

LAND OFF BURLEY ROAD, OAKHAM VISION AND DELIVERY DOCUMENT





FIG 1: VIEW LOOKING NORTH ALONG BURLEY ROAD TO THE EAST OF THE SITE

1.0 **CONTENTS**

1.0	Contents	3
2.0	Introduction	5
3.0	About Pigeon	7
4.0	Planning Context	9
5.0	Site Context	10
6.0	The Site	14
7.0	Technical Summary	16
8.0	Opportunities & Constraints	20
9.0	Our Vision	22
10.0	Masterplan Concept Drivers	24
11.0	Concept Masterplan	26
12.0	Illustrative Masterplan	28
12.0	Delivery & Phasing	30
13.0	Summary & Recommendations	32

Appendices Appendix 1 - List of Figures

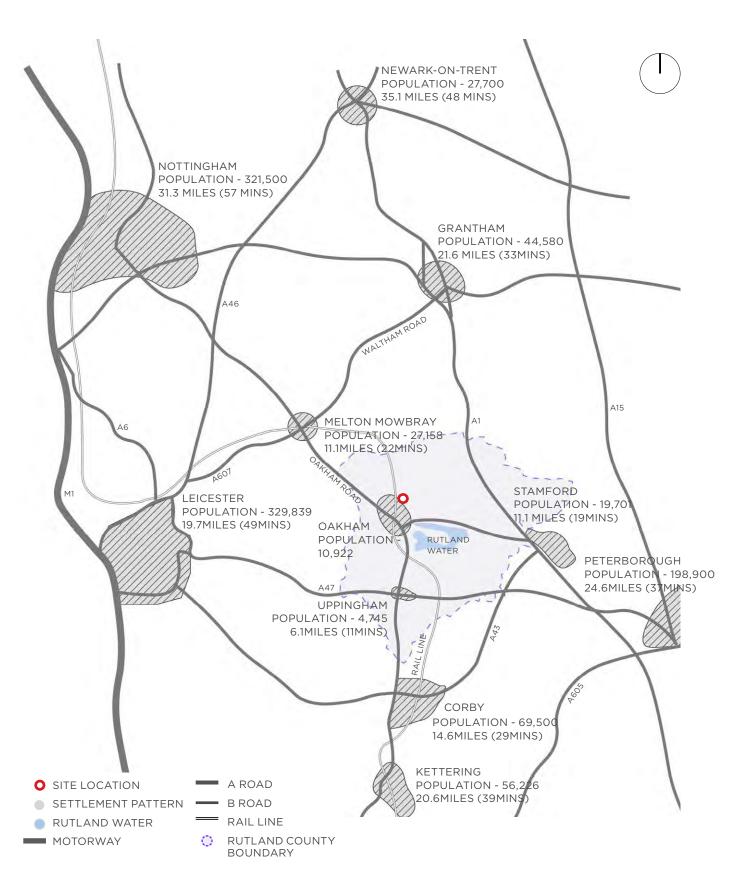


FIG 2: MAP SHOWING THE LOCATION AND CONTEXT OF THE SITE WITHIN THE EAST MIDLANDS ECONOMIC REGION

2.0 INTRODUCTION

Pigeon and the Burley Estate Farm Partnership are pleased to present this Vision & Delivery Document (the 'Vision') for land north west of Burley Road, Oakham (the 'Site'). The document supports submissions to the consultation on the Regulation 19 Pre-Submission Draft Rutland Local Plan. The Site is identified as site OAK/13a within the Regulation 19 Pre-Submission draft Local Plan and is identified as a housing allocation with an indicative capacity of 200 new homes. We believe this site presents an excellent opportunity to create a well-designed, sustainable new neighbourhood at Oakham which will positively contribute to the town.

In this Vision document we set out our proposed vision and conceptual masterplan for the Site and the underlying principles that will guide its design and development. The document demonstrates that the Site is deliverable, technically unconstrained and a sustainable location for new development. It sets out how the site is capable of delivering a well-designed new neighbourhood providing a range of high-quality housing and associated open space in a highly sustainable location and in accordance with draft Local Plan Policy H1.3. This Vision builds upon information contained within Pigeon's Delivery Statement issued in September 2018 and the outcomes of subsequent discussions held between Pigeon and Rutland County Council.

The Vision describes the physical characteristics of the Site and its wider context in order to demonstrate that the Site lies in a sustainable location with good access to a range of services and facilities on its doorstep. The document outlines the planning background, in particular the status of the Rutland County Council Local Plan and summarises the technical work that has been carried out to date in order to define the key constraints and opportunities that the scheme design responds to. The Vision presents a series of key design drivers which are borne out of the technical work and underpin the conceptual design work undertaken on the masterplan.



FIG 3: ALL SAINTS CHURCH, OAKHAM

3.0 **ABOUT PIGEON**

The Site is wholly owned by the Burley Estate
Farm Partnership which has entered in to a
Partnership Agreement with Pigeon to progress
the Site through the planning process. The Site
is a greenfield site in single ownership and is not
encumbered by any legal constraints that would
preclude or unduly inhibit its development for the
uses proposed. As such the Site can be considered
to be 'available' for development as defined by the
NPPF.

Pigeon has been selected by the Burley Estate Farm Partnership for their expertise in bringing together teams of leading designers and specialist advisers to deliver high-quality residential and mixed-use sustainable communities. Pigeon is a private company operated by five directors and a team of professionals from the built environment who each bring considerable experience of promoting and delivering high quality residential and mixed-use neighbourhoods within the East of England and East Midlands.

Pigeon is currently working with the Crown Estate on the delivery of a sustainable urban extension in Thetford that has planning approval for up to 5,000 homes, 20 hectares of employment land, Primary and Secondary School provision, community facilities and Public Open Space.

As master developers for the Kingsfleet scheme, Pigeon is working with a number of housebuilders and commercial developers to deliver the scheme and the first phases of development are currently under construction.

To the east of Bury St Edmunds Pigeon has secured an allocation for an urban extension of up to 1,250 homes, including a Primary School, a new neighbourhood hub, community facilities and public open space.

Pigeon also secured planning permission for a similar scheme for 180 new homes along with a care home, nursery, 3.4 hectares of employment, Public Open Space, allotments and Strategic Landscaping at Burnham-on-Crouch, Essex. The site is currently being delivered.

Pigeon's experience demonstrates that it has a proven track record of planning and delivering sustainable neighbourhoods, such as the allocation proposed for the land off Burley Road, Oakham.

We want our legacy in Oakham to be a truly sustainable community where people aspire to live. A range of high-quality new homes, including specialist housing, along with associated open space provision, will meet local needs and create a vibrant new community. Homes will be set in carefully landscaped surroundings, where residents will greet one another as they walk or cycle along landscaped paths to nearby shops and services, or take their dog out into the countryside. It is a place with a strong individual identity, but one which respects the local context and feels like it is an integral part of the town.



FIG 4: ARTIST'S IMPRESSION OF NEW HOMES AT THETFORD





FIG 5: OTHER PIGEON PROJECTS: BURNHAM-ON-CROUCH (TOP) AND THETFORD (BOTTOM)



FIG 6: **AERIAL PHOTOGRAPH OF OAKHAM SHOWING THE SITE TO THE NORTHEAST**

SITE BOUNDARY

4.0 PLANNING CONTEXT

Rutland County Council ('The Council') is currently in the process of preparing a new Local Plan that will set out the Strategic Policies which will guide development within Rutland including the future housing and employment requirements of the County up to 2036, allocating sites to meet its identified housing and employment needs.

The Site is identified as 'Site OAK/13a' within the Rutland Regulation 19 Pre-Submission Local Plan (August 2020) which is allocated for new housing under draft Policies H1 and H1.3 with an indicative capacity of 200 dwellings. Draft Policy H1.3 requires the following:

A single comprehensive proposal will be expected for the whole site.

The proposed development should be designed to incorporate all of the following key principles within the layout:

a) strengthen existing boundary features and provide significant structural landscaping and planting as well as open space to the northern boundary and north western part of the site to reduce the impact of this part of the site on the landscape;

b) design and orientate new buildings on the site in a way which retains and responds positively to key views out of the town and up towards Burley; c) make appropriate provision for surface water management systems, including SUDs which will ensure that greenfield run-off rates are maintained once the site is developed; d) provide safe, direct and convenient footway and cycleway connections through the site, and to the town centre;

e) ensure safe and direct pedestrian and cycle routes which follow desire lines, between existing residential areas to the west, the town centre, to existing cycle routes and crossings along Burley Park Way and Burley Road and other key destinations;

f) improve the pedestrian and cycle environment around the Co-op site, ensuring direct and safe routes to this retail site;

g) align development with prominent views, including views to the church and key navigational features within the site; h) provide safe and convenient access to the site utilising Burley Road. Ashwell Road should not be used for vehicular access other than for emergency vehicles;

i) provides an appropriate mix of housing choices which reflect the mix set out in most up to date SHMA including 30% of the site capacity as affordable homes (a target of 60 homes); j) provides appropriate green infrastructure and landscaping incorporating different types of open space, play and recreation facilities; k) provision of an onsite LEAP and allotments:

k) provision of an onsite LEAP and allotments; and

I) demonstrate how the development will contribute towards delivering net biodiversity gain.

The supporting text confirms that an application for this site should be accompanied by the following evidence which includes, where appropriate, evidence that necessary mitigation measures have been planned into the design of the development:

- hedgerow, badger and phase 1 habitat surveys;
- archaeological survey (desk based and field assessment);
- consultation with Natural England to consider the potential impact of development on the Rutland Water RAMSAR site;
- archaeological survey (desk based and field assessment);
- heritage impact assessment;
- traffic assessment.

Pigeon, on behalf of the landowner, submitted representations to previous Local Plan consultations to confirm the availability and deliverability of the Site north east of Burley Road.

We believe this site presents an excellent opportunity to create a sustainable new neighbourhood at Oakham which will positively contribute to the town. This Vision builds on these previous representations by setting out further detail and providing a Vision for how the Site could be a developed in accordance with draft Policy H1.3 to create a well-designed new neighbourhood which helps to meet Rutland's housing needs for the Plan period in a sustainable and deliverable manner.

5.0 **SITE CONTEXT**

The Site is located to the northeast of Oakham within the county of Rutland. Oakham is well positioned within the wider East Midlands economic region with Nottingham (northwest), Leicester (west) and Peterborough (southeast) all within 28 kilometres of the site. Oakham is home to a significant and growing population of 12,978 people, and is the largest settlement in Rutland. It is defined within the Adopted and emerging Local Plans as the Main Town within the County with access to higher order services including retail, leisure and health facilities and good public transport links and

is therefore at the top of Rutland's settlement hierarchy. It can therefore be considered to be the most sustainable settlement in Rutland.

The following figures outline the public transport connections, education, healthcare, employment, retail and leisure facilities within proximity to the Site, demonstrating the sustainability of the location to support a new residential community.

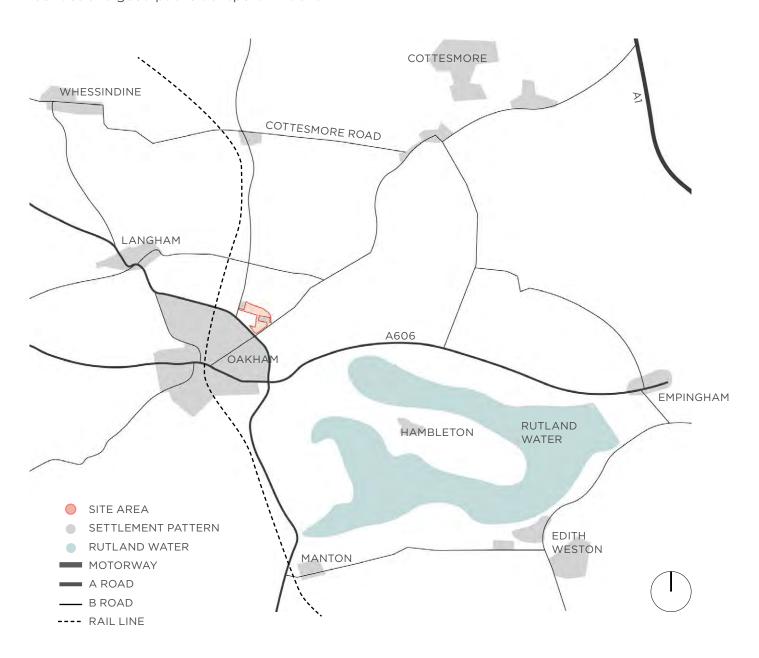


FIG 7: SITE LOCATION PLAN WITHIN RUTLAND



FIG 8: AERIAL VIEW OF RUTLAND WATER



FIG 9: VIEW ALONG OAKHAM HIGH STREET



FIG 10: VIEW OF OAKHAM STATION



FIG 11: RECENT HOUSING DEVELOPMENT IN OAKHAM



FIG 12: OAKHAM C OF E PRIMARY SCHOOL

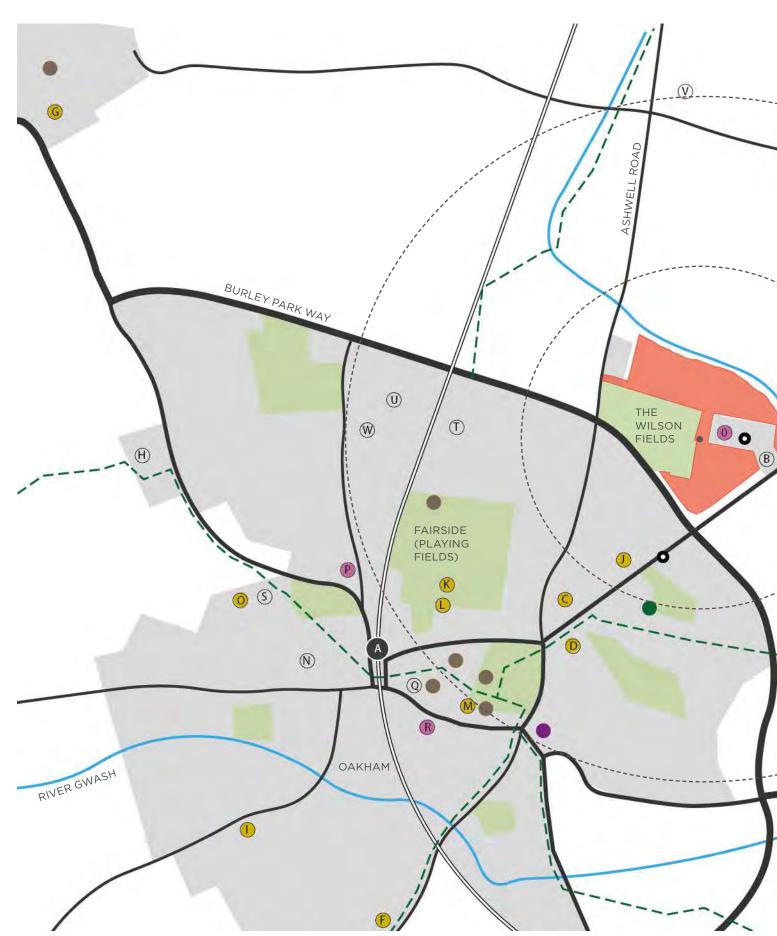
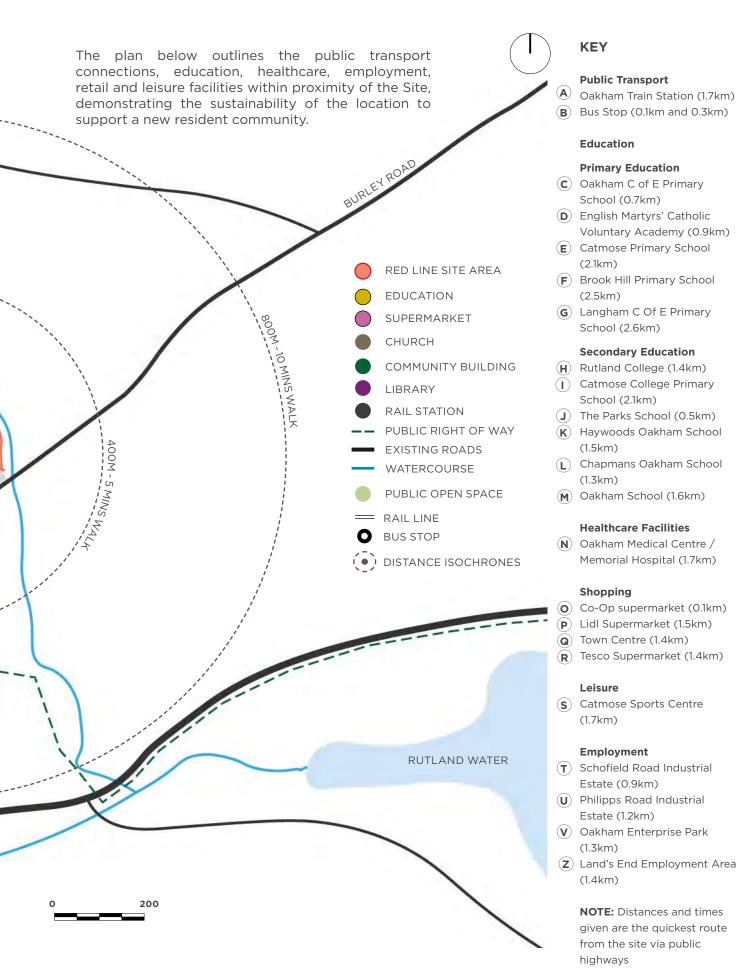


FIG 13: SITE LOCATION PLAN SHOWING FACILITIES WITHIN THE VICINITY OF THE SITE



6.0 THE SITE

The images below were taken on site in early March 2019 at the end of the winter season, but prior to much of the vegetation coming into leaf. The extent of the site area and some of the key features associated with the site are indicated on each image.



FIG 14: VIEW LOOKING NORTHWEST ACROSS THE NORTHERN PARCEL OF LAND



FIG 15: VIEW LOOKING EAST FROM WITHIN THE SITE **TOWARDS THE CO-OP SITE**



FIG 16: VIEW LOOKING SOUTH ALONG BURLEY ROAD TO THE EAST OF THE SITE



FIG 17: VIEW OF THE CO-OP PETROL FILLING STATION OFF BURLEY ROAD



FIG 18: PHOTO LOCATION PLAN

SITE BOUNDARY

7.0 TECHNICAL SUMMARY

The following gives a summary of the salient issues highlighted through the site surveys and assessments carried out by our expert technical team.

Highways and Access Strategy - produced by RPS

Walking & Cycling Routes - An existing footpath lies along the opposite side of Burley Road from the Site with crossing points at the Burley Park Way roundabout, providing connections to the wider foot and cycle path network within Oakham and the various local services and facilities within the town. There is the potential for this footpath to be extended along the western side of Burley Road, north of Burley Park Way to serve the Site with new pedestrian crossings provided across Burley Park Way.

Access to the bus network - The Site has immediate access to the neighbouring Co-Op site which is home to a bus stop. There is also a bus stop at the entrance to Ladywell, approximately 300m to the south west of the Site.

Preliminary Ecological Assessment - produced by Hopkins Ecology

Ecological value - There are no ecological designations within the Site which is made up predominantly of arable farmland of low ecological value. The Site boundaries - improved grassland, the stream to the northern Site boundary and mature hedgerows surrounding the Site hold value in ecology terms, creating potential habitat for birds and bats.



FIG 19: HABITAT PLAN

Protected species - There are no observations of protected species on Site, however any restricted occurrence can be mitigated through sensitive design, retention and management of boundary features.

Landscape Assessment - undertaken by Liz Lake Associates

Designations - The Site does not lie within any areas designated for landscape importance.

Value - Overall, it is considered that the Site has capacity to absorb the scale and type of development proposed in landscape and visual terms and that, subject to implementation of the landscape and visual mitigation measures required by Policy H1.3 as part of a high quality landscape-led design, it is considered that the landscape and visual effects of the proposal will be minimised, being limited and localised.

As such the Site will be able to successfully integrate new development without harm to the key characteristics of the surrounding landscape character of the area.

Mitigation - Retention of existing vegetation and reinforced planting to boundaries is key to create a well-defined landscape edge. Existing landscape should therefore be retained and enhanced along field boundaries, with a landscape buffer provided along the northern boundary to provide a soft edge to the development and help to assimilate it into the countryside. The north-west of the Site to the rear of the Veterinary Hospital should be kept free of development.

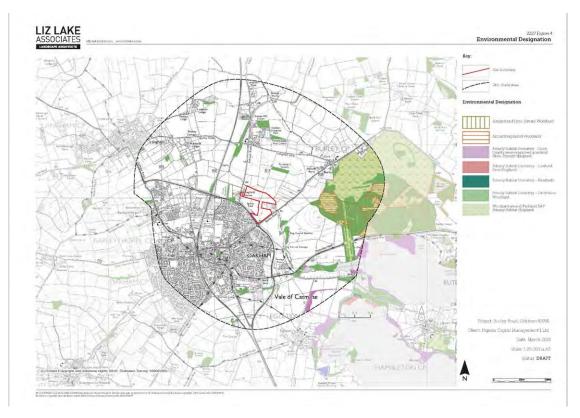


FIG 20: ENVIRONMENTAL DESIGNATIONS PLAN

Flood Risk and Drainage Strategy produced by BWB

Flood Zone - The Site is located within Flood Zone 1, which means a less than 1 in 1,000 annual probability of river or sea flooding.

Stream / Watercourse - A small stream runs along the Site's northern boundary which flows south eastwards towards Rutland Water.

Drainage proposal - Inflitration testing has confirmed that the site is underlain by Clay soils and is not suitable for infiltration drainage. Accordingly, it is proposed that surface water drainage will discharge to the adjoining watercourse along the northern boundary of the Site. Discharge will be restricted to the greenfeld run-off rates (with allowance for climate change) with each of the development parcels within the Site incorporating separate attenuation basins to hold surface water runoff prior to controlled discharge into the watercourse.

Foul Water - There are existing connection points available on Burley Road and Ashwell Road.

Waste Water Treatment - The Site falls within the catchment of Oakham Waste Water Treatment Works. Anglian Water does not anticipate a problem with capacity within the urban areas.

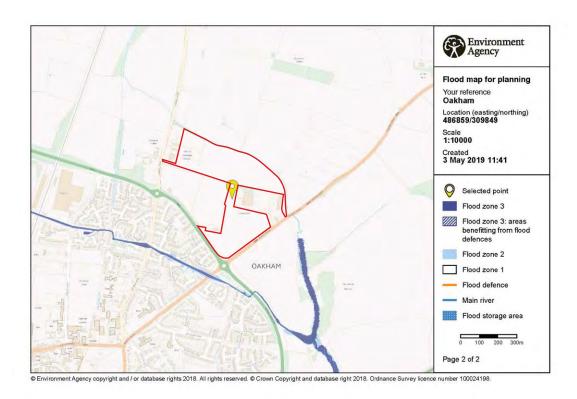


FIG 21: ENVIRONMENT AGENCY FLOOD ZONES MAP

Utilities Assessment undertaken by Pigeon Technical Services

Services - The Site benefits from proximity to strategic infrastructure including potable water, gas, electricity and telecommunications.

Desk-based Archaeology and Heritage assessment undertaken by Lanpro.

Heritage - Development within the study site will result in change to a very limited part of the wider setting of the Grade I listed Burley on the Hill House and the Grade II registered park of Burley on the Hill. However, change does not necessarily equate to harm and, whilst there is some limited intervisibility with the Grade II Registered Park of Burley on

the Hill and parts of the Grade I listed Burley on the Hill House, any views between these designated heritage assets and the study site are not considered to make an appreciable contribution to their setting and significance.

Therefore, it is considered that development within the study site will present no harm to the significance of either the Grade I listed Burley on the Hill House or the Grade II registered park of Burley on the Hill.

Archaeology - There is no evidence to suggest that the study site contains, or has the potential to contain, archaeological remains of sufficient importance to preclude or constrain development.

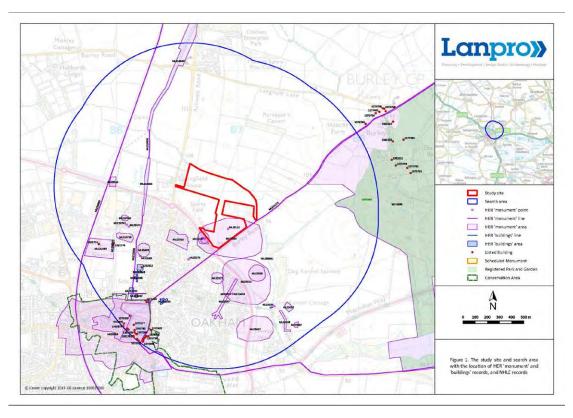


FIG 22: HERITAGE AND CONSERVATION ASSETS IN THE VICINITY OF THE SITE

8.0 **OPPORTUNITIES & CONSTRAINTS**





The constraints and opportunities plan identifies the following aspects that will influence the design of the site for a new residential neighbourhood.

1: Site access - The main vehicular and pedestrian access to the Site will be via Burley Road to the southeast.

2: Neighbouring amenities -

Opportunities will be taken to directly connect walking routes to the existing Co-op and associated bus stops in the eastern area of the site.

3: Walking and cycle links - Extension of pedestrian links to the western side of Burley Road, providing pedestrian access to the Site. New pedestrianised and cycle crossing off Burley Park Way. A further pedestrian/cycle/emergency access will be provided via Ashwell Road to the northwest.

4: Landscape edge to the site

- Protection and enhancement (including widening) of vegetation zones around Site boundaries. The buffer along the northern boundary should be approximately 10 metres.
- **5: Connected ecology** There is potential to connect existing habitats around Site boundaries through the body of the Site.
- **6: SUDS and biodiversity** There is potential to increase species biodiversity and create new habitats within The Site area through creation of new habitats and SUDS features, two within the northern parcel and one within the southern parcel.
- 7: Key Views There is potential to retain key views through the site to the north towards Ashwell and Burley, whilst also positioning development areas to maximise views south into Oakham, connecting with the existing settlement.

OUR VISION

The Burley Road scheme will be an attractive and sustainable new neighbourhood in which people aspire to live. It will be set within a network of attractive green spaces framed by high quality new homes. In order to deliver the Vision the proposed scheme will adhere to the following design principles:

A balanced, vibrant neighbourhood - The new neighbourhood will create a vibrant, mixed community including a variety of new homes to meet a range of needs, from those seeking to access the housing market, family and affordable homes along with housing options for the elderly and self build plots. In addition, links to existing Co-op site and the rest of the town will be enhanced to ensure that residents have easy access to a range of employment, shops and services;

A sustainable accessible neighbourhood - The new neighbourhood will be designed to create an accessible new community on the edge of Oakham. Permeable and legible routes will be incorporated within the scheme providing a walkable neighbourhood where residents walk along landscaped or tree lined paths to nearby shops and services. Existing pedestrian and cycle linkages to the site will be enhanced with new crossings provided across Burley Park Way to integrate the new community with the rest of the town and encourage residents and workers to access the site by means other than the car.

A high-quality place - The new

neighbourhood will provide a strong identity, but one which respects the local context and feels like it is an integral part of the town. It will incorporate high-quality, well designed new homes which reflect local building styles and materials. Houses will be set within a green infrastructure network which helps to create an attractive place by retaining and enhancing existing landscaping and incorporating a variety of green spaces which provide opportunities for recreation and biodiversity enhancement as well as helping to provide a transition to the countryside to the north.



FIG 24: STRONG LOCAL COMMUNITY



FIG 25: WALKABLE NEIGHBOURHOOD



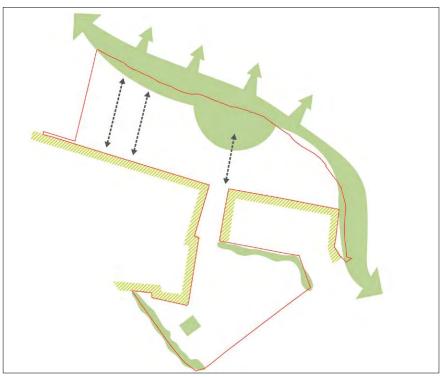
FIG 26: HIGH QUALITY PLACE



FIG 27: PRECEDENT IMAGERY OF SUSTAINABLE HOUSING SCHEMES

10.0 MASTERPLAN **CONCEPT DRIVERS**

CONCEPT DRIVER 1: 'Landscape edge and green links'



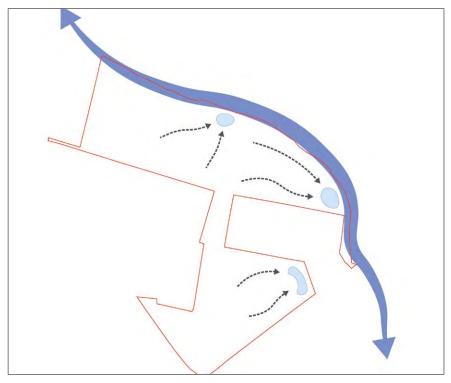


Protection and enhancement of the landscape edge around the entirety of the site, and the opportunity to create new green links through the site to create biodiversity corridors and connect ecology.



FIG 28: CONCEPT DRIVER 1 DIAGRAM: 'LANDSCAPE EDGE AND GREEN LINKS'

CONCEPT DRIVER 2: 'Blue habitats'



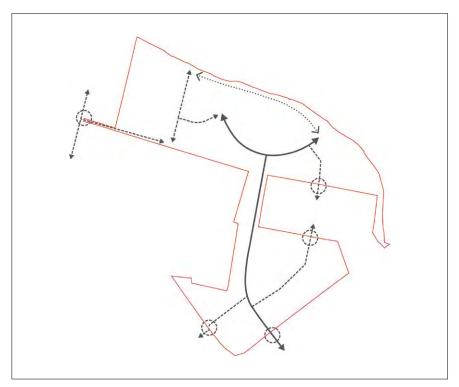


Creation of new infiltration ponds to the north and south of the site and enlargement of the corridor along the watercourse to the north.



FIG 29: CONCEPT DRIVER 2 DIAGRAM: 'BLUE HABITATS'

CONCEPT DRIVER 3: 'Permeable and accessible Site'





Opportunity to create an accessible Site through a new tree-lined boulevard connected to Burley Road, create a series of permeable routes that connect into the wider pedestrian and cycle network and routes through public open space for leisure and recreation.



FIG 30: CONCEPT DRIVER 4 DIAGRAM: 'PERMEABLE AND ACCESSIBLE SITE'

CONCEPT DRIVER 4: 'Key Views'

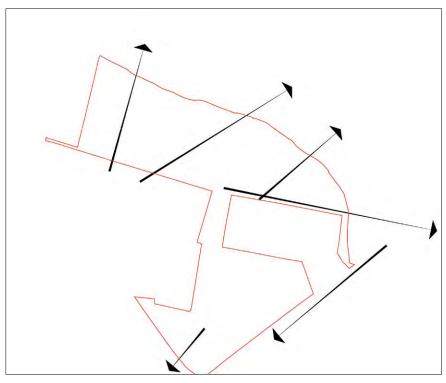
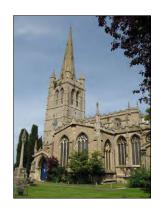


FIG 31: CONCEPT DRIVER 4 DIAGRAM: 'KEY VIEWS'



Retention of key views associated with the site: south to visually connect the site Oakham and north towards Burley and The Vale of Catmose.



11.0 **CONCEPT MASTERPLAN**





12.0 ILLUSTRATIVE MASTERPLAN





DELIVERY & PHASING 13.0

Pigeon, together with the Burley Estate Farm Partnership are committed to working collaboratively together and with Rutland County Council and other stakeholders in order to secure the delivery of the housing allocation for Burley Road, Oakham.

The land is available for development, is free from any overriding constraints and the development of the site is considered to be

The Rutland Regulation 19 Pre-Submission Plan identifies the Site as a housing allocation with an indicative capacity of 200 new homes, along with allotments and other open space provision. The Illustrative Framework Masterplan demonstrates that the site has the capacity to accommodate approximately 220 new homes along with the other requirements of Policy H1.3 taking account of the various site constraints and opportunities identified. Affordable housing can be delivered in accordance with the Council's Emerging Local Plan policy requirements in Policy H9.

Phasing and Delivery

The Masterplan for the Site has been developed to provide separate development parcels for the new homes and allow for the phased development of the Site. In terms of the timeline for the delivery of the Scheme, assuming the Adoption of the Local Plan by the end of 2021, it is envisaged that an Outline planning application would be submitted immediately thereafter. As a result, Pigeon considers that the Site is capable of coming forward for development earlier in the Plan Period than currently shown in the housing trajectory with new housing completions commencing by 2024.

Table 1 identifies the anticipated delivery of new homes, demonstrating that the Site could be fully built out within five years with the site contributing to the Council's 5-year housing land supply on adoption of the Local Plan.

YEAR	COMPLETIONS
2023/24	10
2024/25	50
2025/26	50
2026/27	50
2027/28	40
TOTAL	200

TABLE 1: HOUSING DELIVERY

Delivery Timeline

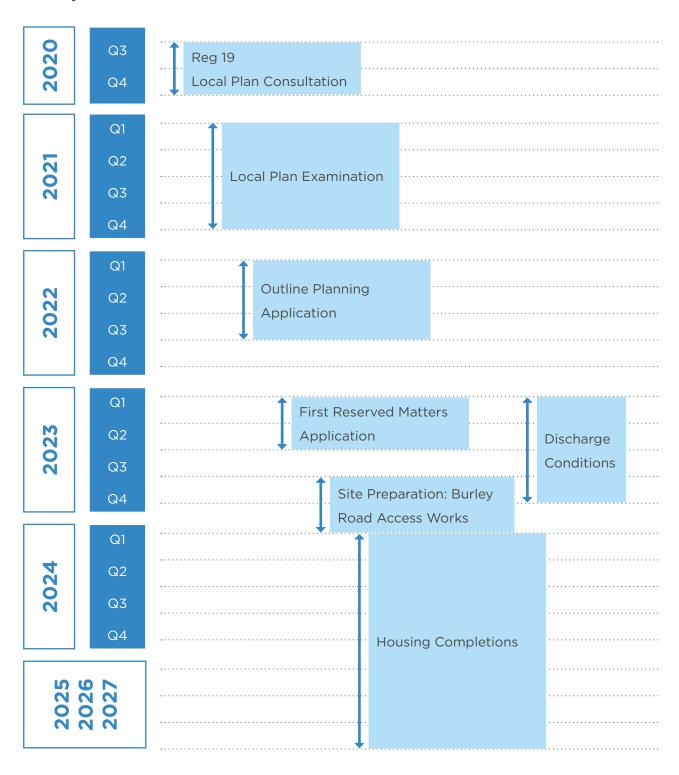


FIG 34: **DELIVERY TIMELINE**

Site area

The site 16.5 ha

Homes



30% affordable

Enhanced walking and cycling links



Self Build



Open space

7.7ha





Including:

Allotments



Children's Play



Biodiversity enhancements



FIG 35: SUMMARY STATISTICS ABOUT THE DEVELOPMENT

14.0 **SUMMARY &** RECOMMENDATIONS

This document has set out our vision and concepts for the delivery of a sustainable new neighbourhood to the north west of Burley Road, Oakham. We have demonstrated our commitment to delivering a sustainable new residential community of the highest design standards where people aspire to live. Pigeon and the Burley Estate Farms Partnership are working together to deliver this and believe that we have the track record and experience to realise the vision set out in this document.

The Council has identified the Site as a housing allocation within the Regulation 19 Local Plan in order to meet Rutland's housing needs. The site is located in a highly sustainable location to the north east of Oakham and is available and suitable for development. We have demonstrated that the site has few constraints and that the existing landscape and other features can be readily incorporated into the design of the scheme in order to avoid any significant impacts.

We have devised a robust spatial concept for the site which is based on a number of key design principles informed by the objectives of the emerging Local Plan, an analysis of the site and its context and universal urban design principles: creating a balanced, vibrant neighbourhood; a sustainable accessible neighbourhood; and a high quality place. The site will provide for a mix of high-quality housing to meet local needs, including affordable and family housing and selfbuild plots, along with complementary open space creating a vibrant new community. Homes will be set in carefully landscaped surroundings, providing a transition with and links to the countryside to the north. The new neighbourhood will be permeable and well-connected to the town with residents able to walk or cycle along landscaped paths to nearby shops and services, or access the surrounding countryside.

It is a place with a strong individual identity, but one which respects the local context and is a fully integrated part of the town. We have demonstrated that the site is in a highly sustainable location, is technically unconstrained and that the existing landscape and other features can be readily incorporated into the design of the scheme in order to avoid any significant impacts.

We therefore consider that the Site can be delivered in accordance with the requirements of Policy H1.3 and the Site's identification for a housing allocation for approximately 200 new homes within the Regulation 19 Rutland Local Plan is sound.



APPENDICES

APPENDIX 1 - LIST OF FIGURES

- FIG 1: VIEW LOOKING NORTH ALONG BURLEY ROAD TO THE EAST OF THE SITE
- FIG 2: MAP SHOWING THE LOCATION AND CONTEXT OF THE SITE WITHIN THE EAST MIDLANDS ECONOMIC REGION
- FIG 3: ALL SAINTS CHURCH, OAKHAM
- FIG 4: ARTIST'S IMPRESSION OF NEW HOMES AT THETFORD
- FIG 5: OTHER PIGEON PROJECTS: BURNHAM-ON-CROUCH (TOP) AND THETFORD (BOTTOM)
- FIG 6: AERIAL PHOTOGRAPH OF OAKHAM SHOWING THE SITE TO THE NORTHEAST
- FIG 7: SITE LOCATION PLAN WITHIN RUTLAND
- FIG 8: AERIAL VIEW OF RUTLAND WATER
- FIG 9: VIEW ALONG OAKHAM HIGH STREET
- FIG 10: VIEW OF OAKHAM STATION
- FIG 11: RECENT HOUSING DEVELOPMENT IN OAKHAM
- FIG 12: OAKHAM C OF E PRIMARY SCHOOL
- FIG 13: SITE LOCATION PLAN SHOWING FACILITIES WITHIN THE VICINITY OF THE SITE
- FIG 14: VIEW LOOKING NORTHWEST ACROSS THE NORTHERN PARCEL OF LAND
- FIG 15: VIEW LOOKING EAST FROM WITHIN THE SITE TOWARDS THE CO-OP SITE
- FIG 16: VIEW LOOKING SOUTH ALONG BURLEY ROAD TO THE FAST OF THE SITE
- FIG 17: VIEW OF THE CO-OP PETROL FILLING STATION OFF BURLEY ROAD
- FIG 18: PHOTO LOCATION PLAN
- FIG 19: HABITAT PLAN
- FIG 20: ENVIRONMENTAL DESIGNATIONS PLAN
- FIG 21: ENVIRONMENT AGENCY FLOOD ZONES MAP
- FIG 22: HERITAGE AND CONSERVATION ASSETS IN THE VICINITY OF THE SITE
- FIG 23: OPPORTUNITIES & CONSTRAINTS PLAN
- FIG 24: STRONG LOCAL COMMUNITY
- FIG 25: WALKABLE NEIGHBOURHOOD
- FIG 26: HIGH QUALITY PLACE
- FIG 27: PRECEDENT IMAGERY OF SUSTAINABLE HOUSING SCHEMES
- FIG 28: CONCEPT DRIVER 1 DIAGRAM: 'LANDSCAPE EDGE AND GREEN LINKS'
- FIG 29: CONCEPT DRIVER 2 DIAGRAM: 'BLUE HABITATS'
- FIG 30: CONCEPT DRIVER 3 DIAGRAM: 'PERMEABLE AND ACCESSIBLE SITE'
- FIG 31: CONCEPT DRIVER 4 DIAGRAM: 'KEY VIEWS'
- FIG 32: CONCEPT MASTERPLAN
- FIG 33: ILLUSTRATIVE MASTERPLAN
- FIG 34: **DELIVERY TIMELINE**
- FIG 35: SUMMARY STATISTICS ABOUT THE DEVELOPMENT

APPENDIX 1 - LIST OF FIGURES

- FIG 1: VIEW LOOKING NORTH ALONG BURLEY ROAD TO THE EAST OF THE SITE
- FIG 2: MAP SHOWING THE LOCATION AND CONTEXT OF THE SITE WITHIN THE EAST MIDLANDS ECONOMIC REGION
- FIG 3: ALL SAINTS CHURCH, OAKHAM
- FIG 4: ARTIST'S IMPRESSION OF NEW HOMES AT THETFORD
- FIG 5: OTHER PIGEON PROJECTS: BURNHAM-ON-CROUCH (TOP) AND THETFORD (BOTTOM)
- FIG 6: AERIAL PHOTOGRAPH OF OAKHAM SHOWING THE SITE TO THE NORTHEAST
- FIG 7: SITE LOCATION PLAN WITHIN RUTLAND
- FIG 8: AERIAL VIEW OF RUTLAND WATER
- FIG 9: VIEW ALONG OAKHAM HIGH STREET
- FIG 10: VIEW OF OAKHAM STATION
- FIG 11: RECENT HOUSING DEVELOPMENT IN OAKHAM
- FIG 12: OAKHAM C OF E PRIMARY SCHOOL
- FIG 13: SITE LOCATION PLAN SHOWING FACILITIES WITHIN THE VICINITY OF THE SITE
- FIG 14: VIEW LOOKING NORTHWEST ACROSS THE NORTHERN PARCEL OF LAND
- FIG 15: VIEW LOOKING EAST FROM WITHIN THE SITE TOWARDS THE CO-OP SITE
- FIG 16: VIEW LOOKING SOUTH ALONG BURLEY ROAD TO THE EAST OF THE SITE
- FIG 17: VIEW OF THE CO-OP PETROL FILLING STATION OFF BURLEY ROAD FIG 18: PHOTO LOCATION PLAN
- FIG 19: HABITAT PLAN
- FIG 20: ENVIRONMENTAL DESIGNATIONS PLAN
- FIG 21: ENVIRONMENT AGENCY FLOOD ZONES MAP
- FIG 22: HERITAGE AND CONSERVATION ASSETS IN THE VICINITY OF THE SITE
- FIG 23: OPPORTUNITIES & CONSTRAINTS PLAN
- FIG 24: STRONG LOCAL COMMUNITY



Carter Jonas

CARTER JONAS 1 CHAPEL PLACE LONDON W1G 0BG

020 7518 3200 CARTERJONAS.CO.UK



This drawing may contain: Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright 2012. All rights reserved. Reference number OS Open data © Crown copyright and database right 2012 | Aerial Photography ©

HERITAGE DESK-BASED ASSESSMENT

LAND OFF BURLEY ROAD OAKHAM

PREPARED BY LANPRO SERVICES
ON BEHALF OF
PIGEON INVESTMENT
MANAGEMENT Ltd.

September 2019



Lanpro Services Ltd. Heritage Desk-Based Assessment: Land off Burley Road, Oakham

Project Reference: 1397H/01

Document Prepared by: Paul Gajos MCIfA

Document Reviewed by: Mitchell Pollington MCIfA

Revision	Reason for Update	Document Updated

Contents

List	of Figures	ii
	of Plates	
Non	ı-Technical Summary	ii
	INTRODUCTION	
2	LEGISLATION, POLICY AND GUIDANCE	1
3	METHODOLOGY	4
4	SITE LOCATION AND DESCRIPTION	5
5	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	7
6	ASSESSMENT OF SIGNIFICANCE	12
7	IMPACT ASSESSMENT	15
8	CONCLUSIONS	. 17
9	REFERENCES	. 18

Figures

Plates

Appendix 1: Gazetteer of heritage assets

Appendix 2: Geophysical Survey

Appendix 3: Concept Masterplan

1397H/01 i

List of Figures

- Figure 1. The study site and search area with the location of HER 'monument' and 'buildings' records, and NHLE records
- Figure 2. The study site and search area with the location of HER 'events' records
- Figure 3. Ordnance Survey 25 inch map of 1885
- Figure 4. Ordnance Survey 6 inch map of 1904
- Figure 5. Ordnance Survey 25 inch map of 1930
- Figure 6. Ordnance Survey 6 inch map of 1952
- Figure 7. Ordnance Survey 1:2500 scale map of 1975
- Figure 8. 18th century map of Burley estate

List of Plates

- Plate 1: View towards Burley on the Hill Park from north-western part of study site
- Plate 2: View towards Burley on the Hill Park from southern part of study site
- Plate 3: View towards study site from near Church Road on north-western edge of Burley on the Hill Park
- Plate 4: Distant view of 'The Coach House' from northern part of study site Plate 5: Distant view of 'The Coach House' from southern part of study site
- Plate 6: Looking west across southern part of study site
- Plate 7: Looking west across northern part of study site
- Plate 8: Looking south-west across northern part of study site

1397H/01 ii

Non-Technical Summary

Lanpro was commissioned by Pigeon Investment Management Ltd to produce a heritage desk-based assessment to inform the promotion of a proposed residential development of land to the north of Burley Road, Oakham (centred at SK 8687 0985). The site comprises a large irregular shaped arable field and an area of paddock covering approximately 15.7ha, situated on the north- eastern fringe of Oakham.

The heritage desk-based assessment addresses the information requirements set out in the National Planning Policy Framework (NPPF) and provides the proportionate response sought by the NPPF.

The assessment draws together the available archaeological, historical, topographic and land-use information, together with the results of a specifically commissioned geophysical survey, in order to clarify the significance and archaeological potential of the site. It has established that there are no designated heritage assets in the study site and that the proposed development will have no impact upon any designated heritage assets in the surrounding area.

The available archaeological evidence for within and adjacent to the study site suggests that there is a high potential for the study site to contain archaeological remains of prehistoric and Roman date, potentially of regional significance. However, the geophysical survey, whilst picking up some potential archaeology does not indicate widespread or intensive activity within the study site. There is no evidence to suggest that the study site contains, or has the potential to contain, remains of sufficient importance to preclude or constrain development.

The assessment concludes that further assessment of the study site's archaeological potential is not necessary to inform decision-making on the proposed allocation of the site for mixed use development. However, should a planning application be submitted for development of the site further work is likely to be required to inform the archaeological mitigation strategy for the development.

1397H/01 jji

1 INTRODUCTION

- 1.1 This heritage desk-based assessment of land situated to the north of Burley Road, Oakham has been prepared by Lanpro Services Limited on behalf of Pigeon Investment Management Limited.
- 1.2 This assessment has been undertaken to inform the promotion of the site for residential development.
- 1.3 This document provides an assessment of the potential for the survival of archaeological remains within the study site and assesses the potential impacts that any proposed development could have on these and other heritage assets in the vicinity.
- 1.4 The assessment has been undertaken to meet the requirements of the National Planning Policy Framework (NPPF; Section 16: 'Conserving and enhancing the historic environment'; revised July 2018) and is in line with the Chartered Institute for Archaeologists (CIfA) guidelines Standard and guidance for historic environment desk-based assessment (CIfA 2014).

2 LEGISLATION, POLICY AND GUIDANCE

2.1 In considering any planning application for development, the local planning authority will be guided by current legislation, the policy framework set by government planning policy, by current Local Plan policy and by other material considerations.

Current Legislation

- 2.2 The applicable legislative framework is summarised as follows:
 - Ancient Monuments and Archaeological Areas Act (AMAAA) 1979;
 - Planning (Listed Buildings and Conservation Areas) (P(LBCA)) Act 1990
- 2.3 The AMAAA largely relates to Scheduled Monuments (SMs) and designated archaeological areas, detailing in particular what can and cannot be undertaken on archaeological grounds.
- 2.4 The P(LBCA) Act provides for the protection of Listed Buildings and Conservation Areas, and is largely expressed in the planning process through policies in regional and local planning guidance, as outlined above.
- 2.5 The Planning (Listed Buildings and Conservation Areas) Act of 1990 is the primary legislative instrument addressing the treatment of listed buildings and conservation areas through the planning process.

National Planning Policy Framework

2.1 Section 16 of the NPPF, entitled *Conserving and enhancing the historic environment* provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets.

1

- 2.2 Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:
 - Delivery of sustainable development
 - Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment, and
 - Conservation of England's heritage assets in a manner appropriate to their significance.
- 2.3 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 189 states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 2.4 A Heritage Asset is defined in Annex 2 of the NPPF as: 'A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest It includes designated heritage assets and assets identified by the local planning authority (including local listing).'
- 2.5 Annex 2 also defines 'Archaeological Interest' as a heritage asset which holds or potentially could hold, evidence of past human activity worthy of expert investigation at some point. Heritage Assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.
- 2.6 A Designated Heritage Asset comprises a World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.
- 2.7 Significance is defined as: 'The value of a heritage asset to this and future generations because of its heritage interest The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance.'
- 2.8 In short, government policy provides a framework which:
 - Protects nationally important designated Heritage Assets (which include World Heritage Sites, Scheduled Ancient Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields or Conservation Areas)
 - Protects the settings of such designations
 - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions
 - Provides for the excavation and investigation of sites not significant enough to merit *in situ* preservation.

Planning Practice Guidance

2.9 The Planning Practice Guidance is a web-based resource which is to be used in conjunction with the NPPF. It is aimed at planning professionals and prescribes best practice within the planning sector. The relevant section is entitled *'Conserving and enhancing the historic environment'*. The guidance given in this section sets out the best practice to applying government policy in the NPPF.

Local Planning Policy

- 2.10 The Rutland Core Strategy Development Plan Document (adopted July 2011) sets out the overall planning strategy for the Borough until 2026.
- 2.11 Local policy relating to archaeology and the historic environment are presented in Core Strategy policy CS22 The Historic and Cultural Environment:

The quality and character of the built and historic environment of Rutland will be conserved and enhanced. Particular protection will be given to the character and special features of:

- a) listed buildings and features;
- b) conservation areas;
- c) scheduled ancient monuments;
- d) historic parks and gardens;
- e) known and potential archaeological sites.

All developments, projects and activities will be expected to protect and where possible enhance historic assets and their settings, maintain local distinctiveness and the character of identified features.

Development should respect the historic landscape character and contribute to its conservation, enhancement or restoration, or the creation of appropriate new features.

The adaptive re-use of redundant or functionally obsolete listed buildings or important buildings will be supported where this does not harm their essential character.

Professional Guidance

- 2.12 The Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Historic Environment Desk-based Assessment (2014) provides guidelines and recommendations for best practice in undertaking archaeological desk-based research and assessment.
- 2.13 The Historic England publication *Historic Environment Good Practice Advice in Planning Note*2: Managing Significance in Decision Taking in the Historic Environment (2015) outlines a seven-stage process for the assembly and analysis of relevant information relating to heritage assets potentially affected by a proposed development:
 - Understand the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;

3

- Understand the significance of the affected assets;
- Understand the impact of the proposal on that significance;
- Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
- Look for opportunities to better reveal or enhance significance;
- Justify any harmful impacts in terms of the sustainable development objective of conserving significance and the need for change; and
- Offset negative impacts on aspects of significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.
- 2.14 In order to understand the nature, extent and level of significance the note advocates considering the four types of heritage value an asset may hold, as identified in *Conservation Principles* (English Heritage 2008): aesthetic, communal, historic and evidential. Significance results from a combination of any, some or all of the values.
- 2.15 The Historic England publication *Historic Environment Good Practice Advice in Planning Note*3 (Second Edition): The Setting of Heritage Assets Setting (2017) recognises that whilst setting is not a heritage asset, elements of a setting 'may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral' (para. 4).
- 2.16 This guidance also notes that the contribution of setting to the significance of a heritage asset is often expressed by reference to views, although the importance of setting lies in what it contributes to the significance of the heritage asset, and this can be influenced by a number of other factors.

3 METHODOLOGY

Information Sources

- 3.1 A gazetteer of all records held on the Leicestershire and Rutland Historic Environment Record (HER) and the Historic England National Heritage List for England (NHLE) for within a 1km search area is provided in Appendix 1, and their locations marked on a plan in Figure 1.
- 3.2 The following sources of information have been consulted in order to meet the requirements of the assessment, and are in line with the guidelines laid down by the CIfA (2014).

Archaeological records

3.3 Information on heritage assets and archaeological investigations for within the search area was obtained from the HER and the NHLE.

Historical documentary and cartographic sources

3.4 The holdings of the Leicestershire Archives and other on-line repositories were consulted for historical maps and plans, and relevant documentary sources.

Designated heritage assets

3.5 Information on designated heritage assets was obtained from the HER and the NHLE.

Published and unpublished documentary sources

3.6 A range of published and unpublished material has been consulted, including the regional archaeological research framework, *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight et al 2012) and sources on the wider archaeological and historical background.

Walkover Survey

3.7 A site walkover survey was undertaken on 8th February 2019 to provide an assessment of the character of the site and appraise the potential impact of the proposed development on any archaeological heritage assets (see Plates 1 to 8). The conditions were dry and overcast, and the site was under a mix of short pasture, young crop and areas of ploughing. No potential archaeological surface features or finds were identified.

Geophysical Survey

3.8 An archaeological geophysical (magnetometer) survey was undertaken across the developable areas of the study site (excluding the current horse paddocks which are beyond the allocation boundary and proposed for open space and allotments) in May 2019 (SUMO 2019; Appendix 2).

Assessment Criteria

Setting

- 3.9 The NPPF defines the setting of a heritage asset as: 'The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral'
- 3.10 Historic England's *Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets Setting* (2017) was used to inform the methodology for this assessment which follows steps i) to iv) outlined in the guidance.

Significance

3.11 Paragraph 189 of the NPPF states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than

sufficient to review the potential impact of the proposal upon the significance of that asset.

- 3.12 It is recognised that not all parts of a heritage asset will necessarily be of equal significance. In some cases, certain elements could accommodate change without affecting the significance of the asset. Change is only considered harmful if it erodes an asset's significance.
- 3.13 Understanding the significance of any heritage assets affected and any contribution made by their setting (paragraph 189, NPPF 2019) is therefore fundamental to understanding the scope for and acceptability of change.
- 3.14 Assessment of significance has been undertaken in accordance with the methodology outlined in Historic England's Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (2015).

Definition of Harm

3.15 Current guidance by Historic England is that 'change' does not equate to 'harm'. The NPPF and its accompanying PPG effectively distinguish between two degrees of harm to heritage assets – substantial and less than substantial. Paragraph 195 of the NPPF states that:

'Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss...'

- 3.16 Paragraph 196 of the NPPF states that:
 - 'Where a development proposal would lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposals...'
- 3.17 In determining the effects of the Proposed Scheme this heritage statement is cognisant of case law. Including the below:
 - Flag Station, Mansel Lacy, Herefordshire [22/09/2015] Case Number EWHC 2688
- 3.18 This ruling has emphasised the primacy of the 1990 Planning Act and the fact that it is up to the decision makers in the planning system to 'have special regard to the desirability of preserving the [listed] building or its setting'. As stated by HH Judge David Cooke in a judgment of 22 September 2015 regarding the impact on the setting of a listed building:

'It is still plainly the case that it is for the decision taker to assess the nature and degree of harm caused, and in the case of harm to setting rather than directly to a listed building itself, the degree to which the impact on the setting affects the reasons why it is listed.'

6

- PALMER Appellant and Herefordshire Council and ANR [04/11/16] Case No: C1/2015/3383
- 3.19 The judgment was agreed by Lord Justice Lewison at the Court of Appeal, who stated that:

'It is also clear as a matter both of law and planning policy that harm (if it exists) is to be measured against both the scale of the harm and the significance of the heritage asset. Although the statutory duty requires special regard to be paid to the desirability of not harming the setting of a listed building, that cannot mean that any harm, however minor, would necessarily require planning permission to be refused.'

4 SITE LOCATION AND DESCRIPTION

- 4.1 The study site comprises approximately 15.7ha situated on the north-eastern fringe of Oakham (centred at SK 8687 0985; Figure 1). The site is bounded to the south-east by the B668 Burley Road, to the south-west by the A606, to the west by sports pitches and a veterinary clinic, and to the north by fields.
- 4.2 The study site consist of a large irregular shaped arable field with a second field divided into small paddocks to the west (see Plates 1 to 8). The study site is situated on a gentle east facing slope, in which the ground level slopes downwards from around 104m above Ordnance Datum (aOD) at the west to around 96m aOD on its eastern edge. The northern edge of the study site is bounded by a small unnamed watercourse.
- 4.3 The recorded bedrock geology across the study site comprises mudstone of the Whitby Mudstone Formation across the north with ferruginous limestone of the Marlstone Rock Formation in the south (BGS 2019). No superficial deposits are recorded.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Introduction

5.1 This section reviews existing archaeological evidence for the study site and the archaeological and historical background of the general area, based on a consideration of evidence in the Leicestershire and Rutland HER and the NHLE. It is not the purpose of this document to create a detailed archaeological or historical narrative of the area, but to provide an assessment of the study site's historical development and archaeological potential in accordance with the NPPF.

Designated Heritage Assets

- 5.2 The study site contains no designated heritage assets.
- 5.3 There are 29 Listed Buildings, one conservation area and one scheduled monument within the 1km search area that are located within Oakham itself. The study site is not considered to form part of the setting of these designated heritage assets due to distance and

intervening development. They are, therefore, given no further consideration within this report.

- The Grade II registered Park and Garden of Burley on the Hill is located approximately 660m to the east of the study site at its closest point. The Grade I listed Burley on the Hill House is located beyond the 1km search area (approximately 1.25km at the closest point), however, given its high grade and elevated position in the landscape it has been included in this assessment.
- 5.5 The locations of all designated heritage assets within the search area are shown on Figure 1.

Non-designated heritage assets

- 5.6 The HER holds six records of archaeological finds and/or features falling within, or partly within, the study site. These records (MLE5587, 5592, 5593, 5594, 5609 & 8112) span the Mesolithic through to the Roman periods and are discussed in detail below.
- 5.7 The HER contains 39 'monument' records for within the wider search area, including designated heritage assets also recorded on the NHLE and a number of duplicated records relating to Listed Buildings. Details of all HER and NHLE records are listed in a gazetteer in Appendix 1 and their positions marked on Figure 1.
- 5.8 The HER records relating to archaeological remains, finds or investigations within the search area breakdown as follows. Some records cover more than one period:-

Period	Within Study Site	Within Search Area
Prehistoric	5	6
Roman	2	3
Early medieval	0	1
Medieval	0	6
Post-medieval/modern	0	23
Undated	0	2

Previous Archaeological Work

- 5.9 The HER records 24 archaeological investigations (events) having taken place within the search area (Figure 2). This demonstrates a reasonably high level of investigation resulting in a good level of interpretation of archaeological potential.
- 5.10 Of the 24 recorded events two relate to work within, or partly within the study site itself. Fieldwalking was conducted within the study site and adjacent fields between 1985 and 1988 (ELE1769). The northern part of the study site is not recorded as being subject to fieldwalking, however, fieldwalking by local societies is not always recorded for areas of

negative evidence and so it is not known whether the northern field was not walked or whether it is simply that no finds were recovered.

- 5.11 In 1986 an archaeological excavation was undertaken in advance of the construction of the A606. Whilst the bulk of the excavation area fell beyond the boundary of the study site the north-eastern part of the excavation area appears to have fallen within the western extremity of the study site. The excavation revealed a Neolithic pit circle, a Late Neolithic/Early Bronze Age barrow with central burial and evidence of Iron Age/Roman activity (ELE6715).
- The 2019 geophysical survey of the study site (Appendix 2) identified a number of anomalies of possible archaeological interest. These are primarily ditch-type in form; some are badly truncated or relatively weak. The overall pattern, although incomplete, suggests former field systems or enclosures. There are two clusters of "pit-like" anomalies the southern part of the study site along with some unusual responses that could be archaeological or modern and are classified as being of uncertain origin. A number of poorly defined linear trends have been highlighted which are not aligned with known field boundaries or ploughing. Some of the responses may reflect former cultivation or drainage. While the immediate context means that an archaeological origin for any one of these cannot be entirely discounted, on balance, various non-archaeological causes seem more likely. Broad, parallel linear anomalies, on multiple orientations, appear throughout the dataset, these indicate a past ridge and furrow agricultural regime. Other than the ridge and furrow and obviously modern anomalies it is not possible to ascribe dates to the anomalies of possible archaeological interest on the basis of their morphology

Earlier Prehistoric Period (c. 9500 BC - 700 BC)

- 5.13 The earliest recorded evidence for both the study site and the wider search area dates to the Mesolithic period. Mesolithic flint implements, along with Neolithic and Bronze Age flint, were recovered during fieldwalking within the study site between 1985 and 1988 with the scatter extending beyond the study site to the south-west (beneath and beyond the current A606) and also to the east of Burley Road (MLE7649).
- 5.14 Further Mesolithic material, again found as part of a scatter which also included Neolithic and Bronze Age flints, has been identified from fieldwalking c.450m to the south of the study site (MLE5610).
- In addition to the Neolithic flints recovered from the fieldwalking, a range of Neolithic features were excavated, including three phases of a pit circle, were excavated immediately adjacent to the eastern edge of the study site (under the current A606) in 1986 (MLE5594). The relatively small numbers of artefacts recovered from the Neolithic features has led to the interpretation that the monument was used for transitory purposes, possibly for ritual activities or a mortuary enclosure (Liddle 1986).

- 5.16 Liddle (1986) notes that a denser scatter of Neolithic worked flint was recovered from c.200m to the north-east of the pit circle (well within the study site and part of MLE7649). Whilst not recorded on the HER, Liddle also notes that two trial trenches excavated through the scatter and potential archaeological features were noted, although no detail is given as to whether or not any further excavation took place (ibid p88). It is suggested that the denser amount of flintwork found in this area may indicate settlement activity. This area also coincides with one cluster of 'pit like anomalies of uncertain origin' identified by the geophysical survey. It is possible that the features identified by the geophysical survey do relate to those seen by Liddle, however, it could also be the case that the anomalies are caused by the trenches excavated by Liddle.
- 5.17 Activity within the study site and its immediate environs has been shown to extend into the Bronze Age period both through the recovery of Bronze Age flintwork during fieldwalking within the study site (MLE7649) and the presence of a small barrow containing an Early Bronze Age burial in the 1986 excavation to the immediate south-west of the study site (MLE5593).
- 5.18 The archaeological evidence from within the study site and its immediate environs suggest a very high potential for further artefactual remains of Mesolithic to Bronze Age date to be present within the topsoil across the study site and a high potential for associated cut features of Neolithic and Bronze Age date.

Iron Age and Roman Period (700BC - c. AD 410)

- The HER records a number of cropmarks within the search area that are likely to be of Iron Age date, although they have not been tested by intrusive investigation. A pit alignment (which typically date to the late Bronze Age and Early Iron Age) has been identified from aerial photography approximately 300m to the south of the study site (MLE5597) and two possible Iron Age enclosures are recorded c. 1km to the south-east (MLE5087).
- 5.20 The only excavated Iron Age remains from the search area were uncovered in the small excavation on the immediate south-western edge of the study site (MLE5592). An enclosure, which appears to extend into the study site itself, was uncovered in the excavation and whilst little dating was recovered from that feature itself, it could be seen to cut the Bronze Age barrow and appeared to be associated with a number of features including three hearth bases and two wells. Late Iron Age/Early Roman pottery was recovered from the wells along with iron slag, suggesting industrial activity was taking place on the site.
- 5.21 Roman pottery has also been recovered from fieldwalking within the study site (MLE8112), although this was found in relatively small quantities and may have resulted from manuring of fields identified with the known settlement (MLE5592) rather than indicating further settlement.

1397H/01 10

- 5.22 Larger quantities of Roman pottery have been found during fieldwalking c.350m to the south-east of the study site, which have been interpreted as possibly indicating the presence of settlement (MLE5609).
- 5.23 The south-western most part of the study site is considered to have a high potential for the presence of late Iron Age to early Roman settlement activity, with a moderate potential for settlement and a moderate to high potential for associated field systems across the remainder of the study site. The geophysical survey has not picked up any features which could be confidently interpreted as Iron Age or Roman settlement, although it is possible that some of the enclosures/field system ditches identified by the geophysical survey are of this date.

Medieval Period (c.AD 410 - c. AD 1540)

- 5.24 There is no archaeological evidence for medieval activity within the study site.
- 5.25 Both Oakham and Burley are known to have Saxon origins (both being mentioned in the Domesday survey of 1086) and a number of Saxon period sites have been excavated within Oakham itself. However, the study site is well removed from the historic cores of these settlements and the only recorded Saxon evidence from the search area comes from a possible Saxon building excavated c.700m to the west of the study site (MLE19740).
- 5.26 Later medieval evidence from the search area comprises finds of medieval pottery from fieldwalking (MLE6952), a holy well and possible associated chapel (MLE5575) and a number of medieval pits (MLE1973). The excavated medieval pits (MLE1973) are in reasonably close proximity to the Saxon structure (MLE19740) and may represent a focus of medieval settlement.
- 5.27 The study site is situated beyond any area of recorded medieval settlement, and it is probable that the site remained in agricultural use throughout the medieval period. Therefore, any possible buried archaeological features dating to the medieval period are likely to relate to agricultural activity, such as the remains of ploughing or field boundaries, and be of negligible significance.

Post-Medieval and Modern Period (c.1540 - Present)

- 5.28 All of the post-medieval, 19th century and modern sites recorded on the HER within the wider search area relate to extant or former sites or buildings of a well-defined extent and nature, and add little to the understanding of the archaeological potential of the study site.
- 5.29 The study site appears to have continued in agricultural use through the post-medieval period to the present. The 2 inch scale Ordnance Survey surveyor's map of the area, produced in 1814 (not reproduced), shows the study site lying within an area of unenclosed fields (the parish of Oakham was not subject to enclosure until 1838).

1397H/01 11

- 5.30 The Oakham enclosure map of 1836 does not extend as far as the study site and no tithe map covering the study site is held by the Leicestershire and Rutland archives. The first detailed mapping of the study site is the Ordnance Survey edition of 1885 (Figure 3) which shows the study site as falling across six enclosed fields. Nothing of any potential archaeological interest is shown within the study site.
- 5.31 The 1904 and 1930 Ordnance Survey 25 inch maps (Figures 4 and 5) shows no significant changes to the study site. By 1952 an ordnance depot had been constructed immediately adjacent to the study site (in the location of the current convenience store), however, no significant change is shown to the study site itself on the 1952 or 1975 Ordnance Survey maps (Figures 6 and 7).
- 5.32 The A606 was constructed along the southern edge of the study site in the late 1980s and it is assumed that it was around this time that the former field boundaries within the study site were removed
- 5.33 The study site is considered to have no potential to contain significant archaeological remains of post-medieval or modern date.

Historic Landscape Characterisation

5.34 Historic Landscape Characterisation (HLC) records produced by Leicestershire County Council covering the study site define it as comprising 'Very large post-war fields'.

6 ASSESSMENT OF SIGNIFICANCE

- 6.1 Paragraph 189 of the NPPF states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- It is recognised that not all parts of a heritage asset will necessarily be of equal significance. In some cases, certain elements could accommodate change without affecting the significance of the asset. Change is only considered harmful if it erodes an asset's significance. Understanding the significance of any heritage assets affected and any contribution made by their setting (paragraph 189, NPPF 2018) is therefore fundamental to understanding the scope for and acceptability of change.

Designated heritage assets

- 6.3 The study site contains no designated heritage assets.
- There are 29 Listed Buildings, one conservation area and one scheduled monument within the 1km search area that are located within Oakham itself. The study site does not contribute to the significance of these designated heritage assets. There are only two designated heritage assets in the vicinity of the study site that are considered to be potentially sensitive

to development proposals. These are the Grade II Registered Park and Garden of Burley on the Hill (located approximately 660m to the east of the study site at its closest point) and the Grade I listed Burley on the Hill House (located approximately 1.25km).

Burley on the Hill Park and Garden

- 6.5 It is known that there was a hunting park at Burley since Norman times, and its boundaries may have been largely the same as those occupied by the later landscape park. The park was improved by the Duke of Buckingham in the 1620s; large numbers of fir trees were planted, probably under the supervision of John Tradescant the elder (d 1638), and the complex arrangement of avenues shown on later maps and illustrations was laid out. By the end of the 17th century the village of Burley had largely been removed, although a few houses still stood immediately north of the north court. After the depredations of the Civil War, work on the geometric layout began again c 1690 and was completed by 1724. It was during this phase of work that a great rectangular fishpond, aligned east/west and 650m long, was laid out across the line of the south avenue c 200m north of the gateway on the Stamford Road. The pond now lies beneath the arm of water leading west from Burley Reach. In 1795 the ninth Earl called in Humphry Repton (1752-1818) to modernise the house's surrounds, and he produced a Red Book.
- 6.6 The current Registered park covers some 300ha. The park lies south of Burley village, 5km north-east of Oakham. Burley House lies 500m south of the village, on the crest of a hill which drops sharply away to the west and south. To the north-west the park is bounded by the B668 Cottesmore Road and to the north-east, where the park has a low stone wall, by Exton Lane. The south edge of the park now largely follows the A606, a modern road built along the north shore of Rutland Water, to replace an earlier line 500m to the south lost when the reservoir was created in the mid C20. The main approaches to the park were from the north (Church Road), the east (avenue leading to East Lodge and Exton Lane) and the south (via rounded arch on the old Stamford Road).
- The principal heritage significance of this asset is largely derived from its historic, aesthetic and associative interest, as a designed landscape and parkland for Burley on the Hill House. This includes its association with notable previous owners of the estate and the architects and landscapers engaged in its design and development. The interrelationship with other associated buildings and structures set within the parkland and gardens, as well as important views, and vistas to and away from the principal designated assets are also of importance. The physical and symbolic function in demarking the division / separation between the estate and wider countryside is also of note, as is the communal value derived from key views and vistas within the park and towards it from the wider landscape.
- 6.8 The contribution of setting to the significance of the park is largely derived from its visual and aesthetic quality as a designed landscape with the use of topography, landscape forms, planting and built form to create a picturesque setting to the main house, and landscape features. The parks historic associations over time with different forms of social and cultural

land use, as expressed in its physical and spatial layout and form also add to its significance. The weight of significance derived from the park and gardens is however largely associated with the parks historic core focused on the mansion and its associated buildings and the approaches to and from it along the principal drive ways leading into and out of the park.

- 6.9 The western edge of the park is visible from the study site (Plates 1 & 2), however, that part of the park is comprised of dense woodland and there are no views of the internal, designed aspects of the park. The study site does not lie in the line of sight of any of the designed views through the park and its woodland, which were largely focused to the south and east. The study site is visible in distant views, lying beyond the current convenience store and garage, from certain points along Church Road within the park (Plate 3). The study site, as seen within these incidental views adjacent the existing convenience store and veterinary practice buildings, is considered to make no appreciable contribution to the significance of the registered park.
- 6.10 Historic England guidance is clear that setting is not confined to visual considerations alone and that other aspects, such as historic relationships and ownership (whereby wider landholdings of an estate can be argued to have provided economic and social support to a great house and/or its parkland) can contribute towards significance. Many of the estate records were destroyed in a fire at the beginning of the 20th century, however, the Leicestershire archives do hold a number of surviving estate records among which are some 18th century estate maps. One of those maps (Figure 8) demonstrates that the study site lay beyond the holdings of the estate in the 18th century, therefore, there do not appear to be any historic economic or social links between the study site and the Burley Estate.

Burley on the Hill House

- The Grade I listed Burley on the Hill House is a large country house built between 1694 1705, formerly a hospital built for Daniel Finch, 2nd Earl of Nottingham to replace a former house built by the 1st Duke of Buckingham and fired in the Civil War. The stable block of the earlier house survived and was incorporated into the new composition, possibly influencing its scale, by its distance from the house itself. Although various names are mentioned in connection with the work, notably that of John Lumley, it now seems probable that the Duke of Nottingham was his own architect, and that Lumley was only one of a number of surveyors/master masons. House, pavillions and stables, with their connecting collonades, form a single composition, Baroque in composition, Palladian in detail. The significance of the building is recognised through its high grade designation and is principally derived from its architectural, historic and aesthetic values that are embodied in its physical fabric.
- 6.12 Setting also contributes to the significance of the house, primarily through its hill top location where the house has been positioned and designed to dominate the landscape to the south with certain views and vistas designed into its surrounding parkland to accentuate its dominance and provide aesthetically pleasing views from within the grounds. The principal

access to the house is from the north, where again the courtyard arrangement of the wings and stables has been designed to draw the focus on the main house.

- 6.13 Burley on the Hill House is located approximately 1.25km from the study site at the closest point. There is no intervisibility between the main house and the study site, with the main vistas from the house facing to the south and north. The rear of the western wing of the former workshop block (now known as 'The Coach House') is visible in distant views from the study site when there are no leaves on the trees along the study site boundary and those trees adjacent to the Coach House (Plates 4 & 5). These distant, glimpsed views of the rear of the Coach House are not considered to make any appreciable contribution to the significance of the Grade I listed Burley on the Hill House.
- As stated above in relation to the setting of Burley on the Hill Park, available evidence would suggest that the study site fell beyond the holdings of the Burley Estate (at least in the 18th century), therefore, there are no historic, economic or social connections between the study site and Burley on the Hill House.

Potential sub-surface archaeological remains

- 6.15 The study site is considered to have a high potential to contain archaeological remains of prehistoric and Roman date.
- Should archaeological remains be present within the study site their significance will be vested in their evidential value i.e. what the physical remains can reveal about past human activity. The level of that significance will be dependent upon several factors including the date of the remains, whether they represent a single period or multiple periods, the nature of the remains (settlement, field system, stock enclosure etc.) and the state of their preservation. Available evidence would suggest that any archaeological remains present would not score well against the Secretary of State's criteria for assessing the national importance of monuments (DCMS 2010 Annex 1) but they do have potential to contribute to regional research agendas. Given what is known from the archaeological investigations undertaken to the immediate south-west of the study site it is likely that any earlier prehistoric remains within the study site would be of regional significance with any Iron Age and Roman remains of local significance.

7 IMPACT ASSESSMENT

Proposed development

7.1 The site is being promoted for allocation for residential development with associated access roads and infrastructure. The current proposed layout is shown at Appendix 3. The northern edge of the study site is proposed as open space behind which is proposed low and medium density housing, punctuated with roads/avenues providing views out to the surrounding countryside. This is designed to soften the interface of the development with the agricultural

landscape to the north. The southern part of the study site, that to the south of the convenience store and petrol station, will contain higher density housing.

Designated heritage assets

- 7.2 Development within the study site will have no direct impacts upon any designated heritage assets.
- 7.3 Development within the study site will result in change to a very limited part of the wider setting of the Grade I listed Burley on the Hill House and the Grade II registered park of Burley on the Hill. However, change does not necessarily equate to harm, there are no known historic, economic or social links between the study site and the Burley estate and, whilst there is some limited intervisibility with the Grade II Registered Park of Burley on the Hill and parts of the Grade I listed Burley on the Hill House, any views between these designated heritage assets and the study site are not considered to make an appreciable contribution to their significance. Therefore, it is considered that development within the study site will present no harm to the significance of either the Grade I listed Burley on the Hill.

Potential sub-surface archaeological remains

- 7.4 This assessment has established that there is high potential for the survival of remains of a prehistoric and Roman date in the study site. If any remains did survive, they would be impacted by the proposed development, but any such remains are unlikely to be of greater than regional significance.
- 7.5 There is no evidence to suggest that the study site contains, or has the potential to contain, archaeological remains of sufficient importance to preclude or constrain development.

8 CONCLUSIONS

- 8.1 This heritage desk-based assessment draws together the available archaeological, historical, topographic and land-use information in order to clarify the heritage significance and archaeological potential of land 15.7ha in extent proposed for development to the west of Burley Road, Oakham. It addresses the information requirements set out in the NPPF and provides the proportionate response sought by the NPPF.
- 8.2 The assessment has established that there are no designated heritage assets within the study site. A number of designated heritage assets are located within the wider area, however, all but two of which are screened by topography, vegetation or buildings and there are no historical associations with the study site, and hence no impact on their setting or significance.
- 8.3 Development within the study site will result in change to a very limited part of the wider setting of the Grade I listed Burley on the Hill House and the Grade II registered park of Burley on the Hill. However, change does not necessarily equate to harm. There are no known historic, economic or social links between the study site and the Burley estate, and whilst there is some limited intervisibility with the Grade II Registered Park of Burley on the Hill and parts of the Grade I listed Burley on the Hill House, any views between these designated heritage assets and the study site are not considered to make an appreciable contribution to their significance. Therefore, it is considered that development within the study site will present no harm to the significance of either the Grade I listed Burley on the Hill.
- 8.4 The available archaeological evidence for within and adjacent to the study site suggests that there is a high potential for the study site to contain archaeological remains of prehistoric and Roman date. However, there is no evidence to suggest that the study site contains, or has the potential to contain, remains of sufficient importance to preclude or constrain development.
- 8.5 The assessment concludes that further assessment of the study site's archaeological potential is not necessary to inform decision-making on the proposed allocation of the site for mixed use development. However, should a planning application be submitted for development of the site further work is likely to be required to inform the archaeological mitigation strategy for the development.

1397H/01 ₁₇

9 REFERENCES

BGS 2019, British Geological Survey website, www.bgs.ac.uk/data/mapViewers/home.html (last accessed 15th February 2019)

CIfA 2014, Standard and guidance for historic environment desk-based assessment

DCLG 2018, National Planning Policy Framework

DCMS 2010, Scheduled Monuments. Identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979. March 2010

English Heritage 2010, Understanding Place

English Heritage 2011a, The Setting of Heritage Assets

English Heritage, 2011b, Seeing the History in the View

Historic England, 2017, Historic Environment Good Practice Advice in Planning: Note 3 (second edition) – The Setting of Heritage Assets

Liddle, P 1986 Archaeology in Leicestershire and Rutland 1985

Liddle, P 1987 Archaeology in Leicestershire and Rutland 1986

Historical Mapping

Map of the Estate of Rt Hon George Earl of Winchelsea in the Forest of Leigh-field in the parishes of Oakham and Belton, co. Rutland No Date (18th century): Record Office Ref: DG7/Ma/R/1 (DG7/3/182) DE585

Ordnance Survey, 1814, 2 inch surveyor's map

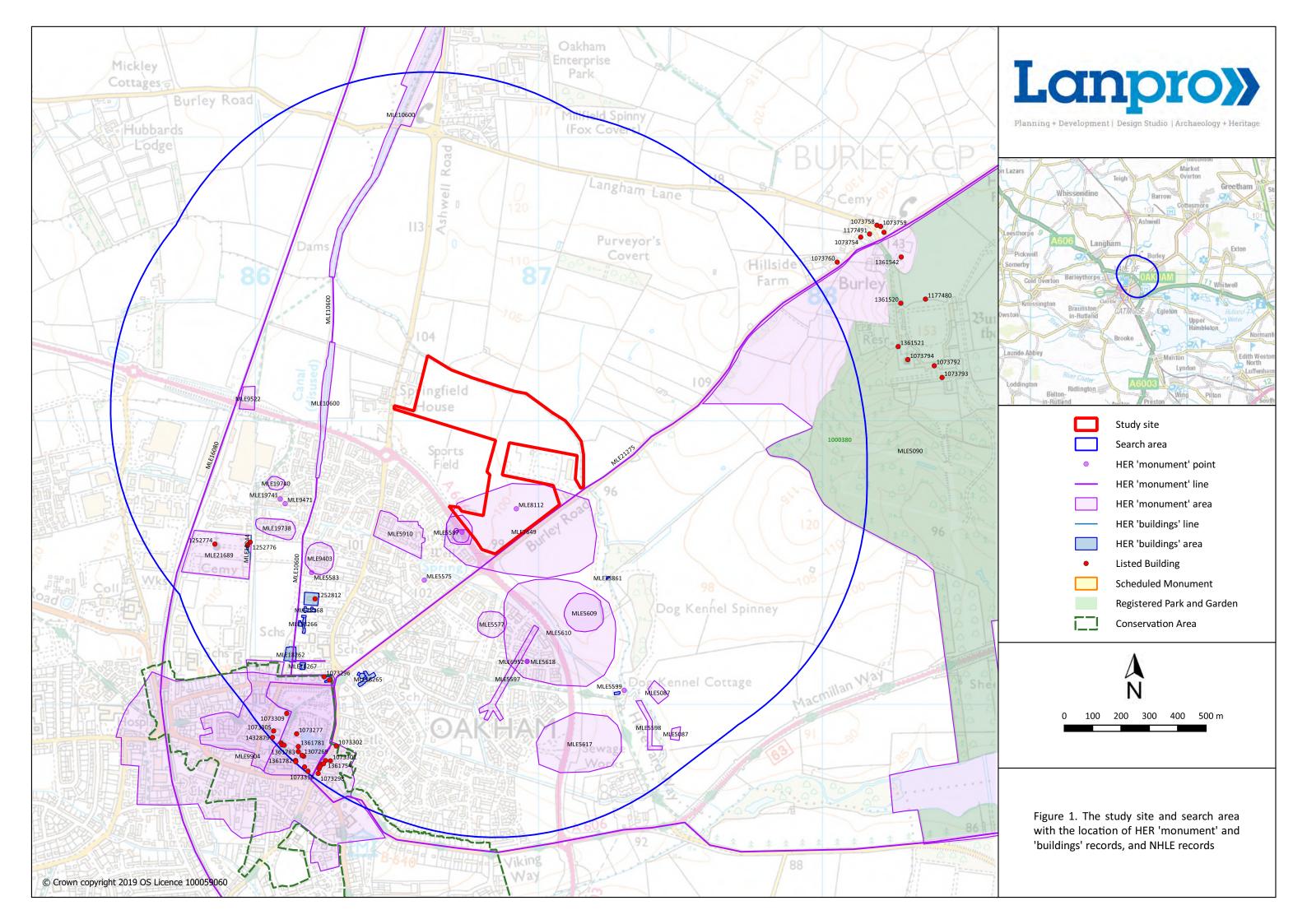
Ordnance Survey 1:2500; 1885, 1886, 1904, 1930, 1970, 1975

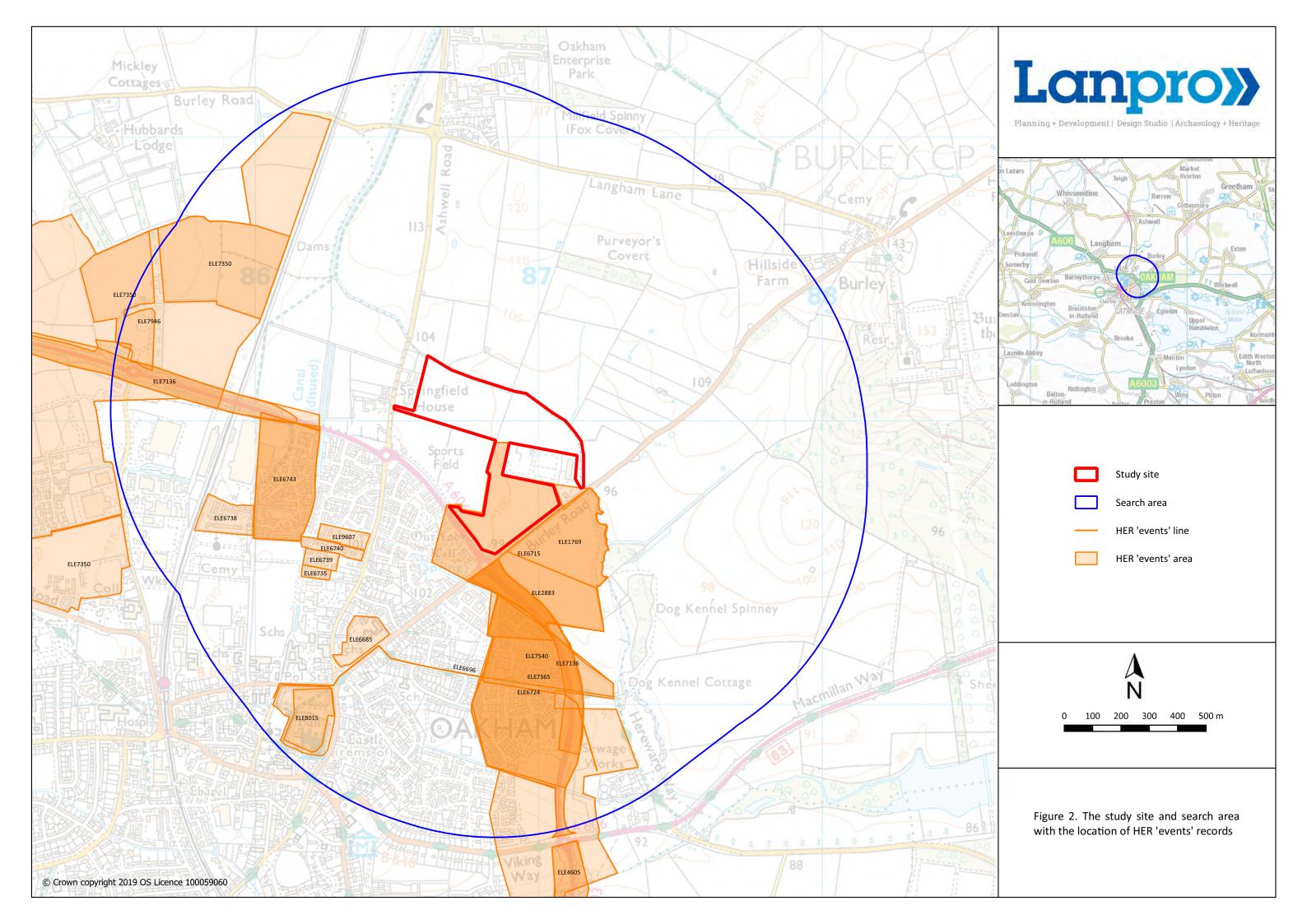
Ordnance Survey 1:10560; 1887, 1888, 1904, 1905, 1931, 1952, 1958

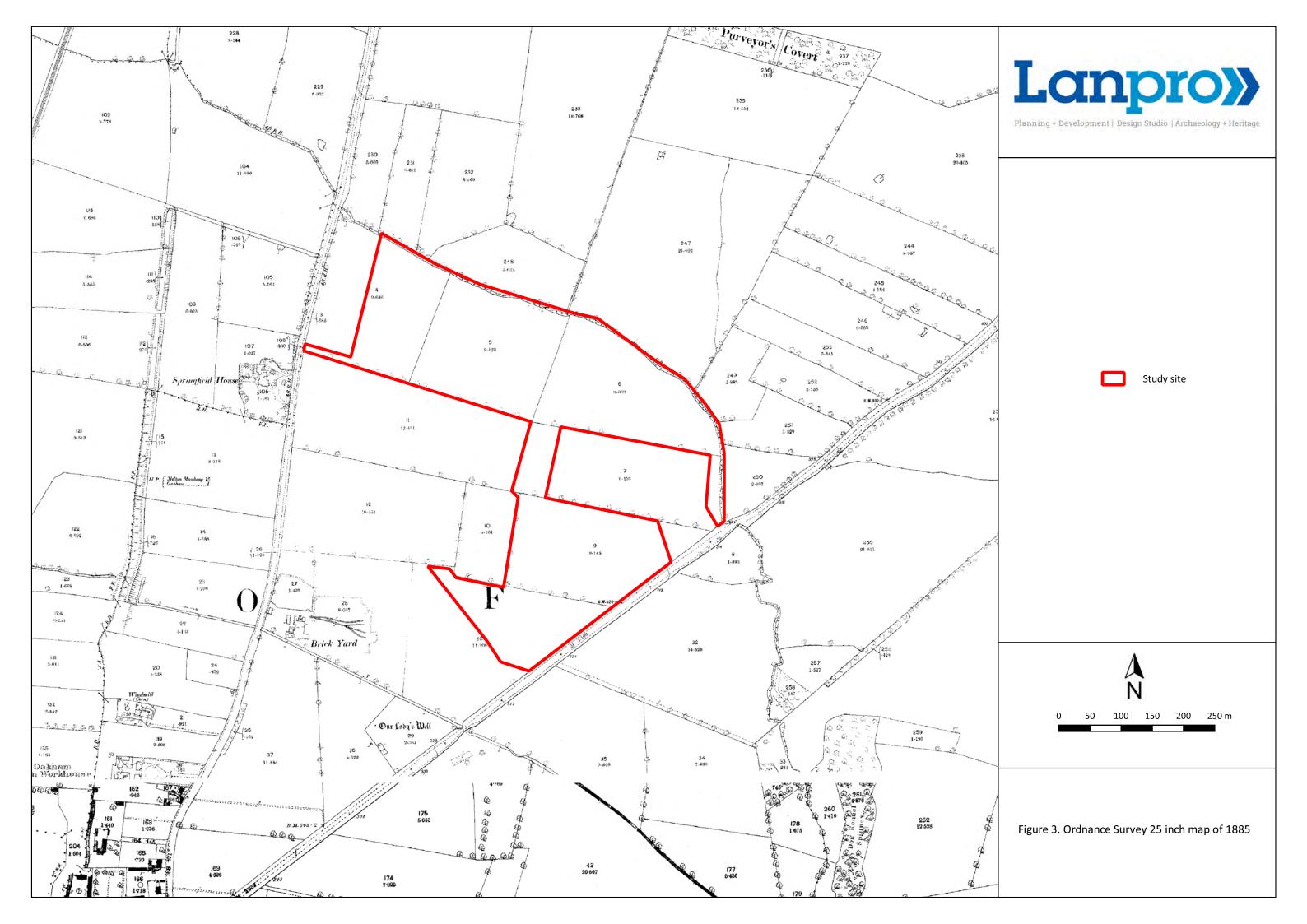
Ordnance Survey 1:10000; 1971, 1980, 1982

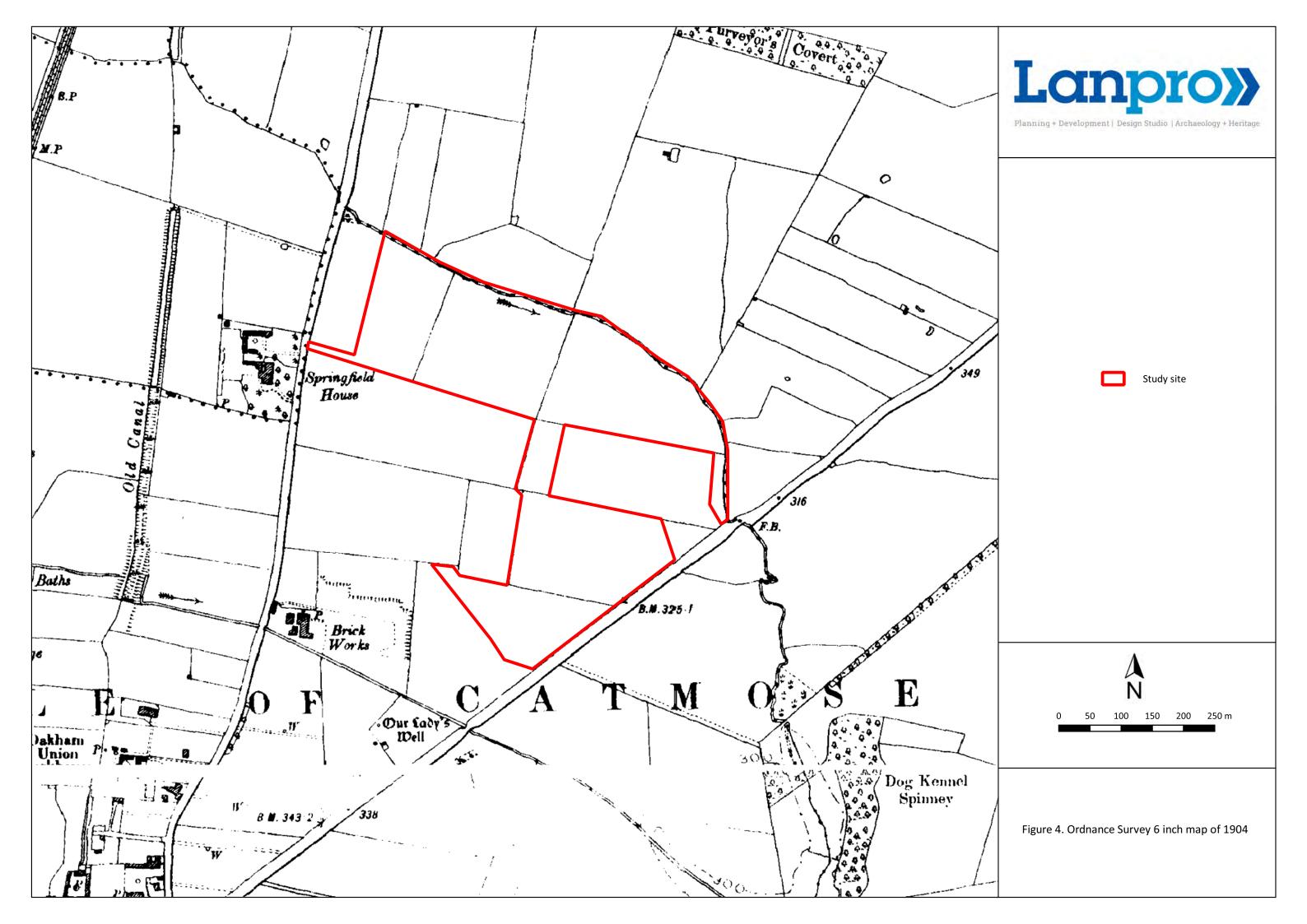
1397H/01 18

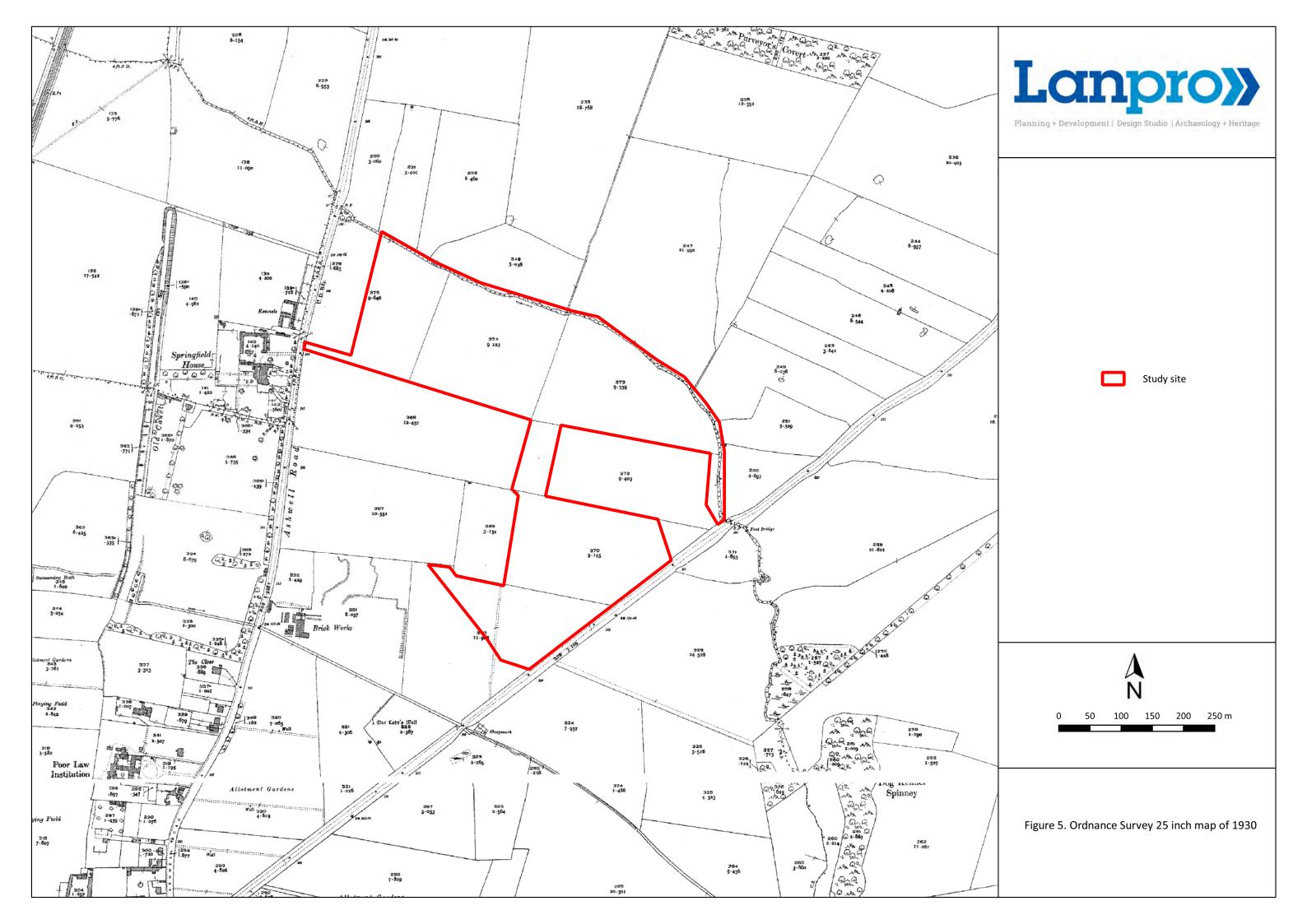
Figures

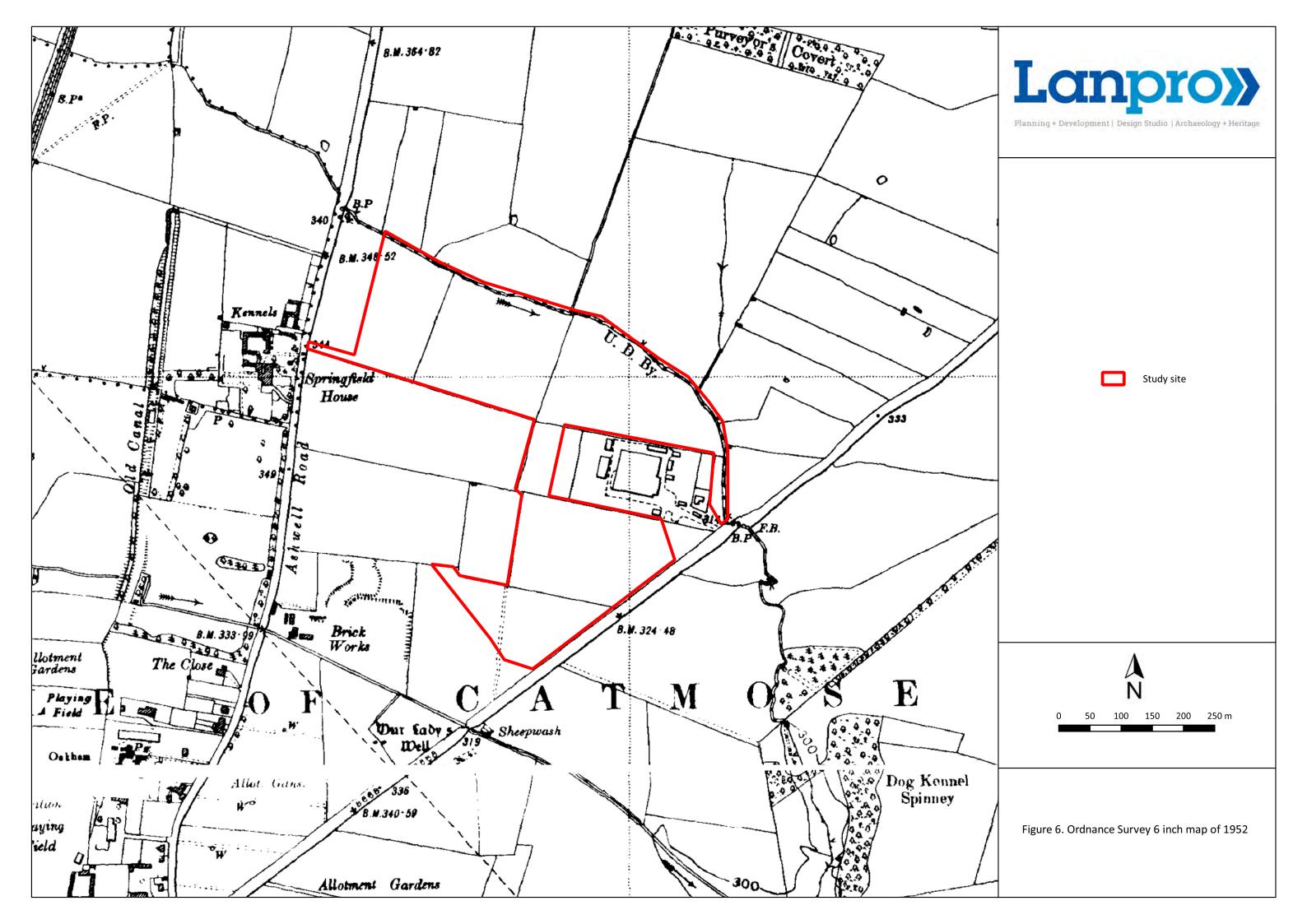














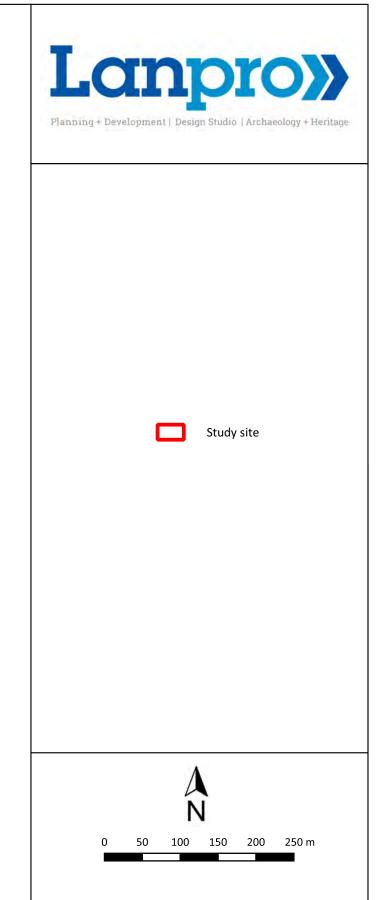
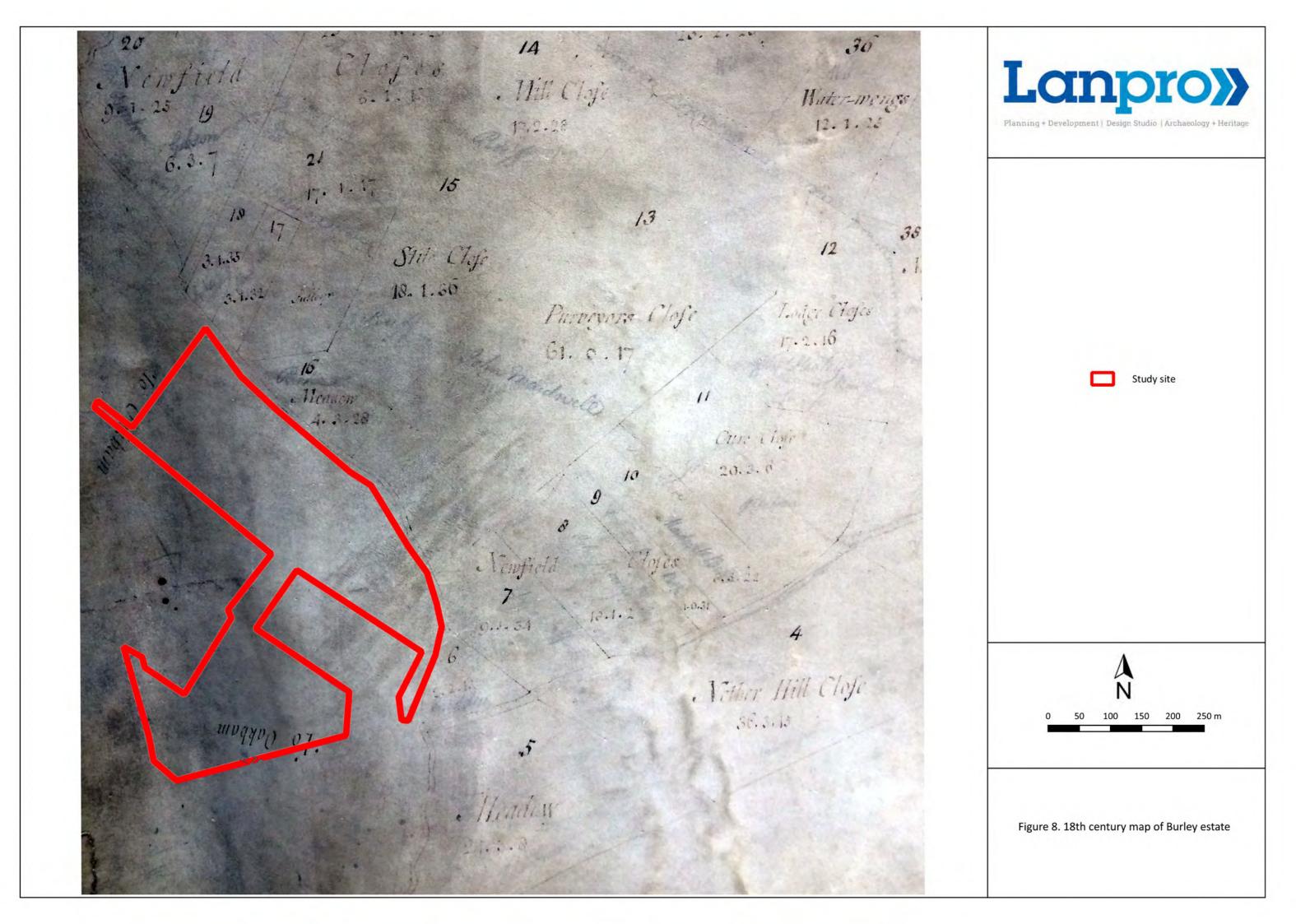


Figure 7. Ordnance Survey 1:2500 scale map of 1975



Plates



Plate 1: View towards Burley on the Hill Park from north-western part of study site



Plate 2: View towards Burley on the Hill Park from southern part of study site



Plate 3: View towards study site from near Church Road on north-western edge of Burley on the Hill Park (arrows indicate study site)



Plate 4: Distant view of 'The Coach House' (arrowed) from northern part of study site



Plate 5: Distant view of 'The Coach House' (arrowed) from southern part of study site



Plate 6: Looking west across southern part of study site



Plate 7: Looking west across northern part of study site



Plate 8: Looking south-west across northern part of study site

Appendix 1: Gazetteer of heritage assets

The following table provides details of heritage assets recorded on the Leicestershire and Rutland HER and on the Historic England National Heritage List for England within 1km of the study site. These have been listed in order of their HER, and their locations are marked on Figure 1.

Ref.	Name Designation		Period		
HER monumen	HER monument records:				
MLE5087	Possible Iron Age enclosures east of Dog Kennel Cottage	Prehistoric			
MLE5090	Burley Park	Grade II Registered Park	Post-medieval		
MLE5575	Medieval holy well, St. Mary's Well		Medieval		
MLE5577	Possible C17th brickworks, Horn Close		Unknown		
MLE5583	Post-medieval windmilll west of Our Lady's Well		19th century		
MLE5587	Possible Mesolithic site west of Burley Road		Prehistoric		
MLE5592	Late Iron Age/Roman site west of Burley Road		Prehistoric/Roman		
MLE5593	Bronze Age burial, west of Burley Road				
MLE5594	Neolithic pit circle site west of Burley Road	west of Prehistoric			
MLE5597	Cropmark of a prehistoric pit alignment, Alsthorpe Road	Prehistoric			
MLE5598	Catmouse Mill, dam south-east of Dog Kennel Cottage	Post-medieval			
MLE5599	Site of post-medieval watermill (Catmouse Mill), Dog Kennel Cottage	Post-medieval			
MLE5609	Possible Roman site west of Dog Kennel Spinney		Roman		
MLE5610	Prehistoric flint scatter from west of Dog Kennel Cottages	Prehistoric			
MLE5617	Prehistoric flint from north-west of the sewage works	n-west Prehistoric			
MLE5618	Roman pottery from near Gunthorpe Close	near Roman			
MLE5910	Late post-medieval brickyard, Kestrel Road	19th century			
MLE6952	Medieval pottery from near Gunthorpe Close	Medieval			
MLE7649	Mesolithic to Bronze Age flint west of Burley Road	Prehistoric			

MLE8112	Roman pottery from west of			
WLLOTTZ	Burley Road		Roman	
MLE9403	Undated features, Ashwell Road	Unknown		
MLE9471	Roman finds from Springfield Park		Roman	
MLE9522	Various features east of Springfield House		Undated	
MLE9904	Historic settlement core of Oakham		Medieval / Post- medieval	
MLE10600	Oakham Canal		Post-medieval	
MLE16080	Midland Railway, Syston to Peterborough		Post-medieval	
MLE17105	Oakham Union Workhouse	LB II	Post-medieval	
MLE18234	LODGE AT OAKHAM CEMETERY	LB II	Post-medieval	
MLE18242	OUTBUILDINGS, FORMERLY STABLES, TO THE ODD HOUSE PUBLIC HOUSE	LB II	Post-medieval	
MLE18244	PERIMETER WALLS AND RAILINGS AT EAST END OF OAKHAM CEMETERY	LB II	Post-medieval	
MLE18249	THE ODD HOUSE PUBLIC HOUSE, ASHWELL ROAD	LB II	Post-medieval	
MLE18262	Barraclough Hall, Oakham School		Post-medieval	
MLE18265	Jerwood's, Burley Road		Post-medieval	
MLE18266	Buchanan's, Ashwell Road		Post-medieval	
MLE18267	Deanscroft, Station Road		Post-medieval	
MLE18268	Rushbrooke's, Ashwell Road		Post-medieval	
MLE19738	Medieval pits, Springfield Park		Medieval	
MLE19740	Anglo-Saxon remains, Springfield Park		Medieval	
MLE19741	Mesolithic flint from Springfield Park	d LB II Prehistoric		
MLE20597	Deanshold or Church Manor	LB II Medieval		
MLE20598	Lordshold or Castle Manor	LB II Medieval		
MLE21275	Turnpike Road, Stamford to Greetham	LB II 1325666	Post-medieval	
MLE21689	Oakham Cemetery, Kilburn Road	LB II 1106937	Post-medieval	

MLE23859	Dog Kennel Cottage, Burley Park Way	LB II 1325668	Post-medieval
MLE23861	Bridge on old drive from Oakham to Burleigh	ED II Doot v	

Appendix 2: Geophysical Survey





Site: Land at Burley Road, Oakham

Work Preliminary Ecological

Item: Appraisal

Client: Pigeon Capital

Management 3 Ltd

Project Ref: 0092

Author: Dr GW Hopkins CEnv MCIEEM

Date: 03 November 2020

Contents

Su	ummary	1
1.	Introduction	3
	Background	3
	Site Context and Status	3 3
	Legislation and Planning Policy	3
2.	Methods	4
	Desk Study	4
	Field Survey	4
	Guidance	4
3.	Designated Sites	5
	Statutory: International and European Sites	5
	Non-Statutory Sites	5
4.	Habitats and Botany	6
	Overview	6
	Phase 1 Habitats	6
_	Off-Site	8 9
5.	Scoping for Species of Conservation Concern	
	Plants Bats	9
	Great Crested Newts	9
	Birds	9 9
	Reptiles	9
	Small Mammals	9
	Invertebrates	10
6.	Evaluation	11
	Habitats of Principal Importance	11
	Scoping for Species of Conservation Concern	11
	Recommendations for Additional Surveys	12
7.	Impacts, Mitigation and Enhancements	13
	Impacts	13
	Statutory Sites	13
	Local Wildlife Sites	13
	On-Site	13
	Mitigation of Construction	13
_	Enhancements and Net Gain	13 15
	Conclusion	
	Appendix 1: Photographs	16
10	Appendix 2: Legislation Summary	18

Summary

Hopkins Ecology Ltd was appointed by Pigeon Capital Management 3 Ltd to prepare a preliminary ecological assessment of Land at Burley Road, Oakham with a view to identifying constraints and opportunities in the context of the local plan promotion of the Site.

The Site lies to the north-east of the Oakham conurbation, and mainly comprises arable farmland with smaller areas of other habitat.

Located 1.11km to the south-east is Rutland Water, which is designated at international, European and national levels, as: Rutland Water Ramsar site, Rutland Water Special Protection Area and Rutland Water Site of Special Scientific Interest (SSSI). The designations are mainly for birds, with the SSSI including the wider wetland vegetation. The only other statutory site within 2km is Burley and Rushpit Woods SSSI (0.58km east), which is an ancient woodland designated for its vegetation and invertebrates.

The nearest non-statutory site is a Local Wildlife Site >0.5km to the north-west.

The Site itself extends to approximately 15.8ha, of which the majority is under arable cropland with two fields of improved grassland, one associated with an equine facility and the other horse-grazed pasture.

Hedgerows run along much of the Site boundary. All lengths are considered to qualify as the Hedgerow Habitat of Principal Importance, based on their native woody vegetation being greater than 80% of their length, but none qualify as Important Hedgerows under the Hedgerow Regulations.

Along the north boundary of the arable field runs a small stream, with mature woody trees and scrub along both banks. The trees here are mainly ash and various willows, with associated scrub and tall ruderal vegetation. The stream itself is narrow, approximately 0.5 to 1m in width, and shallow (mostly <0.3m). The flow is sluggish, and the substrate is silt and fine sand throughout. Aquatic and marginal wetland vegetation are absent.

Six mature trees along the stream bank and boundary hedgerow have moderate bat roost potential, with another two along the stream bank off-Site. These trees have large growth forms and features such as cavities or split limbs that may be suitable for roosting bats. The wider Site is likely to be of lower value for foraging by bats, with foraging restricted to hedgerow and tree lines and to a lesser extent the improved grass swards with horses.

Direct inspection did not find evidence of otters nor water voles and they are concluded to be absent, although singleton transitory otters may be present.

The potential presence of great crested newts cannot be ruled-out at this stage, with small ponds shown on Ordnance Survey maps to the north of the Site boundary. However, these ponds appear to be small and indeed may not be present; the nearest is over 100m to the north. If great crested newts are present then they are likely to be restricted to the bankside areas along the north boundary of the Site. Mitigation for any potential impacts is realistic and feasible, if necessary.

There was no evidence of badgers and they are concluded to be absent, and most other protected species are scoped-out based on the low suitability of the habitat. Nesting birds are likely within the hedgerows and possibly within the arable cropland.

Most other species of conservation concern potentially present are widespread but declining species with the status of Species of Principal Importance, namely brown hares, hedgehogs and a small assemblage of moths. The trees alongside the stream include some with rot

features, and consequently a small assemblage of dead wood insects cannot be discounted. These species of conservation concern would be present as components of larger local populations.

It is not thought that the scheme would impact designated sites. Direct impacts are unlikely by virtue of distance and indirect pathways such as increased recreational pressure from the scheme are also unlikely, given the substantial visitor infrastructure at Rutland Water and the lack of public access to Burley and Rushpit Woods.

Generic mitigation of construction impacts includes the need to avoid the destruction of active bird nests, via the timing of clearance works or pre-works inspections. Works near the stream would also need to have regard for potential water pollution, including soil run-off. If works are necessary on the bankside trees then those with roost potential would require surveys or detailed inspection, and where roosts are found there may be a requirement for protected species licensing and mitigation.

Based on the likely quantum of open space within the scheme and the options for landscaping, it is likely that net gain can be achieved in terms of habitat area. Within the calculation metric, both the overall area of open space and its location are important considerations, with the inclusion of a tract of open space alongside the stream provide the option for the landscaping to contribute to landscape-scale ecological connectivity. Additional enhancements will include measures such as bird and bat boxes.

In conclusion, the scheme will be largely located on arable cropland and fields of improved grassland. Protected species are likely to be of restricted occurrence and any impacts can be mitigated as part of the scheme. The layout of the soft landscaping provides an opportunity to enhance the stream corridor and increases habitat connectivity at a landscape scale. The overall quantum of greenspace is likely to be sufficient to achieve net biodiversity gain, and this will be of benefit to locally relevant species.

1. Introduction

BACKGROUND

1.1 Hopkins Ecology Ltd was appointed by Pigeon Capital Management 2 Ltd to prepare a preliminary ecological assessment of Land at Burley Road, Oakham with a view to identifying constraints and opportunities in the context of the local plan promotion of the Site.

SITE CONTEXT AND STATUS

1.2 The Site itself extends to approximately 15.8ha, of which the majority is under arable cropland and it is within the *Leicestershire* and *Nottinghamshire Wolds*¹, which is characterised as a "rural, mixed farming landscape".

LEGISLATION AND PLANNING POLICY

- 1.3 The following key pieces of nature conservation legislation are relevant to legally protected species (with a more detailed description in Appendix 2):
 - The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations); and
 - The Wildlife and Countryside Act, 1981 (as amended).
- 1.4 Also, the National Planning Policy Framework (MHCLG, 2019²) requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when making planning decisions. A substantial number of species are of conservation concern in the UK. A small number of these species are fully protected under the legislation listed above, but others in England are recognised as Species of Principal Importance under the Natural Environment and Rural Communities Act 2006 and reinforced by the National Planning Policy Framework (NPPF). For these species, local planning authorities are required to promote the "protection and recovery" via planning and development control. Examples include the widespread reptiles, skylarks, and soprano pipistrelle and brown long-eared bats.
- 1.5 Although the NPPF has an overarching aim of minimising impacts to biodiversity, the majority of species of conservation concern are not specifically recognised by legislation or planning policy. The level of protection afforded to these is undefined and should be considered within the overall aim of minimising impacts on biodiversity.

-

¹ Natural England (2014) *NCA Profile 82: Leicestershire and Nottinghamshire Wolds.* Available from: http://publications.naturalengland.org.uk/publication/2098895?category=587130

² MHCLG (2019) *National Planning Policy Framework for England*. Ministry for Housing, Communities and Local Government, London.

2. Methods

DESK STUDY

2.1 The desk study comprises a formal data search from the local records centre and review of relevant data and information from other sources (Table 1).

Table 1. Overview of desk study data sources.

Source	Information
Leicestershire and Rutland	Designated sites, species of conservation concern; 1km
Environment Records Centre	search radius around boundary.
MAGIC	Additional information on statutory sites, habitats of
(https://magic.defra.gov.uk/)	principal importance and wider countryside information.
Various literature and web-based	Information on local projects and initiatives of potential
searches	relevance as well as some species-level data.
OS maps and aerial photographs	Aerial photographs at intervals from 2000.

FIELD SURVEY

2.2 A Site walkover was undertaken on 20 September 2018, and habitats are described according to the methods of JNCC (2010)³. Hedgerows were surveyed following DEFRA (2007)⁴, noting woody species and other features such as ditches and banks and herbs described as typically 'woodland' species. Trees were surveyed from ground level for their potential suitability for roosting bats, looking for gaps, cracks and other potential roost features⁵; searches were also made for signs of badgers. A water vole and otter survey was also undertaken along the stream that runs along the north boundary, looking for evidence such as feeding remains and droppings.

GUIDANCE

2.3 The ecological assessment has been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM) and as detailed in British Standard 42020:2013 Biodiversity - Code of Practice for Biodiversity and Development.

CONSTRAINTS

2.4 It is not considered that there are any significant limitations to the assessment as described.

³ JNCC (2010) *Handbook for Phase 1 Habitat Surveys.* Joint Nature Conservation Committee, Peterborough.

⁴ DEFRA (2007) Hedgerow Survey Handbook. DEFRA, London.

⁵ Collins, J. (2016) Bat Surveys for Professional Ecologists. Bat Conservation Trust, London.

3. Designated Sites

STATUTORY: INTERNATIONAL AND EUROPEAN SITES

- 3.1 Rutland Water is located 1.11km to the south-east. It is designated at an international level as Rutland Water Ramsar site and at a European level as Rutland Water Special Protection Area. These designations are for birds.
- 3.2 There are no other international / European sites within 10km.

STATUTORY SITES: NATIONAL

- 3.3 Within 5km there are two sites with national designation:
 - Burley and Rushpit Woods Site of Special Scientific Interest (SSSI), 0.58km east, which is an ancient woodland designated for its vegetation and invertebrates.
 - Rutland Water SSSI, 1.11km south-east, designated for birds and also wetland vegetation.

NON-STATUTORY SITES

3.4 Within a 1km radius of the Site boundary the Leicestershire and Rutland Environment Records Centre shows five non-statutory Local Wildlife Sites (LWSs) (Table 2), the nearest is 0.8km north-west and is understood to be a single tree.

Table 2. LWSs within 2km.

Site name	Description	Location
Hedgerow Ash 2 LWS	Mature tree	0.8km north-west
Hedgerow Ash 1 LWS	Mature tree	0.8km north-west
Burley / Rushpit Woods LWS	Woodland	0.82km north-east
Burley Road Hedgerow LWS	Hedgerow	0.95km north-west
Pond Burley Way, Oakham	Pond	0.95km north-west

4. Habitats and Botany

OVERVIEW

4.1 The Site itself (Figure 1) extends to approximately 15.8ha, of which the majority is under arable cropland (13.5ha) with two fields of improved grassland, one associated with an equine facility (2.3ha). A stream runs along much of the north boundary. The soil is classed as a 'slowly permeable, seasonally wet slightly acid but base-rich loamy and clayey soil'.



PHASE 1 HABITATS

- 4.2 The phase 1 habitats are described as follows:
 - Arable. The main arable fields appeared to have been under cereals the previous season with seedling brassicas emerging from the stubble. The arable margins are narrow and extend almost to the field verges of improved grass swards. Mostly only common weeds such as groundsel Senecio vulgaris and scarlet pimpernel Anagallis arvensis were noted, with the only less ubiquitous species being blue field madder Sherardia arvensis.
 - Improved grassland is present along the grass verges to the fields, along entrance tracks and as two main fields:
 - o Field verges. The field verges are typically false oat grass *Arrhenatherum elatius* swards with other rank grasses as minor components, mainly cocksfoot *Dactylis glomerata* and couch *Elymus repens*. Red fescue *Festuca rubra* and Timothy *Phleum pratense* are occasional components in some locations. The herb component is mainly tall ruderals as occasional components, such as broadleaved dock *Rumex obtusifolius* and nettle *Urtica diocia*.
 - Entrance tracks onto the Site, from the north-west and south-east have improved grass sward of rye grass Lolium species, false oat grass, and meadow grass Poa species. The herbs component comprises species of disturbed ground or shorter swards, such as white clover Trifolium repens, plantain Plantago major

- and silverweed *Potentilla anserina*, and tall ruderals in less disturbed areas such as tansy *Tanacetum vulgare*, nettle, and ragwort *Jacobaea vulgaris*.
- Equine fields. Along the north-west boundary are four small fields associated with an equine facility and these have a sward of rye grass and fescue species with few herbs.
- Horse pasture. This is an improved sward of rye grass, Timothy and creeping bent Agrostis stolonifera, with a low herb component of mainly white clover, dandelion Taraxacum officinale and creeping thistle Cirsium arvense.
- Stream. The stream is narrow, approximately 0.5 to 1m in width, and shallow (mostly <0.3m). The flow is sluggish and the substrate is silt and fine sand throughout. Aquatic and marginal wetland vegetation are absent, with scrub and tall ruderal vegetation overtopping the channel in many locations.
- Line of trees. Alongside the stream on both banks are mature trees ~10m in height, comprising ash Fraxinus excelsior and willows, including crack willow Salix fragilis and a similar species with shorter, more oblong leaves. Many have a moderate ivy Hedera helix covering. The shrub layer comprises blackthorn Prunus spinosa, Norway maple Acer platanoides, sycamore Acer pseudoplatanus, hawthorn Crataegus monogyna, ash, hazel Corylus avellana, goat willow Salix caprea and grey willow S. cinerea, small-leaved elm Ulmus minor and bramble Rubus fruticosus agg. The ground flora comprises an improved grass sward similar to the sward of other verges, with tall ruderals such as nettle and broad-leaved dock and lower herbs such as hedge cleavers Galium mollugo.
- Hedgerows. The individual hedgerow lengths are described below:
 - West boundary to school playing fields. Here there is a double hedgerow, comprising agricultural hedgerow and then a hedgerow planted on the school-side of the boundary fence. The school hedgerow is mostly trimmed to ~2m with some young grass and tall saplings especially at the southern end. The main species are hawthorn, with field maple Acer campestre, hazel, sycamore, hornbeam Carpinus betulinus, beech Fagus sylvatica, dog rose Rosa canina, oak Quercus robur, larch Larix species, non-native pine Pinus species, wild plum Prunus species, ash, holly Ilex aquifolium and snowberry Symphoricarpos species.
 - West boundary, on-Site. Running parallel to the school fence and forming a double hedgerow with the school hedgerow is a more traditional agricultural hedgerow. The main species is hawthorn, with ash, elms (identified as wych elm *Ulmus glabra* and English elm *U. procera*), Norway maple and elder *Sambucus* nigra.
 - West boundary of equine fields. This hedgerow is mostly trimmed to ~2m and forms a dense hedgerow of hawthorn with ash.
 - South-east boundary. This is trimmed to ~2m and forms a very dense shrub layer of mainly hawthorn, with elder, small-leaved elm and wych elm
 - Boundary to supermarket and commercial centre. Hedgerows run around much of the perimeter of the supermarket and small industrial units, with lengths on-Site and off-Site. The hedgerow is mainly tall and unmanaged hawthorn, with

blackthorn, field rose *Rosa arvensis*, Norway maple, cherry *Prunus* species, hybrid poplar *Populus x canadensis*, sycamore with ivy and bramble.

OFF-SITE

- 4.3 There are two possible ponds marked on Ordnance Survey maps within 500m of the Site, located to the north and north-west of the Site boundary (110m and 406m respectively).
- 4.4 Along the south-west boundary, off-Site, is a belt of young plantation woodland 3-5m in width and 5+m tall. It is species-rich, comprising ash, cherry, hybrid poplar, silver birch *Betula pendula*, apple *Malus domestica*, blackthorn, hawthorn, oak, two species of whitebeam *Sorbus* species, field rose and bramble.

Page | 8

5. Scoping for Species of Conservation Concern

PLANTS

- 5.1 The data search returned records for only a few plant species of conservation concern, of which the only potential arable margin species is common cudweed *Filago vulgaris*, which is widespread in southern England but has undergone declines nationally.
- 5.2 The extent and quality of habitat for arable species on the Site is, however, likely to be very low, with cropping close to the grassy field margins and only limited areas of 'field corners' with a reduced intensity of cultivation. It is unlikely that an assemblage of scarce arable flora is present and at most there would be low numbers of widespread species.

BATS

- 5.3 Records were returned for: common pipistrelle, soprano pipistrelle, noctule, Natterer's, Daubenton's, whiskered, common pipistrelle, soprano pipistrelle and brown long-eared. None of these appear to be of roosts within 500m.
- 5.4 Six mature trees along the stream bank and boundary hedgerow have moderate bank roost potential, with another two along the stream bank off-Site. These trees have large growth forms and features such as cavities or split limbs that may be suitable for roosting bats. The wider Site is likely to be of lower value for foraging by bats, with foraging restricted to hedgerow and tree lines and to a lesser extent the improved grass swards with horses.

GREAT CRESTED NEWTS

- 5.5 The data search returned records for great crested newts from several locations, the nearest 700m to the west of the Site.
- 5.6 There are no waterbodies on-Site and the only two marked within 500m are to the north, at distances of 110m and 406m respectively. The condition and status of the ponds is not known. However, if great crested newts are present then it would be expected that at most they would be restricted to the north boundary of the Site.

BIRDS

- 5.7 The data search returned a small number of records for species of conservation concern associated with farmland and the wider countryside, namely: spotted flycatcher, turtle dove, linnet, house sparrows, song thrush, dunnock, and skylark.
- 5.8 The on-Site habitats appear to be of lower value for many species, lacking seed-rich margins and dense hedgerows; the western part of the Site is likely to be disturbed by walkers on footpaths. Nesting birds are likely, but the Site is likely to be of lower overall value for nesting and overwintering birds.

REPTILES

- 5.9 The data search returned records for slow worms and common lizard close to the limit of the search radius, in both residential areas of Oakham and elsewhere in the countryside.
- 5.10 Arable landscapes typically support few if any reptiles and the on-Site habitats are of very low quality and limited in extent. It is concluded that reptiles are very unlikely to be present and they are scoped-out.

SMALL MAMMALS

5.11 Badgers are known from several data search records, but none from within 500m. No evidence of badgers was seen and the extent of potential habitat for setts was limited, with

Land at Burley Road, Oakham: Ecology Appraisal

the northern part of the Site likely to be too wet at times. It is concluded that badgers are absent.

5.12 Other small mammals are assessed as follows:

- Brown hares are reported from a single record approximately 1km to the west. Low numbers of hares may be present, but again disturbance from footpaths and dogs is likely to limit the value of the Site.
- Hedgehogs are known widely locally, from nearby residential areas. The hedgerows and field margins may offer shelter and foraging habitat and they are probably present.
- Water voles and otters are reported from the stream along the north boundary, at both upstream and downstream locations (approximately 400m in either direction).
 No evidence of water voles was recorded and the stream itself is shaded and lacking in vegetation and is unlikely to be suitable as habitat. No evidence of otters was seen, but they may be present as transient individuals.

INVERTEBRATES

- 5.13 The only invertebrate record is for the white-letter hairstreak butterfly, from a residential part of Oakham. It feeds on elm as a caterpillar, and although elms are present within the hedgerows they are mostly as scattered individuals and are not a frequent component of the hedgerows. White letter-hairstreak butterflies are therefore unlikely to be present.
- 5.14 The Site does not appear to support specialist microhabitats of particular value, such as short sward grassland. The dead wood within the mature trees appears to be of widespread types, such as narrow aerial timbers, rather than heartwood decay or similar scarce types.
- 5.15 Although no moth records were returned, it is likely that the Site supports a small assemblage of declining but widespread species that are Species of Principal Importance (Butterfly Conservation, 2007⁶). These are typically associated with 'arboreal foliage' and 'grassland and scrub matrix' where their caterpillars feed on a wide range of foodplants.

.

⁶ Butterfly Conservation (2007) *Biodiversity Action Plan – Moths*. Available from: http://butterflyconservation.org/files/uk-bap-species-moths-research-only.pdf

6. Evaluation

HABITATS OF PRINCIPAL IMPORTANCE

- 6.1 In general, the Site is typical of lowland farmland, with arable cropland as the main habitat type with partial boundary hedgerows and small areas of other habitat. The following habitats are considered to qualify as a Habitat of Principal Importance (Maddock, 2011⁷):
 - Hedgerows, which are considered to qualify as the Hedgerows Habitat of Principal Importance on the basis of >80% native woody species. None qualify as Important Hedgerows under the Hedgerow Regulations.
- 6.2 With respect to the stream, the qualifying criteria are vague but the stream appears to be 'near natural' in physical profile character and may qualify as the Rivers Habitat of Principal Importance.

SCOPING FOR SPECIES OF CONSERVATION CONCERN

6.3 The assemblages of species of conservation concern are likely to be relatively species-poor and with low numbers. Notwithstanding any legal protection to individual species, it is likely that the Site is of relatively low ecological value and with the species present likely to be in low numbers and as part(s) of larger local population(s). The species scoped-in as potentially present are listed in Table 3. Species that are concluded to be absent include water voles, reptiles, and badgers.

Table 3. Species scoped-in as potentially or likely to be present.

Feature	Description	Assessment
Bats	Six mature trees with moderate roost potential	Roost(s) possible and foraging by
	on north boundary.	low numbers.
	Foraging likely to be along boundary only.	
Great crested	Two ponds within 500m (nearest >100m), but	Potentially present, but almost
newts	condition and status not known.	certainly restricted to the north
		boundary area if so.
Birds	Hedgerows sparse and verges and margins	Nesting birds likely, but Site of
	narrow and lacking seed-rich margins. Likely to	lower overall value for nesting
	be subject to some disturbance from footpaths.	and overwintering.
Otters	No evidence, but known from upstream and	Potentially present as transitory
	downstream.	individuals.
Brown hare	Numerous local records but Site subject to	Potentially present, but with
	disturbance.	disturbance from footpaths.
Hedgehogs	Known to be present locally and hedgerows and	Potentially present.
	verges offer shelter and foraging habitat.	
Invertebrates	Specialist microhabitats generally absent other	Small assemblage of widespread
	than widespread dead wood in trees.	but declining moths possibly
		present in hedgerows.

_

⁷ Maddock, A. (2011) *UK BAP Priority Habitat Descriptions*. Available from: http://jncc.defra.gov.uk/PDF/UKBAP_PriorityHabitatDesc-Rev2010.pdf

RECOMMENDATIONS FOR ADDITIONAL SURVEYS

- 6.4 The work reported here provides a strategic overview of the Site and the main ecological features. In terms of protected species, it is expected that potential impacts can be avoided via scheme design but the following may be required:
 - Roosting bats. The current scheme design retains the tree and the surrounding area
 is allocated as greenspace providing a buffer from development. However, if works
 are required to the tree or within its vicinity it is recommended that emergence
 surveys are undertaken to determine presence/absence of bats and to inform any
 further mitigation.
 - Breeding birds. The Site is large and may support some species of conservation concern, most likely declining but widespread species. It is recommended that breeding bird survey are undertaken to inform the baseline.

Page | 12

7. Impacts, Mitigation and Enhancements

IMPACTS

Statutory Sites

7.1 Direct impacts on statutory sites are unlikely by virtue of distance. Indirect pathways such as increased recreational pressure are also unlikely, given the substantial visitor infrastructure at Rutland Water Ramsar site, SPA and SSSI⁸ and the lack of public access to Burley and Rushpit Woods SSSI.

Local Wildlife Sites

7.2 It is not considered that the scheme will impact other designated sites by virtue of distance, the absence of access and limited appeal to casual visitors.

On-Site

7.3 Adverse impacts from the development of the Site are likely to be driven by habitat loss, mainly arable and improved grass verges. Mitigation of impacts will be achievable for most of the species potentially impacted. Site landscaping and the provision of open greenspace with appropriate planting schemes will provide the potential for net biodiversity gain.

MITIGATION OF CONSTRUCTION

- 7.4 Three actions are proposed as generic mitigation in relation to construction:
 - Bats. Where possible, impacts on the trees along the northern boundary should be avoided via scheme design. Where there are impacts on the trees identified with roost potential then activity surveys should be undertaken to determine the presence/absence of roosting bats. Where roosts are identified it is likely that protected species licensing will be required.
 - Birds. General site clearance of tall verge and any woody vegetation should avoid the
 nesting bird season (March to August) or otherwise be under a watching brief. There
 may also be a risk of nesting birds within open field areas, especially if they are left
 uncropped prior to works commencing.
 - Stream protection. During construction, measures should be taken to avoid pollution of the stream, including soil run-off. Appropriate guidance on working methods is provided by SEPA (2017)⁹.

ENHANCEMENTS AND NET GAIN

- 7.5 Based on the likely quantum of open space within the scheme and the options for landscaping, it is likely that net gain can be achieved in terms of habitat area. Within the calculation metric, both the overall area of open space and its location are important considerations, with the inclusion of a tract of open space alongside the stream provide the option for the landscaping to contribute to landscape-scale ecological connectivity.
- 7.6 The key area for ecological enhancement is therefore the stream and bankside areas, where greenspace could be provided to improve its setting and create gradual transitions from the

⁸ https://www.rutlandwater.org.uk/

[.]

⁹ SEPA (2017) *Guidance for Pollution Prevention Works and maintenance in or near water: GPP 5 January 2017.* Available from: http://www.netregs.org.uk/media/1418/gpp-5-works-and-maintenance-in-or-near-water.pdf

- stream to terrestrial areas, where currently there is a sharp transition to arable. Such greenspace would also buffer the stream from the built development.
- 7.7 The overall proposals include both landscaping through the scheme, and a more extensive tract alongside the stream which will substantially enhance the immediate stream habitat and provide a more substantial corridor of habitat relevant at a landscape scale. As general principles:
 - Linear belts of landscaping should form a mosaic of open grassland with structural planting, ideally to form a mosaic of conditions and with trees and shrubs well-spaced rather than forming dense blocks. Where possible, and particularly alongside the stream corridor, the landscaping areas should be as dark as possible at night, through a combination of reduced lighting and also structural planting to screen from light spill (Gunnell and Grant, 2012¹⁰).
 - The corridors should offer resources for a range of species, increasing the value of the corridors as stepping stones across the landscape. Examples include the provision of blossom over an extended period as required by many pollinating insects, fruit and berries in autumn for many birds, and insect food plants.
- 7.8 The composition of soft landscaping should aim to include appropriate native species and species of known wildlife value. Key points for many species groups is the need for insect prey, for bats and also for the chicks and many fledgling birds. Thus, a range of native plant types should be planted to provide a range of resources across the seasons from spring to autumn (insects and their predators), and also fruit and berry producing species in autumn and winter (birds). Such planting would also directly benefit species such as the declining but widespread moths.
- 7.9 Within areas of grassland and SUDS features there are a number of relevant wildflower seed mixes available from commercial suppliers, including wetland and pond planting (e.g. Emorsgate EM8 meadow mixture for wetlands), wildflower swards (e.g. EM10 tussock mixture) and flowering lawns for areas with more intensive use and management (e.g. EL1 flowering lawn mixture).

7.10 Additional measures could include:

- Bat boxes to be erected on buildings, either as integral 'bat tubes' embedded within walls or as external boxes. A wide range of types are suitable¹¹.
- Bird boxes for locally relevant species, including swifts and house sparrows.
- Using woody material created by Site clearance to provide habitat piles in conjunction with soft landscaping and also species-specific mitigation.

-

¹⁰ Gunnell, K. and Grant, G. (2012) *Landscape and Urban Design for Biodiversity and Bats*. Bat Conservation Trust, London.

¹¹ http://www.wildlifeservices.co.uk/batboxes.html

8. Conclusion

- 8.1 The Site is considered to be broadly typical of arable farmland, comprising an intensively managed cropping area with partial boundary hedgerows and small areas of associated habitat. The boundary hedgerows are considered to qualify as the Hedgerows Habitat of Principal Importance (but not as Important Hedgerows) and the stream possibly qualifies as the Rivers Habitat of Principal Importance.
- 8.2 Impacts on statutory sites are unlikely by virtue of distance and either the lack of public access or, in the case of Rutland Water, by the existing infrastructure for managing visitors.
- 8.3 Most protected species are scoped-out, other than possible roosting bats in trees along the north boundary, and nesting birds. Great crested newts may be present in off-Site ponds, in which case the north boundary may be utilised as terrestrial habitat; otters may be present as transitory singletons. Other species of conservation concern scoped-in are otters, brown hares, hedgehogs and invertebrates (widespread but declining moths). These would be present as minor components of larger local populations.
- 8.4 Mitigation of construction impacts would need to consider nesting birds, the trees with bat roost potential and the stream habitat.
- 8.5 Based on the likely quantum of open space within the scheme and the options for landscaping, it is likely that net gain can be achieved in terms of habitat area. Within the calculation metric, both the overall area of open space and its location are important considerations, with the inclusion of a tract of open space alongside the stream provide the option for the landscaping to contribute to landscape-scale ecological connectivity. Additional enhancements will include measures such as bird and bat boxes.
- 8.6 In conclusion, the scheme will be largely located on arable cropland and fields of improved grassland. Protected species are likely to be of restricted occurrence and any impacts can be mitigated as part of the scheme. The layout of the soft landscaping provides an opportunity to enhance the stream corridor and increases habitat connectivity at a landscape scale. The overall quantum of greenspace is likely to be sufficient to achieve net biodiversity gain, and this will be of benefit to locally relevant species.

Page | 15

9. Appendix 1: Photographs



Figure 2. View across the Site, looking east.



Figure 3. The horse pasture.



Figure 4. Line of trees alongside the stream.



Figure 4.
The stream.

10. Appendix 2: Legislation Summary

Non-technical account of relevant national legislation and policies.

Species	Legislation	Offence	Liconsing
•			Licensing A Natural England (NE)
Bats:	Conservation of	Deliberately capture, injure or kill a	A Natural England (NE)
European	Habitats and	bat; deliberate disturbance of bats;	licence in respect of
protected	Species	or damage or destroy a breeding	development is required.
species	Regulations	site or resting place used by a bat.	
	2010 (as	[The protection of bat roosts is	
	amended) Reg	considered to apply regardless of	
	41	whether bats are present.]	
Bats:	Wildlife and	Intentionally or recklessly obstruct	Licence from NE is required
National	Countryside Act	access to any structure or place	for surveys (scientific
protection	1981 (as	used for shelter or protection or	purposes) that would involve
	amended) S.9	disturb a bat in such a place.	disturbance of bats or
	,	·	entering a known or
			suspected roost site.
Birds	Wildlife and	Intentionally kill, injure or take any	No licences are available to
	Countryside Act	wild bird; intentionally take,	disturb any birds in regard to
	1981 (as	damage or destroy the nest of any	development.
	amended) S.1	wild bird while that nest is in use or	
		being built. Intentionally or	
		recklessly disturb a Schedule 1	
		species while it is building a nest or	
		is in, on or near a nest containing	
		eggs or young; intentionally or	
		recklessly disturb dependent young	
Croot	Conservation of	of such a species [e.g. kingfisher].	Licences issued for
Great		Deliberately capture, injure or kill a	
crested	Habitats and	great crested newt; deliberate	development by Natural
newt:	Species	disturbance of a great crested	England.
European	Regulations	newt; deliberately take or destroy	
protected	2010 (as	its eggs; or damage or destroy a	
species	amended) Reg	breeding site or resting place used	
01	41	by a great crested newt.	A 12
Great	Wildlife and	Intentionally or recklessly obstruct	A licence is required from
crested	Countryside Act	access to any structure or place	Natural England for
newt:	1981 (as	used for shelter or protection or	surveying and handling.
National	amended) S.9	disturb it in such a place.	
protection	1401 1116		
Adder,	Wildlife and	Intentionally kill or injure any	No licence is required.
common	Countryside Act	common reptile species.	However, an assessment for
lizard, grass	1981 S.9(1) and		the potential of a site to
snake slow	S.9(5)		support reptiles should be
worm			undertaken.
Scientific	Wildlife and	To carry out or permit to be carried	Owners, occupiers, public
Interest	Countryside Act	out any potentially damaging	bodies and statutory
(SSSI)	1981 (as	operation. SSSIs are given	undertakers must give notice
It is an	amended)	protection through policies in the	and obtain the appropriate
offence	,	Local Development Plan.	consent under S.28 before
		,	undertaking operations likely
			to damage a SSSI. All
			public bodies to further the
			conservation and
			enhancement of SSSIs.
	i .		

Species	Legislation	Offence	Licensing
Local Wildlife Sites	There is no statutory designation for local sites.	Local sites are given protection through policies in the Local Development Plan.	Development proposals that would potentially affect a local site would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged.



BURLEY ROAD OAKHAM

Supporting Transport Appraisal





Document Status					
Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
02a	Supporting Transport Appraisal	Ben Dance	Melanie A'Lee	Melanie A'Lee	05 11 2020

This report was prepared by RPS Consulting Services Ltd ('RPS') within the terms of its engagement and in direct response to a scope of services. This report is strictly limited to the purpose and the facts and matters stated in it and does not apply directly or indirectly and must not be used for any other application, purpose, use or matter. In preparing the report, RPS may have relied upon information provided to it at the time by other parties. RPS accepts no responsibility as to the accuracy or completeness of information provided by those parties at the time of preparing the report. The report does not take into account any changes in information that may have occurred since the publication of the report. If the information relied upon is subsequently determined to be false, inaccurate or incomplete then it is possible that the observations and conclusions expressed in the report may have changed. RPS does not warrant the contents of this report and shall not assume any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report howsoever. No part of this report, its attachments or appendices may be reproduced by any process without the written consent of RPS. All enquiries should be directed to RPS.

Prepared by: Prepared for:

RPS Consulting Services Ltd

Pigeon Capital Management 1 Ltd

Ben Dance Consultant

20 Farringdon Street, London EC4A 4AB

T 020 3691 0500

E ben.dance@rpsgroup.com



Contents

1	INTRODUCTION	1
2	EXISTING SITE AND SURROUNDING TRANSPORT NETWORK	2
3	ACCESSIBILITY	7
4	PLANNING POLICY	12
5	SCHEME PROPOSALS	18
6	TRIP GENERATION AND DISTRIBUTION	20
7	IMPACT ASSESSMENT	22
8	SUMMARY AND CONCLUSION	25

Appendices

APPENDICES

APPENDIX A – SITE LOCATION

APPENDIX B - ACCIDENT DATA

APPENDIX C - WALKING / CYCLING CATCHMENT PLANS AND ACCESSIBILITY PLAN

APPENDIX D - PROPOSED ACCESS ARRANGEMENT

APPENDIX E - TRICS OUTPUT

APPENDIX F - TRAFFIC FLOW DIAGRAMS



1 INTRODUCTION

Report Brief

- 1.1 RPS Consulting Services Ltd has been commissioned by Pigeon Capital Management 3 Ltd and the landowner Burley Estate Farm Partnership to prepare a Transport Appraisal to support the Sites allocation in the Rutland County Council's Local Plan Review for the proposed scheme to the north of Oakham. The site is identified in the draft Reg. 19 Local Plan as having an indicative capacity of 200 dwellings although the illustrative masterplan for the scheme shows there is the potential to accommodate a scheme of around 220 new homes.
- 1.2 This Transport Appraisal provides details of the Site and its location in respect to Oakham Town Centre and the local highway network. This report also identifies Sites accessibility to non-car modes and also the potential future improvements that can be provided to further enhance accessibility.
- 1.3 This report identifies the proposed means of access for Site which have been designed in accordance with the relevant design standards.
- 1.4 Details are also provided of the predicted level of traffic that will be generated by the Site and the potential impact on the surrounding highway network and any mitigation measures that may be considered necessary,
- 1.5 A review of both central and local government planning policy is provided to demonstrate how the scheme conforms to the current planning policies. The site is identified in the Regulation 19 consultation of the Local Plan as site H1.3.

Report Format

- Section 2 of the report describes the existing Site, location and details the existing travel to work modes by residents within the local ward;
- Section 3 of the report describes the existing accessibility of the Site to sustainable modes
 of travel. This includes walking and cycle facilities and access to public transport;
- Section 4 of this report considers the local and central government planning policies that are relevant to the Site in transportation terms;
- Section 5 of the report provides details of the scheme including access arrangements for both vehicles and pedestrians;
- Section 6 of the report details the likely vehicular traffic generation of the scheme;
- Section 7 considers the potential impact on the proposed accesses and local highway network; and
- Section 8 provides a summary of the report and conclusions.



2 EXISTING SITE AND SURROUNDING TRANSPORT NETWORK

Introduction

2.1 This section of the report considers the context of the Site, the demographics of the area and also the travel to work characteristics of residents within the Oakham North East Ward. A review of the local highway network is also provided demonstrating how well the Site is connected to the local area.

Site Context

- 2.2 Oakham is a town in the county of Rutland, located approximately 32 kilometres east of Leicester. The primary route within Oakham is the A606 Burley Park Way which bypasses the Town Centre and connects to the A6003 southeast of Oakham. The A606 extends from the A52 north west of Oakham, south of Nottingham to the A1 and Stamford to the south east of Oakham. The A606 also provides direct access to Melton Mowbray which is northwest of Oakham.
- 2.3 The Site is located in Oakham North East Ward, which has a population of circa 11,000 (2011 Census). A Site location plan is provided at **Appendix A**.
- The Site is bound to the west by Oakham Veterinary Hospital/ Ashwell Road, pastureland, and Burley Park Way (A606). To the north the Site is bound by agricultural land, to the east by agricultural land and an existing Co-op Supermarket, and to the south by Burley Road (B668). The Site is currently composed of open fields.
- 2.5 The Site is identified within the Rutland Local Plan 'Regulation 19 Consultation' document as H1.3.

Travel to Work Characteristics

- 2.6 Geographically, the Site is located to the north-east of Oakham Town Centre. and benefits from a good network of vehicular routes which provide links to surrounding towns and villages including key destinations such as Leicester, Loughborough, Nottingham and Peterborough.
- 2.7 **Table 2.1** below details the Census 2011 'Travel to Work' data for the Oakham North East Ward, which shows the main modes by which the existing residents travel to work.

Table 2.1: Journey to Work Mode Split (2011 Census)		
Mode	Percentage Mode Share (Oakham North East Ward Output Area)	
Train	3%	
Bus, minibus or coach	1%	
Motorcycle, scooter or moped	1%	
Driver a car or van	59%	

JNY10770-01 | Supporting Transport Appraisal - Burley Road, Oakham | Version 02a | 5th November 2020



Table 2.1: Journey to Work Mode Split (2011 Census)				
Passenger in a car or van	5%			
Bicycle	5%			
On foot	25%			
Other method of travel to work	1%			
Total	100%			

- 2.8 The census data shows that circa 4% of residents use public transport to travel to work (1% bus and 3% train), with 30% travelling by foot/cycle. 59% of the existing residents travel to work by private car as a car driver. The modal split shows that 34% of residents currently travel to work by sustainable modes.
- 2.9 To understand the reasons why 59% of residents travel by car to their work place destination, it is necessary to establish where they travel to. **Table 2.2** identifies the key destinations travelled to by local residents for their place of work by all modes and also by car only.

Location of Employment	% of Residents (all Modes)	% of Residents that Drive		
	UK			
Rutland	64%	50%		
Leicester	7%	9%		
Melton	5%	7%		
South Kesteven	5%	8%		
Peterborough	5%	7%		
Corby	3%	5%		
Blaby	2%	2%		
Nottingham	1%	1%		
North West Leicestershire	1%	1%		
Oadby & Wigston	1%	1%		
Charnwood	1%	2%		
Harborough	1%	2%		
East Northamptonshire	1%	1%		
Kettering	1%	1%		
Rushcliffe	1%	1%		



Table 2.2: Work Place Destinations (2011 Census)					
Huntingdonshire	1%	2%			
	Rutland				
Oakham	52%	34%			
Whissendine	26%	28%			
Cottesmore and Empingham	12%	22%			
Uppingham	6%	10%			
Aldgate and Ryhall	3%	6%			

2.10 **Table 2.2** shows that the highest proportions of residents work within the county of Rutland and more specifically within Oakham which is likely to be the reason for 30% of local residents walking or cycling to work. One of the key workplace destinations will be Oakham Town Centre which within a 20 minute walk or a 6 minute cycle from the centre of the Site.

Highway Network

2.11 As stated above, the Site benefits from being located in an accessible location well connected to the local road network, below are details of the roads in the vicinity of the Site.

Burley Road (B668)

2.12 Burley Road (B668), which forms the south-eastern boundary of the Site, is a single carriageway subject to a signed 40 mph speed limit, within the vicinity of the Site. The speed limit increases to 50 mph after approximately 400 metres in the east travelling direction. Burley Road (B668) is a key route into Oakham, leading from Burley and Cottesmore. A shared pedestrian and cycle footway is located on the southern side of Burley Road (B668).

Burley Park Way (A606)

2.13 Burley Park Way (A606), which forms the south-west boundary of the Site, is a single carriageway subject to a signed 40 mph speed limit. The road forms part of the northern bypass around Oakham and provides a direct link to Melton Mowbray and further westward joins the A52 to Nottingham. A footway is located on the western side of Burley Park Way (A606), within the vicinity of the Site.

Ashwell Road

2.14 Ashwell Road is a single carriageway subject to the national speed limit (60 mph). The road forms the north-western boundary of the Site and has a footway on the western side of the road. There is also a footway/cycleway along the eastern side between the Burley Park Road junction and the Ashwell Road playing fields car park access.



Existing Traffic Flows and Vehicle Speeds

- 2.15 Traffic flows and vehicle speeds within the vicinity of the scheme has been obtained by an Automatic Traffic Count (ATC) survey, undertaken in February 2019 on Burley Road.
- 2.16 **Table 2.3** shows a summary of the daily vehicle movements, the percentage of HGVs and the vehicle speeds on Burley Road.

Table 2.3: Existing Traffic Flows and Speeds on Burley Road							
Direction	То	tal Flow (%H0	Average	85 th Percentile			
	AM Peak	PM Peak	Daily (24hr)	Speeds	Speed		
Northbound	278 (3.2%)	272 (0.4%)	3267 (1.8%)	39.1	46.9		
Southbound	425 (1.4%)	345 (1.1%)	3976 (1.4%)	36.7	43.3		
Two-way	703 (2.1%)	617 (0.8%)	7243 (1.6%)				

2.17 The above table shows that there are around 600-700 two-way traffic movements on Burley Road in the peak periods with the predominant flow southbound towards Oakham in both peak periods. The level of HGV movements is low, below 2% and the 85th percentile speeds are slightly above the signed speed limit northbound but around the speed limit southbound.

Road Safety

- 2.18 Personal Injury Accident (PIA) data has been obtained from Rutland County Council for the five-year period between 01 January 2014 to 31 December 2018. The study area includes Burley Road (B668), Burley Park Way (A606) and Ashwell Road within close proximity to the Site. A copy of the accident data is included in **Appendix B**.
- 2.19 During the five-year period, a total of 12 injury accidents were recorded within the study area, of which 11 were classed as slight, 1 classed as serious and no fatal accidents were recorded.
- 2.20 One serious accident that occurred in the daytime at the junction between Burley Park Way (A606) and Kestrel Road resulted from a collision between a vehicle heading northwest of Burley Park Way and a lamp post due to the car driver's loss of control. The weather condition was dry without high winds.
- A cluster of two slight accidents occurred at the junction between Burley Park Way (A606) and Kestrel Road, within circa 150 metres northwest of the roundabout between Burley Road (B668) and Burley Park Way (A606). One slight accident resulted from a collision between a goods vehicle and a car and has been put down to the goods vehicle making a poor turn/manoeuvre and failing to look properly. The other slight accident resulted from a collision between two cars and was put down to one vehicle failing to judge the other person's path / speed.
- 2.22 A cluster of two slight accidents occurred at the roundabout between Burley Road (B668) and Burley Park Way (A606). One slight accident resulted from a collision between a car and a bicycle and was put down to the car driver failing to look properly and having their vision

JNY10770-01 | Supporting Transport Appraisal - Burley Road, Oakham | Version 02a | 5th November 2020



- affected by a stationary/parked vehicle. The other slight accident resulted from a collision between a car and a bicycle.
- One slight accident occurred at the roundabout between Burley Park Way (A606) and Ashwell Road. This was resulted from a collision between a car and the general island of roundabout and road sign and was put down to firstly the car driver failing to look properly and secondly due to the slippery road.
- 2.24 One slight incident occurred on Ashwell Road close to the access to the vets which resulted in a rear-end shunt collision.
- One slight accident occurred at the entrance of the Co-operative Petrol Station on Burley Road (B668). This was resulted from a collision between a car and a motorcycle and was put down to the car driver failing to look properly and failing to judge other persons path or speed.
- 2.26 A cluster of two slight accidents occurred at a field entrance, circa 1km northeast of the roundabout between Burley Road (B668) and Burley Park Way (A606) on Oakham Road. One slight accident resulted from a collision between 2 vehicles and was put down to one car driver failing to judge other persons path or speed, failing to look properly and making a poor turn/manoeuvre. The other slight accident resulted from a collision between three vehicles and was put down to one driver losing control due to mud on road.
- 2.27 A cluster of two slight accidents occurred on Oakham Road. One slight accident that occurred circa 400 metres northeast of the Co-operative Petrol Station, was resulted from a car driver losing control due to excessive speeding, fatigue and weather condition. The other slight incident that occurred on Oakham Road, within 700 metres southwest of its junction with Langham Lane, was resulted from a collision between a car heading southwest and a tree and was put down to the car driver being impaired by alcohol and losing control by skidding on mud on road.
- 2.28 The PIA review has concluded that the accidents recorded on the local highway are attributable to factors unrelated to the design of the highway network. Overall, it is considered that the existing safety record indicates that there is a good level of safety on the local highway network due to the low and infrequent number of incidents over the assessed five year period.



3 ACCESSIBILITY

Introduction

- 3.1 The modal choice for a particular journey is dependent on a number of factors. These include the type of development, trip purpose and availability of public transport, car ownership and distance from The Scheme. The mode of transport taken relates closely to the facilities available at both ends of the journey and to a lesser extent, choice of travel available to the individual. Where a choice of modes exists, the individual may prefer not to travel by private car; however, the overriding decision relates to the location and trip purpose.
- 3.2 This section of the report considers the sustainability of the scheme in terms of accessibility to public transport infrastructure as well as opportunities for cycling and walking.

Walking and Cycling

- An existing shared footway/ cycleway is provided along the eastern side of Burley Road (B668) extending from the junction with Burley Park Way to Greetham to the north east. An uncontrolled pedestrian refuge island crossing is located on Burley Road (B668) south of the existing vehicular access junction that serves the Co-op Petrol Filling Station, Co-op Supermarket and Car Show Room & Vehicle Repair Shop.
- 3.4 Along the A606 there is a shared footway/cycleway that continues from Langham northwest of Oakham to Egleton to the south east. This route links with other footway routes that continue into Oakham Town Centre as well as other footway/cycle routes that lead to Greetham, Egleton, Upper Hambleton.
- 3.5 National Cycle Route 63 is located approximately 1.3 kilometres (5 minute cycle) to the south of Oakham continuing partly along the B640 and partly along South Street. This strategic route provides connections to Leicester, Stamford, Peterborough and Wisbech.
- 3.6 In terms of other crossing facilities close to the Site, there is an uncontrolled crossing at the Burley Road/ Burley Park Way junction on the B668 arm and Burley Park Way east arm which includes dropped kerbs and tactile paving. To the western side of the Site. a controlled TOUCAN crossing is provided on the A606 east of its junction with Ashwell Road.
- 3.7 Walking and Cycling Catchment Plans are included at **Appendix C**, which shows the areas that can be reached within a reasonable walking / cycling time.

Public Transport

Bus

The nearest bus stops to the Site are located at the Co-op Supermarket, northeast of the Site and on Burley Road (B668) to the southwest of the Site all are within 550 metres from the centre of the Site or within 400m of the Site access (5-7minute walk). **Table 3.1** summarises the route and frequencies of the bus services.



		Average Frequency (per hour)				
Ser	vice Route	Route	Mon-Fri		C-4	0
		AM Peak	Off Peak	PM Peak	Sat	Sun
Co-op Super	store Bus Stop					
146	South Street outside Tesco – John Street adjacent Bus Station	0	1	0	1	No service
	Ladywell Bus Sto	p (Burley Ro	oad, B668)			
146	South Street outside Tesco – John Street adjacent Bus Station	0	1	0	1	No service
185	Ryhall Road outside College – Oakham	1	1	0	1	No service
Rf2 Rutland Flyer	Melton Mowbray – Oakham	1	1	1	1	No service
184	Stamford – Bus Station	0	0	1	No service	No service

3.9 **Table 3.1** shows that there are a range of services within easy walking distance of the Site although the frequency of these services is relatively limited.

Rail

- 3.10 The closest station to the Site is Oakham Rail Station, which is approximately 1.5 kilometres (within a 20 minute walk / 6 minute cycle) from the centre of the Site. The station is managed by East Midlands Trains. Oakham Rail Station provides links to Stanstead Airport, Birmingham New Street, London St Pancras International, Cambridge, Nottingham, Norwich, and Melton Mowbray.
- 3.11 The station has 22 cycle storage spaces and has a car park which serves up to 28 vehicles.
- 3.12 **Table 3.2** summarises the route and frequency of the rail services.

Table 3.2: Train Destinations and Frequencies							
	Destination	Average Frequency (per hour)					
Service			Mon-Fri				
		Peak Frequency	First Service	Last Service	Sat	Sun	
Cross Country	Stansted Airport	2	05:49	21:46	1	1	
	Birmingham New Street	2	06:37	22:26	1	1	
	Cambridge	3	05:49	21:46	1	1	
East Midlands Trains	Kettering	2	06:15	21:19	1	1	
	Melton Mowbray	2	06:37	22:26	1	1	
	Nottingham	2	06:37	22:26	1	1	

JNY10770-01 | Supporting Transport Appraisal - Burley Road, Oakham | Version 02a | 5th November 2020

www.rpsgroup.com Page 8



3.13 Oakham Station provides a good level of service giving both residents and employees a suitable alternative mode to travel.

Local Facilities

- 3.14 In line with current planning policy, development sites should be accessible by a variety of transport modes, in order to minimise travel by private car.
- 3.15 Manual for Streets (Paragraph 4.4.1) states the following:

"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot."

3.16 Furthermore, Local Transport Note 1/04a (Department for Transport 2004), considers acceptable walking and cycling distances at Paragraph 3.10.3, stating:

"There are limits to the distances generally considered acceptable for utility walking and cycling. The mean average length for walking journeys is approximately 1km (0.6miles), and for cycling, it is 4km (2.4miles), although journeys of up to three times these distances are not uncommon for regular commuters. The distances people are prepared to walk, or cycle depend on their fitness and physical ability, journey purpose, settlement size, and walking / cycling conditions. Useful guidance on desirable, acceptable and preferred maximum walking distances for different purposes is included in Tables 3.2 and 3.3 of Providing for Journeys on Foot, IHT (2000)."

3.17 The Institution of Highways and Transportation (IHT) 'Guidelines for Providing Journeys on Foot' (2000) suggests acceptable, desirable and maximum walking distances. **Table 3.3** contains the suggested walking distances for pedestrians without mobility impairment for some common trip purposes.

Table 3.3: IHT Guidelines on Walking Distances						
	Walking Distances (m)					
Definition	Town Centres	Commuting / Schools	Elsewhere			
Desirable	200	500	400			
Acceptable	400	1,000	800			
Preferred Maximum	800	2,000	1,200			

- 3.18 It is evident from **Table 3.3** that walking offers a great potential to replace short car trips, particularly for trips less than 2 kilometres.
- 3.19 Further to LTN 1/04, Local Transport Note 2/08 'Cycle Infrastructure Design' (Department for Transport 2008) states:

"Many utility cycle journeys are under 3 miles although, for commuter journeys, a trip distance of over 5 miles is not uncommon."



3.20 **Table 3.4** identifies the walking and cycling distance and time to local facilities and amenities measured from the centre of The Scheme. This table is not meant to provide an exhaustive list; rather an example of distances and travel time to local facilities and amenities.

Table 3.4: Walking and Cycling Distances to Local Facilities from the Centre of the Site

		Appropriate Journ	ey Time (minutes)*
Facility	Distance from Site Centre	Walking	Cycling
Educational Facilities			
The Ark Association Pre-school	800m	10	3
Oakham C of E Primary School	750m	10	3
Oakham School Jerwoods	800m	10	3
English Martyrs Rc Primary School	950m	12	3
Local Facilities			
Co-op Food Supermarket	450m	5	1
Oakham Veterinary Hospital	350m	4	1
Post Office	1.4 km	18	5
Tesco Superstore	1.6 km	20	6
Oakham Fish Bar (fish and chips takeaway)	850m	11	3
St Joseph's Catholic Church	1.2 km	16	5
The Lord Nelson (PH)	1.3 km	17	5
Rutland Memorial Hospital	1.9 km	24	7
Oakham Market	1.5 km	19	6
Recreational Facilities			
Catmose Sports Centre	2.4 km	30	9
Oakham United Football Club	2.3 km	29	10
Public Transport			
Co-op Bus Stop	450m	5	1
Ladywell Bus Stop	550 m	7	2
Oakham Rail Station	1.5 km	19	6

^(*) distances based on Google Maps which takes into account local topography.

- 3.21 As can be seen local facilities including bus stops, railway stations, schools, retail and health services are within either acceptable or the preferred maximum walking distance and also within acceptable cycling distance of the Site.
- 3.22 Discussions are being made with the neighbouring Co-op site to improve pedestrian and cycle links between the Site and the store/ bus stops which will significantly reduce the distance identified above to approximately 100m.
- 3.23 A plan showing the Sites accessibility to the existing cycle route, bus stops, railway station and local facilities is included in **Appendix C.**

JNY10770-01 | Supporting Transport Appraisal - Burley Road, Oakham | Version 02a | 5th November 2020

www.rpsgroup.com Page 10



Summary

- 3.24 In terms of sustainability, the scheme benefits from good accessibility to existing bus and rail services as well as being accessible to local facilities within Oakham by walking and cycling. The Sites location will therefore provide residents with a realistic alternative in travel to the private car.
- 3.25 As part of The Scheme proposals it is considered that the opportunity exists to provide a new controlled crossing on Burley Park Way adjacent to A606 would provide benefits to residents in providing a safe route to and from Oakham Town Centre. Further details of the potential measures to improve accessibility are identified in Section 5.



4 PLANNING POLICY

Introduction

- 4.1 This section of the report evaluates The Scheme against the appropriate national, regional and local transport policies:
 - National Planning Policy Framework (NPPF), 2019;
 - Rutland Local Plan 2018 2036 'Regulation 19 Consultation' document; and
 - Rutland County Council, Local Transport Plan 3 Rutland Transport Strategy, April 2011 to March 2026.

National Planning Policy Framework (NPPF, 2019)

- 4.2 The National Planning Policy Framework (NPPF) adopted in February 2019, replaces the previous version adopted in July 2018. The NPPF replaced existing national planning policy guidance and statements, including Planning Policy Guidance 13 (PPG13) and Planning Policy Statement 3 (PPS3), with a single more concise document. The NPPF aims to enable local people and their accountable councils to produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.
- 4.3 National policy in relation to the transport planning of developments is set out in Section 9 'Providing Sustainable Transport – considering development proposals' and states the following:
- 4.4 Paragraph 108 states that:

"In assessing site that may be allocated for development in plans, or specific applications for development, it should be ensures that:

- Appropriate opportunities to promote sustainable transport modes can be or have been – taken up, given the type of development and its location;
- Safe and suitable access to the site can be achieved for all users; and
- Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."
- 4.5 Paragraph 109 states that:

"Development should only be prevented or refuse on highway grounds if there would be an unacceptable impact on highway safety or residual cumulative impacts on the road network would be severe."

4.6 Paragraph 111 states that:

"All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement of transport assessment so that the likely impacts of the proposal can be assessed."

4.7 With regard to parking, Paragraph 105 of the NPPF states that:



"If setting local parking standards for residential and non-residential development, policies should take into account:

- The accessibility of the development;
- The type, mix and use of the development;
- The availability of and opportunities for Public Transport;
- Low car ownership levels; and
- the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles."

4.8 Paragraph 106 states that:

"Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with Chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."

Local Planning Policy

Rutland Local Plan 2018 – 2036 'Regulation 19 Consultation'

- 4.1 The Rutland Local Plan has now been produced for public consultation under regulation 19 of the Local Plan Regulations in advance of submissions to the Secretary of State under Regulation 22 of the Local Plan regulations. This Transport Appraisal provides further evidence base for The Site identified within the Reg 19 document at site Ref: H1.3 as part of this consultation process.
- 4.2 The relevant planning policies that are relevant to this report include:

POLICY EN3 – Delivering Good Design

- "1. To ensure high quality design is achieved throughout the County, all development proposals will be expected to:
- a) Make a positive contribution to the local distinctiveness, vernacular and character of the area. Proposals should reinforce local identity and not have an adverse impact on the street scene, settlement pattern or the landscape / townscape character of the surrounding area. Proposals should be of an appropriate scale, density, massing, height and material, given the context of the area;
- Ensure there is no adverse impact on the amenity of neighbouring users in terms of noise, light pollution, loss of privacy and loss of light and have regard to features that minimise crime and the fear of crime;
- c) Provide sufficient private amenity space, suitable to the type and amount of development proposed; and
- d) Take account of requirements of the Design SPD and made Neighbourhood Plans.



- 2. Development Proposals should seek to:
- a) Retain and incorporate on site features, such as trees and hedgerows and incorporate, where possible, nature conservation and biodiversity enhancement into the development; and
- 3. All Major development (as defined in the Glossary) must demonstrate with:
- a) Manual for Streets guidance and relevant Rutland County Council highways standards and guidance;
- b) Development should enable flexible use and adaptation to reflect changing lifestyles, having an adaptable layout for sites and/or buildings that takes into account the needs of future users; and
- c) For new residential proposals, development should perform positively against Buildings for Life 12.
- 5. Designing for Streets and spaces:

New developments should ensure that streets and spaces are attractive, safe, easy to use and navigate and that they encourage people to walk and cycle by:

- a) Relating to their context, with a balance being struck between place-making needs and vehicle movement's needs;
- b) Prioritising the needs of pedestrians, cyclists and public transport users;
- c) Being active, overlooked, feeling safe and promoting inclusive access;
- d) Creating legible places which make it easy for people to find their way around;
- e) Ensuring that streets and spaces achieve continuity and enclosure within the street scene, being continuously enclosed by buildings, or by strong landscaping with welldefined public and private space;
- f) Ensuring that parking is well integrated and does not dominate the street scene; and
- g) Ensuring safe and easy access for emergency vehicles.
- 4.3 Policy H1.3 Land off Burley Road, Oakham identifies the following key principles within the layout that are applicable to transport:
 - d) provide safe, direct and convenient footway and cycleway connections through the site, and to the town centre;
 - e) ensure safe and direct pedestrian and cycle routes which follow desire lines, between existing residential areas to the west, the town centre, to existing cycle routes and crossings along Burley Park Way and Burley Road and other key destinations;
 - f) improve the pedestrian and cycle environment around the Co-op site, ensuring direct and safe routes to this retail site:
 - h) provide safe and convenient access to the site utilising Burley Road. Ashwell Road should not be used for vehicular access other than for emergency vehicles.
- 4.4 Within Appendix 4 of the Local Plan are the Parking Standards to be adopted for residential developments, these standards are replicated in the table below and are identified a minimum standards.



Table 4.1 Minimum Residential Parking Standards							
Dwelling Size	Shared/ Communal Parking Spaces	Allocated Parking Spaces					
2 rooms	1	1					
3 rooms	1.5	2					
4 rooms	1.5	2					
5 rooms	1.5	2					
6 rooms	2	2					
7 rooms	2	3					
8+ rooms	2	3					

Source: Rutland County Council Local Plan 2018 - 2036 'Regulation 19 Consultation' - Appendix 4 - Table 1

- 4.5 For cycle parking Table 5 identifies the following for Residential Dwellings;
 - 1 space per 5 dwellings to be under cover and secure.

Rutland County Council, Local Transport Plan 3 Rutland Transport Strategy, April 2011 to March 2026

- 4.6 The Rutland County Council LTP3 sets out the main direction of objectives over the coming years to be:
 - Maintaining the transport network and minimising delays and congestion in order to support the local economy;
 - Developing and expanding public transport including demand responsive services;
 - Managing existing transport assets in an environmentally friendly way and minimising adverse impacts on quality of life and at the same time reducing our carbon emissions;
 - Working with partners to make sustainable travel a viable option for local people and visitors to the county by developing travel plans, car sharing opportunities and encouraging the use of public transport;
 - Developing Rutland as destination for rural cycling and walking to grow tourism in the county;
 - Working with the voluntary sector to grow community transport and other sustainable transport initiatives;
 - Working with the police, emergency services other authorities and the community in making Rutland a safer place to live in, work in and visit; and
 - Work with colleagues and the health service to promote healthier lives through increased exercise.
- 4.7 Oakham is described in the Rutland County Council LTP3 as:



"The larger of the two market towns and is the main service centre for Rutland. With a population of 11,363 (ONS Mid 2997 estimate) it has a range of education, employment, community, health and leisure facilities and offers diverse retail and shopping opportunity including a twice weekly market. Its railway station provides links to cross country services to the surrounding area and wider network."

- 4.8 The Rutland County Council LTP3 sets out a vision to have created thriving, vibrant and prosperous towns by 2026; of which Oakham will be the main focus for development and provision of services and employment. These plans which are relevant to the scheme in Oakham include:
- 4.9 The role of: Walking and Cycling:

"The provision of well signed pedestrian and cycle routes between the towns of Oakham and Uppingham.

We will seek to work with companies who have experience in running cycle hire facilities such as the existing successful cycle hire facility at Rutland Water to provide a similar facility at the train station in Oakham where people can hire a bicycle to cycle between the station and Rutland Water."

4.10 The role of: Public Transport

"The Council will continue to work in partnership with Network Rail and the Department of Transport to improve passenger rail services and facilities to Oakham and other parts of the region and bus, pedestrian and cycle links to the rail station.

Oakham station should be better used as a point of information and be a hub of tourism information. To do this we will provide:

- Better tourism racking systems and fulfilment of those racking systems to ensure a constant flow of tourism information for visitors; and
- A warmer welcome with signage, maps and information point.

In order for people to be encouraged to travel around the County by sustainable means it is necessary to provide a transport interchange in Oakham. One possible location is at the rail station."

4.11 The role of: Smarter Cities

"We also aim to treat Oakham and Uppingham as major employment centres and attract many of the small businesses in these places to sign up to the car share scheme."

Summary

- 4.12 Taken together, national and local transport planning policy requires new residential development to be located where a range of facilities and services can be accessed by a number of modes of transport including walking, cycling and public transport, so as to minimise the number and length of car journeys. In addition, safe and suitable access to the Site should be achieved for all people.
- 4.13 The policies identified for H1.3 advise that safe and direct footway and cycle connections to the town centre should be provided and that safe and convenient access to the Site utilising Burley



Road should be provided with access onto Ashwell Road only permitted for non-vehicular modes except for emergency use. This Transport Appraisal demonstrates that the Site is close to existing residential areas and Oakham Town Centre and new footway and cycle links would be provided together with a safe crossing provisions. The site would also be accessed from Burley Road and is demonstrated that a safe and suitable access can be provided.

- 4.14 The Site benefits from good accessibility to existing bus and rail services as well as local facilities including shops and education are of which are accessible by walking and cycling modes. The Site will therefore provide residents with a realistic alternative to the private car.
- 4.15 The predicted level of traffic generated by the Site is not considered to have a material impact on the flow of traffic movements in this area. A Transport Assessment will be prepared and submitted as part of a planning application for the Site to demonstrate that the impact of the proposal will not have a severe impact on the surrounding highway network. In addition a Residential Travel Plan will be provided to encourage the use of modes other than the private car.
- 4.16 As such, the Site is considered to accord to the relevant Local and Central Government Policy Guidelines.



5 SCHEME PROPOSALS

Introduction

- 5.1 The Site is located on land to the northwest of Burley Road, Oakham and is bound to the west by Oakham Veterinary Hospital/ Ashwell Road, pasture land, and Burley Park Way (A606), to the north by agricultural land, to the east by agricultural land an existing Co-op Supermarket, and to the south by Burley Road (B668). The Site is currently composed of open fields.
- 5.2 The site is allocated in the Reg. 19 draft Local Plan with an indicative capacity of around 200 dwellings, although the illustrative masterplan shows the Site has capacity to accommodate around 220 new homes.

Proposed Vehicular Access Arrangement – Burley Road

5.3 The scheme will be served by new priority junction arrangement on Burley Road (B668) which will include a 3m wide ghost island right turn lane with footway/cycleways. The access into the Site will be 6 metres wide at its junction with Burley Road (B668) and narrow to 5.5 metres within the Site.

Visibility at the Proposed Junction on Burley Road

- 5.4 Burley Road is subject to a 40mph speed limit and based on DMRB (Design Manual for Roads and Bridges. TD9/93) the required visibility splay is a 'Y' distance of 120m. The 'X' distance is taken as a distance of 2.4m back from the edge of carriageway.
- 5.5 The plan attached at **Appendix D** shows that this level of visibility can easily be achieved within the extent of highway.
- 5.6 Whilst the visibility that is achievable along Burley Road conforms to the relevant design standards for a 40mph speed limit, the opportunity exists to reduce the speed limit along the Site frontage to 30mph. The environment along this section of Burley Road will change with The Scheme, from rural to a more urban environment which in turn will encourage lower vehicle speeds. Burley Road to the south of the A606 is currently subject to a 30mph speed limit as it is within a built up residential area as such the opportunity exists to extend this 30mph speed limit further northward and encompass the Site.
- 5.7 As part of a Transport Assessment, the proposed access arrangement will be subject to an independent Stage 1 Road Safety Audit.

Pedestrian and Cycle Access

Pedestrian and cycle access to the Site will be via the proposed vehicular access off Burley Road (B668) and also via the proposed emergency access off Ashwell Road, with an additional access being provided onto Burley Park Way. To connect the Site with the existing footway/cycleways in the area, a new 3m wide shared footway/cycleway will be provided along the western side of Burley Road between the Site access and the A606 and also an extension of the existing shared footway/cycleway along the northern side of Burley Park Way. In addition



- an extension of the existing footway on Ashwell Road from Ashwell Road Playing Fields to the proposed emergency/ pedestrian/cycle access would be provided.
- There are currently no controlled crossing facilities within close proximity to the Site, as such a new TOUCAN crossing would be provided on Burley Park Way to the west of the Burley Road/Burley Park Way junction providing a safe route for pedestrians and cyclists to use. Details of the proposed measures are shown in **Appendix D**.
- 5.10 A plan showing how the Site connects to the local footway/cycleway network and also local PT facilities is included in **Appendix C**

Public Transport

5.11 In Section 3 of this report it is identified that the Site is within easy walking distance to 5 bus services. The frequency of these services is relatively good for a rural location, although only route RF2 provides a daily service with a frequency of a bus every 2 hours.

Servicing and Deliveries Vehicles

In order to demonstrate that the largest design vehicle that will access the Site on a regular basis can manoeuvre easily in and out of the proposed accesses, a swept path analysis has been undertaken using AUTO TRACK. The Swept path of a large refuse vehicle has been used for the access on Burley Road. Swept path drawings are provided at **Appendix D** and demonstrate that this type of vehicle will be able to easily manoeuvre in and out of the proposed access.

Emergency Access

5.13 The scheme will have two points of access, one access will be provided off Burley Road and another access will be provided off Ashwell Road which will be a 3.5m wide route for emergency use only permitting use by pedestrians and cycles.

Parking

5.14 The car and cycle parking provided at the Site will be provided in line with Rutland County Council's parking standards, as identified in Section 4.

Summary

- 5.15 The proposed access arrangement to the Site on Burley Road has been designed to conform with the relevant highway design standards and appropriate visibility splays based on the speed of the road. An emergency access point will also be provided off Ashwell Road which will also permit access by pedestrians and cyclists.
- 5.16 The scheme offers the opportunity to provide extension and enhancement of the existing walking and cycling facilities in this location as well as providing controlled crossing facilities on Burley Park Road.



6 TRIP GENERATION AND DISTRIBUTION

Introduction

- This section of the Transport Appraisal has been included to provide the local highway authority with an indication of the number of vehicular trips that proposed the scheme is expected to generate.
- 6.2 This Transport Appraisal has been produced to support the residential scheme for this site and as such detailed impact assessments have only been carried out at the Site access and not on the wider highway network. The impact on the wide highway network will be reviewed as part of a detailed Transport Assessment which will be submitted as part of a planning application for the Site. An indication of the potential impact on the wider network is however provided later in this section.
- 6.3 The indicative scheme currently includes for around 220 New Homes on the Site.
- To review the potential level of trips that could be generated by The Scheme, data from the TRICS Database has been obtained. The trip generation, distribution and extent of impact will be agreed with the Highway Authority as part of pre-application scoping discussions and will form the basis of a Transport Assessment.

Trip Generation

The trip generation for the proposed residential use has been based on the TRICS database which includes other similar developments in terms of type, size and location. Whilst an element of The Scheme will include affordable housing which would result in a lower trip rate, it is assumed that 100% are private residential housing to ensure a robust assessment is undertaken.

Private Residential Dwellings

- The vehicle trip rates for the residential use on the Site has been established based on similar surveyed sites contained within the TRICS database. More specifically, the trip generation sites have been based on:
 - Land use: Residential;
 - Category: Privately Owned;
 - Number of Dwellings; 101-248 selected; and
 - Location: East Anglia, East Midlands and West Midlands and North West.
- 6.7 **Table 6.1** summarises the peak trip rates obtained from the TRICS database. A copy of the TRICS output is provided in **Appendix E** of this report.



Table 6.1: Proposed Residential Use Trip Rates and Traffic Movements

Trin Data / Trina	АМ	Peak (08:00-09	0:00)	PM Peak (17:00-18:00)			
Trip Rate / Trips	Arrival	Departure	Two-way	Arrival	Departure	Two-way	
Trip Rate per Dwelling	0.154	0.442	0.596	0.442	0.259	0.701	
Total No. Vehicle Trips	34	97	131	97	57	154	

Based on TRICS vehicle trip rates the scheme use is likely to generate in the region of 131 and 154 two-way vehicle trips in the AM and PM Peak hours respectively.

Trip Distribution

- To establish the direction of travel residents are likely to use, the 2011 Census database has been used. The data from this database is in relation to 'Work Related Trips', whilst it is accepted that other trips are made during the peak periods, it is considered that the 'work' related trip is the primary trip purpose and as such is considered appropriate to use.
- In Section 2 of this report, **Table 2.2** identifies the Key Work Place destinations for residents living in Oakham. Based on this information 64% work within the Rutland District of which 52% of residents work within Oakham, 26% work within Langham/ Whissendine, 12% work in Cottesmore/ Empingham, 6% in Uppingham and 3% in Aldgate/ Ryhall. The remaining 36% work in areas such as Leicester, Melton, South Kesterven and Peterborough.
- 6.11 To establish the distribution of trips made by car drivers, the Work Place information has been extracted from the 2011 Census database for car drivers only. Based on this information the predicted traffic flows for the Site are expected to be 19% north on Burley Road and 81% to the south. A plan showing the potential distribution of traffic movements on the wider road network is identified in **Appendix F.**



7 IMPACT ASSESSMENT

Introduction

7.1 This section considers the impact of traffic likely to be generated by The Scheme at the proposed access arrangement to the Site via Burley Road and also the potential impact on the wider highway network. The impact on the wider highway network is not considered in detail within this report, although a detailed assessment will be provided as part of a Transport Assessment that will be submitted as part of a planning application for this Site.

Proposed Site Access Impact

- 7.2 The proposed access off Burley Road has been assessed to demonstrate that they are suitable for this scheme and will be able to accommodate the predicted levels of traffic without having a negligible impact on the highway. For this purpose of this assessment, a future year of 2026 has been used obtaining growth rates from TEMPRO together with a 2036 scenario for the end of the Local Plan period.
- 7.3 The junctions have been modelled using Junction 9 and the results are summarised in the tables below.

Table 7.1: P	roposed Site	Access -	Burley	Road
--------------	--------------	----------	---------------	------

	Site Access (B-AC)		Burley Road (C-B) Right Turn		
_	RFC	Q	RFC	Q	
2026 Proposed – AM Peak	0.28	0	0.01	0	
2036 Proposed – AM Peak	0.29	0	0.01	0	
2026 Proposed – PM Peak	0.16	0	0.04	0	
2036 Proposed – AM Peak	0.17	0	0.04	0	

7.4 The above table shows that the proposed access arrangement on Burley Road with around 220 New Homes will operate well within capacity with no delays to traffic movements along Burley Road. Details of the predicted traffic movements are included in **Appendix F**.

Wider Impact Assessment

- 7.5 Based on the distribution identified in Section 6, it is likely that the majority of trips will continue south-westwards along Burley Road and north-westwards along A606. The junctions that are likely to be affected by The Scheme include:
 - Burley Park Way/ Burley Road junction,
 - Burley Park way/ Ashwell Road junction;
 - Burley Park Way/ Lands End Way; and
 - A606 Oakham Road/ Burley Park Way / B640 junction.



- 7.6 The volume of traffic movements beyond these junctions will disperse and would not be considered significant and unlikely to be any greater than the existing variation in traffic movements that occur along these routes.
- 7.7 In terms of impact and for the purpose of this supporting Transport Appraisal a review of Google Maps traffic has been used, more detailed traffic surveys and analysis will be provided as part of a TA to support a planning application for the Site. The typical traffic for the peak periods identifies the following:

A606 Oakham Road / Burley Park Way / B640 Junction

7.8 This is a three-arm roundabout which typically has some slow traffic movement on the B640 arm of the junction during the peak periods, however this appears to be a moderately fast-moving queue and no other queues are identified on the other arms. It is therefore considered that this junction currently operates well within its design capacity and as such it is not anticipated to be adversely affected by The Scheme.

Burley Park Way / Lands End Way Junction

7.9 This is a three-arm roundabout which typically has some slow traffic queuing on the Lands End Way arm of the junction and on the A606 eastbound arm, although these appear to be fast moving queues and not of any great length as such it is likely that this junction is also operating within its design capacity and as such is not anticipated to be adversely affected by The Scheme.

Burley Park Way / Ashwell Road Junctions

7.10 This is a four-arm roundabout junction and typically does not appear to show any indications of queues forming at this junction during the peak periods and as such is considered to be operating well within its design capacity.

Burley Park Way / Burley Road Junction

- 7.11 This is a four-arm roundabout, and typically sees some minor queuing especially on the Burley Park Road western arm. These queues appear to be fast moving and as such it is considered that any delays experienced at this junction are minimal. With access being provided off Burley Road there is likely to be an increase of approximately 15% of traffic along the Burley Road arm of the junction in the peak periods which is likely to result in a reduction in capacity. However, it is considered that the impact will not be severe and should any mitigation measures be required to this junction it is likely to be in the form of entry widening to increase capacity which could be accommodated within the extent of public highway.
- 7.12 The extent of network to be assessed will be agreed with the local highway authority, however it is considered that the impact of The Scheme will not have a severe impact and that mitigation if required could be accommodated within the extent of public highway.
- 7.13 Within Oakham, the predicted traffic movements are considered to be around 20-30 two-way during the peak periods, this level of traffic is not likely to be greater than the existing daily variation in traffic movements in this area and as such no junctions within the town are considered necessary to assess in detail, although this will be agreed with the Highway



Authority. The Scheme will include a Travel Plan which will seek to encourage both residents and employees of the Site to use alternative modes and this together with the improvements to pedestrian/cycle and PT access are considered likely to encourage fewer residents to use their car than predicted.

Summary

- 7.14 This section of the report considers the potential impact of the Scheme with around 220 new homes on land off Burley Road and the suitability of the proposed access arrangement. The results show that the proposed priority junction arrangement on Burley Road will operate well within its design capacity ensuring that traffic along Burley Road will not be adversely affected.
- 7.15 In terms of impact on the wider highway network, the majority of traffic will travel to the southwest and northwest of the Site, with the traffic on the other routes being of a sufficiently low volume that it is not considered to adversely affect existing road users. It is considered that up to four junctions may require detailed analysis as part of a TA although the extent of network to be assessed will be agreed with the highway authority as part of pre-app discussions. It is considered that the traffic generated by The Scheme will be able to be suitably accommodated within the existing highway network and where necessary suitable mitigation provided.



8 SUMMARY AND CONCLUSION

- 8.1 The report has been prepared on behalf of Pigeon Capital Management 1 Ltd., and the landowner Burley Estate Farm Partnership to provide the Highway Authority with additional transport related information to support a Scheme of around 220 new homes on land to the northwest of Burley Road (B668).
- 8.2 The site is identified in the draft Reg.19 Local Plan as having an indicative capacity of 200 dwellings although the illustrative masterplan for the scheme shows there is the potential to accommodate a scheme of around 220 new homes.
- 8.3 The Site is bound to the west by Oakham Veterinary Hospital, pastureland, and Burley Park Way (A606), to the north by agricultural land, to the east by agricultural land an existing Co-op Supermarket, and to the south by Burley Road (B668). The Site is currently composed of open fields.
- 8.4 In terms of sustainability, this Transport Appraisal demonstrates that the Site benefits from being accessible to a number of existing bus services that offer services to Oakham Town Centre, surrounding villages and towns, and is also within easy cycling distance of Oakham Rail Station and other local facilities within Oakham.
- 8.5 Oakham Railway Station provides regular services to Stanstead Airport, Birmingham New Street, London St Pancras International, Cambridge, Nottingham, Norwich, and Melton Mowbray. Moreover, a good range of local facilities within Oakham are within easy walking and cycling distance. The Site therefore provides residents with a realistic alternative choice to travel to the private car; conforming to the relevant central and local planning policy guidelines.
- 8.6 The proposal includes access off Burley Road and a pedestrian/cycle/ emergency access off Ashwell Road. The proposed access off Burley Road will be in the form of a priority junction arrangement including a new ghost island right turn lane designed to conform with the relevant highway design standards. In addition new footway/cycleways would be provided linking the Site with the surrounding footway/cycleway network.
- 8.7 The car and cycle parking provided at the Site would be provided in line with Rutland County Council's parking standards.
- 8.8 The total level of traffic predicted to be generated by The Scheme is likely to be in the region of 131 two-way vehicle trips during the morning peak and 154 two-way vehicle trips in the evening peak. Distribution of the traffic has been reviewed against the 2011 Census database for work placed trips.
- 8.9 From the initial findings, this report considers that up to four junctions may be required to be reviewed in greater detail as part of a TA, although the impact of the traffic generated by The Scheme is not considered to materially affect the operation of these junctions. Any mitigation that may be required is considered to be able to be accommodated within the extent of public highway. Details in terms of trip generation, distribution and extent of impact will be discussed and agreed with the Highway Authority as part of pre-application scoping discussions associated with a planning application for the Site.
- This Transport Appraisal provides supporting evidence to support the Sites allocation within the Local Plan demonstrating the suitability for around 220 new homes in terms of accessibility,



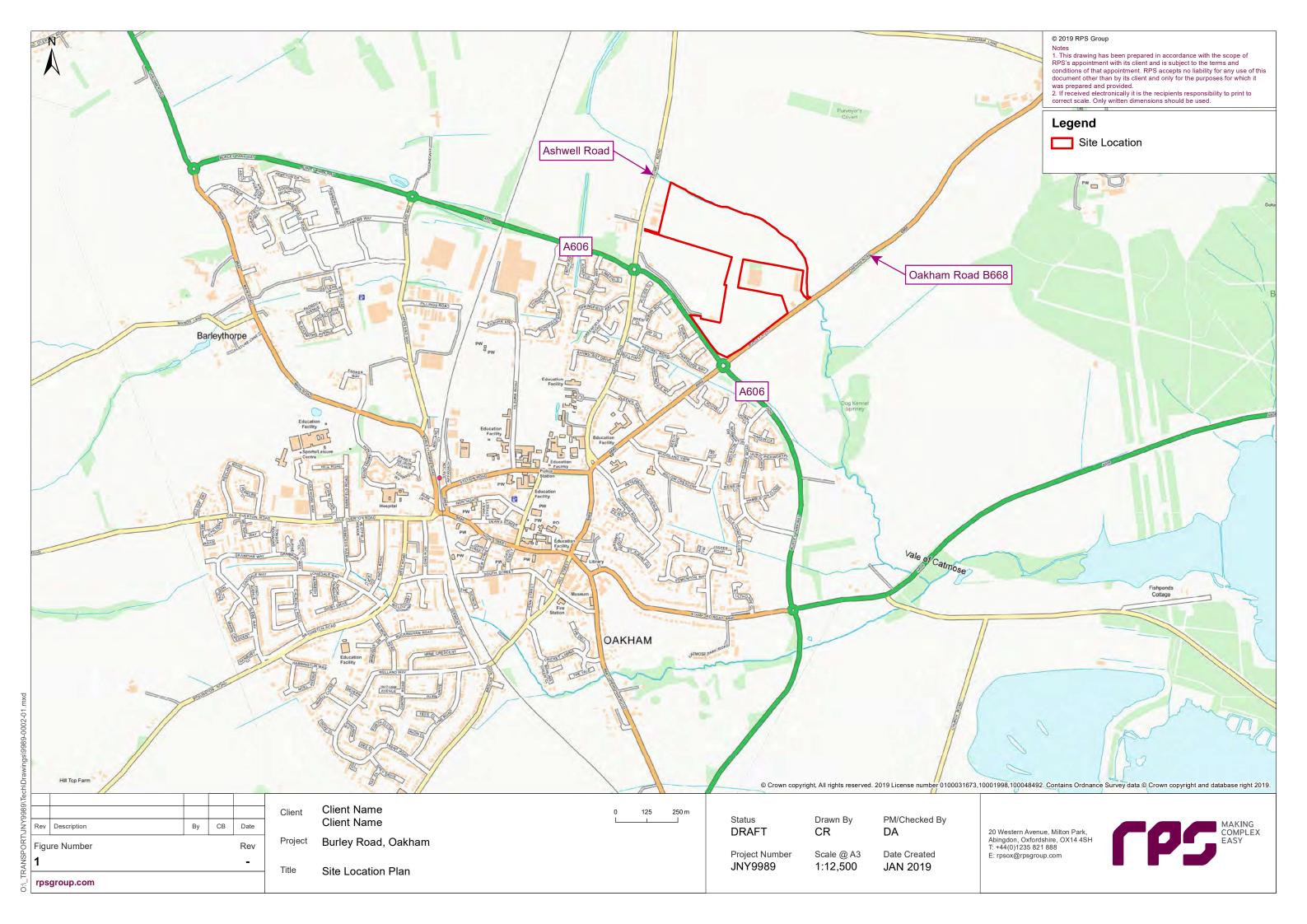
access, impact and how it confirms to planning policy. This report demonstrates that the Site is in an accessible location and that safe and suitable access can be provided. Any impact on the local highway network is considered to be able to be suitably mitigated ensuring that The Scheme will not have a severe impact.



Appendices

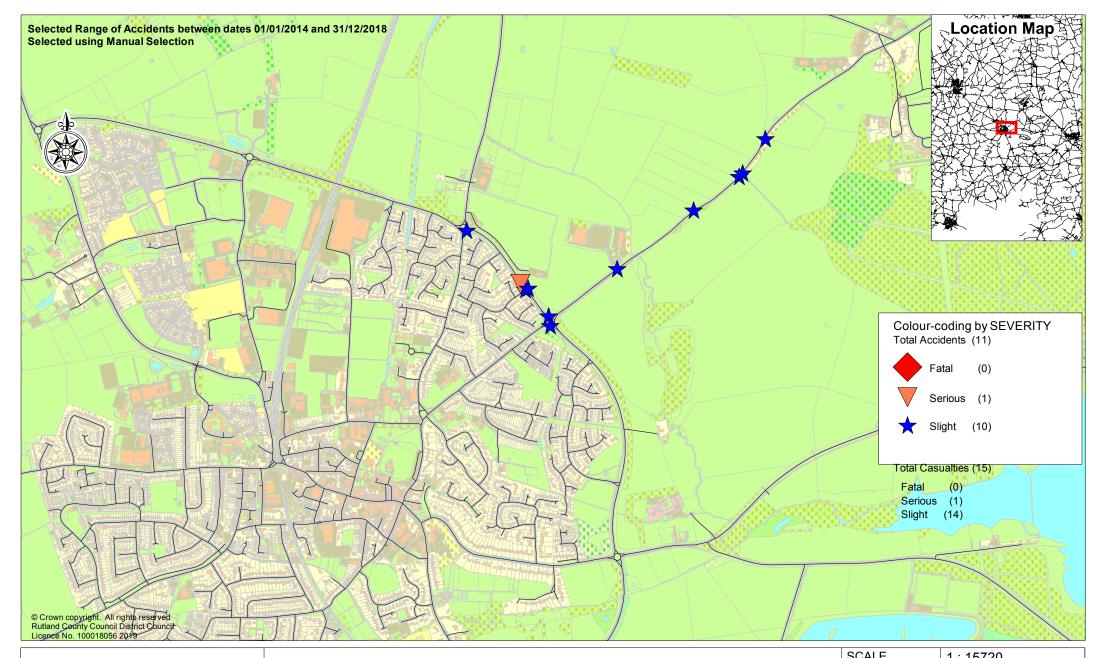


Appendix A – Site Location





Appendix B – Accident Data





	JUALL	1.13720
	DATE	24/01/2019
Dakham Jan 2019	DRAWING No.	1
	DRAWN BY	H.Baker



Crash Date: Monday, May 16, 2016 **Time of Crash:** 8:50:00 AM **Crash Reference: 2016331605058**

Highest Injury Severity: Slight Road Number: U0 Number of Casualties: 1

Highway Authority: Rutland Number of Vehicles: 2

Local Authority: Rutland County OS Grid Ro

Weather Description: Fine without high winds

Road Surface Description: Dry

Speed Limit: 60

Light Conditions: Daylight: regardless of presence of streetlights

Carriageway Hazards: None

Junction Detail: Not at or within 20 metres of junction

Junction Pedestrian Crossing: No physical crossing facility within 50 metres

Road Type: Single carriageway

Junction Control: Not Applicable



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/home/Premium_Services







Vehicles involved

Vehic Ref	e Vehicle Type	Vehicle Age	Driver Gender		Vehicle Maneouvre	First Point of Impact	· ·	Hit Object - On Carriageway	Hit Object - Off Carriageway
	2 Car (excluding private hire)	1	Male		Vehicle proceeding normally along the carriageway, not on a bend	Back	Other	None	None
	1 Car (excluding private hire)	12	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

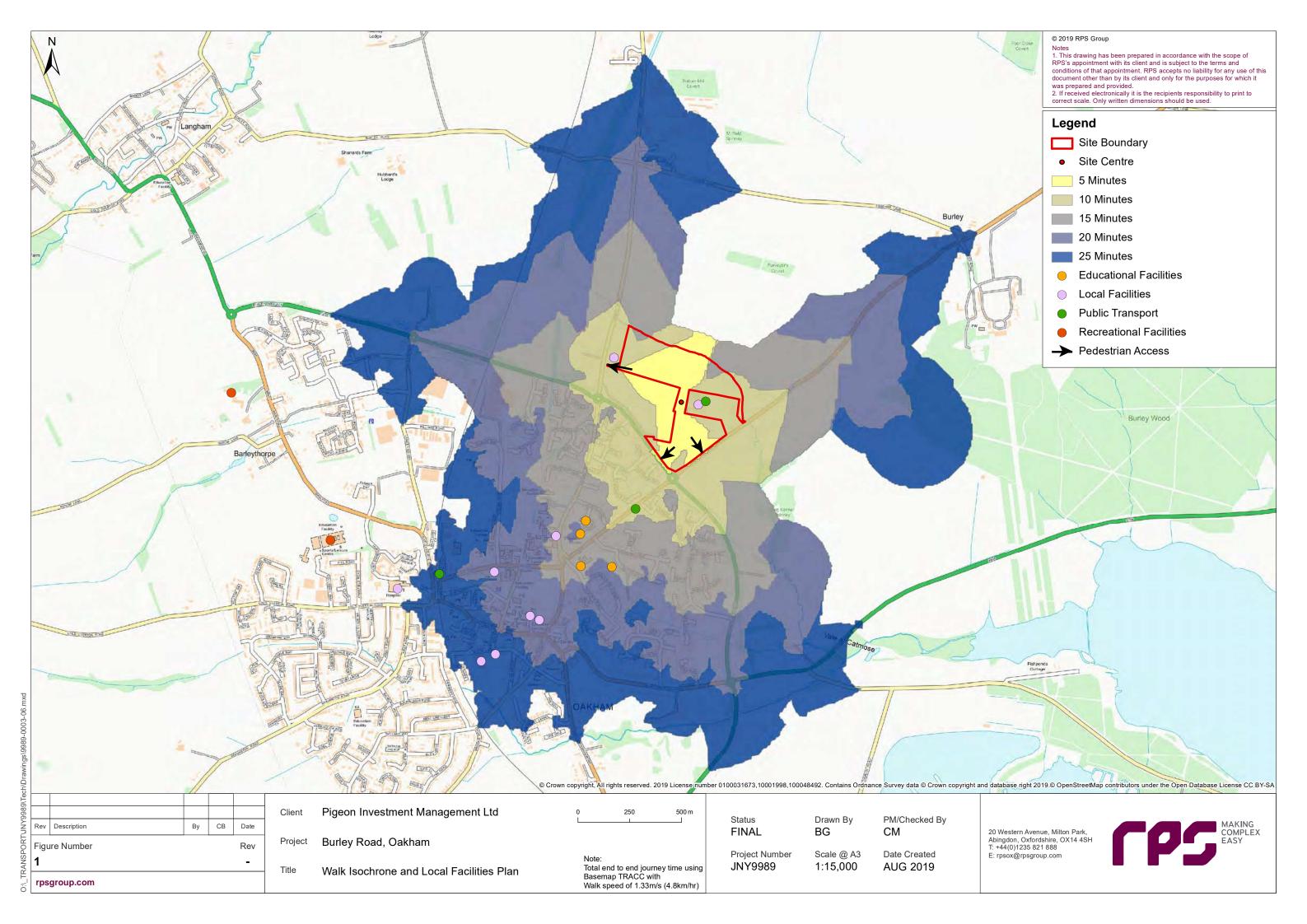
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

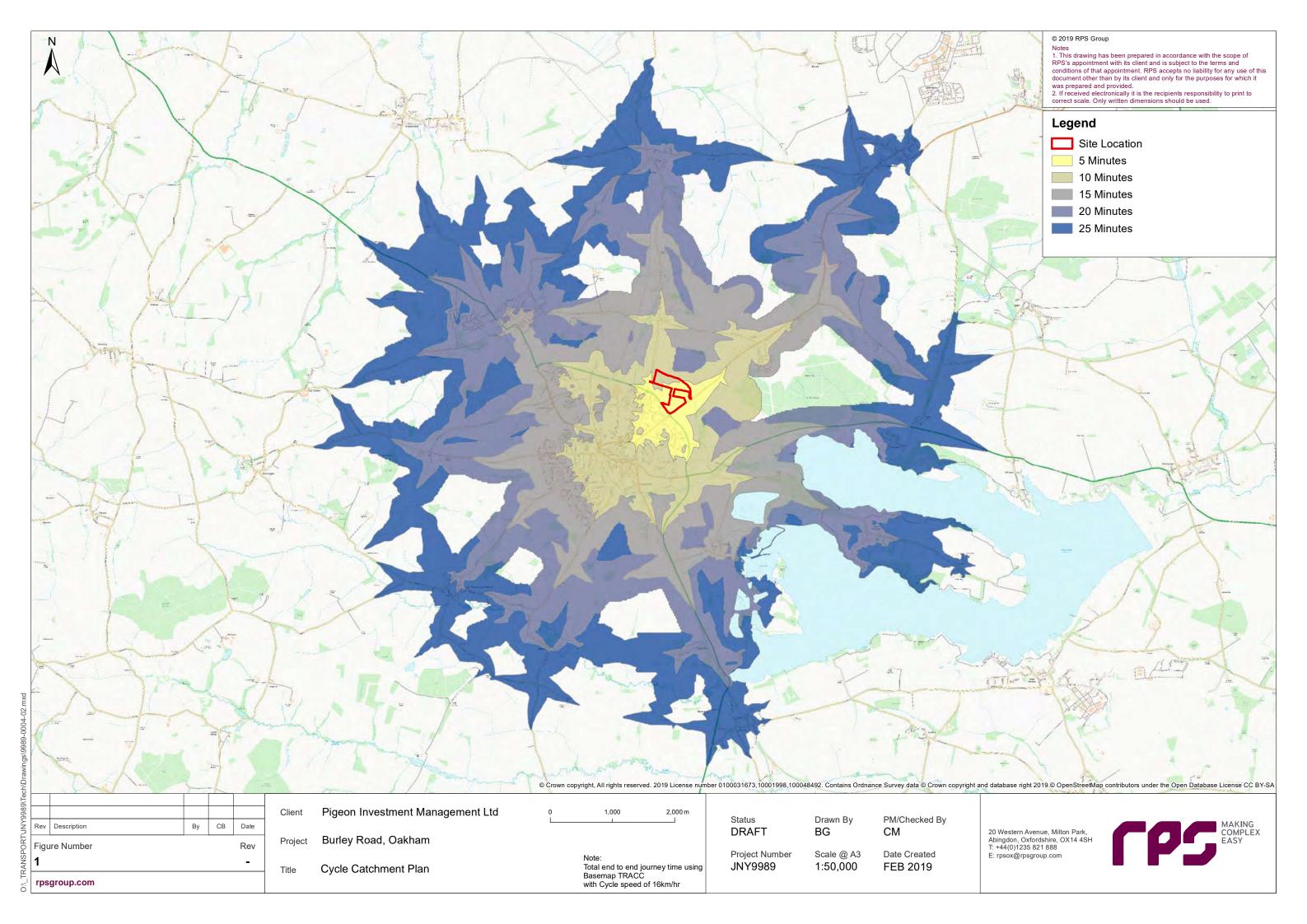
For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

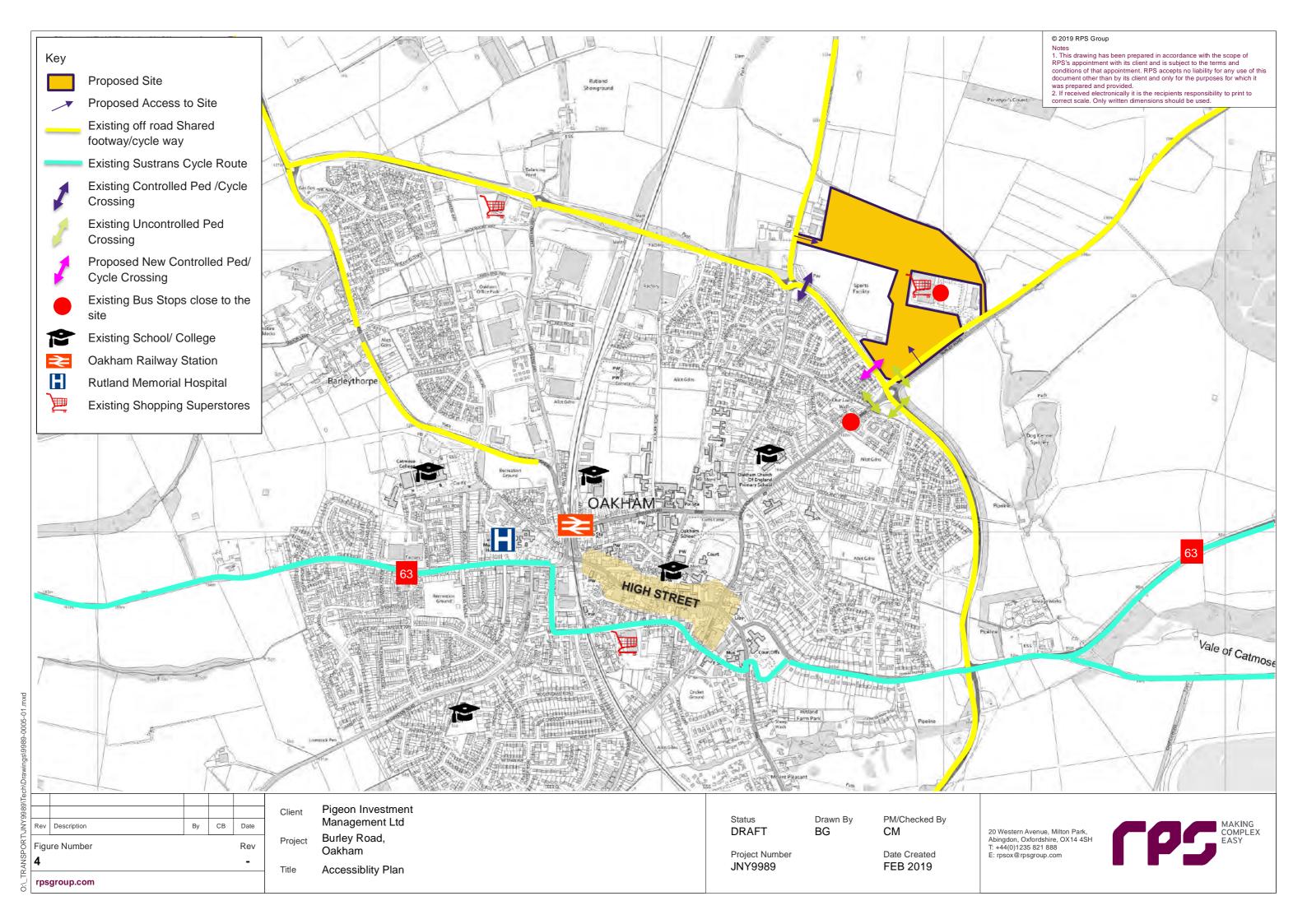




Appendix C – Walking / Cycling Catchment Plans and Accessibility Plan

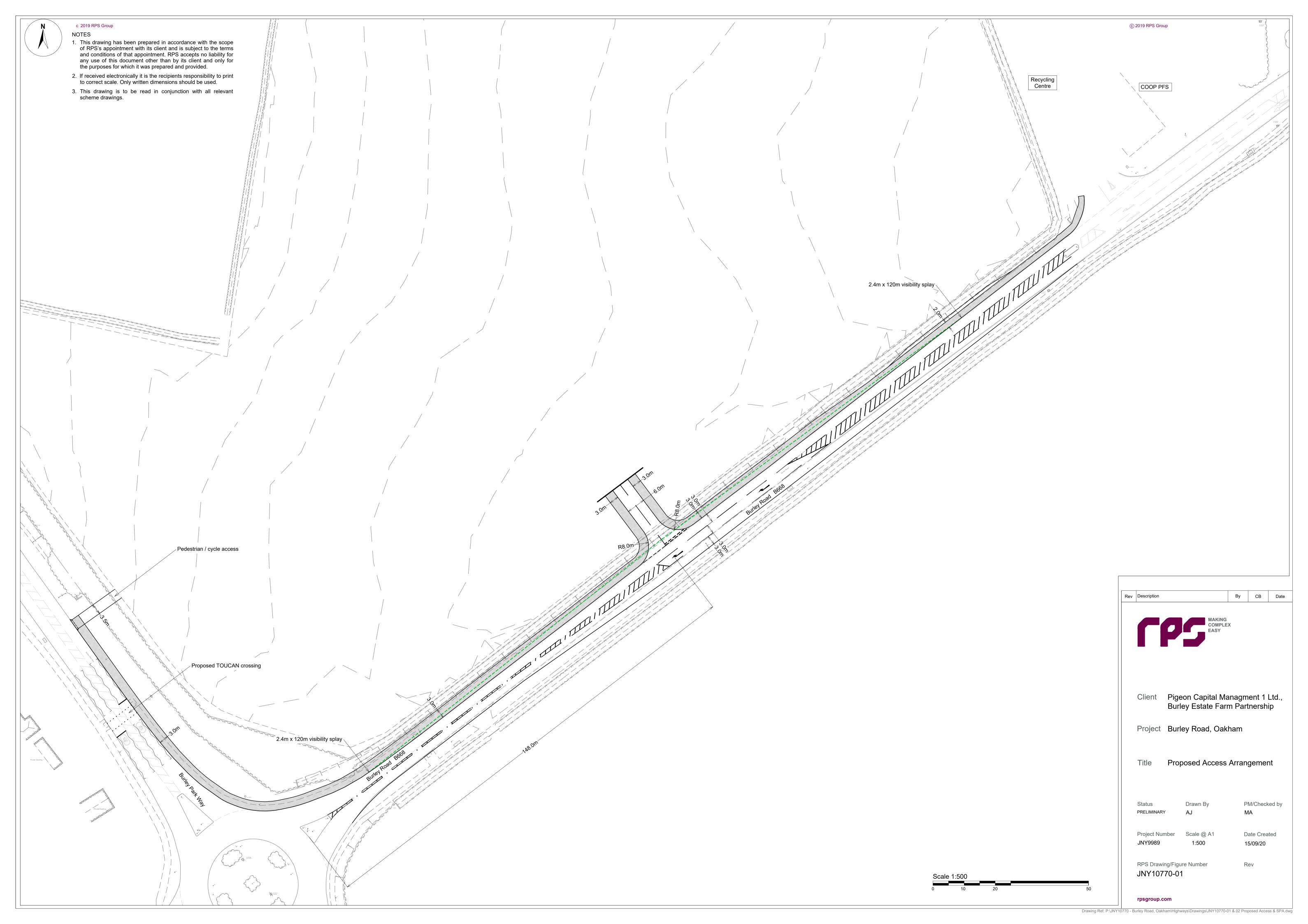


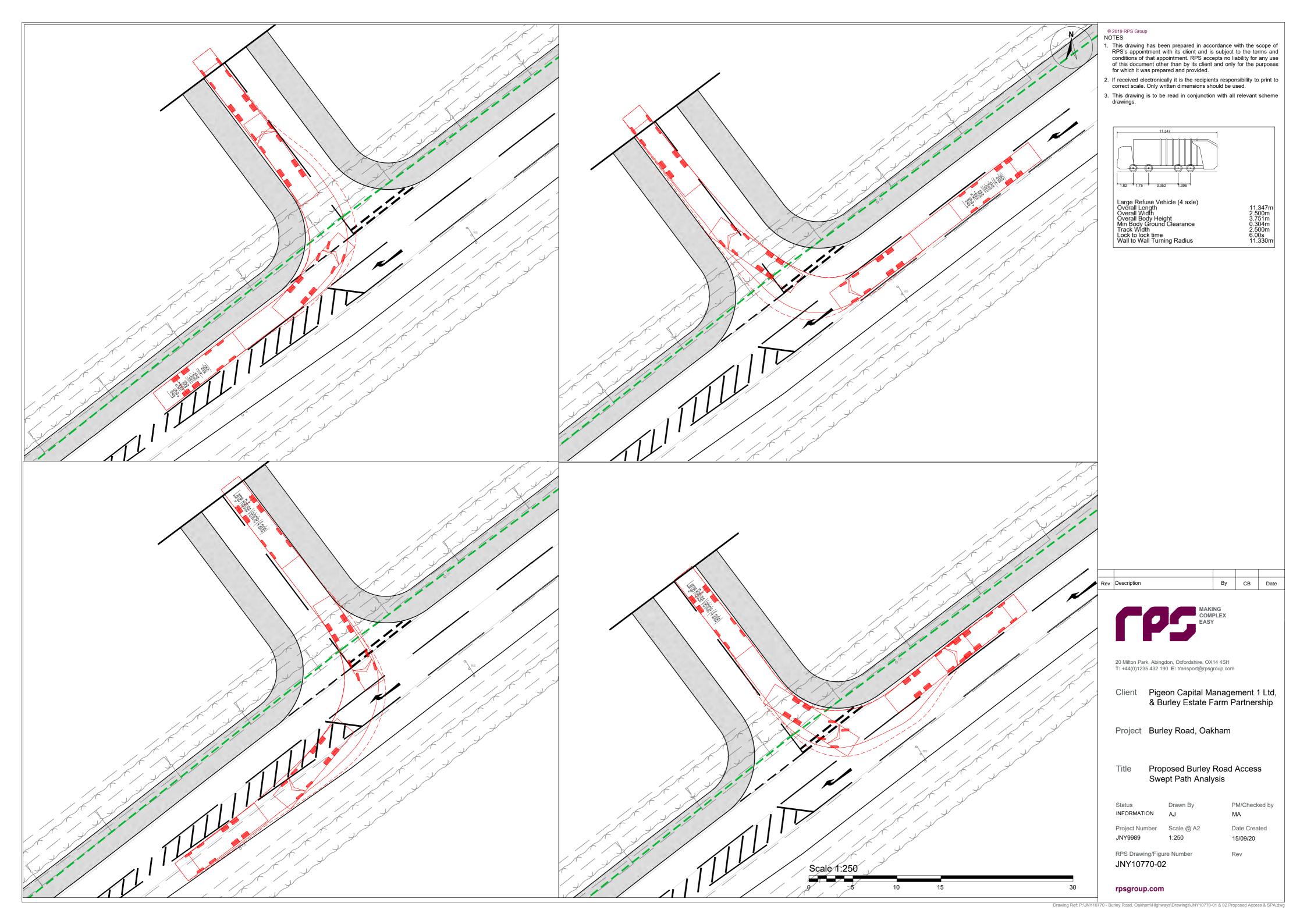






Appendix D – Proposed Access Arrangement







Appendix E – TRICS Output

TRICS 7.5.4 030219 B18.58 Database right of TRICS Consortium Limited, 2019. All rights reserved Monday 04/02/19
Page 1

RPS 1st Floor West London Licence No: 515506

Filtering Summary

Land Use 03/A RESIDENTIAL/HOUSES PRIVATELY OWNED

7

1

Selected Trip Rate Calculation Parameter Range 100-250 DWELLS

Actual Trip Rate Calculation Parameter Range 101-248 DWELLS

Date Range Minimum: 01/01/00 Maximum: 22/06/18

25,001 to 50,000

Parking Spaces Range Selected: 12 to 881 Actual: 12 to 881

Percentage of dwellings privately owned: All Surveys Included

Days of the week selected

Monday
Tuesday
Wednesday
Thursday
Friday

Main Location Types selected

Suburban Area (PPS6 Out of Centre)

2

Main Location Types selected

Suburban Area (PPS6 Out of Centre)

Edge of Town

Population <1 Mile ranges selected 5,001 to 10,000 2 10,001 to 15,000 1 15,001 to 20,000 4 20,001 to 25,000 1

Population <5 Mile ranges selected 50,001 to 75,000 1
75,001 to 100,000 2
100,001 to 125,000 3
125,001 to 250,000 3

Car Ownership <5 Mile ranges selected
0.6 to 1.0
1.1 to 1.5

PTAL Rating No PTAL Present 9

RPS 1st Floor West London Licence No: 515506

Calculation Reference: AUDIT-515506-190204-0247

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

04 EAST ANGLIA SF SUFFOLK 2 days EAST MIDLANDS 05 LN LINCOLNSHIRE 2 days **NOTTINGHAMSHIRE** NT 1 days WEST MIDLANDS 06 **STAFFORDSHIRE** ST 1 days WO WORCESTERSHIRE 1 days NORTH WEST 08 CHESHIRE CH 1 days LC LANCASHIRE 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings Actual Range: 101 to 248 (units:) Range Selected by User: 100 to 250 (units:)

Parking Spaces Range: Selected: 12 to 881 Actual: 12 to 881

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 22/06/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday 2 days
Tuesday 2 days
Wednesday 2 days
Thursday 2 days
Friday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 9 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2 Edge of Town 7

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 8
Out of Town 1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Licence No: 515506

RPS 1st Floor West London

Secondary Filtering selection:

Use Class:

C3 9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	4 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	3 days
125,001 to 250,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0 3 days 1.1 to 1.5 6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 9 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 9 days

This data displays the number of selected surveys with PTAL Ratings.

6.00 hect

150

RPS 1st Floor West London Licence No: 515506

LIST OF SITES relevant to selection parameters

CH-03-A-02 6.42 hect Site area: HOUSES/FLATS Number of dwellings: Development Name: 174 Location: **CREWE** Housing density: 36 Postcode: CW1 5LZ Total Bedrooms: 440 14/10/08 Main Location Type: Edge of Town Survey Date: Sub-Location Type: Residential Zone Survey Day: Tuesday PTAL: Parking Spaces: 489 n/a

Site(2): LC-03-A-29 Site area: 7.60 hect DETACHED/SEMI D. Number of dwellings: Development Name: 185 Location: **BLACKBURN** Housing density: 28 Total Bedrooms: Postcode: BB1 8NW

Survey Date: Main Location Type: Edge of Town 10/06/04 Sub-Location Type: Residential Zone Survey Day: Thursday Parking Spaces: 741 PTAL:

LN-03-A-01 Site(3): Site area: Development Name: MIXED HOUSES Number of dwellings:

Location: LINCOLN Housing density: 31 Postcode: LN5 8SW Total Bedrooms: 520 Survey Date: 15/05/07 Main Location Type: Edge of Town Sub-Location Type: Residential Zone Survey Day: Tuesday

Parking Spaces: PTAL: 736 Site(4): LN-03-A-02 8.79 hect

Site area: MIXED HOUSES Number of dwellings: Development Name: 186 Location: LINCOLN Housing density: 26 Total Bedrooms: Postcode: LN6 8BT 562

Suburban Area (PPS6 Out of Centre) Survey Date: 14/05/07 Main Location Type:

Sub-Location Type: Residential Zone Survey Day: Monday Parking Spaces: PTAL: 768

Site(5): NT-03-A-03 Site area: 7.53 hect Number of dwellings: SEMI DETACHED Development Name: 166

Location: KIRKBY-IN-ASHFIELD Housing density: 25 NG17 8HA Total Bedrooms: 498 Postcode: Main Location Type: Edge of Town Survey Date: 28/06/06 Survey Day: Parking Spaces: Residential Zone Wednesday Sub-Location Type:

PTAL: 267

7.10 hect Site(6): SF-03-A-02 Site area: Number of dwellings: Development Name: SEMI DET./TERRACED 230

Housing density: Location: **IPSWICH** 39 Total Bedrooms: Postcode: IP2 9DP 606 Main Location Type: Edge of Town Survey Date: 24/05/07 Survey Day: Sub-Location Type: Residential Zone Thursday

PTAL: n/a Parking Spaces: 570

SF-03-A-03 3.60 hect Site area: Site(7): Development Name: MIXED HOUSES Number of dwellings: 101 **BURY ST EDMUNDS** Location: Housing density: 30

IP31 1TA Total Bedrooms: Postcode: Edge of Town Survey Date: 15/05/06 Main Location Type: Sub-Location Type: Out of Town Survey Day: Monday

Parking Spaces: 438 PTAL:

Site(8): ST-03-A-07 Site area: 9.00 hect

Development Name: **DETACHED & SEMI-DETACHED** Number of dwellings: 248 Location: Housing density: 173 STAFFORD Postcode: ST16 1GZ Total Bedrooms: 821 Main Location Type: Edge of Town Survey Date: 22/11/17 Survey Day: Residential Zone Sub-Location Type: Wednesday

PTAL: Parking Spaces: 881

WO-03-A-03 Site(9): Site area: 5.50 hect Development Name: **DETACHED** Number of dwellings: 138

Location: **KIDDERMINSTER** Housing density: 34 Postcode: DY11 6BA Total Bedrooms:

Main Location Type: Suburban Area (PPS6 Out of Centre) Survey Date: 05/05/06

Residential Zone Survey Day: Sub-Location Type: Friday Parking Spaces: PTAL: 434

Trip Rates for I	Key Periods	Trips per 1 dwells DWELLS			
Period	Inbound	Outbound	Total		
0800-0900	0.154	0.442	0.596		
1700-1800	0.442	0.259	0.701		

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES	,	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	175	0.108	9	175	0.316	9	175	0.424
08:00 - 09:00	9	175	0.154	9	175	0.442	9	175	0.596
09:00 - 10:00	9	175	0.174	9	175	0.226	9	175	0.400
10:00 - 11:00	9	175	0.153	9	175	0.186	9	175	0.339
11:00 - 12:00	9	175	0.192	9	175	0.191	9	175	0.383
12:00 - 13:00	9	175	0.217	9	175	0.210	9	175	0.427
13:00 - 14:00	9	175	0.189	9	175	0.168	9	175	0.357
14:00 - 15:00	9	175	0.200	9	175	0.199	9	175	0.399
15:00 - 16:00	9	175	0.295	9	175	0.200	9	175	0.495
16:00 - 17:00	9	175	0.343	9	175	0.215	9	175	0.558
17:00 - 18:00	9	175	0.442	9	175	0.259	9	175	0.701
18:00 - 19:00	9	175	0.292	9	175	0.253	9	175	0.545
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00	·								
23:00 - 24:00									
Total Rates:			2.759			2.865			5.624

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

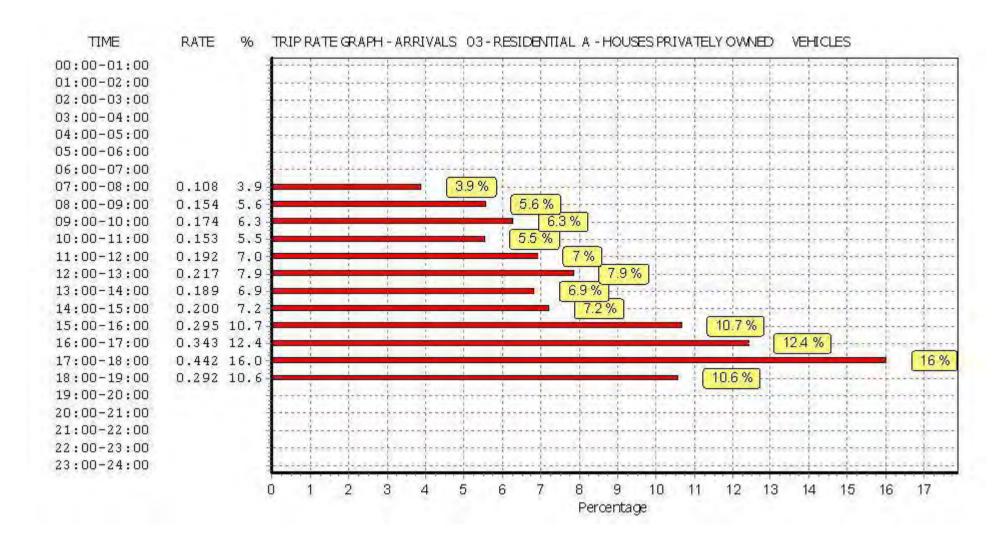
The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

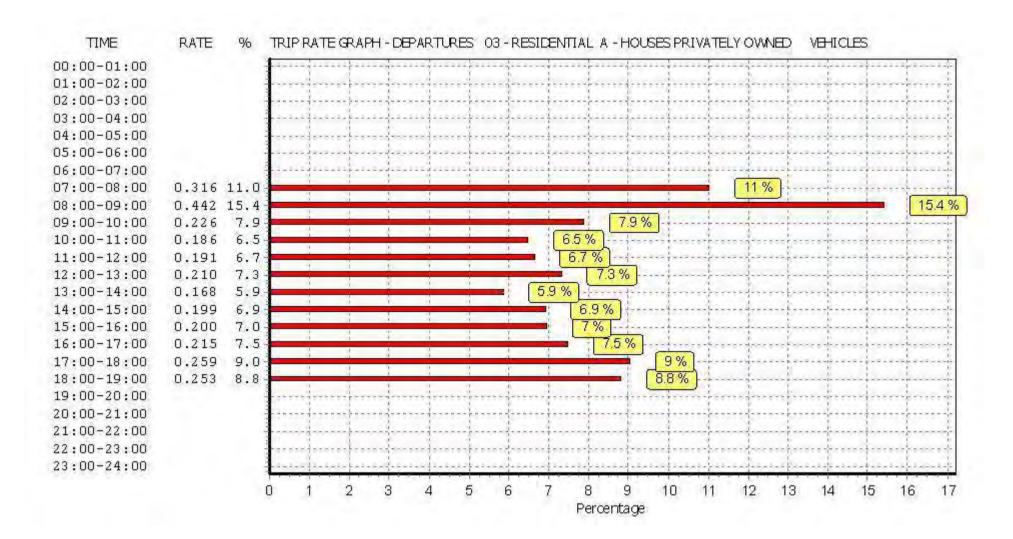
Parameter summary

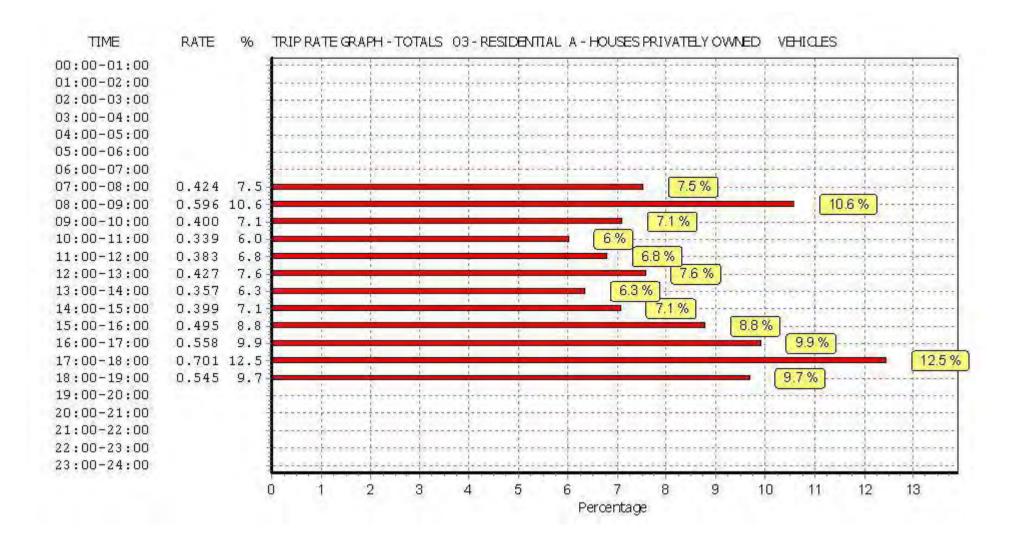
Trip rate parameter range selected: 101 - 248 (units:)
Survey date date range: 01/01/00 - 22/06/18

Number of weekdays (Monday-Friday): 9
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 7

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.







RPS 1st Floor West London

Licence No: 515506

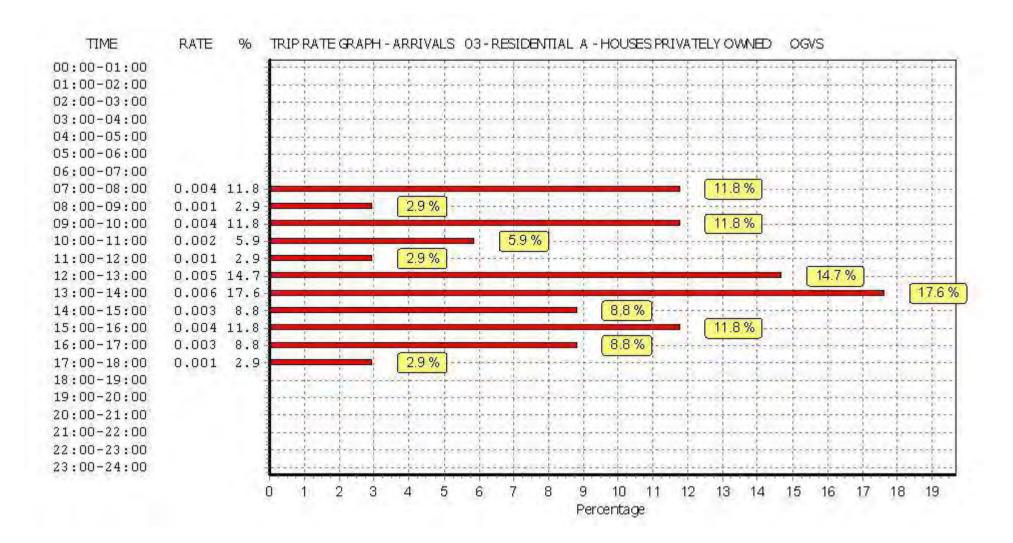
TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED OGVS

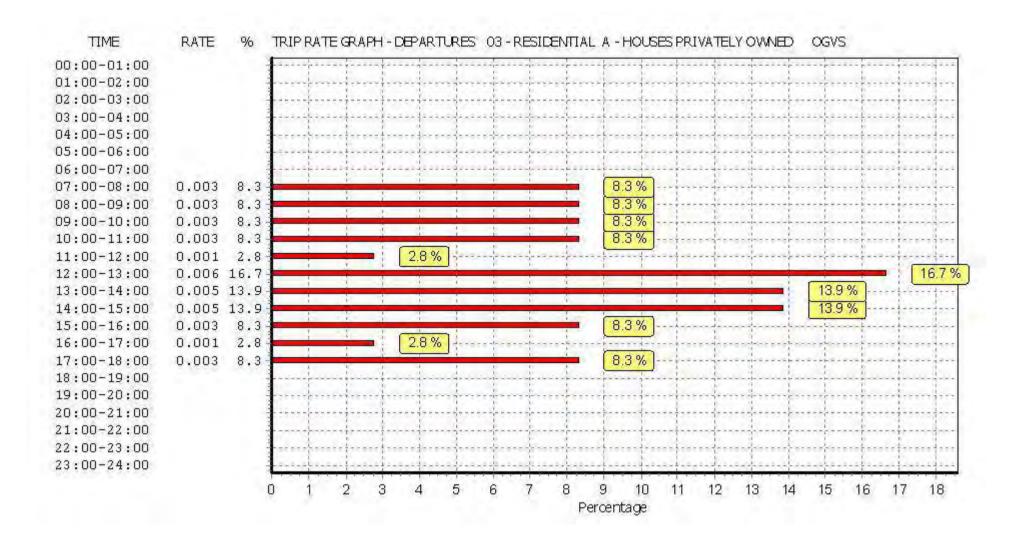
Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

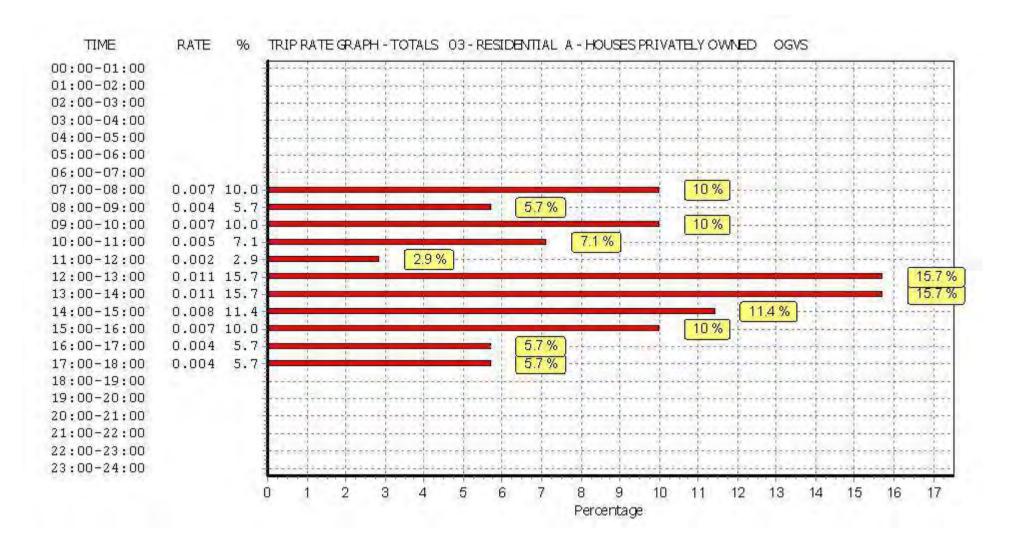
	ARRIVALS				DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	175	0.004	9	175	0.003	9	175	0.007	
08:00 - 09:00	9	175	0.001	9	175	0.003	9	175	0.004	
09:00 - 10:00	9	175	0.004	9	175	0.003	9	175	0.007	
10:00 - 11:00	9	175	0.002	9	175	0.003	9	175	0.005	
11:00 - 12:00	9	175	0.001	9	175	0.001	9	175	0.002	
12:00 - 13:00	9	175	0.005	9	175	0.006	9	175	0.011	
13:00 - 14:00	9	175	0.006	9	175	0.005	9	175	0.011	
14:00 - 15:00	9	175	0.003	9	175	0.005	9	175	0.008	
15:00 - 16:00	9	175	0.004	9	175	0.003	9	175	0.007	
16:00 - 17:00	9	175	0.003	9	175	0.001	9	175	0.004	
17:00 - 18:00	9	175	0.001	9	175	0.003	9	175	0.004	
18:00 - 19:00	9	175	0.000	9	175	0.000	9	175	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00	_									
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.034			0.036			0.070	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.







RPS 1st Floor West London

Licence No: 515506

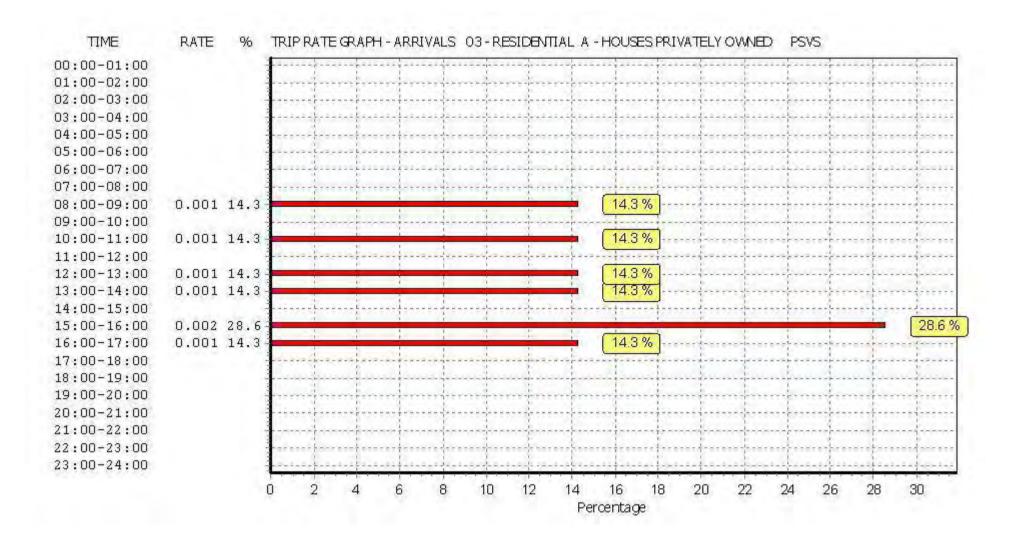
TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED PSVS

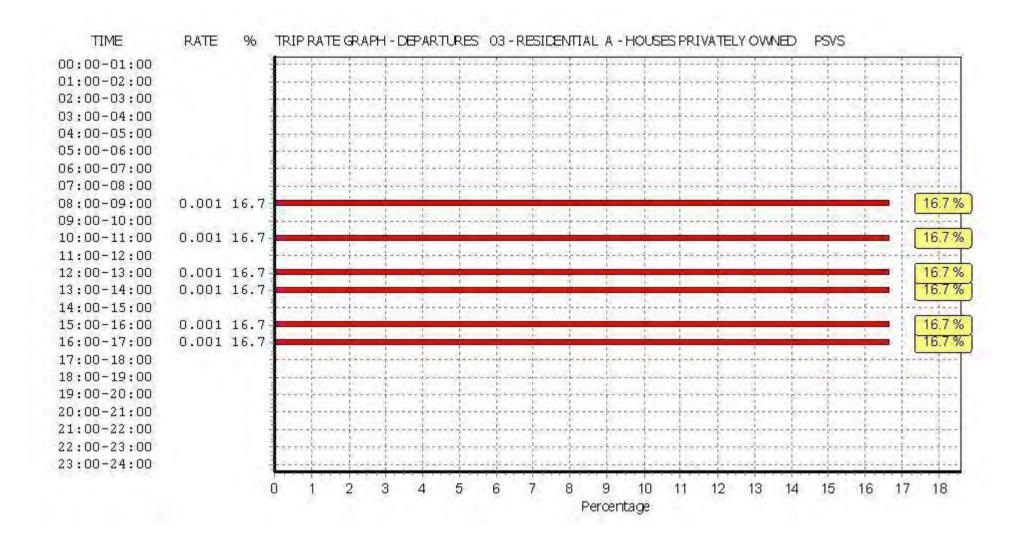
Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

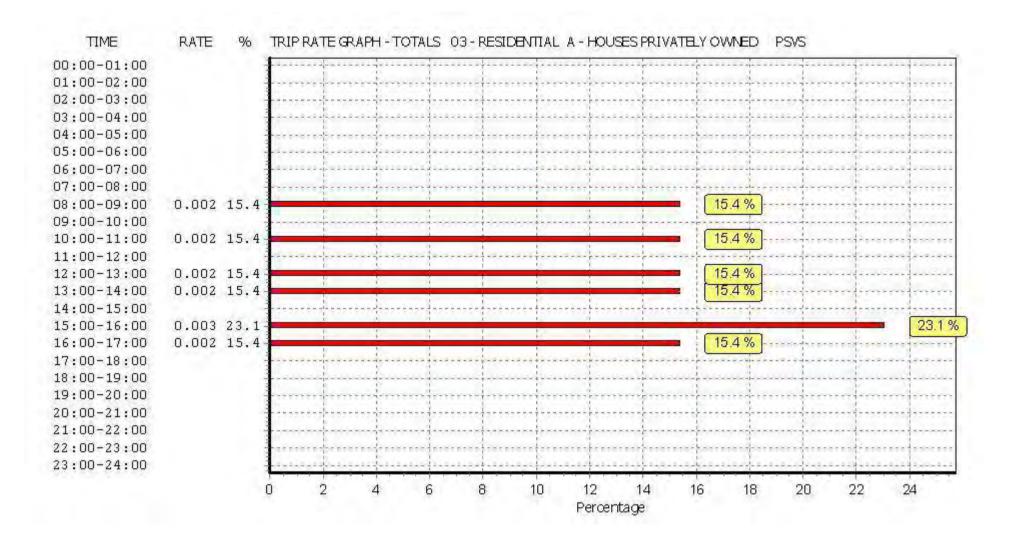
	ARRIVALS				DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	175	0.000	9	175	0.000	9	175	0.000	
08:00 - 09:00	9	175	0.001	9	175	0.001	9	175	0.002	
09:00 - 10:00	9	175	0.000	9	175	0.000	9	175	0.000	
10:00 - 11:00	9	175	0.001	9	175	0.001	9	175	0.002	
11:00 - 12:00	9	175	0.000	9	175	0.000	9	175	0.000	
12:00 - 13:00	9	175	0.001	9	175	0.001	9	175	0.002	
13:00 - 14:00	9	175	0.001	9	175	0.001	9	175	0.002	
14:00 - 15:00	9	175	0.000	9	175	0.000	9	175	0.000	
15:00 - 16:00	9	175	0.002	9	175	0.001	9	175	0.003	
16:00 - 17:00	9	175	0.001	9	175	0.001	9	175	0.002	
17:00 - 18:00	9	175	0.000	9	175	0.000	9	175	0.000	
18:00 - 19:00	9	175	0.000	9	175	0.000	9	175	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.007			0.006			0.013	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.







RPS 1st Floor West London

Licence No: 515506

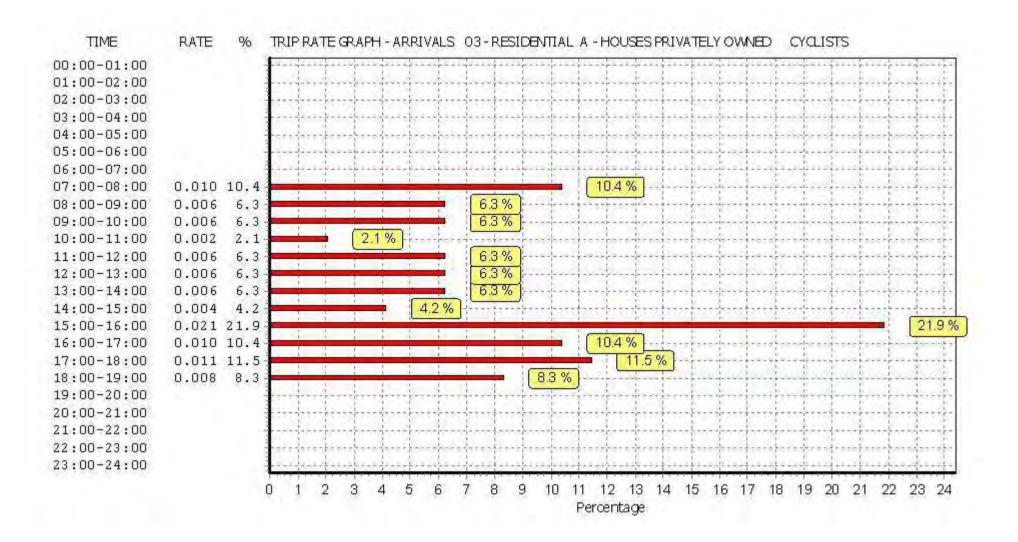
TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED CYCLISTS

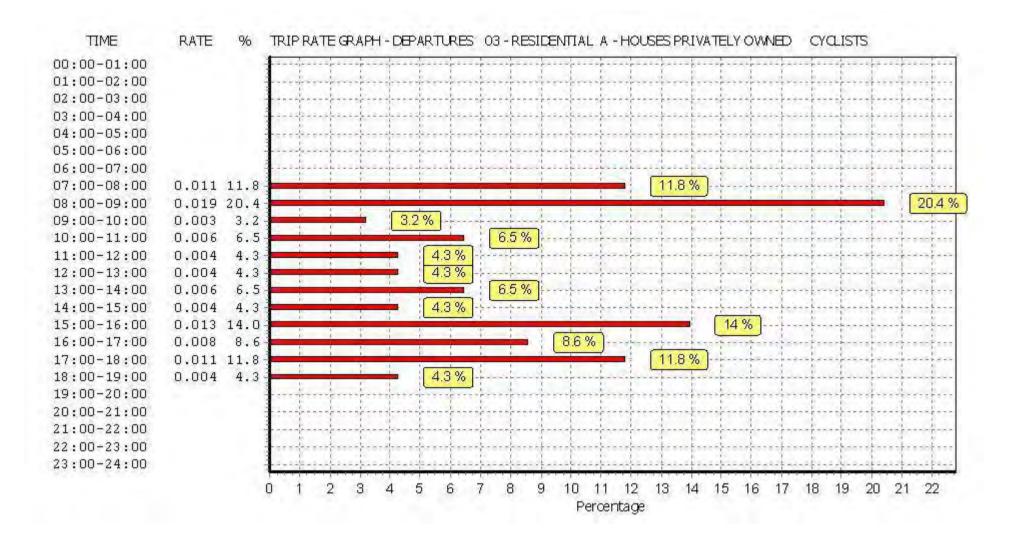
Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

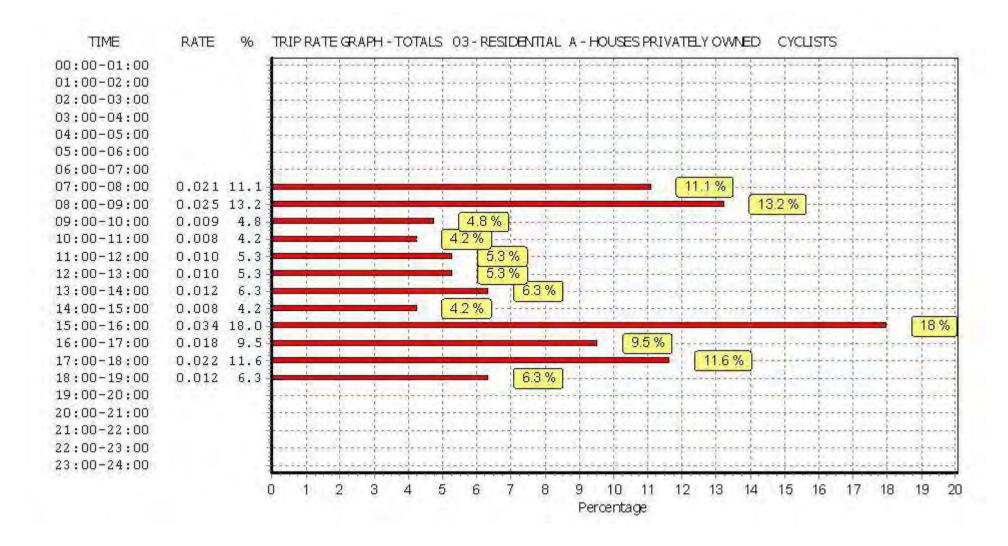
	ARRIVALS			I	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	175	0.010	9	175	0.011	9	175	0.021	
08:00 - 09:00	9	175	0.006	9	175	0.019	9	175	0.025	
09:00 - 10:00	9	175	0.006	9	175	0.003	9	175	0.009	
10:00 - 11:00	9	175	0.002	9	175	0.006	9	175	0.008	
11:00 - 12:00	9	175	0.006	9	175	0.004	9	175	0.010	
12:00 - 13:00	9	175	0.006	9	175	0.004	9	175	0.010	
13:00 - 14:00	9	175	0.006	9	175	0.006	9	175	0.012	
14:00 - 15:00	9	175	0.004	9	175	0.004	9	175	0.008	
15:00 - 16:00	9	175	0.021	9	175	0.013	9	175	0.034	
16:00 - 17:00	9	175	0.010	9	175	0.008	9	175	0.018	
17:00 - 18:00	9	175	0.011	9	175	0.011	9	175	0.022	
18:00 - 19:00	9	175	0.008	9	175	0.004	9	175	0.012	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.096			0.093			0.189	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.









Appendix F – Traffic Flow Diagrams





