacts on the SSSI. However the habitats in question are not especially sensitive to recreational disturbance and, through providing sufficient open space on-site and through encouraging visitors into the nearby Country Park (see below), such impacts would be avoided or reduced to insignificant levels.

Solent European Sites

4.25 The Site lies over 4km away from (but within 5.6km of) two of the Solent European Sites, namely the Solent Maritime SAC and the Solent and Southampton Water SPA and Ramsar site. No direct effects of development at the Site are anticipated, however indirect effects relating to increased recreational impacts and changes in water quality (via the River Itchen) need to be considered.

4.26 In accordance with the Interim Solent Recreation Mitigation Strategy currently in place, new developments within 5.6km of any Solent European Site can avoid harmful recreational impacts by contributing funds to a formal scheme of mitigation and impact management measures. The required contribution to the Mitigation Strategy is determined on a 'per dwelling' basis and, as of 1 April 2016, the required amount was £176 per dwelling.

4.27 Any potential downstream water quality effects of development of the Site on the Solent European Sites would be conveyed via the River Itchen. Therefore, provided the necessary avoidance/mitigation measures to avoid water quality effects on the River Itchen SAC (as described above) are put in place, effects on the Solent European Sites further downstream would be avoided.

4.28 Based on the above it would be possible for development at the Site to ensure that no significant effects would occur, and a site-specific Appropriate Assessment would be screened out in consultation with Natural England.

Local and/or Non-statutory Designations

SINCs

4.29 A search has been undertaken for non-statutory and/or local designations within 2km of the site. Within this search radius there are 51 Sites of Importance for Nature Conservation (SINCs). It should be noted that many of nearest SINCs overlap with the statutory designations (SAC and SSSI) to the north of Allington Lane as described above.

4.30 The SINCs which are considered most pertinent to the Site, namely those located within or directly adjacent to it, are summarised in **Table EDP 4** below.

Table EDP 4: SINCs within or directly adjacent to the Site

SINC ref. no.	Name	Location	Size (ha)	Qualifying Criteria
EA0034	Dummers Copse North	Within Site boundary (west)	3.98	"Ancient semi-natural woodlands"
EA0065	Meadow adjacent to Home Covert	Within Site boundary (central)	2.95	"Semi-improved grasslands which retain a significant element of unimproved grassland"
EA0069	Home Covert, West End	Within Site boundary (central)	1.17	"Ancient semi-natural woodlands"
EA0060	Winslowe House Meadow	Near central area of Site but excluded from Site boundary	2.57	Agriculturally unimproved grasslands
EA0063	Copse by Oaklands House	Adjoins north west Site boundary	1.31	"Ancient semi-natural woodlands; and other semi-natural woodland such alder swamp woods"

4.31 The presence of these non-statutory designations does not represent an in principle constraint to development of the Site. However, information regarding the distribution of these SINCs and appropriate development buffers (illustrated on **Plan EDP 4**) have been fed into the concept masterplan for the Site, to ensure their retention and protection within a future development.

4.32 In addition to avoiding harm, the SINCs within the Site boundary offer opportunities for enhancement through appropriate management in the long-term and for incorporation into the wider GI network within and adjacent to the Site.

Itchen Valley Country Park

4.33 Itchen Valley Country Park lies directly adjacent to the Site on the other side of Allington Lane. The Country Park is not an ecological designation *per se,* although it incorporates some of the River Itchen SAC, Itchen Valley SSSI and several SINCs. The presence of the Country Park in close proximity to the Site does pose any additional constraints; conversely it provides the following opportunities to a future development scheme within the Site:

- The Park is set up to attract visitors whilst at the same time managing public access to protect the most ecologically sensitive areas. The less sensitive parts of the Country Park could therefore act as focus for the some of the increased demand for recreational greenspace generated by new housing development within the Site, thereby avoiding potential recreational disturbance of the more sensitive/designated habitats within the SAC and SSSI; and

- The Park contains a strong and diverse habitat/GI network comprising woodland, grassland and wetland. The GI Strategy for the Site, incorporating both existing and new habitats of ecological and amenity value, could therefore be designed to integrate with this existing resource to achieve greater benefits for biodiversity.

Habitats

4.34 The habitats present within the Site are illustrated on **Plan EDP 3** (Phase 1 Habitat Survey) appended to this document.

4.35 The majority of the Site comprises poor semi-improved grass fields grazed by sheep and horses, which are of limited ecological interest. However, and unsurprisingly for a green field site of this extent, there are a number of locally important habitats present namely:

- Semi-natural woodland and smaller planted woodland copses;

- Mature trees, tree lines and hedgerows;

- Wet/marshy grassland; and

- Ponds and water courses.

4.36 More detailed surveys will be required to confirm the value of certain habitats within the Site, namely woodland, grassland and hedgerows, which will provide further information regarding their priority for retention in the masterplan and any opportunities for their enhancement and restoration.

4.37 The presence of these habitats does not represent an in principle constraint to development of the Site. However, information regarding the distribution of these habitats and appropriate development buffers (illustrated on **Plan EDP 4**) has been fed into the concept masterplan for the Site, so that they can be prioritised for retention and protection within a future development. Any unavoidable losses of such habitats to development could be readily compensated, and further ecological enhancement provided, through additional planting or other forms of habitat creation within the green space associated with a future development.

Protected and/or Priority Species

EBC Surveys 2016

4.38 During 2016 EBC commissioned borough-wide surveys of rare woodland bats and of great crested newts to inform the emerging Local Plan. Copies of these surveys were provided to EDP by EBC's Biodiversity Officer in November 2016. The survey findings are summarised below as far as these relate the Site.

Woodland bat survey

4.39 In May and June 2016 trapping surveys and automated detector surveys were undertaken within 14 different woodlands across Eastleigh Borough. The main purpose of these surveys was to establish the presence/absence of the rare Bechstein's and barbastelle bats which are strongly associated with woodland and which are known to occur in the neighbouring districts around Eastleigh.

4.40 Two of the 14 surveyed woodlands were within Itchen Valley County Park, just to the north of the Site. No Bechstein's or barbastelle bats were recorded within the Country Park, or any other surveyed woodlands within 3km of the Site. Therefore, whilst the presence of these species within the Site cannot be entirely ruled out, the likelihood of a significant or breeding population of either species being present is low. Full bat surveys at the Site would be undertaken in support of any future planning application.

Great crested newt survey

4.41 Between March and June 2016 full great crested newt surveys were undertaken of accessible water bodies across the north-eastern quarter of Eastleigh Borough. 108 water bodies were initially assessed for their suitability to support great crested newts, of which 52 were then subject to six detailed surveys (i.e. torching, trapping, netting and/or egg search).

4.42 Five of the ponds surveyed in detail are located within or directly adjacent to the Site, and none of these were found to contain great crested newts. A further four ponds surveyed in detail are located within 500m of the Site, although two of these are north of Allington Lane and two are to the north-east of the railway line. A small population

of great crested newts was recorded in just one of these ponds; just to the north-east of Chalcroft Distribution Park and approximately 500m from the Site.

4.43 The nearest pond found to contain great crested newts is a significant distance from the Site and separated from the Site by poor quality habitats and various dispersal barriers. Based on these recent survey findings, the likelihood of the great crested newts occurring within the Site is very low. EBC's survey may already provide sufficient information to support any future planning application for the Site, however if any deficiencies in coverage are identified or the surveys become out of date, supplementary surveys may be required.

HBIC Records

4.44 Numerous records of protected and priority species have been received from Hampshire Biodiversity Information Centre within a 2km radius around the Site. This is not surprising, however, given that this search radius incorporates the Itchen Valley Country Park area to the north of Allington Lane, which comprises a diverse range of ecological valuable habitats of varying designatory status, and the majority of received species records are from this area.

4.45 Based on the records received, together with an assessment of the suitability of habitats within the Site, the following species groups could potentially occur within the Site:

- Breeding and wintering birds;
- Bats;
- Otter, water vole and crayfish;
- Dormouse;
- Badger; and
- Reptiles.

4.46 The potential presence of these species does not represent an in principle constraint to development of the Site. The incorporation and buffering of the Site's key habitats within a sensitive masterplan can avoid or mitigate many potential effects on protected species and a number of species populations are likely to benefit from the design and long-term management of informal green spaces. Further survey, assessment and masterplan design would enable the full range of mitigation measures to be identified to ensure compliance with legislation and planning policy.

Summary of Ecology Matters

4.47 At this stage it is clear that there are no 'in principle' or other significant development constraints in ecological terms. Furthermore, the relatively low ecological importance attributed to the majority of the Site presents an opportunity to deliver net biodiversity benefits in accordance with national and local planning policies.

4.48 The ecological constraints and opportunities for development that have been identified through EDP's preliminary studies are presented on **Plan EDP 4**. This plan illustrates the key components of the existing ecological network which should be a priority for retention and buffering within the masterplan and restoration/enhancement as part of the wider Landscape/GI Strategy.

4.49 A future planning application would be supported by a full Ecological Impact Assessment, prepared by EDP with reference to *Guidelines For Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal (CIEEM, 2016)*. The assessment would be informed by detailed surveys to further evaluate the habitats and confirm the presence/absence/abundance/distribution of protected/priority species. The scope of survey work would be agreed in consultation with EBC's Biodiversity Officer and Natural England where appropriate.

4.50 The ecological assessment would inform the masterplan design and the Landscape/GI Strategy referred to in Section 3 above, to avoid harmful effects and provide net gains for biodiversity.

This page has been left blank intentionally

Appendix EDP 1
Photographic Plates Illustrating Landscape and Ecology Context

Plate EDP 1: Veteran Oak Tree

Plate EDP 2: Example of the Site's undulating topography and wooded character

Plate EDP 3: Areas of horsiculture are associated with the settlement fringes

Plate EDP 4: Example of the Site's boundary treatment

Plate EDP 5: Wooded horizons visible to the south and the Ageas Bowl

Plate EDP 6: Wooded horizons visible to the North toward Fair Oak and the National Park

Plate EDP 7: View from high point within recreational area south of M27

Plate EDP 8: Many minor roads in the locality exhibit a rural character

This page has been left blank intentionally

Plans

Plan EDP 1 Site Boundaries and Context
(EDP2831/06a 18 November 2016 WG/TW)

Plan EDP 2 Topography Plan
(EDP2831/07a 18 November 2016 WG/TW)

Plan EDP 3 Phase 1 Habitat Survey
(EDP2831/05a 18 November 2016 LB/TW)

Plan EDP 4 Constraints and Opportunities
(EDP2831/03c 18 November 2016 WG/TW)

This page has been left blank intentionally

Site Boundary

N

0 100 200 300 400 500 m

edp

THE ENVIRONMENTAL DIMENSION PARTNERSHIP

Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

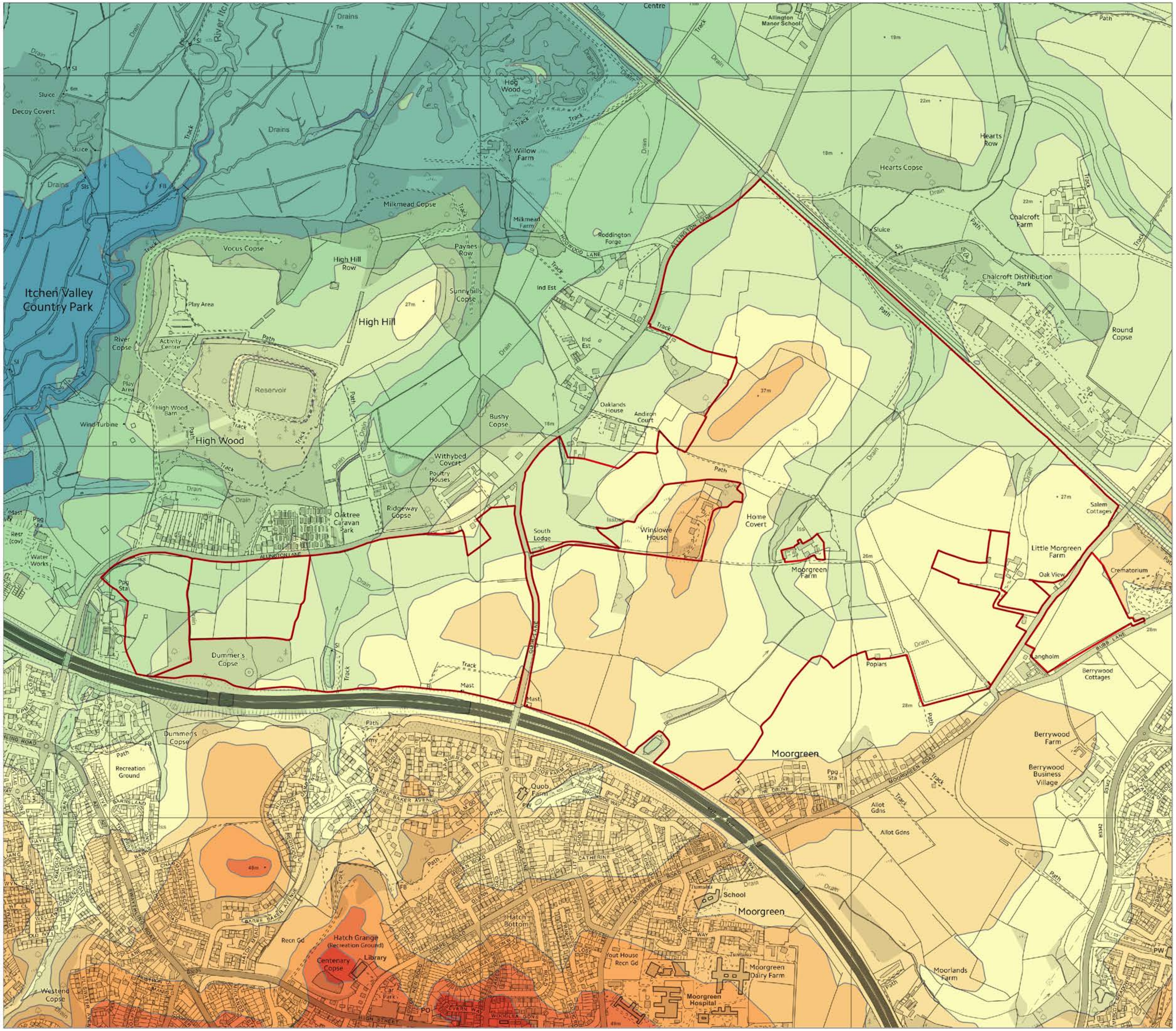
project title

Allington Lane, Eastleigh

drawing title

Plan EDP 1: Site Boundaries and Context

date	18 NOVEMBER 2016	drawn by	WG
drawing number	EDP2831/06a	checked	TW
scale	1:10,000 at A3	QA	TB



Site Boundary

Elevation AOD (m)

- 0 to 5m
- 5 to 10m
- 10 to 15m
- 15 to 20m
- 20 to 25m
- 25 to 30m
- 30 to 35m
- 35 to 40m
- 40 to 45m
- 45 to 50m
- 50 to 55m

N

0 100 200 300 400 500 m

edp

THE ENVIRONMENTAL DIMENSION PARTNERSHIP

Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

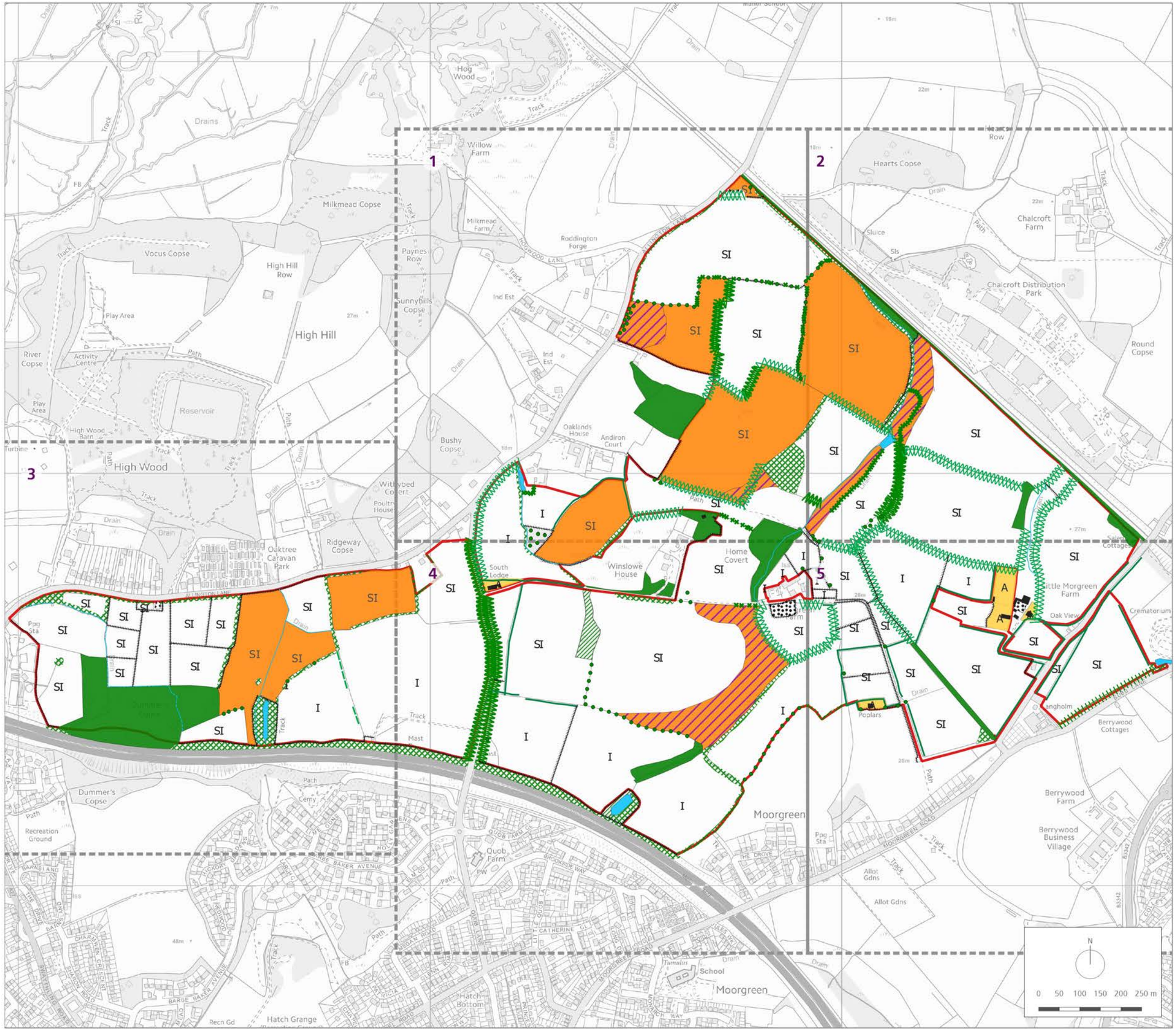
project title

Allington Lane, Eastleigh

drawing title

Plan EDP 2: Topography Plan

date	18 NOVEMBER 2016	drawn by	WG
drawing number	EDP2831/07a	checked	TW
scale	1:10,000 at A3	QA	TB



Survey Area
Broadleaved Woodland Semi-natural
Broadleaved Woodland Plantation
Dense/continuous Scrub
Scattered Tree
Scattered Scrub
Species-rich Hedgerow with Trees
Species-rich Hedgerow
Species-poor Hedgerow with Trees
Species-poor Hedgerow
Species-poor Defunct Hedgerow
I Improved Grassland
SI Semi-improved Neutral Grassland
SI Poor Semi-improved Grassland
Marshy Grassland
A Amenity Grassland
Standing Water
Running Water
Dry Ditch
Fence
Bare Ground
Buildings

THE ENVIRONMENTAL DIMENSION PARTNERSHIP
Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

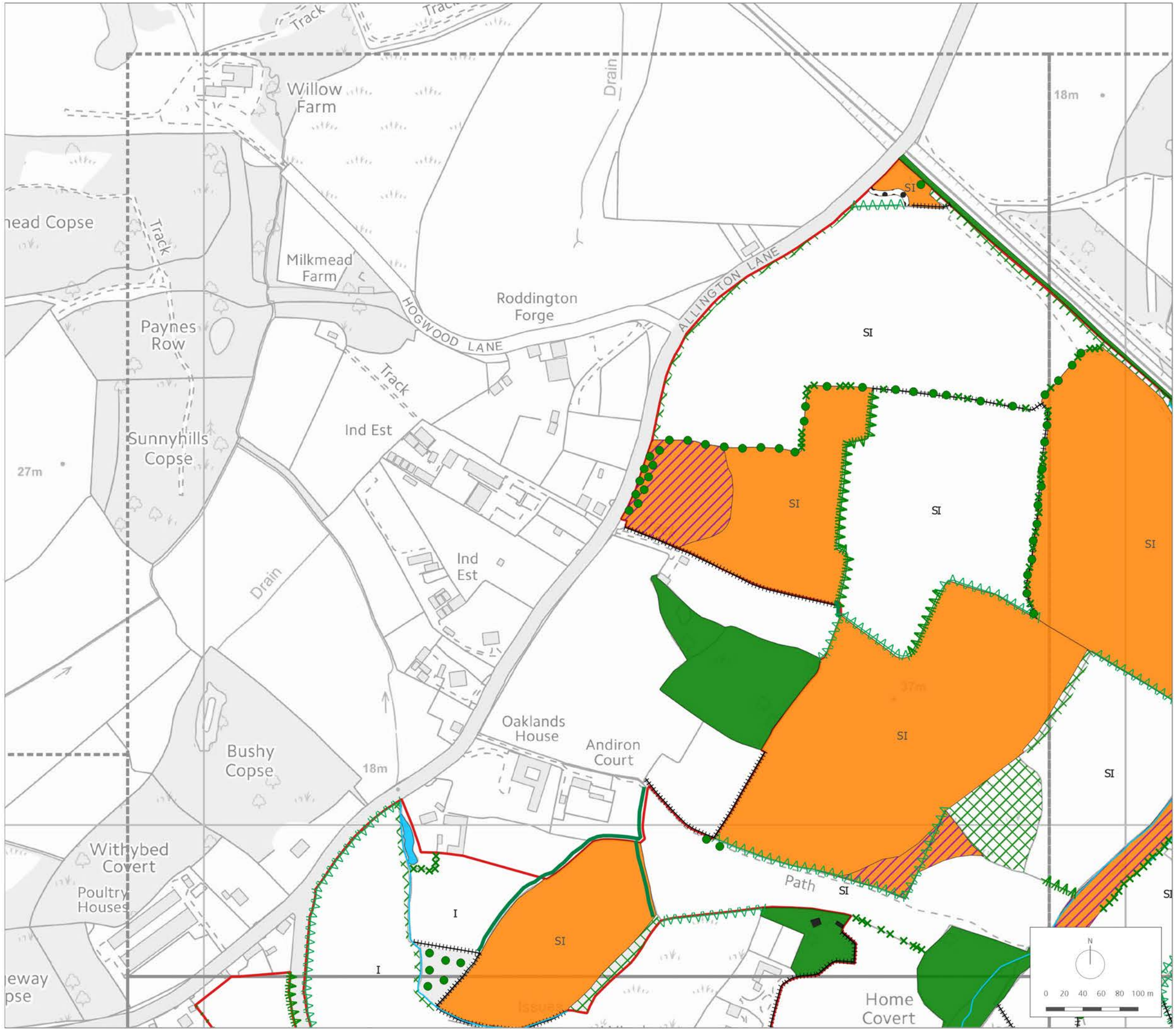
project title

Allington Lane, Eastleigh

drawing title

Plan EDP 3: Phase 1 Habitat Survey Overview

date	18 NOVEMBER 2016	drawn by	LB
drawing number	EDP2831/05a	checked	TW
scale	1:9,000 at A3	QA	TB



Survey Area
Broadleaved Woodland Semi-natural
Broadleaved Woodland Plantation
Dense/continuous Scrub
Scattered Tree
Scattered Scrub
Species-rich Hedgerow with Trees
Species-rich Hedgerow
Species-poor Hedgerow with Trees
Species-poor Hedgerow
Species-poor Defunct Hedgerow
I Improved Grassland
SI Semi-improved Neutral Grassland
SI Poor Semi-improved Grassland
Marshy Grassland
A Amenity Grassland
Standing Water
Running Water
Dry Ditch
Fence
Bare Ground
Buildings

edp
THE ENVIRONMENTAL DIMENSION PARTNERSHIP
Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

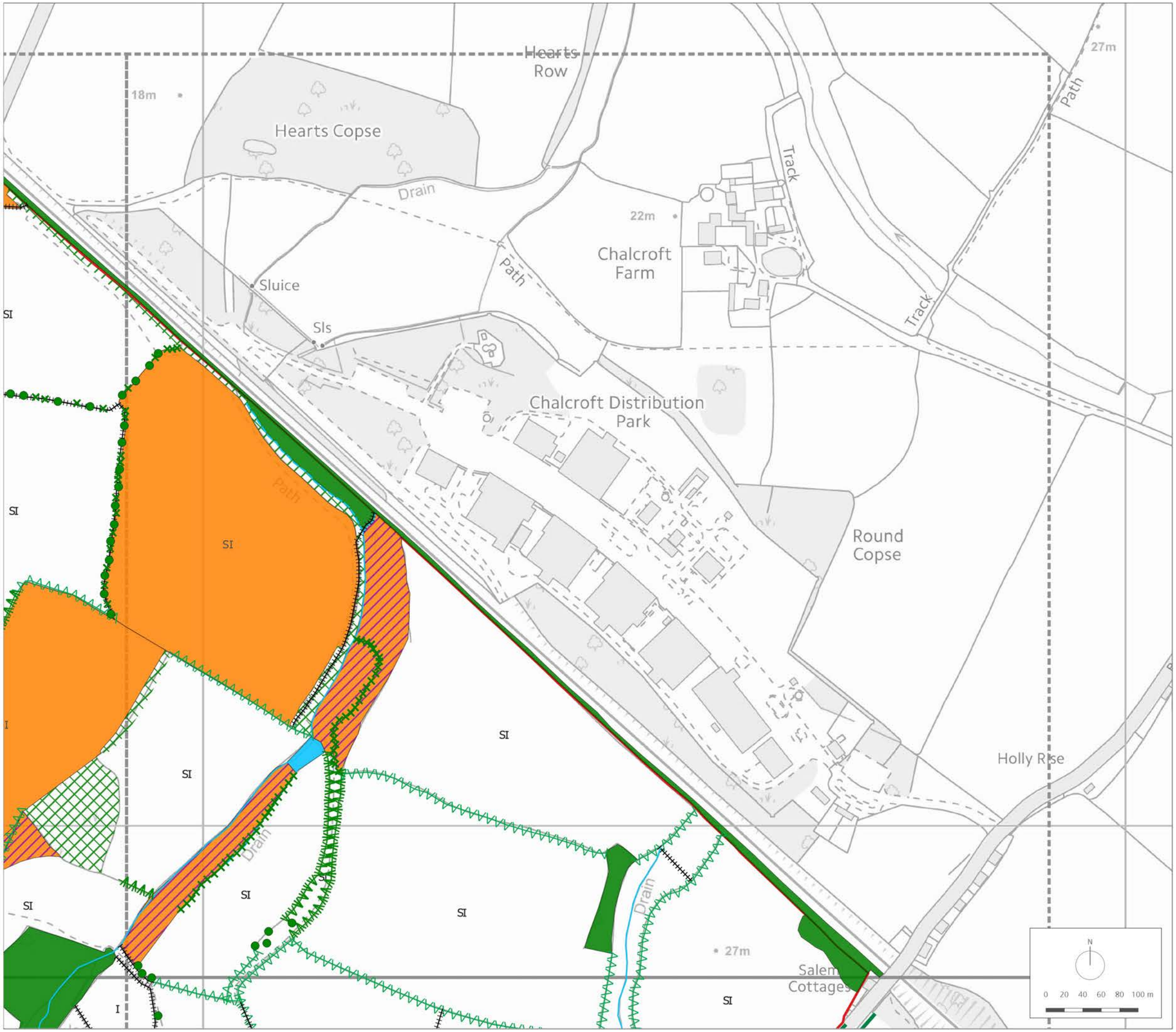
project title

Allington Lane, Eastleigh

drawing title

Plan EDP 3: Phase 1 Habitat Survey (Page 1 of 5)

date	18 NOVEMBER 2016	drawn by	LB
drawing number	EDP2831/05a	checked	TW
scale	1:4,000 at A3	QA	TB



Survey Area
Broadleaved Woodland Semi-natural
Broadleaved Woodland Plantation
Dense/continuous Scrub
Scattered Tree
Scattered Scrub
Species-rich Hedgerow with Trees
Species-rich Hedgerow
Species-poor Hedgerow with Trees
Species-poor Hedgerow
Species-poor Defunct Hedgerow
I Improved Grassland
SI Semi-improved Neutral Grassland
SI Poor Semi-improved Grassland
Marshy Grassland
A Amenity Grassland
Standing Water
Running Water
Dry Ditch
Fence
Bare Ground
Buildings

THE ENVIRONMENTAL DIMENSION PARTNERSHIP
Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

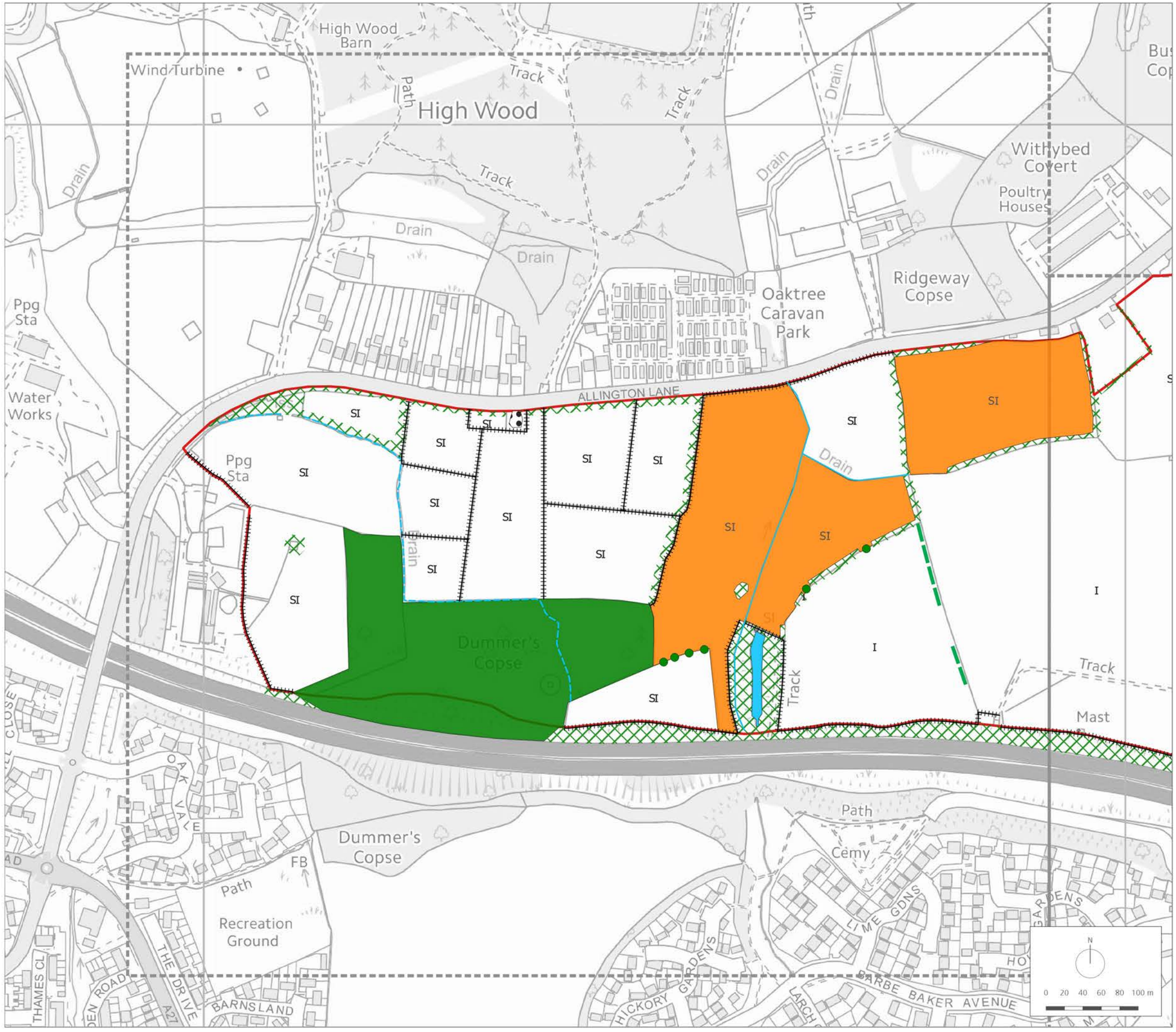
project title

Allington Lane, Eastleigh

drawing title

Plan EDP 3: Phase 1 Habitat Survey (Page 2 of 5)

date	18 NOVEMBER 2016	drawn by	LB
drawing number	EDP2831/05a	checked	TW
scale	1:4,000 at A3	QA	TB



Survey Area
Broadleaved Woodland Semi-natural
Broadleaved Woodland Plantation
Dense/continuous Scrub
Scattered Tree
Scattered Scrub
Species-rich Hedgerow with Trees
Species-rich Hedgerow
Species-poor Hedgerow with Trees
Species-poor Hedgerow
Species-poor Defunct Hedgerow
I Improved Grassland
SI Semi-improved Neutral Grassland
SI Poor Semi-improved Grassland
Marshy Grassland
A Amenity Grassland
Standing Water
Running Water
Dry Ditch
Fence
Bare Ground
Buildings

THE ENVIRONMENTAL DIMENSION PARTNERSHIP
Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

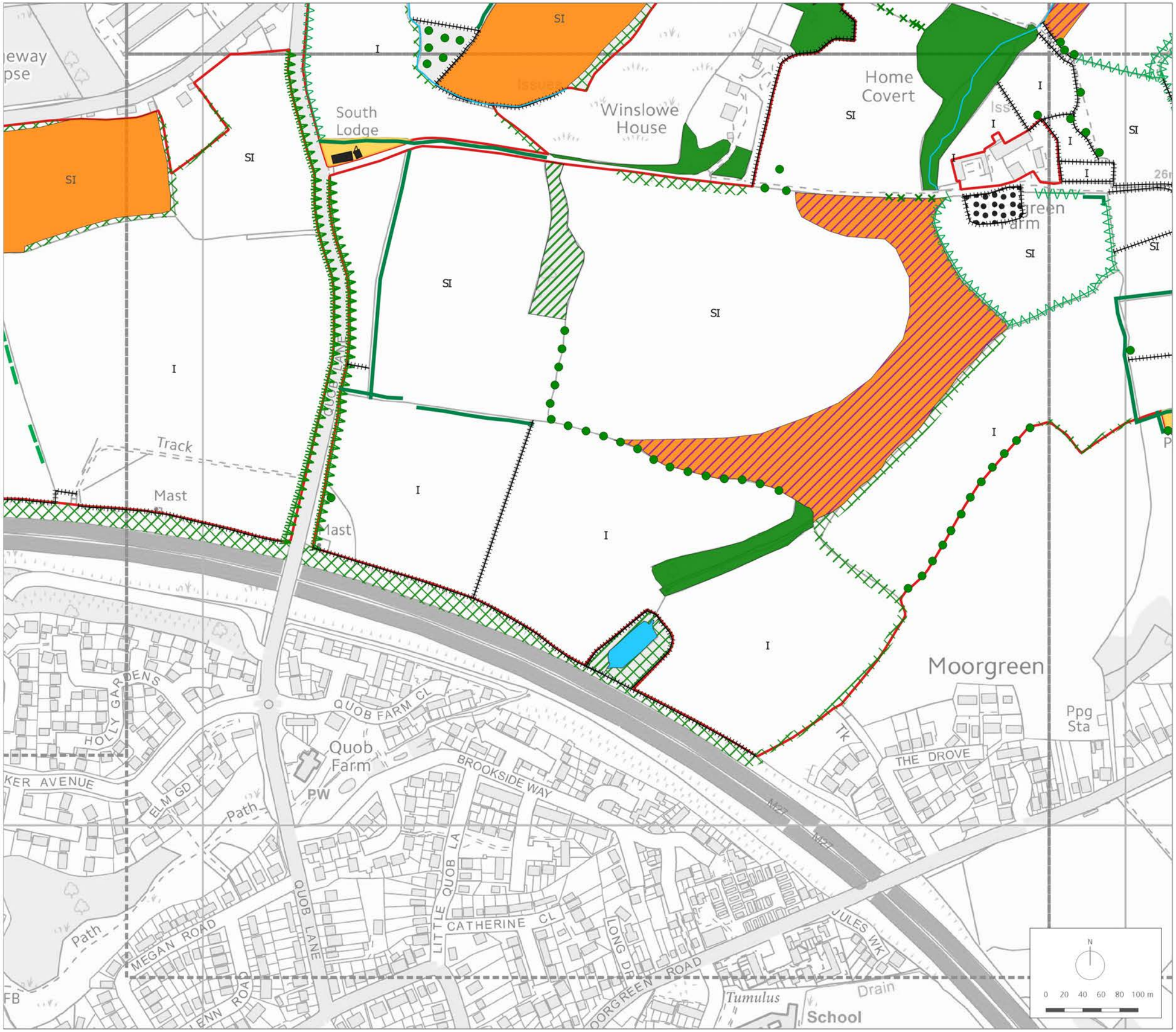
project title

Allington Lane, Eastleigh

drawing title

Plan EDP 3: Phase 1 Habitat Survey (Page 3 of 5)

date	18 NOVEMBER 2016	drawn by	LB
drawing number	EDP2831/05a	checked	TW
scale	1:4,000 at A3	QA	TB



Survey Area
Broadleaved Woodland Semi-natural
Broadleaved Woodland Plantation
Dense/continuous Scrub
Scattered Tree
Scattered Scrub
Species-rich Hedgerow with Trees
Species-rich Hedgerow
Species-poor Hedgerow with Trees
Species-poor Hedgerow
Species-poor Defunct Hedgerow
I Improved Grassland
SI Semi-improved Neutral Grassland
SI Poor Semi-improved Grassland
Marshy Grassland
A Amenity Grassland
Standing Water
Running Water
Dry Ditch
Fence
Bare Ground
Buildings

THE ENVIRONMENTAL DIMENSION PARTNERSHIP
Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

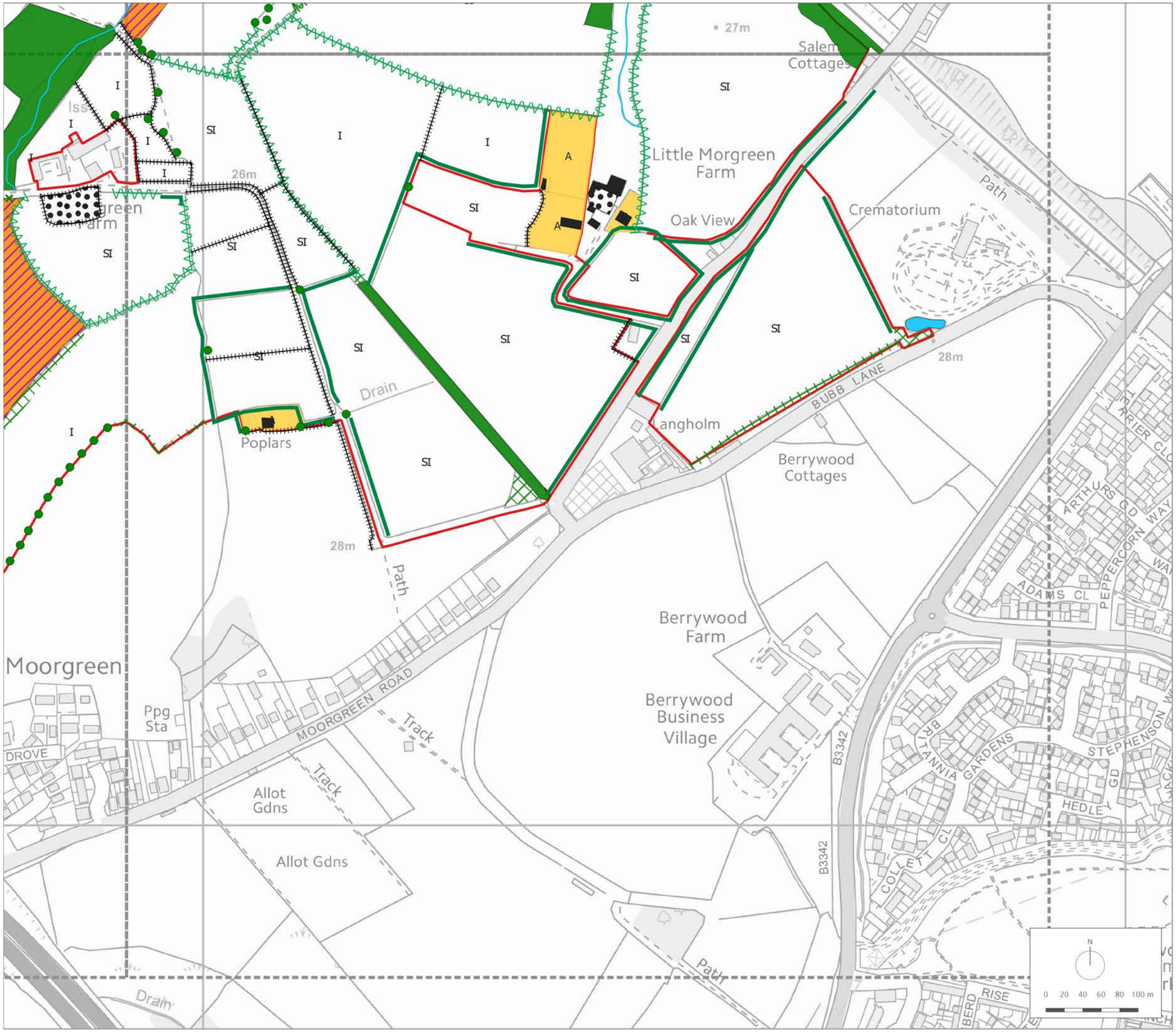
project title

Allington Lane, Eastleigh

drawing title

Plan EDP 3: Phase 1 Habitat Survey (Page 4 of 5)

date	18 NOVEMBER 2016	drawn by	LB
drawing number	EDP2831/05a	checked	TW
scale	1:4,000 at A3	QA	TB



Survey Area
Broadleaved Woodland Semi-natural
Broadleaved Woodland Plantation
Dense/continuous Scrub
Scattered Tree
Scattered Scrub
Species-rich Hedgerow with Trees
Species-rich Hedgerow
Species-poor Hedgerow with Trees
Species-poor Hedgerow
Species-poor Defunct Hedgerow
I Improved Grassland
SI Semi-improved Neutral Grassland
SI Poor Semi-improved Grassland
Marshy Grassland
A Amenity Grassland
Standing Water
Running Water
Dry Ditch
Fence
Bare Ground
Buildings

THE ENVIRONMENTAL DIMENSION PARTNERSHIP
Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848
e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

project title

Allington Lane, Eastleigh

drawing title

Plan EDP 3: Phase 1 Habitat Survey (Page 5 of 5)

date	18 NOVEMBER 2016	drawn by	LB
drawing number	EDP2831/05a	checked	TW
scale	1:4,000 at A3	QA	TB

Planting within Itchen Valley Country Park restricts views into site.

Chalcroft Distribution Park and railside vegetation prevents views into site from the northeast.

Views into site from the south of the M27 are restricted by roadside vegetation.

Moorgreen limits views into site from the east and southeast.

Views toward Chilworth

Views toward Fair Oak

Views toward West End and The Ageas Bowl

Views toward West End and The Ageas Bowl

Views toward West End and The Ageas Bowl

Constraints

- Sites of Importance for Nature Conservation
- Itchen Valley Country Park
- Trees and Woodland
- Key Green Infrastructure
- Habitat Buffer
- Rights of Way
- Water Courses
- Listed Buildings

Opportunities

- Long Distance Views out of Site
- Proposed Structural Landscaping
- Proposed Key GI and Access Linkages
- Local High Point - Potential Location of Open Space

N

0 100 200 300 400 500 m

THE ENVIRONMENTAL DIMENSION PARTNERSHIP

Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire, GL7 5EG **t** 01285 740427 **f** 01285 740848

e info@edp-uk.co.uk www.edp-uk.co.uk

client

Hallam Land Management, Davies Family and Bovis Homes Ltd.

project title

Allington Lane, Eastleigh

drawing title

Plan EDP 4: Constraints and Opportunities

date	18 NOVEMBER 2016	drawn by	WG
drawing number	EDP2831/03c	checked	TW
scale	1:10,000 at A3	QA	TB

THE
ENVIRONMENTAL
DIMENSION
PARTNERSHIP

CIRENCESTER (Head Office)
Tithe Barn
Barnsley Park Estate
Barnsley, Cirencester
Gloucestershire GL7 5EG
t 01285 740427

CARDIFF
First Floor
The Bonded Warehouse
Atlantic Wharf
Cardiff CF10 4HF
t 029 21671900

SHREWSBURY
The Stables
Sansaw Business Park
Hadnall, Shrewsbury
Shropshire SY4 4AS
t 01939 211190

e info@edp-uk.co.uk

www.edp-uk.co.uk