

Land at Golden End Knowle, Solihull

Statement in Support of Representations to
the Solihull Draft Local Plan Supplementary
Consultation January 2019

Submitted on behalf of
Golden End Farms

March 2019



Contents

1. Introduction	3
2. The Opportunity at Golden End	4
3. Green Belt Assessment	7
4. Summary of Technical Issues and Site Constraints.....	11
5. Summary and Conclusions	14

Appendices:

Appendix 1 – Site Location Plan

Appendix 2 – Constraints Plan

Appendix 3 – Concept Masterplan

Appendix 4 – Transport Note

Appendix 5 – Landscape and Visual Appraisal

Appendix 6 – Extended Phase 1 Habitat Survey

Statement Produced by:

Delta Planning

1 Chester Court, High Street,

Knowle, Solihull, B93 0LL

Tel: 0121 285 1244

www.deltaplanning.co.uk

March 2019

1. Introduction

- 1.1. This document has been prepared to support representations to the Solihull Local Plan Supplementary Consultation published in January 2019. It is submitted on behalf of the owners of Golden End Farms, in relation to land at Golden End, north of Kenilworth Road, Knowle, Solihull.
- 1.2. This document provides updated information on our client's land and shows that the site provides a suitable and sustainable option for growth. It should therefore be considered as an additional housing allocation through the Local Plan Review.
- 1.3. This statement should be read alongside the main objection response to the consultation document and evidence base.
- 1.4. The scope of this report is as follows:
 - The Opportunity at Golden End
 - Green Belt Assessment
 - Overview of technical issues and constraints
 - Summary and conclusions

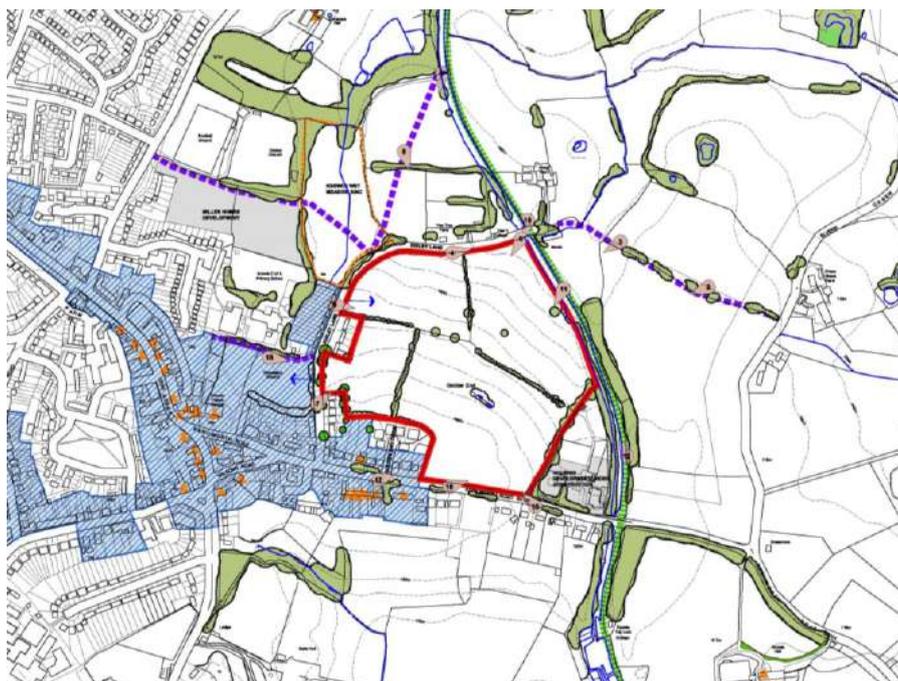
2. The Opportunity at Golden End

- 2.1. The land north of Kenilworth Road known as Golden End Farm is being promoted as an opportunity to provide an exemplar sustainable village expansion to help meet the Borough's housing needs. It is being promoted by the landowners, who are one of Knowle's oldest families.

The Site

- 2.2. The land in total extends to approximately 15 hectares (37 acres) and is bounded by Kenilworth Road to the south, by the Grand Union Canal to the east and by Kixley Lane to the west and north. A location plan of the site is provided within Appendix 1.
- 2.3. The site is well contained by permanent features including roads and the canal, which provide a long term defensible boundary. Accordingly, its development would not expose further Green Belt areas around this part of the village to pressure for development. An overall assessment of the site's contribution towards the Green Belt is provided in Section 3 of this Statement.
- 2.4. The site is currently Grade 3 arable farmland. It is relatively level, although the land falls from west to east as it approaches the canal. As shown on the Constraints Plan (Appendix 2), the land is for the most part free of trees except for the boundaries. Field hedges split the site into approximately 4 main parcels of land. Existing trees along Kixley Lane are protected by a TPO.

Figure 1: Site Constraints Plan (See Appendix 2 for full size version)



- 2.5. The site is by far the most accessible site to the village shops and community facilities of any of the possible growth locations around Knowle. It is located immediately east of Knowle Primary Academy, and within 5 minutes walk of the High Street. It is also well serviced by a principal bus route from Solihull to Coventry. This high level of accessibility has been recognised by the Council's Accessibility Mapping Report published in conjunction with the Draft Solihull Local Plan review.

The Proposal

- 2.6. The site is suitable for a mix of market and affordable housing together with a new village park, comprising playing fields, ecological habitat and a canal side walk/cycleway. An illustrative masterplan has been prepared and is included as Appendix 3.

Figure 2: Concept Masterplan (See Appendix 3 for full size version)



- 2.7. The masterplan is landscape led and provides for the following:
- Protection of existing boundary hedges and trees;
 - Protection of views from the public footpath network to Knowle church;
 - Protection of the area of nature conservation north of Kixley Lane;
 - Opportunity for a new village park including new playing fields, public open space and ecological habitat;

- Opportunity to create new pedestrian/cycle routes across the site linking to the adjacent public footpath network, including a new canal-side walk along the western bank which does not currently exist along this section of the canal;
 - Opportunity to improve facilities and access/parking for Knowle Primary Academy, helping to relieve parking issues on Kixley Lane, and providing additional public parking close to the village.
 - Opportunity to provide a walkers car park close to the canal bridge to relieve parking pressures by Knowle Locks.
- 2.8. The gross developable area identified through the initial masterplan is some 9 hectares (22 acres). This could provide for at least 250 homes. A site of this size would provide the opportunity to cater for the full range of housing needs, from starter homes and live-work units, through to accommodation for the elderly and bungalows. It is proposed that the site could be developed to the highest environmental credentials using the latest sustainable/low carbon designs.
- 2.9. The remaining 6 hectares (15 acres) of the site would be given over to parkland, community/school playing fields and public open space.
- 2.10. Vehicular access to the site would be taken from Kenilworth Road. Kixley Lane would not be used for vehicular access except possibly for emergency vehicles in the event that the main access was blocked.
- 2.11. Pedestrian access would be provided to ensure maximum connectivity between the site and the village. It is envisaged that 3 pedestrian access points would be provided off Kenilworth Road; one at the western edge of the site, one at the eastern edge and one at the vehicular access. Pedestrian access would also be provided via Kixley Lane, and to the proposed canal side park.

3. Green Belt Assessment

National Green Belt Policy

- 3.1. The National Planning Policy Framework (NPPF) reiterates previous national policy relating to the Green Belt and confirms at Paragraph 79 that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open.
- 3.2. Paragraph 80 of the NPPF sets out the five purposes Green Belts serve:
 - check the unrestricted sprawl of large built-up areas;
 - prevent neighbouring towns merging into one another;
 - assist in safeguarding the countryside from encroachment;
 - preserve the setting and special character of historic towns; and
 - assist in urban regeneration, by encouraging the recycling of derelict and other urban land.
- 3.3. The NPPF emphasises at Paragraph 83 that local planning authorities should identify Green Belt boundaries in their Local Plans. It goes on to state that once established, Green Belt boundaries should only be altered in exceptional circumstances through the preparation or review of the Local Plan.
- 3.4. Paragraph 84 of the NPPF notes that *“when drawing up or reviewing Green Belt boundaries local planning authorities should take account of the need to promote sustainable patterns of development”*.
- 3.5. The NPPF at Paragraph 85 sets out a number of criteria that should be considered when defining Green Belt boundaries including:
 - ensure consistency with the Local Plan strategy for meeting identified requirements for sustainable development;
 - not include land which it is unnecessary to keep permanently open;
 - satisfy themselves that Green Belt boundaries will not need to be altered at the end of the development plan period; and
 - define boundaries clearly, using physical features that are readily recognisable and likely to be permanent.

Strategic Green Belt Assessment

- 3.6. As part of the Local Plan Review, the Council has commissioned a Strategic Green Belt Assessment, which was undertaken by Atkins.
- 3.7. The Strategic Green Belt Assessment has divided the Borough into smaller refined land parcels at the edge of the urban area and villages and a number of broad areas. An assessment was then undertaken of these refined land parcels and broad areas against the first four of the five purposes that Green Belts serve. All parcels are considered to perform equally well against the fifth purpose.
- 3.8. The site at Golden End has been included in Refined Parcel RP37, which is defined by Hampton Road to the north, the Grand Union Canal to the east, Kenilworth Road to the south and the built up edge of Knowle to the west.
- 3.9. The Strategic Green Belt Assessment considers that Refined Parcel RP37 performs highly against Green Belt Purpose 1 (check unrestricted sprawl of large built-up areas), Purpose 3 (assist in safeguarding the countryside from encroachment) and Purpose 4 (preserve the setting and special character of historic towns) and moderately against Purpose 2 (prevent neighbouring towns merging into one another).
- 3.10. We strongly disagree with the findings of the Strategic Green Belt Assessment as outlined in full within the main response to the Local Plan Review. Our own review of the site against the five purposes of Green Belts is set out below.

Assessment against the five purposes of Green Belt

Purpose 1: To check the unrestricted sprawl of large built-up areas

- 3.11. As outlined in Section 2 of this statement, the site is clearly contained by physical features with the Grand Union Canal to the east and Kixley Lane to the north forming a strong boundary. The western and southern edge of the site, adjacent to the existing built-up area of Knowle, is much weaker as ribbon development has occurred along these boundaries over the years.
- 3.12. The site's removal from the Green Belt and development for residential uses would establish a new clearly identifiable and long term defensible boundary to the Green Belt restricting the further urban sprawl of the built-up area of Knowle into the open countryside to the east of the canal or north of Kixley Lane.
- 3.13. Contrary to the Strategic Green Belt Assessment's findings we therefore contend that this is a low performing site with regard to Purpose 1.

Purpose 2: To prevent neighbouring towns from merging into one another

- 3.14. The nearest large settlement to the east of Knowle is Balsall Common, approximately 4km to the east of Knowle. The release of the Golden End Farm site from the Green Belt would not therefore lead to any perception of coalescence between settlements.

Purpose 3: To assist in safeguarding the countryside from encroachment

- 3.15. The site is currently in agricultural use, but it is immediately bounded by the built-up area of Knowle to the west and south. Kixley Lane to the north and particularly the Grand Union Canal to the east separate the site from the wider countryside beyond.
- 3.16. The site is well contained by permanent features and its release would create a long term defensible boundary limiting the risk of further encroachment into the countryside to the east and north. Contrary to the findings of the Strategic Green Belt Assessment it is therefore considered that the site performs moderately against Purpose 2.

Purpose 4: To preserve the setting and special character of historic towns

- 3.17. It is acknowledged that Knowle is a historic settlement that should be protected. The concept masterplan provided with this submission demonstrates that the site can be developed in a manner so as to preserve the setting of the historic core of the village. This can be achieved through the retention of existing boundary features, and avoiding development on the northern part of the site, where there is potential for views to the village to be adversely affected if the land were not to be kept open.
- 3.18. Contrary to the findings of the Strategic Green Belt Assessment, it is therefore considered that the site performs only moderately against Purpose 4, not highly.

Purpose 5: To assist in urban regeneration by encouraging the recycling of derelict and other urban land

- 3.19. As acknowledged by the Strategic Green Belt Assessment, any Green Belt release will conflict with this aim. In this regard the land at Golden End is no different from any other greenfield Green Belt release site.

Summary and Conclusions

- 3.20. Contrary to the findings of the Strategic Green Belt Assessment, we consider that the site's locational characteristics mean that it performs a limited role with regard to Purpose 1 and a moderate function with regard to Purpose 2 and 3. Although it performs a role in respect of the fourth purpose, a sensitively designed scheme for the site can be brought forward which preserves the setting of the historic core of the village, such that it only provides a moderate function.

4. Summary of Technical Issues and Site Constraints

4.1. As with any development site, there are a range of environmental and technical considerations that need to be considered as part of any development allocation. The following section of this document identifies those aspects that need to be considered. Known baseline conditions, the data required to assess impacts and the scope for any mitigation measures are discussed. The key issues for this development will be:

- Traffic and Transportation;
- Landscape and Visual Impacts;
- Ecology;
- Archaeology and Cultural Heritage;
- Flood Risk and Drainage; and
- Ground Conditions

Traffic and Transportation

4.2. Traffic and transportation issues are an important consideration in the development of the site. The site is in a highly sustainable location being within very easy walking distance of the high street and all community facilities, and particularly to the primary school. It is also on the bus route from Solihull to Coventry with new bus stops available close to the proposed site access. The site's excellent accessibility is recognised by the Council's Accessibility Mapping Report and the Sustainability Appraisal, although the scoring in this report would be even higher if it had been published after the new bus stops were installed. Indeed the site now scores maximum accessibility points.

4.3. It is envisaged that any vehicular access to the site would be from Kenilworth Road. The junction of Kenilworth Road with Wilsons Road and the Warwick Road will be assessed in detail as part of the site consideration together with any wider potential highway impacts. A preliminary appraisal of the Transport issues is provided within Appendix 4. This concludes that the impact of additional traffic from the development when compared to existing traffic flows will be very modest and there are no transportation issues constraining the site's development.

Landscape and Visual Impact

4.4. The site is capable of satisfactorily accommodating new development in a manner that minimises the impact on the countryside as demonstrated by the

masterplan provided with this submission. This is important to the landowners given their long relationship with the village.

- 4.5. The site contains an existing framework of vegetation along its southern, western and northern boundaries, and there are opportunities to create a new boundary to the east to help the development assimilate into the landscape.
- 4.6. It is nevertheless inevitable that any development around the edge of a settlement such as Knowle will have a degree of landscape and visual impact. These impacts will need to be considered in the balance with the other planning considerations. A preliminary appraisal of the landscape and visual impact issues is provided within Appendix 5.

Ecology

- 4.7. An Extended Phase 1 Habitat Survey was undertaken to consider the possible ecological impacts of developing the site. A copy of the survey is included as Appendix 6 to this statement.
- 4.8. The survey report shows that the site is dominated by arable farmland under continuous cultivation, which is of low interest to wildlife. The hedges and trees around the field boundaries provide potentially suitable nesting/roosting habitat for birds and bats and the adjacent canal offers suitable foraging habitat for bats. The survey also recorded some evidence of badger activity on the site. These are all considerations that can be further investigated through species-specific surveys to identify appropriate mitigation measures. They do not present significant constraints to the site's development.
- 4.9. With regard to the nature conservation site immediately to the north of Kixley Lane, the inclusion of playing fields and parkland within northern part of the site will ensure that an appropriate buffer is provided to protect this local wildlife site. The canal side walk along the eastern boundary will also provide a buffer to protect the canal wildlife and the new parkland will provide opportunities for the creation of new wildlife habitats.

Archaeology and Cultural Heritage

- 4.10. The site is located immediately to the east of Knowle Conservation Area and close to a number of listed buildings. A full heritage impact assessment would be carried out as part of any detailed site assessment but it is not considered that there any significant constraints that could not be overcome through sensitive design and careful layout of the site. Of note, views of Knowle Church tower from the public footpath network will be protected by the retention of the northern part of the site as parkland and playing fields.

Flood Risk and Drainage

- 4.11. The site lies within Flood Zone 1 (low risk) and therefore is not at risk of flooding.
- 4.12. As with any development of this scale, detailed proposals will have to be developed in due course to accommodate the necessary foul and surface water drainage, and detailed strategies to address any impacts will be required. The principles of sustainable urban drainage systems (SUDS) will be incorporated into any design. At this stage it is not envisaged that there are any constraints that would prevent acceptable drainage solutions from being achieved.

Ground Conditions

- 4.13. The site has historically been used for agriculture and has no known contamination or ground suitability restrictions to its development.

Deliverability

- 4.14. The site is available and in single ownership with no agricultural tenancy restrictions. The owners have been overwhelmed with interest from developers expressing interest in developing the site should it be selected. It is therefore immediately deliverable and would contribute to housing supply in the early years of the Local Plan.

5. Summary and Conclusions

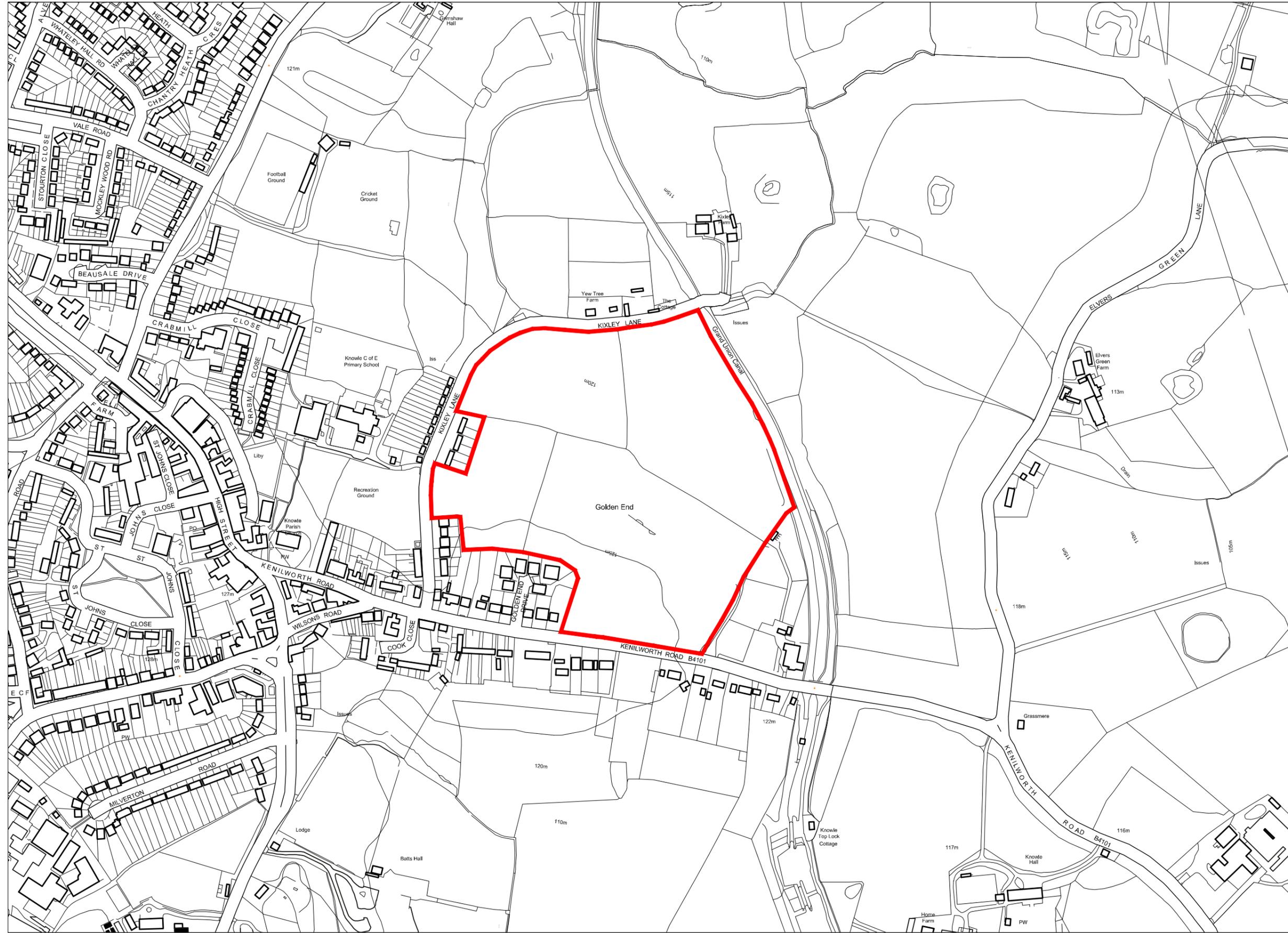
- 5.1. This document has been prepared to support representations to the Solihull Local Plan Review Supplementary Consultation. It sets out why land at Golden End in Knowle should be selected as an allocated site.
- 5.2. Land at Golden End, north of Kenilworth Road, is the closest available site to the centre of the village. It is immediately adjacent to the primary school and within 5 minutes walk of the high street. It is on a bus route with newly installed bus stops close to the site access.
- 5.3. The site is well contained with very limited ecological interest. The landscape contribution of the site can largely be retained and enhanced through the creation of parkland and playing fields on the northern half of the site.
- 5.4. The site offers long term defensible boundaries so as not to set any unwanted precedents for future expansion of the village in this location.
- 5.5. The site can be planned so as to protect the setting of nearby listed buildings and the Conservation Area.
- 5.6. The site is available and deliverable with string developer interest. There are no technical or land ownership constraints.
- 5.7. An initial masterplan for the site has been prepared and shows that the site could provide the following:
 - Opportunity for at least 250 dwellings including a significant proportion of affordable homes. The site could accommodate the full range of housing needs from starter homes and live-work units through to housing for the elderly;
 - Opportunity to develop a scheme of the highest environmental credentials and using the latest sustainable/low carbon designs;
 - Opportunity for 6 hectares (15 acres) of new public open space and parkland, including playing fields, a new canal side walk and ecological habitats;
 - Vehicular access would be from Kenilworth Road. Kixley Lane would not be used for access except possibly for emergency vehicles;
 - Opportunity to improve parking facilities and coach access to Knowle Primary Academy, helping to relieve parking issues on Kixley Lane;
 - Opportunity to provide a walkers car park close to the canal bridge to relieve parking pressures by Knowle Locks;

- Significant levels of pedestrian connectivity between the site, the village and the surrounding countryside;
- Protection of existing boundary trees and hedges;
- Protection of views from the public footpath network to Knowle Church;
- Protection of the area of nature conservation north of Kixley Lane.

5.8. It is concluded that the site offers a highly sustainable location for an exemplar high quality housing development that accords with national and local planning policy. It should therefore be included in the Solihull Local Plan Review as an allocation to accommodate some of the housing growth requirements.

Appendix 1

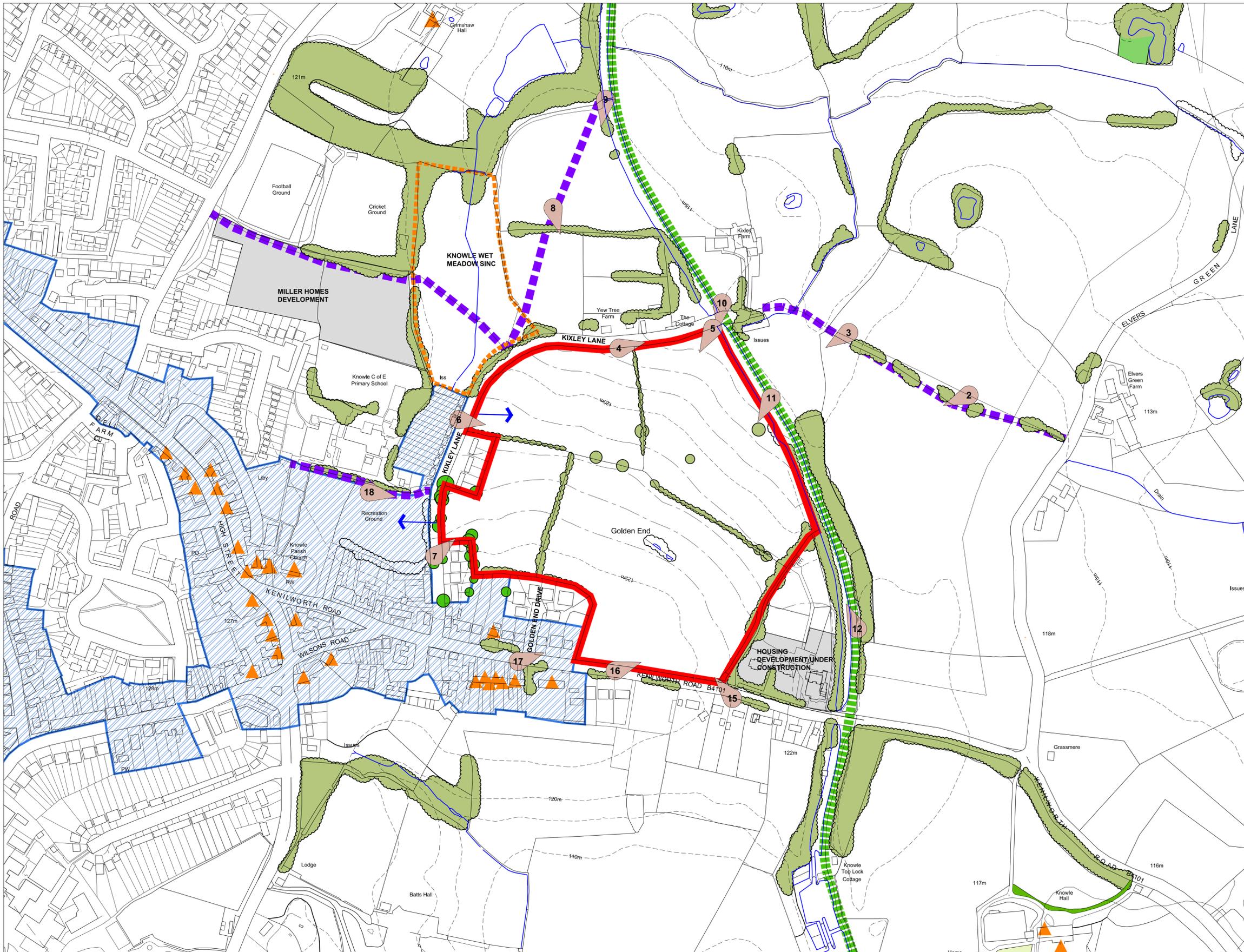
NOTES



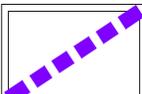
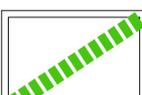
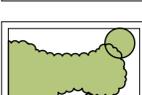
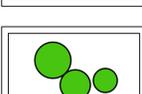
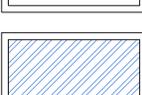
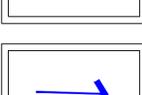
REV NOTE	DATE AUTH
CLIENT GOLDEN END FARMS LTD	
PROJECT GOLDEN END, KNOWLE, SOLIHULL	
DRAWING LOCATION PLAN	
CONTRACT 1622/15	DRG NO.
DATE JAN 2016	DRAWN DR
ISSUE PLANNING	CHECKED BC
SCALE 1:5000	ORIG SHEET A3
CAD FILE 1622-15-01 Location Plan.dwg	REV -
01	

Reproduced from the Ordnance Survey Map with the permission of Her Majesty's Stationery Office
© Crown Copyright Barry Chinn Associates License Number AR10001 4228

Appendix 2



KEY

-  SITE BOUNDARY
-  PUBLIC FOOTPATHS
-  LONG DISTANCE PATH
Grand Union Canal
-  LISTED BUILDINGS
-  WOODLAND, TREES AND HEDGEROWS
-  TREES WITH TREE
PRESERVATION ORDERS (TPO)
-  KNOWLE CONSERVATION AREA
-  LOCATION OF PHOTO VIEWPOINT
-  NOTABLE VIEWS FROM KIXLEY
LANE REFERRED TO IN KNOWLE
CONSERVATION AREA
APPRAISAL



REV NOTE DATE AUTH

BCA BARRY CHINN
associates
Landscape Architects

CLIENT
GOLDEN END FARMS

PROJECT
**GOLDEN END FARM
KNOWLE**

DRAWING
CONSTRAINTS PLAN

CONTRACT 1622/15	DRG NO.
DATE DEC 2015	02
ISSUE COMMENT	CHECKED DR
SCALE 1:2500	ORIG SHEET A1
CAD FILE 1622-15-02 constraints plan.dwg	REV

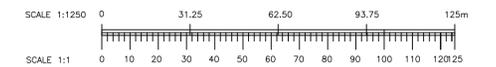
Appendix 3

NOTES



KEY

-  EXISTING TREES AND HEDGEROWS TO BE RETAINED AND PROTECTED
-  PROPOSED BLOCKS OF INFRASTRUCTURE PLANTING TO DEFINE AREAS AND PROVIDE SCREENING
-  PROPOSED INFRASTRUCTURE TREE PLANTING
-  PROPOSED GREENWAY INFRASTRUCTURE ROUTES PROVIDE CONNECTIVITY ACROSS SITE
-  PROPOSED FOOTPATHS PROVIDE LINKS ACROSS SITE TO PUBLIC RIGHTS OF WAY NETWORK BEYOND SITE
-  SITE BOUNDARY
-  INFRASTRUCTURE ROADS
-  MINOR ROADS



REV NOTE DATE AUTH



CLIENT
GOLDEN END FARMS LTD.

PROJECT
GOLDEN END, KNOWLE, SOLIHULL

DRAWING
PRELIMINARY MASTERPLAN

CONTRACT	1622/15	DRG NO.	03
DATE	DEC 2015	DRAWN	
ISSUE	COMMENT	CHECKED	DR
SCALE	1:1250	ORIG SHEET	A1
CAD FILE	1622-15-01 landscape strategy.dwg		

Appendix 4



Golden End Farms

**Potential Residential Development,
Kenilworth Road, Golden End,
Knowle**

Transport Strategy

WYG
3rd Floor
54 Hagley Road,
Birmingham,
B16 8PE

Report No. RT95526-01

January 2016
Copyright © WYG EPT Ltd 2015



REPORT CONTROL

Project: Golden End, Knowle

Client: Golden End Farms

Job Number: A095526

File Origin: \\lds-dc-vm-002\Birmingham\Birmingham Transport Folder\Birmingham Transport Folder\Projects\A095526 _Golden End, Knowle Residential



Document Checking:

Primary Author	Dan Palmer	Initialled:	DP
----------------	------------	-------------	----

Contributor	Dan Palmer	Initialled:	DP
-------------	------------	-------------	----

Review By	Shirley Dumigan	Initialled:	SD
-----------	-----------------	-------------	----

Issue	Date	Status	Checked for Issue
1	7/12/2015	Draft	SD
2	14/12/2015	Updated following team comments	SD
3	16/12/2015	Updated following team comments	SD
4	21/12/2015	Updated following team comments	SD
5	19/01/2016	Updated following client review	SD



Contents

1	Introduction.....	3
2	Existing Conditions	4
3	Development Proposal	7
4	Trip Generation, Distribution and Traffic Impact.....	9
5	Summary and Conclusion.....	13

Tables

Table 1 - TRICS Trip rates

Figures

Figure 1 - Site Location Plan

Appendices

Appendix A – SMBC Consultation

Appendix B – Potential Site Access Arrangement



1 Introduction

1.1 BACKGROUND & PURPOSE OF THIS REPORT

1.1.1 WYG has been appointed by Golden End Farms to provide a preliminary Transport Strategy to support the delivery of a potential residential development of approximately 250 dwellings (Use Class C3) on Land off Kenilworth Road, Golden End, Knowle. The site location is shown in **Figure 1**.

1.1.2 This Transport Strategy will provide an indication of the key issues and opportunities to deliver the site for residential development prior to the completion of a Transport Assessment to support a planning application and will cover the following key elements of delivery:

- Preliminary guidance on both the form and location of an appropriate vehicular access to serve the potential development
- Consultation with Solihull Metropolitan Borough Council (SMBC) as local highway authority in determining the number of vehicular accesses that are appropriate to the serve the development site
- Identification of the likely level of traffic to be generated by the potential development and a strategic analysis of development impact at key junctions on the local highway network
- A review of public transport accessibility in the context of the site and assess opportunities to improve connectivity

1.2 CONSULTATION

1.2.1 This Transport Strategy has been informed by consultation with SMBC as local highway authority to agree an appropriate number of vehicular accesses to serve the proposed development.

1.2.2 Consultation was completed with SMBC by telephone and email exchange on 30th November 2015 to demonstrate that one all movement vehicular access to the proposed development would be sufficient. SMBC have stated a 'preference' for an emergency access. This could be considered further in due course and in response to the potential development layout. A copy of this correspondence is presented as **Appendix A**.

2 Existing Conditions

2.1 SITE LOCATION

2.1.1 The potential development site is located immediately to the north of Kenilworth Road (B4101) at the eastern periphery of the village of Knowle. Currently the site is undeveloped and in agricultural use. The site is bound by Kenilworth Road (B4101) to the south, existing residential dwellings to the west (accessed by Golden End Drive and Kixley Lane) and agricultural land to the north and the canal to the east (see **Figure 1**).

2.2 SITE ACCESS

2.2.1 At present the site only has agricultural access. This is from Kenilworth Road (B4101) and is in the form of a dropped kerb access. The access leading into the site is unsurfaced and suitable for agricultural vehicle access only, as presented below.

Existing Site Access



2.3 HIGHWAY LAYOUT

2.3.1 In proximity to the site, Kenilworth Road (B4101) is a single carriageway road that runs in an east to west direction, subject to a speed limit of 30mph and provided with a carriageway width of approximately 6.0 metres. In addition a footway of approximately 1.6 metres in width is provided on the northern side of the carriageway, aided by street lighting, which provides pedestrian connectivity into Knowle village, as presented below.

Kenilworth Road (B4101) along site frontage



2.3.2 To the west of the site Kenilworth Road (B4101) leads into Knowle village centre providing access to the associated amenities. Beyond Knowle village centre, the B4101 provides connectivity into Dorridge and Dorridge Rail station (the closest rail station to the site).



2.4 EXISTING PUBLIC TRANSPORT INFRASTRUCTURE

- 2.4.1 The site benefits from being located in proximity to existing bus stops on Kenilworth Road (B4101). The bus stops for westbound and eastbound services are located approximately 290 metres (approximately 3 ½ minutes' walk time) and 310 metres (approximately 4 minutes' walk time) respectively from the centre of the site. The westbound bus stop is located in proximity to no.184 Kenilworth Road and the eastbound bus stop opposite no.190 Kenilworth Road.
- 2.4.2 The bus stops are served by the Johnson's Excelbus no.87 service which provides an hourly service (Monday to Saturday) between Coventry and Solihull via Balsall Common. The proximity of the bus stops on Kenilworth Road (B4101), which can be accessed from the site by an existing lit footway, provides a genuine opportunity for prospective residents to access Knowle village centre and the range of amenities and services as well as Solihull as a key local destination by bus.



3 Development Proposal

3.1 INTRODUCTION

3.1.1 The proposal is to provide approximately 250 residential dwellings (Use Class C3) on Land off Kenilworth Road (B4101) Knowle. The location of the site is provided as **Figure 1**.

3.2 SITE ACCESS

3.2.1 Vehicular access to the proposed development could be potentially provided by way of a new priority junction with Kenilworth Road (B4101) which would be sufficient in scale and design to accommodate the development as proposed.

3.2.2 The proposed access would be located approximately 180 metres to the east of the existing Kenilworth Road (B4101) / Golden End Drive junction, at the approximate location of the existing dropped kerb agricultural access for the site with Kenilworth Road (B4101). The location of the proposed access is approximately equidistant along the site frontage and not opposite any existing private driveway accesses for dwellings on the south side of Kenilworth Road (B4101), as presented in **Appendix B**.

3.2.3 Kenilworth Road (B4101) is subject to a 30mph speed limit in proximity to the proposed site access, however for the purpose of robustness the proposed site access has been designed to accord with Design Manual Road and Bridges (DMRB) standards for a 40mph design speed whereby visibility splays of 120 metres are required to be achieved. It should be noted that in accordance with Manual for Streets (MfS) design guidance, the required visibility splays for a design speed of 30mph would be 43 metres, therefore the 120 metres achievable visibility splays are far in excess of this requirement, however speed surveys should be undertaken to confirm the actual design speeds (based upon the 85%ile speeds recorded on Kenilworth Road (B4110)).

3.2.4 The setback distance or 'X' distance from the give-way line has been designed to 2.4 metres which is more appropriate for the rural nature of the access location and in terms of Manual for Streets (MfS) design guidance. An increased set back or 'X' distance of 4.5 metres as per DMRB design guidance is for increased capacity and not for safety reasons.



- 3.2.5 The potential site access will also be provided with 2.0 metre wide footways on either side of the access to tie into the existing provision on the site side of Kenilworth Road (B4101) to enhance pedestrian connectivity.
- 3.2.6 In addition to the site access, SMBC have highlighted that an emergency access may be required subject to further consultation. An emergency access with Kixley Lane to a width of 3.7 metres (in accordance with MfS design standards) could provide access to the site should the main access from Kenilworth Road (B4101) become unusable in the event of an emergency.
- 3.2.7 During normal operation the emergency access would be provided with measures to restrict vehicle access but allow pedestrian and cycle permeability to Kixley Lane as well as to the existing footpath that runs to the south of Knowle Primary Academy and adjacent to the village centre car park. This route reduces the walk distance from the centre of the potential development site to Knowle High Street, with the range of associated amenities, to approximately 500 metres (approximately 6 minutes' walk time).



4 Trip Generation, Distribution and Traffic Impact

4.1 TRIP GENERATION

4.1.1 Development trip generation for the weekday AM/PM peak hours has been estimated utilising TRICS trip rates as presented within the Transport Assessment (*David Tucker Associates 31st October 2012 – SKP/JB 13141-03_TA Rev A*) for the Hampton Road residential development that has been agreed with SMBC. These TRICS trip rates and resultant number of vehicle movements for 250 dwellings is presented below in **Table 1**.

Table 1 – TRICS Generation Rates for Residential Uses – Vehicle Trips per dwelling

AM Peak (08:00 to 09:00 hrs)			PM Peak (17:00 to 18:00 hrs)		
Arrivals	Departures	2-Way	Arrivals	Departures	2-Way
0.165	0.430	0.595	0.410	0.242	0.652
41	108	149	103	61	164

4.2 TRIP DISTRIBUTION

4.2.1 The Transport Assessment that was prepared to accompany the Waitrose foodstore planning application (*Turner Lowe Associates – Transport Assessment 09302 26th February 2010*) had traffic surveys completed in 2009 of the key junctions within Knowle and provides the most recent and complete publically available traffic data. The Transport Assessment that was completed for the Hampton Road residential development on behalf of Miller Homes (*David Tucker Associates – SKP/JB 13141-03_TA Rev A 31st October 2012*) only included traffic survey data from the Hampton Road / High Street / Lodge Road / Hampton junction and was therefore of limited use for this report.

4.2.2 The 2015 base traffic flows presented within the Turner Lowe Associates Transport Assessment has been growthed from the 2009 surveyed traffic flows to account for expected traffic growth as a result of committed development within the area, however excludes any traffic associated with the potential Waitrose foodstore development. This has been used in this review as it is agreed network traffic flows.

4.2.3 Review of the traffic survey data provided an indicative assessment of the direction of travel in that approximately 55% and 45% of traffic is expected to arrive and depart from the east and west respectively. Furthermore, a review of the distribution of development related traffic for the Hampton Road residential development indicates an approximate 60% east and 40% west distribution from that site, which corroborates with the data presented within the Turner Lowe Transport Assessment.

- 4.2.4 In due course it would be appropriate to complete an Automatic Traffic Count (ATC) survey on Kenilworth Road (B4101) in 2016 to verify whether the traffic data and distribution is still appropriate.
- 4.2.5 In the interim, an assessment of the Journey to Work (JTW) 2011 Census data (which indicates where people work who live within Knowle) has been completed. This suggests that approximately 75% and 25% would arrive and depart from the west and east respectively. It should however be noted that the JTW Census data does not account for linked trips during the peak hours (i.e. people travelling to other places on their way to work) or account for people taking alternative routes to avoid congestion or route preferences and therefore should be treated with care.

4.3 TRAFFIC IMPACTS AND DEMAND STRATEGY

- 4.3.1 The development as proposed would generate in the order of 149-164 two way vehicle trips during the AM and PM peak hours respectively. To provide a robust assessment (or sensitivity test) of the likely development trip impact on the local highway network it has been assumed that 75% of development traffic would arrive and depart from the west and 25% would arrive and depart from the east during the AM and PM peak hours, as presented below in **Diagram 1** and **Diagram 2**.

Diagram 1 – AM Peak Trip Distribution

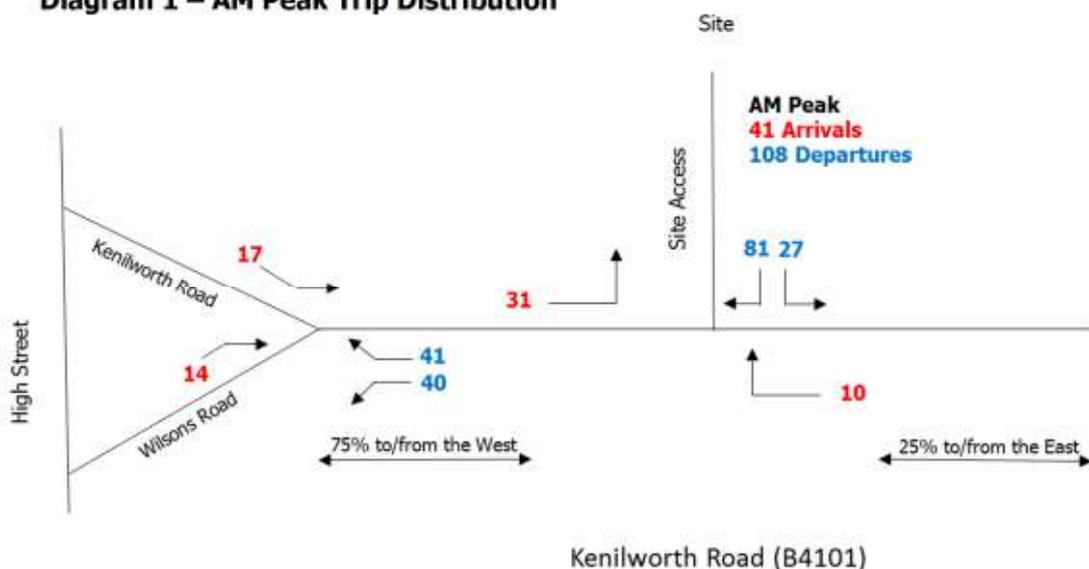
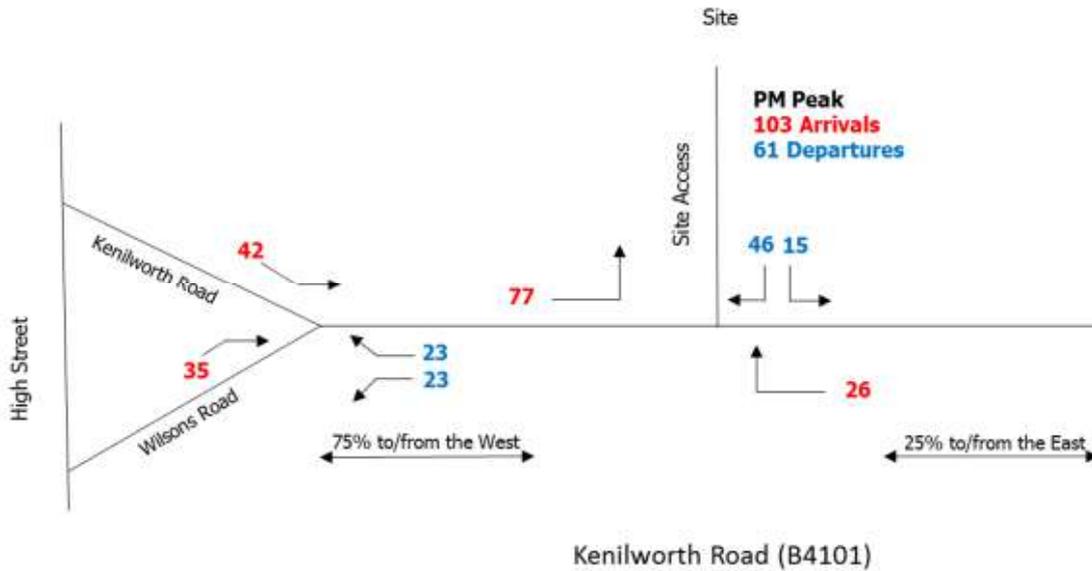




Diagram 2 – PM Peak Trip Distribution



4.3.2 To provide context to the potential development trip impact at key junctions within Knowle, **Table 2** indicates the anticipated percentage impact of development related traffic flows during the AM and PM peak hours. It is generally accepted that traffic flows vary by up to 5% on a daily basis and therefore a percentage impact of less than 5% is likely to have a negligible impact on the existing operation of a junction.

4.3.3 It should be highlighted that the percentage impact at junctions not identified within **Table 2** (which are further away from the potential development site) would experience a further reduced trip impact due to the dissipation of traffic on the wider highway network.

Table 2 – Potential Development Trip Percentage Impact

Link / Junction	AM Peak (08:00 to 09:00 hrs)			PM Peak (17:00 to 18:00 hrs)		
	2015 Base Two-Way Traffic Flows*	Potential Two-Way Development Flows	% Impact	2015 Base Two-Way Traffic Flows*	Potential Two-Way Development Flows	% Impact
Kenilworth Road (E of Site Access)	1089	37	3.4%	1133	40	3.5%
Kenilworth Road (W of Site Access)	1089	112	10.3%	1133	123	10.9%
Wilsons Road / High Street	1689	54	3.2%	1867	58	3.1%
Kenilworth Road / High Street	1605	65	4.0%	1629	65	4.0%

*derived from Turner Lowe Associates – Transport Assessment 09302 26th February 2010



- 4.3.4 It has been concluded that the development as proposed should not materially impact the junctions within Knowle village centre which is also a conservation area and therefore a pragmatic and reasoned approach should be undertaken to avoiding disruptive and unnecessary highway works.
- 4.3.5 Policy P7 'Accessibility and Ease of Access' of the Solihull Local Plan (2013) states that proposed housing development should be '*Within 400m walk distance of a commercial high frequency bus service (daytime frequency of 15 minutes or better)*'. It would therefore be appropriate for the potential development to be delivered in conjunction with consultation with both SMBC and Johnson's Excelbus (as local bus operator) to assess the viability of potentially increasing the frequency of the no.87 bus service serving should there be patronage demand.



5 Summary and Conclusion

5.1 SUMMARY

- 5.1.1 WYG has been appointed by Golden End Farms to provide a preliminary Transport Strategy to support the delivery of a potential residential development of approximately 250 dwellings (Use Class C3) on Land Off Kenilworth Road, Golden End, Knowle.
- 5.1.2 Initial consultation with Solihull Metropolitan Borough Council (SMBC) has been completed whereby it was confirmed that for the scale of development proposed a sole vehicular access would be sufficient, likely to be accompanied by an emergency access, subject to further consultation.
- 5.1.3 This Transport Strategy has demonstrated that there are no fundamental or overarching issues that would result in the development as proposed to be undeliverable with the level of information and data currently available. In addition, the proposed development could deliver an improved bus service frequency on Kenilworth Road (B4101), enhancing public transport accessibility for both existing and prospective residents. In due course a Transport Assessment would be required to provide a comprehensive assessment of Transport issues and opportunities to deliver the proposals to support the planning application.
- 5.1.4 Furthermore, paragraph 32 of the National Planning Policy Framework (NPPF) states that *'Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'* the development as proposed is not envisaged to cause severe impact on the local highway network.



Figures



Legend



Site Boundary



Contains Ordnance Survey data © Crown copyright and database right 2016.

REV	DESCRIPTION	BY	CHK	APP	DATE

Client:
Golden End Farms

54 HAGLEY ROAD
BIRMINGHAM
B16 8PE

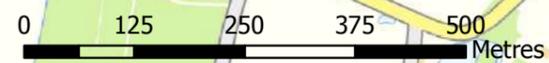


TEL: +44 (0)121 456 7444
e-mail: birmingham@wyg.com

Project:
Golden End, Knowle

Drawing Title:
Figure 1
Site Location Plan

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
NTS	IM	19/01/16	DP	19/01/16	-	-
Project No.	Office	Type	Drawing No.	Revision		
A095526	35	18	002	-		





Appendix A – SMBC Consultation

daniel.palmer

From: Gouveia, Danny (Places Directorate - Solihull MBC) <dgouveia@solihull.gov.uk>
Sent: 30 November 2015 13:07
To: daniel.palmer
Cc: shirley.dumigan
Subject: RE: Proposed Residential Development - Knowle

Hi Dan,

That's correct....although, as discussed on the phone, there would be a preference to provide at least an emergency access somewhere.

Cheers
Danny

From: daniel.palmer [mailto:dan.palmer@wyg.com]
Sent: 30 November 2015 13:01
To: Gouveia, Danny (Places Directorate - Solihull MBC)
Cc: shirley.dumigan
Subject: Proposed Residential Development - Knowle

Good afternoon Danny,

Thanks for taking the time to discuss the potential residential development in Knowle this morning.

For our records, could you please confirm that there is no set criteria or policy basis that would inform the number of dwellings that could be served by a single point of access as this would be determined on a site specific basis, informed by Manual for Streets guidance.

Many thanks.

Dan Palmer
Associate

WYG
54 Hagley Road, Birmingham, B16 8PE
Tel: +44 121 456 7444
Mob: +44 746 449 6282

www.wyg.com

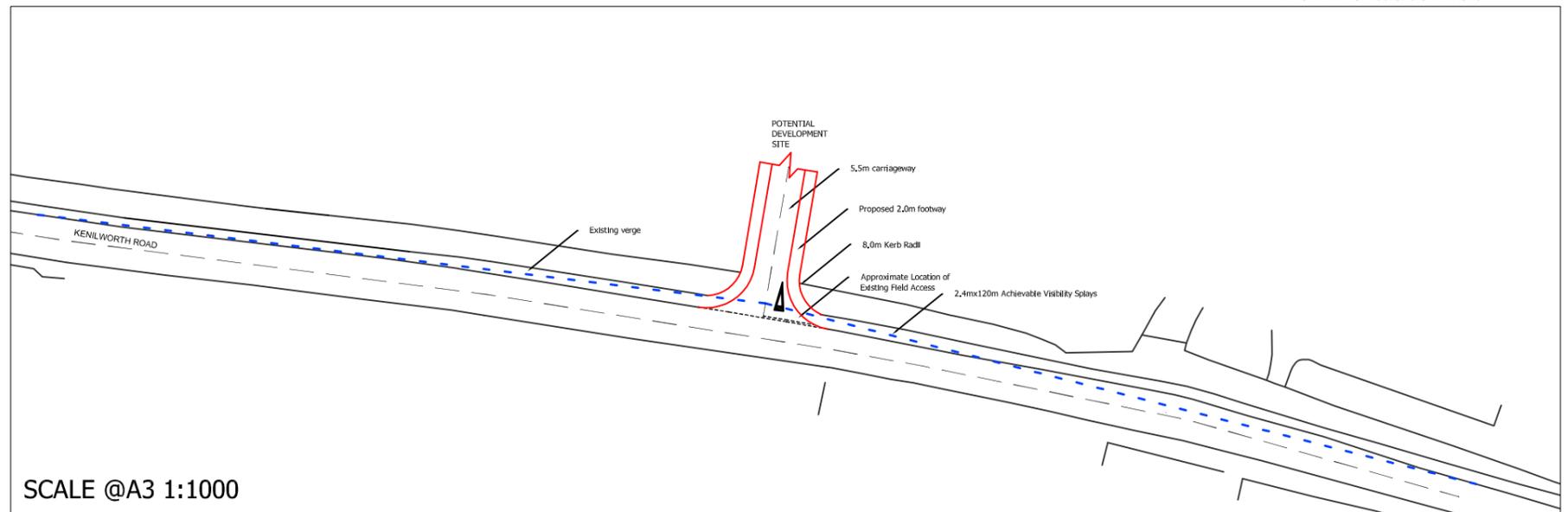
.....
WYG Environment Planning Transport Limited. Registered in England number: 3050297. Registered Office: Arndale Court, Otley Road, Headingley, Leeds, West Yorkshire LS6 2UJ VAT No: 431-0326-08



This message contains confidential information and is intended only for the recipient. If you are not the recipient you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

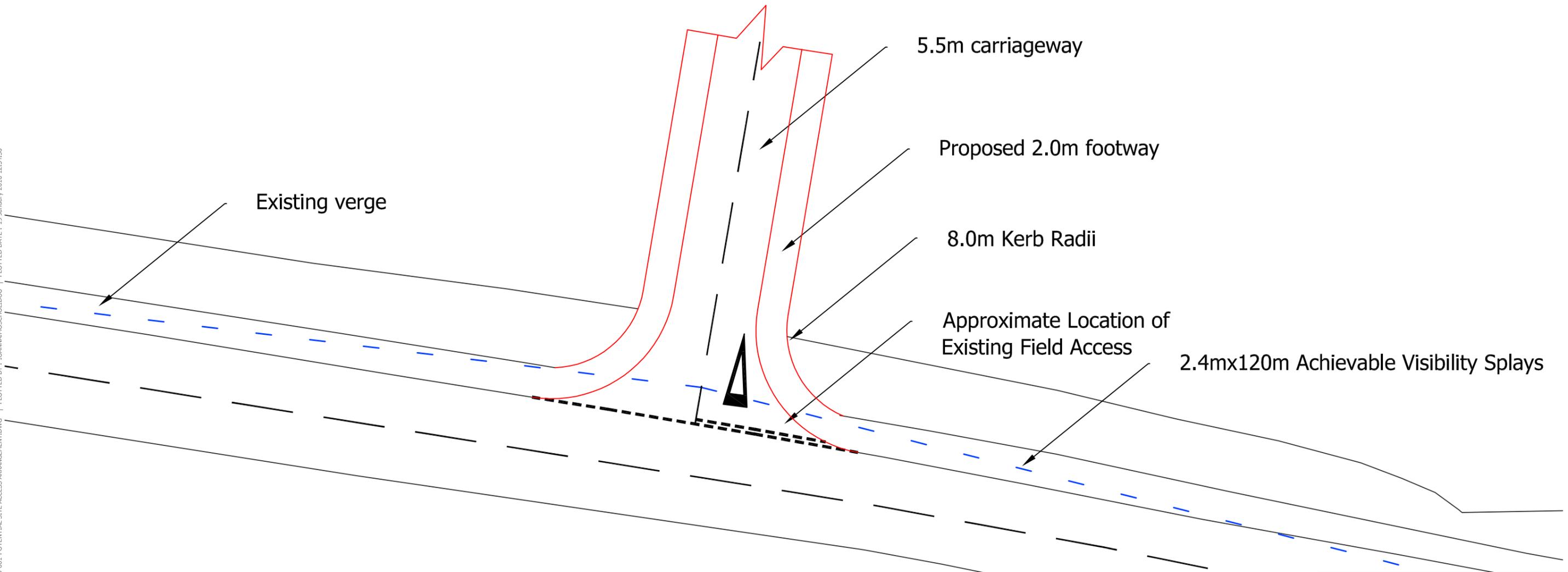


Appendix B – Potential Site Access Arrangement



SCALE @A3 1:1000

POTENTIAL DEVELOPMENT SITE



FILENAME : \\LDS-DC-VH-02\BIRMINGHAM\BIRMINGHAM TRANSPORT FOLDER\BIRMINGHAM TRANSPORT FOLDER\PROJECTS\A095526 - GOLDEN END, KNOWLE RESIDENTIAL
 DEVA\A095526\A095526-05-18-001-POTENTIAL SITE ACCESS ARRANGEMENT.DWG | PLOTTED BY : LDMAN\TOSCHLODD | PLOTTED DATE : 19 JANUARY 2016 12:54:33

54 HAGLEY ROAD
BIRMINGHAM
B16 8PE



TEL: +44 (0)121 456 7444
e-mail: birmingham@wyg.com

Client:
Golden End Farms

Project:
Golden End, Knowle

Drawing Title:
Potential Site Access Arrangement

REV	DESCRIPTION	BY	CHK	APP	DATE
Scale @ A3 1:250	Drawn Date IM 19/01/16	Checked Date DP 19/01/16	Approved Date SD 19/01/16		
Project No. A095526	Office 35	Type 18	Drawing No. 001	Revision -	

© WYG Group Ltd.

Appendix 5

**Land at Golden End
Kenilworth Road,
Knowle, Solihull**

**Appendix 4
LANDSCAPE AND VISUAL APPRAISAL**

Prepared on behalf of Golden End Farms Ltd.



Prepared by:
BARRY CHINN ASSOCIATES LTD.
Harbury Road
Deppers Bridge
Southam
Warwickshire
CV47 2SZ

Ref:	1622/15/RP001
Author:	DR
Checked:	BC
Date	04/01/2016

CONTENTS		Page
1.0	Introduction	3
2.0	Methodology.....	3
3.0	Baseline Conditions.....	4
4.0	Landscape Appraisal	6
5.0	Visual Appraisal.....	7
6.0	Landscape Proposals.....	8
7.0	Conclusion.....	9
 Appendices		
4A	Viewpoints Plan	
4B	Viewpoint Photos	

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

1.0 INTRODUCTION

- 1.1 In December 2015, Barry Chinn Associates Ltd. were appointed by Golden End Farms Ltd to carry out a preliminary landscape and visual appraisal of a site for a potential housing development within the Green Belt on land at Golden End Knowle, Solihull.

2.0 METHODOLOGY

- 2.1 The existing baseline conditions in and around the site have been determined by site visits and desktop studies. This information has then been utilised to make a preliminary assessment of the capacity of the site to accommodate residential development with regard to the potential change to the landscape and visual character.
- 2.2 Specific investigations to verify and record existing site conditions took place between November 2015 and January 2016.
- 2.3 This appraisal has broadly been carried out in accordance with the 'Guidelines for Landscape and Visual Impact Assessment' - Third edition, published in 2013 by the Landscape Institute and the Institute of Environmental Management and Assessment.

Assumptions & Limitations

- 2.4 Should the principle of developing the site be accepted then it is acknowledged that a full landscape and visual impact assessment will need to be carried out in support of any future planning application.

Documents Consulted

- 2.5 The following documents have been consulted in the preparation of this assessment:
- Knowle Conservation Area Appraisal carried out by Solihull Borough Council (September 2007);
 - Warwickshire Landscape Guidelines - Arden;
 - Guidelines for Landscape and Visual Assessment (Third edition 2013) published by The Landscape Institute and the Institute of Environmental Management and Assessment;
 - Natural England National Character Area Profile 97 – Arden;
 - Natural England, Magic Map website which provides listing of all designations etc..
 - Solihull's Green Infrastructure Study (January 2012)

3.0 BASELINE CONDITIONS

(refer to Landscape Constraints Plan Ref 1622/15/02 included as Appendix 2)

The review of the Local Plan and principle of development in the Green Belt and the wider National Planning Policy aspects are covered in the main report by prepared by Delta Planning.

Site Description

- 3.1 The site consists of a parcel of agricultural land directly to the east of the settlement of Knowle in Solihull. It is irregularly shaped and separated into four fields which are currently cultivated for arable crops. It is bounded by roads and dwellings on three sides and the Grand Union Canal and associated tree planting on the two remaining sides. On the southern boundary it fronts directly onto the Kenilworth Road (B4101) and in the south west corner residential properties on Golden End Drive back onto the site. Kixley Lane extends around the western and northern boundaries of the site with dwellings backing onto the site along part of the western boundary and a maintained hedgerow along the north. On the north-eastern corner the site is bounded by the bank of the canal and on the south eastern section is a recently consented residential development.
- 3.2 The wider landscape beyond the site consists broadly of rural, agricultural land with isolated farmsteads and residential properties to the north and east. Large detached residential properties on the south of Kenilworth Road face the site with rural land beyond them to the south. To the west of the site Kixley Lane is fronted by residential properties, Knowle Primary Academy and associated sports pitch. The main settlement of Knowle including the Parish Church and residential and commercial properties extends further to the north and west.

Topography (Refer to Appendix 2)

- 3.3 The site falls from Kenilworth Road in the south-west corner towards the canal bridge in the north-east corner with the overall difference in level being approximately 9 metres with a level of 125m AOD on Kenilworth Road and 116m AOD on Kixley Lane adjacent to the Grand Union Canal. Indicative contours are shown on the Site Constraints Plan included in Appendix 2.
- 3.4 Knowle itself occupies a slightly elevated location and the site is on the perimeter of this area. Beyond the site contours fall away to the north, east and south.

Existing Vegetation (Refer to Appendix 2)

- 3.5 Within the site existing hedgerows run from north to south and east to west. These are generally well maintained and include occasional mature trees which are principally oak. The portion of the site that is open to Kixley Lane also has a number of mature trees the majority of which are protected by Tree Preservation Orders. There are established native hedges where the site abuts both Kixley Lane and the Kenilworth Road and a band of tree planting on the canal embankment on the southern portion of the eastern boundary.
- 3.6 The vegetation in the wider landscape consists of agricultural land enclosed by frequent hedgerows and associated trees with occasional small copses and blocks of woodland. Front gardens along Kenilworth Road and generally within Knowle include a number of established

trees. There are also some blocks of more extensive woodland within the vicinity of the site particularly around Grimshaw Hall to the north and along the banks of the Grand Union Canal. These all contribute to and enhance the rural character of the village settlement.

Landscape Designations (Refer to Appendix 2)

3.7 The relevant Landscape Designations are taken from Magic Map online mapping, OS Data and information available on Solihull MBC website. Only those designations considered to have a direct influence on the site or to potentially be impacted upon by the development of the site are listed.

Conservation Areas

3.8 The central area of Knowle is designated a conservation area and the extent of this is shown on drawing no. 1622/15/02 included in Appendix 2. The conservation area extends directly up to the western boundary of the site and includes the area along Kenilworth Road and on the western side of Kixley Lane. The Conservation Area Appraisal prepared by Solihull MBC in 2007 makes specific mention of the landscape setting of the village and also makes note of Kixley Lane as being a “*relatively tranquil area*”.

3.9 The Conservation Area Appraisal also makes note of key views and in particular states that: “*Where the conservation area abuts open countryside, there are extensive views across the Green Belt. These points are primarily on Kenilworth Road and Kixley Lane*”.

Public Rights of Way PROW (Refer to viewpoints plan ref 1622/15/04)

3.10 The area around the site contains a number of public footpath routes and the towpath along the Grand Union Canal is part of a long distance walking route that runs from London to Birmingham. In close proximity to the site two footpaths enter Kixley Lane adjacent to its north-west corner and another PROW starts at the canal footbridge in the north-east corner of the site and connects to Elvers Green Lane to the east. A direct pedestrian route running alongside Knowle Primary School connects Kixley Lane to Knowle High Street.

Tree Preservation Orders (TPO)

3.11 A number of trees along the Kixley Lane boundary of the site are protected by Tree Preservation Orders and these are shown on drawing 1622/15/02.

Sites of Special Scientific Interest (SSSI's)

3.12 There are no SSSI's in close proximity to the site. The River Blythe which is an SSSI runs to the east and north of the site and at its closest is approximately 1km from the assessment site.

Local Nature Reserves

3.13 Knowle Wet Meadow SINC is the closest site of nature conservation interest which is opposite the site north of Kixley Lane. Within Knowle itself Jobs Close Local Nature Reserve is west of Knowle High Street just under a kilometre from the site.

Scheduled monuments

3.14 There are no Scheduled Monuments within Knowle or in close proximity to the site.

Listed Buildings

- 3.15 There are a number of nationally listed buildings within Knowle Conservation Area and a significant number of locally listed buildings. These are listed within the Conservation Area Appraisal and those in close proximity to the site are shown on drawing 1622/15/02. This includes a number of buildings on the south side of Kenilworth Road, within the Conservation Area just west of the site. The listed buildings are generally Grade II or Grade II*. The exceptions to this are two Grade I listed buildings namely: Knowle Parish Church (the church of St John The Baptist, Saint Lawrence and Saint Anne) west of the site and Grimshaw Hall to the north-west, which are both within half a kilometre of the site boundary.
- 3.16 Grimshaw Hall is enclosed by a block of woodland planting which provides effective screening around its southern boundary. However, the Conservation Area Appraisal makes particular reference to the tower of Knowle Parish Church which it regards as a '*significant landmark*' and '*focal point*' for the village.

Landscape Appraisal

In any landscape appraisal of a site reference is made to national and local landscape character assessments which identify the key characteristics of any part of the countryside within which a site is located. The National Landscape Character Areas map created by the then Countryside Agency in 1999, divided England into 159 natural areas each defined by a unique combination of landscape, biodiversity, geo-diversity and economic and cultural activity.

- 3.17 The application site is within National Character Area no. 97 – Arden. The summary description of this character area is of "*farmland and former wood-pasture lying to the south and east of Birmingham, including part of the West Midlands conurbation*". The character area description goes on to state: "*The landscape of the lower lying central area is gently rolling with small fragmented semi-natural and ancient woodlands. Mature oaks set in hedgerows, distinctive field boundaries, historic parklands and narrow river corridors are key features, all on the doorstep of a heavily urbanised area*". This provides a good description of the existing landscape to the east of Knowle village.

The Warwickshire Landscape Guidelines 1993 – Arden

- 3.18 In 1993 the Countryside Commission and Warwick District Council carried out a study, resulting in The Warwickshire Landscape Guidelines, which identified the following three regional character areas: Arden, Avon and Dunsmore. The area of Knowle and the site being assessed is situated in Arden Character Area. The Arden Character area is further sub-divided into different landscape types:
- 3.19 The area east of Dorridge and Knowle, including the area of the site, is within the zone described within the assessment as **Arden Pastures** – The overall character and qualities of this area are described as – "*A small scale enclosed landscape often pervaded by suburban influences and characterised by small fields typically bordered by mature hedgerow trees.*"

Characteristic features that are identified of particular relevance to the landscape of Golden End Farm are:

- *Gentle rolling topography*
- *Well defined pattern of small fields and paddocks*
- *Numerous mature hedgerow oaks*

- *Permanent pasture often grazed by horses*
- *A network of minor lanes often with ribbon development*

The stated management strategy for the Arden Pastures landscape is to: *“conserve and enhance the unity and small scale enclosed character of the landscape”*.

- 3.20 The area further to the east on the opposite side of the Grand Union Canal is within the character area described as **Arden Parklands** – The overall character and qualities of this area are described as – *“An enclosed gently rolling landscape defined by woodland edges, parkland and belts of trees.*
- 3.21 In summary, the site is situated within a rural landscape on the edge of the settlement of Knowle. It contributes to the character of the village and its rural feel and landscape setting. On Kenilworth Road the development currently under construction east of the site, although isolated, extends the built form up to the Grand Union Canal which could be considered to provide a natural boundary to the village.

Visual Appraisal

Appendix 4B includes photographs taken from representative viewpoints around the site and locations are shown on drawing 1622/15/02 in Appendix 2 and on drawing 1622/15/04 which is included in Appendix 4A. A brief description is provided in Appendix 4B for each of the selected views.

- 3.22 *Viewpoints 1, 2, 3, 8 and 9* - A number of footpaths cross the landscape to the north of the site and many of these from more elevated positions provide open views looking towards Knowle across the rural landscape. Generally in these views the roofs of the existing dwellings along the Kenilworth Road or in Golden End Drive are visible along the horizon with the tower of Knowle Parish Church discernible within the tree canopy.
- 3.23 *Viewpoint 5* – This view is taken from the top of the canal bridge on the north-east corner of the site and provides a good view of the whole site and Knowle from this direction. Although the houses along Kenilworth Road break the horizon the contribution that the site makes to the rural setting and character is most evident from this location.
- 3.24 *Viewpoints 10, 11, 12, 13 and 14* - these photos are taken from the towpath on the Grand Union Canal which is part of a long distance walk between London and Birmingham. On the northern part of the eastern boundary the site is open to the canal but moving further south the canal is within cutting and planted embankments screen any potential views of the site. Views 13 and 14 are taken adjacent to Knowle Locks which are an important historical landmark and one of the few areas south of the site which have public access. Due to topography only the rear of properties on south of Kenilworth Road are visible on the horizon.
- 3.25 *Viewpoints 15, 16 and 17* – these photos show the front of the site from Kenilworth Road. The existing hedge screens lower level views from the road but houses on the south side of the road benefit from clear views across the rural landscape to the north. The Conservation Area Appraisal makes specific reference to Kenilworth Road and states that: *“properties tend to be set back further than in other streets. This produces additional space for planting which, although private, adds considerably to the visual appeal of the area.”*

- 3.26 *Viewpoint 4* – this photo is taken from Kixley Lane on the northern boundary of the site. The two dwellings on the north of Kixley Lane have open views across the site towards Kenilworth Road.
- 3.27 *Viewpoint 6* – this view represents one of the notable views from Kixley Lane referred to in the Conservation Area Appraisal and is an open view from the edge of Knowle and the Conservation Area across the rural landscape to the north-east.
- 3.28 *Viewpoints 7 and 18* – These photos are taken from the east of the site and show the TPO trees and section of the eastern boundary that fronts directly onto Kixley Lane and the conservation area.
- 3.29 In summary there is good visibility of the site from viewpoints to the north particularly from the canal towpath and bridges. A number of properties also have views across the site to the rural landscape beyond. Visually the site contributes to the rural setting of Knowle and the character of the conservation area. The northern part of the site is the most sensitive, particularly with regard to views of Knowle from rural land to the north. It is recommended that this area should be left undeveloped and retained to provide public open space, habitat mitigation and drainage features to serve any new housing development.

Landscape Proposals

In response to the landscape and visual baseline conditions a preliminary masterplan has been prepared identifying how the site might be developed for housing recognising its sensitive location on the edge of Knowle Conservation Area and its role as part of the setting for the village. Refer to Preliminary Masterplan 1622/15/03 included in Appendix 3.

Description of proposals

- 3.30 Along the site frontage to Kenilworth Road (Viewpoints 15 and 16) existing hedge and trees will be retained and the housing line will be kept back to line through with existing dwellings to the west and proposed housing being constructed to the east. This will maintain the existing building line, screen new houses and allow for a wide landscape frontage in keeping with the rest of Kenilworth Road. Proposed tree planting in association with new roads will also contribute to the green infrastructure within and across the site.
- 3.31 The northern part of the site will be kept free from development and this area will be retained as open space for recreation and habitat creation. The existing hedgerows and trees south of this area will be retained and enhanced to provide a natural boundary to the north of the proposed development. This is aligned with the current extent of existing housing on the east side of Kixley Lane and will retain the notable view (Viewpoint 6) from Kixley Lane across the countryside to the east. Keeping this area free from development will also ensure that the views of the church tower from footpaths east of the site (Viewpoints 3 and 5) will not be adversely affected. Existing hedges and TPO trees along Kixley Lane will also be retained and protected.
- 3.32 Within the site new hedge and tree planting and footpaths through the site will improve physical and visual connectivity between Kenilworth Road and Kixley Lane and the public footpaths to the north and east of the site. Existing boundary hedgerows will be retained and

re-inforced with new planting to increase bio-diversity and improve screening where necessary.

4.0 Conclusion

- 4.1 The proposed masterplan that has been developed for the site takes account of the landscape and visual considerations that have been identified and responds to its location within the green belt and on the edge of Knowle Conservation Area.
- 4.2 If this site is accepted for development there will inevitably be some impact on both the landscape and visual character. However the preliminary masterplan proposals seek to minimise this to ensure that the new housing can be successfully assimilated into the surroundings with minimal adverse residual impact. By retaining and enhancing existing boundary vegetation the development will create a new more defined and defensible boundary to the green belt.
- 4.3 It is envisaged that the landscape and visual impacts for the development will be predominantly localised and contained within a reasonably small area. However with sensitive design and careful consideration of the layout these impacts will be able to be minimised to ensure that the development will be appropriate to its location and properly respect its sensitivity.

Golden End, Knowle, Solihull

Landscape and Visual Appraisal

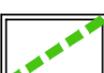
Appendix 4A

Photo Viewpoints plan - 1622/15/04

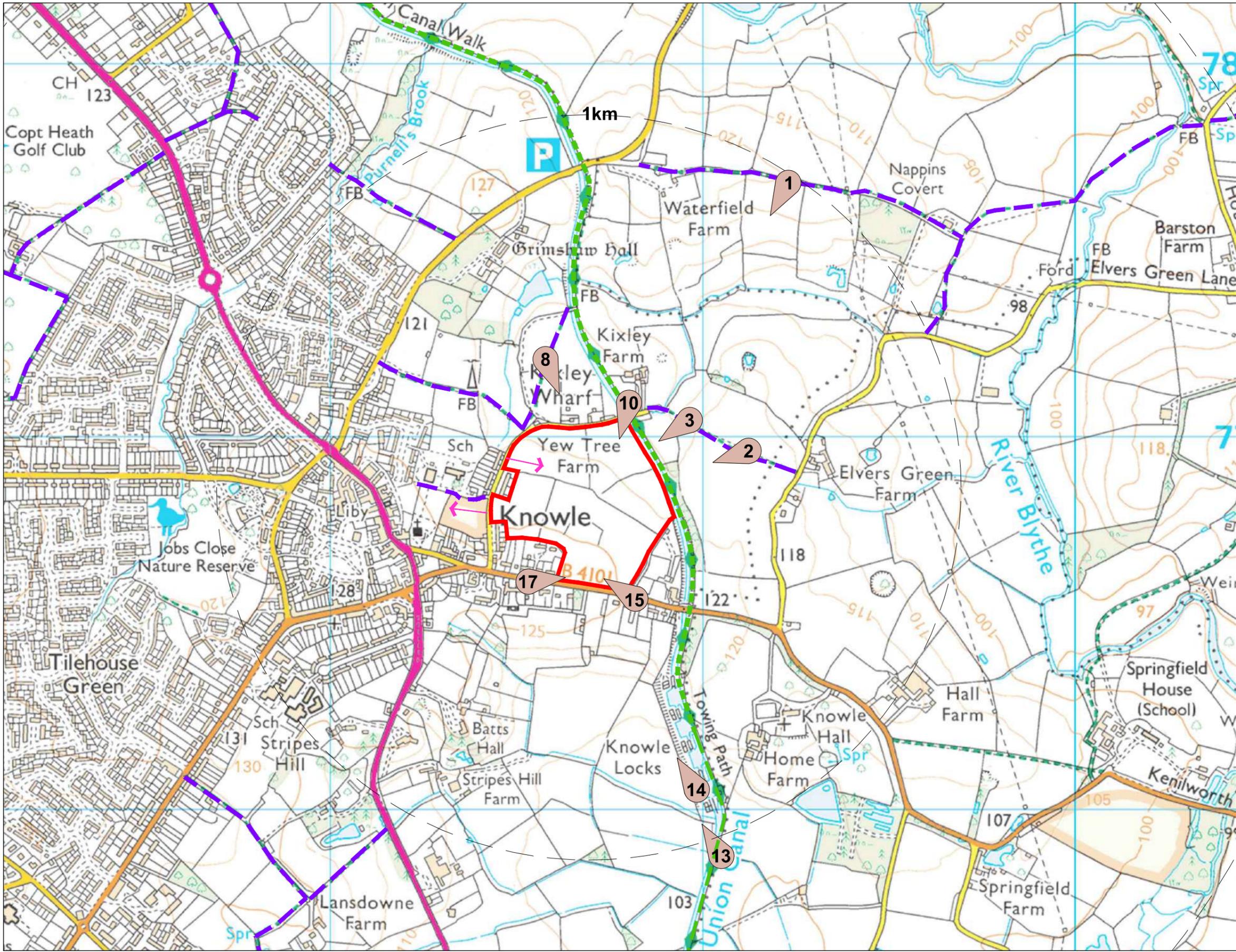
NOTES



KEY

-  Site Boundary
-  Public Right of Way
-  Grand Union Canal Walk (Long Distance Path)
-  01 Photo viewpoint locations
-  Important views from Kixley Lane identified in Knowle Conservation Area Appraisal

Refer to Constraints Plan 1622/15/02 for additional viewpoints close to site



REV NOTE DATE AUT



CLIENT
GOLDEN END FARMS

PROJECT
GOLDEN END FARM KNOWLE

DRAWING
FOOTPATHS AND PHOTO VIEWPOINTS

CONTRACT	1622/15	DRG NO.	04	
DATE	15 JAN 16	DRAWN		DR
ISSUE	COMMENT	CHECKED		DR
SCALE	1:10,000	ORIG SHEET		A3
CAD FILE	1622-15-02 constraintsplan.dwg	REV	-	

Golden End, Knowle, Solihull

Landscape and Visual Appraisal

Appendix 4B

Photo Viewpoint images



Viewpoint 1 – From footpath adjacent to Waterfield Farm to north-east of site. Kixley Farm is visible in the centre of the photo and houses and trees along Kenilworth Road are visible on the horizon.



Viewpoint 2 – From footpath between Elvers Green Lane and Kixley Farm, looking through gap in hedge. Houses on Kixley Lane (on the northern boundary of site) and northern field of site are visible but tree planting along canal screens the southern part of the site.



Viewpoint 3 – From footpath to the west of Kixley Farm. Church tower is visible on horizon in centre of photo, houses on Kixley Lane are visible on the right and houses on Golden End Drive are visible on the left.



Viewpoint 4 – From Kixley Lane (on northern boundary of site) looking towards bridge over canal. Existing hedge provides low level screening of site.



Viewpoint 5 – From bridge over canal. Northernmost field and hedge across centre of the site are visible in the foreground with houses along Kenilworth Road and Golden End Drive visible on the horizon. The tower of Knowle Parish Church is just visible to right of photo beyond houses on Kixley Lane west of the site.



Viewpoint 6 – From Kixley Lane looking across northern fields of the site. Hedge running across the site from west to east is visible on the right hand side of the picture. This represents one of the notable views from Kixley Lane that is mentioned in the Conservation Area Appraisal.



Viewpoint 7 – From Kixley Lane looking towards gap in housing east of Kixley Lane.



Viewpoint 8 – From footpath north of the site. House north of Kixley Lane is visible on the left of the photo with houses on Kenilworth Road just visible on the horizon.



Viewpoint 9 – From footbridge over the canal looking back along footpath north of the site. Houses on Kixley Lane and Golden End Drive are visible on the horizon.



Viewpoint 10 – Photo taken looking under the canal bridge on Kixley Lane at the northern corner of the site. Houses on Kenilworth Road are visible on the horizon.



Viewpoint 11 – From Canal towpath east of site. Houses on Golden End Drive are visible on right hand side of picture with houses on Kenilworth Road visible on the horizon to the left.



Viewpoint 12 – Photo taken from canal towpath just north of Kenilworth Road looking northwards. The canal embankment and associated vegetation screens the site from this point.



Viewpoint 13 – From towpath adjacent to Knowle Locks. The rear of houses on Kenilworth Road are visible in the centre of the picture.



Viewpoint 14 – Photo taken from west of Grand Union Canal looking towards rear of houses on Kenilworth Road on the horizon.



Viewpoint 15 – View from Kenilworth Road looking towards south-east corner of the site.



Viewpoint 16 – Photo taken from Kenilworth Road looking at existing gate into site with bench in highway verge. House beyond is part of new development to the east of the site.



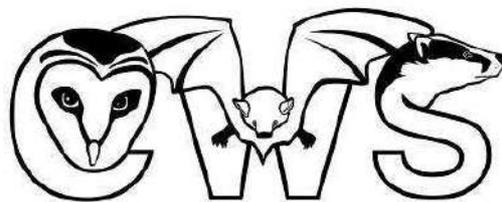
Viewpoint 17 – View from Kenilworth Road looking towards south-west corner of the site.



Viewpoint 18 – Photo taken from public footpath from town centre adjacent to playing field at rear of churchyard, east of Kixley Lane.

Appendix 6

Extended Phase 1 Habitat Survey at Golden End Farm, Kenilworth Road, Knowle



Cotswold Wildlife Surveys

28th April 2016

CONTENTS

	Page
SUMMARY	2
1. INTRODUCTION.....	5
1.1 Background and survey objectives	5
1.2 Site description	5
1.3 Proposed works.....	6
2. METHODOLOGY	7
2.1 Desk study.....	7
2.2 Habitat survey	7
2.3 Protected species survey	7
2.4 Constraints	7
3. RESULTS.....	8
3.1 Desk study.....	8
3.1.1 Designated sites	8
3.1.2 Protected species	8
3.2 Habitat survey	9
3.2.1 Habitat descriptions	9
3.2.2 Flora	14
3.3 Protected species survey	14
3.3.1 Bats	14
3.3.2 Badgers	15
3.3.3 Otters	15
3.3.4 Water Voles.....	16
3.3.5 Birds	16
3.3.6 Reptiles	16
3.3.7 Great Crested Newts.....	16
3.3.8 Invertebrates.....	16
3.3.9 Other species	17
4. CONCLUSIONS AND RECOMMENDATIONS.....	18
4.1 Site evaluation	18
4.2 Possible impacts of proposed work and recommendations.....	19
4.3 Further surveys	19
5. REFERENCES.....	20
APPENDICES.....	21
Appendix 1: Phase 1 Habitat Survey Map.....	22
Appendix 2: Target Notes	23
Appendix 3: Plant species list	24
Appendix 4: Bird species list	25
Appendix 5: Relevant legislation	26
5.1 – Birds	26
5.2 – Bats	26
5.3 – Badgers.....	26

SUMMARY

In April 2016, at Golden End Farm on Kenilworth Road near Knowle, Cotswold Wildlife Surveys was instructed to carry out an Extended Phase 1 Habitat Survey of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by proposed development.

A search of the ecological data revealed a small number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.5 km radius of the site.

Bats included pipistrelles *Pipistrellus sp.*, observed 1.0 km to the east at Springfield House School in 1984, and 1.2 km to the east in 1994. 100 m south of the school there was a record of a Whiskered Bat *Myotis mystacinus* in 1983, with Daubenton's Bat *M. daubentonii* 1.2 km to the east.

There were several records of Badger *Meles meles* in the area, [REDACTED] but no Otter *Lutra lutra* or Water Vole *Arvicola amphibius*, and no records of reptiles. There was a single observation of a Common Frog *Rana temporaria* 1.4 km to the southeast, but no other common amphibians, and no Great Crested Newts *Triturus cristatus*.

A few veteran trees were noted in the data, none within 1.0 km, and there were several records of White-letter Hairstreak butterfly *Satyrion w-album*, including one in the southeastern corner of the survey site. This was from 1994, and since then the species has undergone a significant decline as Elm trees *Ulmus spp.* have disappeared from the landscape.

The site itself was not designated or identified as a site of wildlife importance or interest, but within the search area there were two statutory sites; River Blythe Site of Special Scientific Interest (SSSI) and Jobs Close Local Nature Reserve (LNR). There were a number of Ecosites, including the Grand Union Canal which ran along the eastern boundary of the site and Ecosite 101/17 approximately 20 metres to the northwest over Kixley Lane.

There was no direct connectivity between the statutory sites and Golden End Farm, and they were separated by intervening land use such as arable farmland, residential areas and main and local roads. There was direct connectivity with the Grand Union Canal Ecosite which bordered the east of the site, although there were no records of Otter or Water Vole within it.

The Phase 1 survey took place on 28th April 2016, in mild, bright conditions with a light wind.

The site comprised four arable fields, one of which was large whilst the others were more moderate in size. The fields were separated and enclosed by a combination of tall and untrimmed and low clipped hedgerows.

The southern boundary hedge and the hedgerow along the west of the largest field were both species rich, whilst the rest were all species poor. The majority also had ditches at the base, which at the time of the survey were holding water in places.

In the centre of the largest field there was a small damp area with scattered trees, whilst the latter were also present in the hedgerows, with most of these large mature Pedunculate Oaks *Quercus robur*.

There were some narrow field margins of tall ruderal vegetation, although there were also some wildflowers present at the hedgerow bases.

No rare vascular plants were found, and all species recorded were common and widespread.

A total of 11 species of birds were observed. Of these two were Species of High Conservation Concern (RSPB Red list); Song Thrush *Turdus philomelos* and Yellowhammer *Emberiza citrinella*, two were Species of Medium Conservation Concern (RSPB Amber List); Dunnock *Prunella modularis* and Stock Dove *Columba oenas*, and the rest were species of Low Conservation Concern (RSPB Green List).

Several of these birds were likely to be nesting in the hedges during the breeding season and indeed a pair of Robins *Erithacus rubecula* were noted, and the Stock Dove was seen flying out of a cavity in a Pedunculate Oak tree where it was either roosting or nesting.

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal should be undertaken outside the period 1st March to 31st August inclusive.

If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed should be undertaken prior to clearance. Work should not be carried out within 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

Several of the trees within the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation. These were generally within the mature Pedunculate Oak trees around the field boundaries. As such, if these trees are to be affected by the proposed works then further surveys for bats will be required.

The site overall was considered to have low potential for foraging bats, as most of the hedgerows were quite low, and although there was some cover there was little suitable vegetation to attract invertebrates. However, the canal which runs along the eastern boundary of the site is likely to be used by foraging bats which may also venture onto the site.



This was not thought to be the main sett, but instead was considered to be an outlier or subsidiary sett. There were also two holes in the southwestern corner of the site where there were signs of Badger activity. One of these holes looked to have been used by Badger, but it was considered more likely that they had since been taken over by Rabbits *Oryctolagus cuniculus*.

There were a total of seven ponds within a 500 metre radius of the site, although all of these were over 250 metres from the site boundaries, with the majority over 400 metres away. They were all separated from the survey area by significant barriers to newt dispersal which included the Grand Union Canal, main and local roads, arable fields under continuous cultivation, and residential areas. As such it was considered that any amphibians, if present, within these ponds would not be found on the application site.

The site itself was unsuitable for reptiles and amphibians, since although there were some wet ditches, these were isolated. There were very limited foraging opportunities and no suitable refugia or hibernacula. Furthermore the majority of the site was arable farmland under continuous cultivation. As such, the site was considered unsuitable for Great Crested Newts and reptiles.

Although no surveys for reptiles and amphibians were considered necessary, care should be taken at all times when removing vegetation and stripping topsoil. Any amphibians, reptiles (or small mammals) disturbed or uncovered should be left to vacate the work site in their own time.

It was also possible to assess the potential importance of the habitats within the application site to invertebrates. Since the majority of the site was arable farmland under continuous cultivation, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. Indeed, Small Tortoiseshell *Aglais urticae* was the only butterfly noted.

If excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

1. INTRODUCTION

1.1 Background and survey objectives

In April 2016, at Golden End Farm on Kenilworth Road near Knowle, Cotswold Wildlife Surveys was instructed to carry out an Extended Phase 1 Habitat Survey of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by the proposed development.

A search of the ecological data revealed a small number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.5 km radius of the site.

1.2 Site description

The site comprised four arable fields, one of which was large whilst the others were more moderate in size. At the time of the survey they were planted with cereal crops.

There were some narrow field margins of tall ruderal vegetation dominated by Common Nettle *Urtica dioica*, Cow Parsley *Anthriscus sylvestris* and Hogweed *Heracleum sphondylium*, with Common Cleavers *Galium aparine*, White Dead-nettle *Lamium album*, Green Alkanet *Pentaglottis sempervirens*, Field Forget-me-not *Myosotis arvensis* and Dandelion *Taraxacum Section vulgaria* also present. The sward consisted largely of Perennial Ryegrass *Lolium perenne*, but also included meadow-grasses *Poa spp* and Cocksfoot *Dactylis glomerata*.

The fields were separated and enclosed by a combination of tall and untrimmed and low clipped hedgerows. The southern boundary hedge and the hedgerow along the west of the largest field were both species rich, whilst the rest were all species poor. The majority also had ditches at the base, which at the time of the survey were holding water in places, and at the east were flowing into the canal. The hedgerows were dominated by Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Elder *Sambucus nigra* and Hazel *Corylus avellana*, with Holly *Ilex aquifolium*, Yew *Taxus baccata* and Dog Rose *Rosa canina* also present in the species rich sections.

Along the hedgerow which bordered the northern boundary of the site along Kixley Lane there were a number of Bluebells *Hyacinthoides non-scripta*, along with common wildflower species such as Selfheal *Prunella vulgaris*.

In the centre of the largest field there was a small damp area with scattered trees, whilst the latter were also present throughout the hedgerows, with most of the trees comprising large mature Pedunculate Oaks, with some Sycamore *Acer pseudoplatanus*, Crack Willows *Salix fragilis* and Horse Chestnuts *Aesculus hippocastanum*.

There was a small area of dense Bramble *Rubus fruticosus* scrub in the eastern corner of the site.

The Ordnance Survey Grid Reference is SP 18696 76844 located on the approximate centre of the site.

1.3 Proposed works

The proposal is for a residential development which will include a large recreation area and a separate wildlife area.

2. METHODOLOGY

2.1 Desk study

A detailed desk study was undertaken to determine the nature conservation designations and protected species that had been recorded within a 1.5 km radius of the site. This involved contacting statutory and non-statutory organisations, and then assimilating and reviewing the data provided.

The consultees for the desk study were:

- ❑ Multi Agency Geographic Information (MAGIC) website www.magic.gov.uk;
- ❑ National Biodiversity Network Gateway website;
- ❑ Warwickshire Biological Records Centre.

2.2 Habitat survey

An Extended Phase 1 Habitat Survey was carried out across the whole of the survey site. It was conducted using standard JNCC (2003) techniques and methodologies.

The site was visited on the 28th April 2016 in mild, bright conditions.

2.3 Protected species survey

During the surveys the potential for other protected and important species was assessed. This included European Protected Species, legally protected species and Local Biodiversity Action Plan Species (and habitats).

2.4 Constraints

There were no constraints, and the survey was carried out during the optimum period.

3. RESULTS

3.1 Desk study

3.1.1 Designated sites

The site itself was not designated or identified as a site of wildlife importance or interest, but within the 1.5 km search area there were two statutory sites; River Blythe Site of Special Scientific Interest (SSSI) and Jobs Close Local Nature Reserve (LNR).

There were a number of Ecosites within the search area including the Grand Union Canal which ran along the eastern boundary of the site and Ecosite 101/17 approximately 20 metres to the northwest over Kixley Lane.

There was no direct connectivity between the statutory sites and Golden End Farm, and they were separated by intervening land use such as arable farmland, residential areas and main and local roads.

There was direct connectivity with the Grand Union Canal Ecosite which bordered the east of the site, although there were no records of Otter or Water Vole within it.

3.1.2 Protected species

The ecological data search revealed a small number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.5 km radius of the site.

These included pipistrelle bats, observed 1.0 km to the east at Springfield House School in 1984, and 1.2 km to the east in 1994. 100 m south of the school there was a record of a Whiskered Bat in 1983, with Daubenton's Bat 1.2 km to the east.

There were several records of Badger in the area, [REDACTED] but no Otter or Water Vole, and no records of reptiles either. There was a single observation of a Common Frog 1.4 km to the southeast, but no other common amphibians, and no Great Crested Newts.

A few veteran trees were noted in the data, none within 1.0 km, and there were several records of White-letter Hairstreak butterfly, including one in the southeastern corner of the survey site. This was from 1994, and since then the species has undergone a significant decline as Elm trees have disappeared from the landscape.

3.2 Habitat survey

3.2.1 Habitat descriptions

The following habitats were recorded across the site:

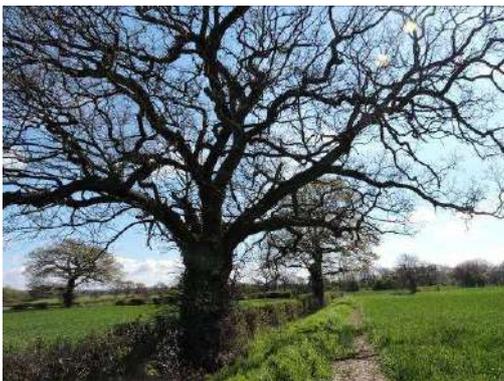
- Scattered broadleaved trees;
- Arable;
- Tall ruderal vegetation;
- Dense scrub;
- Standing water;
- Running water;
- Wet ditch;
- Dry ditch;
- Intact hedge;
- Fence.

These are shown on the Phase 1 Habitat Survey map in Appendix 1, with the target notes (where applicable) in Appendix 2.

Scattered broadleaved trees

In the centre of the largest field there was a small damp area with scattered trees, whilst the latter were also present throughout the hedgerows.

Most of the trees were large mature Pedunculate Oaks, with Sycamore, Crack Willow and Horse Chestnut also noted (Figs. 1, 2, 3 and 4).



Figs. 1 & 2 Scattered trees



Figs. 3 & 4 Scattered trees

Arable

The site comprised four arable fields under continuous cultivation, one of which was large whilst the others were more moderate in size. At the time of the survey they were planted with cereal crops (Figs. 5 and 6).



Figs. 5 & 6 Arable farmland

Tall ruderal vegetation

There were some narrow field margins of tall ruderal vegetation dominated by Common Nettle, Hogweed and Cow Parsley, with Common Cleavers, White Dead-nettle, Green Alkanet, Field Forget-me-not and Dandelion also present.

The sward included Perennial Ryegrass, meadow-grasses and Cocksfoot (Figs. 7 and 8).



Figs. 7 & 8 Tall ruderal vegetation

Dense scrub

There was a small area of dense Bramble scrub in the eastern corner of the site (Fig. 9).



Fig. 9 Dense scrub

Standing water

In the centre of the largest field there was a damp hollow which had become very overgrown with grasses and tall ruderals (Fig. 10).



Fig. 10 Standing water

Running water

At the eastern boundary there was a small section of wet ditch which was flowing into the canal (Fig. 11).



Fig. 11 Running water

Wet ditch

Along the base of the hedgerows were drainage ditches, some of which contained water at the time of the survey (Figs. 12 and 13).



Figs. 12 & 13 Wet ditches

Dry ditch

Many of the ditches did not contain any water and were dry (Figs. 14 and 15).



Figs. 14 & 15 Dry ditch

Intact hedge

The fields were separated and enclosed by a combination of tall and untrimmed and low clipped hedgerows.

The southern boundary hedge and the hedgerow along the west of the largest field were both species rich, whilst the rest were all species poor (Figs. 16, 17, 18 and 19).



Figs. 16 & 17 Species rich hedgerows

The hedgerows were dominated by Hawthorn, Blackthorn, Elder and Hazel, with Holly, Yew and Dog Rose also present in the species rich sections.

There were also conifer hedges along the boundaries with neighbouring residential properties.

Along the hedgerow which bordered the northern boundary of the site along Kixley Lane there were a number of Bluebells, along with common wildflower species such as Selfheal (Ref. Fig. 19).



Figs. 18 & 19 Species poor hedgerows with Bluebells (r)

Fence

Some of the boundaries were bordered with wire fencing.

3.2.2 Flora

The botanical composition of each habitat was typical, and all species recorded were common and widespread. No rare vascular plants were found, and there were no invasive species or notifiable weeds.

A list of species observed is presented in Appendix 3.

3.3 Protected species survey

3.3.1 Bats

Several of the trees within the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered potentially suitable for bat roosting and/or hibernation (Figs. 20, 21, 22 and 23 – Target Notes 1 and 2). These were generally within the mature Pedunculate Oak trees around the field boundaries.

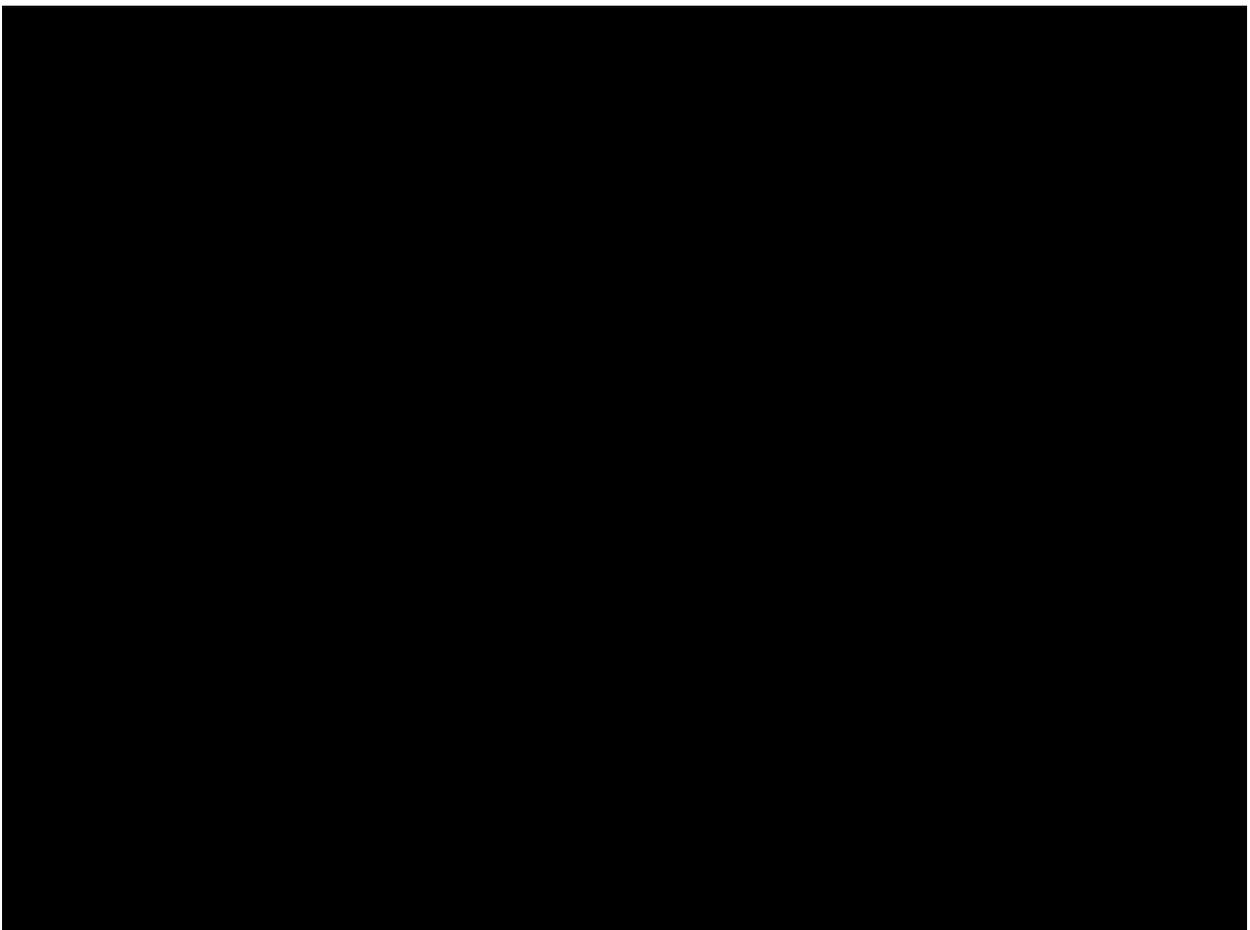


Figs. 20 & 21 Woodpecker holes and cavities



Figs. 22 & 23 Holes and cavities

The site was considered to have low potential for foraging bats, as most of the hedgerows were quite low, and although there was some cover there was little suitable vegetation to attract invertebrates. However, the canal which runs along the eastern boundary of the site is likely to be used by foraging bats which may also venture onto the site.



3.3.3 Otters

No evidence of Otter presence was found and there were no records of the species within the nearby stretch of canal.

3.3.4 Water Voles

No evidence of Water Vole presence was found and there were no records of the species within the nearby stretch of canal.

3.3.5 Birds

A total of 11 species of birds were observed. Of these two were Species of High Conservation Concern (RSPB Red list); Song Thrush and Yellowhammer, two were Species of Medium Conservation Concern (RSPB Amber List); Dunnock and Stock Dove, and the rest were species of Low Conservation Concern (RSPB Green List).

Several of these birds were likely to be nesting in the hedges during the breeding season, and indeed a pair of Robins were noted, whilst the Stock Dove was seen flying out of a cavity in a Pedunculate Oak tree where it was either roosting or nesting (Target Note 2).

A full list of species noted is given in Appendix 4.

3.3.6 Reptiles

No reptiles were observed during the survey and the site was considered to be unsuitable given its isolation by main and local roads, the canal, residential areas and arable farmland under continuous cultivation.

3.3.7 Great Crested Newts

There were a total of seven ponds within a 500 metre radius of the site, although all of these were over 250 metres from the site boundaries, with the majority over 400 metres away.

They were all separated from the survey area by significant barriers to newt dispersal which included the Grand Union Canal, main and local roads, arable fields under continuous cultivation and residential areas. As such it was considered that any amphibians, if present, within these ponds would not be found on the application site.

The site itself was unsuitable for Great Crested Newts, since although there were some wet ditches present, these were isolated within the site, whilst there were very limited foraging opportunities and no suitable refugia or hibernacula.

Furthermore the majority of the site was arable farmland under continuous cultivation.

3.3.8 Invertebrates

No important or uncommon invertebrates were observed although several Small Tortoiseshell Butterflies were noted (Fig. 26).



Fig. 26 Small Tortoiseshell

3.3.9 Other species

No other protected or LBAP species were observed during the site visit.

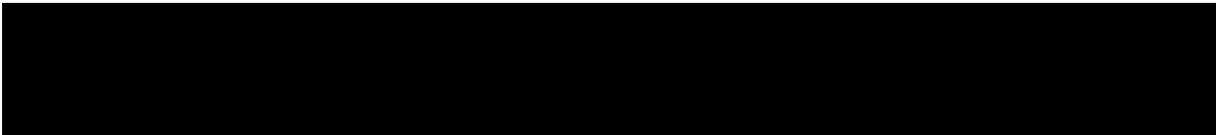
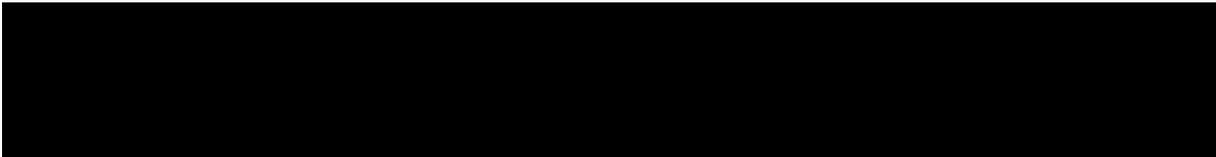
4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Site evaluation

The site was dominated by arable farmland under continuous cultivation which was of low interest to wildlife. However, the species rich and species poor hedgerows were of potential to nesting birds. Indeed, a Stock Dove was seen flying out of a cavity in a Pedunculate Oak tree where it was either roosting or nesting.

Several of the trees within the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation. These were generally within the mature Pedunculate Oak trees around the field boundaries.

The site was considered to have low potential for foraging bats, as most of the hedgerows were quite low, and although there was some cover there was little suitable vegetation to attract invertebrates. However, the canal which runs along the eastern boundary of the site is likely to be used by foraging bats which may also venture onto the site.



There were a total of seven ponds within a 500 metre radius of the site, although all of these were over 250 metres from the site boundaries, with the majority over 400 metres away. They were all separated from the survey area by significant barriers to newt dispersal, which included the Grand Union Canal, main and local roads, arable fields under continuous cultivation and residential areas. As such it was considered that any amphibians, if present, within these ponds would not be found on the application site.

The site itself was unsuitable for reptiles and amphibians, since although there were some wet ditches present, as mentioned above these were isolated within the site, whilst there were very limited foraging opportunities and no suitable refugia or hibernacula. Furthermore the majority of the site was arable farmland under continuous cultivation. As such, the site was considered unsuitable for Great Crested Newts and reptiles.

It was also possible to assess the potential importance of the habitats within the application site to invertebrates. Since the majority of the site was arable farmland under continuous cultivation, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. Indeed, Small Tortoiseshell was the only butterfly noted.

4.2 Possible impacts of proposed work and recommendations

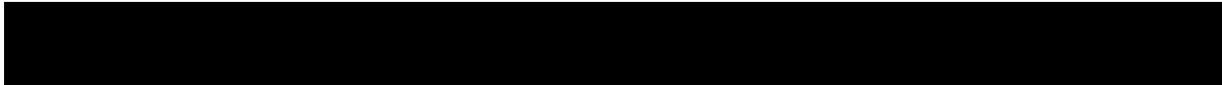
The main impact of any re-development will be on the semi-natural habitats noted above, in particular the hedgerows and trees.

These provided cover for nesting birds. Since all in-use bird's nests and their contents are protected from damage or destruction, any tree or shrub removal should be undertaken outside the period March to August inclusive. If this time frame cannot be avoided, a close inspection of the trees or shrubs to be removed should be undertaken prior to clearance. Work should not be carried out within 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

Some of the trees were also considered to be potentially suitable for roosting bats, therefore further surveys should be carried out on these trees if they are to be affected by proposed development.

Although no additional surveys for reptiles and amphibians were considered necessary, care should be taken at all times when removing vegetation and stripping topsoil. Any amphibians, reptiles (or small mammals) disturbed or uncovered should be left to vacate the work site in their own time.

There will be a potential impact of a development on the nearby Grand Union Canal, so an appropriate buffer of wildlife habitat should be retained along the eastern boundary to reduce or remove this impact.



Finally, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

4.3 Further surveys

If any tree or shrub removal cannot be timed appropriately to avoid the bird nesting period (considered to be March to August inclusive), then further surveys of the trees and/or shrubs to be removed will be necessary.

A survey for bats will be required if any of the potentially suitable trees are to be removed or significantly affected.

5. REFERENCES

- Bat Conservation Trust, 2016.** *Bat Surveys – Good Practice Guidelines. 3rd edition.* Bat Conservation Trust, London.
- Cotswold Wildlife Surveys, 2011.** *Bat survey report for Hall Farm, Kenilworth Road, Knowle.* 891-CWS-02.
- English Nature, 2004.** *Bat mitigation guidelines.* English Nature, Peterborough.
- Fitter R., Fitter A. & Blamey, M., 1983.** *The Wildflowers of Britain and Northern Europe.* Collins, London.
- Fitter R. & Fitter A., 1984.** *Grasses, Sedges, Rushes & Ferns of Britain and Northern Europe.* Collins, London.
- JNCC, 2003.** *Handbook for Phase 1 habitat survey – a technique for environmental audit (revised reprint).* Joint Nature Conservation Committee, Peterborough.
- Langton, T., Beckett, C. And Foster, J., 2001.** *Great Crested Newt: Conservation Handbook.* Froglife, Suffolk.
- Mitchell-Jones A. J. & McLeish, 2004.** *Bat Workers' Manual.* Joint Nature Conservation Committee, Peterborough.
- Natural England, 2007.** *Badgers and Development.* Natural England, Peterborough.
- Scottish Natural Heritage, 2007.** *Badgers and Development.* Scottish Natural Heritage, Edinburgh.
- Stebbins R.E., 1986.** *Which bat is it?* The Mammal Society and The Vincent Wildlife Trust, London.
- The Vincent Wildlife Trust, 2003.** *The Bats of Britain and Ireland.* The Vincent Wildlife Trust, Ledbury.
- White Young Green, 2008.** *Hall Farm, Kenilworth Road, Knowle – Bat emergence survey.* 27 pp. A045234-1.

APPENDICES

Appendix 1: Phase 1 Habitat Survey Map

Appendix 2: Target Notes

Appendix 3: Plant species list

Appendix 4: Bird species list

Appendix 5: Relevant legislation

Appendix 3: Plant species list

Latin name	Common name
<i>Cupressus sp</i>	Conifer species
<i>Ilex aquifolium</i>	Holly
<i>Taxus baccata</i>	Yew
<i>Quercus robur</i>	Pedunculate Oak
<i>Acer pseudoplatanus</i>	Sycamore
<i>Salix fragilis</i>	Crack Willow
<i>Aesculus hippocastanum</i>	Horse Chestnut
<i>Prunus spinosa</i>	Blackthorn
<i>Crataegus monogyna</i>	Hawthorn
<i>Sambucus nigra</i>	Elder
<i>Corylus avellana</i>	Hazel
<i>Rosa canina</i>	Dog Rose
<i>Rubus fruticosus</i>	Bramble
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Prunella vulgaris</i>	Selfheal
<i>Taraxacum Section vulgaria</i>	Dandelion
<i>Myosotis arvensis</i>	Field Forget-me-not
<i>Pentaglottis sempervirens</i>	Green Alkanet
<i>Lamium album</i>	White Dead-nettle
<i>Galium aparine</i>	Common Cleavers
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Heracleum sphondylium</i>	Common Hogweed
<i>Urtica dioica</i>	Common Nettle
<i>Lolium perenne</i>	Perennial Ryegrass
<i>Dactylis glomerata</i>	Cocksfoot
<i>Poa spp.</i>	Meadow-grass species

Appendix 4: Bird species list

Common name	Latin name
Woodpigeon	<i>Columba palumbus</i>
Stock Dove	<i>Columba oenas</i>
Dunnock	<i>Prunella modularis</i>
Wren	<i>Troglodytes troglodytes</i>
Robin	<i>Erithacus rubecula</i>
Song Thrush	<i>Turdus philomelos</i>
Blackbird	<i>Turdus merula</i>
Great Tit	<i>Parus major</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Yellowhammer	<i>Emberiza citrinella</i>
Magpie	<i>Pica pica</i>

Appendix 5: Relevant legislation

5.1 – Birds

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981. There are penalties for:

- ❑ *Killing, injuring or capturing them, or attempting any of these;*
- ❑ *Taking or damaging the nest whilst in use;*
- ❑ *Taking or destroying the eggs.*

5.2 – Bats

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines ‘European protected species of animals’.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- ❑ *Intentionally or deliberately kill, injure or capture (or take) bats;*
- ❑ *Deliberately disturb bats (whether in a roost or not);*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts;*
- ❑ *Damage or destroy roosts;*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally;*
- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats.*

The word ‘roost’ is not used in the legislation, but is used here for simplicity. The actual wording is ‘any structure or place which any wild animal...uses for shelter or protection’ (WCA), or ‘breeding site or resting place’ (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

5.3 – Badgers

Badgers are protected in Britain by the Protection of Badgers Act 1992. The purpose of this Act is to protect the animals from deliberate cruelty and from the incidental effects of lawful activities which could cause them harm. Under this legislation it is an offence to:

- ❑ *Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;*
- ❑ *Interfere with a sett by damaging or destroying it;*
- ❑ *Obstruct access to, or any entrance of, a Badger sett;*

- Disturb a Badger when it is occupying a sett.

Note that if any of the above resulted from a person being *reckless*, even if they had no intention of committing the offence, their action would still be considered an offence. A person is not guilty of an offence if it can be shown that the act was '*the incidental result of a lawful operation and could not have been reasonably avoided*'; only a court can decide what is 'reasonable' in any set of circumstances.

Penalties for offences under this legislation can be up to six months in prison and a fine of up to £5,000 for each offence.

A Badger sett is defined in the Act as '*any structure or place which displays signs indicating current use by a Badger*'. This can include culverts, pipes and holes under sheds, piles of boulders, old mines and quarries, etc.

'Current use' does not simply mean 'current occupation' and for licensing purposes it is defined as '*any sett within an occupied Badger territory regardless of when it may have last been used*'. A sett therefore, in an occupied territory, is classified as in current use even if it is only used seasonally or occasionally by Badgers, and is afforded the same protection in law.

Cotswold Wildlife Surveys Limited
Company Reg. No. 6864285 (England & Wales)

**Andy Warren BSc (Hons), MA (LM), Tech Cert (Arbor A),
MCIEEM, TechArborA
Withy Way, Charingworth, Chipping Campden,
Gloucestershire, GL55 6NU**

Tel: 01386 593056/07879 848449

andy@cotswoldwildlifesurveys.co.uk

Golden End Farm, Kenilworth Road, Knowle – Extended Phase 1 Habitat Survey

To: Golden End Farms

Report Number: 2319-CWS-01

Version: 01

Date: 26th May 2016