

**PLANNING APPLICATION FOR
HEYFORD PARK – A SUSTAINABLE SUB-HUB**

**ON LAND AT HEYFORD PARK, OXFORDSHIRE
(FORMER RAF AIR BASE AT UPPER HEYFORD)**

**ENVIRONMENTAL IMPACT ASSESSMENT
SCOPING REPORT**

ON BEHALF OF THE DORCHESTER GROUP

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2011

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1. INTRODUCTION

- 1.1 This Environmental Impact Assessment Scoping Report has been prepared on behalf of the Dorchester Group (the Applicant) in respect of land at Heyford Park, Oxfordshire (the Application Site) which is proposed for a 'sustainable sub-hub' comprising up to 4,000 additional residential dwellings, a circa 4.5 hectare district centre and 6.6 hectare business centre, primary and secondary schools, renewable energy park, heritage and visitor facilities, linear park, community open space, sports and recreation, landscaping and associated utilities and infrastructure (the Proposed Development).
- 1.2 The Application Site is situated within the administrative area of Cherwell District Council (CDC).
- 1.3 The publication of the Oxfordshire Strategic Housing Market Assessment (SHMA) in March 2014 indicates a substantial increase in the level of housing need across the County and within the Cherwell District. The need for Cherwell District is stated to be in the region of 1,140 new homes per annum over the period 2011 to 2031. This figure is substantially higher than that planned for in the recently published Cherwell Local Plan (2006 to 2031), submitted to the Secretary of State for Communities and Local Government for formal Examination on 31 January 2014, and accordingly there is a need to identify additional housing land.
- 1.4 This Scoping Report has been prepared to support a formal request to CDC for a Scoping Opinion under Regulation 13(1) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (the EIA Regulations).
- 1.5 The Scoping Report provides the information necessary to accompany such a request, as set out within Regulation 13(2), including a plan sufficient to identify the land (**Appendix 1**) and a brief description of the nature and purpose of the proposed development (**Chapter 2**). This Scoping Report also sets out the views of the Applicant as to the proposed scope of the environmental issues to be considered and the method by which the Environmental Impact Assessment (EIA) will be undertaken. The report also outlines the proposed structure of the Environmental Statement (ES) and identifies those statutory bodies and other interested parties that it is proposed to consult with during the EIA.

The requirements of an Environmental Statement

- 1.6 An EIA is a process for identifying the likely significant environmental effects (beneficial and adverse) of a proposed development before development consent is granted.
- 1.7 The Proposed Development falls within the Schedule 2 category 10(b) of the EIA Regulations, that is “Infrastructure Projects (Urban Development projects...)”, and exceeds the associated indicative development area threshold of 0.5ha, such that likely significant effects may occur.
- 1.8 Development proposals falling within the categories set out under Schedule 2 of the EIA Regulations are required to be subject to an EIA where they are considered likely to have ‘significant’ effect on the environment by virtue of such factors as its nature, size or location (Regulation 2(b)).
- 1.9 Consideration has been given to the likelihood of significant effects occurring based on a review of the development proposals against the criteria set out within Schedule 3 of the EIA Regulations and accompanying guidance in the National Planning Policy Framework, Planning Policy Guidance, Environmental Impact Assessment topic area (NPPF-PPG-EIA).
- 1.10 It was concluded that the Proposed Development would constitute EIA development, the key factors being:
- The development area exceeds the indicative threshold of 0.5ha within Schedule 2 of the EIA Regulations;
 - The development area exceeds the indicative threshold of 5ha set out within the NPPF-PPG-EIA and the proposals ‘... **would** have a significant urbanising effect on a previously non-urbanised area with >1,000 dwellings’, with potential for effects to traffic, emissions to air and noise;
 - The Proposed Development is of more than local significance and would have an affect on housing provision across the Cherwell District, as well as the dispersal of traffic and potential economic effects within the wider area; and
 - The Proposed Development has the **potential to affect ‘sensitive areas’** as defined within Regulation 2 of the EIA Regulations, there being Scheduled Ancient Monuments (SAMs) located within the Application Site and a Site of Special Scientific Interest (SSSI) circa 0.1km to the east. The entire

Application Site is designated a Conservation Area; there are also a number of Listed Buildings and a County Wildlife Site located within the Application Site.

- 1.11 Accordingly, whilst no formal request for a Screening Opinion has been submitted to, or thereby been provided by, CDC, the Applicant is proposing to carry out an EIA with the submission of an ES to accompany the planning application for the Proposed Development.
- 1.12 An EIA is a process that identifies the likely significance of environmental effects arising from a proposed development, by comparing the existing situation prior to development (baseline) with the construction, operational and decommissioning phases of a proposed development.
- 1.13 The ES is a document that sets out the findings of the EIA. The information required to be included within an ES is set out within Schedule 4 of the EIA Regulations (**Appendix 2**).

Structure of Report

- 1.14 This report is structured as follows:
- Section 2 – Provides a summary of the Application Site and its context, followed by a brief description of the nature and purpose of the Proposed Development;
 - Section 3 – Identifies those environmental receptors that have potential to be affected by the Proposed Development and the proposed approach to assigning a significant rating to any identified effects. This section also sets out, under the relevant environmental receptor headings, a summary of the key baseline conditions and proposed scope and method of assessment to be adopted during the EIA;
 - Section 4 - identifies the proposed structure of the ES; and
 - Section 5 - identifies the statutory consultees and other interested parties which it is proposed to consult during the EIA process.

2. APPLICATION SITE AND PROPOSED DEVELOPMENT

Application Site and Context

- 2.1 The Application Site covers an area of approximately 500 hectares of land at the former RAF Upper Heyford Air Base, now known as Heyford Park, in Oxfordshire (see **Appendix 1**). The site is located approximately 7km north-west of Bicester, 13km south-east of Banbury and 3km south-west of junction 10 of the M40 motorway.
- 2.2 The Application Site is located within the administrative boundary of Cherwell District Council.
- 2.3 The site is accessed via Camp Road which passes through the Application Site to the south on an east-west axis. Camp Road provides access between Somerton Road/Station Road in the village of Upper Heyford to the west of the Application Site and the B430 (Station Road) to the east. The B430 (Station Road) provides access south to Oxford via the village of Middleton Stoney and north to the M40 motorway via the village of Ardley. There are several private roads leading off Camp Road into the Application Site both north and south.
- 2.4 The United States Air Force ceased operations at Heyford in 1994, returning the site to the Ministry of Defence where upon military operations ceased and the site decommissioned. The Application Site is occupied by the former operational areas, **the majority of which fall within the former 'flying field'**, including take-off and taxi runways, aircraft hangers and supporting stores, maintenance, operations, office and security buildings, and military/air base infrastructure located to the north of Camp Road and a residential/urban area comprising married quarters and barracks, disused petrol station, supermarket, school, hospital, gymnasium and sports facilities to the south of Camp Road.
- 2.5 Outside the main site area but within the Application Site is the sewage treatment works, located to the south-east of the residential area, and a balancing pond, which is accessible from Camp Road to the east of the site.
- 2.6 Subsequent to the site being vacated, there have been a number of planning applications, the most notable of which are:
- 2.7 08/00716/OUT (also known as **the 'Lead Appeal'**) – A hybrid planning application lodged by the North Oxfordshire Consortium (NOC) for a new settlement of 1,075 dwellings, together with associated works and facilities including employment uses,

community uses, school, playing fields and other physical and social infrastructure along with the change of use a number of buildings on the flying field. The application was granted consent, subject to 71 conditions, on 11 January 2010 on appeal (APP/C3105/A/08/2080594), alongside a series of associated Conservation Area Consent (CAC) appeals. The permission has been implemented with regards to the Change of Use of the buildings on the flying field and in particular the use of part of the southern taxi way by Paragon Fleet Solutions, a car processing company. The boundary of this consent is broadly similar to the proposed Application Site boundary.

- 2.8 10/01642/OUT (also known as **the 'Outline Consent'**) – An outline planning application lodged by the Dorchester Group for a new settlement of 1,075 dwellings including the retention and change of use of 267 existing military dwellings to residential use (Class C3) and the change of use of other specified buildings, together with associated works and facilities, including employment uses, a school (free school from entry to secondary level), playing fields and other physical and social infrastructure. This application was also supported by an application for Conservation Area Consent for the demolition of the majority of the structures South of Camp Road (10/01619/CAC). The application was granted planning consent, subject to 57 conditions, by CDC on 27 October 2010. Demolition and construction is underway. This latter application revised the development consented within the previously consent outline scheme referred to above (08/00716/OUT). Accordingly, the site boundary of this consent nests within the south-east of both the aforementioned planning consent and the proposed Application Site boundary.
- 2.9 In addition to the uses permitted under the above, there have been a number of temporary and permanent consents granted for the reuse of redundant buildings, many of which relate to business/employment use to the north of the site in vacant aircraft hangers and associated structures. At the time of writing, the following live planning applications are under consideration by CDC:
- 13/01599/F – An extension to Paragon Fleet Solution's permanent footprint to extend east, outside of the area which was previously granted consent.
 - 13/01811/OUT - an additional 60 dwelling units, to be located within a discrete area to the south of Camp Road.
 - 13/00343/F and 13/0040/F – two applications relating to the Heyford Park Free School for the change of use of building numbers 583 and 74 respectively to

school use; both applications are subject to a resolution to grant consent subject to a Section 106 agreement.

2.10 The key environmental baseline conditions are set out under the relevant receptor headings within Chapter 3.

Proposed Development

2.11 The Proposed Development is for a **'sustainable sub-hub'** comprising up to 4,000 additional residential dwellings, a circa 4.5 hectare district centre and 6.6 hectare business centre, primary and secondary schools, renewable energy park, heritage and visitor facilities, linear park, community open space, sports and recreation, landscaping and associated utilities and infrastructure (the Proposed Development).

2.12 In summary, the scope of the Proposed Development would comprise:

- Site clearance to include demolition of selected buildings and ground modelling as required (it is not proposed to demolish the Scheduled Ancient Monuments or Listed Buildings);
- Up to 4,000 residential dwelling units, in addition to the 1,075 previously consented;
- A District Centre (circa 4.5 hectares) comprising range of community facilities with potential food retail outlet;
- Business Centre (circa 6.6 hectares) comprising predominantly B1 use;
- Educational Facilities (Primary and Secondary Schools);
- Solar Park on the former airstrip;
- Cold War Park – heritage / visitor attraction;
- Relocation of the existing Paragon Fleet Solution car storage and distribution facility with associated accommodation;
- Open space and landscaping, including a linear park along the former airstrip;
- New spine road connecting Camp Road to Somerton Road to the north of Upper Heyford (west);
- Estate roads/footways;
- Access and parking; and
- Supporting infrastructure and utilities.

2.13 The spatial distribution of development is subject to on-going design; however, it is proposed that the residential areas, district and business centres and school facilities would all be developed to the south of the runway, with the proposed solar park to the east of the former airstrip.

- 2.14 The residential areas would occupy an area of circa 134 hectares providing an average density of 35 dwellings per hectare; it is anticipated that the density would vary across the site with higher densities towards the settlement core and lower densities approaching the runway and settlement fringes. An allowance has been made for the implementation of Sustainable Urban Drainage scheme (SUDs), estates roads and open green space.
- 2.15 The district centre would occupy an area of circa 4.5ha to provide a combination of land use classes A1 to A5 (Shops, Financial/Professional, Food and Drink, Drinking Establishments and Hot Food Takeaways) and D1 (Non-residential institutions, e.g., health centres, nurseries, public spaces etc). It is anticipated that a food retail unit of circa 9,100m² (30,000ft²) may be provided with associated parking, recycling, delivery and turning areas.
- 2.16 The business centre would occupy an area of circa 6.6ha providing on-site employment opportunity for land use class B1 (business, e.g., offices, research and development, and light industrial).
- 2.17 The Proposed Development would involve a revision to the previously consented educational provision at Heyford Park to accommodate the estimated increase in student in-take across all school years. The previously consented Free School, **described as an 'all-through school'** providing primary and secondary education (4 to 19 years), would be converted to a secondary school. The secondary school would occupy circa 1.53 hectares of land and additionally sports playing fields and facilities located elsewhere on the site. It is proposed to construct two new primary schools, together occupying circa 4.32 hectares of land, which would be spatially located to achieve the circa 800m walking distance from the residential design catchment, as set out in BREEAM Communities guidance.
- 2.18 The solar park would be located at the eastern end of the former runway, occupying circa 10.5 hectares of land. It is estimated that renewable energy output would be circa 4.2MW; this is a conservative figure and subject to detailed design by the chosen technology provider.
- 2.19 Public open space across the site would occupy circa 41.5 hectares, comprising a Linear Park occupying the former airstrip providing formal sports pitches and informal open space, supported by a series of smaller public spaces comprising a **combination of public open green spaces and equipped children's play areas.**

EIA Parameters

- 2.20 It is proposed that the EIA would be based on a set of development parameters supported by a series of parameter plans. This is to ensure that the EIA considers the maximum scope of development proposed (i.e. the worst case) allowing for refinements to the design in later phases, i.e., in response to consultation and during the submission of reserved matters and discharge of conditions.
- 2.21 The parameters would be set out in the description of development supported by a series of parameter plans comprising:
- Structures to be demolished and retained;
 - Land Use and Key Frontages;
 - Access and Circulation;
 - Development Building Heights;
 - Green Infrastructure and Public Open Space; and
 - Utilities and Infrastructure.
- 2.22 **Phasing** – In light of the outline stage of development and for the avoidance of unnecessarily restricting the implementation of the scheme at such an early stage, it is not proposed to submit a phasing plan with the planning application. However, it is recognised that in order appropriately assess the potential impacts of Proposed Development, it is necessary to consider the likely duration of development and extent of development that could be carried out in any one year. For this purpose, the EIA will assume:
- A circa 15 year programme from start on site to completion of development, i.e., allowing for full occupation of the Proposed Development, representing the life of the emerging Cherwell Local Plan period to 2031; and
 - An average build-out rate of 250-300 residential dwellings / year.
- 2.23 It is acknowledged that development of other land uses, such as the District Centre, Business Centre and solar park would also be carried out during this period.
- 2.24 Confirmation is sought from CDC within their Scoping Opinion that this approach and the identified parameter plans is acceptable.

3. SCOPE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

3.1 It is considered that the Proposed Development has the potential to give rise to environmental effects with respect to the following 'receptors':

- Socio-Economics;
- Transport and Access;
- Utilities and Infrastructure;
- Noise and Vibration;
- Air Quality;
- Water Resources and Flood Risk;
- Ground Conditions and Contamination;
- Landscape and Visual Amenity;
- Ecology and Nature Conservation; and
- Archaeology and Cultural Heritage.

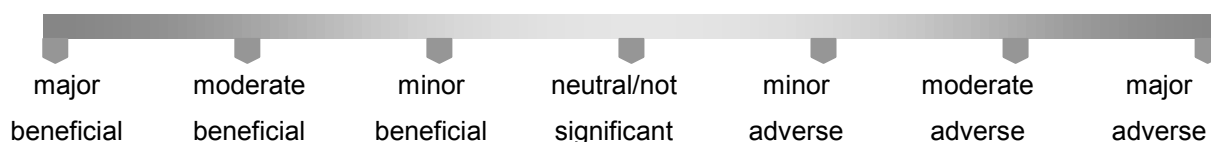
3.2 It is proposed that the EIA will examine:

- i. Any alternative schemes considered by the Applicant and the reasons why these were discounted;
- ii. Each of the above receptors, considering, as appropriate, the direct, indirect, secondary, cumulative, short, medium, long-term, permanent and temporary, positive and negative effects of the Proposed Development; and
- iii. Any potential cumulative effects of the Proposed Development in combination with other schemes in the locality.

3.3 The findings from the EIA would be set out within individual chapters within the ES (see Chapter 4).

Assessment of Significance

- 3.4 The assessment of individual receptors will consider the significance of the effects identified with reference to the magnitude of the impact and the sensitivity of the receptor.
- 3.5 Following the assessment of effects, mitigation measures to reduce and avoid these effects will be identified and detailed, and the significance of any residual effects also evaluated.
- 3.6 It is proposed to use a seven point scale to rank the likely significance of environmental effects, thus: -



- 3.7 Placement within the scale would be derived from the interaction of the receptor’s sensitivity and the magnitude of change likely to be experienced, according to the matrix below: -

Table 3.1 – Significance Matrix

Magnitude of Change	Sensitivity of Receptor			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Negligible
Medium	Major	Moderate	Minor to Moderate	Negligible
Low	Moderate	Minor to Moderate	Minor	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

- 3.8 Each discipline would separately qualify and quantify the definitions of the receptor sensitivity scale, the magnitude of change scale and the seven point significance scale as relevant to their particular discipline. Such criteria will be dependent on published and accepted guidance specific to each specialist environmental area, albeit broadly in line with the following: -

Table 3.2 – Magnitude of Change Criteria

Magnitude of Change	Criteria
High	Total loss or major/substantial alteration to features of the baseline (pre-development) conditions such that the existing conditions would be fundamentally changed following development.
Medium	Loss or alteration to features of the baseline conditions such that the existing conditions would be materially changed following development.
Low	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but the underlying character / composition / attributes of the baseline condition would be similar.
Negligible	Very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable, approximating to a 'no change' situation on the receptor.

Table 3.3 – Sensitivity Criteria

Sensitivity	Criteria
High	The receptor has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Medium	The receptor has a moderate capacity to absorb change without significantly altering its present character, or is of high and more than local (but not national or international) importance.
Low	The receptor is tolerant of change without detrimental effect, is of low or local importance.
Negligible	The receptor can accommodate change without material effect and/or is of limited importance.

Alternatives

3.9 In accordance with Paragraph 2 of Schedule 4 (Part 1) of the EIA Regulations, the ES will include a chapter that provides *"An outline of the main alternatives studied by the applicant ... and an indication of the main reasons for the choice made, taking into account the environmental effects"*.

Socio Economic Issues

Introduction

3.10 The Socio Economic Assessment will consider the likely significant effects of the Proposed Development upon the human population who will live in the new development area and those who already live in close proximity to the Application Site. The analysis will focus on the provision for housing, employment and

community services within Heyford Park and the surrounding rural area which it will service as a rural service hub. The analysis will also consider Bicester and the wider Cherwell District area.

Baseline Conditions

- 3.11 The Application Site comprises the former RAF Base at Upper Heyford, now known as Heyford Park which closed in 1994. The Application Site lies within the Parishes of Upper Heyford, Somerton and Ardley, with the eastern corridor to the B430 bordering the Parish Middleton Stoney.
- 3.12 The former RAF base comprises a wide variety of buildings that were historically associated with the RAF base. There are approximately 315 ex military dwellings within the site which are now occupied on a private rental basis. The majority of the remaining buildings are occupied by commercial operations or are vacant. There are currently in the region of 130 different businesses operating from Heyford Park, comprising circa 90 commercial tenants and further circa 40 businesses operating from the Cherwell Innovation Centre.
- 3.13 In addition to various planning permissions for commercial uses within the Application Site (in particular the area known as the 'Flying Field') planning permission (ref: 10/01642/OUT, aka the 'Outline Consent') was granted for a new settlement on the south eastern part of the site comprising 1,075 dwellings (including the change of use of 315 existing military dwellings to residential use) together with community and employment uses.
- 3.14 In terms of community and retail facilities Heyford Park provides a Free School that opened in September 2013 and provides education for primary and secondary years alongside a crèche facility. The Outline Consent for a new settlement includes provision for a Local Centre that will provide opportunities for retail (Use Classes A1-A5) and non-residential institutions / community facilities (Use Class D1). Children's play space and sports pitches will also be brought forward as part of the residential developments.
- 3.15 The town of Bicester is approximately 7km to the south-east of the Application Site and provides for a wider range of employment opportunities as well as community facilities and services and retail opportunities.

Scope & Method of Assessment

3.16 The baseline conditions would be further established by information from a variety of sources, including (but not exclusively):

- Office for National Statistics (ONS) Census 2011;
- Cherwell Annual Monitoring Report (2013);
- Cherwell Strategic Housing Market Assessment Review and Update (December 2012), or as subsequently revised;
- Oxfordshire Strategic Housing Market Assessment (March 2014);
- Cherwell Local Plan Background Paper – Extra Care / Elderly Accommodation (February 2013);
- Cherwell Retail Study (October 2012);
- Cherwell Employment Land Review Update (February 2012);
- Cherwell Economic Analysis Study (August 2012);
- Cherwell Open Space Update (September 2011);
- DCLG National Planning Policy Framework (NPPF) (2012);
- National Online Manpower Information System (NOMIS);
- NHS Choices;
- The Network of Public Health Observatories; and
- HCA (2010) Employment Densities Guide, 2nd Edition.

3.17 The Assessment will consider the socio-economic issues arising from the Proposed Development, examining social and community matters, including:

- Demographic change;
- Housing Need;
- Employment Generation;

- Education Provision;
- Local Retail Facilities;
- Sports and Recreation Provision; and
- Health Care Provision.

- 3.18 **Demographic change** would be assessed by considering population forecasts, age profiles and household growth for the Cherwell District and how this will affect the existing Ward and District demographics.
- 3.19 **Housing Need** would be assessed by comparing the District's housing need (including tenure and dwelling size) as identified in the Oxfordshire Strategic Housing Market Assessment (March 2014) and Cherwell Strategic Housing Market Assessment Review and Update (December 2012) (or subsequent update) compared to the level and type of development proposed.
- 3.20 **Employment Generation** would be assessed by comparing the existing baseline provision of employment land at Heyford Park and within the District (informed by the Cherwell Employment Land Review Update (February 2012) and the Cherwell Economic Analysis Study (August 2012)) as well as levels of employment and unemployment in the District with the proposed employment provision, based on the calculations of the Employment Densities Guide (2010).
- 3.21 **Education Provision** would be assessed by undertaking a full assessment of current and future capacities of schools within the catchment area of the Application Site. An indicative dwelling mix will then be used alongside expected pupil generation rates per dwelling to estimate the number of children likely to be generated by the Proposed Development which can then be compared against the current and future capacity of the assessed schools.
- 3.22 **Local Retail Facilities** would be assessed by comparing the existing baseline provision of retail facilities at Upper Heyford and in the wider District, including how this serves the existing population with the retail needs of the proposed population and how the proposed retail facilities would serve the proposed population and would affect the existing retail provision and need as set out in the Cherwell Retail Study (October 2012).

- 3.23 **Sports and Recreation** provision would be assessed by using an indicative population increase to calculate an expected population which in turn will be used to calculate the requirement for sports and recreation provision. The amount of sports and recreation space proposed as part of the development will be assessed against the population projections to assess the impact of the proposal on existing sports and recreation facilities within the immediate vicinity informed by the Cherwell Open Space Update (September 2011).
- 3.24 **Health Care Provision** would be assessed by using an indicative population increase and comparing this against information obtained from local GP Surgeries regarding their surplus capacity / deficit. Any surplus / deficit would subsequently be assessed against proposed provision of GP facilities.
- 3.25 The likely effects in terms of the construction and operational phases of development will be considered as well as the potential cumulative effects of any other identified developments, to be confirmed with CDC.
- 3.26 The assessment of significance would be determined in accordance with the seven-point scale as described above. Given the varying nature socio-economic receptors and potential effects, the assignment of magnitude of change and sensitivity would be determined in accordance with the generic criteria set out in Tables 3.1 to 3.3 above.

Transport

Introduction

- 3.27 The Proposed Development is likely to lead to increases in traffic on the local and strategic road network during both the construction and operational phases. The development will also create additional demand for public transport services and movement by pedestrian and cycle modes in the local transport network.
- 3.28 A Transport Assessment Report (TA) and a Framework Travel Plan (FTP) will be prepared as a supporting document to the planning application and this will form the basis of the transport and access assessment within the ES.
- 3.29 The scope of the TA and FTP is currently being agreed with Oxfordshire County Council (OCC) as the Highways Authority and the Highways Agency (HA). The findings of these reports will be utilised in the Transport and Access chapter of the

ES, drawing upon the EIA methodology outlined earlier in the scoping report. A copy of the Scoping Report for submission to OCC and the HA is provided in Appendix 3.

- 3.30 The ES will include a description of the temporary transport effects anticipated during the construction phases as a result of construction vehicle movements on the local road system.
- 3.31 Operational effects will include a comparative prediction of local vehicle movements with and without the development, based upon the predicted number of trips generated and the likely modal share. Other potential effects considered will include effects on pedestrians, cyclists, other site users, car parking and servicing and safety.

Baseline Conditions

- 3.32 Heyford Park is located within a network of predominately rural roads, many of which are unclassified, although Junction 10 of the M40 motorway is located 5km to the east and the A420 Banbury to Oxford road runs from north to south some 6km to the west. There is a railway line (north - south orientation) located to the west of the Application Site with railway station at Lower Heyford, circa 3.7km to the south-west of the Application Site (5km by road), providing services to Banbury, Oxford and London Paddington. **At circa 250m to the east of the Application Site's boundary** is the mainline railway line (north - south orientation), set within a cutting before entering a tunnel to the north, providing services between London Marylebone and Birmingham.
- 3.33 The M40 forms part of the strategic route to London to the south-east and Birmingham to the north.
- 3.34 The site is accessed from Camp Road, which forms the arterial route through Heyford Park. The former runway, taxiway and employment buildings associated with the Flying Field lie to the north of Camp Road and the existing residential and auxiliary buildings lie to the south.
- 3.35 Camp Road connects to Upper Heyford village, and the north-south route of Somerton Road / Station Road in the west (linking to the B4030 which runs parallel to Camp Road), through to the junctions with Chilgrove Drive and the B340 in the east.

- 3.36 The B430 forms a north-south link between the M40 and the A43 Trunk Road at Weston-on-the-Green, providing access to other key destinations including Bicester and Oxford. To the north the B430 terminates at Junction 10 of the M40, immediately north of the village of Ardley.
- 3.37 Camp Road is currently served by a single bus route, the 25/25A from Oxford to Bicester. The service is operated by Heyfordian Travel and offers approximately 1 service per hour in each direction on weekdays and Saturdays, with a less-frequent service during the evenings. There is no Sunday service.
- 3.38 **As part of the planning obligations for the 'outline consent', there will be a significant upgrade of local bus services on the Oxford - Upper Heyford – Bicester route, and the Upper Heyford – Bicester Town Centre – Bicester Rail Station routes.**
- 3.39 The baseline section of the Transport and Access Assessment will consider the existing conditions across the local transport network within the Heyford study area. This will include assessment of:
- Current levels of accessibility in the context of access to local facilities and amenities;
 - The existing pedestrian and cycle network including severance and intimidation characteristics in the vicinity of the site;
 - Public transport provision including both bus and rail services and;
 - The operation of the highway network and road safety based on available traffic data sources; and
 - An assessment will be made of accident risk and highway safety based upon existing accident rates and specific local circumstances to identify accident clusters.

Scope & Method of Assessment

- 3.40 As part of the planning application a Transport Assessment Report (TA) and a Framework Travel Plan (FTP) will be submitted and will assess the impact of the Proposed Development on the highway network. In addition to considering the impact of additional traffic on the highway network, the EIA will also focus on environmental issues associated with potential changes to the traffic and transport behaviour - in particular changes in traffic flows on links and at key junctions in the

network and consequent effects on local communities such as severance, intimidation, driver delay, road safety and impacts on noise and air quality.

3.41 The methodology utilised in this chapter will reflect that contained within the Town and Country Planning (Environmental Assessment Regulations) 2011 and also take account of guidance detailed within:

- National Planning Policy Framework (NPPF);
- The Guidelines for the Environmental Assessment of Road Traffic published by the Institute of Environmental Assessment in 1993 (now the Institute of Environmental Management and Assessment);
- Volume 11 of the Design Manual for Roads and Bridges – Environmental Assessment (Highway Agency et al.);
- Guidance contained in the National Planning Policy Framework, Planning Practice Guidance under the theme 'Travel Plans, Transport Assessments and Statements in Decision-Taking' (on-line); and
- Department for Transport Circular 02/13 'The Strategic Road Network and the Delivery of Sustainable Development.

3.42 A detailed review of associated and relevant local transport policy and guidance will be provided within the TA.

3.43 Relevant baseline, future baseline and projected traffic flow information will be supplied to the appointed noise and air quality consultants to enable such issues to be assessed in relation to transport and access.

Scoping and Consultation

3.44 The scope of the TA and FTP will be agreed with OCC and the Highways Agency (see Appendix 3). This will include agreement to the geographic study area, technical parameters and assumptions to underpin future year assessment works to be carried out using an agreed transport modelling assessment tool.

Assessment Scenarios

3.45 The assessment will consider the potential effects during the construction and operation of the Proposed Development under future year horizons to be agreed with OCC and the Highways Agency.

Assessment of Construction Effects

- 3.46 Given the outline nature of the planning application there is likely to be limited information available on the proposed construction works. The transport and access effects of the construction of the Proposed Development would be dependent on various factors including, the final programme of construction works, build out rate, import/export of materials and construction processes adopted.
- 3.47 Consequently a qualitative assessment will be carried out with regard to the potentially significant transport and access effects of the proposed construction works. The assessment will draw upon our experience of assessing the environmental effects of similar scale developments.
- 3.48 Suitable management and control measures will be identified; it is anticipated that these would be incorporated into a Code of Construction Practice (CoCP) or Construction Environmental Management Plan (CEMP) as a basis for managing the construction works process on site.

Assessment of Operational Effects

- 3.49 The impact assessment of the operational phase of development will be based on traffic data outputs derived from transport model, the details of which will be agreed with OCC and the HA, and entail a comparison of an agreed future year 'Test Case' scenario (with **development**) with a 'Reference Case' **scenario** (without development). The effect of the Proposed Development will be identified and assessed, separate to any increase in background traffic that is not associated with the Proposed Development.
- 3.50 **Both the 'Test Case' and 'Reference Case' assessment scenarios will incorporate the aggregate effects of any consented / committed development and infrastructure within the vicinity of the Heyford development as agreed during the TA scoping discussions with the Highway Authority and Highways Agency. The impact assessment will be based on and include:**
- Determination of trip generation for the Proposed Development, including any future scenario years and diurnal patterns, using relevant sources and predicted traffic growth over agreed scenario years using agreed factors;
 - Examination of the impact of the development on traffic flows and accident rates on the existing road and junction network at, and immediately surrounding, the site and on the existing access arrangements. In addition to

pure highways impact, predicted changes in flow will consider the effects on receptors based on the IEMA / IHT guidelines;

- Assessment of the likely effect of the development proposals on the local highway and public transport network, and identified sensitive receptors. The assessment will quantify the changes in flows in the context of link and junction capacities, and the capacity of existing public transport services;
- Assessment of the potential for driver delay and pedestrian severance and intimidation; and
- Assessment of the potential impact on pedestrian and residential amenity surrounding the site.

3.51 The generic significance criteria for the EIA, as applied to the assessment of transport and access effects, would draw upon the Guidelines for Environmental Assessment of Road Traffic and the assessment of fear and intimidation the thresholds will be based **upon the conclusions of Crompton and Gilbert's Pedestrian Delay Annoyance and Risk (1981)**.

3.52 Categories of receptor sensitivity will be defined from the principles set out in the Guidelines for the Environmental Assessment of Road Traffic, including the following:

- The need to identify particular groups or locations which may be sensitive to changes in traffic conditions;
- The list of affected groups and special interests set out in the guidance; and
- The identification of links or locations where it is felt that specific environmental problems may occur. Such locations would include accident blackspots, conservation areas, hospitals, links with high pedestrian flows etc.'

Utilities and Infrastructure

Introduction

3.53 The Utilities and Infrastructure Assessment will consider the existing utility and foul drainage networks and their adequacy to supply the proposed scope of development. This will include (but will not be limited to) electricity, gas, telecommunications, foul sewerage, water supply, cable and data providers and other utility mediums. The assessment will consider the impact of the development on the surrounding area, during the enabling works, construction and operational phases.

Baseline Conditions

3.54 Existing utility and foul drainage infrastructure will have been historically designed to cater for the requirements of the former airbase; whilst an operational airbase circa 14,000 persons lived and worked on the site. It is possible that there may be insufficient capacity within the existing networks to serve the Proposed Development. Thus offsite reinforcement works may be triggered, the extent of which will need to be ascertained via dialogue with the incumbent utility transporters.

3.55 Existing data will be obtained to determine the current private on-site utility infrastructure.

3.56 The primary consultees who will be contacted in relation to the Proposed Development are:

- Scottish and Southern Electricity (SSE) – Electricity;
- Scotia Gas Networks – Gas;
- Thames Water – Water Supply;
- Albion Water – Water Supply and Foul Drainage; and
- Other consultees will be contacted to determine the extent of utility infrastructure in the vicinity of the site.

Scope & Method of Assessment

- 3.57 The assessment will be based around the requirement to deliver the required utility services from the existing supply infrastructure. The existing service provision would be appraised through discussion with the relevant service providers to ascertain the existing capacity and its ability to meet the estimated supply required to support full occupation of the Proposed Development once operational, representing the worst case scenario. Consideration would be given to the need to divert, abandon, renew, upgrade or provide services, identifying the scope of any enabling works required.
- 3.58 The assessment of enabling works will assess the impact on the existing onsite utility infrastructure and its need to be altered to facilitate the development proposals. Construction impacts will focus on the potential offsite reinforcement / upgrade works to existing utility infrastructure to serve the development.
- 3.59 Operational impacts will focus on the earliest year that the development is likely to be operational to provide a worst case assessment.
- 3.60 In addition to the above, it is proposed to investigate and design, as appropriate, an environment led water inset scheme in conjunction with Albion Water, helping to increase bio-diversity, enhance natural environments, and to improve the security of supply and buy-in from the local communities.
- 3.61 Discussions will be carried out to determine whether a District Heat Network off-take from the Ardley Energy from Waste (EfW) facility, currently under construction, is a viable option to supply the Proposed Development with heat.
- 3.62 The proposed on-site Solar Farm would be assessed to identify its potential contribution to support the Proposed Development. Discussions will be held with the Distribution Network Operator (DNO) to confirm that the renewable energy generated could be accommodated by the existing infrastructure or the scope of any works required identified.

Noise and Vibration

Introduction

- 3.63 The noise and vibration assessment will assess the potential impacts on the existing conditions at local sensitive receptors, such as residential dwellings, schools, care homes etc arising from potential noise and vibration generated as a consequence of the construction and operation phases of the Proposed Development, as well as considering the suitability of the prevailing noise and vibration environment to impact on the future occupants of the Proposed Development.

Baseline Conditions

- 3.64 It is anticipated that the noise climate will be dominated by the transportation sources surrounding the site. These include the railway lines to the east and west (at circa 1.75km and 2.6km from the centre of the Application Site), the B430 carriageway (circa 2.7km to the east) and the M40 motorway (circa 3.4km to the east). Due to the separation distance to the railway tracks, it is unlikely that incident vibration will be an issue and therefore vibration monitoring will not be considered.
- 3.65 Current operations on the site, adding to the ambient noise levels on the site, include Paragon Fleet Solutions car storage and transportation together with employment uses in the hangers and buildings.
- 3.66 The potential impact from the site operations and increased traffic will be assessed at sensitive receptors (i.e., existing and consented dwellings) within and surrounding the site. These include residential receptors at Heyford Leys Camping Park to the south east of the site, Upper Heyford (circa 2km east) and Lower Heyford (circa 3km south-east).

Scope & Method of Assessment

- 3.67 The noise assessment will cover the following:
- The effects of noise generated by construction traffic on existing receptors;
 - The effects of noise generated by traffic associated with occupants and users of the Proposed Development on existing receptors;
 - The effect of noise from transportation sources and surrounding land uses on the proposed dwellings; and

- The effect of noise from transportation sources and surrounding land uses on the proposed school to ensure performance standards for the new schools are being met.
- 3.68 The assessment will, in the first instance, identify all key local noise and vibration sources and existing and proposed sensitive receptors. A baseline environmental noise survey will be undertaken to establish the prevailing ambient and background noise levels around the site. Unattended noise surveys will be undertaken at representative positions to evaluate the daytime, evening and night time conditions, which would be supplemented with attended daytime measurements at positions around the site representing proposed residential receptors, to be agreed with CDC.
- 3.69 Further to the baseline environmental noise survey a noise model will be prepared as the basis for the assessment using the computer based software SoundPLAN version 7.3.
- 3.70 Baseline traffic flows for the roads surrounding the site and at the nearest noise sensitive receptor areas will be entered into the model, together with future forecast traffic flows. Consideration will also be undertaken of traffic flows for a cumulative scenario accounting for other development schemes in the area, to be agreed with CDC.
- 3.71 The noise prediction will be undertaken following the methodology in 'Calculation of Road Traffic Noise' (CRTN). The 'Method for Converting the UK Road Traffic Noise Index LA10,18h to the EU Noise Indices for Road Noise Mapping: 2006' will also be used to determine daytime and night-time noise contours.
- 3.72 Internal noise levels within habitable rooms for proposed dwellings will be presented based on guidance in World Health Organization (WHO) 'Guidelines for Community Noise' and British Standard 8233: 1999 'Sound insulation and noise reduction for buildings – Code of practice'.
- 3.73 Noise levels will be predicted for both 'with' and 'without' development scenarios, to allow the determination of the changes in road traffic noise at existing receptors as a result of the proposed scheme. The significance of these changes in road traffic noise will be assessed against a set of clearly defined significance criteria drawing on the guidance contained within the DMRB, and accounting for the sensitivity of local receptors.

- 3.74 The assessment of significance would be determined in accordance with the seven-point scale as described at the beginning of this chapter. It is widely accepted that a change of 3 dB is the minimum perceptible under normal conditions, and a change of 10 dB corresponds roughly to halving or doubling the subjective 'loudness' of sound, therefore this forms the basis for determining the magnitude of change in noise levels.
- 3.75 The guidance contained within Building Bulletin 93 (BB93) will be used in order to determine the suitability of the site for a school. BB93 gives the performance standards for new school buildings to prevent disturbance to its users.
- 3.76 BS: 4142 provides a method for rating external noise levels from factories, industrial premises or fixed installations of an industrial nature, such as building services plant, in order to determine the likelihood of complaints from occupants of nearby residential properties. Drawing upon this guidance, any specific requirements of CDC, and the results of the baseline noise survey, a series of fixed plant noise emissions criteria will be determined to which proposed fixed plant or building services noise should comply.
- 3.77 Construction activities have been identified as a potential, albeit temporary, source of noise and vibration. Guidance within BS 5228-1&2 (2009) will be used in order to assess potential noise and vibration effects from the construction process. The standard contains detailed information on noise reduction measures and promotes **the 'best practicable means' (BPM) approach to control noise and minimise** associated impacts on local residents.
- 3.78 Consultation on the noise assessment will be undertaken with **CDC's** Environmental Health Department.

Air Quality

Introduction

- 3.79 The air quality assessment will consider the impact of the Proposed Development on the air quality of the surrounding area during both the construction and operational phases.
- 3.80 The existing local air quality, the likely future air quality in the absence of the Proposed Development and the likely future air quality should the development go ahead will all be defined. The assessment of construction impacts will focus on the

anticipated duration of works and using an agreed estimated build-out rate. The assessment of operational impacts will focus on the earliest year that the development is likely to be fully operational to provide a worst case assessment.

Baseline Conditions

- 3.81 The existing local air quality in the area is currently good. There are no Air Quality Management Areas in close proximity to the site and roadside monitoring in the village of Ardley to the east indicates that concentrations of nitrogen dioxide are currently below the annual mean objective. Baseline nitrogen deposition rates at the Ardley Cutting & Quarry SSSI to the east are approaching the upper critical load.

Scope & Method of Assessment

- 3.82 The principal air pollutants of concern with respect to the development will be:

- Nitrogen dioxide;
- Fine airborne particles (PM10); and
- Construction Dust.

- 3.83 The main local sources of these pollutants are likely to be road vehicles (nitrogen dioxide, PM10 and PM2.5) and construction activities (dust and PM10). Professional experience indicates that any impacts associated with other air pollutants will be negligible.

- 3.84 Air quality will be assessed at a range of worst-case receptor locations. For construction activities these will be existing properties and vegetation closest to the Proposed Development. For traffic-related impacts these will be the existing residential properties that are closest to busy roads, in particular those close to junctions, where traffic emissions are greater, and sensitive habitats within 200m of affected roads (i.e., Ardley Cutting & Quarry SSSI).

- 3.85 The potential impacts of dust during construction will be assessed, making reference to the London Best Practice Guidance on the control of dust and emissions from construction and demolition. There are no statutory objectives for dust and therefore it is common practice to provide a qualitative assessment based on the size of the site (taking into account the estimated build-out rates and the introduction of additional sensitive properties), regional meteorological conditions and experience of the distances over which impacts may occur. Emissions from on-site plant during

construction will be assessed if any potentially significant sources are identified. The impact of construction traffic flows will be taken into account when considering the build out rate of the development. Where significant construction traffic is generated, the impacts will be assessed in the same manner as operational road traffic impacts.

- 3.86 The assessment of operational road traffic impacts will be undertaken using the Atmospheric Dispersion Modelling System (ADMS) Roads detailed dispersion model, where the proposals are predicted to bring about significant increases in traffic flows. Model outputs will be verified against local air quality monitoring data. This modelling will make use of mapped background concentration data provided by Defra, mapped background deposition data provided on the Air Pollution Information System (APIS) website, and of traffic flow data.
- 3.87 Air quality will be assessed in relation to the national air quality objectives, established by the Government to protect human health. The objectives are set as concentrations below which effects are unlikely even in sensitive population groups, or below which risks to public health would be exceedingly small. They also take account of, and incorporate as appropriate, limit values set by the European Union. The objectives for seven pollutants are prescribed within the Air Quality Regulations, 2000 and the Air Quality (England) (Amendment) Regulations 2002.
- 3.88 All practical and reasonable measures which can be implemented to mitigate any detrimental impacts associated with construction and operation of the proposed scheme will be considered, and highlighted within the Air Quality chapter.
- 3.89 The construction impact significance criteria will be based on: Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance, IAQM 2012 and The control of dust and emissions from construction and demolition Best Practice Guidance, GLA 2006.
- 3.90 Operational significance will be based on the approach developed by the Institute of Air Quality Management, **and incorporated in Environmental Protection UK's** guidance document on planning and air quality: [1] Institute of Air Quality Management, 2009. Position on the Description of Air Quality Impacts and the Assessment of their Significance, November 2009. EPUK, 2010. Development Control: Planning for Air Quality (2010 Update).

Water Resources and Flood Risk Assessment

Introduction

- 3.91 The Water Resources and Flood Risk Assessment will consider the impact of the development on the surrounding area with regard to flood risk and surface water quality during the preconstruction, construction and operational phases.

Baseline Conditions

- 3.92 **A review of the Environment Agency's mapping shows the site to be located within flood zone 1 (low probability of flooding).** Given that the extent of the planning application will be greater than 1 hectare in area, a flood risk assessment (FRA) will be required in accordance with the *Technical Guidance to the National Planning Policy Framework* (March 2012).
- 3.93 As a brownfield site, the airfield comprises a mix of positively drained impermeable surfaces (e.g. runway, taxiways, hard-standings, buildings and car parks) and permeable surfaces, generally in the form of managed grassed areas. Drainage records indicate that the existing drainage scheme is intermittent and will need to be reviewed as part of the initial stages to determine existing discharge locations etc.
- 3.94 A preliminary assessment of the local ground conditions, based on a limited site investigations, indicate that the ground is impermeable suggesting that infiltration will be unlikely to provide sufficient rates to discharge surface water to the ground. This will be investigated further, across the entire site, as part of the assessment.
- 3.95 The primary consultees that will be contacted are the Environment Agency, Albion Water and the Lead Local Flood Authority.

Scope & Method of Assessment

- 3.96 The assessment will include an analysis of the existing surface water drainage system, summarised from the Flood Risk Assessment, including any off-site connections. Any likely changes to the existing surface drainage pattern will be identified and any potentially significant impacts assessed.
- 3.97 It is anticipated that the Proposed Development will replace the existing surface water drainage network with a Sustainable Urban Drainage system (SUDs) and therefore construction impacts will focus on the potential for removing cross connections and improving the water quality for discharges from the Proposed

Development. As a brownfield site surface water discharge rates will be reduced by 30% from the existing situation.

- 3.98 Surface water would discharge into the local watercourses (subject to topography). The SUDs will be assessed to ensure sufficient treatment is provided to improve water quality.
- 3.99 In addition to the above, we will work closely with the Utilities and Infrastructure and Landscape Architect teams, in conjunction with Albion Water, to design an environmental led water inset scheme, helping to increase bio-diversity and enhanced natural environment among other local community benefits.

Ground Conditions and Contamination

Introduction

- 3.100 The Ground Conditions and Contamination Assessment would present the results of an assessment of the likely significant impacts of the Proposed Development with respect to ground conditions and contamination at the Application Site. In particular, consideration will be given to the likely significant effects of any ground contamination on human health and the environment.
- 3.101 The assessment will provide a summary of relevant planning policy and a description of the methods used in the assessment. This will be followed by a description of the relevant baseline conditions of the Application Site and surrounding area, and an assessment of the likely significant effects of the Proposed Development during the demolition and construction works, and once the Proposed Development is completed and operational. Mitigation measures will be identified, where appropriate, to avoid, reduce or offset any adverse effects identified, together with the nature and significance of likely residual effects.

Baseline Conditions

- 3.102 The solid geology of the Application Site comprises the Middle Jurassic Great Oolite Limestone underlain by the Inferior Oolite Group which includes sand, sandstones and thin mudstone. Made ground is found at the surface comprising silt or clay, often sandy, and comprising a significant proportion of gravel to cobble sized pieces of limestone.

3.103 A summary of the geological conditions expected beneath the Application Site is provided below: -

Table 3.4 – Geological Conditions of the Application Site

Soil Type	Typical Description
Topsoil	Sandy gravelly topsoil
Made ground	Reworked material, very gravelly clay with many limestone cobbles and occasional fragments of tarmac
Natural Drift	Slightly sandy gravelly clay with occasional limestone cobbles and boulders
Limestone deposits	Yellowish to grey, fine grain, fragments of shell with fractures present throughout.
Sandstone deposits	Light yellow to grey weak sandstone with fragments of shell, bands of weathered sandstone present manifesting as sand.
Siltstone deposits	Light grey to dark grey fine grained siltstone with shell fragments, medium to strong, weak where weathered.
Mudstone deposits	Dark grey thinly laminated calcareous mudstone, with frequent shelly deposits.

3.104 There are two distinct groundwater bodies underlying the Application Site separated by a layer of relatively impermeable material. Both groundwater bodies are classified as principal aquifers.

Potentially Contaminative Activities

3.105 A number of potentially contaminative historic and current uses have been noted on-site including:

- Below ground fuel storage and delivery system referred to as the POL (Petroleum Oil Lubricants) system associated with the site’s former use as a NATO air base.
- The use of part of the Application Site by vehicle fleet management company to store and maintain cars;
- Fuel filling and storage facilities for use by the fleet management company;
- Multiple locations used for above ground storage tanks;
- Electrical substations; and
- Asbestos containing materials within some buildings.

Previous works undertaken on Site

- 3.106 Extensive intrusive site investigation and remedial works have taken place across large parts of the site.
- 3.107 The purpose of the intrusive works was to determine if the former use of the Application Site and surrounding areas as a NATO air base was having a significant impact on underlying groundwater quality. The investigation concluded that while some impact was noted the impact to off-site water bodies was considered not significant.
- 3.108 Remedial works carried out on the **Application Site comprised “Clean and Make Safe”** works to the POL system and the emptying, cleaning and grouting of individual fuel storage tanks.
- 3.109 These successfully completed works ensured that the redundant POL system was no longer capable of being a potential source or pathway of contamination.

Scope & Method of Assessment

Preliminary Environmental Risk Assessment

- 3.110 The presence of contamination sources and hazardous materials at, and in proximity to, the Application Site will be assessed in the form of a desk-based study the findings of which will be presented in a Preliminary Environmental Risk Assessment (PERA). The PERA will be undertaken in general accordance with the Model procedure for Management of Land Contamination (Contaminated Land Report 11 (CLR 11)) and will be informed by:
- A Landmark Information Group EnviroCheck Report which contains historical Ordnance Survey (OS) extracts, environmental data sheets and sensitivity plans;
 - A walkover and inspection of the Application Site;
 - Consultation with the Environmental Health, Planning and Building Control departments at the Cherwell District Council and the groundwater protection officer from the Environment Agency;
 - A review of available historical reports pertaining to the Site including;

- Aspinwall & Company Limited (June 1997) 'RAF Upper Heyford Land Quality Assessment Phase Two: Intrusive Survey Factual Report';
- DLS South (1995) 'Explosives Ordnance Disposal of RAF Upper Heyford';
- Waterman 2011 Heyford Park Flying Field Hydrogeological Characterisation and Groundwater Quality Assessment; and
- POL System – Clean and Make Safe, Upper Heyford, Oxfordshire.

3.111 In order to evaluate the potential and residual contamination risks associated with the Application Site, a source-pathway-receptor model will be developed for the Proposed Development in line with the Environmental Protection Act and the approach suggested in current UK guidance relating to human health including **DEFRA's Contaminated Land Exposure Assessment Model (CLEA) series CLR 7 and CLR 11**. Accordingly, the PERA will include an assessment which comprises:

- Identification of potential ground contamination source(s);
- Identification of potential contamination pathway(s);
- Identification of potential contamination receptor(s);
- Identification of potential ground contamination risk(s); and
- Assessment of the relative significance of the potential ground contamination risk.

Impact Assessment

3.112 The findings of the PERA will be used to inform the qualitative assessment presented in the ES Chapter of likely significant impacts to, and from, any ground contamination that exists at the Application Site. In accordance with guidance (Contaminated Land Statutory Guidance, 2012), the Conceptual Site Model (CSM) of the likely significant pollutant linkages will be updated, where necessary, for the purposes of this assessment to reflect the Proposed Development. The CSM comprises a qualitative assessment of the linkages between potential on site contamination and identified receptors.

3.113 There are no published criteria for assessing the significant potential impacts from ground conditions and contamination. Significance criteria will therefore be

developed using the generic criteria outlined in Tables 3.1 to 3.3 above, contaminated land guidance, and professional expert judgement.

3.114 An adverse impact in respect of ground contamination relies on the presence of a source, pathway and receptor pollutant linkage. The significance of the impact depends on the value of the resource, the sensitivity of the receptor and the ways in which the Proposed Development can provide a pathway to the receptor. The significance of an impact partly depends on the timescales involved, i.e. short, medium or long term and the extent of the area affected.

Potential Impacts

3.115 Potential ground condition and contamination impacts to be addressed as part of the EIA include:

- Health and safety risks to workers during demolition and construction works arising from
 - contaminated soils and groundwater;
 - ground gas and vapours; and
 - asbestos containing materials;
- Human health risks to future residents, site users, maintenance workers and others arising from
 - contaminated soils and groundwater;
 - ground gas and vapours; and
 - asbestos containing materials;
- Potential contamination risks to soils, surface water and groundwater (controlled waters) from the mobilisation of any existing contamination during demolition and construction phase; and
- Potential for new sources of accidental contamination during construction and operational phases.

3.116 Prior to its closure the Airbase was subject to a survey for unexploded ordnance and was declared clear. It is therefore proposed that the impact of health and safety risks posed by unexploded ordnance can be scoped out of the EIA.

Landscape and Visual Amenity

Introduction

3.117 The Landscape and Visual Impact Assessment (LVIA) will assess the potential effects of the Proposed Development on the landscape character of the area and visual amenity of receptors from outside the Application Site and existing and consented receptors from within the Application Site boundary. It will consider the Proposed Development as a whole with the various elements of the development occurring simultaneously.

Baseline Conditions

3.118 The Application Site is not subject to any statutory or non-statutory landscape designation. The nearest statutory landscape designation is the Cotswolds Area of Outstanding Natural Beauty (AONB) which is located approximately 12km to the south-west at its closest point.

3.119 According to the Cherwell Local Plan 1996 the Area of High Landscape Value (AHLV) is located approximately 2km away to the west at its closest point near Steeple Aston. Broadly speaking its boundary follows the higher ground to the west and north-west, and borders such settlements as the aforementioned Steeple Aston and Somerton. It continues further east excluding the airfield and its immediate surroundings and the settlement of Fritwell and Ardley. The AHLV continues further east while excluding Bicester. The AHLV is also located to the south at approximately 2.5km away with its northern boundary located between Lower Heyford and Northbrook.

3.120 The nearest Sustrans cycle route is Number 5 and is located just over 5km to the south-west. The Route Number 51 is located approximately 6.5km away at its closest point in Bicester.

3.121 The nearest long distance path is the Oxford Canal Walk which is located approximately 0.7km away to the west at its closest point near Upper Heyford. We are not aware of any other scenic routes, either sign posted or appearing in any available publication.

3.122 There are no specific visitor features or tourist attractions indicated on the available OS maps. The nearest attraction, the Deddington Castle owned by English Heritage is located approximately 6km to the north-west. **It is described as an "...extensive**

earthworks marking the site of an 11th century motte and bailey castle.” (the English Heritage website).

3.123 A number of historic parks have been identified within and around the 5km study area. They are listed on the English Heritage 'Register of Historic Parks and Gardens of special historic interest in England' and are:

- Rousham Park to the south-west;
- Aynho Park to the north;
- Middleton Park to the south-east;
- Kirtlington Park to the south
- Tackley Water Park to the south-west; and
- Tackley Water Garden to the south-west.

3.124 The entire site forms the RAF Upper Heyford Airbase Conservation Area and contains several Scheduled Ancient Monuments and Listed Buildings; these are identified and would be appropriately appraised within the Archaeology and Cultural Heritage Assessment.

Scope & Method of Assessment

Study Area

3.125 Based on our knowledge of the local landscape and particularly the local topography we suggest a 5km study area within which we would consider effects upon landscape character and visual amenity. The study area could be amended to a non-radial shape study to accommodate the inclusion of certain receptors otherwise excluded, if required by CDC.

3.126 The extent of the agreed study area will not necessarily preclude the inclusion of certain visual receptors and viewpoints located outside, should they be considered appropriate and identified during the consultation process.

3.127 The refined study area would apply to the LVIA, baseline section, assessment of landscape receptors (landscape character areas and designations), visual receptors (for example identified representative viewpoints, roads, cycle routes, designated viewpoints, long distance footpaths, Public Rights of Way (PRoW), Registered Parks

and Gardens included on the English Heritage 'Register of Historic Parks and Gardens of Special Historic Interest in England' (such as Rousham near Lower Heyford etc).

3.128 Proposed developments (consented or pipeline) to be considered in combination with the Proposed Development would be agreed with the Council. However, we are of the opinion that there is limited potential for significant cumulative effects with respect to landscape and visual amenity.

3.129 It is proposed to provide annotated baseline photos, stitched to form a panorama, sufficient to provide evidence in terms of baseline landscape character, views gained and the extent and inter-visibility with the Proposed Development. At this stage we do not envisage a need for visualisations.

Methodology

3.130 The LVIA assessment will provide for:

- Assessment of direct and indirect effects on landscape resource;
- Effects on visual amenity;
- Assessment of cumulative effects where relevant;
- Assessment and design of mitigation proposals as appropriate;
- Consideration of alternatives as appropriate.

3.131 The LVIA will be carried out in accordance with current best practice guidance, including:

- The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (2013) Landscape Institute and the Institute for Environmental Management and Assessment;
- Landscape Character Assessment Guidance for England and Scotland, (2002) Countryside Agency / Scottish Natural Heritage;
- The Guidelines for Environmental Impact Assessment (2004) Institute for Environmental Management and Assessment; and

3.132 In addition, the following documents will be used to aid the assessment:

- 'Cherwell District Landscape Assessment' (1995) Cherwell District Council;
- 'RAF Upper Heyford Conservation Area Appraisal' (2006) Cherwell District Council;
- 'RAF Upper Heyford Revised Comprehensive Planning Brief 2007' (2007) Cherwell District Council; and
- 'Renewable energy and sustainable construction study' (2009) Cherwell District Council.

3.133 The above list is not exhaustive and we would seek the Council's comment on the above list.

3.134 The LVIA will address the following:

- Landscape receptors – Local Landscape Character and Planning Policies;
- Landscape receptors – Landscape Designations and Planning Policies; and
- Visual receptors and views.

Baseline Information

3.135 To support our baseline understanding it is proposed to carry out desk-based review of current statutory designations and policies covering the agreed study area, best practice guidance and existing landscape character assessments. We will include a review of any relevant guidance or Supplementary Planning Guidance published by the Council if available at the time of writing.

Local landscape character and Planning Policies

3.136 It is our opinion that National Character Areas, previously known as Joint Character Areas developed by the former Countryside Commission are too coarse for the purpose of this assessment and would prefer to omit them from the study and focus instead on the local landscape character assessment developed by the Council and known as the '***Cherwell District Landscape Assessment***' (1995) or other landscape assessment as recommended by CDC.

Landscape Designations and Planning Policies

3.137 We have reviewed the policies as they relate to landscape at the national, regional and local level. The nearest statutory landscape designation is the Cotswolds Area of Outstanding Natural Beauty (AONB) which is located approximately 12km to the south-west at its closest point.

3.138 As we understand the Local Plan policy C13 in relation to Areas of High Landscape Value (AHLV) has been 'saved' in the current Cherwell Local Plan 1996. Other policies of relevance would be the policies C7, C10 and C11. This is not exhaustive and we seek the Council's recommendation with regards to policies in its Local Plan.

3.139 We also seek the Council's confirmation on the extent of the aforementioned AHLVs and the evidence base gathered by the Council and associated with this particular Local Plan 1996 policy.

3.140 We will review the published landscape character assessment and the evidence base for the AHLVs and provide for the assessment of the Proposed Development upon the local landscape character and the character of the AHLVs.

Visual Receptors and Views

3.141 This part of the baseline and assessment section will provide for:

- Local settlements;
- Transport corridors;
- Railways;
- National cycle routes;
- Scenic drives;
- Long distance paths as defined on OS maps (1:25,000 and 1:50,000) and the Long Distance Path association website;
- Attractions and visitor features as defined on OS maps;
- Historic parks and other heritage assets which would warrant its inclusion as a visual receptor; and

- Agreed viewpoints.

3.142 The selection of visual receptors will be informed by the ZTV, distance to the Proposed Development and their extent (roads, cycle routes). Exact viewpoint locations, from outside and/or within the site boundary, will be confirmed on site during field work while undertaking photography.

3.143 The selection of viewpoints would reflect the above identified receptors, landscape character areas and types and any specific locations the Council is considering of relevance. We welcome the **CDC's** suggestions with regards to their locations.

3.144 The provided preliminary ZTV (Appendix 4) is based on a height of the built form for the Proposed Development set at 15m height. This is for illustrative purposes only and to give an indication of the theoretical visibility of the Proposed Development. It does not take into account any proposed planting which will form part of the Proposed Development nor does it take into account smaller areas of woodland or hedgerows in the wider landscape which would aid the screening. Any consequent changes to the height of the Proposed Development would be reflected in the assessment and selection of visual receptors and viewpoints.

3.145 It is our opinion that the visual effects of the Proposed Development upon the majority of the visual receptors found within the 5km study area are unlikely to be potentially significant. However in order to test the limited visual influence of the Proposed Development we would review the level of inter-visibility between the Proposed Development and the identified visual receptors and specific viewpoints.

3.146 The initial review of the current inter-visibility between the western part of the central runway of the airfield established that views can be gained towards:

- Lower Heyford;
- Steeple Aston;
- Middle Aston;
- North Aston and
- Somerton.

3.147 Such views are however unlikely to be gained from within the residential part of the Proposed Development due to the intervening topography and existing vegetative

screening. Views from those settlements are likely to terminate on the proposed planting. As stated above the level of inter-visibility would be tested as part of the assessment.

- 3.148 Based on the initial site visit we do not envisage that views of the Proposed Development from local public roads would be significantly affected. The views from the north, from Ardley Road and Fritwell Road would be substantially restricted with views terminating on the Hardened Aircraft Shelters (HASs) and associated tree belt located in the northern part of the airfield. Theoretically, views from the north-east and east would be gained but the intervening vegetation is likely to restrict such views to a considerable degree. Some views would be potentially gained from the B430 to the east and south-east, the B4030 to the south and the minor roads linking the Proposed Development with the aforementioned roads and the wider landscape. Such visibility is unlikely to result in significant effects but this would be assessed in the LVIA to confirm. Views from local roads located to the east between Upper Heyford and Somerton to the north and Lower Heyford to the south-west would also be reviewed to confirm the level of inter-visibility between the Proposed Development and those receptors.
- 3.149 Similarly, views from the nearest railway lines would be included in the assessment. The railway line to the west connects Tackley in the south-west with Lower Heyford and King Sutton to the north and broadly speaking follows the valley of the River Cherwell. A second railway line is located to the east and north-east connecting Bicester to the south-east with Banbury to the north, forming part of the London Marylebone to Birmingham line. We do not envisage any significant effects upon receptors travelling along those railway lines however the inter-visibility between the proposed development and the identified railway lines would be reviewed as part of the LVIA.
- 3.150 We do not envisage that the Proposed Development would result in potentially significant effects upon receptors along either of the Sustrans cycle routes (No 5 and 51) **and therefore they will be excluded from the assessment.** The 'screened' ZTV illustrates that there would be no theoretical visibility of the Proposed Development from these sections of the Route No 5 and No 51.
- 3.151 Theoretically some views would be gained from certain sections of the Oxford Canal Walk, located approximately 0.7km to the west at its closet point, and this would be further explored in the assessment. **CDC's** confirmation is sought regarding the

presence or otherwise of any other scenic routes, either sign-posted or appearing in any available publication.

3.152 **The tourist attraction 'Deddington Castle,** benefits from a substantial level of screening provided by trees associated with this site. It is unlikely that the Proposed Development would result in potentially significant effects upon receptors located at this visitor feature and therefore will be excluded from the assessment.

3.153 We are of opinion that none of the identified historic parks identified features have the potential to experience significant effects as a result of the Proposed Development. Notwithstanding this we will test the level of inter-visibility between the Proposed Development and the two closest parks Rousham Park and Middleton Park, and liaise with the Council regarding the need to assess the other identified sites.

Ecology and Nature Conservation

Introduction

3.154 The Ecology and Nature Conservation assessment will focus on identifying and assessing the potential likely significant effects of the Proposed Development on ecological resources within the Application Site itself and within the surrounding zone of influence. Ecological resources to be considered include statutory and non-statutory ecological designations (e.g. SACs, SPAs, SSSIs and LWS), habitats and faunal species.

Baseline Conditions

3.155 Extensive ecological survey work has already been undertaken within and adjacent to the Application Site between 2001 and 2013 in connection with previous planning **applications, including the 'Lead Appeal' and the 'Outline Consent', and subsequent** discharge of planning condition applications. The previous work has included Phase 1 Habitat Surveys, National Vegetation Classification (NVC) surveys, bat surveys, Badger surveys, breeding bird surveys, Great Crested Newt surveys, invertebrate surveys and reptile surveys. To date, the following ecological resources have been identified within the site and surrounding area:

- Designations - There are no statutory nature conservation designations within or adjacent to the Application Site. The nearest statutory designation is Ardley Cutting and Quarry Site of Special Scientific Interest (SSSI) located

approximately 0.1km to the east of the site. Approximately 35ha of grassland within the east of the Application Site is subject to the non-statutory designation known as RAF Upper Heyford Airfield County Wildlife Site (CWS) (Appendix 5), as **indicated on the 'Ecological Constraints Plan'**. The CWS is designated on the basis of its calcareous grassland, which supports a number of notable plants including Bee Orchid *Ophrys apifera* and Dwarf Thistle *Cirsium acaule*. In addition, a large number of Skylark *Alauda arvensis* have been recorded breeding and Curlew *Numenius arquata*, Corn Bunting *Miliaria calandra* and Tree Sparrow *Passer montanus* have also been noted within the CWS. The grassland within the CWS also constitutes a Priority Habitat under Section 41 of the 2006 NERC Act. A wider area within the Application Site is also designated as an Ecologically Important Landscape (EIL) as a locally-important area of semi-improved grassland, notable for ground nesting birds.

- Habitats – Outside of the CWS, the remainder of the Application Site (including the EIL) is of relatively limited botanical interest, being dominated by sheep-grazed or mown semi-improved grassland with small pockets of plantation woodland and hard-standing forming the runways and built-up areas of the former airfield.
- Species – The survey work to date has identified the following protected species interest at the site: bats (a number of roosts in buildings supporting low numbers of Common Pipistrelle and Brown Long-eared Bat, and a medium-sized maternity roost for Common Pipistrelle); Badger (a number and variety of types of sett are present); birds (the Application Site was previously assessed as being of county importance for declining farmland birds and it is also frequently visited by the Schedule 1 listed Red Kite); Great Crested Newt (the fire water storage tanks and oil capture tanks support three populations of GCN, collectively considered to be of county importance); invertebrates (the CWS is considered of county value for invertebrates but the vast majority of the site is of negligible importance for invertebrates).

3.156 The baseline for the assessment of likely significant effects will be the Application Site conditions that are expected to occur if the Proposed Development were not to take place. This will be established based primarily on the existing ecological

situation as a result of the survey work to be conducted, as described below, as well as the pre-existing survey data.

Scope & Method of Assessment

- 3.157 A desktop study for existing biological and nature conservation data held by statutory and non-statutory organisations, including Natural England (via MAGIC) and the Thames Valley Environmental Records Centre (TVERC) will be undertaken. The zone of influence for the desktop study will be a minimum of 2km from the Application Site.
- 3.158 An extended Phase 1 Habitat Survey will be conducted in accordance with standard methods (JNCC, 2010) to record habitats and notable features present within the Application Site. This will form the baseline for the ecological assessment and provide information on the extent of potentially suitable habitats for protected species. More detailed botanical surveys will be undertaken if deemed necessary based on the results of the Phase 1 Habitat Survey.
- 3.159 Should suitable habitat for, or evidence of, any protected species be identified within or immediately adjacent to the Application Site, further detailed surveys will be carried out as required. Based on available background information to date we anticipate that this will include:
- Activity surveys for bats;
 - Badger presence / absence surveys;
 - Great Crested Newt presence/absence surveys, and where appropriate population surveys;
 - Reptile presence/absence surveys; and
 - Breeding bird surveys.
- 3.160 Surveys will be conducted in accordance with the relevant best practice guidelines by suitably experienced, and where necessary licensed, ecologists as appropriate.
- 3.161 The assessment of ecological effects will only focus on those ecological resources for which a significant effect is likely to be generated. Therefore, ecological features or resources will only be selected for detailed assessment where that feature or resource is sufficiently valuable, in terms of biodiversity, for an impact to be significant. The

relevant decision-making level in the present case is the District level. Therefore any ecological features or resources of value at or above the District level will be included in the assessment.

3.162 Potential ecological effects of the Proposed Development will be identified and assessed in accordance with the `Guidelines for Ecological Impact Assessment in the United Kingdom, 2006` published by the Chartered Institute of Ecology and Environmental Management (CIEEM) and proposals produced to mitigate or avoid these where possible. Indirect effects of the Proposed Development on flora, fauna and designated sites will be assessed as required including a cumulative assessment of other proposed / consented developments in the vicinity, where appropriate. During the evolution of the Proposed Development, measures will be incorporated into the scheme design to ensure that adverse effects on the ecology of the Application Site and surrounding areas are minimised or avoided through inherent mitigation, where possible.

3.163 Opportunities for ecological enhancements within the Proposed Development will be identified and these will be used to provide net gains for biodiversity, in line with the aims of relevant Biodiversity Action Plans, where practicable.

Archaeology and Cultural Heritage

Introduction

3.164 The archaeology and cultural heritage interest features at Heyford Park comprise **three `strands` of potential receptors: historic buildings and structures; the historic and Cold War landscape; and archaeological deposits.** The main impacts to be assessed are the physical effects on the archaeological resource and historic buildings, and the effects on the setting of the historic buildings and historic landscape.

Baseline Conditions

3.165 The Application Site is situated within the RAF Upper Heyford Airbase Conservation Area. The whole area has been divided into character areas, many of which are of very high and high significance due to the survival of the Cold War landscape (Appendix 6, Figure 1). Reflecting this importance the Application Site contains five Scheduled Monuments: the Hardened Telephone Exchange, the Battle Command Centre, the Quick Reaction Alert Area, the Avionics Maintenance Facility and the

Northern Bomb Stores, and five grade II Listed Buildings: three Nose Docking Sheds, a Squadron Headquarters and the Control Tower (Appendix 6, Figure 2).

3.166 Previous work carried out in 2010 identified that the Application Site has a high potential for Iron Age and Roman archaeological remains (Appendix 6, Figure 3). Iron Age ring ditches have been found in the Flying Field to the west and Aves Ditch (a probable Iron Age frontier boundary) runs through the eastern part of the Application Site and Proposed Development. **There is also an abundance of 'banjo' enclosures and other settlement evidence all around the Application Site, some of which appear to extend into it.** The Application Site lies alongside Port Way, a Roman Road, which highlights the potential for a settlement within this area during the Roman period. There may also be the potential for earlier prehistoric material and early medieval remains, based on the fact that an early medieval inhumations were found just to the south east of the Proposed Development.

Scope & Method of Assessment

3.167 All available historic sources will be consulted to assess the archaeological potential of the Application Site including archaeological, documentary, cartographic, and photographic sources as well as information from past investigations and geotechnical surveys. There have already been a number of documents produced looking at the built heritage, and these will be used and further assessments undertaken based on this body of work. The primary documents to be referenced are:

- Former RAF Upper Heyford Conservation Plan (ACTA, OA and the Tourism Company, Unpublished document 2005);
- Landscape Character Assessment of the Airbase South of the Cold War Zone (ACTA 2006);
- Cultural Heritage Chapter for ES for the North Oxfordshire Consortium (OA 2010); and
- The RAF Upper Heyford Conservation Area Appraisal (CDC 2006).

3.168 Site visits will be undertaken to assess the impacts on the buildings, character area and the Conservation Area, facilitated by photographic montages of key views taken to the north of the Proposed Development. English Heritage, the County

Archaeologist and Cherwell District Council will also be consulted to discuss the relevant issues.

3.169 The assessment will be guided by the Standard and Guidance for Archaeological Desk-based Assessments issued by the Institute of Field Archaeologists (2012). English Heritage guidance documents that will also be used include Conservation Principles: Policies and Guidance (English Heritage (EH) 2008) and two specific documents have been published which address the issue of the setting of heritage assets: Seeing the History in the View (EH 2011), and The Setting of Heritage Assets (EH 2011). The assessment methodology will be guided by that detailed in the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3 Part 2, in the amended document HA 208/07, issued by the Highways Agency in August 2007. Whilst specifically produced for roads it is recognised as the industry standard for the assessment process looking at the effects of development on the cultural heritage.

Cumulative Effects

3.170 This chapter of the ES will respond to the requirement in the EIA Regulations to assess the cumulative effects of the Proposed Development. For the cumulative assessment, two types of effect will be considered:

- The combined effect of individual effects, for example noise, airborne dust or traffic on a single receptor from the Proposed Development; and
- The combined effects of development schemes which may, on an individual basis be insignificant but, cumulatively, have significant effect. This will be conducted principally with reference to committed development in the surrounding area.

3.171 Impact interactions are also likely to occur for a small number of localised receptors, such as residential buildings. These potential interactions are likely to be related to noise, vibration, dust and traffic. Interactions are likely to take place during the construction phase.

4. Structure of the Environmental Statement

4.1 The ES will address the requirements of Parts 1 and 2 of Schedule 4 of the EIA Regulations. The anticipated structure and content of the ES is as follows:

- Chapter 1 Introduction
- Chapter 2 Assessment Scope and Methodology
- Chapter 3 Application Site and Proposed Development
- Chapter 4 Alternatives
- Chapter 5 Socio Economics
- Chapter 6 Transport and Access
- Chapter 7 Utilities and Infrastructure
- Chapter 8 Noise and Vibration
- Chapter 9 Air Quality
- Chapter 10 Water Resources and Flood Risk
- Chapter 11 Ground Conditions and Contamination
- Chapter 12 Landscape and Visual Amenity
- Chapter 13 Ecology and Nature Conservation
- Chapter 14 Archaeology and Cultural Heritage
- Chapter 15 Cumulative Effects
- Chapter 16 Summary

4.2 Within each of the assessment chapters (Chapter 5 to 14) the findings of the assessment will be presented under the following headings: -

- Introduction – introducing the subject matter and purpose of the assessment;
- Assessment Approach – describing the scope and methodology of the assessment, including criteria for assigning magnitude and sensitivity of impacts, the policy framework and any limitations of assessment;
- Baseline Conditions – providing a summary of the key baseline conditions relevant to the receptor including the results of any desk-based research and survey work undertaken;
- Likely Significant Effects – describing and evaluating the potential effects of the Proposed Development (construction and operational phases) and **assigning a 'significance' according to the matrix set out within Chapter 3** of this Scoping Report;
- Mitigation and Enhancement – describing and appraising the mitigation measures and/or enhancements, where proposed, and assigning a resultant significance as if these were implemented as part of the scheme;
- Cumulative Effects – the identification of any schemes whereby cumulative effects could occur and an appraisal of these scheme(s) in combination with the Proposed Development; and
- Summary of Findings – a short synopsis of the assessment using a non-technical language.

4.3 The ES will be supported by Technical Appendices, Drawings and Plans, where appropriate, and a Non-Technical Summary (NTS).

5. Statutory and Other Consultees

5.1 This Scoping Report is submitted to the Local Authority as part of the request for a Scoping Opinion under Regulation 13(1) of the EIA Regulations.

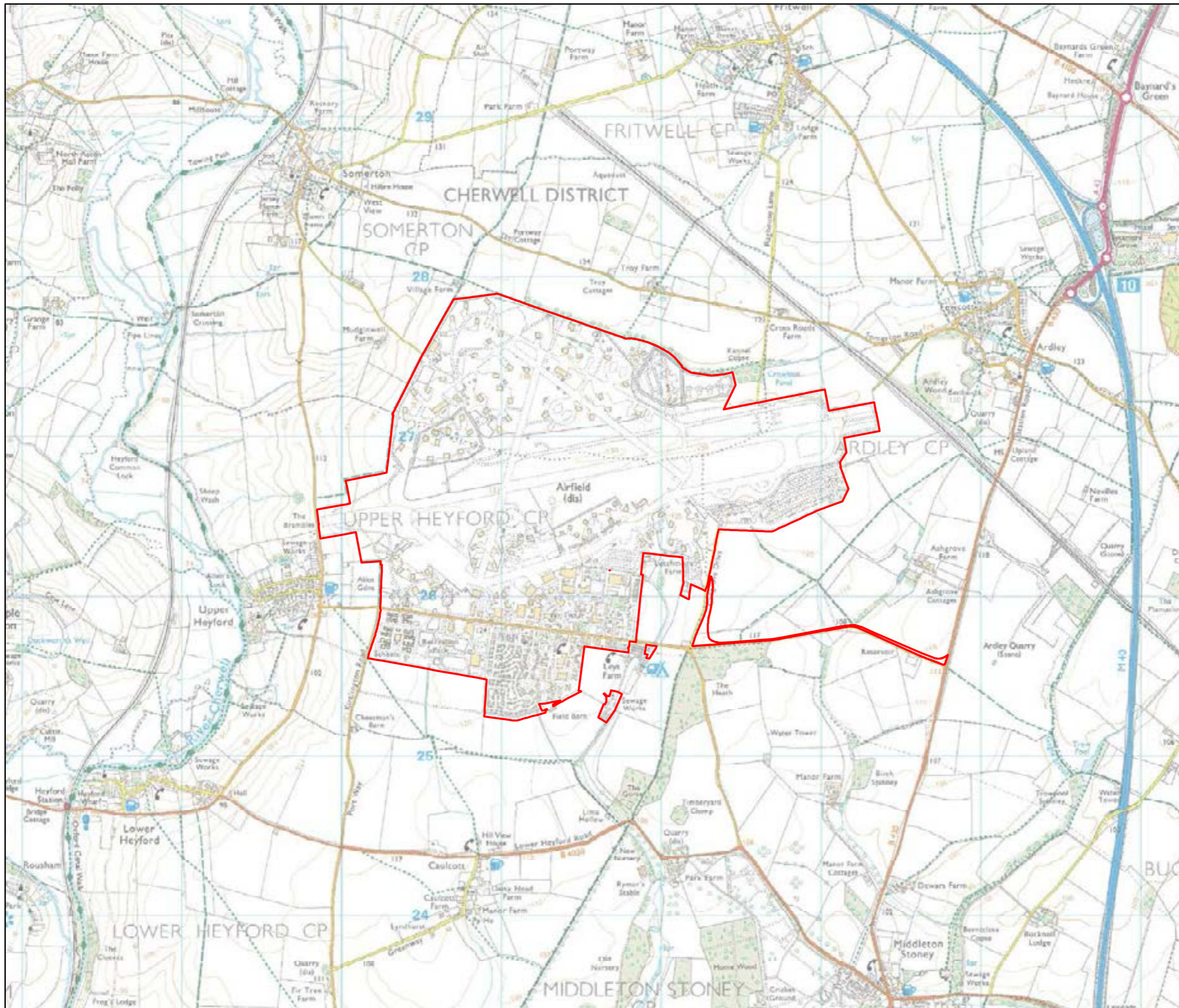
5.2 It is anticipated that the Local Authority will invite statutory and other consultees to comment on the proposed scope and contents of the ES. It is considered that these consultees are likely to include:

- Oxford County Council (highways authority and archaeologist);
- Highways Agency;
- Environment Agency (flood risk management and groundwater protection);
- Natural England;
- English Heritage;
- CDC's internal departments including:
 - Local Plans/Forward Planning team;
 - Landscape;
 - Conservation;
 - Environmental Protection/Environmental Health (air and noise quality, and groundwater protection); and
 - Building Control.

5.3 This consultation will also include any other consultation bodies that the Planning Authority nominates, as required under Regulation 15 of the EIA Regulations.

APPENDIX 1

SITE LOCATION PLAN



KEY

 Site Boundary

Revisions	Date
A - First Issue	14.03.14

Heyford Park - A Sustainable Sub Hub

Site Location Plan

Drawing Ref: D.0349_03-A
 Client: Dorchester Group

1:25,000 @ A3
 Date : 14.03.14
 Drawn by : DMB
 Checked by : RCH



APPENDIX 2

SCHEDULE 4 OF THE EIA REGULATIONS

SCHEDULE 4

Regulation 2(1)

INFORMATION FOR INCLUSION IN ENVIRONMENTAL STATEMENTS

PART I

1. Description of the development, including in particular -

(a) a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;

(b) a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;

(c) an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.

2. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.

3. A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

4. A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:

(a) the existence of the development;

(b) the use of natural resources;

(c) the emission of pollutants, the creation of nuisances and the elimination of waste,

and the description by the applicant of the forecasting methods used to assess the effects on the environment.

5. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

6. A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.

7. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

PART II

- 1.** A description of the development comprising information on the site, design and size of the development.
- 2.** A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.
- 3.** The data required to identify and assess the main effects which the development is likely to have on the environment.
- 4.** An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.
- 5.** A non-technical summary of the information provided under paragraphs 1 to 4 of this Part.

APPENDIX 3

TRANSPORT ASSESSMENT SCOPING REQUEST & SCOPING FOR TRANSPORT ASSESSMENTS FORM TO OCC & HIGHWAYS AUTHORITY

(Note: The Transport Scoping Document was issued on Friday 7 March 2014. Subsequent discussions held with OCC regarding the use of the transport model, supersede references to the model to be used as set out within these reports)



Heyford Park

Transport Assessment Scoping Report

Local Highway Authority and Highways Agency Scoping

On behalf of **The Dorchester Group Ltd**



Project Ref: 30284/001 | Rev: 00 | Date: March 2013



Document Control Sheet

Project Name: Heyford Park

Project Ref: 30284

Report Title: Transport Assessment Scoping Report

Doc Ref:

Date: March 2014

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Approved by:				
For and on behalf of Peter Brett Associates LLP				

Revision	Date	Description	Prepared	Reviewed	Approved
00		Draft for Comment			

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Figure 2 2013 Traffic Survey Locations

Figure 3 Junction Survey Locations (Study Area)

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1 Introduction

- 1.1.1 Peter Brett Associates LLP (PBA) has been commissioned by The Dorchester Group (the "Owner") to undertake a Transport Assessment and prepare a Transport Assessment Report (TAR) and Travel Plan Framework (TPF) in support of an outline planning application for the redevelopment of Heyford Park, Oxfordshire.

1.2 Site Location and Background

- 1.2.1 Heyford Park is located on the former RAF Upper Heyford site, which lies approximately 20km due north of Oxford. The nearest towns to the site are Bicester, approximately 7km south east of the site, Brackley approximately 10km north east, and Banbury 15km to the north. **Figure 1** shows the location of the site and wider area.
- 1.2.2 The original RAF base was established in 1915 and was active in WWII. From the 1950s the base was used by the Americans during the cold war and housed some circa 15,000 servicemen and their families during that time.
- 1.2.3 RAF Upper Heyford was then an operational airfield from the 1960s until 1994 when it closed after a period of reduced activity.
- 1.2.4 Heyford Park offers a great range of infrastructure over a sizeable area due to its military history. Following the closure of the airfield, most of the infrastructure has been retained, with some used for commercial purposes now, although some are disused and derelict. The existing employment areas comprise some B1 use with predominantly B2 / B8 uses occupying the existing Flying Field Buildings. There are also 315 dwellings formerly used by military personnel which are still in use on the site for residential purposes.
- 1.2.5 The RAF Upper Heyford former airfield site covers a total area of 225 ha (555 acres) and the existing points of access are along Camp Road.

1.3 Development Planning Context

- 1.3.1 In 1998 the Oxfordshire Structure Plan adopted policy H2 which limited future development on RAF Upper Heyford to 1,000 dwellings. The reasons given for the limit cited proximity to Bicester and the anticipated need for local road access improvements.
- 1.3.2 The first planning application for circa 1,000 dwellings was heard at public inquiry and refused in 2003 by the Secretary of State.
- 1.3.3 The whole site was subsequently designated as a conservation area in 2006.
- 1.3.4 A further application was submitted in 2008 which went to public Inquiry in 2010 when the Secretary of State granted planning consent for development to a maximum of 1,075 dwellings and around 1,000 jobs.
- 1.3.5 This planning consent is currently in the process of being implemented with commencement of the refurbishment of the existing dwellings underway and the construction of new dwellings and associated ancillary development is in progress.

1.4 Proposed Development

1.4.1 The draft framework masterplan for the expansion and redevelopment at Heyford Park is currently being developed. The key elements of the proposed mixed use scheme are:

- 4,000 residential dwellings;
- 4.5ha Mixed use district centre including 30,000 sqft (2,787 sqm) retail store;
- 6.6ha Employment mixed use hub generating circa 1,600 B1 office employment opportunities;
- 2 Primary schools (total land area of 4.32ha);
- 10.5ha Solar park; ; and
- 41.49ha Public open space.

1.5 Purpose of Scoping Statement

1.5.1 The purpose of the Scoping Statement is to formally agree the technical parameters and scope of works with Oxfordshire County Council (OCC) as the Local Highway Authority (LHA) and the Highways Agency (HA) to inform the completion of the Transportation Assessment Report (TAR) and Framework Travel Plan (FTP) documents to support an outline planning application submission.

1.5.2 The National Planning Policy Framework 2012 (NPPF), which replaced most Government Planning Policy, including PPG 13: Transport, states that “*all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment*”. The NPPF goes on to confirm that “*development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe*”.

1.5.3 The National Planning Practise Guidance (NPPG) has been published online from the 6th March 2014. The ministerial statement that accompanied it confirmed that the government has cancelled all previous planning practise guidance documents.

1.5.4 The DfT ‘Guidance on Transport Assessment’ (GTA) 2007 and ‘Good Practise Guidelines: Delivering Travel Plans through the Planning Process’ 2009 were listed in Annex B of Lord Taylor’s report. The recommendation on these documents states ‘*Guidance needed on this issue but should be streamlined. Cancel existing advice and prepare new guidance*’.

1.5.5 Since NPPG has been published, the list of documents to be cancelled by the planning practise guidance suite includes the Travel Plan guidance but does not include the GTA.

1.5.6 It is proposed that in the absence of further guidance, at this stage, that the TAR, FTP and this scoping report are still informed by the GTA document whilst taking account of NPPG.

1.5.7 The GTA states that a properly prepared TAR will help Local Planning Authorities (LPAs) assess the development’s compatibility with the relevant planning policy framework and transport strategy. It will allow the transport implications of proposed development to be properly considered and where appropriate, will help identify suitable measures to achieve a more sustainable and environmentally sound outcome. A TAR can also address issues likely to be of concern to the LHA and HA, where relevant, in performing their network management duties.

1.5.8 The GTA states that, in preparing a TAR the following considerations will be relevant:

- Encouraging environmental sustainability:
 - Reducing the need to travel, especially by car;
 - Tackling the environmental impact of travel;
 - The accessibility of the location; and
 - Other measures which may assist in influencing travel behaviour (ITB).
- Managing the existing network:
 - Making best possible use of existing transport infrastructure; and
 - Managing access to the highway network.
- Mitigating residual impacts:
 - Through demand management;
 - Through improvements to the local public transport network, and walking and cycling facilities;
 - Through minor physical improvements to existing roads; and
 - Through provision of new or expanded roads.

1.5.9 The GTA continues by advocating the need for pre-application discussions. It states that pre-application discussions should be held with the Local Planning Authority (LPA), LHA and HA, where there might be an impact on the Strategic Road Network (SRN). This ensures that all parties have a better understanding of, and reach a consensus on, the key issues to be addressed in respect of particular development proposals.

1.6 Heyford Park Transport Assessment Scoping Statement

1.6.1 This Transport Scoping Statement has been prepared in liaison with OCC, following an initial scoping meeting with relevant Officers 25th February 2014. In addition to the wider Heyford Park scheme, PBA has worked with the LHA over a number of years through the other phased developments within Heyford Park.

1.6.2 This Transport Assessment Scoping Statement is a working document in which continuing discussions with OCC and the HA will be reported and inform the technical content of the TAR.

1.7 Scope of Transport Assessment

1.7.1 In order to provide clarity of understanding to the Local Authorities and key stakeholders, the TAR will be set out in accordance with the GTA.

1.7.2 Whilst the approach advocated within the GTA will be followed throughout the assessment process, PBA have developed their own approach and structure to TAR's which incorporates all of the technical requirements of the guidance, whilst setting out the results in a clear, concise and chronological order to best reflect and report upon the refinement process.

1.7.3 The format will consist of a TAR supported by a series of Technical Appendices covering specific elements of works. This approach facilitates a staged assessment whereby each

technical element can be thoroughly considered and allows informed comments and suggestions from OCC and the HA to be incorporated as part of the process.

- 1.7.4 Stage 1 of the Transport Assessment will include all Baseline information and Stage 2 will be progressed to provide an understanding of the potential impacts of the proposed development and requirements in terms of any mitigation measures.
- 1.7.5 It is recognised that with the publication of the DfT's Circular 02/13 the HA's requirements for Transport Assessment now differ from those of the LHA, specifically in relation to opening year assessment. It is therefore recognised that the TAR will need to present all common analysis before providing separate analysis of impact on the local and strategic road networks. PBA recognises that some elements of this analysis will be of interest to both authorities, such as the impact on local roads due to the operation of motorway junctions.
- 1.7.6 The proposed TAR Structure and specific Heyford Park scoping requirements are set out within the following sections.

DRAFT

2 Policy and Guidance

2.1.1 The TAR will be guided by national and local policies and the developers and their consultants will seek to ensure that the development proposals will conform to and enforce those policies where possible. This policy section identifies specific Transport Guidance and identifies the appropriate contents of a TAR adopting the guidance. The national and local policies which will be considered in the TAR are listed below.

2.2 National Policy and Transport Policy Context

2.2.1 National Planning Guidance will include:

- National Planning Policy Framework (March 2012);
- DfT Circular February 02/13, 'The Strategic Road Network and the Delivery of Sustainable Development';
- Delivering a Sustainable Transport System (2008); and
- The Future of Transport, White Paper (2004).

2.3 National Planning Practise Guidance

2.3.1 National Planning Practise Guidance (March 2014) has been produced to streamline planning guidance and cancel existing advice.

2.4 Local Planning and Transport Policy Context

2.4.1 Local Planning Guidance will include:

- Oxfordshire Local Transport Plan 2011 - 2030; and
- Cherwell District Local Plan 2006 – 2031 (submitted to the Secretary of State 31st January 2014); and
- Oxfordshire County Council Parking Standards for New Residential Developments 2011.

2.5 Relevant Transport Guidance and Studies

2.5.1 Transport Guidance will include:

- DfT Guidance on Transport Assessments (2007);
- Manual for Streets (2007) and Manual for Streets 2 (2010);
- Circular 02/13: The Strategic Road Network and the Delivery of Sustainable Development'; and
- Good Practice Guidelines: Delivering Travel Plans through the Planning Process (DfT, 2009) now cancelled by NPPG.

2.6 Summary

2.6.1 The TAR will include a summary of how the site will be guided by and accord with national, regional and local policies as well as specific Transport Guidance and studies.

3 Existing Transport Conditions

- 3.1.1 This section of the TAR will consider Heyford Park in the context of existing transport conditions; will provide details of the site location; access to local facilities and amenities; and the local highway network, including a review of local Personal Injury Collision (PIC) data and results of baseline network and junction capacity assessments.
- 3.1.2 The sustainability of the site will be considered as well as the potential for access by non-car modes of transport including walking, cycling, bus and rail.

3.2 Site Location and Description

- 3.2.1 A full description of the site's current state, its previous uses and any extant planning permissions will be set out. As part of preliminary feasibility work prior to commencement of the formal TAR study, investigation into the extant traffic generation of the site will be undertaken.

3.3 Local Facilities and Amenities

- 3.3.1 The TAR will identify and describe the existing key local facilities and amenities within the vicinity of the site.

3.4 Walking and Cycling

- 3.4.1 In terms of foot and cycle connectivity, the TAR will identify any foot and cycle connections throughout and within the vicinity of, the site, linking the site with the key local facilities and amenities. Any access to National Cycle Network (NCN) Routes and National Routes (NR) will be considered as well as both formal and recreational routes in the local area.

3.5 Public Transport

- 3.5.1 The TAR will provide information on all existing bus services operating in close proximity to the site. This will include the location of the nearest bus stops, timetable information (including frequency, periods of travel, journey time and costs), information on bus services origins and destinations and will identify how accessible the City of Oxford, towns of Bicester and Banbury and surrounding communities of the North Oxfordshire are by bus.
- 3.5.2 The nearest Rail station to the site is Heyford Station, located at around 3.0km from the western edge of the site in Lower Heyford. This station is served by local services to Banbury and Oxford. These can be used to connect to journeys further afield to Reading and London. Further national rail services can be accessed via Bicester which has two stations, Bicester North and Bicester Town, both lie between 10 and 11km to the south west of the western edge of the site. Bicester North Station provides direct services to London Marylebone. In terms of travel by train, the TAR will provide information on train timetables from Lower Heyford, Bicester and Oxford stations and will set out how accessible they are by walk, cycle and other public transport modes.

3.6 Local Highway Network

- 3.6.1 The TAR will provide a detailed description of the local highway network, including geometries, speed limits, parking and waiting restrictions as well as identifying current traffic levels and any observed operational constraints across the study area.

3.7 Strategic Road Network

- 3.7.1 The TAR will also include information on the Strategic Road Network (SRN), providing a commentary on current traffic levels and the operational performance of the mainline and key junctions. Details of programmed improvement works will also be considered.

3.8 Network Operational Capacity

- 3.8.1 A baseline assessment of existing conditions will be included, based on available traffic data obtained through commissioned traffic surveys or through LHA traffic data records. Through ongoing work at the Heyford Park site PBA commissioned traffic surveys in 2013 at 5 local junctions, these are listed below:

- Camp Road Junction with Somerton Road;
- Camp Road Junction with Kirtlington Road;
- Camp Road Junction with Chilgrove Drive;
- B4030 Heyford Road Junction with B4030 Bicester Road 'Middleton Stoney Junction'; and
- A4260 Banbury Road / Oxford Road Junction with B4030 Station Road.

- 3.8.2 The locations of these junctions in relation to Heyford Park are shown in **Figure 2**.

3.9 Personal Injury Collision Data

- 3.9.1 Personal Injury Collision (PIC) data will be obtained from OCC for the most recently available five year period covering the local and strategic highway network. Analysis of PIC data will be presented in the TAR.

4 Site Access and Sustainable Access Strategy

4.1.1 The transport strategy for the site will detail the measures proposed to increase the sustainability of the site and encourage use of sustainable modes of transport. The transport strategy for the site will be influenced by the emerging masterplan and transport package measures that will be identified through the TAR process.

4.2 Overview of Development Proposals

4.2.1 A description of the development proposals will be provided in the TAR which will include the masterplan, anticipated development build out rate and vehicular access principles.

4.3 Maximising Sustainable Accessibility

4.3.1 The site masterplan will be designed to reduce the need to travel and to enable sustainable travel options for any journeys that are made to, from and through the site.

4.3.2 In support of this, the site transport strategy will positively promote accessibility by all sustainable modes of travel, in particular, public transport, walking and cycling and will facilitate multi-modal travel where possible. The strategy will reflect upon the existing transport conditions and demand for movement from the development proposals to identify appropriate measures to both enable and influence sustainable travel behaviour. A staged approach to the strategy will be set out, to support the key stages of construction of the Heyford Park development and ensure appropriate measures are put in place.

4.4 Public Transport Strategy

4.4.1 The TAR will set out the public transport strategy which will seek to provide accessible and convenient public transport choices, using the information gathered during Stage 1 of the TAR (Existing Conditions) to build upon the public transport system already in place and any improvements proposed as part of other developments. Proposals for public transport will take into account any forthcoming local transport strategies and will consider:

- Enhancement to existing services;
- New services;
- Community services;
- Supporting infrastructure including stops and interchange facilities; and
- Funding and delivery mechanism.

4.5 Walking and Cycling Strategy

4.5.1 A strategy for walking and cycling will be identified, building on a review of the current network, level of infrastructure provision and demand. The strategy will also consider:

- Commuter routes;
- Recreational routes; and
- Integration with the existing and future networks and adjacent residential and commercial communities.

4.6 Vehicular Access Strategy

- 4.6.1 The TAR will set out the site access and vehicular circulation strategy for the site and will include details for proposals to connect the site with the public highway, which are likely to include vehicular connections to a combination of:
- A new junction onto Somerton Road, broadly on alignment with the runway; and
 - Camp Road and Chilgrove Drive amended junction.
- 4.6.2 Proposals will be presented in the form of a Site Access Infrastructure Plan with junction details provided.

4.7 Parking Strategy

- 4.7.1 The NPPF sets out the Government's policy of removing the maximum non-residential car parking standards for major developments, as prescribed by PPG13. The Framework notes that current policy is too centralised and prevents local councils from developing policies that are most appropriate to their local circumstances and communities. The NPPF therefore states that: "*when setting local standards for residential and non-residential development, local planning authorities should take into account:*
- *The accessibility of the development;*
 - *The type, mix and use of development;*
 - *Local car ownership; and*
 - *An overall need to reduce the use of high-emission vehicles."*
- 4.7.2 OCC approved the Oxfordshire County Council Parking Standards for New Residential Developments in 2011. The residential parking provision will accord with the requirements set out in this document.

4.8 Travel Plan Framework

- 4.8.1 In accordance with the DfT documents 'Guidance on Transport Assessments' and DfT's 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process' (2009), PBA will prepare a separate Travel Plan Framework (TPF) to accompany the TAR. The TPF will also be summarised within the TAR to provide a concise reference to readers and to demonstrate the mechanisms for reducing trip generation to levels that will be tested in the "with FTP/Smarter Choices" scenarios.
- 4.8.2 The key aim of a TPF is to reduce the need to travel by single occupancy car trips associated with the development by promoting more sustainable alternatives to the car such as car sharing, public transport and by walking and cycling.
- 4.8.3 The contents of the TPF will be agreed with OCC and the HA and is likely to include the following:
- Introduction;
 - Site Accessibility;
 - General Situation;
 - Walking;

- Cycling;
- Bus Use;
- Trains;
- Driving; and
- Neighbouring Land Uses and Local Facilities.
- Action Plan;
 - Informational Measures;
 - Promotional Measures;
 - Design of the Development;
 - Parking Measures;
 - Cycle, Motorcycle and Car Share Parking;
 - Car Parking Provision and Parking Management Strategy;
 - Management Measures;
 - Off-site Transport Improvements;
 - Bus Services;
 - Walking;
 - Cycling; and
 - Highway Improvements;
- Targets and Outcomes; and
- References.

4.9 Development Travel Demand

4.9.1 This section of the TAR will provide an overview of the likely travel demand resulting from the Heyford Park development proposals by all modes of travel including walking, cycling, public transport and private cars.

4.10 Trip Generation

4.10.1 The initial trip generation assessments will be based upon 'standard' trip rates for each land use derived from the TRICS database. Adjustments would then subsequently be made to account for reductions in single occupancy car trips due to Smarter Choices and the proposed transport package measures.

4.10.2 The standard trip rates and modal splits will be agreed with OCC and the HA in the first instance through the submission of a technical note for agreement. The adjustment in trip rates and modal splits through Smarter Choices would be agreed within a separate note which sets out the assumptions and justifications for the forecast rates.

- 4.10.3 The two Primary Schools and District Centre trips are assumed to be wholly internal to the site or included in residential rates to some extent and are not therefore proposed to be modelled as impacting outside of the red line boundary of the site.

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5 Traffic Impact Assessment

- 5.1.1 This section of the TAR considers the impact of development proposals upon the local and strategic highway network.
- 5.1.2 During the initial scoping consultations with OCC, it was confirmed that the LHA would require a strategic model to assess any impacts. The options for a strategic model that were discussed in the meeting are described below.

5.2 Central Oxfordshire Transport Model

- 5.2.1 OCC commissioned Halcrow Group Ltd to develop a transport model of Central Oxfordshire, in 2007, known as the Central Oxfordshire Transport Model (COTM). The model was intended for use as a major scheme bid for access to Oxford and to assist with the Central Oxfordshire Transport Strategy.
- 5.2.2 In addition to the traffic demand model it also appears that the COTM model may have been developed as a public transport assignment model to forecast passenger numbers and impact on bus and rail services.
- 5.2.3 We understand this model this model is currently being updated by Atkins and is due to be completed within this year (2014).
- 5.2.4 The proposed use of the COTM model to assess the proposals at Heyford Park has been discussed with OCC. However the LHA was unable to confirm the extent of the COTM study area and whether it includes Heyford. It was also not confirmed when the model would be completed and available for use to assess the Heyford Park development proposals.
- 5.2.5 OCC will confirm the status of the model to PBA.

5.3 SATURN

- 5.3.1 There is understood to be a SATURN model known as the Heyford Park model. This model may be available for use, although is likely to be pre 2006 and would need to be assessed to establish whether it has been outdated by changes in the highway network.
- 5.3.2 OCC will confirm the status of the model to PBA.

5.4 Spreadsheet

- 5.4.1 PBA confirmed at the scoping meeting that should the existing strategic models be found to be unsuitable or not available in time for the intended submission in June 2014 an alternative model would be prepared. PBA propose that a spreadsheet model will be developed for the site study area in order to assess the development impact. The model will be built using current traffic survey data which is being used in developing the COTM model for consistency. In that way, the Heyford Park proposals could easily be fed into the COTM model at a later date if necessary when it is available.

5.5 The Proposed Method of Assessment

- 5.5.1 OCC will advise on the availability and validity of both the COTM and SATURN models. The intended submission of the Heyford Park development application is June 2014, a staged approach is proposed where by the application is registered in June using a PBA-developed spreadsheet model with supplementary information submitted post application.

- 5.5.2 A bespoke spreadsheet model will be developed to support the TAR for the purpose of submission. This model will establish the impact of the proposals across the network. The technical assessments within the TAR will be supported with a PBA commissioned model on the COTM or SATURN model which will follow post application as a separate technical assessment. As such, the existing models will be used to validate the findings of the spreadsheet model if required.

5.6 Strategic Road Network Junction Assessment

- 5.6.1 The HA has developed traffic models of Junction 9 and 10 of the M40. In the scoping meeting of the 25th February 2014, it was stated by the HA representative that these will be made available to PBA in order to assess the impacts of the development onto the strategic network.

5.7 Assessment Years

- 5.7.1 The assessment years will be finalised following OCC's confirmation of the availability of the strategic model. We understand that reference case years of 2016 and 2026 have been developed for use in the COTM model.
- 5.7.2 The Heyford Park development will be registered in 2014 and the year of opening is likely to be 2015. The design year, in line with the 2007 DfT guidance would be five years after opening, 2020.
- 5.7.3 The impact of development will be tested in the opening year of 2015, in line with the HA's most recent requirements as set out in Circular 02/13. The circular requires the impact of development to be tested in the first year of opening, 2015, assuming full development build out.
- 5.7.4 Circular 02/13 also identifies a requirement to assess the operation of the network with full build out of the development in a forecast year, ten years after registration of the application or the end of the local plan period, whichever is greater. This forecast year test is to provide the HA with information on the future operation of the network only, it is not the responsibility of the developer to mitigate impact in this test. The submitted Cherwell District Local Plan ends in 2031.
- 5.7.5 Forecast year models will all take into account the HA improvement schemes at Junctions 9 and 10 of the M40.
- 5.7.6 Based on the projected build out of the development and in line with the requirements of the GTA, the following Reference Case models will be developed:
- **2015/2016 Reference Case:** Base traffic and known committed development traffic, including already consented Heyford Park development.
 - **2020/2021 Reference Case:** Base traffic plus background traffic growth and known committed development traffic, already consented Heyford Park development.
- 5.7.7 In order to establish the impact of the development proposals, the following 2016 test scenario will be undertaken:
- **2015/2016 Test Case 1:** Reference Case plus full Heyford Park development proposals and access infrastructure, including Smarter Choices trip reductions.
 - **2020/2021 Test Case 1:** Reference Case plus full Heyford Park development proposals and access infrastructure, including Smarter Choices trip reductions.

- **2031 Test Case 1:** Reference Case plus full Heyford Park development proposals and access infrastructure, including Smarter Choices trip reductions.

5.7.8 The forecast years will be assessed under AM and PM network peak hours for a typical weekday scenario.

5.8 Traffic Growth

5.8.1 The recent version of TEMPRO 6.2.1 will be consulted in order to provide growth rates for use to derive design year traffic. The rates to be applied will be provided in a Technical Note for agreement with the LHA and HA.

5.9 Committed Development

5.9.1 It is assumed that there has been a full schedule of the committed development sites included in the COTM model. PBA request that the schedule be made available for consideration in relation to the selected Heyford Park study area to incorporate within our modelling process.

5.9.2 PBA will ensure that committed development flows are not double counted through the use of TEMPRO growth factors in the future year models, by adjusting TEMPRO rates accordingly.

5.10 Traffic Distribution and Assignment

5.10.1 The COTM and SATURN models will have agreed levels of assignment and distribution around the network. If this information is made available it will be used in the Heyford Park traffic impact analysis.

5.10.2 Development traffic will be assigned to the network using traffic survey information and Census data for use in the spreadsheet model.

5.11 Network / Junction Capacity Assessments

5.11.1 It has been requested by OCC that the impact of the site is assessed on the wider highway network, using strategic modelling to fully assess the potential impacts of the development. In addition to this, PBA will assess the impacts locally using detailed junction models, where the strategic modelling identifies a significant increase in movement through local junctions as a result of the Heyford Park proposals.

Study Area

5.11.2 It is considered that the study area for network and junction assessments will extend to incorporate the M40 J9 to J10. The proposed assessment study area and the wider higher network are show in a local context on **Figure 3**. This area will comprise of a number of key routes such as:

2013 Surveyed Junctions

- Camp Road Junction with Somerton Road;
- Camp Road Junction with Kirtlington Road;
- Camp Road Junction with Chilgrove Drive;
- B4030 Heyford Road Junction with B4030 Bicester Road 'Middleton Stoney Junction';
and

- A4260 Banbury Road / Oxford Road Junction with B4030 Station Road.

Proposed Junction Surveys for LHA Assessment

- The B430 Ardley Road Junction with an unnamed road (extends west from Camp Road);
- The A4095 Junction with the B430 Oxford Road;
- The A4260 Banbury Road Junction with the A4095 Upper Campsfield Road;
- The B4030 Junction with Heyford Road;
- Water Street Junction with Ardley Road (Somerton); and
- B4030 Junction with Station Road

Proposed Junction Surveys for HA Assessment

- The M40 Junction 9;
- The M40 Junction 10; and
- The A34 Junction with the B430 Northampton Road.

Junction Modelling

- 5.11.3 Traffic flows derived from the spreadsheet model for the forecast years will be used for the detailed modelling at local junctions, where it is agreed with OCC that the output of the modelling identifies a need for capacity testing. In order to assess the impacts of the development on individual junctions, standalone junction models will be developed as appropriate.
- 5.11.4 The modelling packages used to assess individual junctions will be determined following confirmation of the study area and availability of existing traffic models but are likely to be TRANSYT, LINSIG, ARCADY and PICADY.

6 Mitigation Measures

6.1.1 This section of the TAR will set out the measures identified to minimise the need to travel, and to mitigate the residual transport impacts of the development.

6.2 Proposed Walking and Cycling Measures

6.2.1 The TAR will detail a walking and cycling strategy which focuses on the provision of a network of routes connecting the site's internal spaces with external routes and facilities in order to integrate and provide a seamless link between the site and the surrounding area.

6.2.2 A visible, coherent network of walking and cycling routes would encourage greater use of these modes, thus reducing the need to travel by car and impact on the highway network.

6.3 Proposed Public Transport Measures

6.3.1 The TAR will include a public transport strategy which focuses on providing accessible and convenient public transport choice. Such proposals could include the extension of existing and/or provision of new bus routes to the site and will integrate and compliment wider network proposals for Oxford.

6.4 Proposed Travel Plan Framework

6.4.1 The key aim of a TPF is to reduce single occupancy car trips associated with the development by promoting more sustainable alternatives to the single occupancy car, including car sharing, public transport and by walking and cycling.

6.4.2 The underlying objectives of producing such a document include:

- Reduce reliance on single occupancy cars;
- Minimise the effects of transport on the environment;
- Promote change in travel behaviour and travel awareness;
- Improve accessibility, particularly to non-car users;
- Ensure a safe and pleasant environment for those wishing to access the site by foot or cycle; and
- Meeting Government objectives for transport and health.

6.4.3 The TPF will therefore identify committed measures to promote non car travel which will be supported by targets for mode split and mechanisms for future monitoring and intervention.

6.5 Highway Improvements

6.5.1 This will include identification of off-site highway improvements for the local and Strategic Road Network required to mitigate the residual traffic impacts of the development. The development thresholds/triggers for off-site highway improvements will be established through phasing assessments to be agreed with OCC and the HA at the appropriate stage in the assessment process.

6.6 Summary and Conclusions

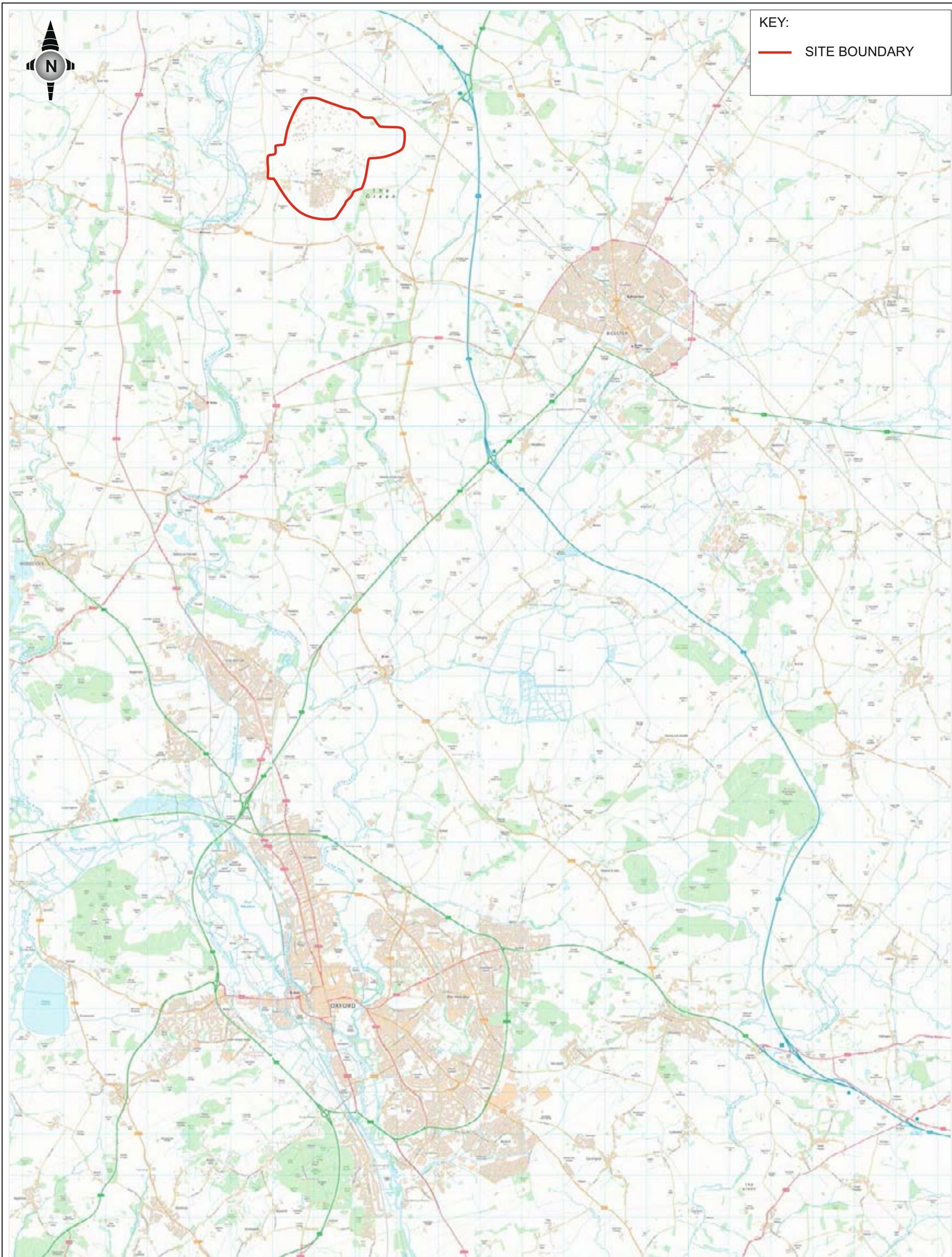
6.6.1 This section of the TAR will set out a concise summary of the assessment undertaken and identified package of mitigation measures, as set out within the TAR and TPF. These findings are set out in the context of the GTA's three key areas of consideration:

- Encouraging environmental sustainability;
- Managing the existing network; and
- Mitigating residual impacts.

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Figures

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**HEYFORD PARK
 TRANSPORT ASSESSMENT SCOPING REPORT**

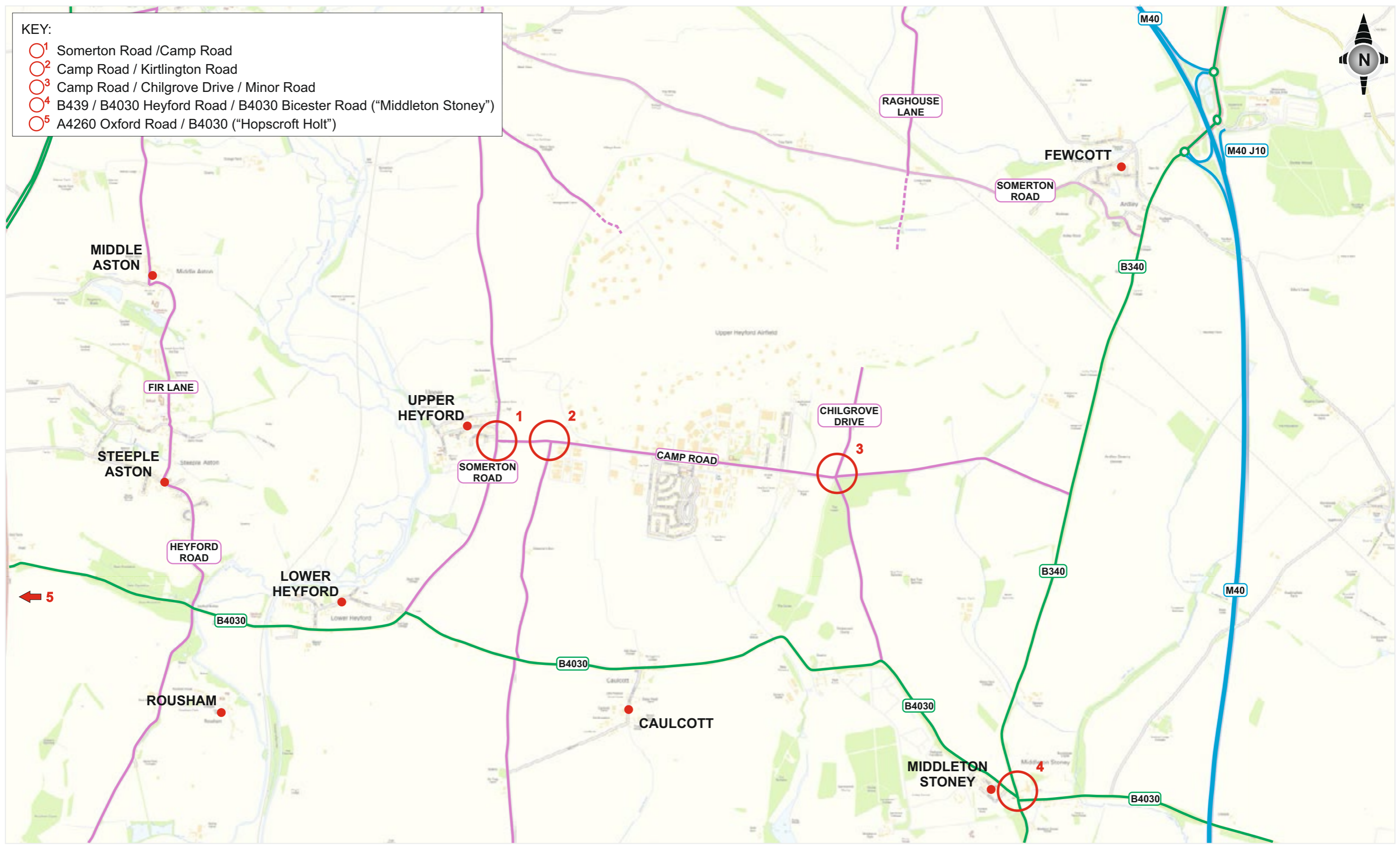
SITE LOCATION PLAN

Mark	Revision	Drawn	Date	Chkd
Date	05.03.14			
Scale	NTS			
Drawn by	ARL			
Checked by	FR			

FIGURE 1

-

- KEY:**
- ¹ Somerton Road /Camp Road
 - ² Camp Road / Kirtlington Road
 - ³ Camp Road / Chilgrove Drive / Minor Road
 - ⁴ B439 / B4030 Heyford Road / B4030 Bicester Road ("Middleton Stoney")
 - ⁵ A4260 Oxford Road / B4030 ("Hopscroft Holt")



Client
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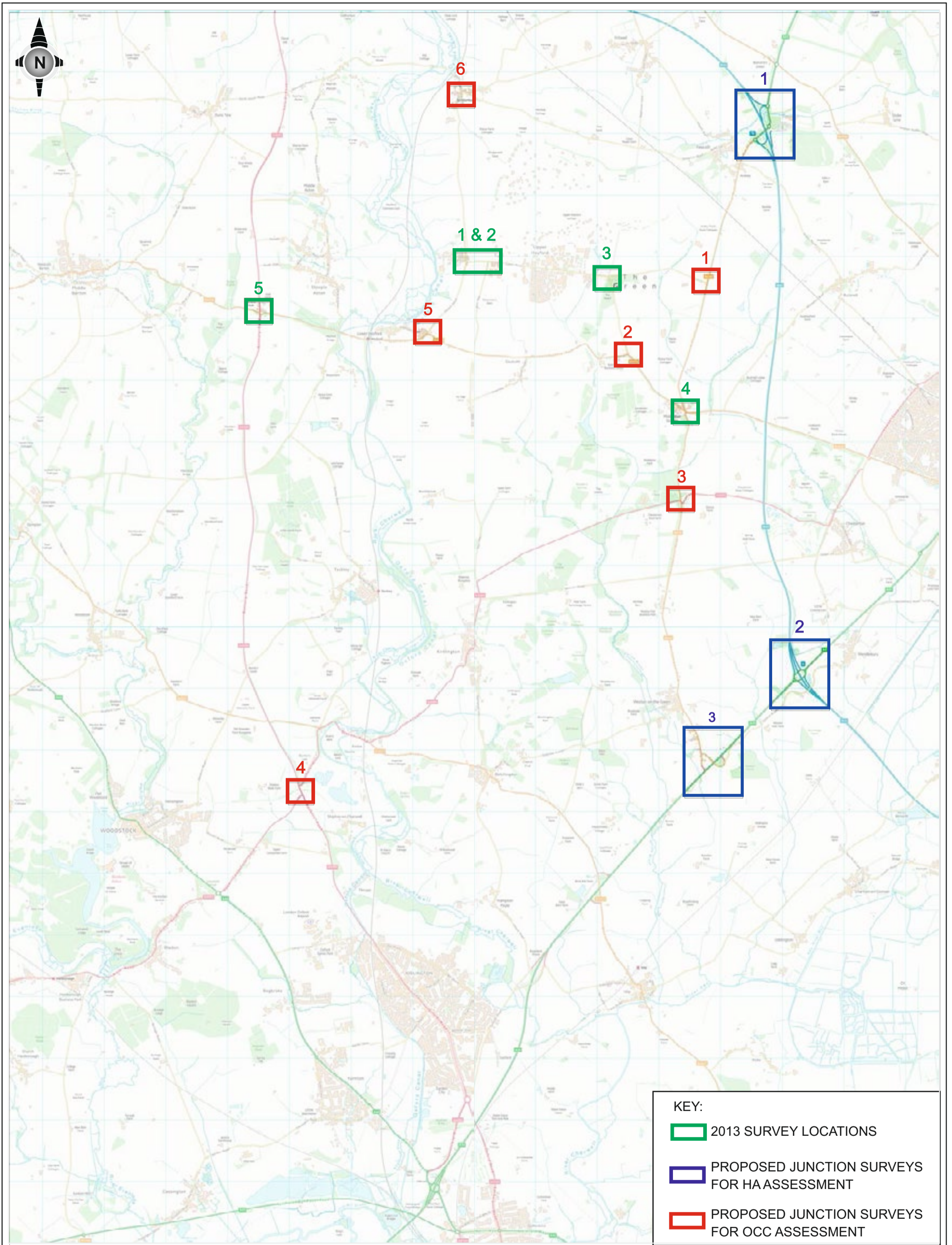
Contains Ordnance Survey Data © Crown Copyright and Database Right 2014.

HEYFORD PARK
 TRANSPORT ASSESSMENT SCOPING REPORT

2013 TRAFFIC SURVEY LOCATIONS

Mark	Revision		Drawn	Date	Chkd				
Date	05.03.14								
Scale	A3 - N.T.S								
Drawn by	ARL								
Checked by	FR								

FIGURE 2



KEY:

- 2013 SURVEY LOCATIONS
- PROPOSED JUNCTION SURVEYS FOR HA ASSESSMENT
- PROPOSED JUNCTION SURVEYS FOR OCC ASSESSMENT



Client
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**HEYFORD PARK
TRANSPORT ASSESSMENT SCOPING REPORT**

SURVEY LOCATIONS

Mark	Revision			Drawn	Date	Chkd			
Date	05.03.14						FIGURE 3		
Scale	NTS								
Drawn by	ARL								
Checked by	FR								

Scoping for Transport Assessments Form

Please e-mail the completed form to
transport.development.control@oxfordshire.gov.uk

Planning Application No. TBC

Contact Information			
Developer			Consultant
Company:	Dorchester Group Limited	Company:	Peter Brett Associates LLP
Address:	23 Berkeley Square, London W1J 6HE	Address:	10 Queen Square, Bristol, BS1 4NT
Contact person:	Paul Silver	Contact person:	Matt Whiston
Tel:	0207 665 6624	Tel:	0117 928 1560
E-mail:	p.silver@dorchestergrp.com	E-mail:	mwhiston@peterbrett.com

Development Details	
Brief Description of the development	<p>A draft framework masterplan for the expansion of development at Heyford Park is currently being developed.</p> <p>The key elements of the masterplan include:</p> <ul style="list-style-type: none"> a. Up to additional 4,000 dwellings (beyond the consented 1,075) north of Camp Road and south of the runway; b. Commercial uses retained on site, primarily to the north of the runway; c. New spine road through the site, broadly on the southern taxiway alignment, connecting to Somerton Road at the western end and Chilgrove Drive at the eastern end; d. Camp Road function changed to street / place as the proposed spine road accommodates the main movement function; and e. Regional and national heritage elements retained, including Cold War Park in south west corner of site.
Description of the location (Please attach a location map in .pdf format when submitting this form)	<p>Former RAF Upper Heyford, Upper Heyford, Oxfordshire. Location shown in Figure 1 attached to this form.</p>
Postcode	OX25 5HD
Number/Street Name/Road	Camp Road
Town	Upper Heyford
Size (GFA/no of units)	<p>4,000 dwellings (average 35 dph & 85% of dev area) (30% - 35% affordable)</p> <p>4.5ha mixed use district centre including 30,000 sq ft retail store.</p> <p>6.6ha employment mixed use hub generating 1,600 B1 office jobs</p> <p>2x primary schools (totaling 4.32ha)</p> <p>10.5ha solar park</p> <p>41.49ha public open space</p>
Planned date of opening	2015

<p>Consultant (name, address and contact details)</p>	<p>Matt Whiston. Peter Brett Associates LLP, 10 Queen Square, Bristol, BS1 4NT. mwhiston@peterbrett.com. 0117 928 1560.</p>
<p>Applicant (name, address and contact details)</p>	<p>Paul Silver. Dorchester Group Limited, 23 Berkeley Square, London, W1J 6HE. p.silver@dorchestergrp.com. 0207 665 6624.</p>
<p>Site/ Development name and address)</p>	<p>Former RAF Upper Heyford, Upper Heyford, Oxfordshire. OX25 5HD</p>
<p>Description of existing use of land</p> <ul style="list-style-type: none"> - Constraints of existing highway network - Planning History - Extant uses 	<p>Extant Uses</p> <p>A large amount of the existing infrastructure on the airbase has been re-purposed for commercial uses. There are currently over 100 businesses on the site spread over 1.3million square feet of commercial space employing over 1,000 people.</p> <p>Planning History</p> <p>In 1998 the Oxfordshire Structure Plan adopted policy H2 which limited future development on RAF Upper Heyford to 1,000 dwellings. The reasons given for the limit cited proximity to Bicester and the anticipated need for local road access improvements. The first planning application for circa 1,000 dwellings was heard at public inquiry and refused in 2003 by the Secretary of State. The whole site was subsequently designated as a conservation area in 2006.</p> <p>A further application was submitted in 2008 which went to public Inquiry in 2010 where the Secretary of State granted planning consent for development to a maximum of 1,075 dwellings and around 1,500 jobs. A further planning consent was granted in December 2011 which focussed on the refurbishment of existing dwellings rather than the provision of new dwellings.</p> <p>An outline application for an additional 60 dwellings at Heyford Park was submitted in December 2013 and is currently awaiting determination.</p>

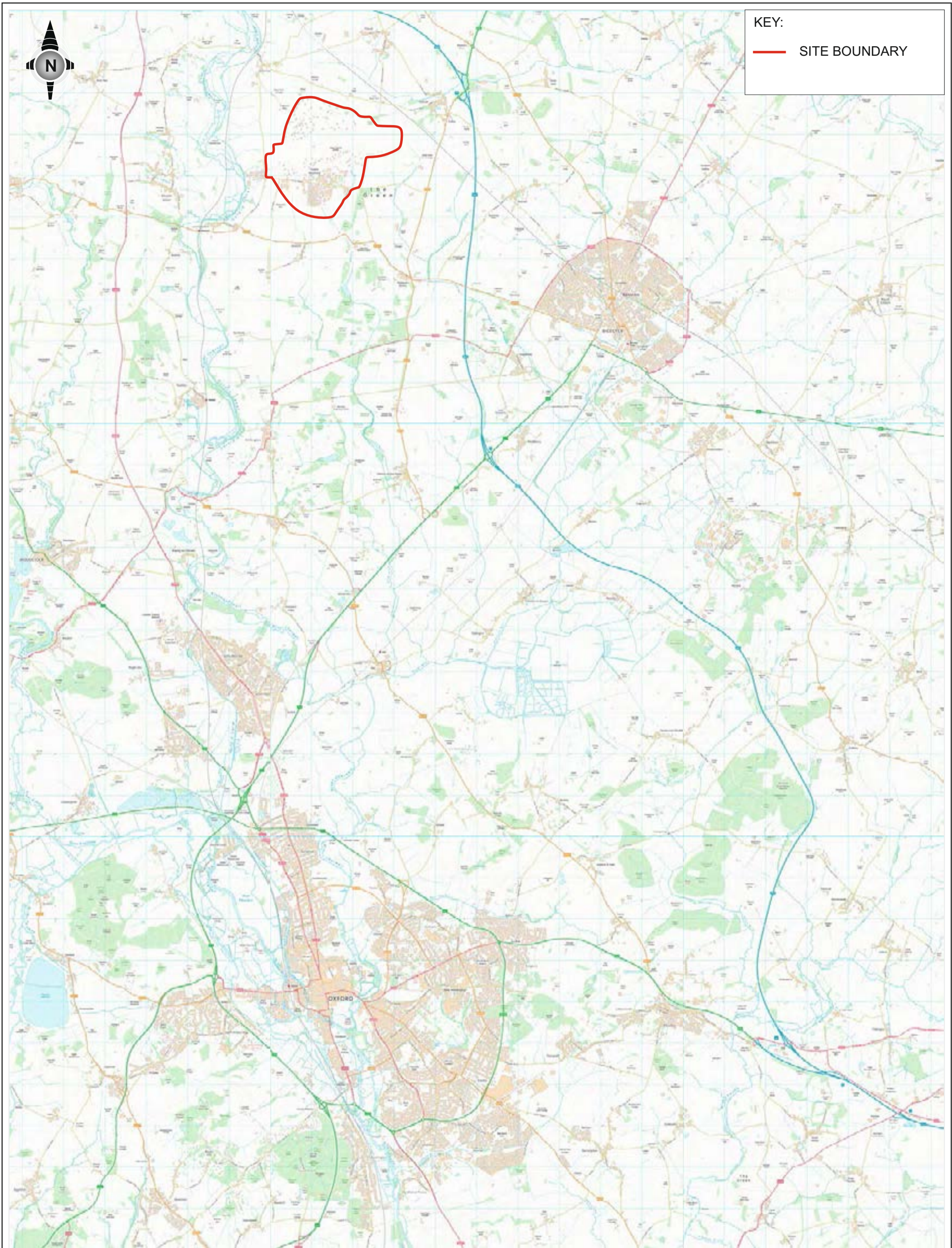
	<p>Constraints of the existing highway network</p> <p>Local roads in the vicinity of the site including the B4030 to the south and B430 to the east provide access to and from existing villages and facilitate connections to strategic routes. The Local nature of these routes means that they are not conducive to carrying large volumes of traffic such that any significant increases in traffic arising from development is likely to necessitate a need for both local capacity enhancements and traffic management measures in order to manage the effects of development on the local amenity.</p> <p>The signalised Middleton Stoney staggered cross-road junction on the B430 is identified as the key constraint point within the local highway network.</p> <p>Access to the A4260 to the west of the site is via a number of small villages with roads of a rural nature. The A4260 would potentially be the predominant route used for Oxford-bound trips.</p> <p>In terms of the strategic network, the M40 runs in a north – south direction to the east of the site and the A4260 Oxford Road runs in a north – south direction to the west of the site. The M40 Junction 10 lies to the east of the site and represents a potential key pinch-point in the network under future development and transport conditions. M40 Junction 9 lies to the south of the site which in transport terms provides a strategic gateway to Bicester and the A34 corridor. The current junction is approaching capacity and experiences problems with queuing and delay during peak times. However, improvement works are currently planned by the Highway’s Agency through the pinch point program which are aimed at addressing existing constraints at this location.</p>
<p>If some or all existing land uses are being relocated then where to?</p>	<p>Existing commercial motor industry uses within the proposed residential area to the south of the runway will be re-located to the north of the runway, but still within the extents of the site.</p>
<p>Approximate traffic volume level on adjacent road network? (peak hourly two way flow, average 12 hour two way flow)</p>	<p>Surveys undertaken in 2013 at following locations as shown in Figure 2 appended to this form:</p> <p>Camp Road / Somerton Road junction; Camp Road / Kirtlington Road junction; Camp Road / Chilgrove Drive junction; Middleton Stoney junction; and B4030 / Heyford Road junction.</p> <p>A summary of the observed flows at each junction are shown in Figure 3 and Figure 4 appended to this form.</p>
<p>Distribution /Assignment method to be used? How will this be done. i.e Gravity model,</p>	<p>Discussed with Oxfordshire CC at pre-scoping meeting on 25th February 2014. Awaiting receipt of information on availability of</p>

or based on existing turning movements	<p>Central Oxfordshire Transport Model (COTM). If available, distribution / assignment to be assessed using the COTM model.</p> <p>In parallel, PBA are investigating the creation of a bespoke spreadsheet model backed up by survey information and reviewed & tested using COTM model when available. Under this scenario distribution / assignment will be generated within the spreadsheet model.</p>
<p>How will potential traffic generation from the site be established?</p> <ul style="list-style-type: none"> - TRICS (85th percentile trips) - Special surveys? 	To be confirmed. Initial trip generation from proposed uses on site to be determined from TRICS database. Initial trip rates to be adjusted to take account for site smarter choice strategy. Adjusted trip rates to be provided to OCC for agreement.
<p>Estimated Modal Splits:</p> <p>Initial estimate of target Modal Splits:</p>	The emerging site transport strategy is likely to be heavily public transport focused to effectively reduce the volumes of traffic through potential pinch points on the adjacent highway network. The site transport strategy will be reflected in the estimated site modal splits.
<p>Period of assessment? (peak periods of development and/or network)</p>	To be confirmed, Period of assessment to be guided by model parameters. Likely to be weekday AM and PM network peak periods. As proposals are primarily residential focused, they are unlikely to have significant weekend generation. Therefore it is not proposed to undertake a weekend assessment.
<p>Locations of new/modified accesses of development onto existing road network? (supply plan of development area, road network and access locations)</p>	<p>The emerging masterplan for the site has two access points as shown in Figure 5 appended to this form:</p> <p>New junction onto Somerton Road broadly on runway alignment; and Amended Camp Road / Chilgrove Drive junction.</p>
<p>Describe committed development to be taken into account:</p>	To be confirmed by OCC.
<p>Area of impact (based on proposed development levels, existing traffic levels and existing congestion) (supply plan of development area, road network and access locations)</p>	Locations of existing traffic surveys, proposed traffic surveys for OCC and proposed traffic surveys for the HA are shown in Figure 6 appended to this form.
<p>When will site become fully operational?</p>	To be confirmed by Dorchester Group / PBA.
<p>Will the development be split into phases? If so supply plan of phases and timescales.</p>	No (To be confirmed by Dorchester Group / PBA)
<p>Will construction traffic be significant? If so how is this dealt with and will it need specific haul routes?</p>	To be confirmed. If so, Construction Environmental Management Plan (CEMP) to be produced to plan and minimise construction traffic impacts.
<p>What are the assessment years? Existing Year of opening Design Year</p>	To be confirmed following information on model availability and existing modelling parameters. Assessment years may be dictated by parameters coded into model.

Any other sensitivity tests required eg phasing	Ideal assessment years: Existing – 2014 Year of opening – 2015 Design year (5 years after opening in line with 2007 DfT Guidance on Transport Assessments) – 2020
Car-parking levels for each land use (on and off street)?	To be provided in line with OCC standards.
Provide plan of real travel 5km isochrones (cycling)	To be completed by PBA
Provide plan of real travel 2km isochrones (walking)	To be completed by PBA
Provide plan of existing bus stops and locations of transport interchanges in area	Locations of existing bus stops and transport interchanges in the vicinity of Heyford Park are shown in Figure 7 appended to this form.
Road Safety- Accident records <ul style="list-style-type: none"> - Examination of historical data normally 3/5 years - Safety audit needed for changes to highway layout? (supply plan with recorded accident injury data)	OCC to provide road collision data. Safety Audits to be procured if required once highway schemes have been designed.
General description of how facilities for people with mobility problems will be tackled:	Facilities to be provided in line with DDA regulations.
Policy issues <ul style="list-style-type: none"> - Is proposal in line with current national policy? - Is development proposal in line with regional and local plan policies? - Is the development included in the current development plan? 	CDC Core Strategy / Local Plan evidence base (SMHA, numbers to be confirmed) identifies shortfall in housing. Heyford Park provides strategic opportunity to accommodate significant levels of housing on a brownfield site within the district.
Any other relevant information:	

Thank You

Please e-mail the completed form and site location map to
transport.development.control@oxfordshire.gov.uk



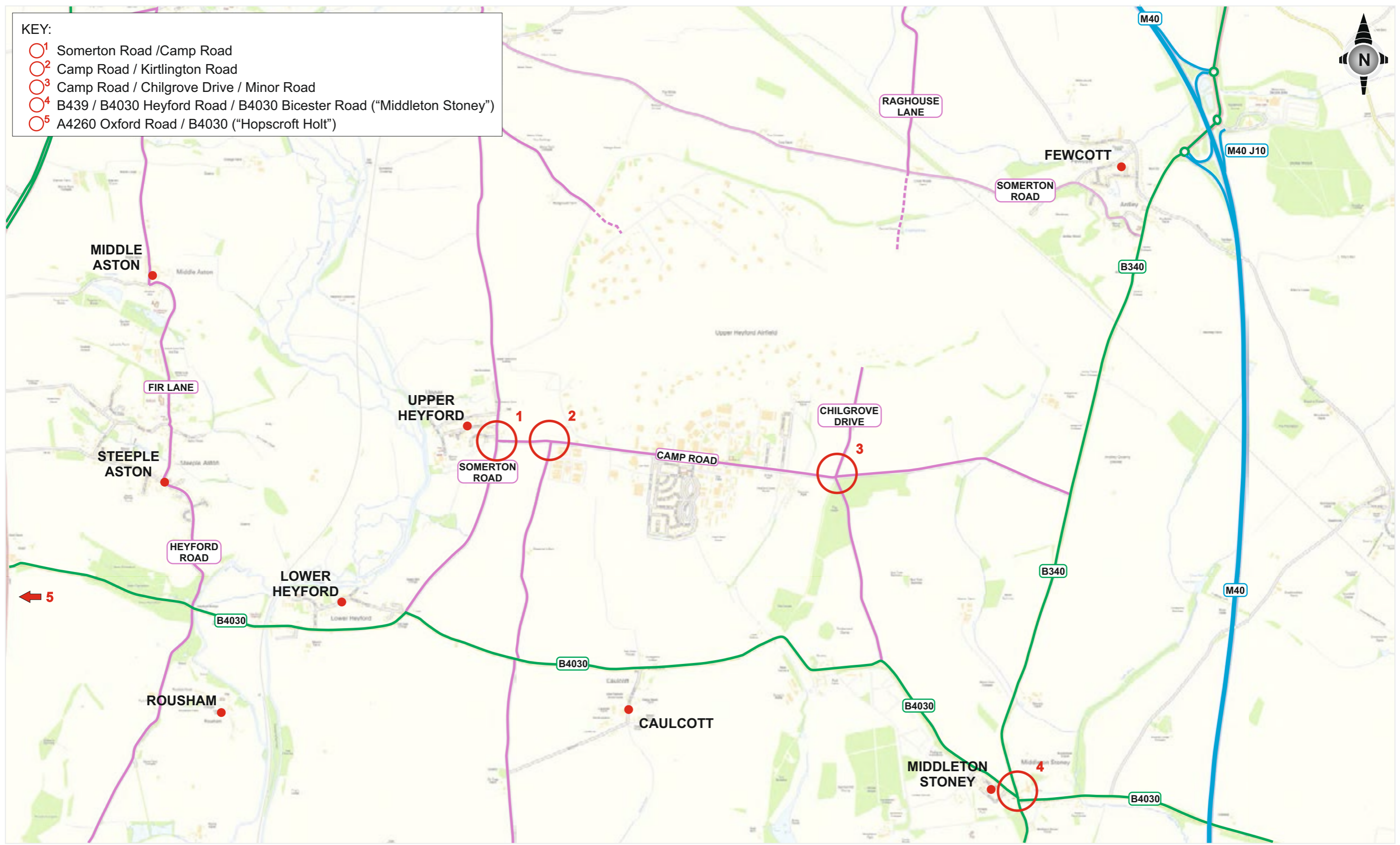
Client
DORCHESTER GROUP

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HEYFORD PARK
2014 OXFORDSHIRE COUNTY COUNCIL TRANSPORT SCOPING
SITE LOCATION PLAN

Mark	Revision	Drawn	Date	Chkd
Date	05.03.14			
Scale	NTS	FIGURE 1		-
Drawn by	ARL			
Checked by	FR			

- KEY:**
- ¹ Somerton Road /Camp Road
 - ² Camp Road / Kirtlington Road
 - ³ Camp Road / Chilgrove Drive / Minor Road
 - ⁴ B439 / B4030 Heyford Road / B4030 Bicester Road ("Middleton Stoney")
 - ⁵ A4260 Oxford Road / B4030 ("Hopscroft Holt")



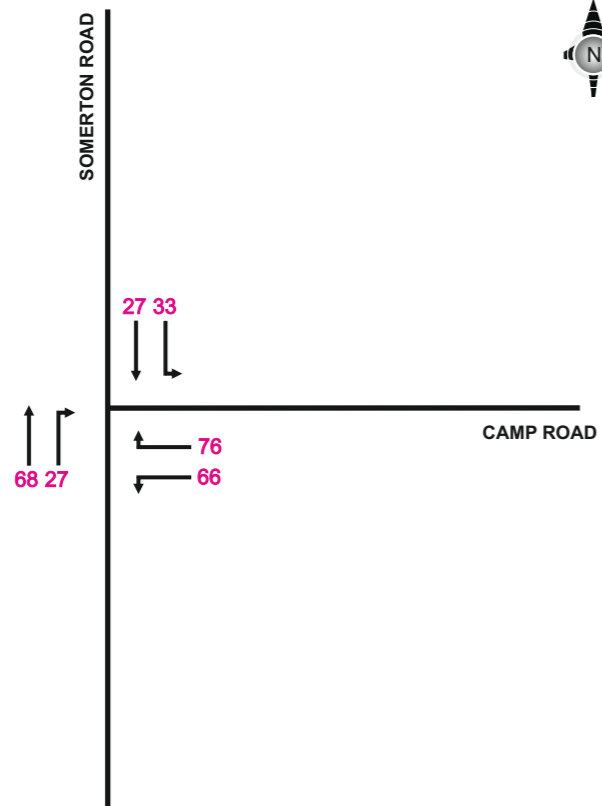
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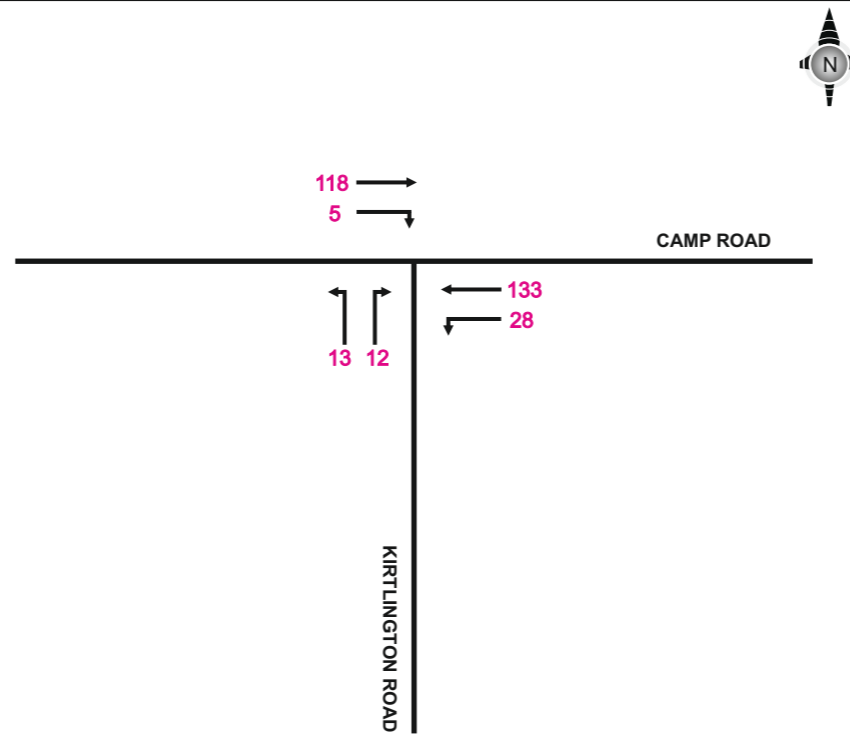
HEYFORD PARK
2014 OXFORDSHIRE COUNTY COUNCIL TRANSPORT SCOPING
2013 TRAFFIC SURVEY LOCATIONS

Mark	Revision	Drawn	Date	Chkd
Date	05.03.14			
Scale	A3 - N.T.S			
Drawn by	ARL			
Checked by	FR			

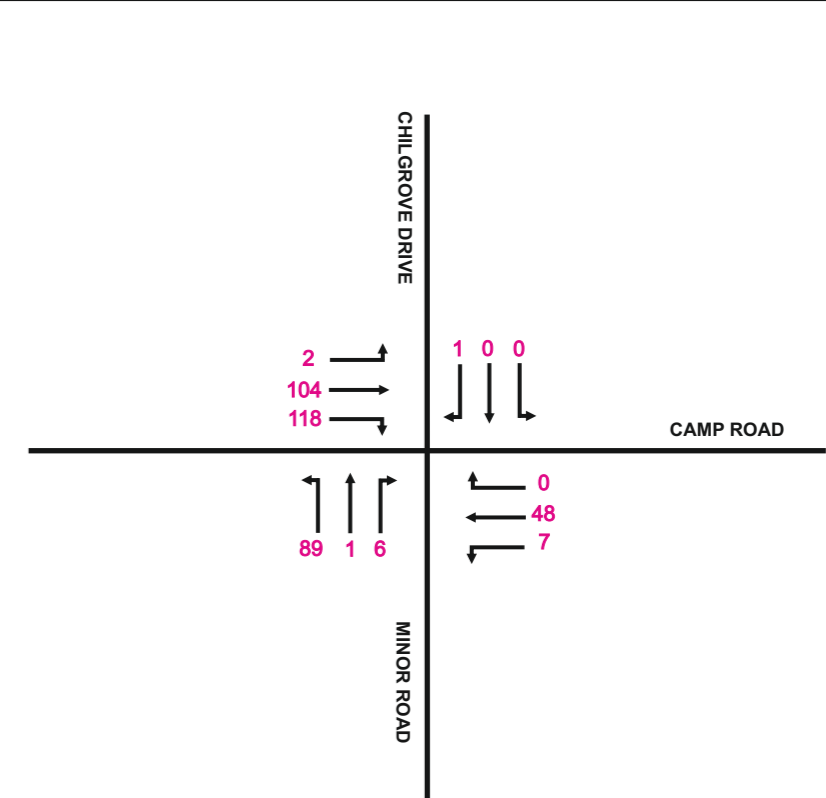
FIGURE 2



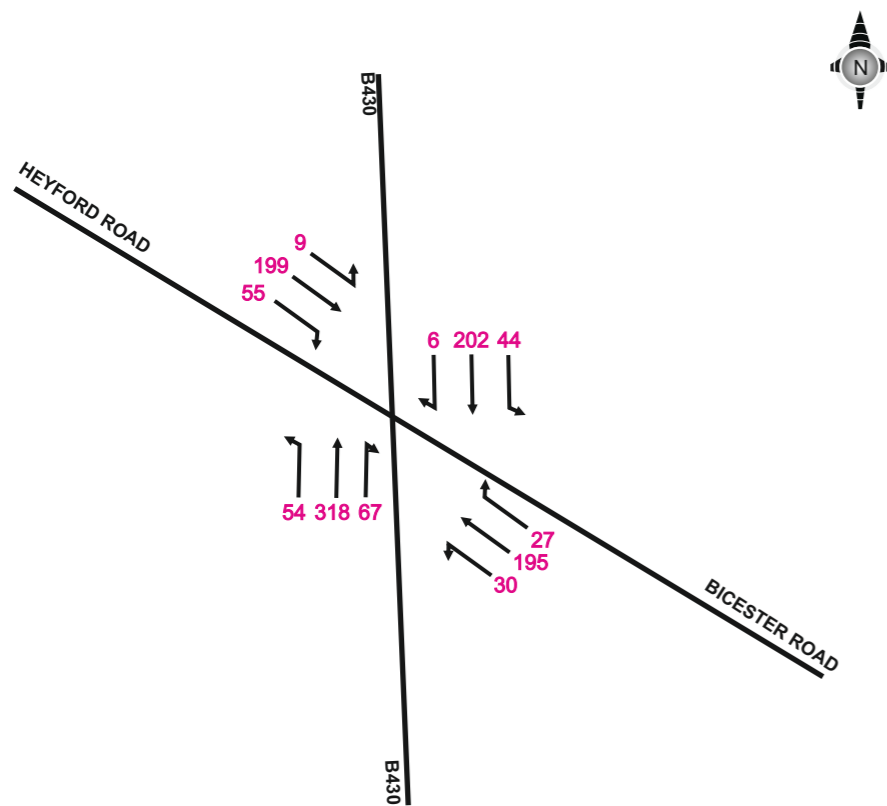
AM Peak Observed Flows
Junction 1 : Somerton Road / Camp Road



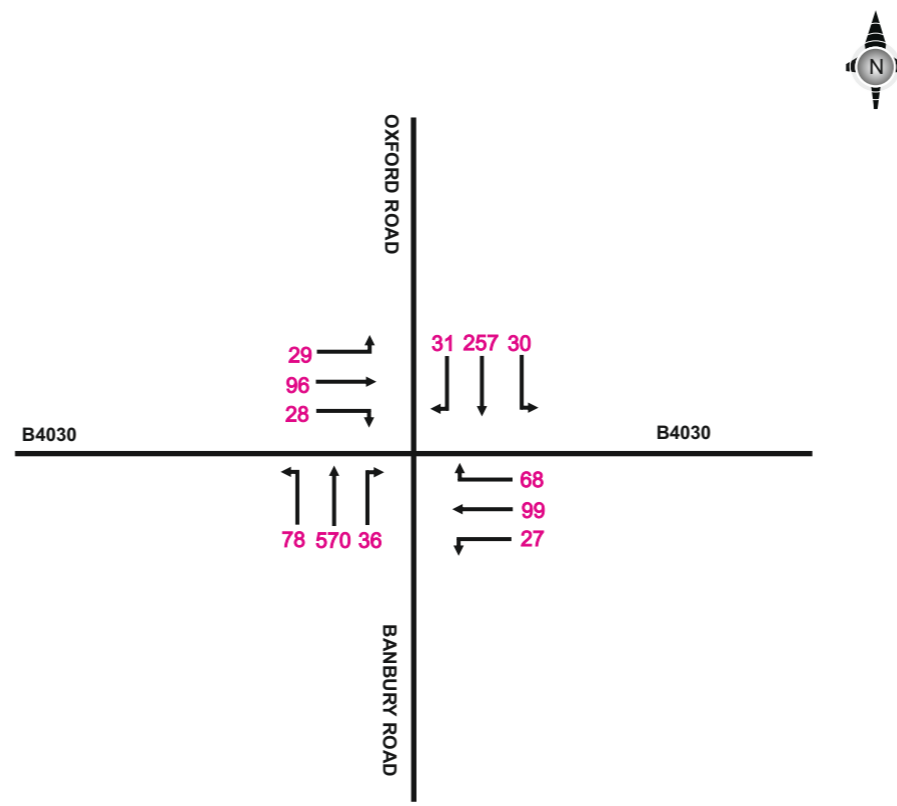
AM Peak Observed Flows
Junction 2 : Camp Road / Kirtlington Road



AM Peak Observed Flows
Junction 3 : Camp Road / Chilgrove Drive / Minor Road



AM Peak Observed Flows
Junction 4 : "Middleton Stoney"



AM Peak Observed Flows
Junction 5 : "Hopscroft Holt"

KEY:
XX 2013 AM Observed Traffic Flow

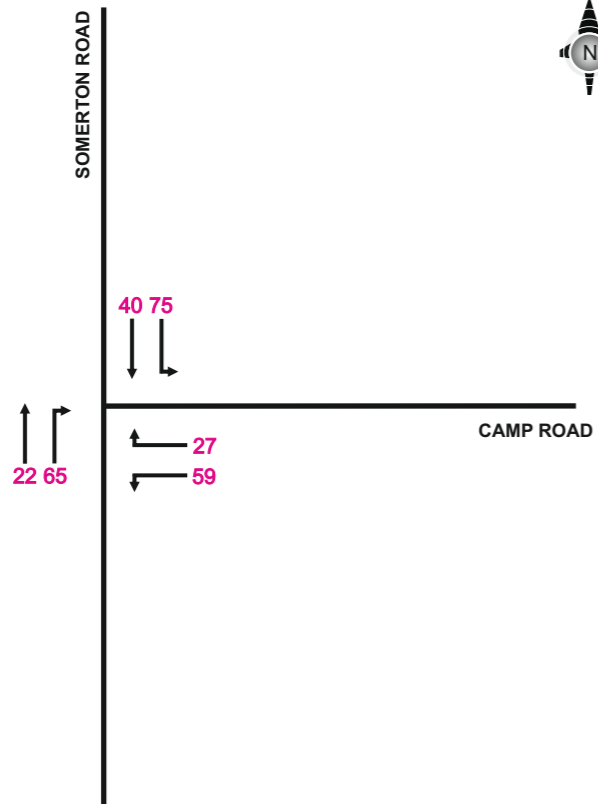


Client
DORCHESTER GROUP

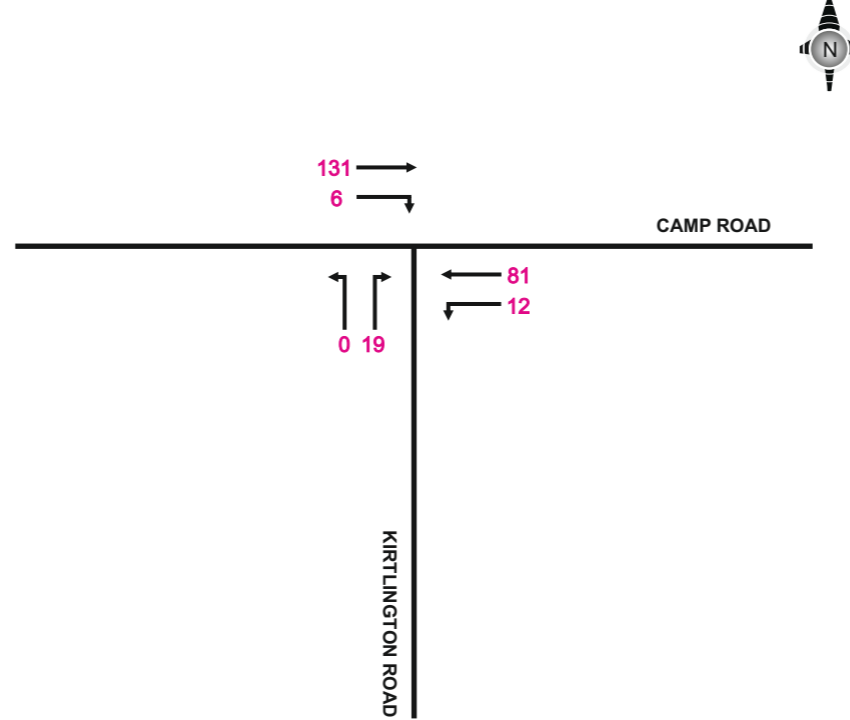
HEYFORD PARK
2014 OXFORDSHIRE COUNTY COUNCIL TRANSPORT SCOPING

2013 OBSERVED TRAFFIC FLOWS
PM PEAK (7:00 - 18:00)

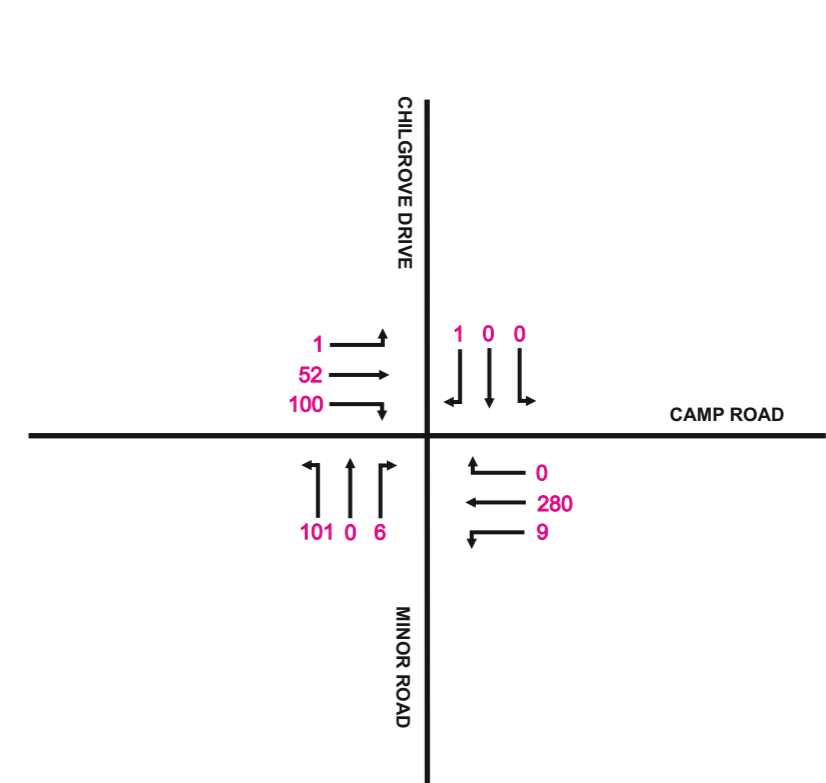
Mark	Revision	Drawn	Date	Chkd
Date	05.03.14	<div style="border: 2px solid black; padding: 5px; display: inline-block;"> FIGURE 4 </div>		
Scale	NTS			
Drawn by	ARL			
Checked by	FR			



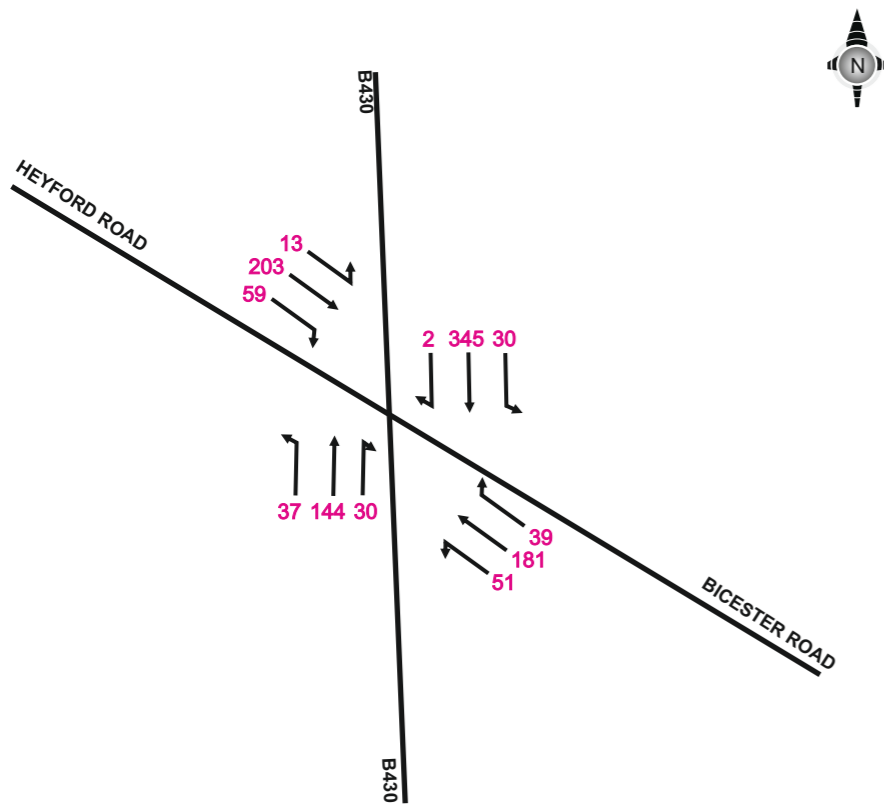
AM Peak Observed Flows
Junction 1 : Somerton Road / Camp Road



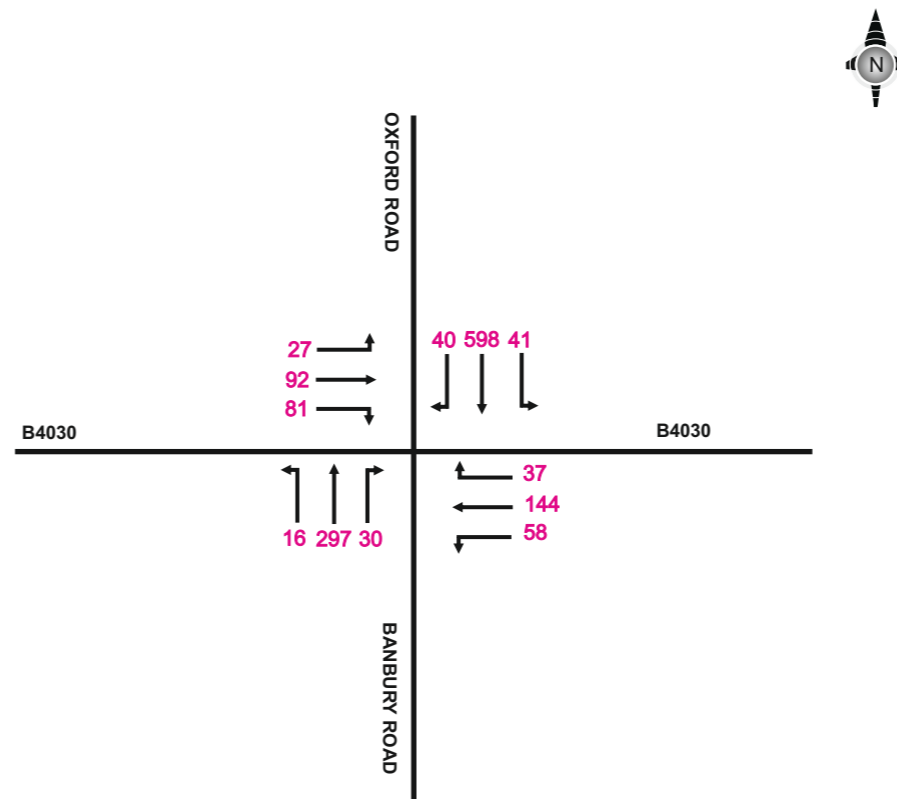
AM Peak Observed Flows
Junction 2 : Camp Road / Kirtlington Road



AM Peak Observed Flows
Junction 3 : Camp Road / Chilgrove Drive / Minor Road



AM Peak Observed Flows
Junction 4 : "Middleton Stoney"



AM Peak Observed Flows
Junction 5 : "Hopscroft Holt"

KEY:
XX 2013 AM Observed Traffic Flow



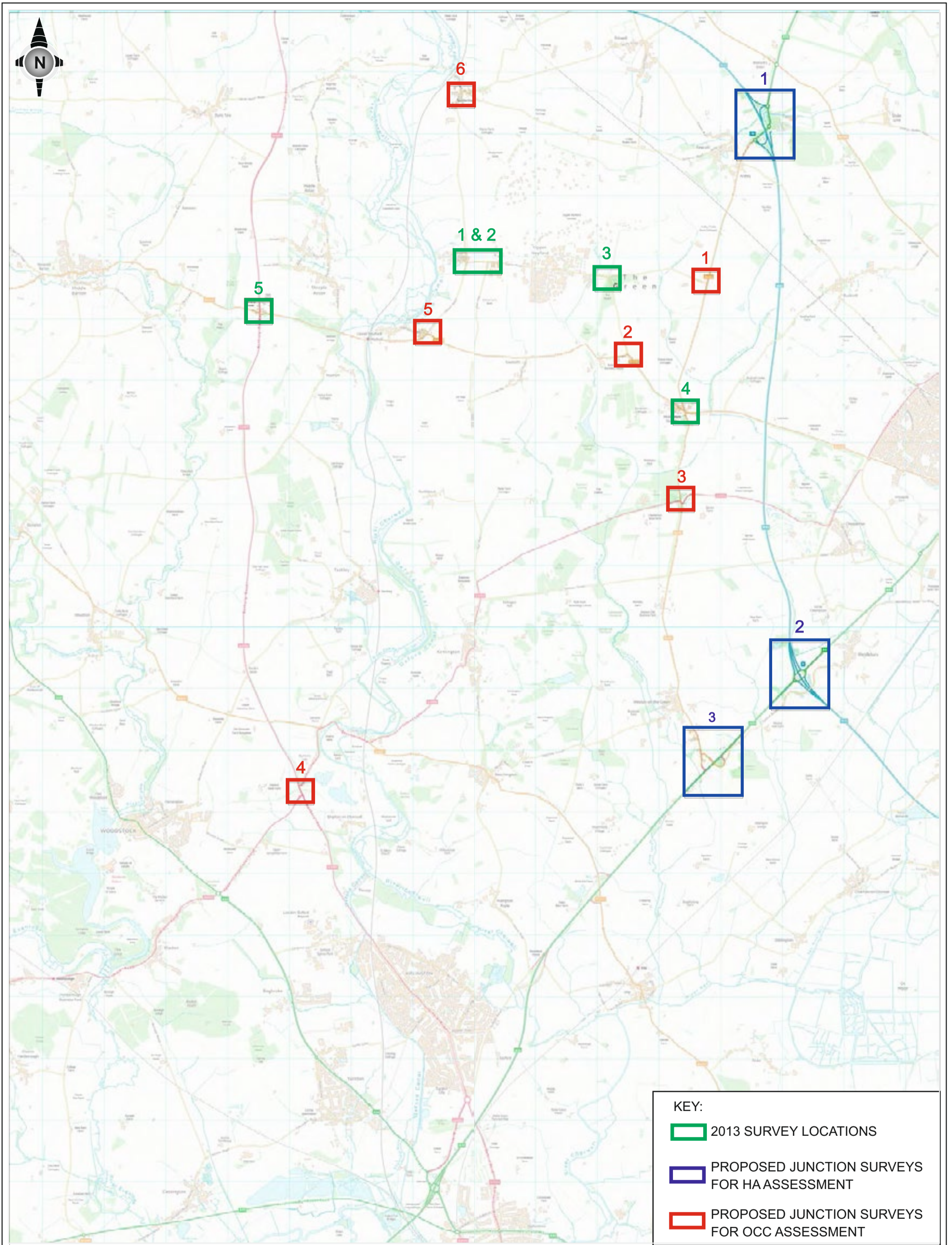
Client
DORCHESTER GROUP

HEYFORD PARK
2014 OXFORDSHIRE COUNTY COUNCIL TRANSPORT SCOPING

2013 OBSERVED TRAFFIC FLOWS
AM PEAK PERIOD (8:00-9:00)

Mark	Revision	Drawn	Date	Chkd
Date	05.04.14			
Scale	NTS			
Drawn by	ARL			
Checked by	FR			

FIGURE 3



KEY:

- 2013 SURVEY LOCATIONS
- PROPOSED JUNCTION SURVEYS FOR HA ASSESSMENT
- PROPOSED JUNCTION SURVEYS FOR OCC ASSESSMENT



Client
DORCHESTER GROUP

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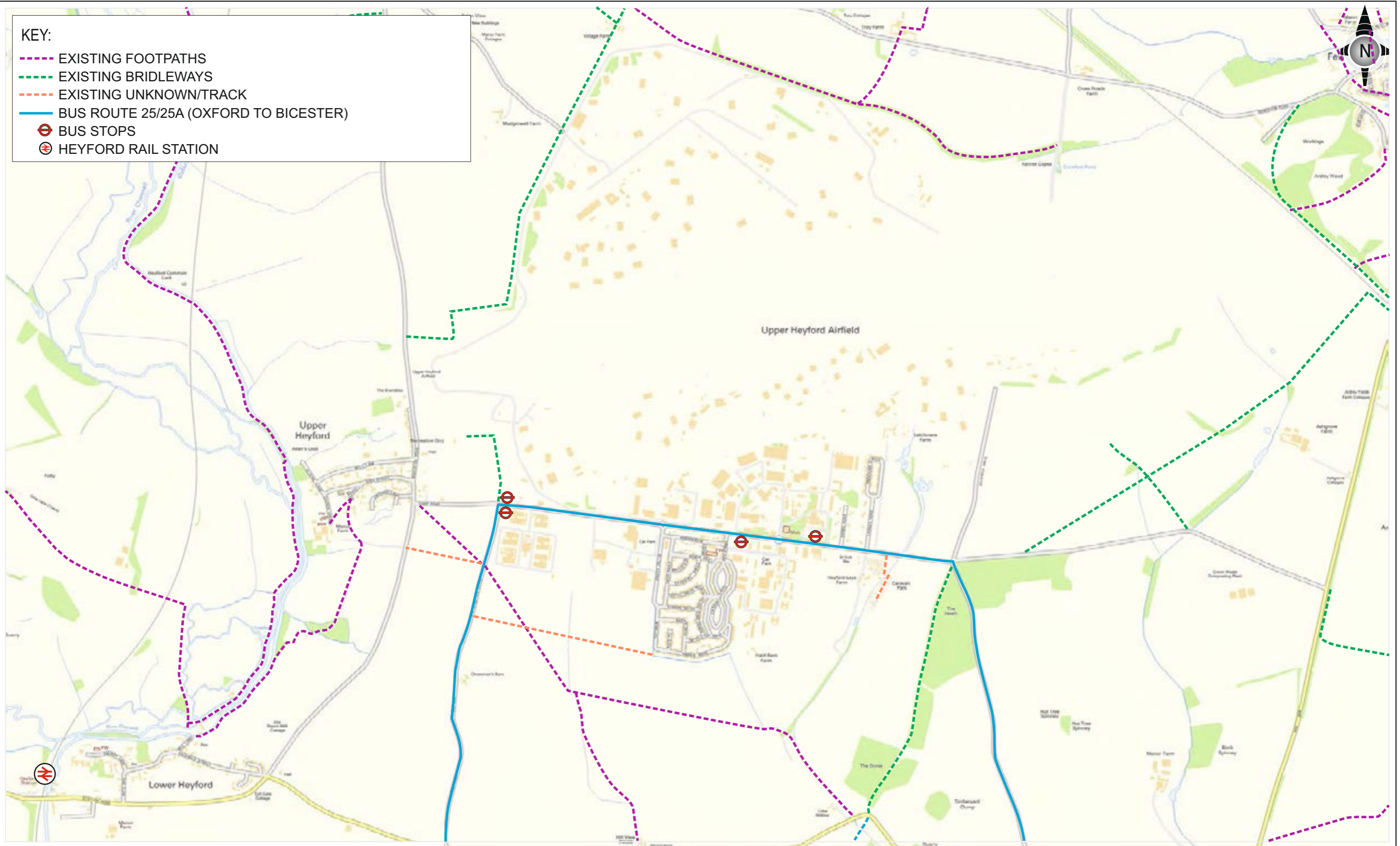
HEYFORD PARK
2014 OXFORDSHIRE COUNTY COUNCIL TRANSPORT SCOPING

SURVEY LOCATIONS

Mark	Revision			Drawn	Date	Chkd			
Date	05.03.14						FIGURE 6		
Scale	NTS								
Drawn by	ARL								
Checked by	FR								

KEY:

- - - EXISTING FOOTPATHS
- - - EXISTING BRIDLEWAYS
- - - EXISTING UNKNOWN/TRACK
- BUS ROUTE 25/25A (OXFORD TO BICESTER)
- BUS STOPS
- HEYFORD RAIL STATION



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HEYFORD PARK
2014 OXFORDSHIRE COUNTY COUNCIL SCOPING
EXISTING PUBLIC TRANSPORT AND LOCATIONS OF TRANSPORT INTERCHANGES

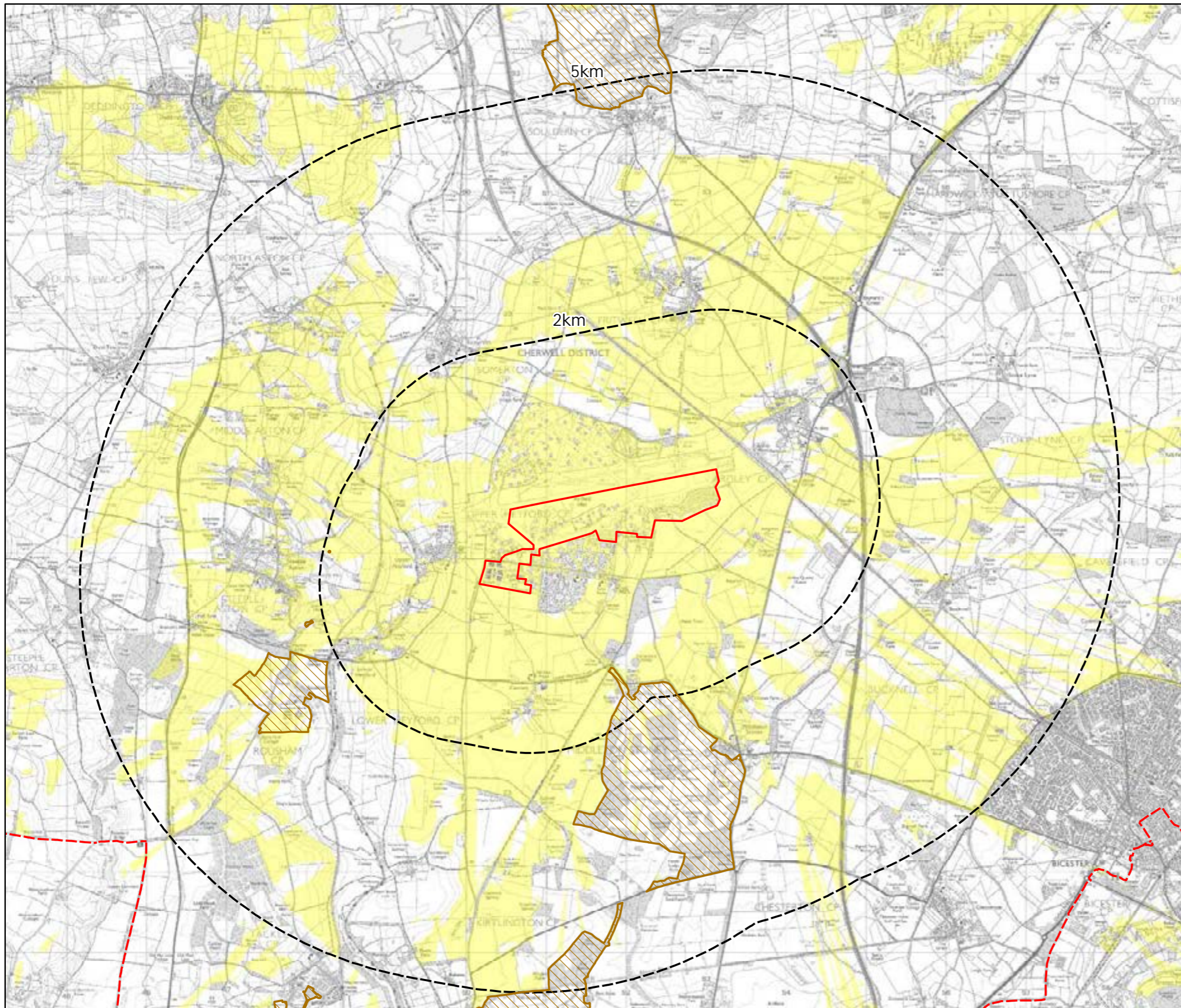
Mark	Revision		Drawn	Date	Chkd				
Date	05.04.14								
Scale	NTS								
Drawn by	ARL								
Checked by	FR								

FIGURE 7

-

APPENDIX 4

ZONE OF THEORETICAL VISIBILITY



KEY

- Potential Maximum Residential Development Boundary
- Zone of Theoretical Visibility - 15m building height
- Registered Park / Garden
- SUSTRANS National Route

Screened ZTV Production Information -
 - DTM data used in calculations is OS Terrain 5 that has been combined with OS Vectormap data for woodland and buildings to create a Digital Surface Model (DSM).
 - Woodland and Building heights are 15m and 8m respectively.
 - Viewer height set at 1.7m
 - Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the development will be visible from, assuming 100% visibility, and includes the screening effect from vegetation and buildings.

Revisions	Date
A • First Issue	28.02.14

Heyford Park - A Sustainable Sub Hub
Screened Zone of Theoretical Visibility

Drawing Ref: D.0349_02-A
 Client: Dorchester Group

1:50,000 @ A3
 Date : 28.02.14
 Drawn by : AD
 Checked by : RCH



APPENDIX 5

ECOLOGICAL CONSTRAINTS PLAN



KEY:
 COUNTY WILDLIFE SITE

FORMER RAF UPPER HEYFORD PROJECT
 ECOLOGICAL CONSTRAINTS TITLE

3641/ESC1 DRAWING NO.



FEBRUARY 2014 DATE

Aspect Ecology Limited - West Court - Hartwick Business Park
 North Way - Banbury - Oxfordshire - OX16 2AF
 01295 270066 - info@aspect-ecology.com - www.aspect-ecology.com

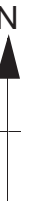


APPENDIX 6

**ARCHAEOLOGICAL AND CULTURAL HERITAGE
CONTEXT PLANS**

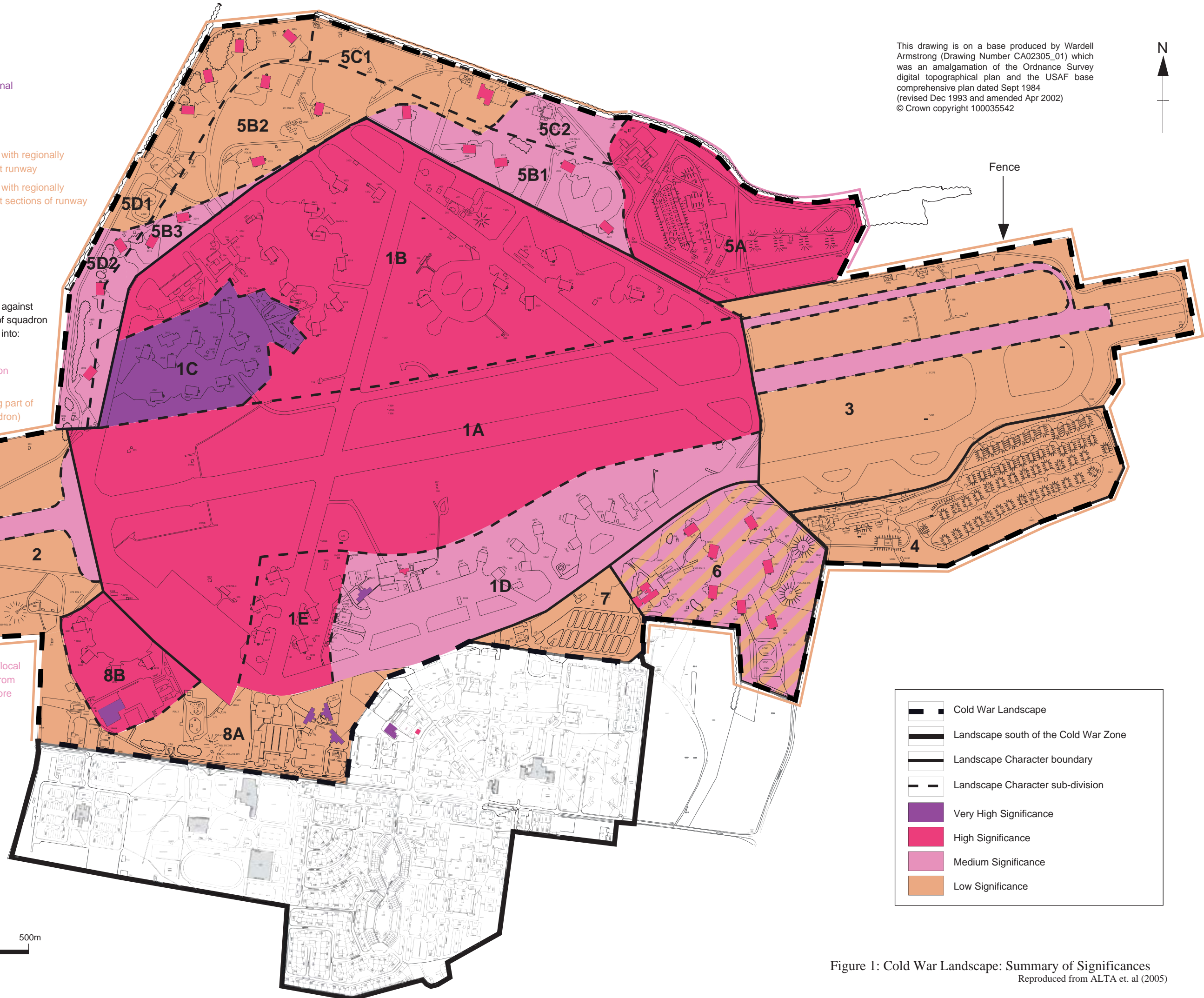
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This drawing is on a base produced by Wardell Armstrong (Drawing Number CA02305_01) which was an amalgamation of the Ordnance Survey digital topographical plan and the USAF base comprehensive plan dated Sept 1984 (revised Dec 1993 and amended Apr 2002) © Crown copyright 100035542



- 1 Central Airbase
- 1A Central Runway National
- 1B Central Plateau National
- 1C QRAA International
- 1D South Aircraft Shelters/
Victor Alert Area Regional
- 1E Southwest HASS National
- 2 Runway West Terminal Local but with regionally significant runway
- 3 Runway East Terminal Local but with regionally significant sections of runway
- 4 Southern Conventional Arms Store Local
- 5 North Edge
- 5A Northern Bombstores National
- 5B/D Landscape and individual national significances need to be balanced against the need to maintain the integrity of squadron groupings. Area therefore divided into:
 - 5B1 Regional
 - 5C2 Regional because retains squadron grouping
 - 5B2/5C1/5D1 Local because no point in keeping part of a squadron grouping (42nd Squadron) but containing nationally significant buildings
 - 5D2/5B3 Regional because retains integrity of 55th Squadron grouping

- 6 Southeast HASS Regional/local isolated from historic core
- 7 Tanker area Local
- 8 Southwest Edge
- 8A Local landscape significance but containing internationally important buildings
- 8B National because containing centrally important buildings and usually linked to core area



	Cold War Landscape
	Landscape south of the Cold War Zone
	Landscape Character boundary
	Landscape Character sub-division
	Very High Significance
	High Significance
	Medium Significance
	Low Significance

0 500m
Scale approximately 1:10,000

Figure 1: Cold War Landscape: Summary of Significances
Reproduced from ALTA et. al (2005)



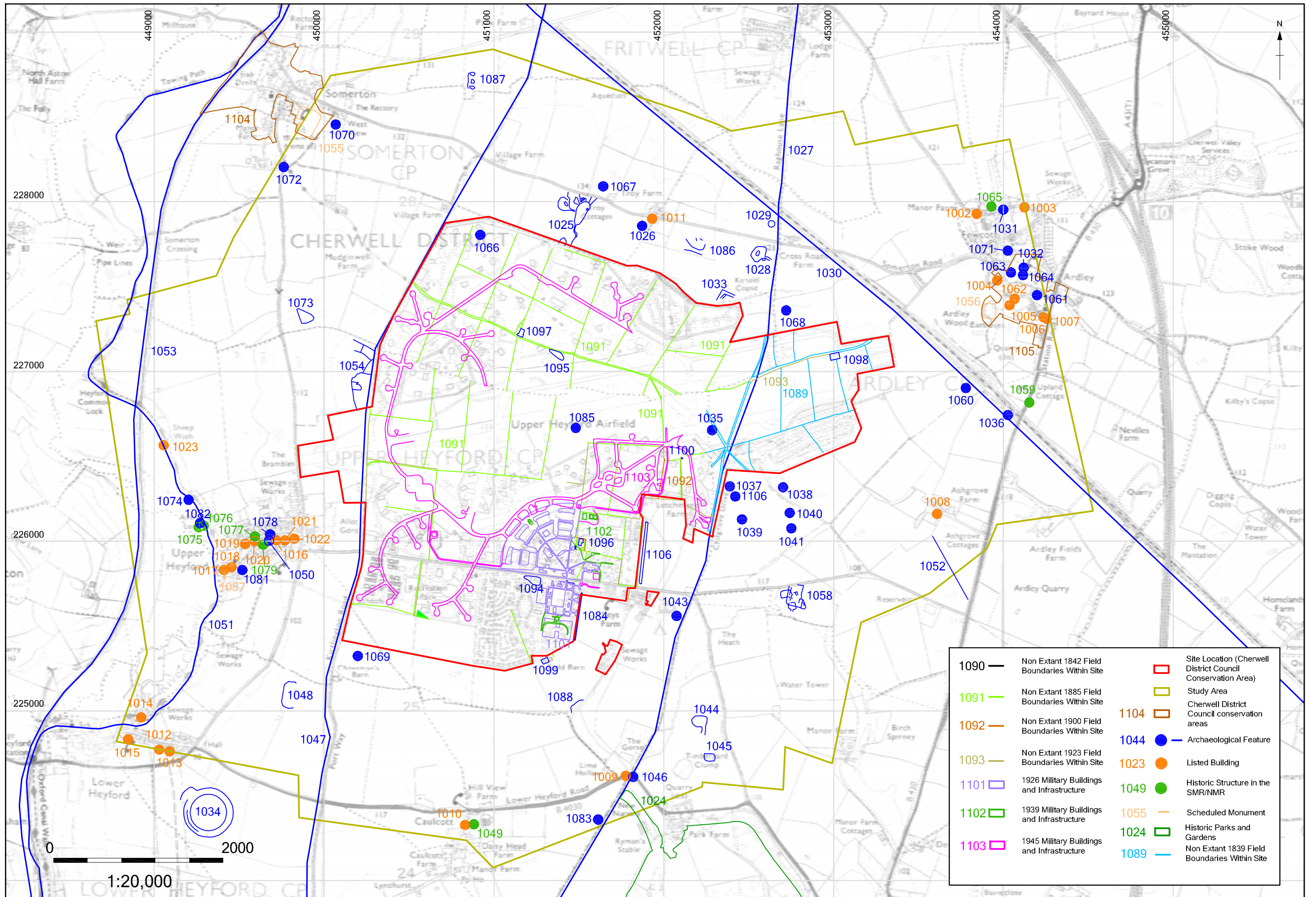
0 500m
Scale approximately 1:10,000

Character Areas	
1	Central Airbase
1A	Central Runway
1B	Central Plateau
1C	Quick Reaction Alert Area
1D	South Aircraft Shelters
1E	Southwest HASs
2	Runway West Terminal
3	Runway East Terminal
4	Southern Conventional Arms Store
5	North Edge
5A	Northern Bomb Stores
5B	Plateau Edge
5C	North Fringe
5D	Northwest Fringe
6	Southeast HASs
7	Tanker Area
8	Southwest Edge
8A	Built up South Edge
8B	Avionics and HASs

	Scheduled Monuments
	Structures under consideration for protection (scheduling or listing)
	Landscape South of the Cold War Zone
	Cold War Landscape
	Landscape Character boundary
	Landscape Character sub-division

Figure 2: RAF Upper Heyford Area and Designations
Reproduced from ALTA et. al (2005)

\\Samba-1\invoice codes r\thru z\U_codes\UPHEPPCO\UpperHeyfordMapping30_07_07.dwg(CH1)***** 05 Mar 2014



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Figure 3: Archaeological features mapping